EAU

PROJECT ID: 1570-02-77

COUNTY: POLK

DECEMBER 2019

ORDER OF SHEETS

TOTAL SHEETS = 108

30

DESIGN DESIGNATION

A.A.D.T.	6600	=	2020
A.A.D.T.	7800	=	2040
D.H.V.		=	1537
D.D.		=	61/39
T.		=	24.7
DESIGN SPEED		=	60
ESALS		=	3,900,000

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1570-02-77	WISC 2019753	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ST CROIX FALLS - TURTLE LAKE

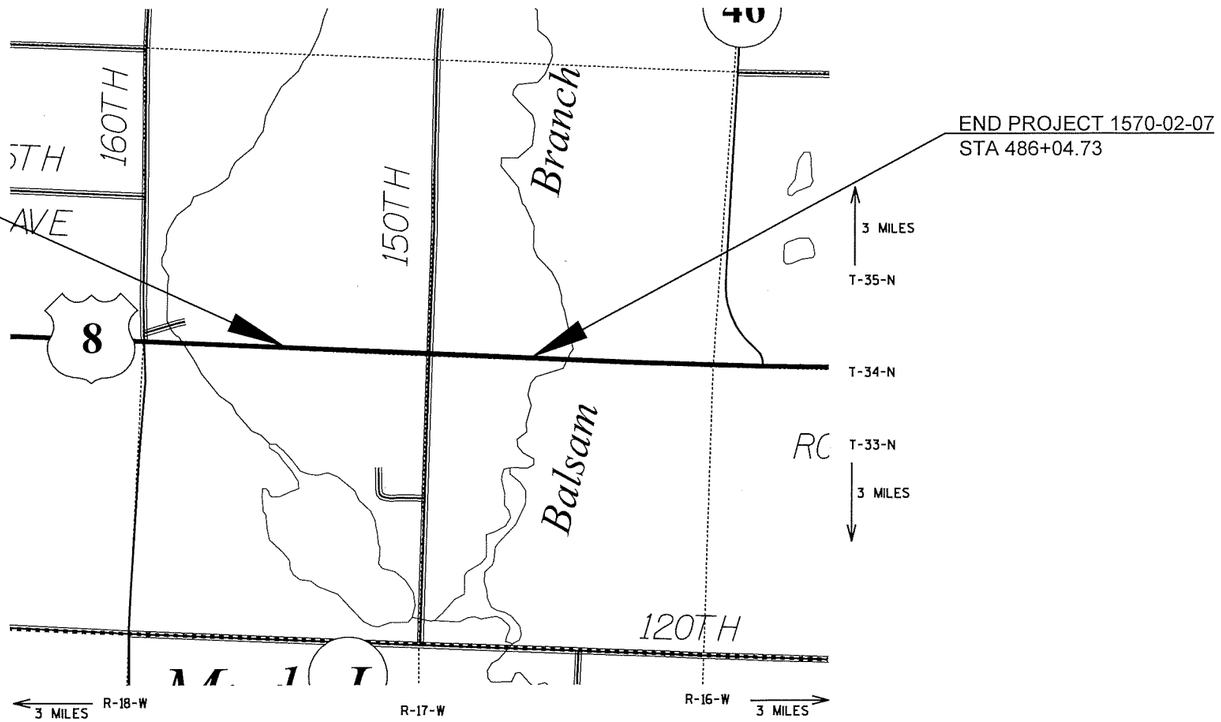
150TH STREET INTERSECTION

USH 8

POLK

STATE PROJECT NUMBER

1570-02-77



CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.488 MILE

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WCCS), POLK COUNTY, NAD83 (1991), 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 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 03.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	TOM ARMSTRONG
Designer	MICHAEL PEARSON
Project Manager	BETH CUNNINGHAM
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	ANDREW STENSLAND

APPROVED FOR THE DEPARTMENT

DATE: 7/31/19 Andy Stensland (Signature)

E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277-TITLE.DWG PLOT DATE : 7/18/2019 10:15 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME :

2

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

GENERAL NOTES

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

SOME UTILITY LOCATIONS HAVE CHANGED. THE CONTRACTOR SHALL LOCATE UTILITIES PRIOR TO ANY EXCAVATION.

WHEN THE QUANTITY OF BASE AGG. DENSE AND ASPHALTIC PAVEMENT ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

SURVEY IS REFRENCED TO THE POLK COUNTY COORDINATE SYSTEM, WISCONSIN; NAD83 (1991); NAVD88 (1991) WCCS

ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, SHALL BE SEEDED, AND STABILIZED WITHIN 7 WORKING DAYS.

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.

NO TREES SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.

CROSS SECTION ELEVATIONS ARE BASED ON THE AVAILABLE T.I.N. MODEL AND MAY NEED VERIFICATION IN THE FIELD. INLET AND INVERT ELEVATIONS ARE BASED ON FIELD SURVEY DATA.

PRESERVATION OF ALL GEODEDIC MONUMENTATION IS REQUIRED. NOTIFY RESPONSIBLE AUTHORITY OF ANY ACTIVITY AFFECTING SUCH MONUMENTATION.

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

UTILITIES

DAIRYLAND POWER COOP - ELEC
3200 EAST AVENUE S; PO BOX 817
LACROSSE, WI 54602-0817
ATTN: ROB MALY
(608) 788-4000
rob.maly@dairylandpower.com

NORTHWEST COMMUNICATIONS
116 HARRIMAN AVE. N
AMERY, WI 54001
ATTN: GREG CARDINAL
PHONE: (715) 268-4690
gregcardinal@amerytel.net

NORTHWESTERN WISCONSIN ELECTRIC CO.
104 E. OAK ST.; P.O. BOX 467
FREDRIC, WI 54837
ATTN: DAN OLSON
PHONE: (715) 327-4231
danolson@nweco.com

CENTURYLINK
20 S WILSON AVE
RICE LAKE, WI 54868
ATTN: MONTY PARKER
(715)234-5528
monty.parker@centurylink.com

CHARTER COMMUNICATIONS/SPECTRUM
2304 MAIN ST.
RICE LAKE, WI 54868
ATTN: TOM HAASE
PHONE:(715)719-0564/418-9317
tom.haase@charter.com

POLK-BURNETT ELECTRIC COOP
1001 STATE ROAD 35
CENTURIA, WI 54824
ATTN: ED JOHANSEN
PHONE: (715) 646-3322
ejohansen@polkburnett.com

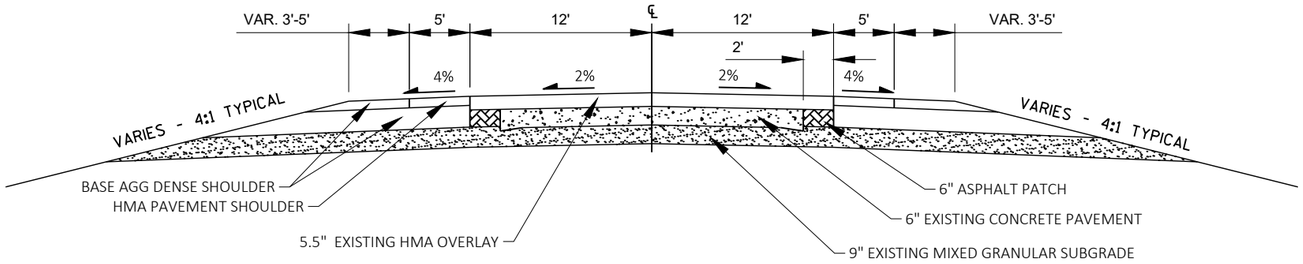
DESIGN CONTACT
MICHAEL PEARSON
WISDOT NORTHWEST REGION
1701 N. 4TH STREET
SUPERIOR WI, 54880
PHONE: (715) 395-3024

POLK COUNTY HIGHWAY COMMISSIONER
EMIL NORBY
518 MAIN ST.
BALSAM LAKE, WI 54810
PHONE: (715) 485-8723

VILLAGE OF BALSAM LAKE
PRESIDENT: GENO D'AGOSTINO
201 FIRST AVE. EAST
P.O.BOX 284
BALSAM LAKE, WI
PHONE: (715) 554-4136
vobl@lakeland.ws

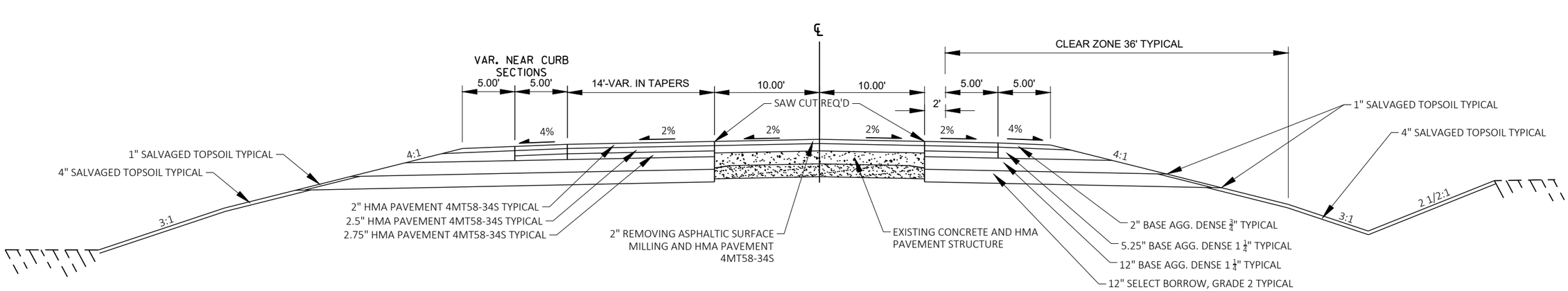
DNR CONTACT
AMY CRONK
WDNR - NORTHWEST DISTRICT HEADQUARTERS
810 WEST MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4229

2



EXISTING TYPICAL SECTION

STA 460+27.97 - 486+04.73

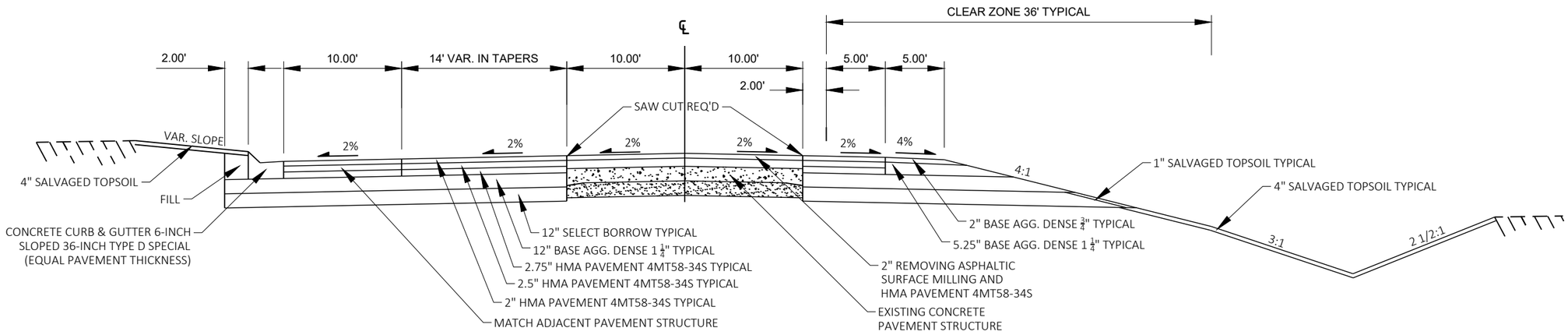


FINISHED TYPICAL RURAL SECTION

STA 460+27.97 - 462+50
STA 463+50 - 476+50
STA 479+50 - 486+04.73

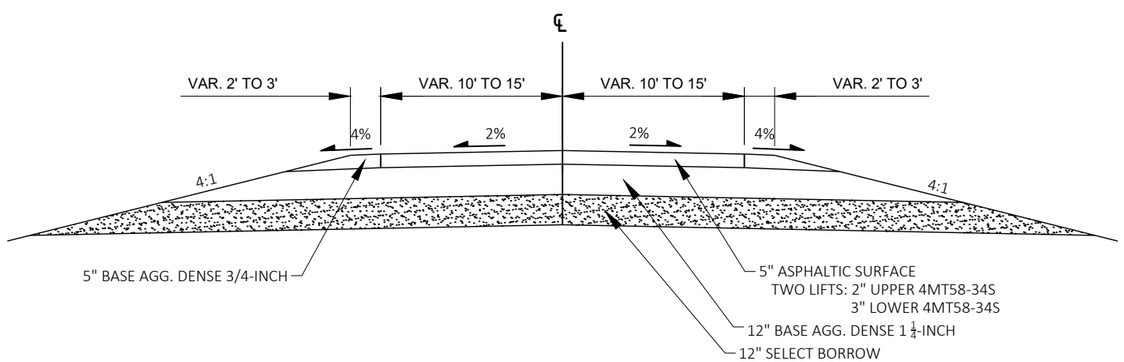
PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN: TYPICAL SECTIONS	SHEET 3	E

2



FINISHED TYPICAL CURB SECTION

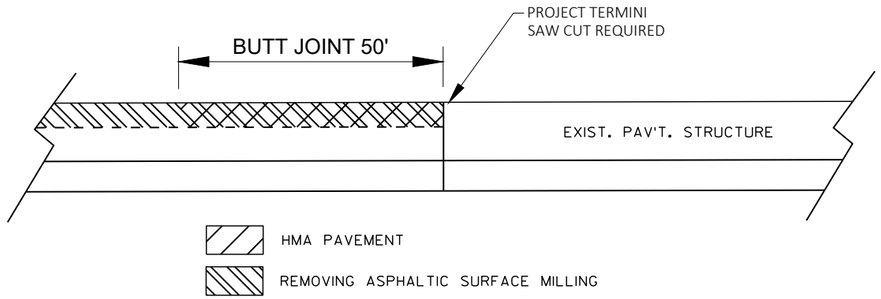
STA 462+50 - 463+50
STA 476+50 - 479+50



FINISHED TYPICAL SIDE ROAD SECTION

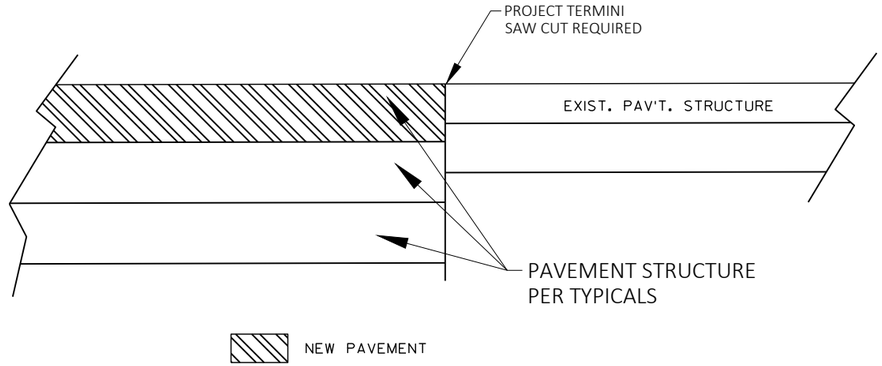
STA 48+48 - 49+37.97
STA 50+74.41 - 51+50

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN: CONSTRUCTION ISSUE	SHEET 4	E



BUTT JOINT DETAIL PROJECT
TERMINII FOR MILLING SECTION

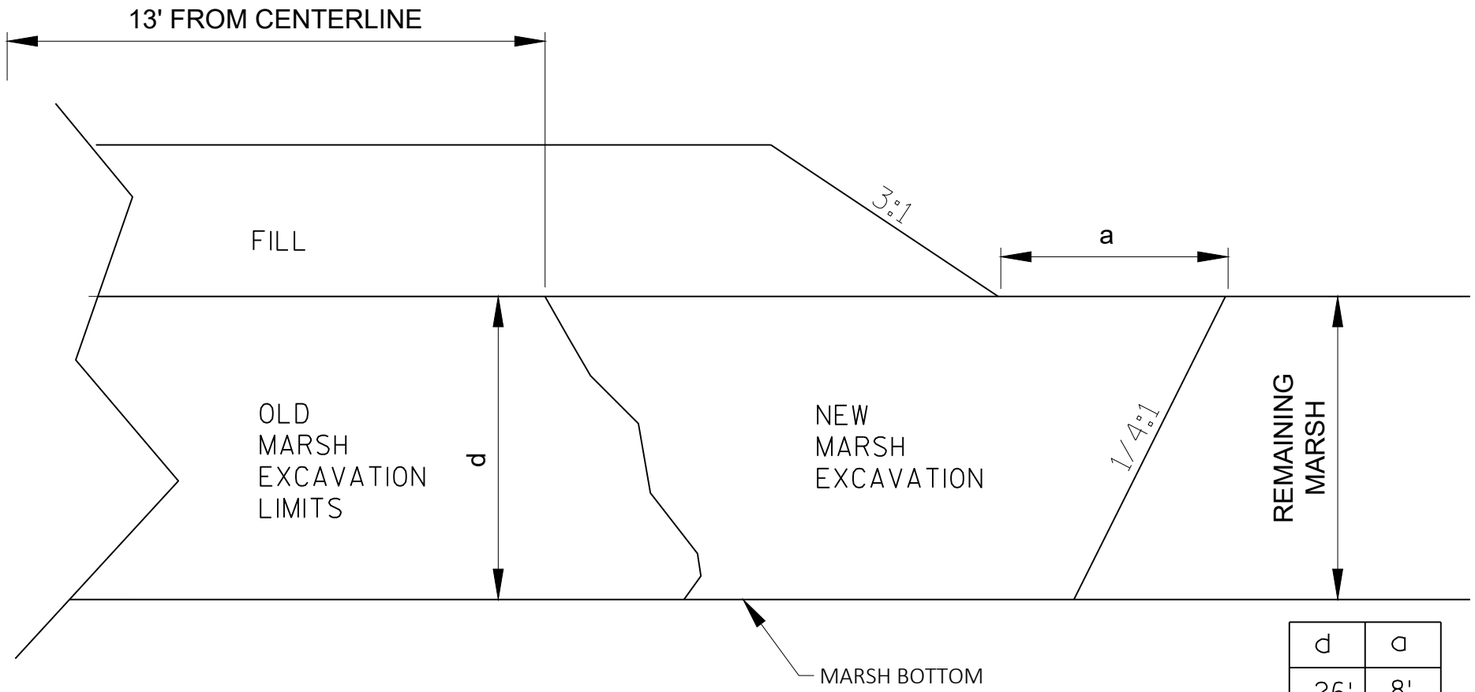
STA 460+27.97 AND STA 486+04.73



BUTT JOINT DETAIL PROJECT
TERMINII FOR GRADING SECTION

STA 460+27.97 AND STA 486+04.73

STA 48+48.14 150TH S. AND STA 51+50 150TH N.

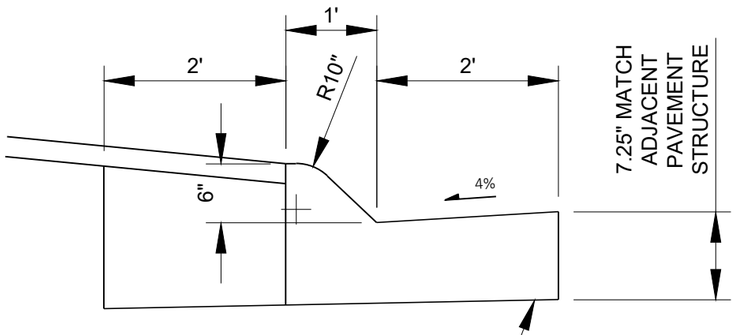


$$a = \frac{50}{c}\left(\frac{d - 10}{2}\right) \geq 0$$

MARSH EXCAVATION DETAIL

ASSUME C = 50

d	a
26'	8'
22'	6'
18'	4'
14'	2'
≤10'	0'

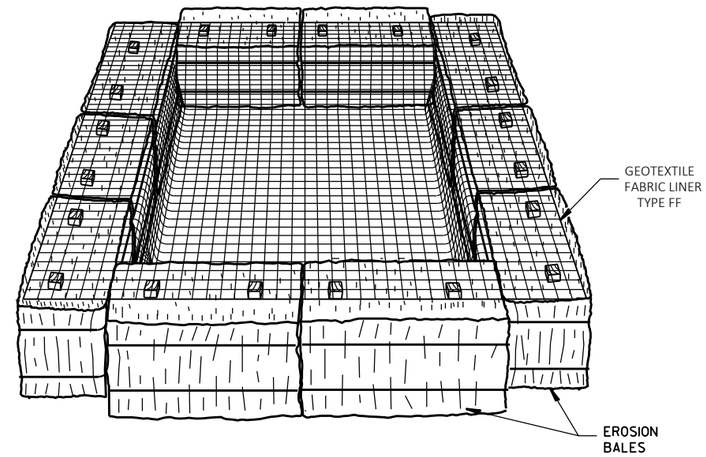


THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A MINIMUM 7.25" GUTTER THICKNESS IS MAINTAINED.

CONCRETE CURB AND GUTTER 6-INCH SLOPED
36-INCH TYPE D SPECIAL

BENCHMARKS AND CONTROL POINTS

NO.	STATION	SIDE	OFFSET	Y	X	DESCRIPTION	ELEV.
CP907	455+50.39	RT	32.143'	505362.464	267963.698	¾" REBAR W/RED CAP	1082.949
CP100	473+14.09	RT	0.363'	507126.404	267975.760	BURIED SEC CORNER	1087.356
CP101	473+35.90	RT	37.188'	507147.805	267938.694	WIT 1 ¼" IRON PIPE	1085.170
CP102	472+86.31	RT	48.885'	507098.083	267927.552	WIT 1 ¼" IRON PIPE	1077.833
CP103	472+45.16	LT	67.351'	507058.236	268044.241	WIT 1 ¼" IRON PIPE	1080.331
CP910	474+73.09	LT	20.305	507285.621	267994.650	PK NAIL	1087.895
CP905	472+86.57	LT	893.893'	507108.8820	268870.2680	IRON ROD WITH CAP	1091.505
CP904	472+97.80	RT	1101.301	507097.8110	266875..0730	IRON ROD WITH CAP	1081.483
CP909	480+23.99	LT	20.892	267989.0780	507836.500	CP NAIL	1089.632
CP908	485+44.43	LT	20.801	267983.1690	508356.9090	CP NAIL	1086.501



TEMPORARY SETTLING BASIN

(SIZE TO BE DETERMINED IN FIELD AS INDICATED BELOW:)

PAYMENT IS INCIDENTAL TO THE PAY ITEM "EROSION BAILS"

STORAGE VOLUME (C.F.) = 16 X GPM (PUMP RATE)

EXAMPLE:
CONTRACTOR INDICATES PUMP CAPABLE OF 50 GPM
HEIGHT OF BALES = 1.5 FT.

SOLUTION:
SV (C.F.) = 16 X 50
SV = 800 C.F.

$$\frac{800 \text{ C.F.}}{1.5 \text{ FT.}} = 533 \text{ S.F.}$$

USE A 20 FT. X 27 FT. BASIN

2

N

STH 46

150TH ST

WORK ZONE

USH 8

M3-2 or MM3-2 or MP3-2
24"X12"

EAST

8

M1-4
24"X24"

MAX. 11' WIDTH

W12-52
48"X48"

4 MILES AHEAD

WO57-52
48"X36"

STH 35

STH 65

1 MILES AHEAD

5 MILES AHEAD

M3-4 or MM3-4 or MP3-4
24"X12"

WEST

DISPLAYED FOR EAST BOUND TRAFFIC.
REVERSE SEQUENCE FOR WEST BOUND TRAFFIC

500'

ROAD WORK AHEAD
W20-1A

ROAD WORK 1000 FT
W20-1C

ROAD WORK 500 FT
W20-1D

END ROAD WORK
G20-2A
48"X24"

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	TRAFFIC CONTROL	SHEET 7	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277-TC1.DWG
LAYOUT NAME - TC-OV

PLOT DATE : 7/23/2019 7:58 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

2

N

200'

50'

1000'

USH 8

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WTH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONE 42-INCH

TYPE A WARNING LIGHT (FLASHING)

WORK AREA

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

DIRECTION OF TRAFFIC

W01-4R

NEXT INTER-SECTION

500'

52+00

51+00

49+00

48+00

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED

TYPE III BARRICADE

V SIGN

BP: 50+00.00

EP: 50+00.00

R3-1 24"X24"

R3-2 24"X24"

ADDITIONAL BARRICADES NEEDED FOR STAGE 1

5'

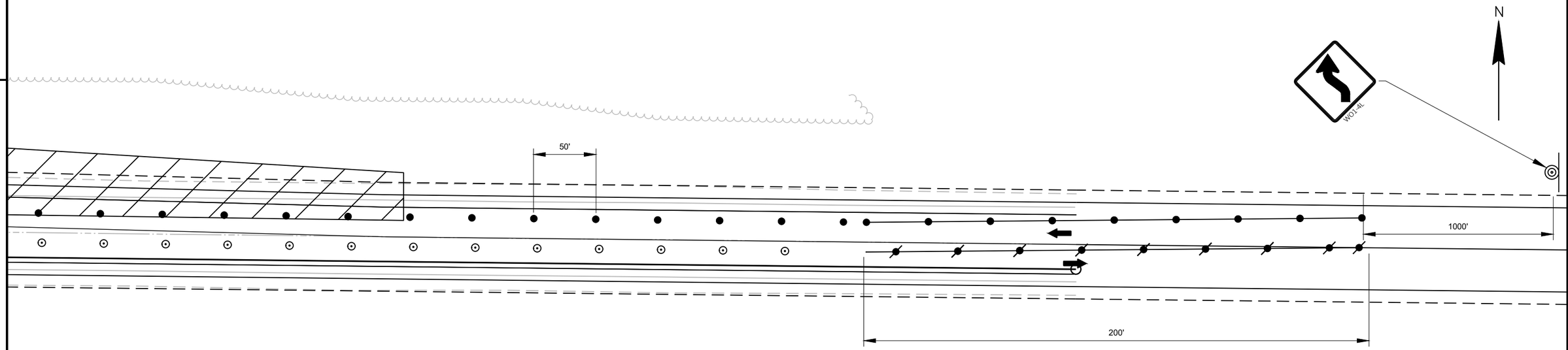
PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	TRAFFIC CONTROL STAGE 1	SHEET 8	E

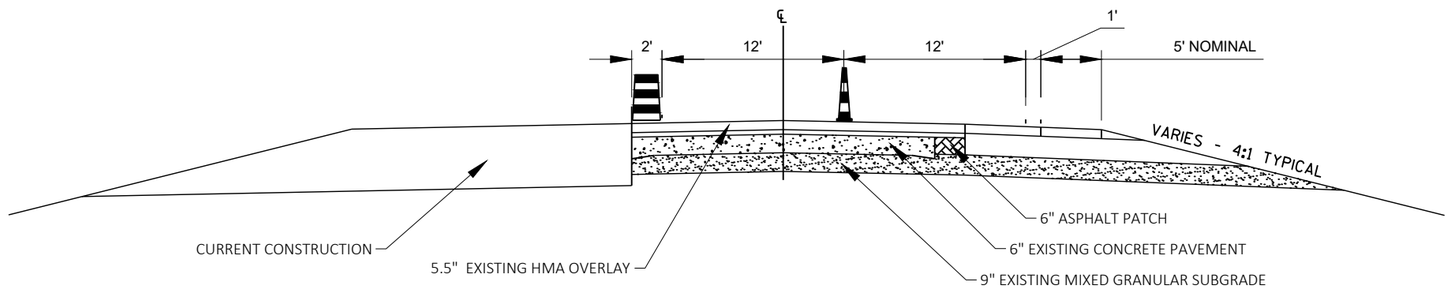
FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277-TC1.DWG
LAYOUT NAME - TC1-1

PLOT DATE : 7/23/2019 7:58 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

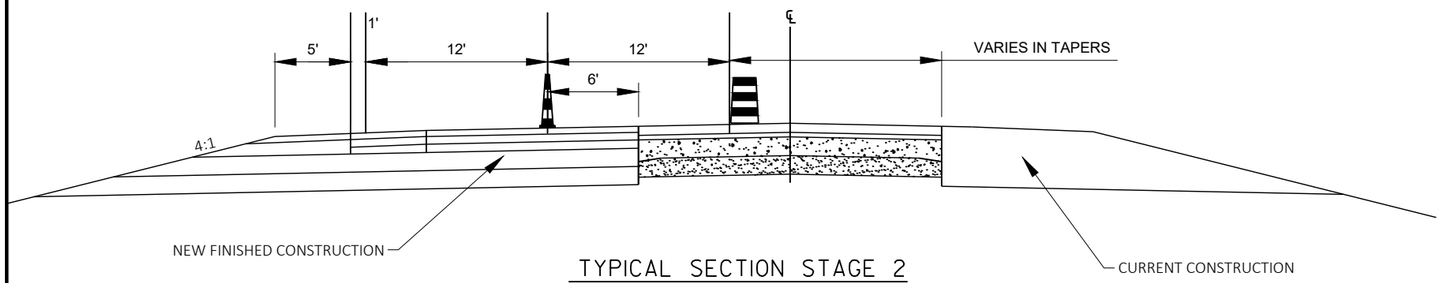
2





TYPICAL SECTION STAGE 1

STA 460+27.97 - 486+04.73



TYPICAL SECTION STAGE 2

STA 460+27.97 - 486+04.73

WEST BOUND LANES WILL ENCROACH ONTO SHOULDERS AT BOTH ENDS OF THE PROJECT.

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	TRAFFIC CONTROL STAGE 1	SHEET 9	E

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONE 42-INCH
- TYPE A WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC

200'

1000'

W01-4L

ROAD CLOSED AHEAD W20-3A

ROAD CLOSED 500 FT W20-3D

NEXT INTER-SECTION

500'

52+00

51+00

49+00

48+00

ADDITIONAL BARRICADES NEEDED FOR STAGE 2

V SIGN

BP 50+00.00

R11-2 48"X36" ROAD CLOSED

TYPE III BARRICADE

R3-2 24"X24"

R3-1 24"X24"

50'

ROAD CLOSED 500 FT W20-3D

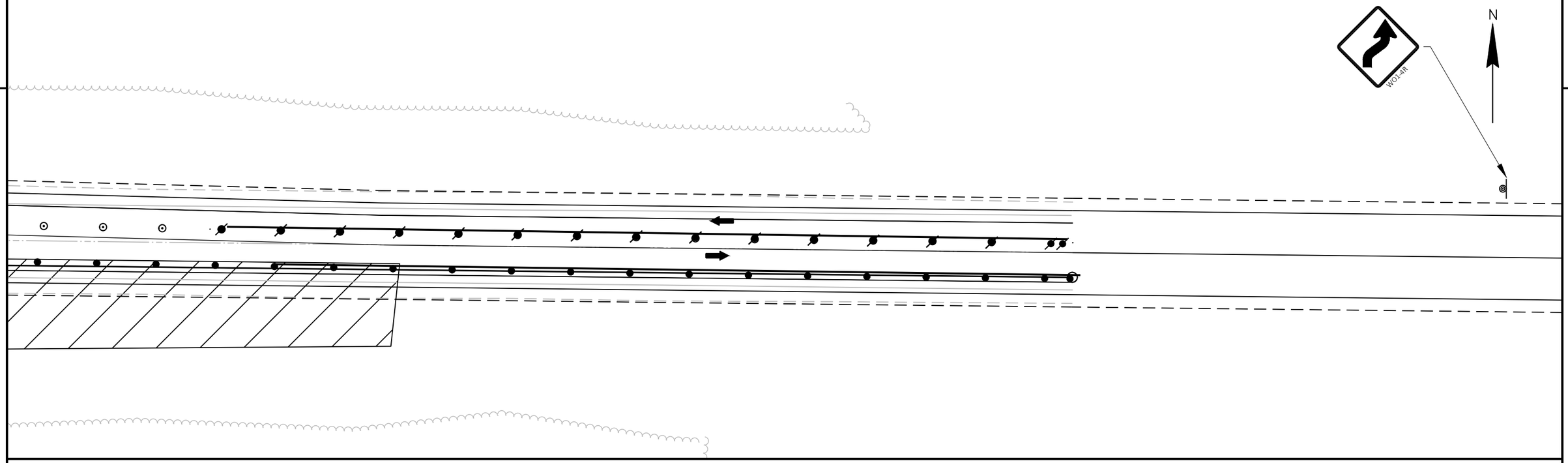
ROAD CLOSED AHEAD W20-3A

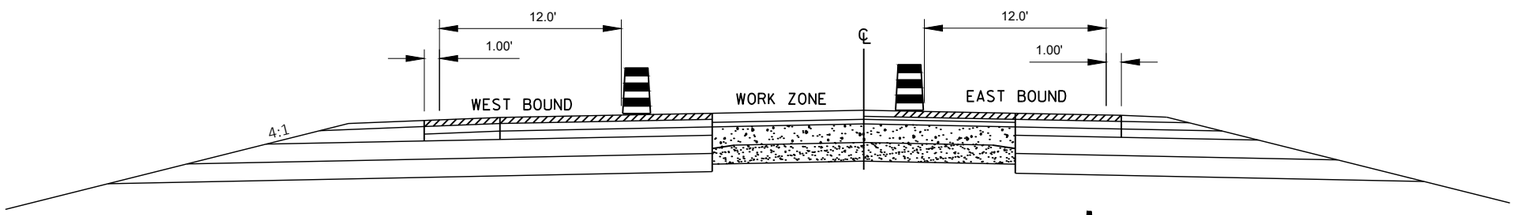
PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	TRAFFIC CONTROL STAGE 2	SHEET 10	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277-TC2.DWG
LAYOUT NAME - TC2-1

PLOT DATE : 7/23/2019 7:57 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2





TYPICAL SECTION STAGE 3

STA 460+27.97 - 486+04.73

UNFINISHED PAVING WILL BE PERFORMED USING FLAGGERS

DRUMS MAY BE REPLACED WITH CONES IF APPROVED BY THE ENGINEER.

FINISHED PAVING

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	TRAFFIC CONTROL STAGE 2	SHEET 11	E

2

2

BP: 458+64.30

BEGIN PROJECT
STA 460+27.97
SAW CUT REQ'D

459+00

460+00

461+00

464+00

BEGIN TAPER

NO PASSING ZONE
W14-3
48"X36"

MARKING LINE DIAGONAL
EPOXY 12-INCH YELLOW

465+00

466+00

467+00

468+00

469+00

STA 469+58

470+00

MARKING LINE EPOXY
4-INCH DOUBLE YELLOW

END TAPER
STA 468+08

ONLY
R3-8A
36"X30"

MARKING LINE GROOVED
WET REFLECTIVE EPOXY
4-INCH WHITE

150TH ST
D1-61

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 12	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PS.DWG
LAYOUT NAME - SGN-MARK1

PLOT DATE : 7/30/2019 8:31 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

END CONSTRUCTION
STA 51+50

MARKING LINE
EPOXY 4-INCH
DOUBLE YELLOW

STOP
R1-1
30"X30"

NO
PASSING
ZONE
REMOVE

52+00

51+00

POLK
COUNTY PARK
D1-61

STA 473+74.7

MARKING LINE GROOVED
WET REFLECTIVE EPOXY
8-INCH WHITE

STA 472+58.37

MARKING LINE GROOVED
WET REFLECTIVE EPOXY
8-INCH WHITE

MARKING LINE
EPOXY 4-INCH
DOUBLE YELLOW

471+00

472+00

BP: 50+00.00

473+00

474+00

475+00

476+00

MARKING WORDS EPOXY

MARKING ARROWS
EPOXY

MARKING ARROWS
EPOXY

MARKING WORDS EPOXY

MARKING LINE
EPOXY 4-INCH
DOUBLE YELLOW

POLK
COUNTY PARK
D1-61

49+00

STOP
R1-1
30"X30"

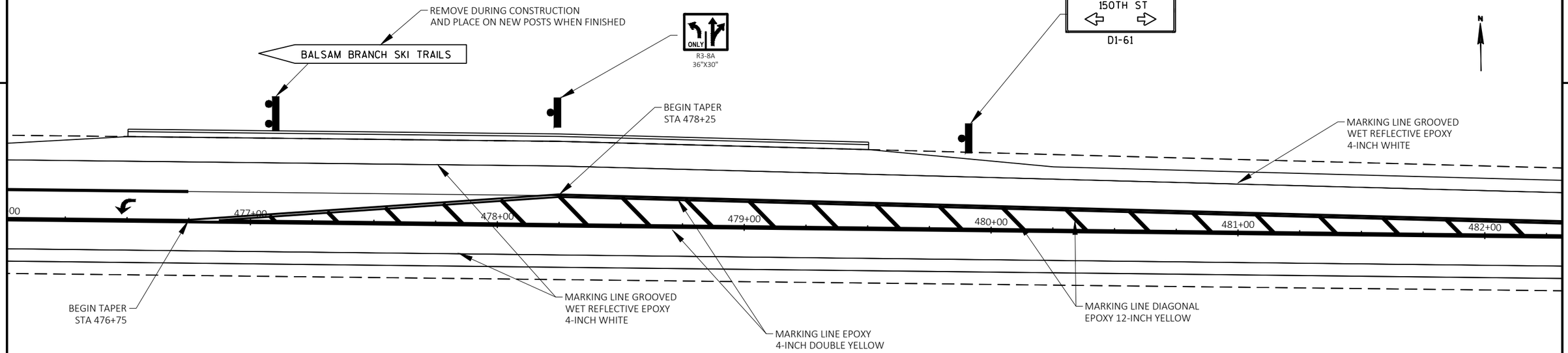
MARKING LINE
EPOXY 4-INCH
DOUBLE YELLOW

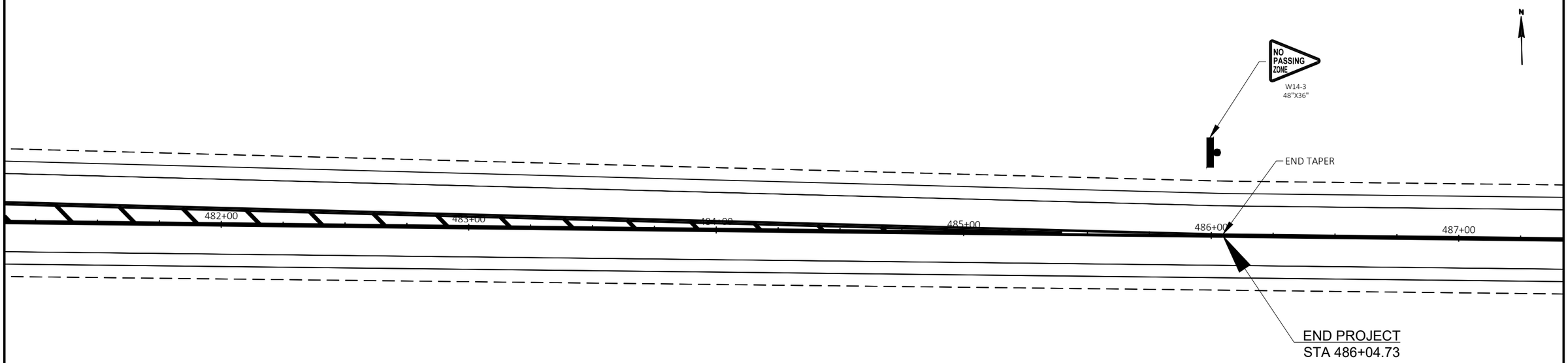
END CONSTRUCTION
STA 48+48.14

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 13	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PS.DWG
LAYOUT NAME - SGN-MARK2

PLOT DATE : 7/30/2019 8:31 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 14	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PS.DWG
LAYOUT NAME - SGN-MARK3

PLOT DATE : 7/30/2019 8:31 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE A OR B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

BP: 458+64.30

459+00 460+00 461+00 462+00 463+00 464+00

465+00 466+00 467+00 468+00 469+00 470+00

V SIGN

2

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	EROSION CONTROL	SHEET 15	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_ENV.DWG
LAYOUT NAME - EROSION1

PLOT DATE : 9/18/2019 7:50 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE A OR B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

52+00

51+00

49+00

471+00

472+00

473+00

474+00

475+00

476+00

BP: 50+50.00

100

101
1083.170
WIT 1 1/4IP

102
1077.833
WIT 1 1/4IP

103
1080.331
WIT 1 1/4IP

910
1087.895
CP NL

OH

FO

T

E

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	EROSION CONTROL	SHEET 16	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_ENV.DWG
LAYOUT NAME - EROSION2

PLOT DATE : 9/18/2019 7:50 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

909
1089.632
CP NL

00 477+00 478+00 479+00 480+00 481+00 482+00

FO

908
1086.501
CP NL

482+00 483+00 484+00 485+00 486+00 487+00

LEGEND

- EROSION MAT CLASS I, TYPE A OR B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	EROSION CONTROL	SHEET 17	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_ENV.DWG
LAYOUT NAME - EROSION3

PLOT DATE : 9/18/2019 7:50 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

1570-02-77

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	9.000	9.000
0004	201.0205	Grubbing	STA	9.000	9.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	380.000	380.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	5,778.000	5,778.000
0012	204.0150	Removing Curb & Gutter	LF	150.000	150.000
0014	205.0100	Excavation Common	CY	7,753.000	7,753.000
0016	205.0400	Excavation Marsh	CY	117.000	117.000
0018	208.1100	Select Borrow	CY	6,614.000	6,614.000
0020	213.0100	Finishing Roadway (project) 01. 1570-02-77	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,230.000	1,230.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,640.000	8,640.000
0026	455.0605	Tack Coat	GAL	1,431.000	1,431.000
0028	460.2000	Incentive Density HMA Pavement	DOL	2,390.000	2,390.000
0030	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	5,100.000	5,100.000
0032	460.6244	HMA Pavement 4 MT 58-34 S	TON	3,734.000	3,734.000
0034	465.0110	Asphaltic Surface Patching	TON	200.000	200.000
0036	520.8700	Cleaning Culvert Pipes	EACH	4.000	4.000
0038	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	110.000	110.000
0040	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	6.000	6.000
0042	524.0124	Culvert Pipe Salvaged 24-Inch	LF	56.000	56.000
0044	606.0100	Riprap Light	CY	24.000	24.000
0046	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1570-02-77	EACH	1.000	1.000
0048	619.1000	Mobilization	EACH	1.000	1.000
0050	624.0100	Water	MGAL	130.000	130.000
0052	625.0500	Salvaged Topsoil	SY	13,500.000	13,500.000
0054	627.0200	Mulching	SY	13,500.000	13,500.000
0056	628.1104	Erosion Bales	EACH	35.000	35.000
0058	628.1504	Silt Fence	LF	2,525.000	2,525.000
0060	628.1520	Silt Fence Maintenance	LF	2,525.000	2,525.000
0062	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0064	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0066	628.2008	Erosion Mat Urban Class I Type B	SY	376.000	376.000
0068	628.7555	Culvert Pipe Checks	EACH	4.000	4.000
0070	629.0210	Fertilizer Type B	CWT	851.000	851.000
0072	630.0120	Seeding Mixture No. 20	LB	365.000	365.000
0074	630.0200	Seeding Temporary	LB	365.000	365.000
0076	630.0500	Seed Water	MGAL	800.000	800.000

1570-02-77

Line	Item	Item Description	Unit	Total	Qty
0078	633.5200	Markers Culvert End	EACH	8.000	8.000
0080	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	16.000	16.000
0082	637.2210	Signs Type II Reflective H	SF	73.360	73.360
0084	637.2230	Signs Type II Reflective F	SF	11.120	11.120
0086	638.2602	Removing Signs Type II	EACH	10.000	10.000
0088	638.3000	Removing Small Sign Supports	EACH	15.000	15.000
0090	642.5201	Field Office Type C	EACH	1.000	1.000
0092	643.0300	Traffic Control Drums	DAY	1,890.000	1,890.000
0094	643.0420	Traffic Control Barricades Type III	DAY	490.000	490.000
0096	643.0705	Traffic Control Warning Lights Type A	DAY	560.000	560.000
0098	643.0715	Traffic Control Warning Lights Type C	DAY	350.000	350.000
0100	643.0900	Traffic Control Signs	DAY	1,750.000	1,750.000
0102	643.1070	Traffic Control Cones 42-Inch	DAY	1,890.000	1,890.000
0104	643.5000	Traffic Control	EACH	1.000	1.000
0106	645.0130	Geotextile Type R	SY	72.000	72.000
0108	646.1020	Marking Line Epoxy 4-Inch	LF	9,548.000	9,548.000
0110	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	5,066.000	5,066.000
0112	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	600.000	600.000
0114	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	2,533.000	2,533.000
0116	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0118	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0120	646.7120	Marking Diagonal Epoxy 12-Inch	LF	622.000	622.000
0122	646.9000	Marking Removal Line 4-Inch	LF	2,708.000	2,708.000
0124	649.0105	Temporary Marking Line Paint 4-Inch	LF	1,600.000	1,600.000
0126	650.4500	Construction Staking Subgrade	LF	2,577.000	2,577.000
0128	650.5000	Construction Staking Base	LF	2,577.000	2,577.000
0130	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	720.000	720.000
0132	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0134	650.8000	Construction Staking Resurfacing Reference	LF	2,577.000	2,577.000
0136	650.9910	Construction Staking Supplemental Control (project) 01. 1570-02-77	LS	1.000	1.000
0138	650.9920	Construction Staking Slope Stakes	LF	2,577.000	2,577.000
0140	690.0150	Sawing Asphalt	LF	5,304.000	5,304.000
0142	740.0440	Incentive IRI Ride	DOL	3,865.000	3,865.000
0144	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0146	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000
0148	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	720.000	720.000
0150	SPV.0090	Special 02. Concrete Curb and Gutter 6-inch Sloped 36-Inch Type D Special	LF	720.000	720.000

3

CLEARING

201.0105

CAT	STATION	TO	STATION	LOC	STA	REMARKS
0010	462+00	-	465+00	LT	3	
0010	468+00	-	469+00	LT	1	
0010	474+00	-	479+00	LT	5	
TOTAL 0010					9	

GRUBBING

201.0205

CAT	STATION	TO	STATION	LOC	STA	REMARKS
0010	462+00	-	465+00	LT	3	
0010	468+00	-	469+00	LT	1	
0010	474+00	-	479+00	LT	5	
TOTAL 0010					9	

REMOVING SMALL PIPE CULVERTS

203.0100

CAT	STATION	LOC	EACH	REMARKS
0010	474+00	LT	1	
TOTAL 0010			1	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

204.0115

CAT	STATION	SY	REMARKS
0010	460+27	166	USH 8
0010	486+04	166	USH 8
0010	51+25	24	150TH N.
0010	48+50	24	150TH S.
TOTAL 001		380	

REMOVING ASPHALTIC SURFACE MILLING

204.0120

CAT	STATION	TO	STATION	SY	REMARKS
0010	460+00	-	486+00	5778	20' CENTER
TOTAL 0010				5778	

REMOVING CURB & GUTTER

204.0150

CAT	STATION	LOC	LF	REMARKS
0010	473+00	LT	150	
TOTAL 0010			150	

EXCAVATION COMMON

205.0100

CAT	STATION	LOC	CY	REMARKS
0010	PROJECT		7753	
TOTAL 0010			7753	

EXCAVATION MARSH

205.0400

CAT	STATION	LOC	CY	REMARKS
0010	PROJECT		117	
TOTAL 0010			117	

SELECT BORROW

208.1100

CAT	STATION	CY	REMARKS
0010	PROJECT	5154	SUBG
0010	PROJECT	204	MARSH
0010	PROJECT	1256	MISC.
TOTAL 001		6614	

BASE AGGREGATE SUMMARY

			305.0110	305.0120	
			BASE AGG. DENSE		
			3/4-INCH	1 1/4-INCH	
CAT	STATION	LOC	TON	TON	REMARKS
0010	PROJECT			8640	BASE
0010			1230		SHOULDERS
TOTAL 0010			1230	8640	

CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH

			522.0124 CPRC CLASS III 24-INCH	522.1024 CPRC AEW 24-INCH	524.0124 CPRC SALVAGED 24-INCH	
CAT	STATION	LOC	LF	EACH	LF	JOINT TIES
0010	466+50	LT	6	1	8	6
0010	472+00	LT	18	1	8	8
0010	472+00	RT	20	1	8	10
0010	474+00	LT	22	0	8	10
0010	474+00	RT	24	1	8	10
0010	482+80	LT	14	1	8	8
0010	482+80	RT	6	1	8	6
TOTAL 0010			110	6	56	

HMA SUMMARY

		455.0605 TACK COAT	460.4110.S REHEATING HMA LONG JOINTS	460.6244 HMA PAVEMENT 4MT58-34S	465.0110 ASPHALTIC SURFACE PATCHING	
CAT	STATION	GAL	LF	TON	TON	REMARKS
0010	PROJECT	1431	5100	3427	200	
0010	SIDE RDS			307		150TH ST.
TOTAL 0010		1431	5100	3734	200	

CLEANING CULVERT PIPES

520.87

CAT	STATION	EACH	REMARKS
0010	PROJECT	4	
TOTAL 0010		4	

EROSION CONTROL SUMMARY #1

CAT	STATION	LOC	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.1104 EROSION BAILS EACH	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBIL-IZATION EACH	628.1910 EMRGENCY MOBIL-IZATION EACH	REMARKS
0010	PROJECT		13500	13500	5			2	1	UNDISTRIBUTED
0010	PROJECT				30					SILT BASIN
0010	PROJECT					2525	2525			SHOWN ON PLANS
TOTAL 0010			13500	13500	35	2525	2525	2	1	

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT)

618.0100

CAT	STATION	LOC	EACH	REMARKS
0010	PROJECT		1	
TOTAL 0010			1	

WATER

624.0100

CAT	STATION TO STATION	MGAL	REMARKS
0010	460+27 - 486+04	130	COMPACTION
TOTAL 0010		130	

MARKERS CULVERT END

633.5200

CAT	STATION	LOC	EACH
0010	PROJECT		8
TOTAL 0010			8

EROSION CONTROL SUMMARY #2

CAT	STATION TO STATION	LOC	628.2008 E-MAT URBAN CL I TYPE B SY	628.7555 CULVERT PIPE CHECK EACH	629.0210 FERTILIZER TYPE B CWT	630.0120 SEED MIX 20 LB	630.0200 TEMPORARY SEED MIX LB	REMARKS
	PROJECT		20	4	851	365	365	UNDIST.
0010	462+75 - 463+75		89					BEHIND
0010	476+50 - 479+50		267					CURB
TOTAL 0010			376	4	851	365	365	

SIGN SUMMARY

CAT	STATION	LOC	634.0616 WOOD POSTS 4X6-INCH 16-FOOT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SIGN NUMBER	DESCRIPTION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	460+50	RT	1		5.56	W14-3	NO PASS	1	1	
0010	465+50	RT	2	9.00		D1-61	150TH ST W/ARROW	1	2	
0010	468+10	RT	1	7.50		R3-8A	LANE ARROWS	0	0	
0010	470+50	RT	2	15.00		D1-61	POLK COUNTY PARK	1	2	
0010	472+30	LT				W14-3	NO PASS	1	1	
0010	472+80	LT	1	5.18		R1-1	STOP	1	1	
0010	473+50	RT	1	5.18		R1-1	STOP	1	1	
0010	476+00	LT	2	15.00		D1-61	POLK COUNTY PARK	1	2	
0010	477+00	LT	2	N/A		N/A	SKI TRAILS	1	2	REMOVE AND REPLACE
0010	478+24	LT	1	7.50		R3-8A	LANE ARROWS	0	0	
0010	480+00	LT	2	9.00		D1-61	150TH ST W/ARROW	1	2	
0010	485+00	LT	1		5.56	W14-3	NO PASS	1	1	
TOTAL 0010			16	73.36	11.12			10	15	

SEED WATER

630.0500

CAT	STATION	MGAL	REMARKS
0010	PROJECT	800	
TOTAL 0010		800	

FIELD OFFICE TYPE C

642.5201

CAT	STATION	EACH
0010	PROJECT	1
TOTAL 001		1

3

TRAFFIC CONTROL SUMMARY

CAT	STATION	TO	STATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 BARRICADES TYPE III DAY	643.0705 LIGHTS TYPE A DAY	643.0715 LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1070 CONES 42-INCH DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	460+00	-	487+00	1890	490	560	350	1750	1890	1	35 DAYS
TOTAL 0010				1890	490	560	350	1750	1890	1	

MARKING LINE EPOXY 4-INCH

CAT	STATION	TO	STATION	646.1020 EPOXY 4-INCH YELLOW LF	646.1020 EPOXY 4-INCH WHITE LF	646.1040 GROOVED WET REFLECTIVE EPOXY 4-INCH LF	646.3040 GROOVED WET REFLECTIVE EPOXY 8-INCH LF	646.4520 SAME DAY EPOXY 4-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.7120 DIAGONAL EPOXY 12-INCH YELLOW LF	646.9000 MARKING REMOVAL 4-INCH LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF
0010	460+00	-	472+58	4248		2516	300	1258	2	1	311	715	800
0010	473+75	-	486+50	4300		2550	300	1275	2	1	311	1994	800
0010	48+50	-	49+75	250	250								
0010	50+50	-	51+75	250	250								
TOTAL 0010				9048	500	5066	600	2533	4	2	622	2708	1600

CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT

SPV.0090.01

CAT	STATION	LOC	LF	REMARKS
0010	473+00	LT	160	RADII
0010	473+00	RT	160	RADII
0010	465+00	LT	100	SHOULDER
0010	477+00	LT	300	SHOULDER
TOTAL 0010			720	

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D SPECIAL

601.0557

CAT	STATION	LOC	LF	REMARKS
0010	473+00	LT	160	RADII
0010	473+00	RT	160	RADII
0010	465+00	LT	100	SHOULDER
0010	477+00	LT	300	SHOULDER
TOTAL 0010			720	

SAWING ASPHALT

690.0150

CAT	STATION	LOC	LF	REMARKS
0010	PROJECT		104	TERMINII
0010	PROJECT		5200	EDGE CONCRETE
TOTAL 0010			5304	

CONSTRUCTION STAKING SUMMARY

CAT	STATION	TO	STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB AND GUTTER LF	650.6000 PIPE CULVERTS EACH	650.8000 RESURFACE REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL LS	650.9920 SLOPE STAKES LF	REMARKS
0010	460+27	-	486+04	2577	2577	720	4	2577	1	2577	
TOTAL 0010				2577	2577	720	4	2577	1	2577	

RIPRAP LIGHT

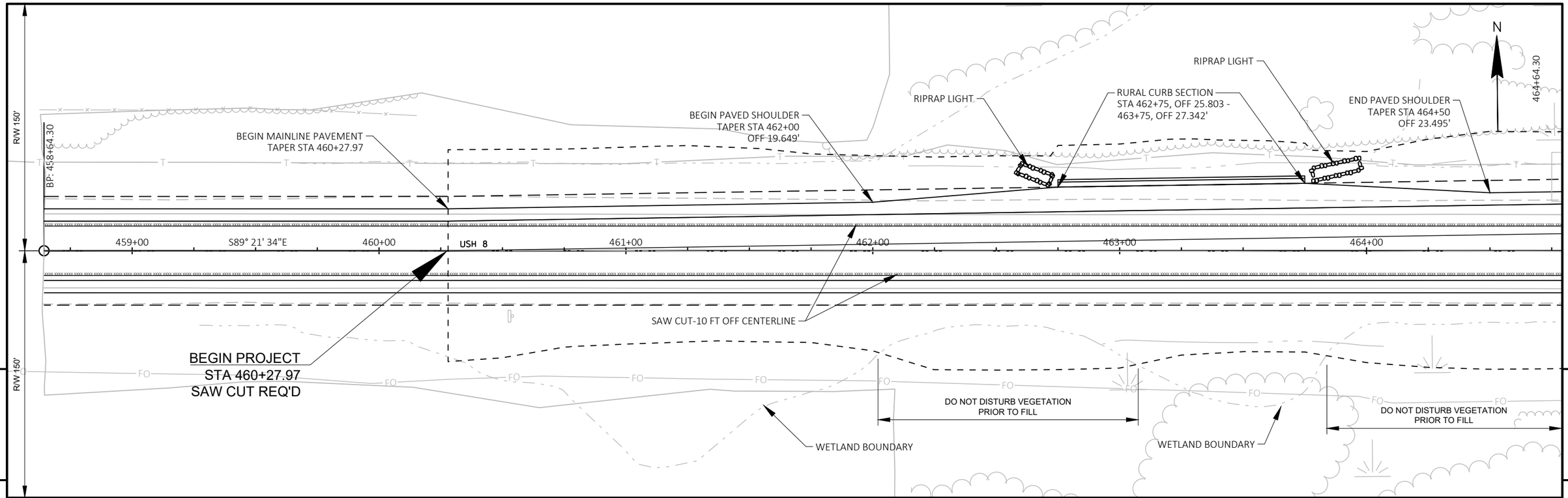
606.01

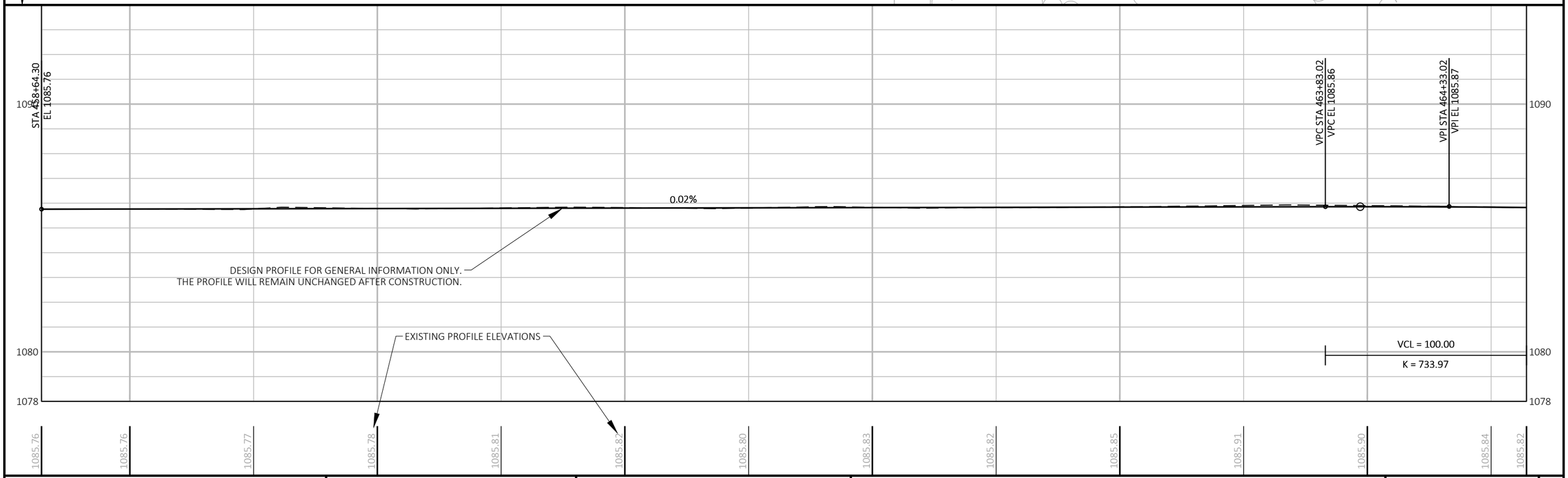
CAT	STATION	LOC	CY	REMARKS
0010	462+75	LT	4	FLUME
0010	463+75	LT	4	8'X12'
0010	476+50	LT	4	"
0010	479+50	LT	4	"
	472+75	RT	2	6x8
	473+50	RT	2	FLUME
	472+75	LT	2	"
	473+50	LT	2	"
TOTAL 0010			24	

GEOTEXTILE TYPE R

645.0130

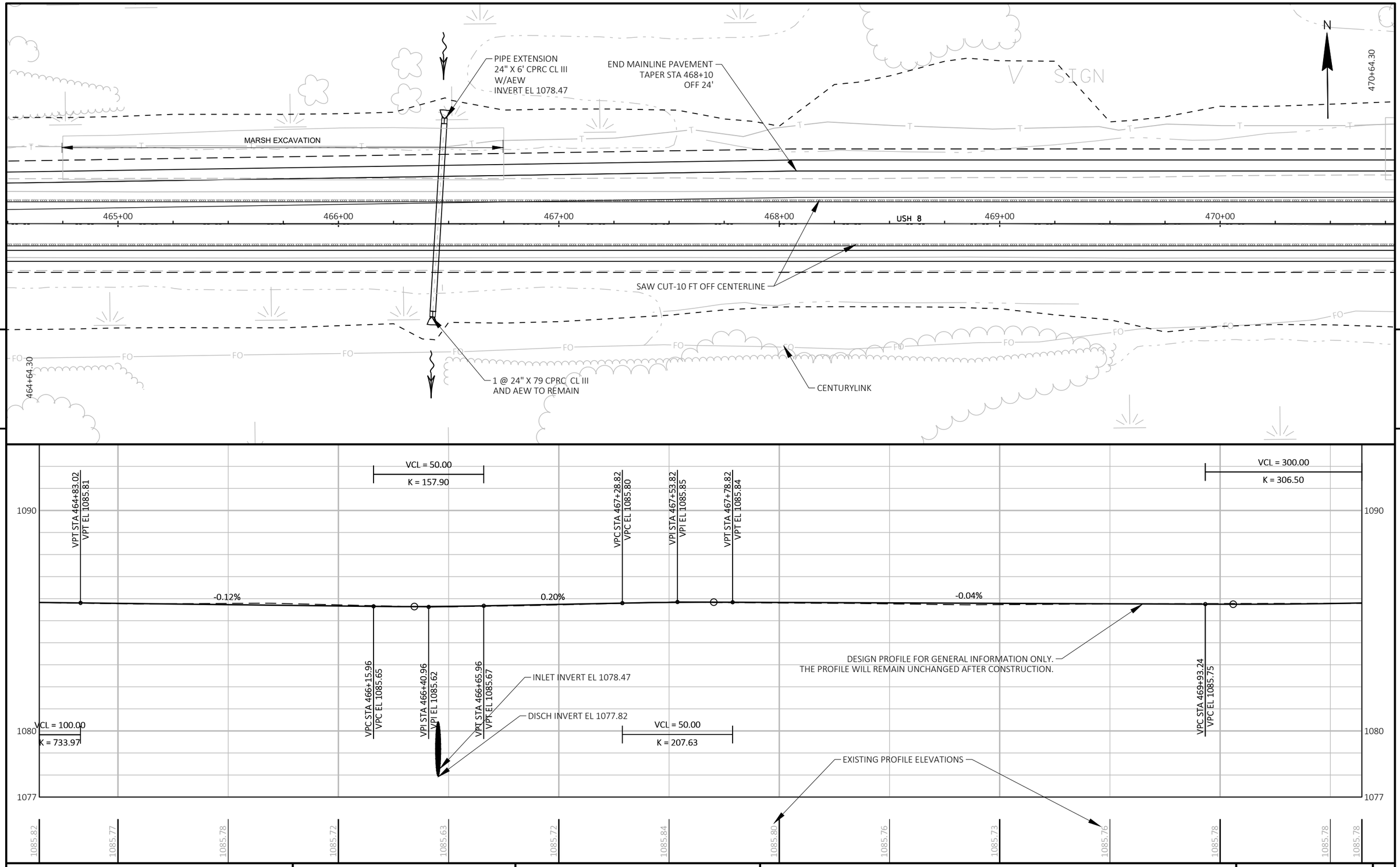
CAT	STATION	LOC	SY
0010	462+75	LT	12
0010	463+75	LT	12
0010	476+50	LT	12
0010	479+50	LT	12
0010	472+75	RT	6
0010	473+50	RT	6
0010	472+75	LT	6
0010	473+50	LT	6
TOTAL 0010			72





PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN AND PROFILE: USH 8	SHEET 24	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PPLN.DWG
LAYOUT NAME - Sht - (1)
PLOT DATE : 7/30/2019 9:02 AM
PLOT BY : PEARSON, MICHAEL R
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN AND PROFILE: USH 8	SHEET 25	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PPLN.DWG
LAYOUT NAME - Sht - (2)

PLOT DATE : 7/30/2019 9:02 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

POLK-BURNETT ELECTRIC
RAD = 40'
CTR OF RADIUS
472+57.44
OFF 74' LT
PIPE EXTENSION
24" X 18' CPRC CL III
W/AEW
INVERT EL 1075.80
CENTURYLINK
MARSH EXCAVATION
DAIRYLAND POWER
OVERHEAD LINE
CENTURYLINK
1080.331
WIT 1 1/4IP
51+00
REMOVE SMALL
CULVERT PIPE
18" X 34' CPCS
SPECIAL DITCH EL. 1077.0
CENTURYLINK
PIPE EXTENSION
24" X 22' CPRCCLIII
W/AEW
INVERT EL 1076.5
WETLAND BOUNDARY
RURAL CURB SECTION
STA 476+25
MARSH EXCAVATION
RAD = 60'
1CTR OF RAD
STA 473+87.30
OFF 94' LT
910
1087.895
CP NL
150TH AVE N. STA 50+00 = USH8 STA 473+13
150TH AVE S. STA 50+00 = USH8 STA 473+19.63
SECTION CORNER
SEE GENERAL NOTES
SAW CUT-10 FT OFF CENTERLINE
DO NOT DISTURB VEGETATION
IN WETLAND PRIOR TO FILL
101
1083.170
WIT 1 1/4IP
PIPE EXTENSION
24" X 24' CPRC CLIII
W/ AEW
INVERT EL 1075.31
102
1077.833
WIT 1 1/4IP
POLK-BURNETT ELECTRIC
DAIRYLAND POWER
OVERHEAD LINE
CENTURYLINK
PIPE EXTENSION
24" X 20' CPRC CL III
W/AEW
INVERT EL 1074.5
RAD = 60'
CTR OF RADIUS
STA 472+44.79
OFF 82'
CENTURYLINK
DAIRYLAND POWER
RAD = 40'
CTR OF RADIUS
STA 473+74.75
OFF 62'
0.94%
DESIGN PROFILE FOR GENERAL INFORMATION ONLY.
THE PROFILE WILL REMAIN UNCHANGED AFTER CONSTRUCTION.
VCL = 800.00
K = 490.09
VPI STA 471+43.24
VPI EL 1085.69
VPT STA 472+93.24
VPT EL 1087.09
ENTRY INVERT EL 1075.8
DISCH INVERT EL 1074.50
ENTRY INVERT EL 1076.5
DISCH INVERT EL 1075.31

471+00 USH 8 472+00 473+00 474+00 475+00 S89° 21' 34"E 476+00

RW 150'
470+64.30
1090
1080
1076
1085.78 1085.87 1086.07 1086.39 1086.81 1087.26 1087.68 1088.06 1088.46 1088.85 1089.16 1089.59 1089.95 1090.06

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN AND PROFILE: USH 8	SHEET 26	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PPLN.DWG
LAYOUT NAME - Sht - (3)
PLOT DATE : 9/18/2019 8:04 AM
PLOT BY : PEARSON, MICHAEL R
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

MATCH MAINLINE TAPER
STA 478+24.67
OFF 34'

BEGIN MAINLINE PAVEMENT
TAPER STA 478+24.67
OFF 24'

RURAL CURB SECTION
STA 479+50
OFF 32.07'

RIPRAP LIGHT FLUME

END SHOULDER PAVING
TAPER STA 480+25
OFF 25.918'

909
1089.632
CP NL

N

RW 150'

482+64.30

DO NOT DISTURBE NATIVE
VEGETATION PRIOR TO FILL

477+00 | 478+00 | 479+00 | USH 8 | 480+00 | 481+00 | 482+00

SAW CUT-10 FT OFF CENTERLINE

RW 150'

WETLAND BOUNDARY

5

5

476+64.30

FO

VPI STA 478+59.99
VPI EL 1092.41

VPT STA 482+59.99
VPT EL 1089.63

1090

1090

DESIGN PROFILE FOR GENERAL INFORMATION ONLY.
THE PROFILE WILL REMAIN UNCHANGED AFTER CONSTRUCTION.

VCL = 800.00

K = 490.09

EXISTING PROFILE ELEVATIONS

1081

1081

1090.06 | 1090.28 | 1090.53 | 1090.64 | 1090.73 | 1090.79 | 1090.69 | 1090.62 | 1090.45 | 1090.17 | 1089.84 | 1089.53 | 1089.26 | 1089.19

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN AND PROFILE: USH 8	SHEET 27	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PPLN.DWG
LAYOUT NAME - Sht - (4)

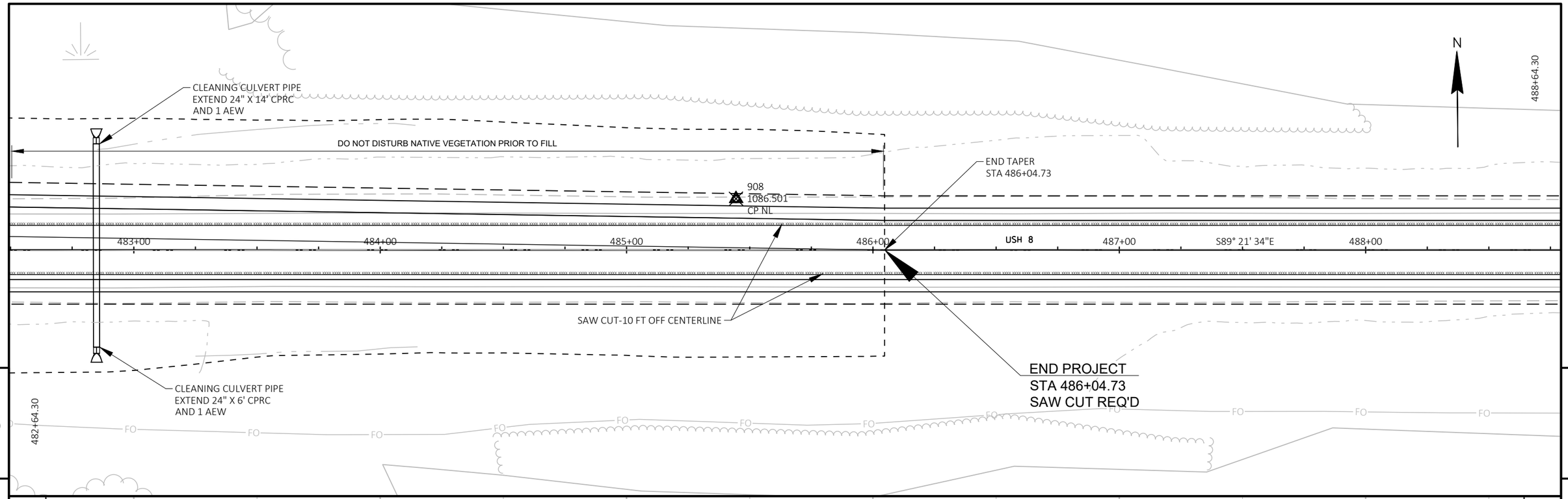
PLOT DATE : 7/30/2019 9:02 AM

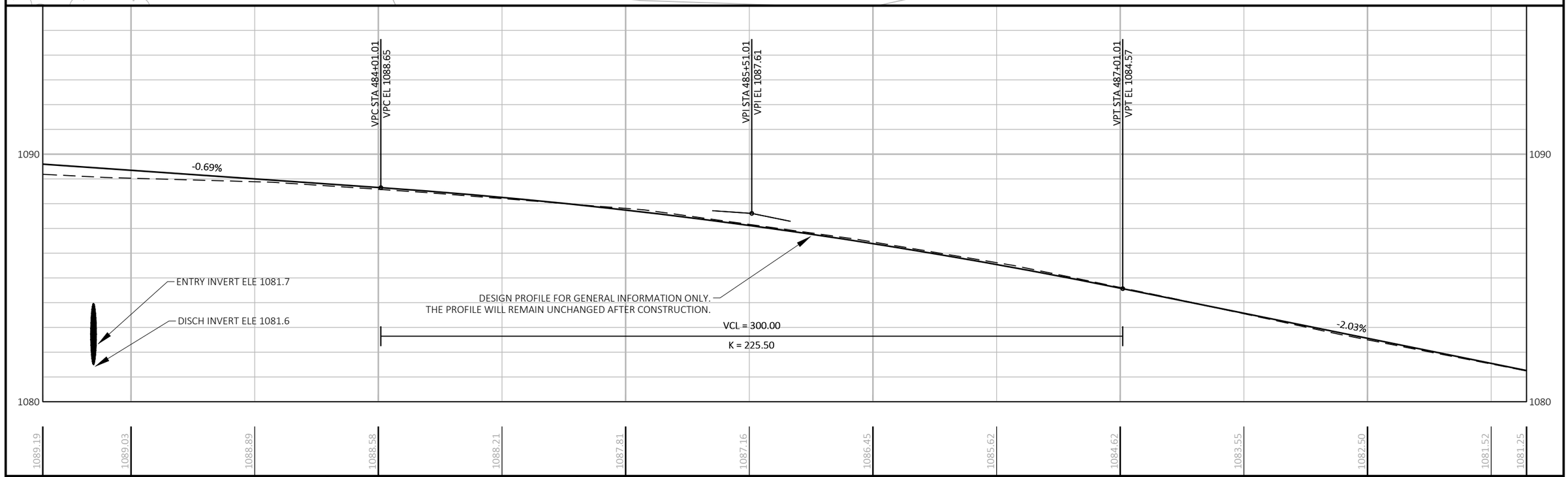
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PLAN AND PROFILE: USH 8	SHEET 28	E

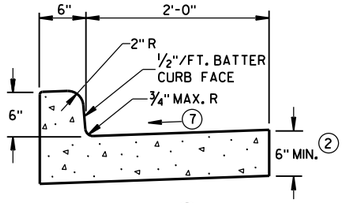
FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSPLAN\15700277_PPLN.DWG
LAYOUT NAME - Sht - (5)

PLOT DATE : 7/30/2019 9:02 AM PLOT BY : PEARSON, MICHAEL R PLOT NAME : PLOT SCALE : 1 IN:40 FT

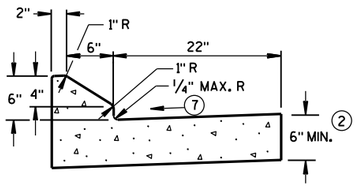
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

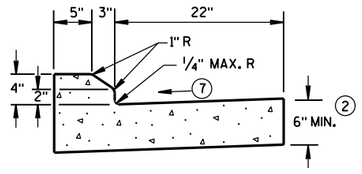
08D01-20A	CONCRETE CURB & GUTTER
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-07F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



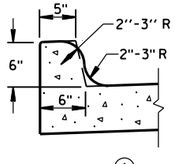
TYPES A (1) & D



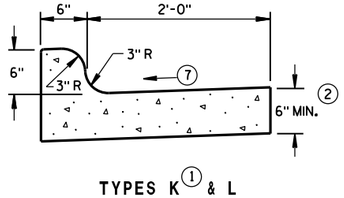
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

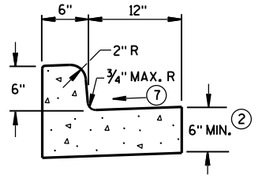


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



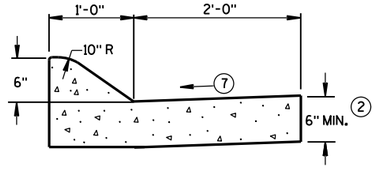
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

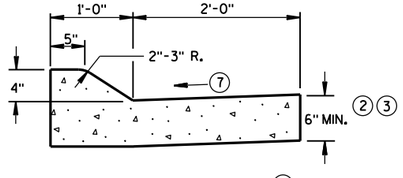


TYPES A (1) & D

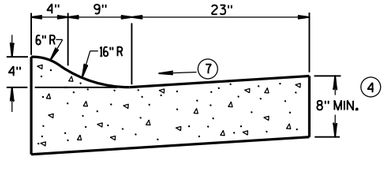
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

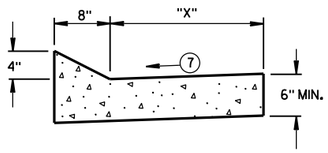


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 GUTTER 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.

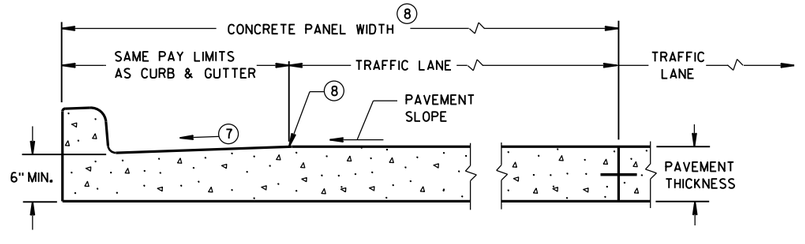
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(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.

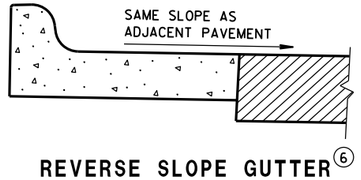
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



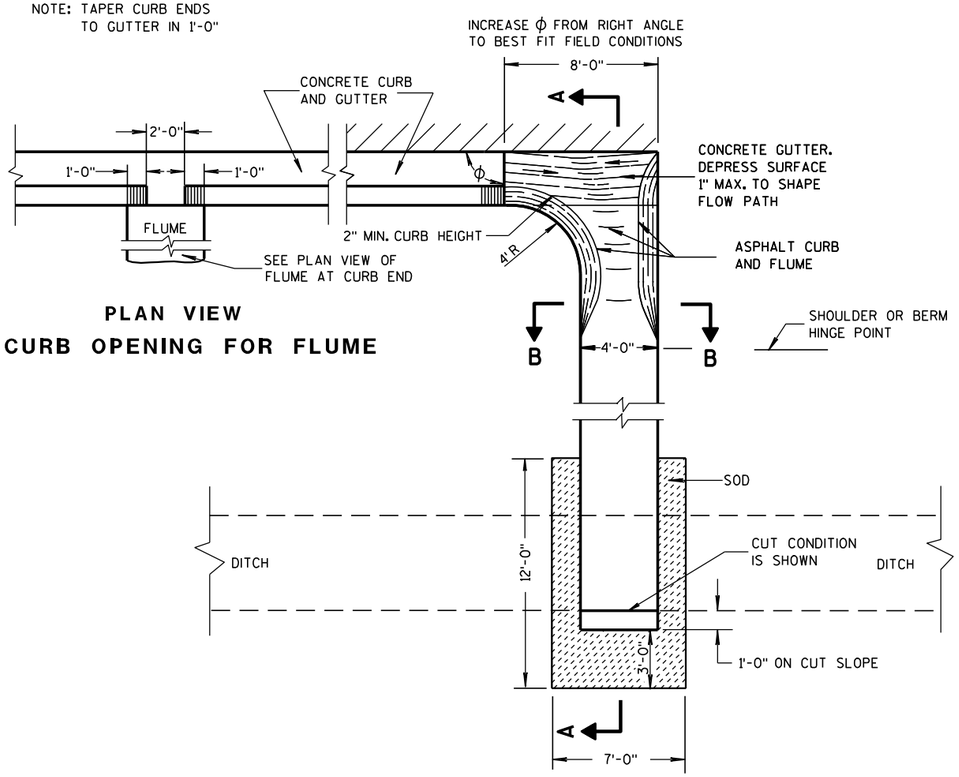
REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

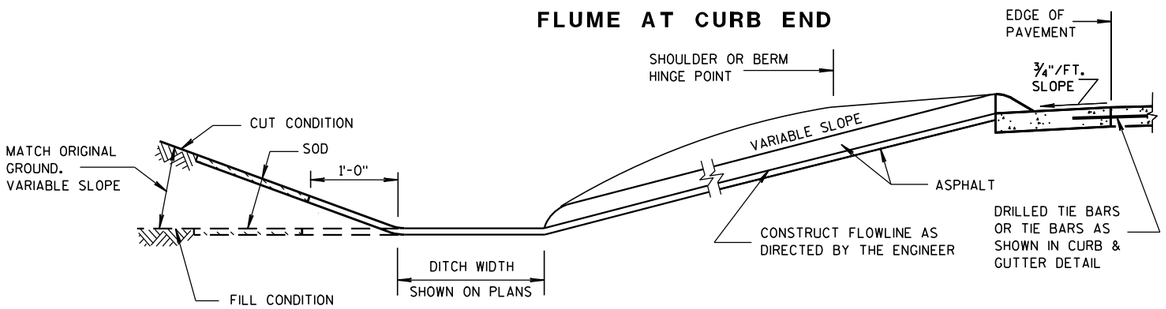
S.D.D. 8 D 1-20a

ASPHALTIC FLUME

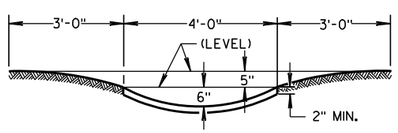


PLAN VIEW
CURB OPENING FOR FLUME

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.

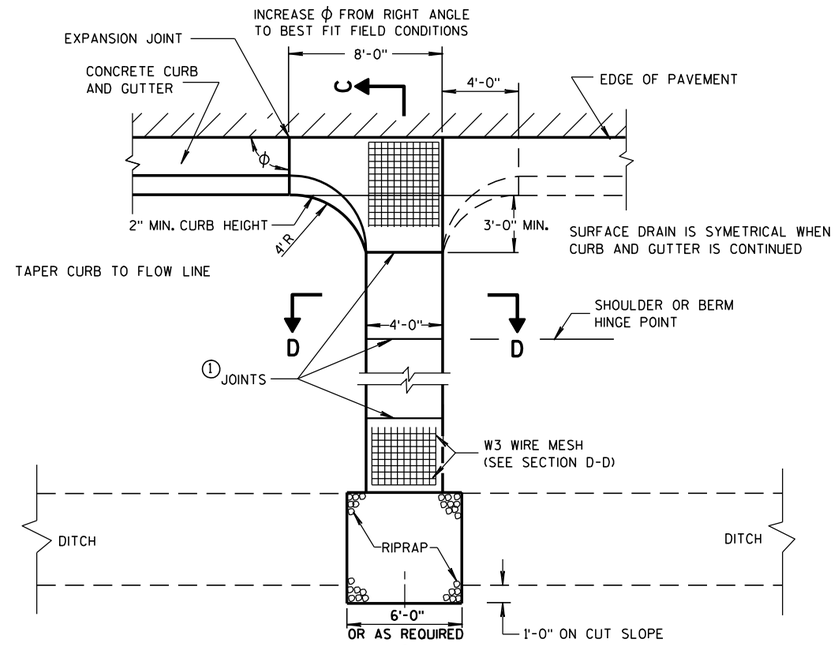
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

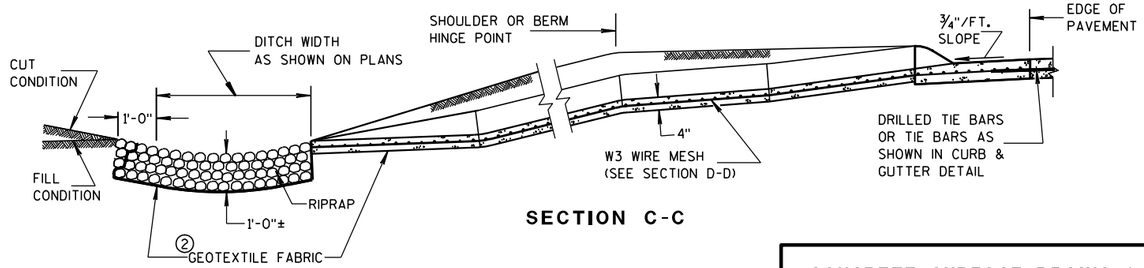
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

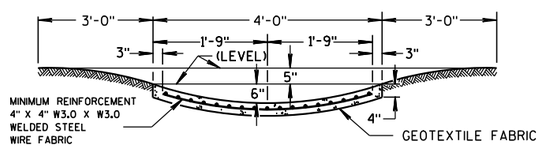
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

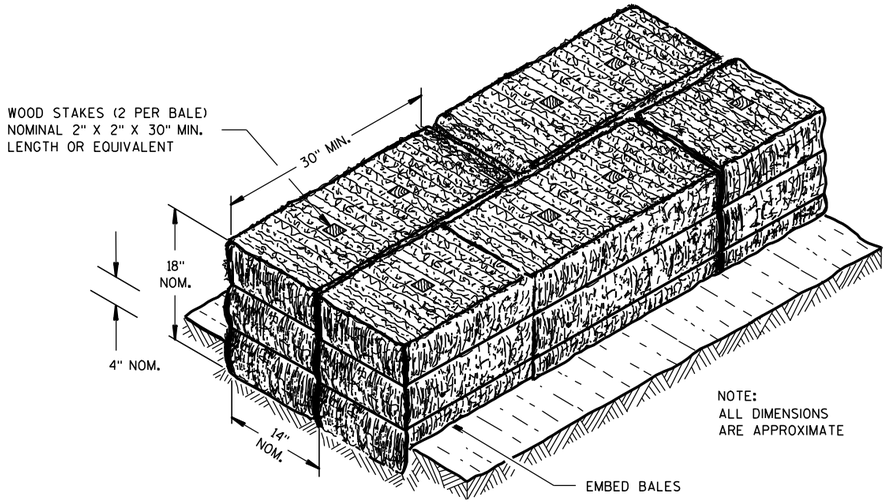
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

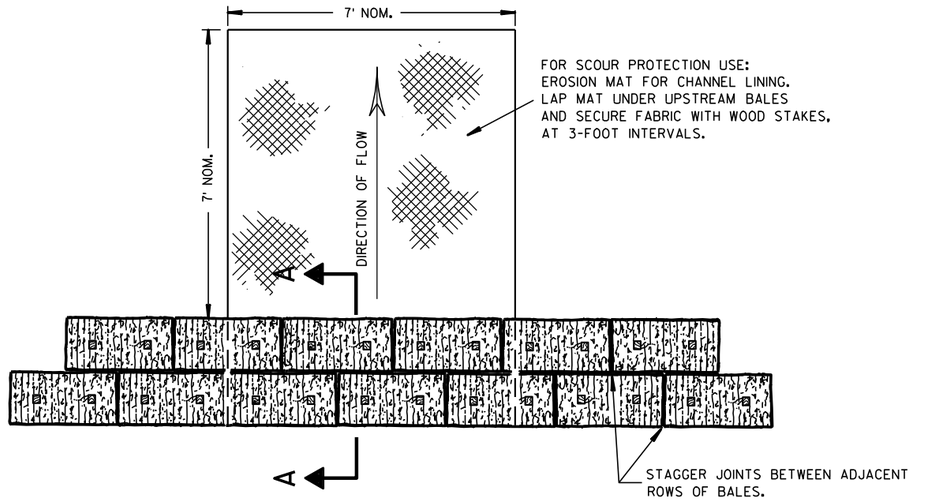
S.D.D. 8 D 4-5

6

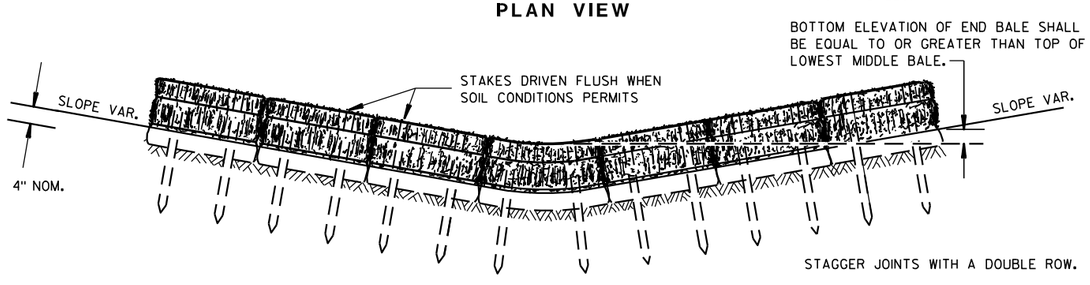
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



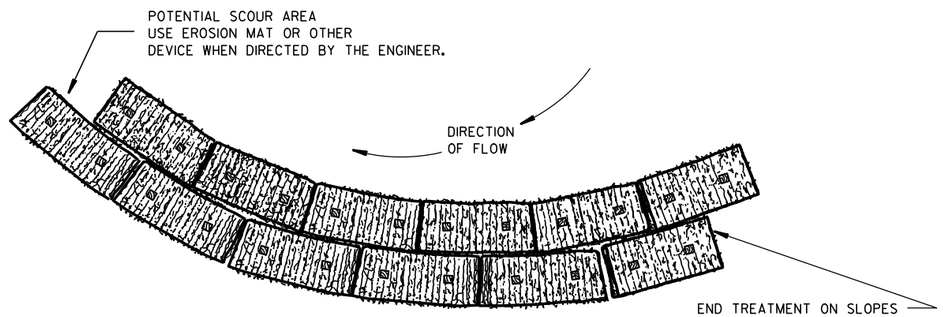
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

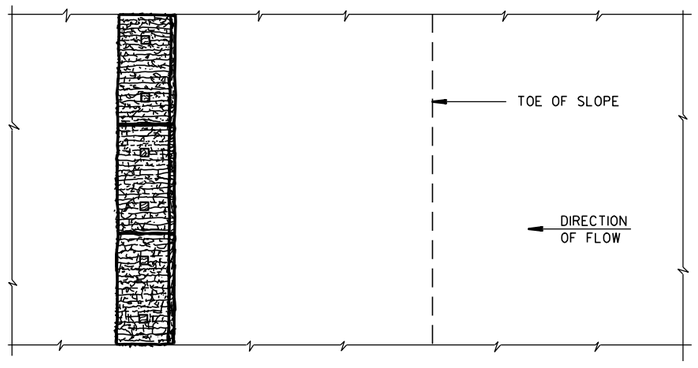
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

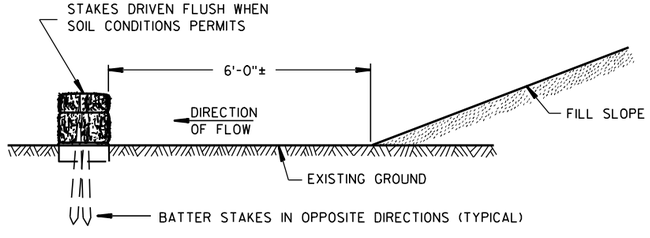


PLAN VIEW

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

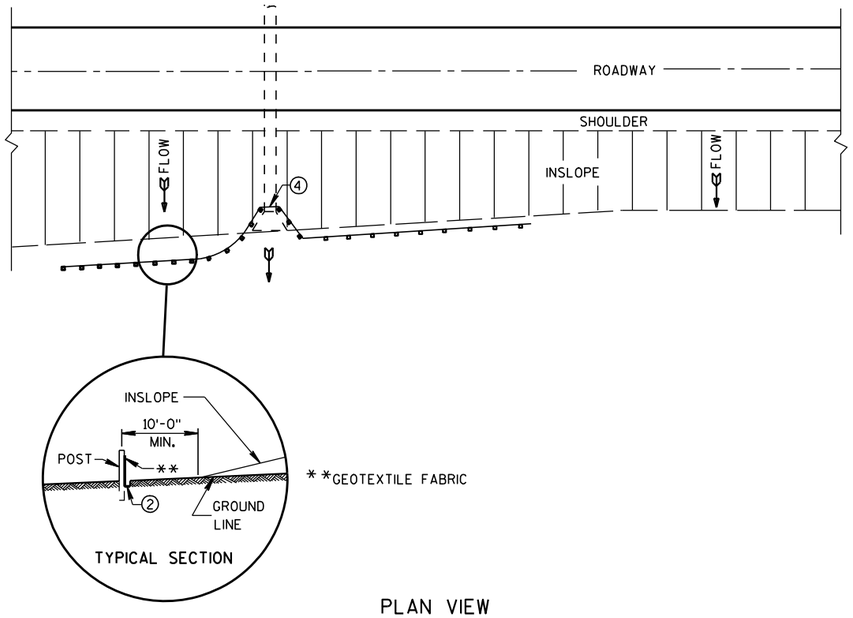
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

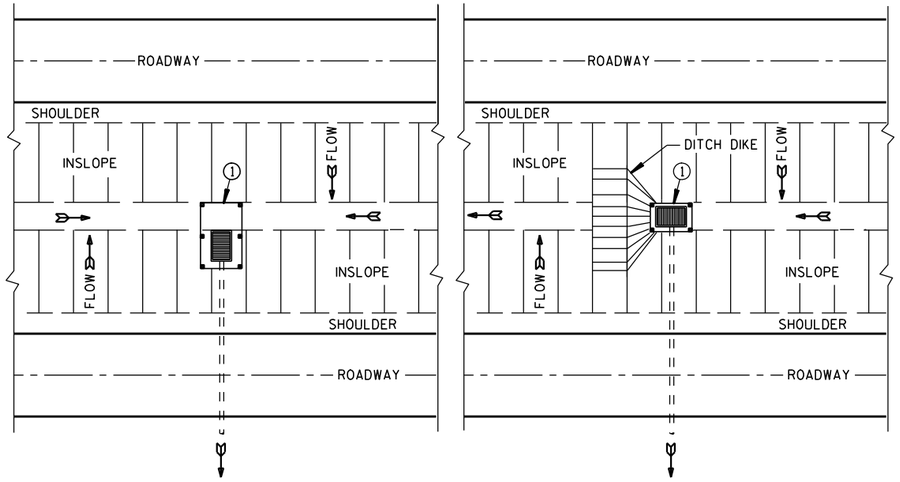
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



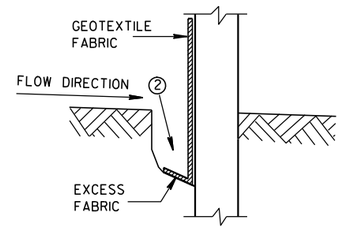
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

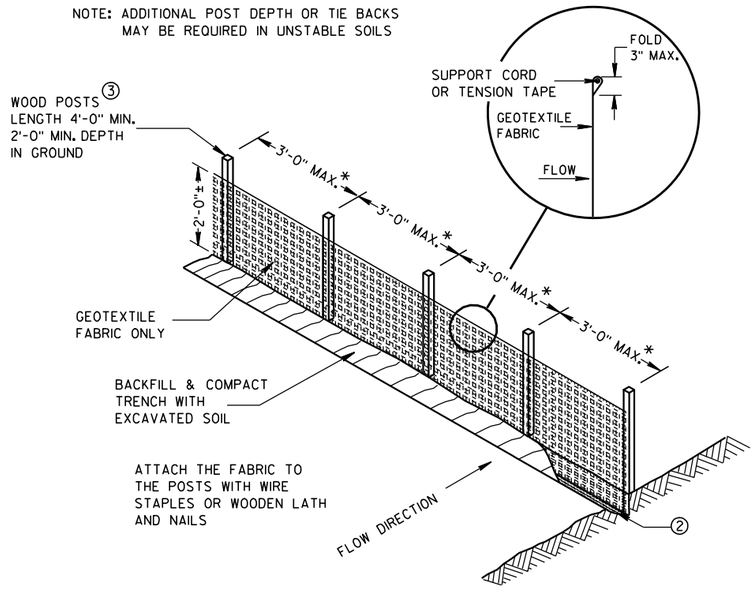
GENERAL NOTES

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

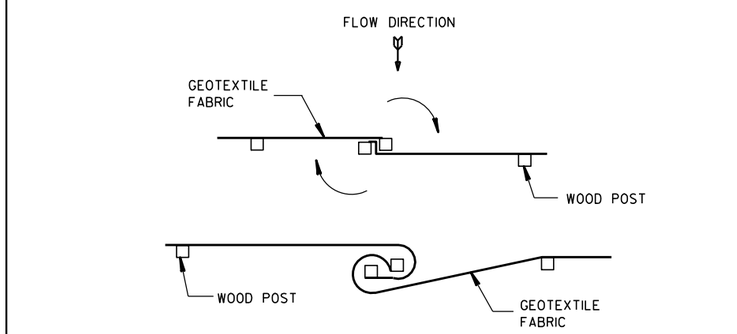
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



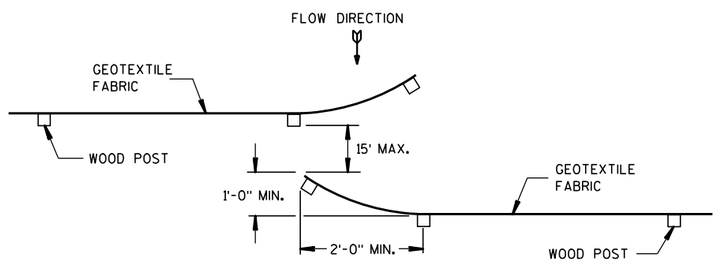
TRENCH DETAIL



SILT FENCE

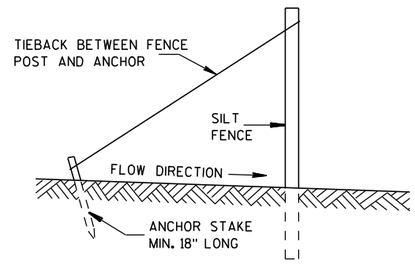


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

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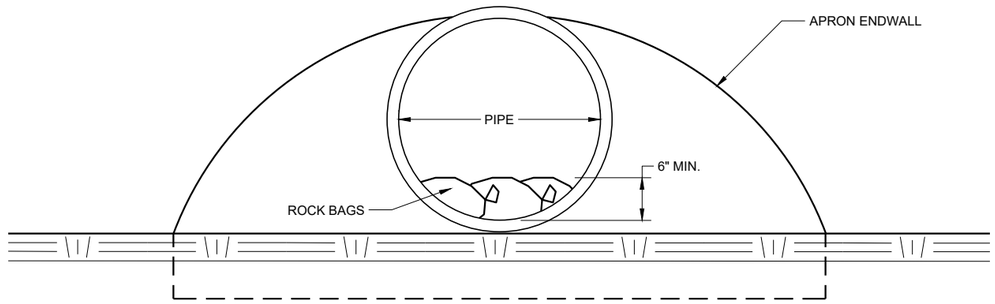
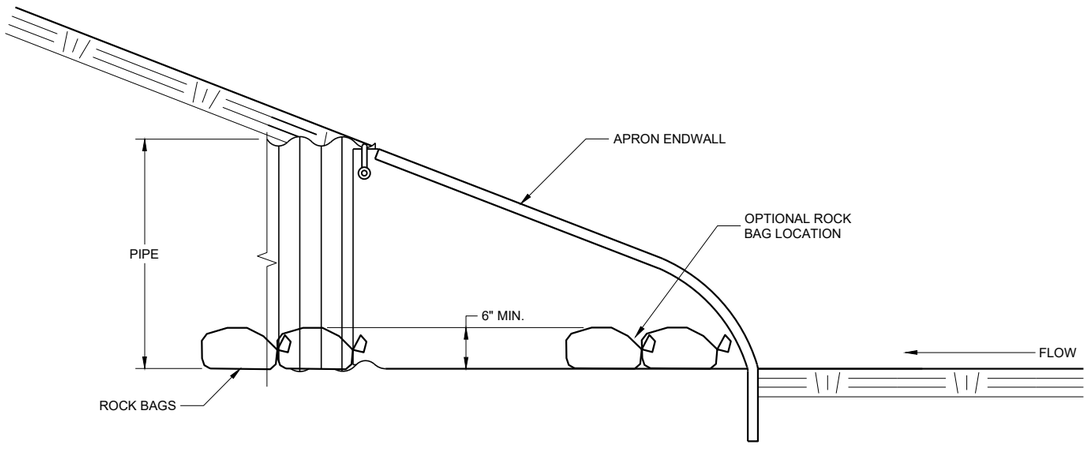
S.D.D. 8 E 9-6



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

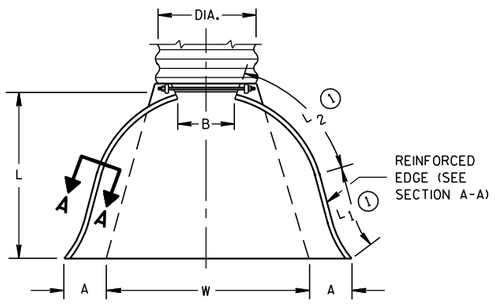
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

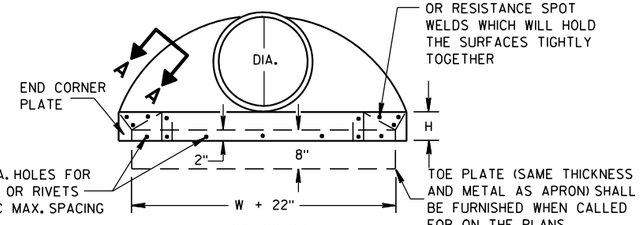
REINFORCED CONCRETE APRON ENDWALLS

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

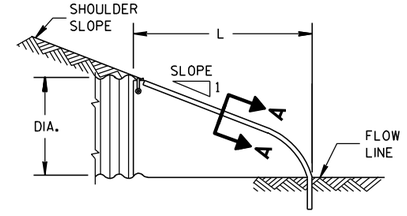
*MINIMUM
**MAXIMUM



PLAN VIEW

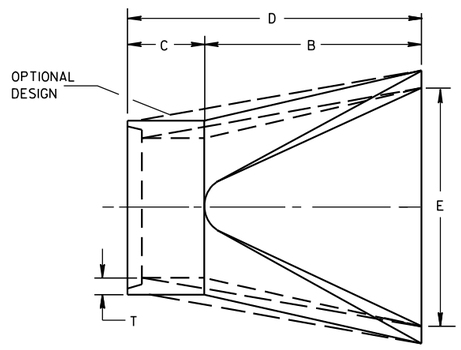


END VIEW

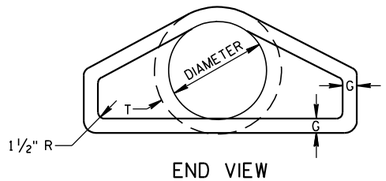


SIDE ELEVATION

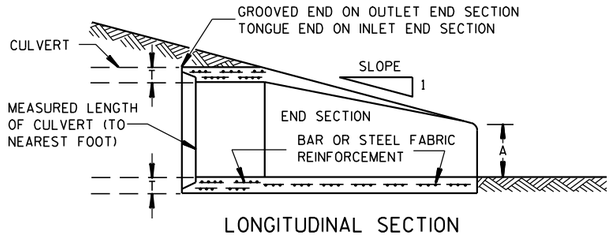
METAL ENDWALLS



PLAN

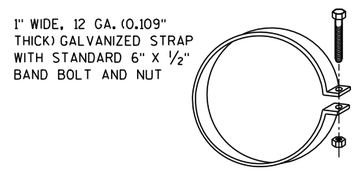


END VIEW



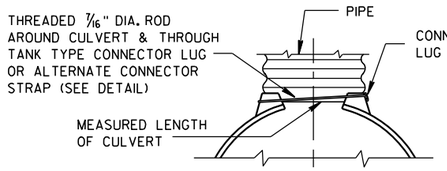
LONGITUDINAL SECTION

CONCRETE ENDWALLS

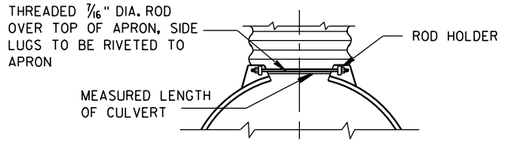


ALTERNATE FOR TYPE 1 CONNECTION

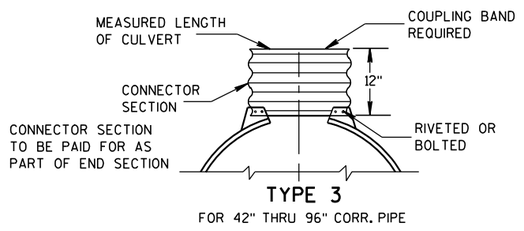
END SECTION CONNECTOR STRAP



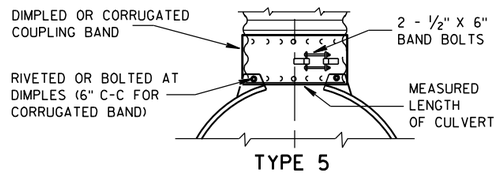
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

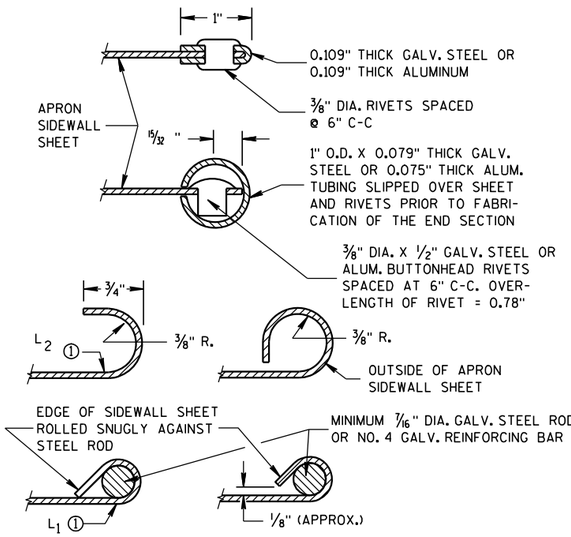
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

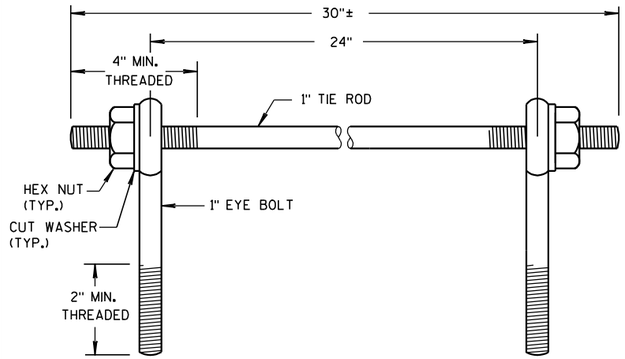
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

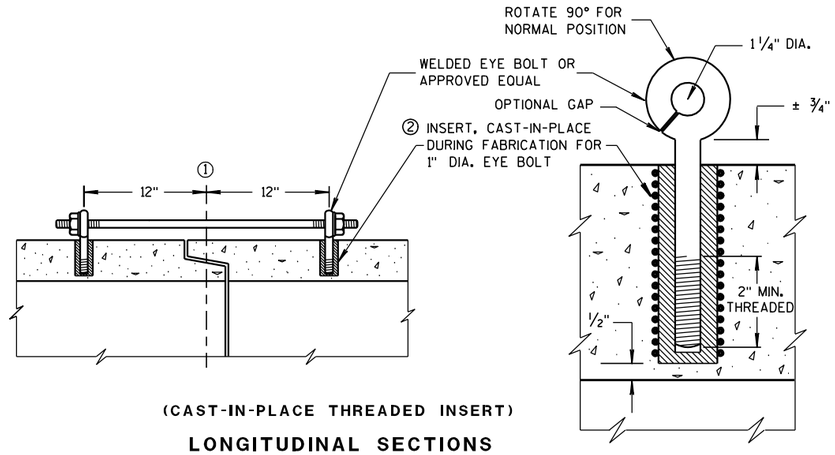
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

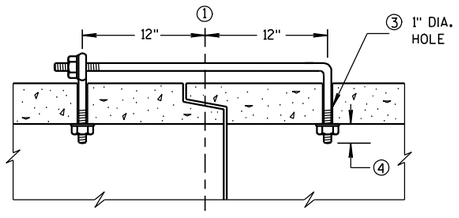
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

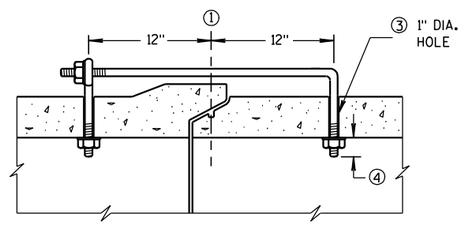
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

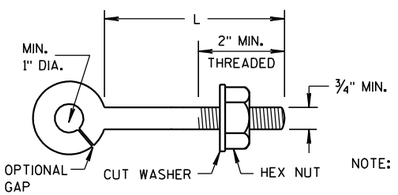


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

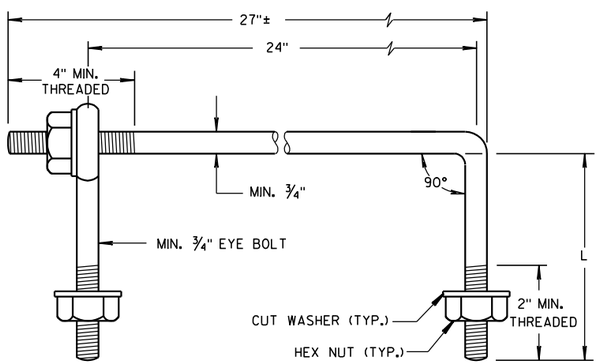
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

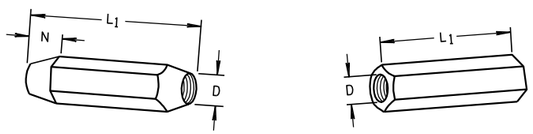
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

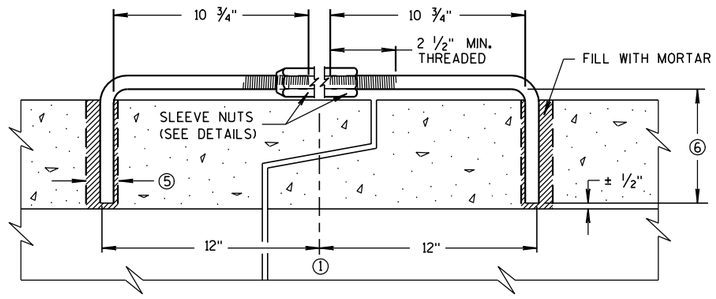
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

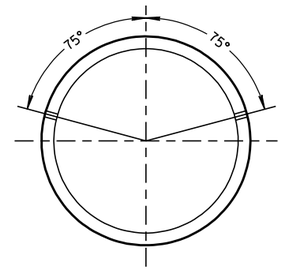
SLEEVE NUTS



LONGITUDINAL SECTION

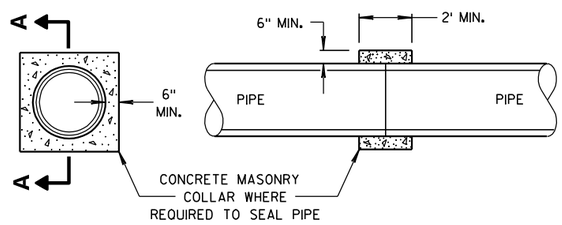
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

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S.D.D. 8 F 4-7

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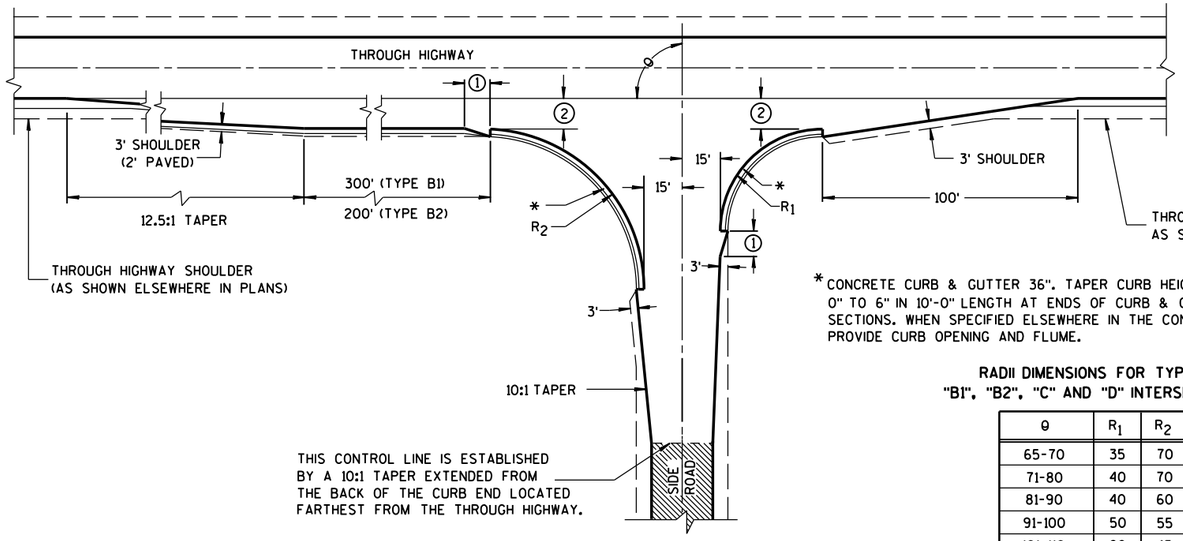
S.D.D. 8 F 4-7

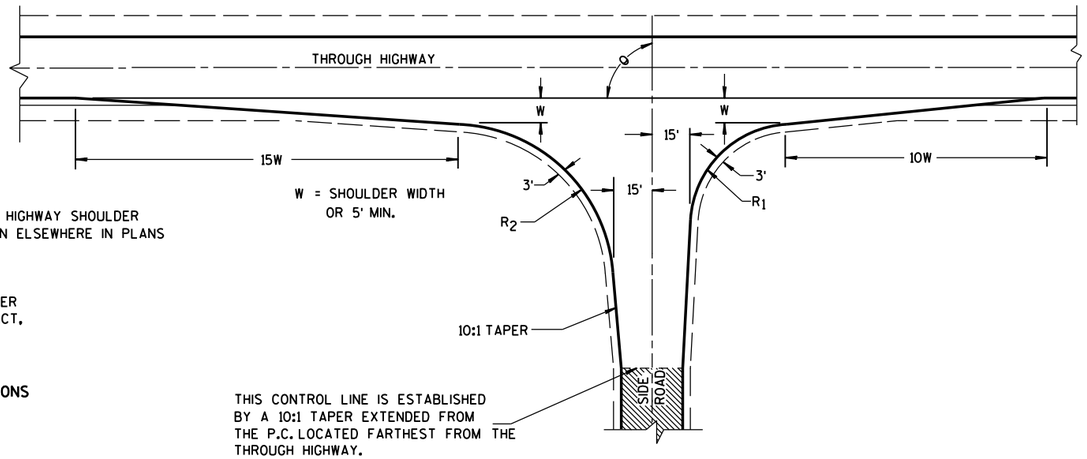


TYPE "B1" AND "B2"

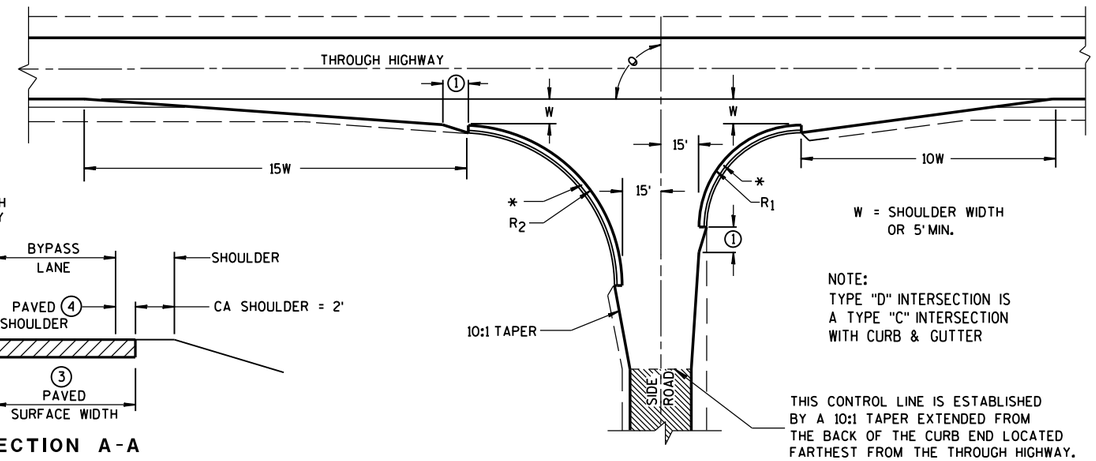
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

(1) 10-FT TYPICAL.

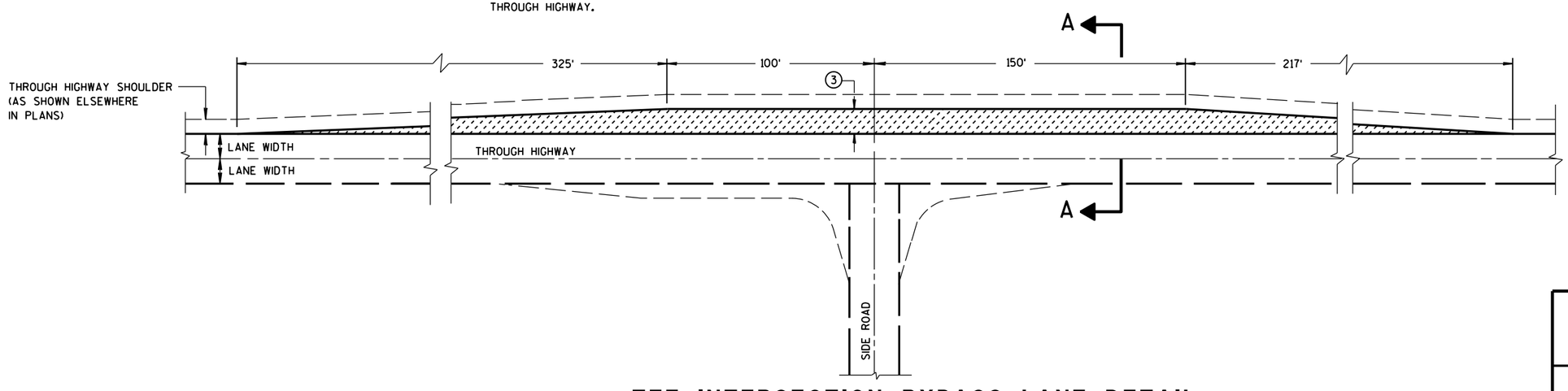
(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

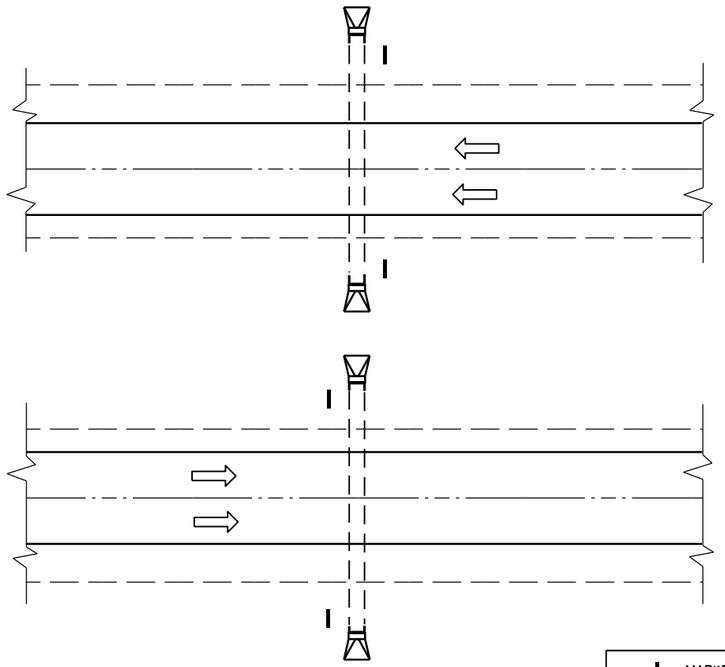


TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

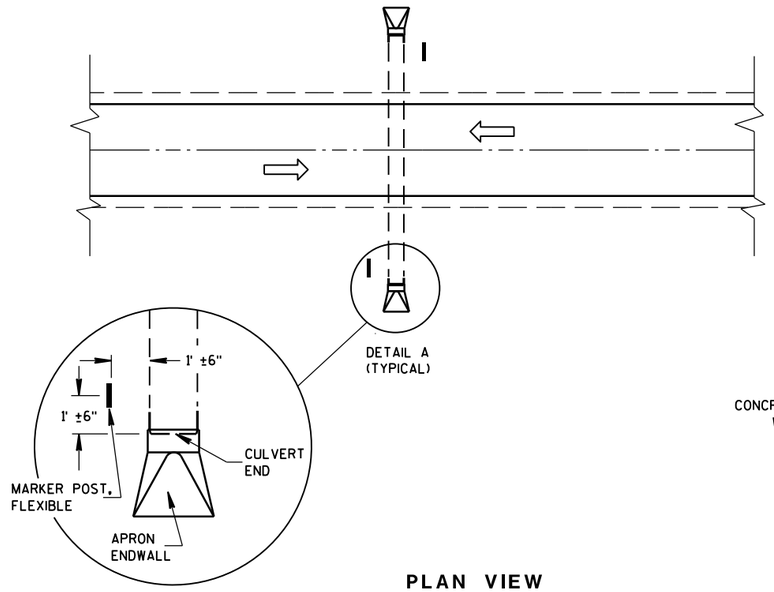
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 9 A 1-13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

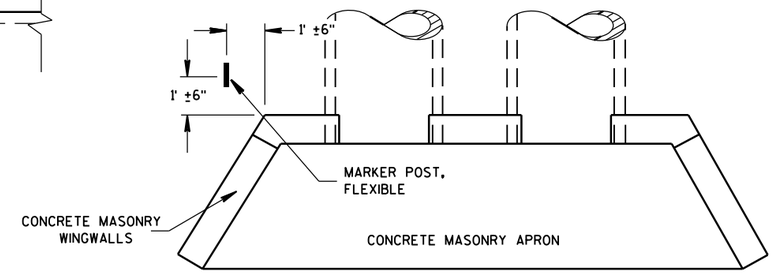
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

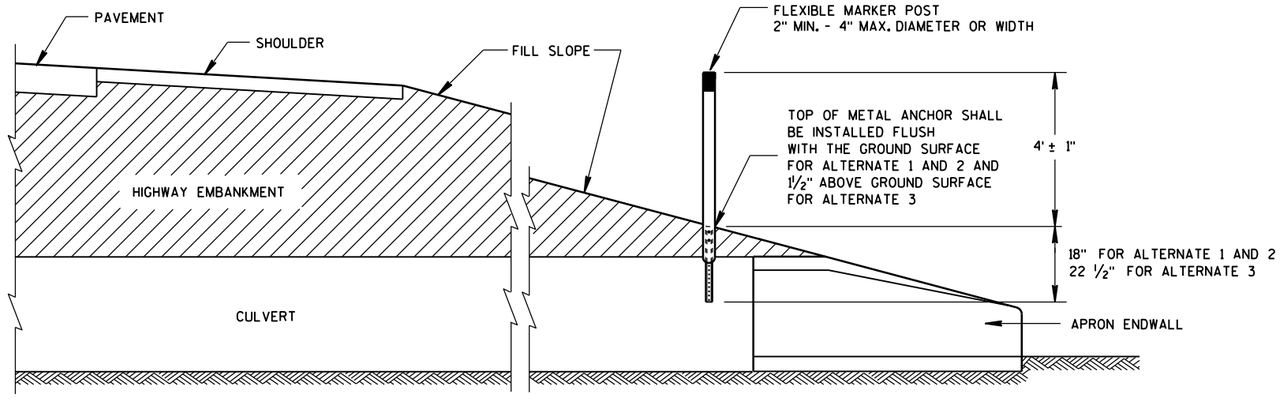
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

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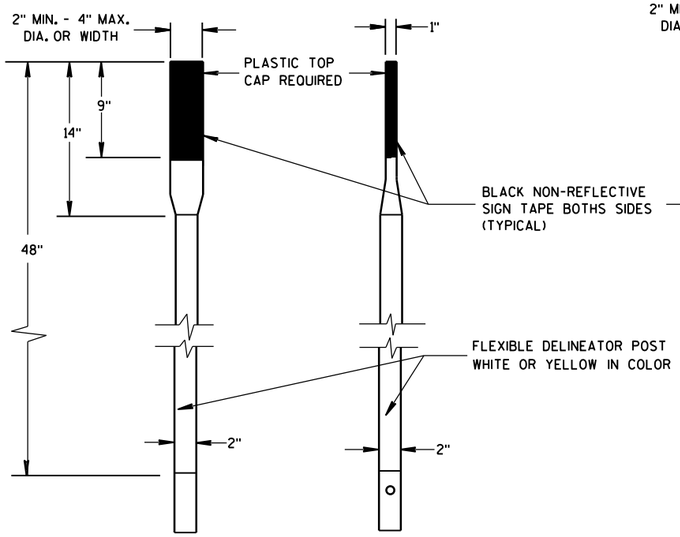
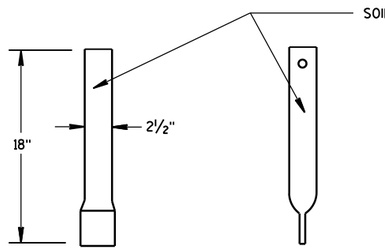
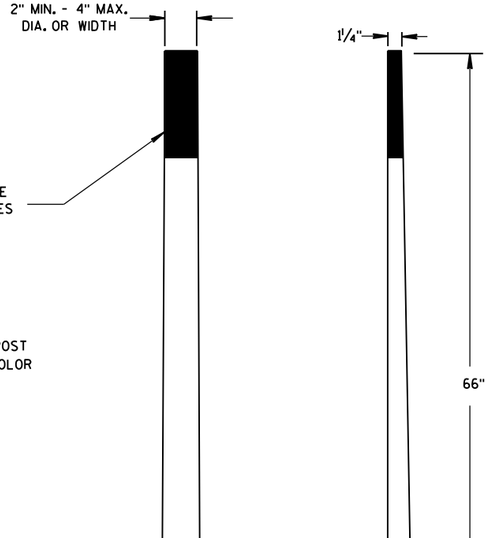
S.D.D. 15 A 3-2a





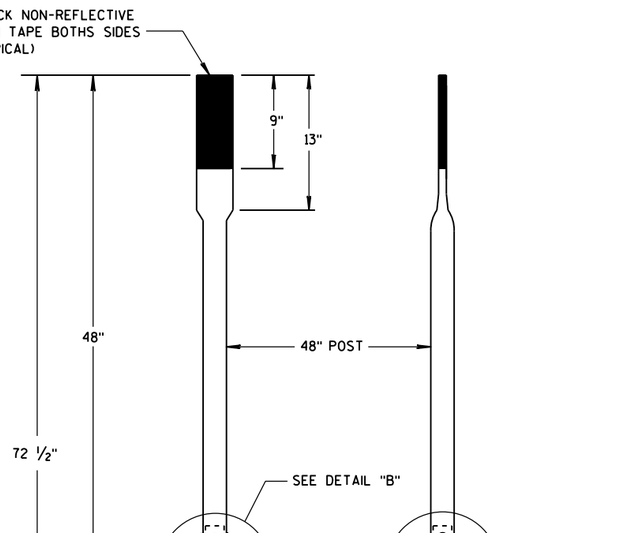
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

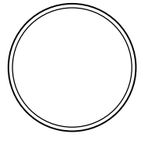
ALTERNATE 2



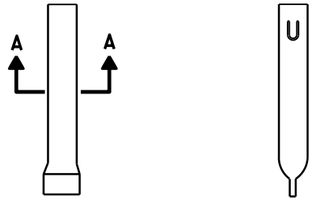
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

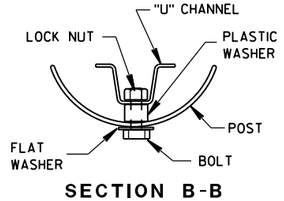


SECTION A-A

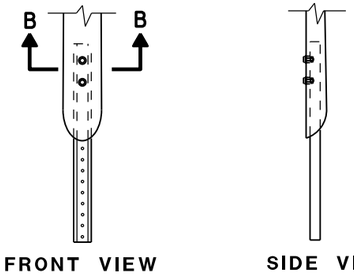


FRONT VIEW SIDE VIEW

ALTERNATE 1

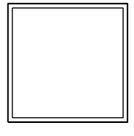


SECTION B-B

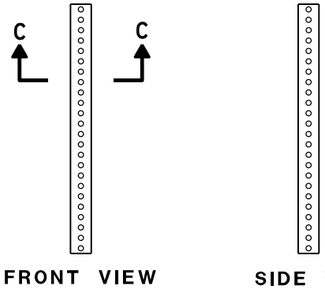


FRONT VIEW SIDE VIEW

ALTERNATE 2



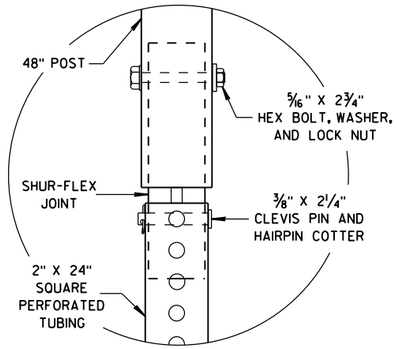
SECTION C-C



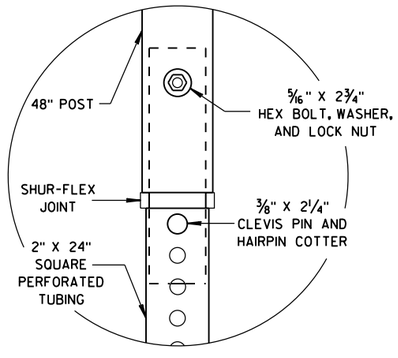
FRONT VIEW SIDE VIEW

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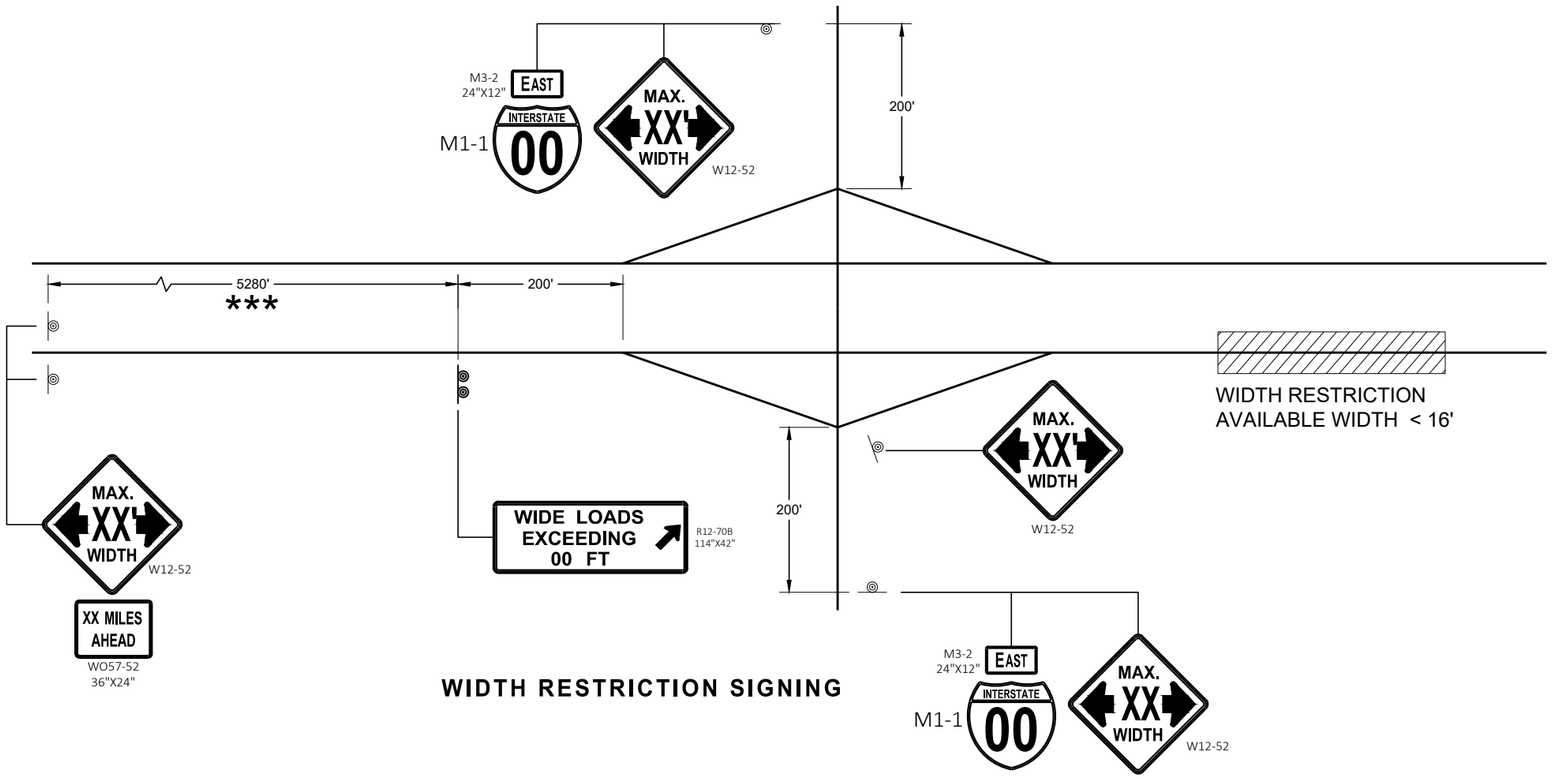
S.D.D. 15 A 3-2b



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS 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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

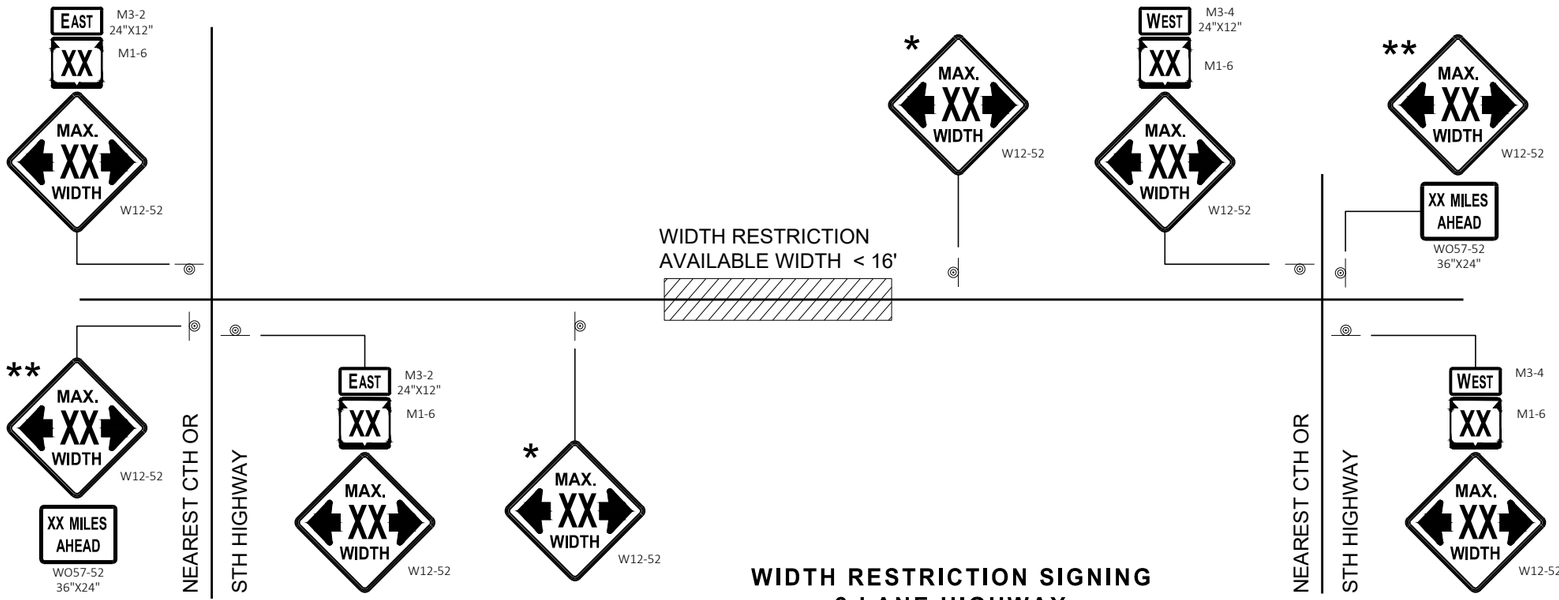
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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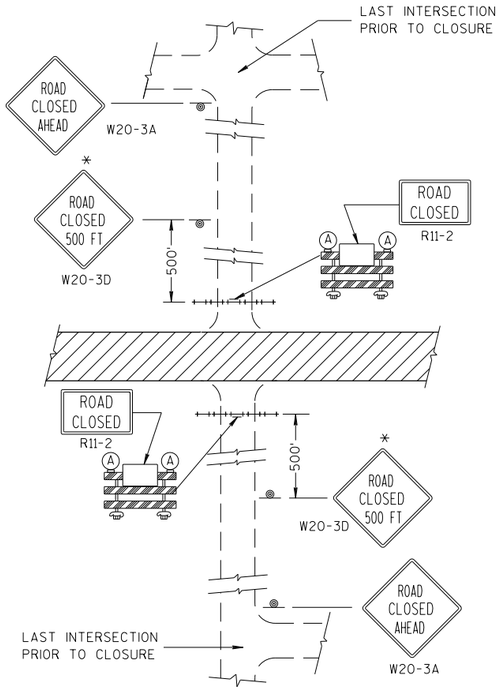
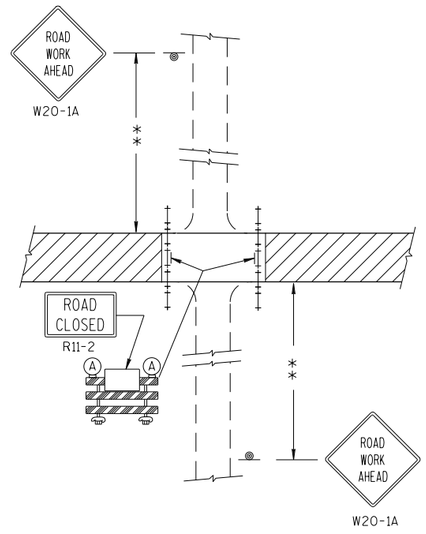
SDD 15C02 - 07f



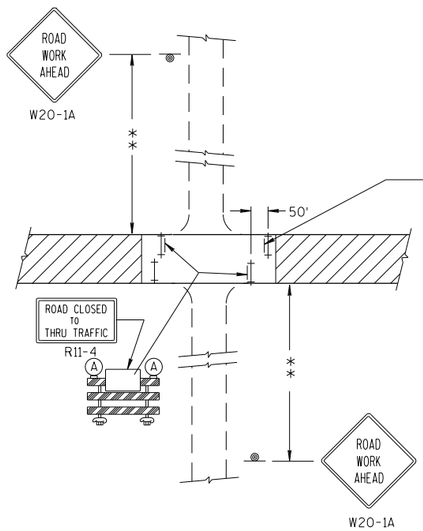
DETAIL 1

(NO ACCESS TO PROJECT)



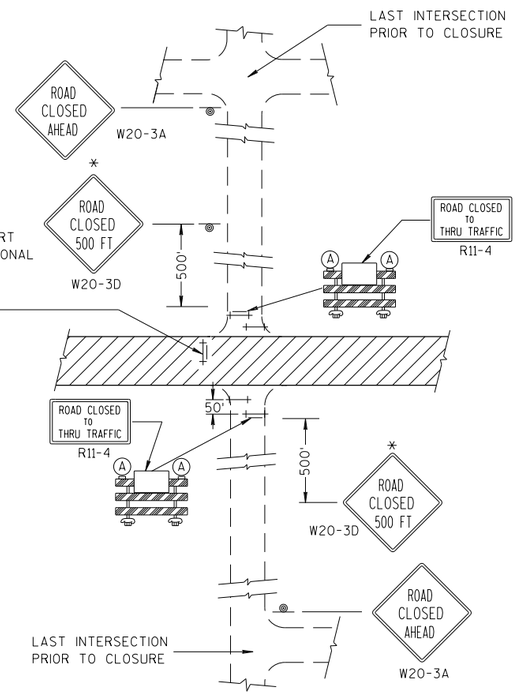
DETAIL 2

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



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE 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 RE-ESTABLISHED.

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 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 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

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S.D.D. 15 C 3-5

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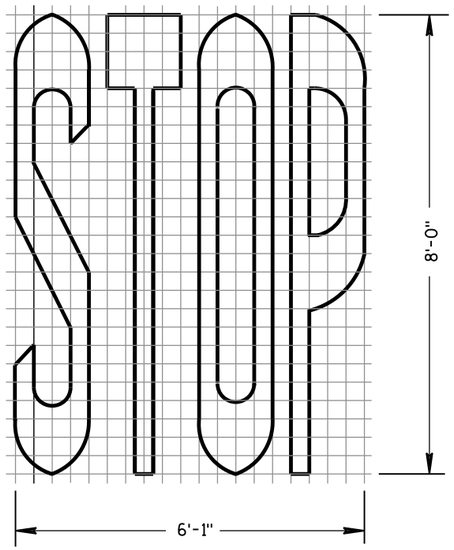
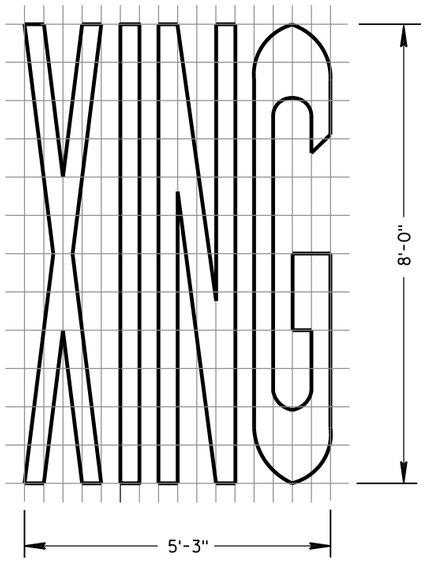
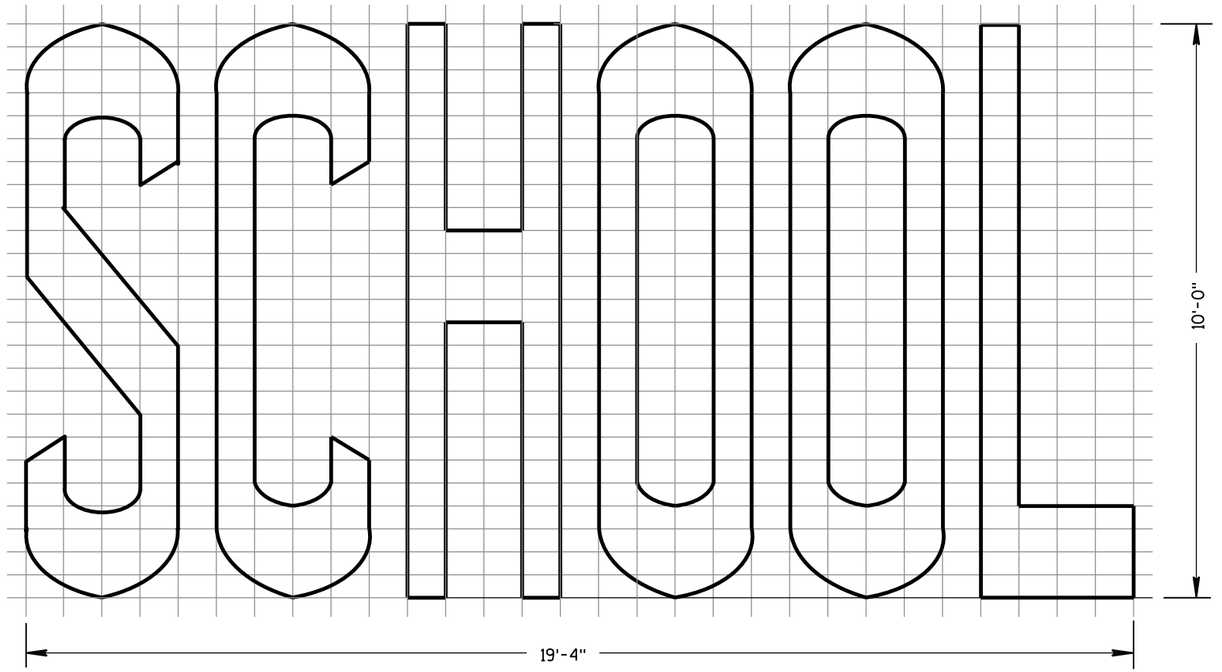
S.D.D. 15 C 3-5

GENERAL NOTES

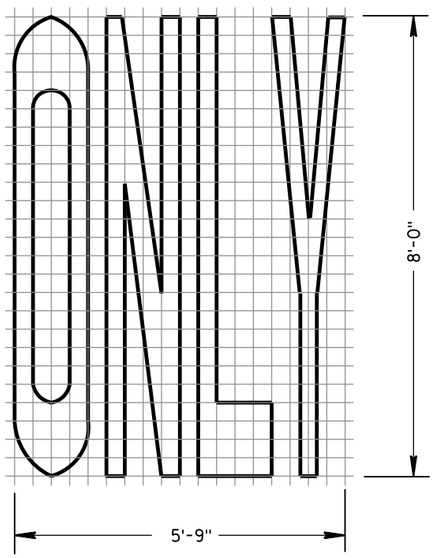
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

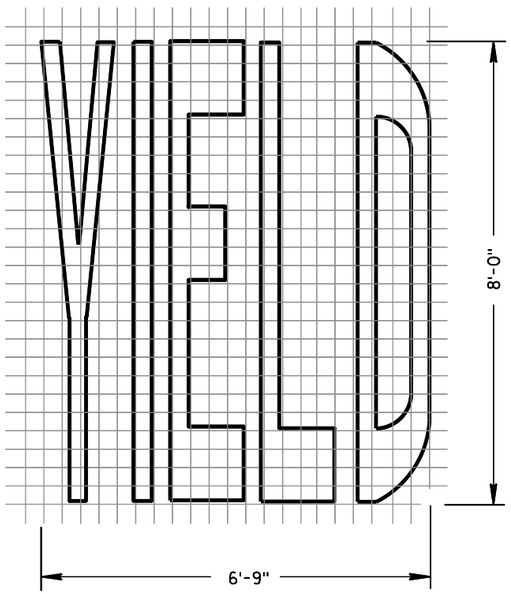


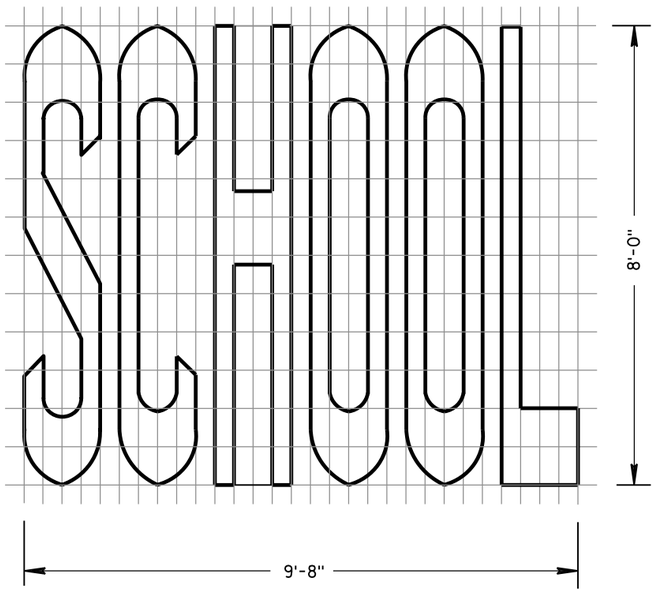




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

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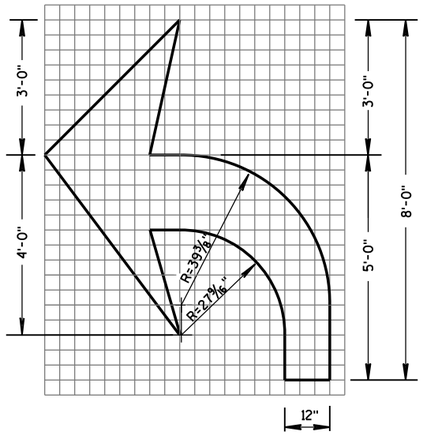
S.D.D. 15 C 7-14b

6

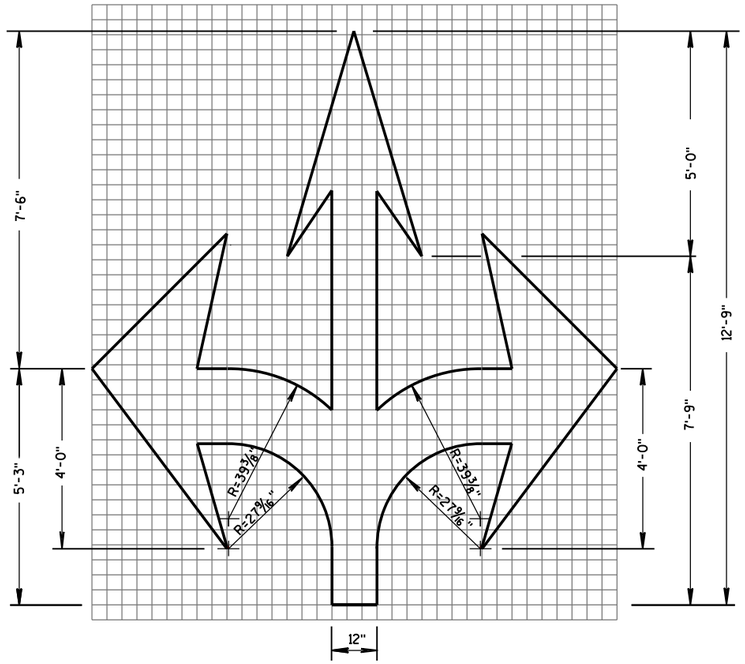
S.D.D. 15 C 7-14b

GENERAL NOTES

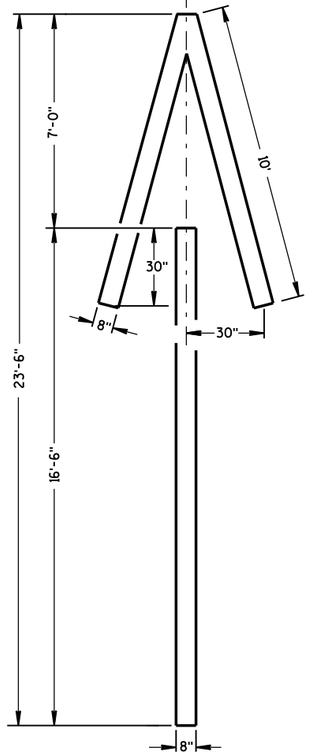
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



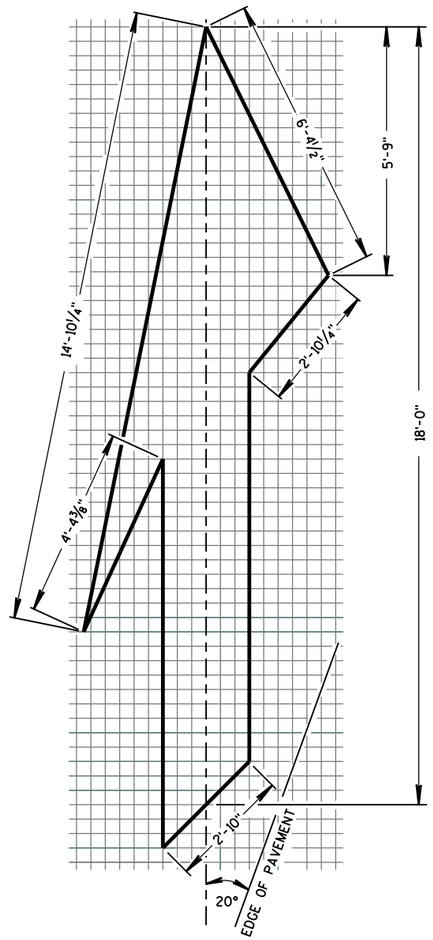
TYPE 2



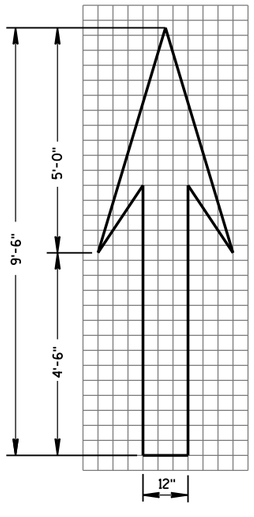
TYPE 6



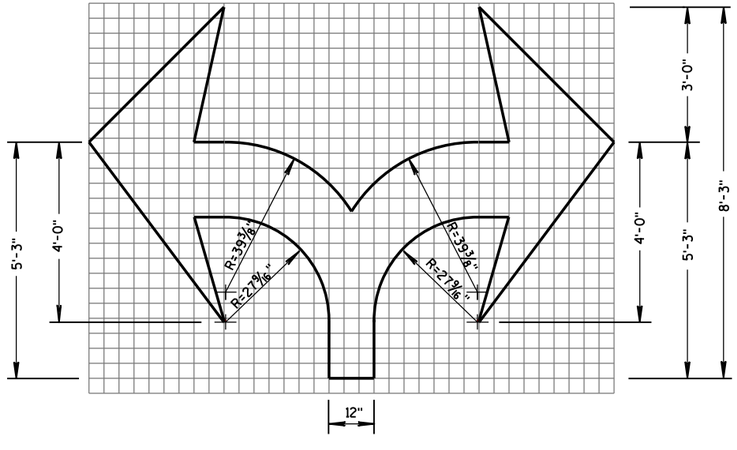
TYPE 4



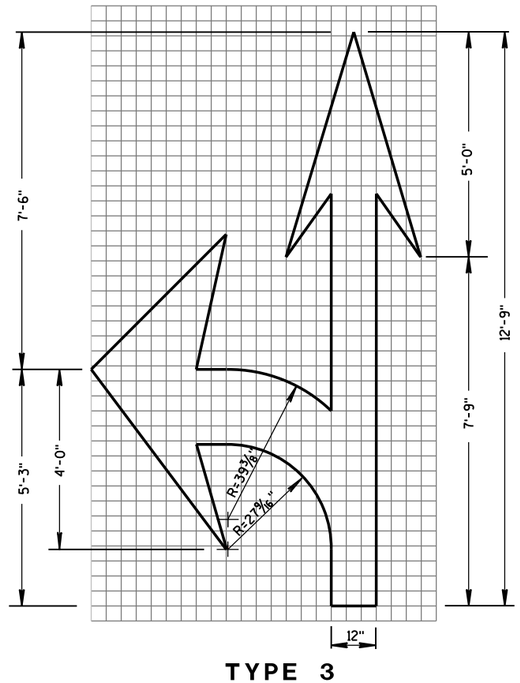
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

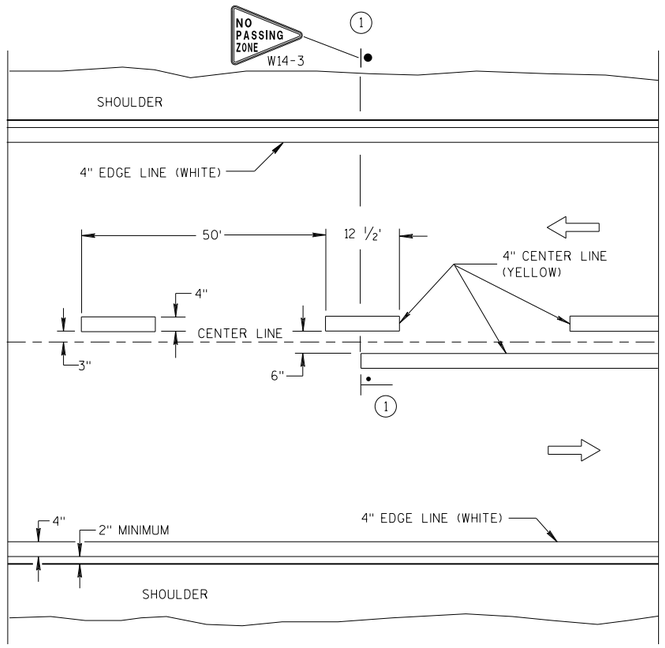
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR
ENGINEER
FHWA

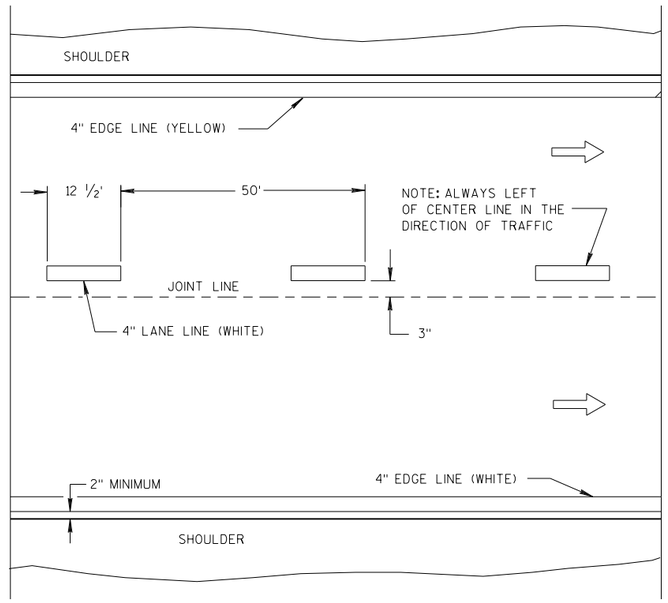
6

S.D.D. 15 C 7-14c

S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

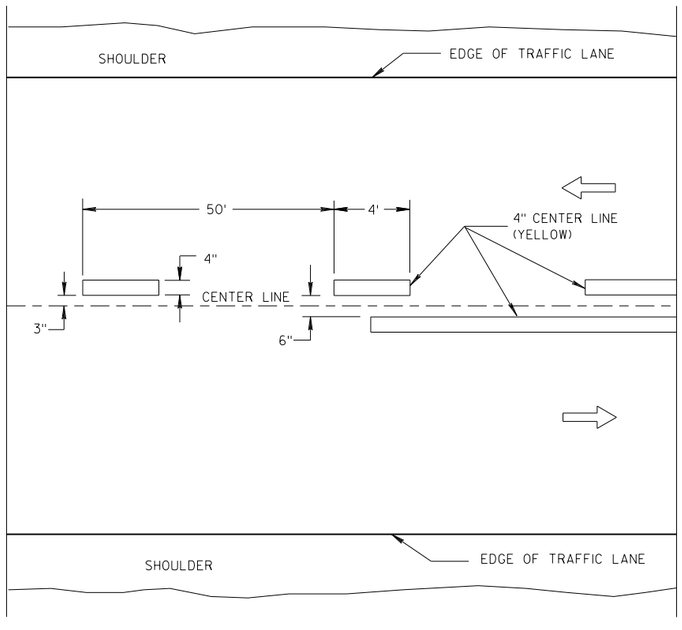
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

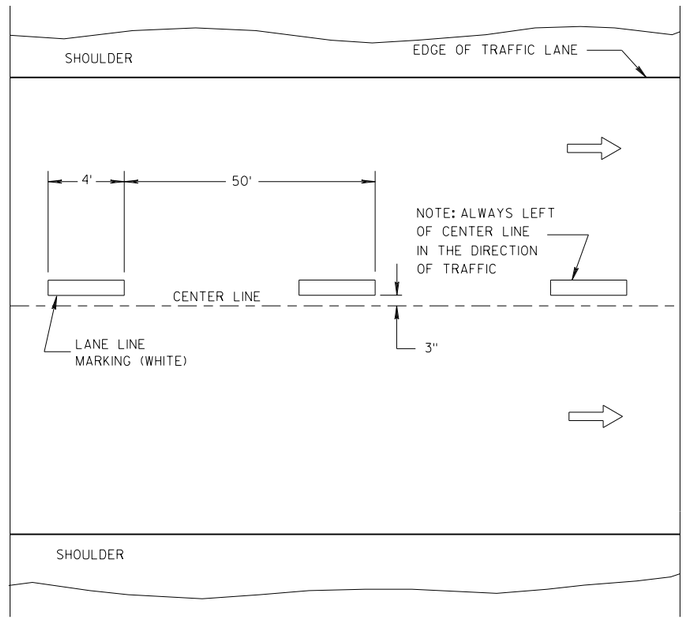
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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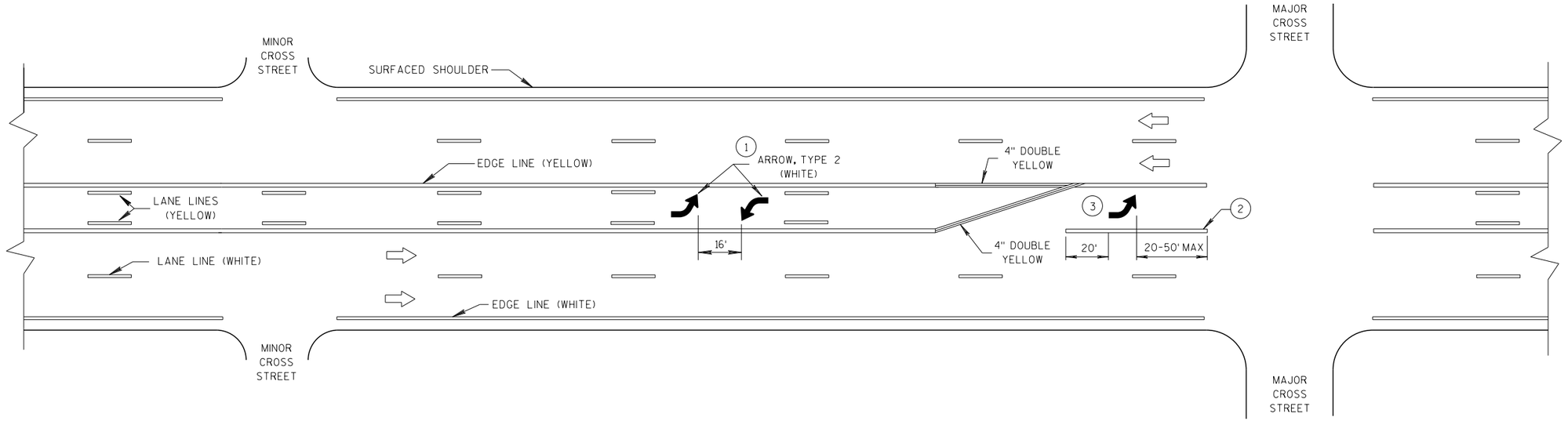
S.D.D. 15 C 8-19a

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

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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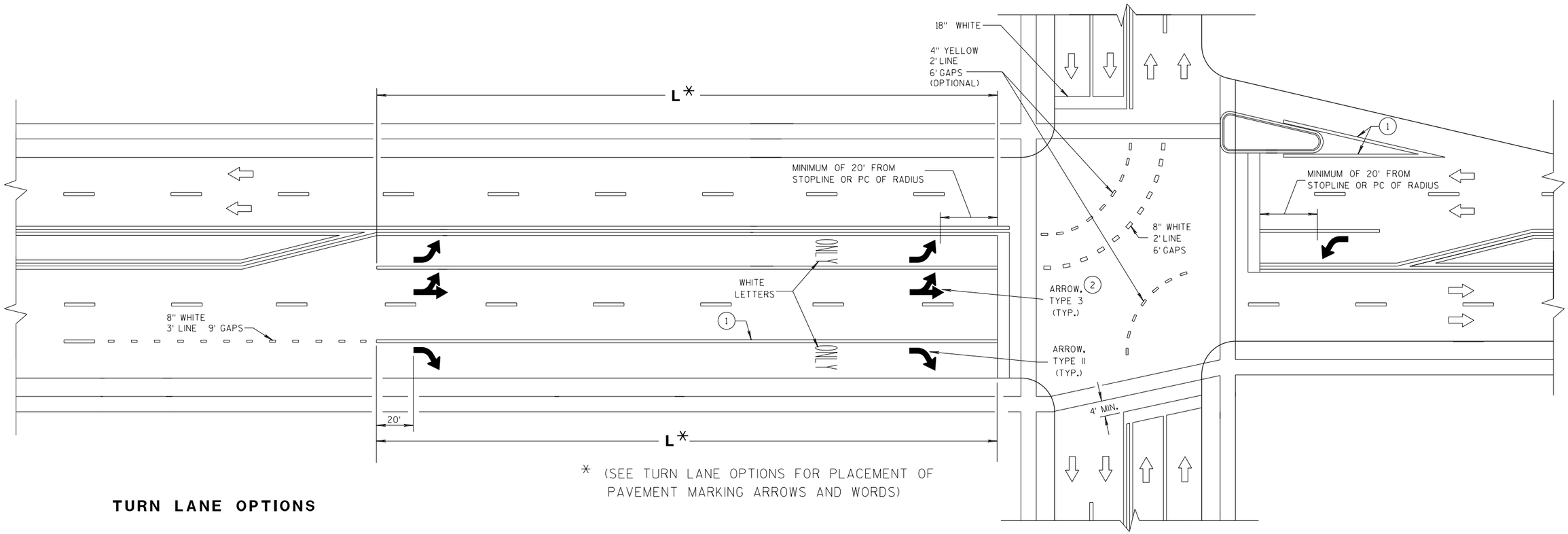
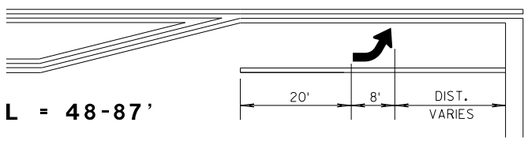
S.D.D. 15 C 8-19b



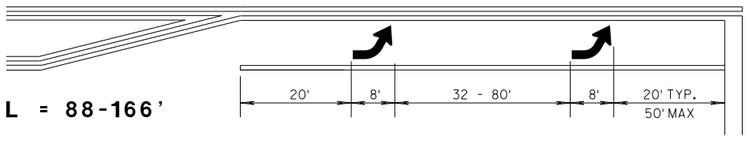
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

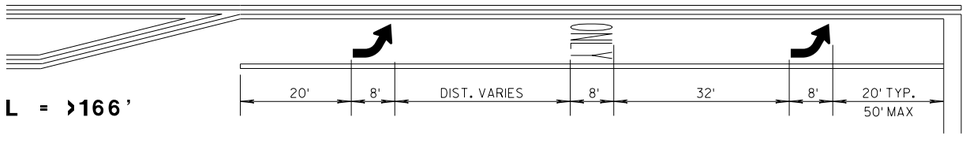
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

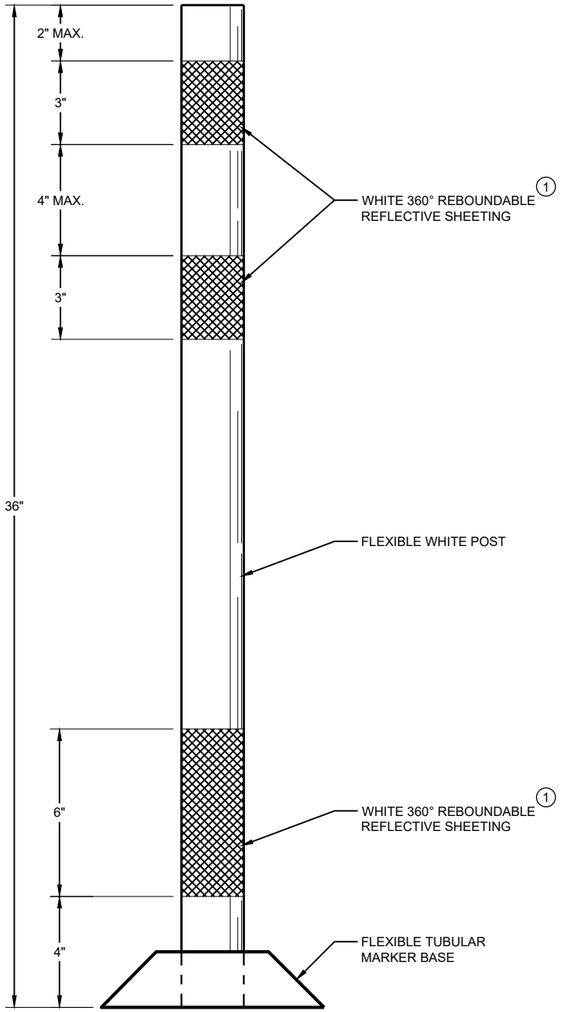
(1) 8" WHITE

(2) QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

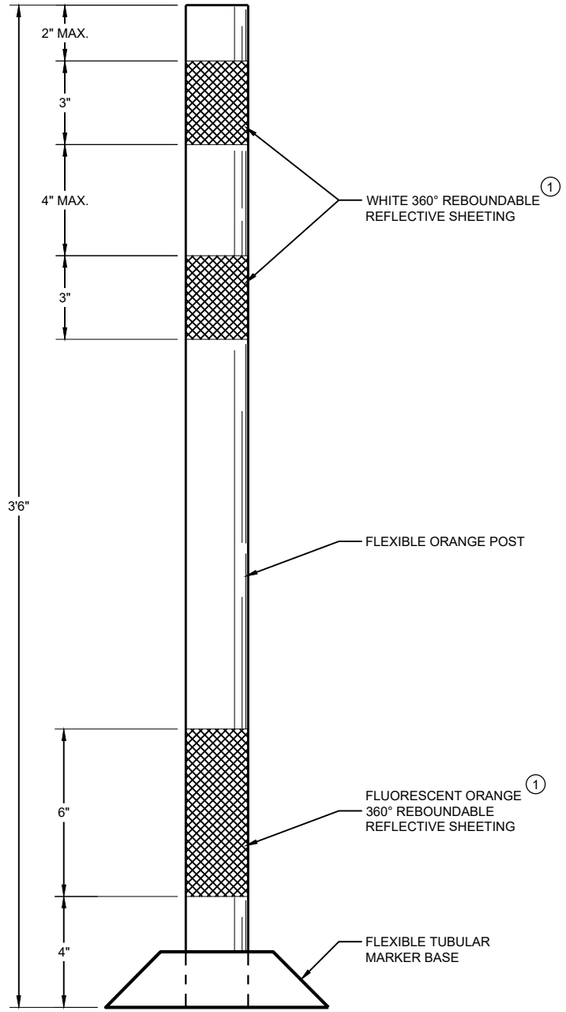
⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)



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.

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CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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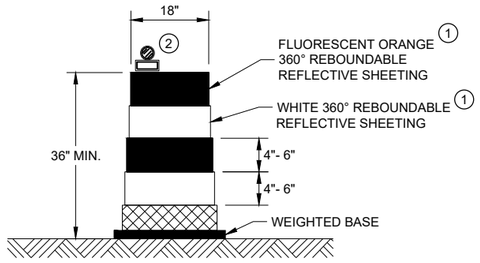
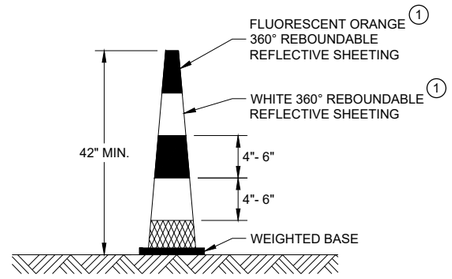
GENERAL NOTES

(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.

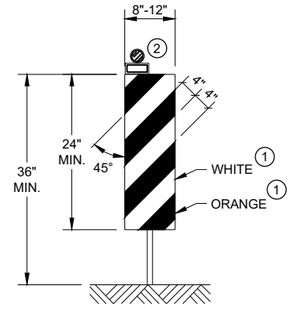


DRUM



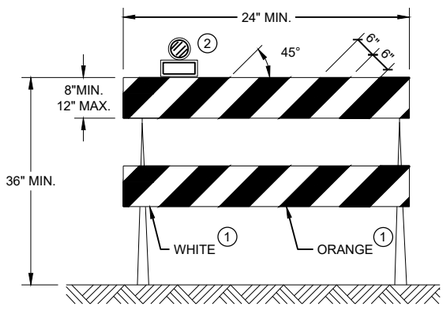
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



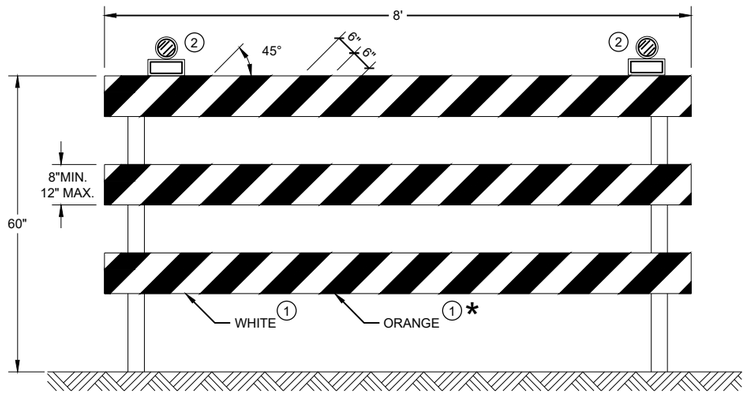
VERTICAL PANEL

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
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

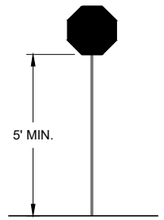
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



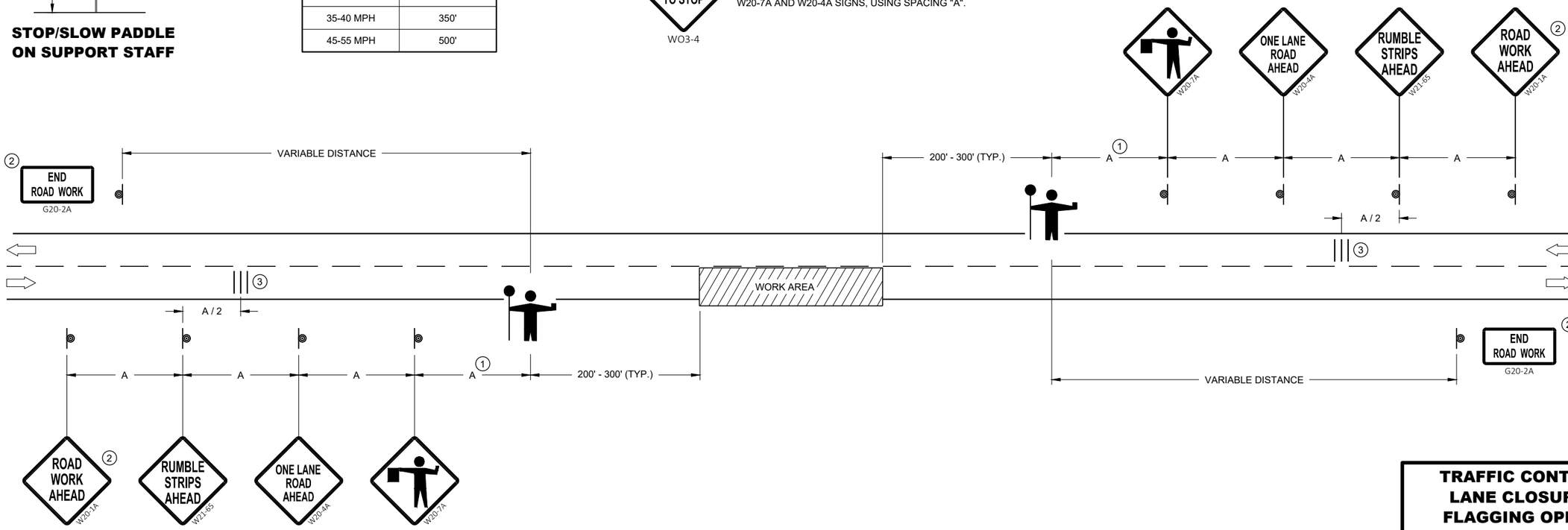
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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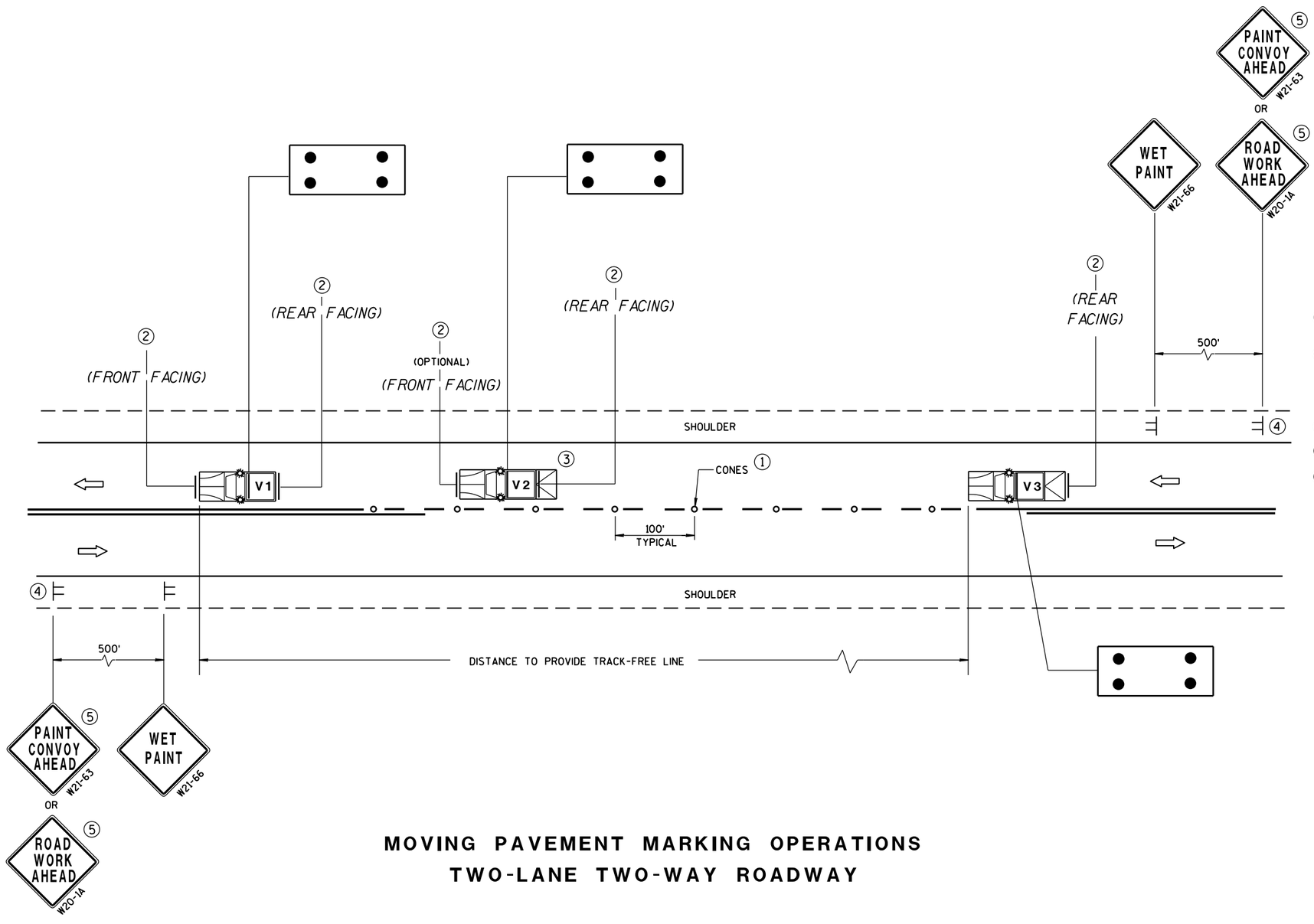


MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

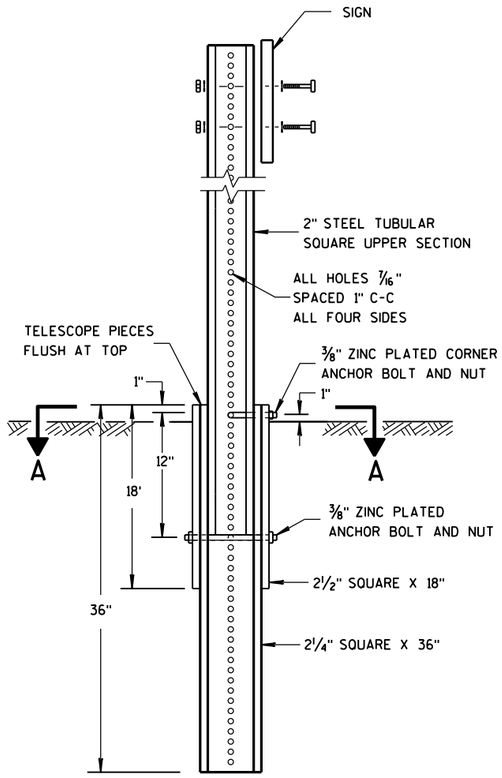
(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

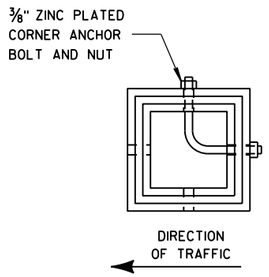
LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
⊨	SIGN ON TEMPORARY SUPPORT
⇨	DIRECTION OF TRAFFIC
o	CONES
⁘	FLASHING ARROW PANEL (CAUTION)

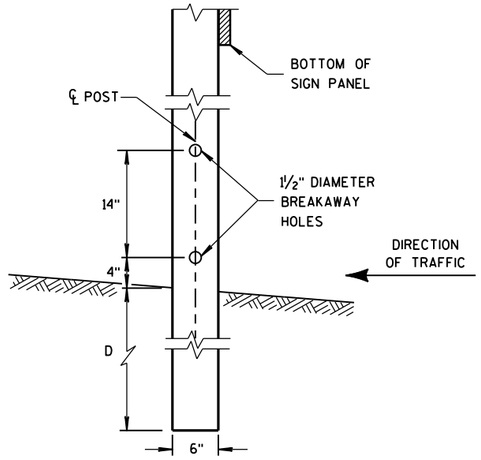
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept., 2017 DATE — /S/ Andrew Heldtke WORK ZONE ENGR — FHWA



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



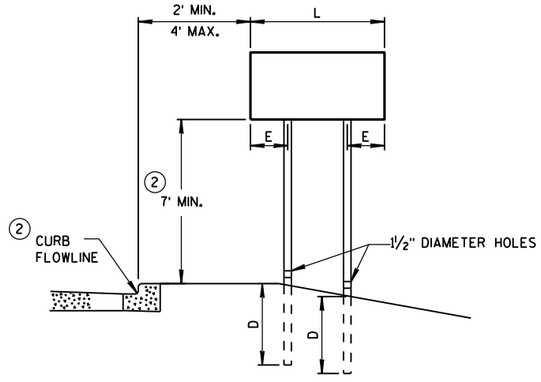
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

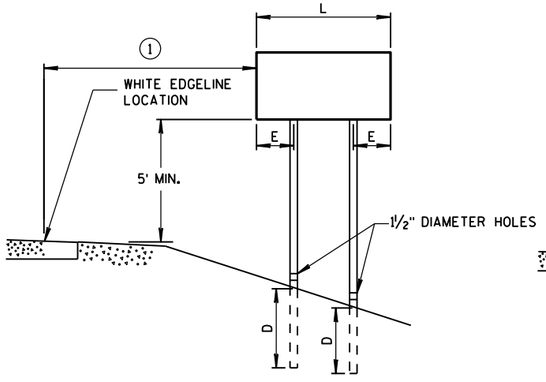
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

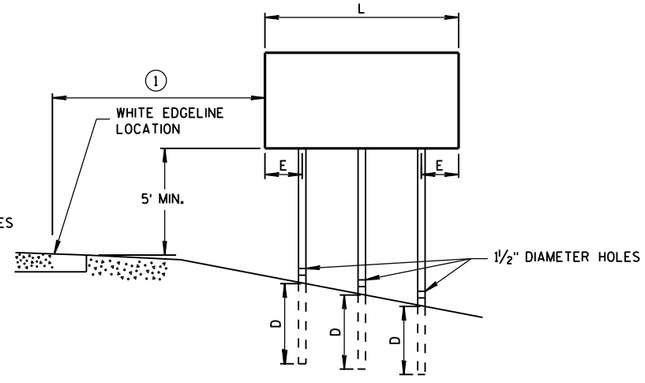
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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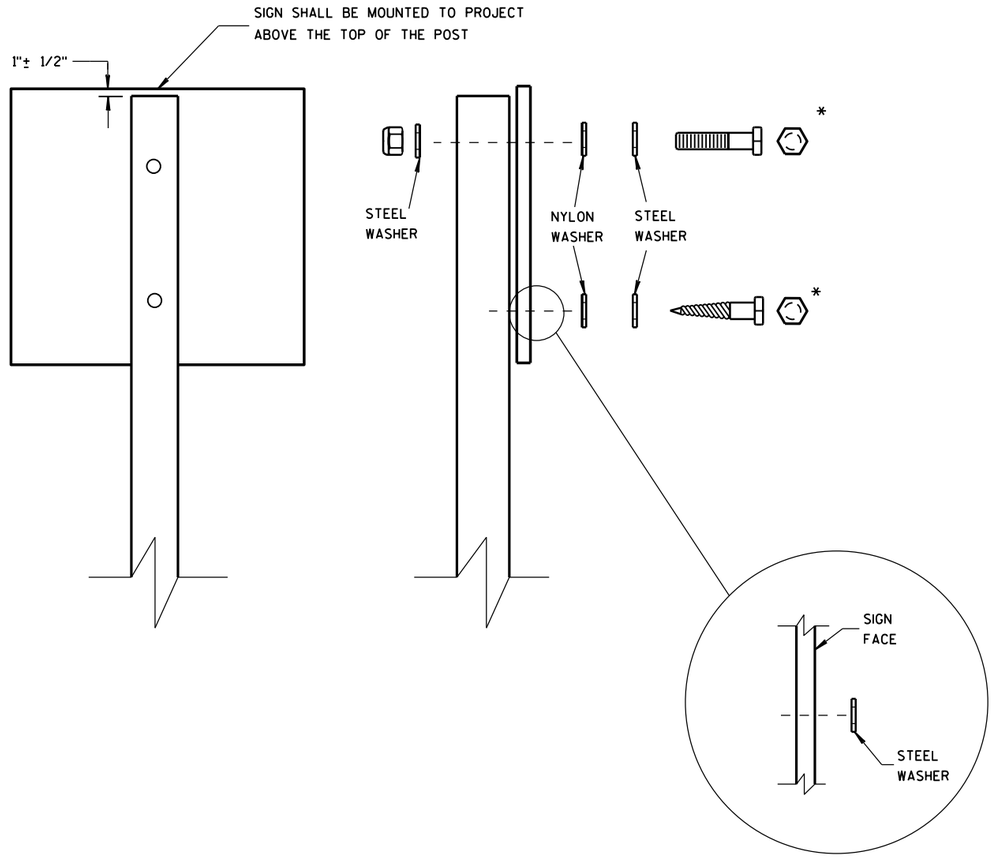
S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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 POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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 FOR ALL TYPE H SIGNS

* 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.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

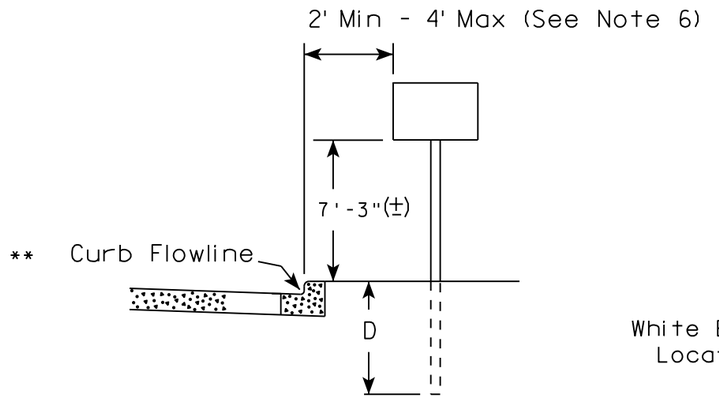
APPROVED

June 2017
DATE

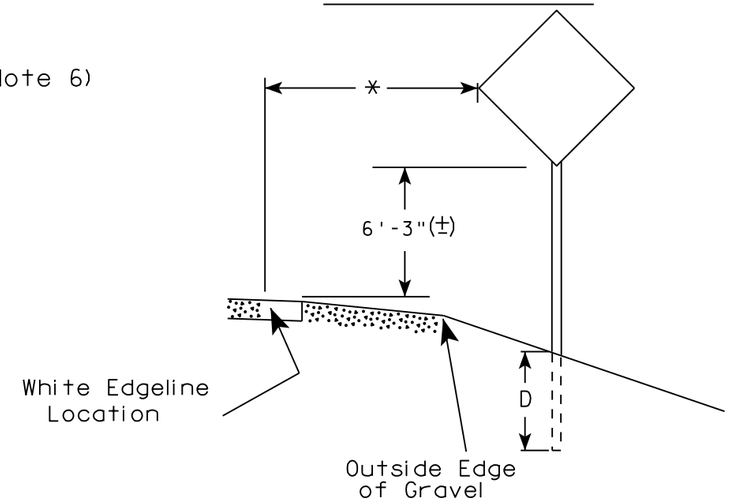
/S/ Andrew Heldtke
WORK ZONE ENG

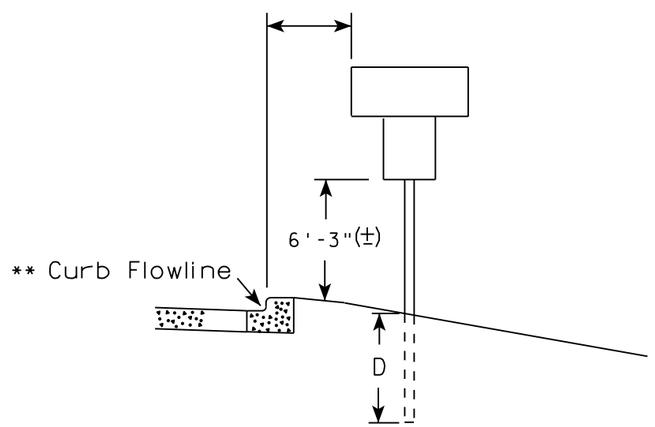
FHWA

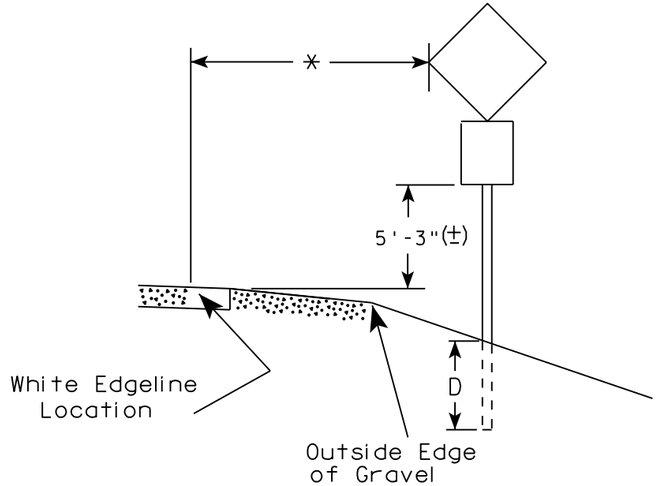
URBAN AREA



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 barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

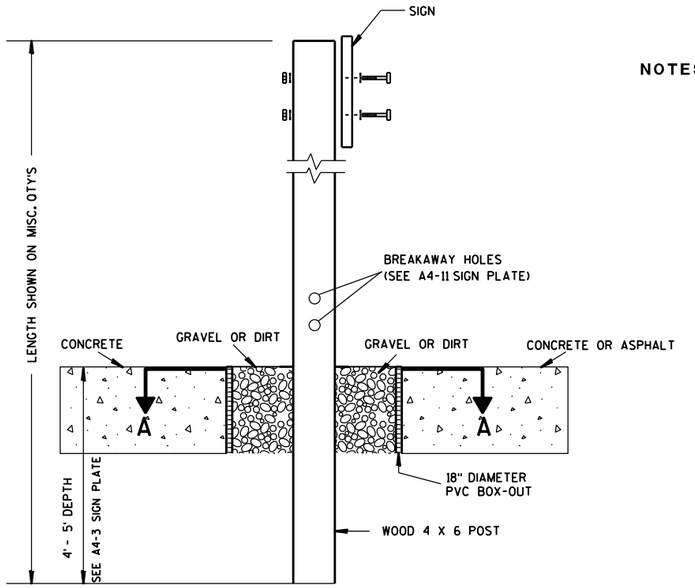
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

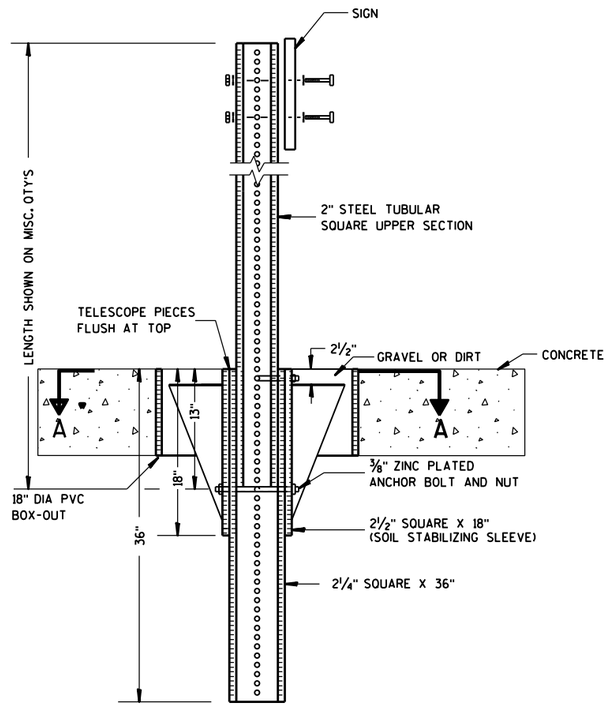
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 53	E



ELEVATION VIEW

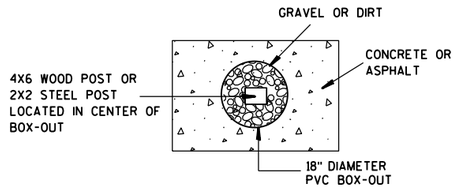
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

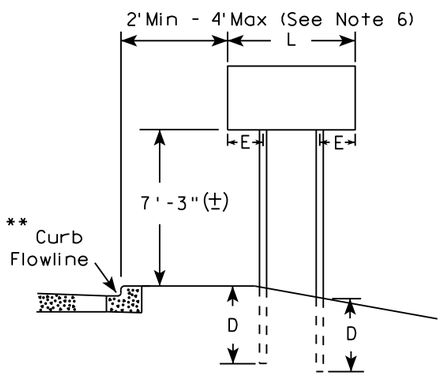
APPROVED Matthew R Rauch
for State Traffic Engineer

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

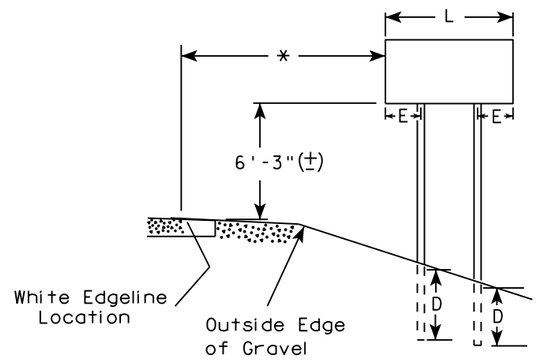
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

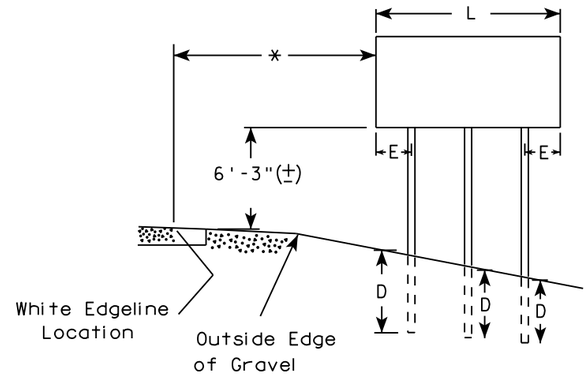
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

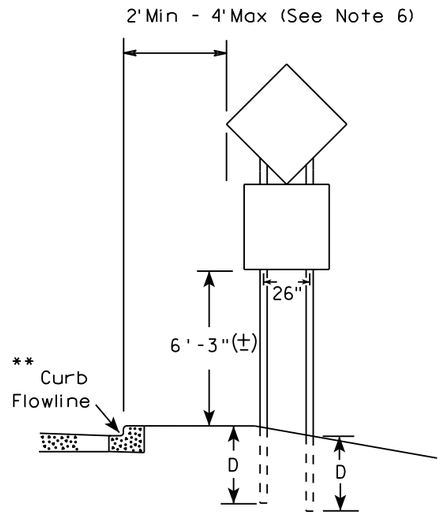
URBAN AREA



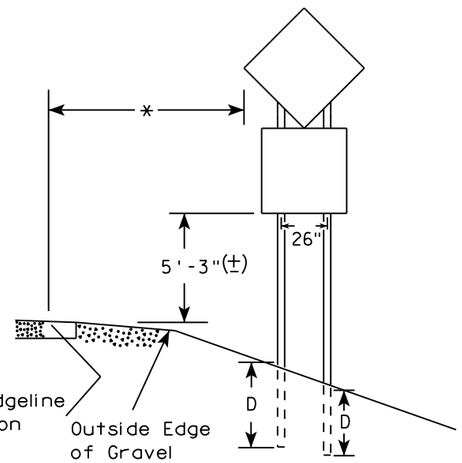
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

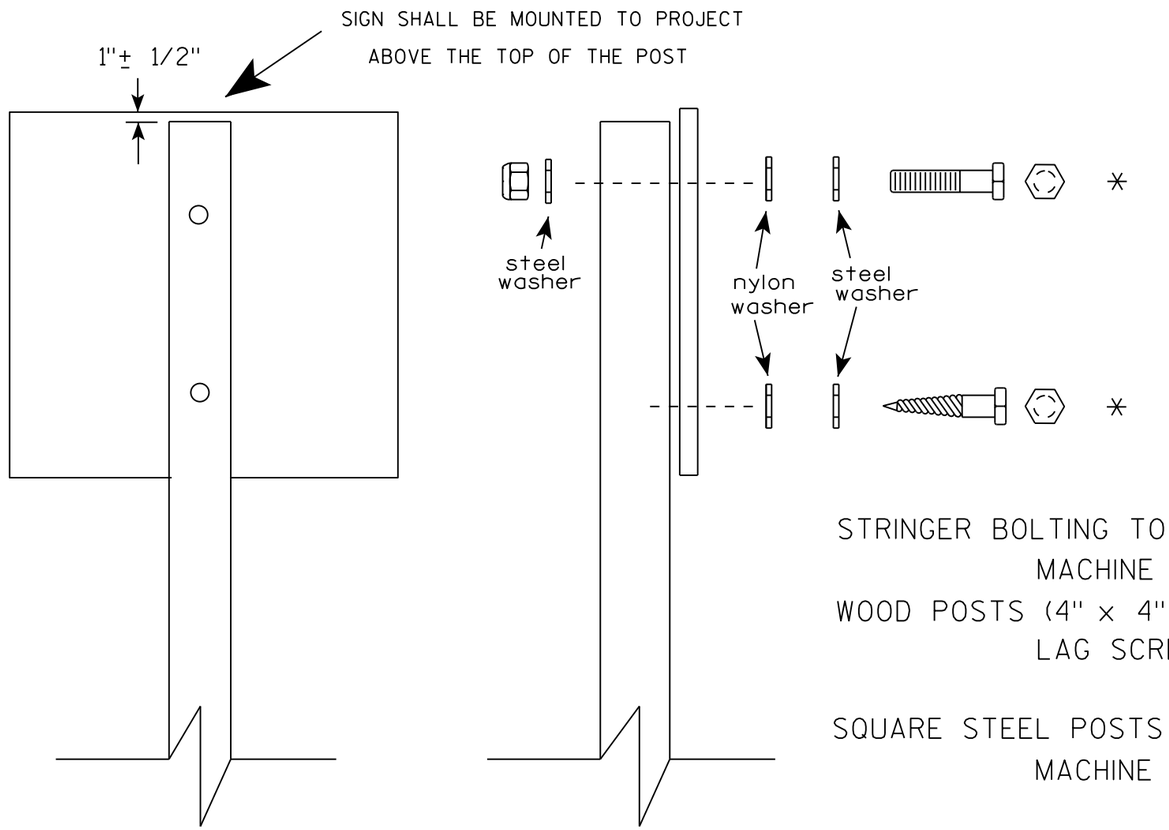
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 55	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 4" or 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

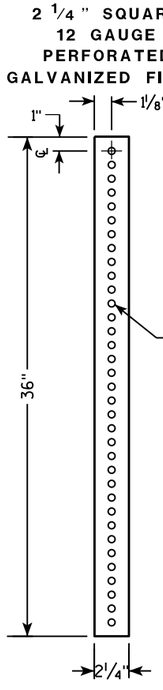
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

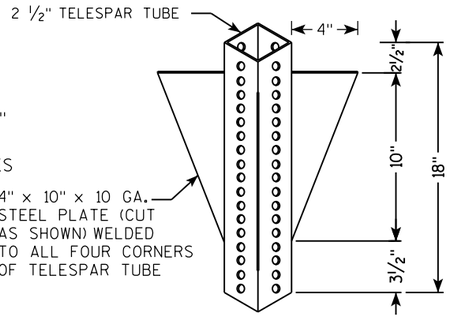
PROJECT NO: SHEET NO: E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

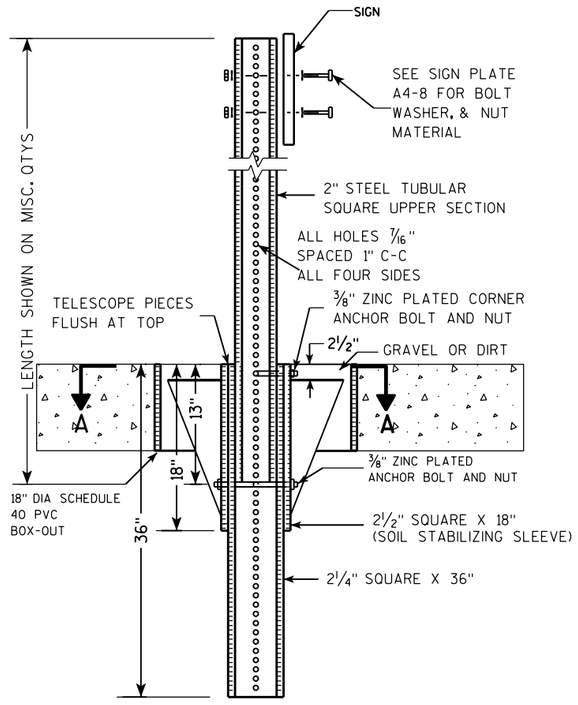
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



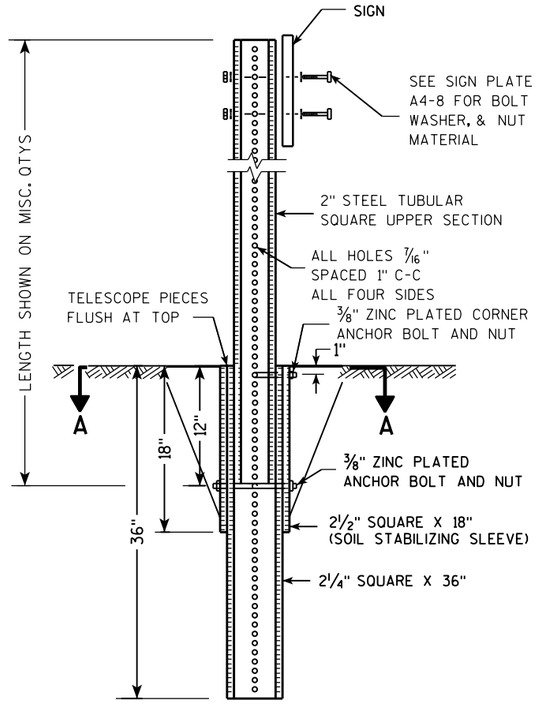
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

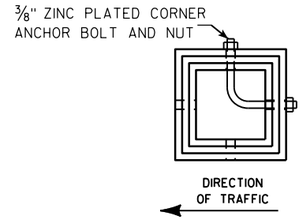


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

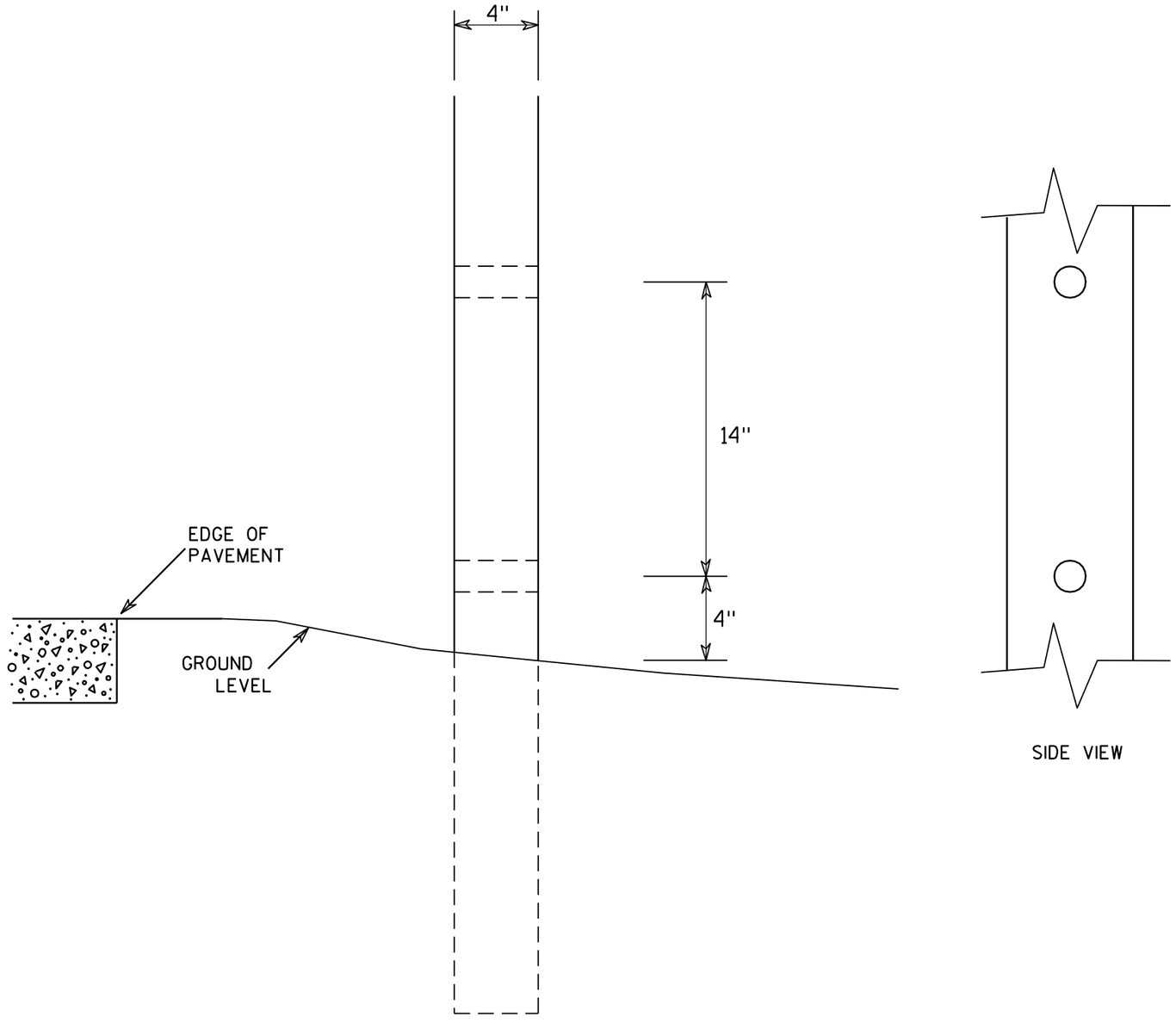
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 57 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

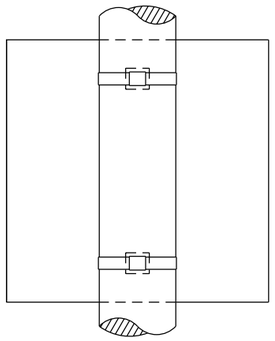
APPROVED Chester J Spang for State Traffic Engineer

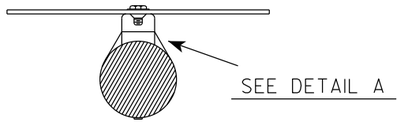
DATE 3/27/97 PLATE NO. A4-11.2

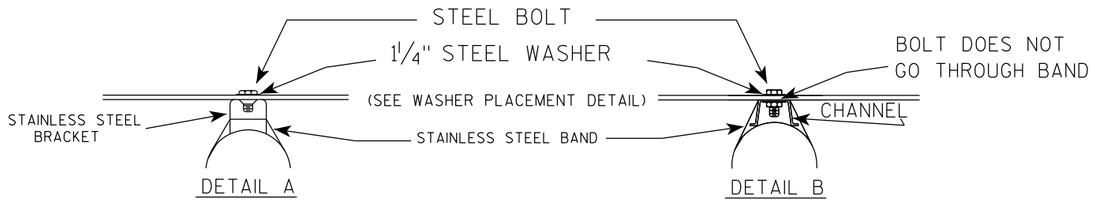
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 58	E

BANDING

SINGLE SIGN



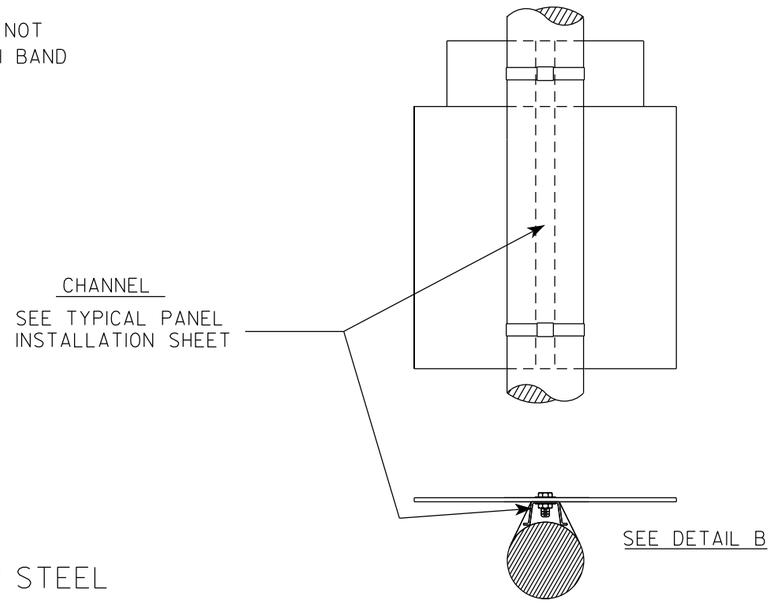




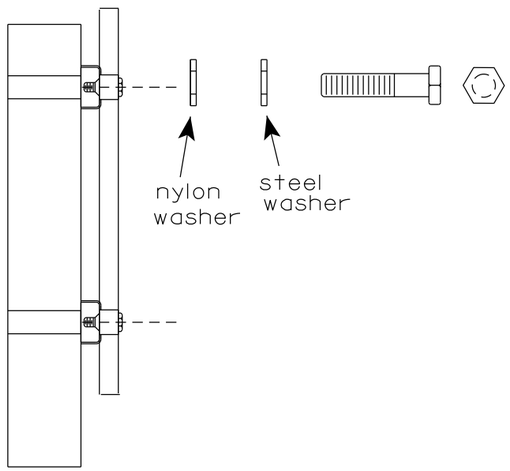
GENERAL NOTES

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

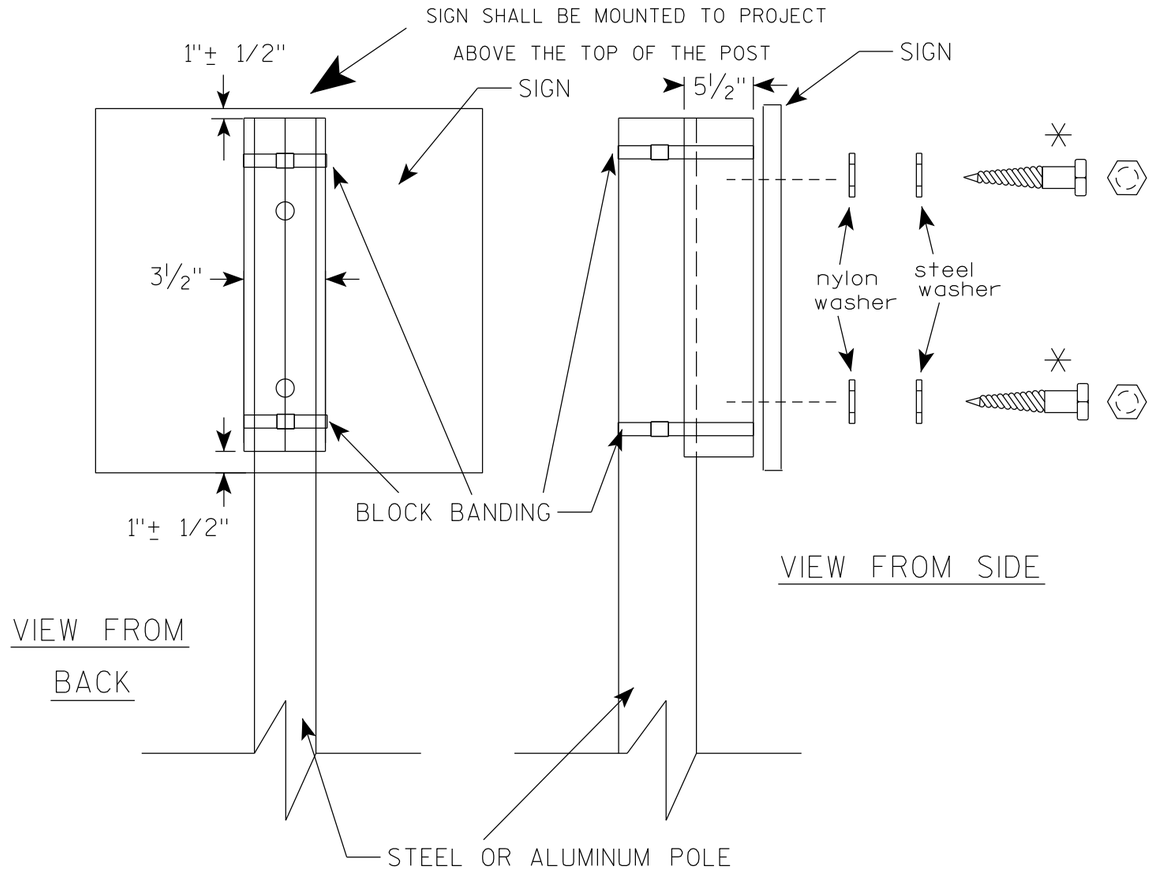
WISCONSIN DEPT OF TRANSPORTATION

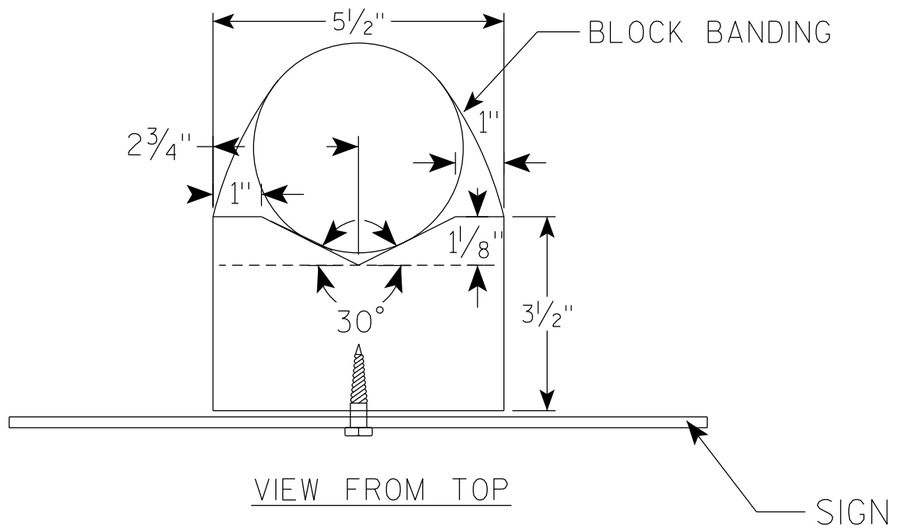
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 59	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"

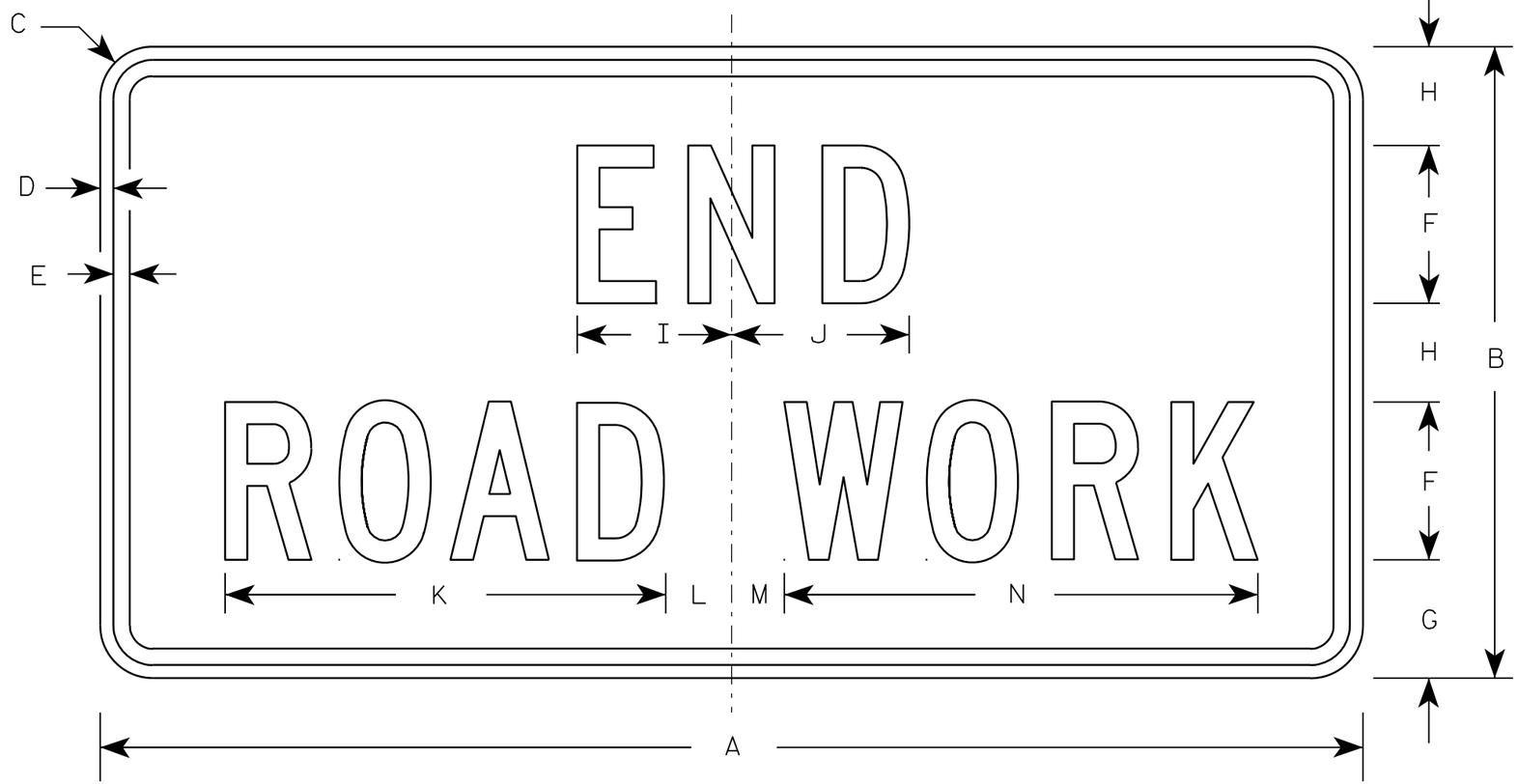
BLOCK BANDING DETAIL (V-BLOCK OPTION)

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: 60	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

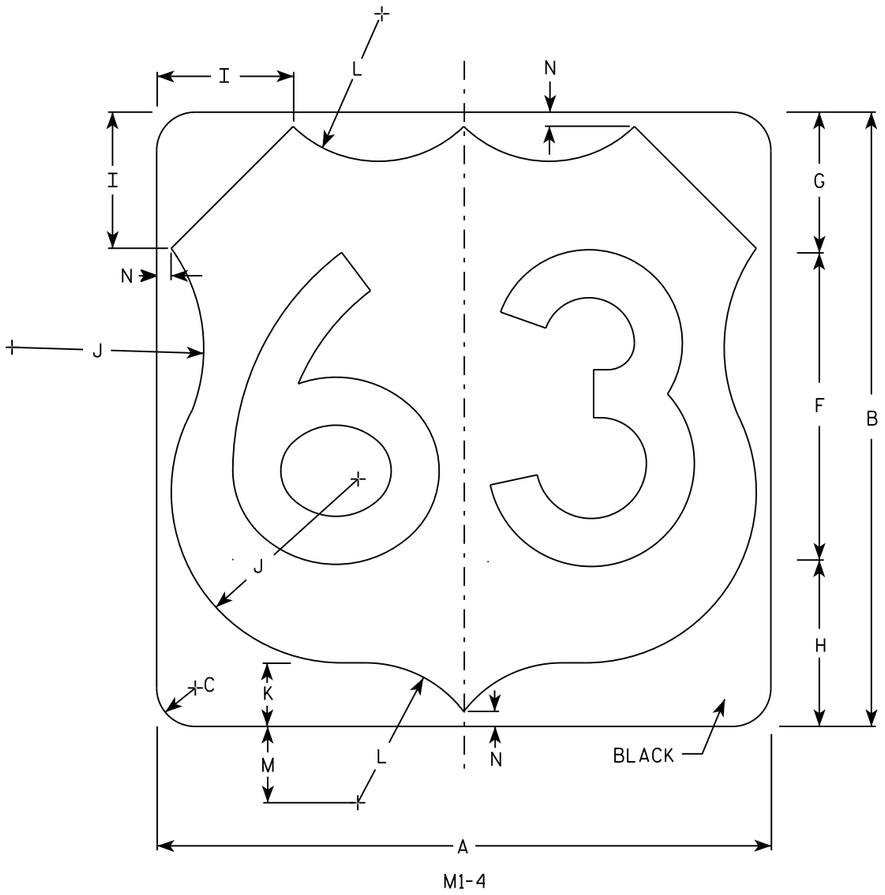
APPROVED Matthew R Rauch
for State Traffic Engineer

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

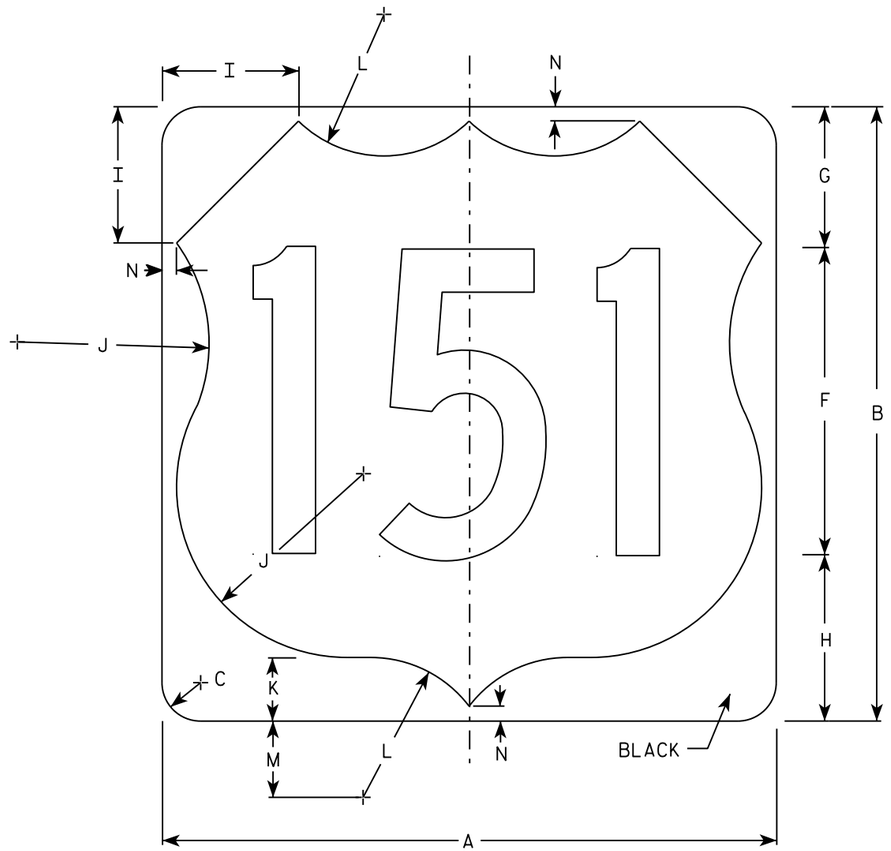
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	E

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.



M1-4



M1-4

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	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

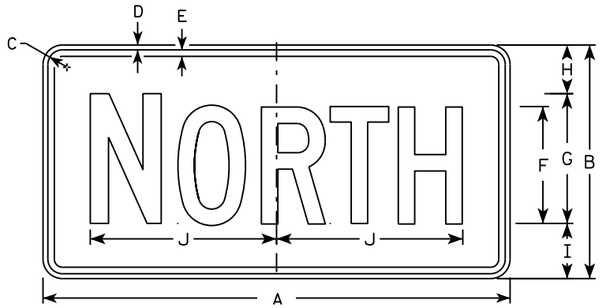
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

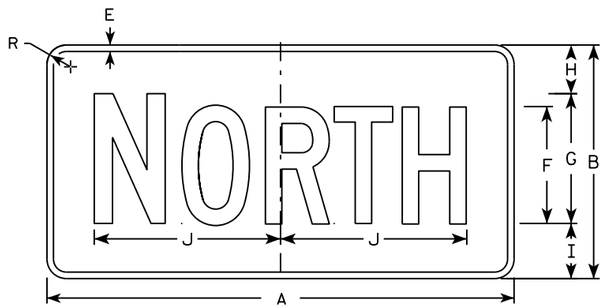
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 62	E



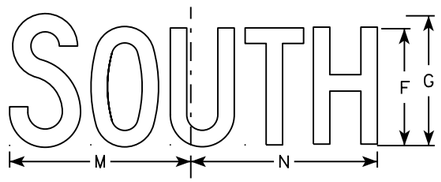
M3-1
MM3-1
MP3-1



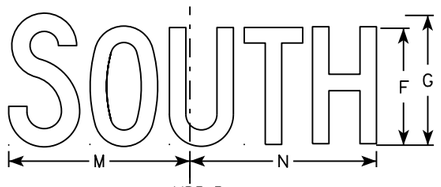
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

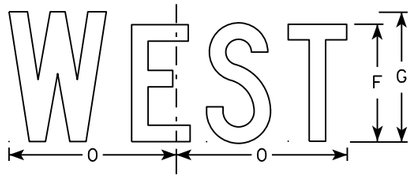
MB3-2
MK3-2
MN3-2



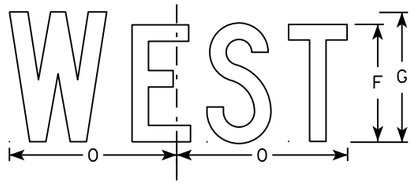
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

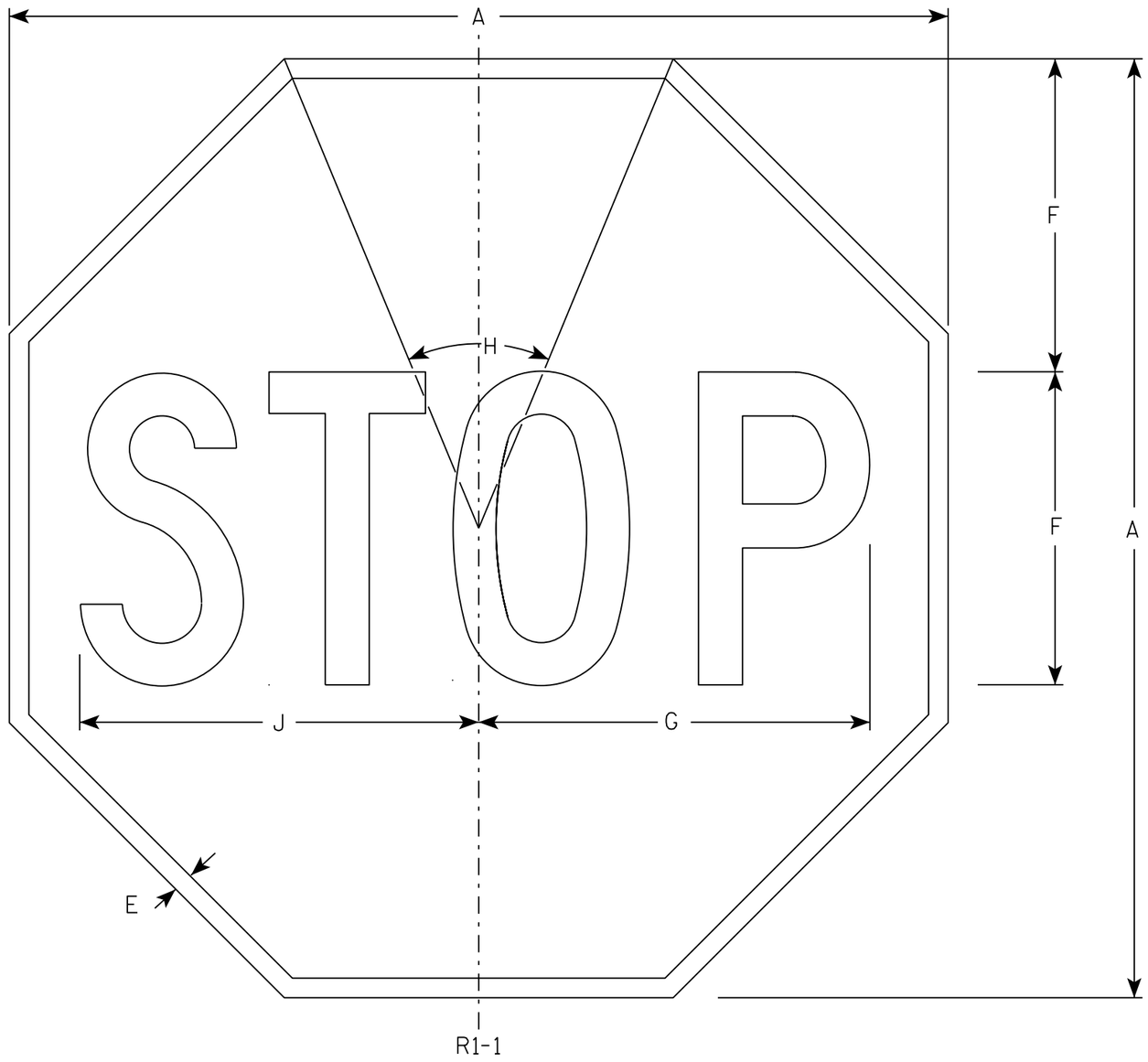
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



NOTES

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

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

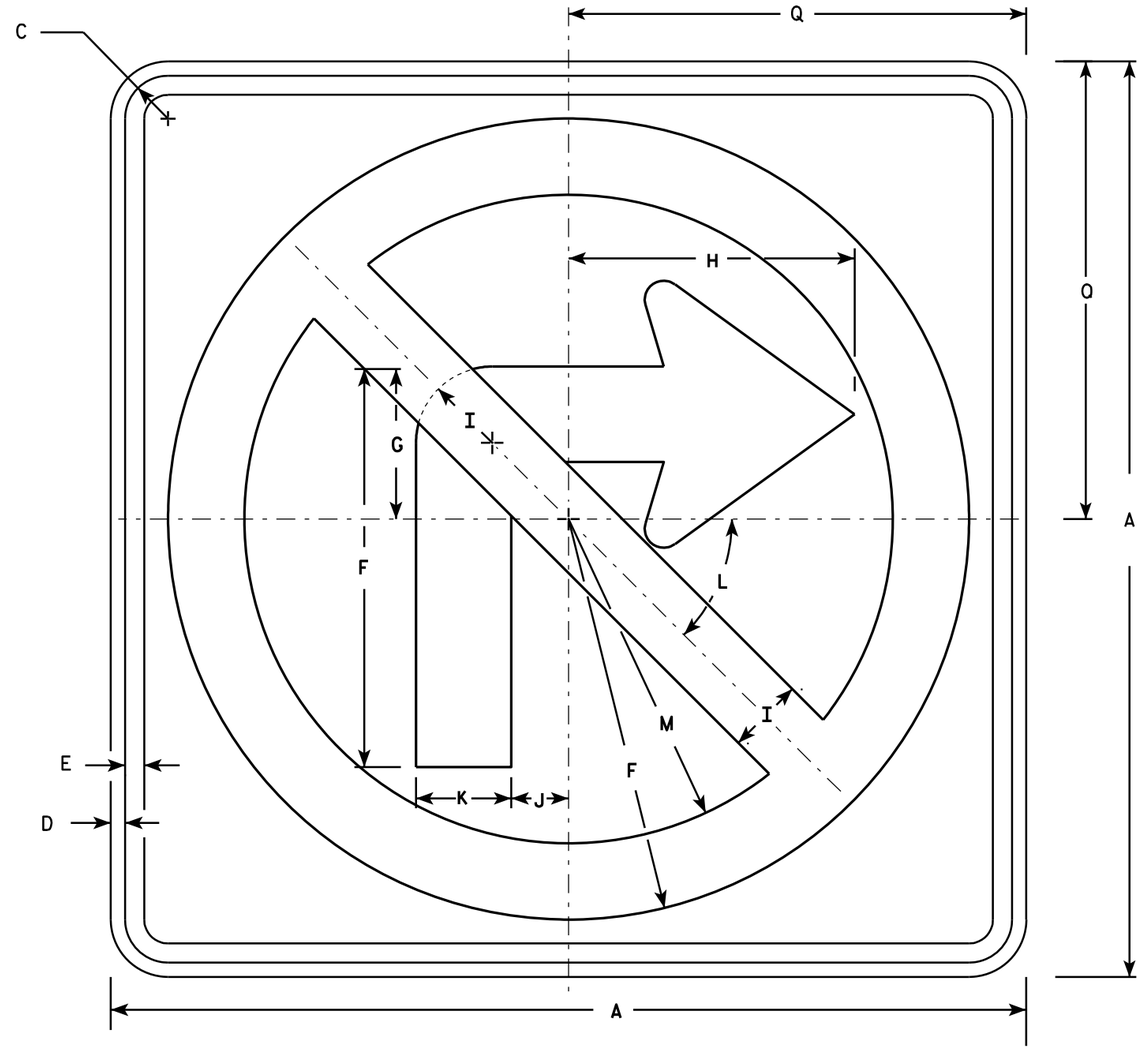
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

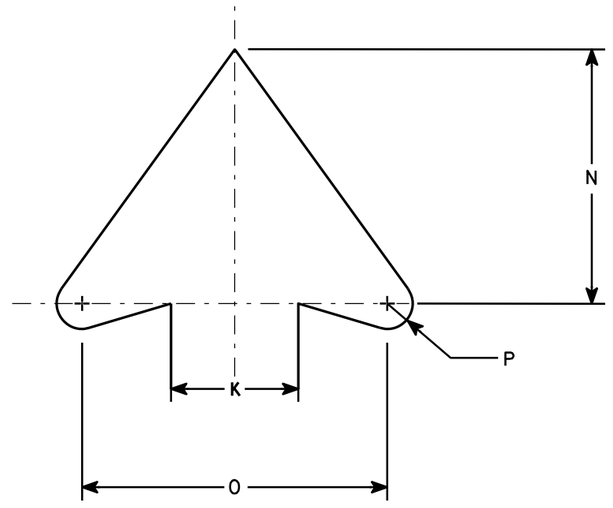
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 64	E



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

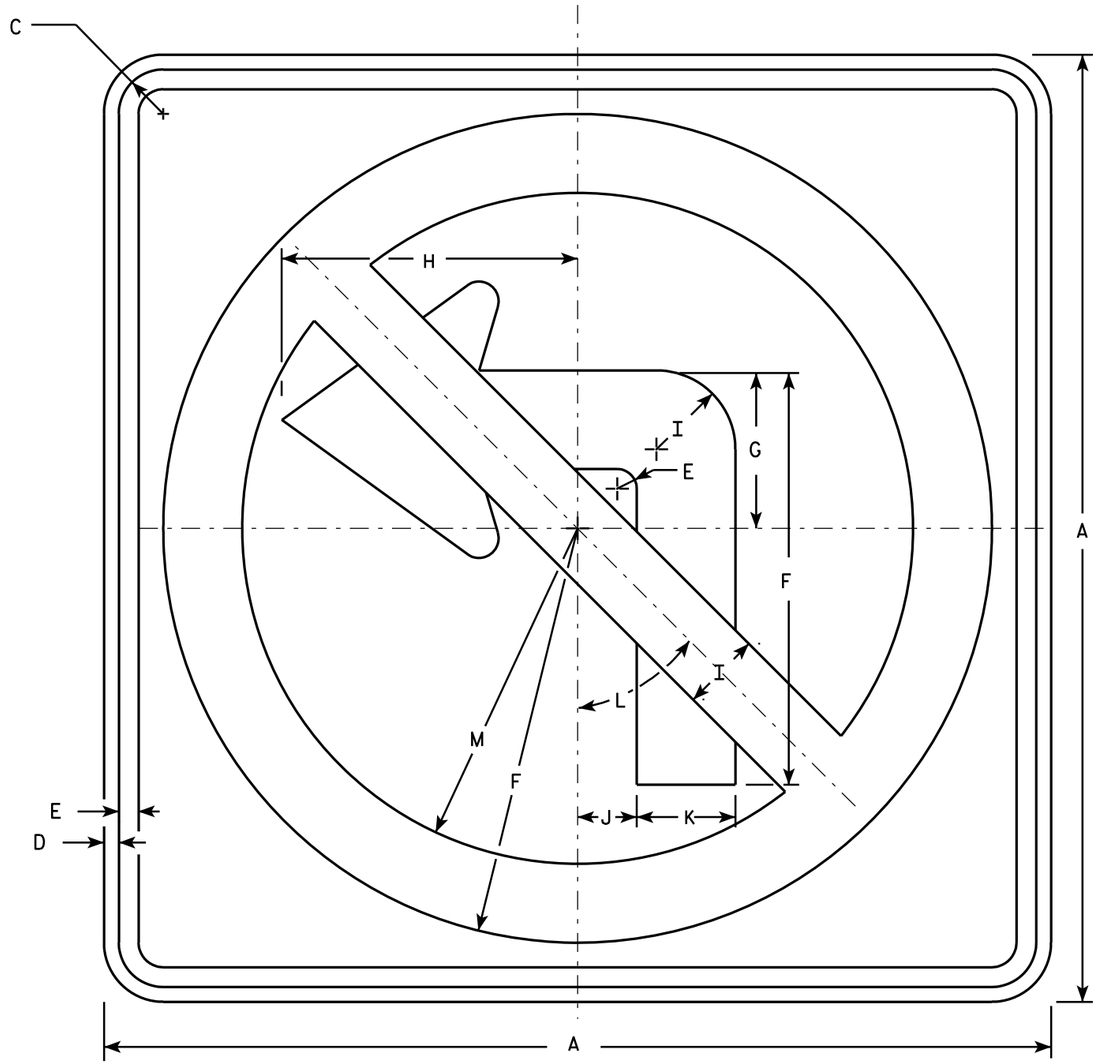
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

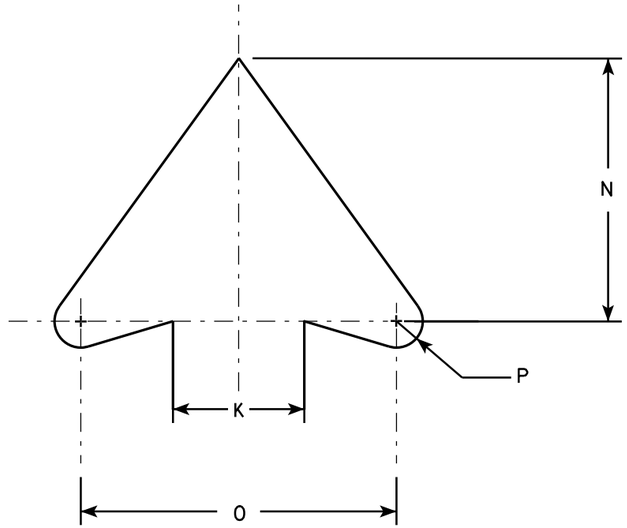
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 65	E



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

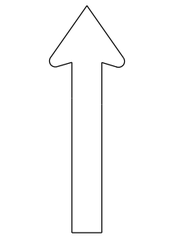
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

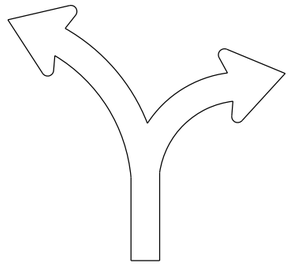
DATE 12/08/10 PLATE NO. R3-2.10

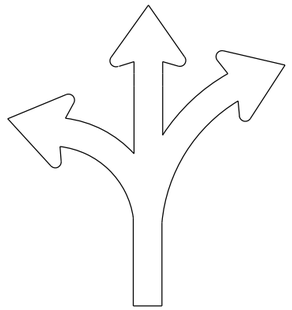
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 66	E

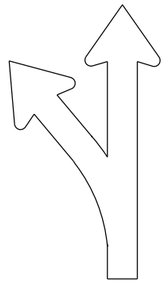


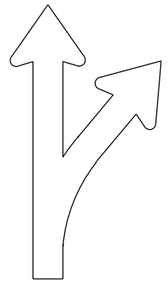
(A)

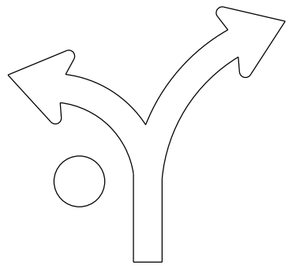
(B)

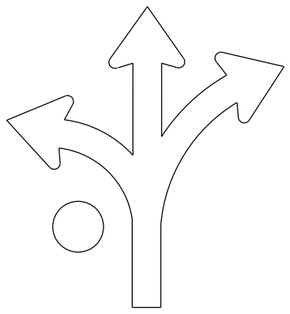

(C)

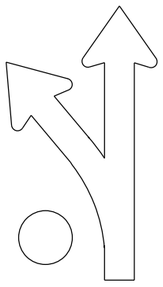

(D)


(E)

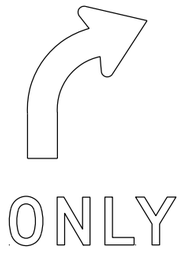

(F)


(G)

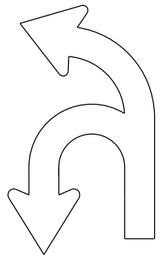

(H)


(I)

(L)



(R)


(U)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

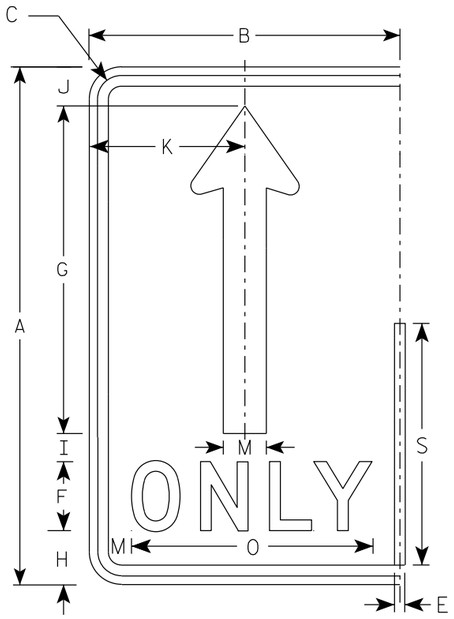
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

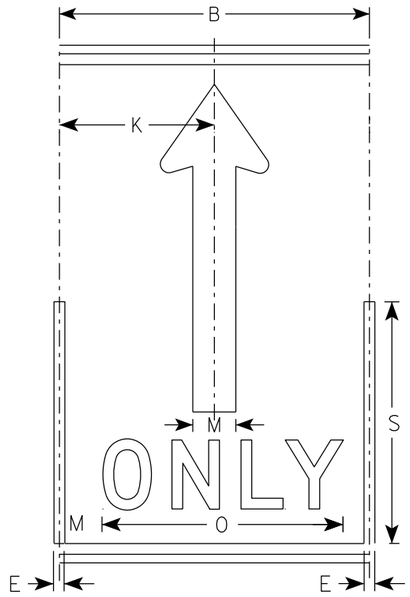
DATE 5/21/19 PLATE NO. R3-8.1

NOTES

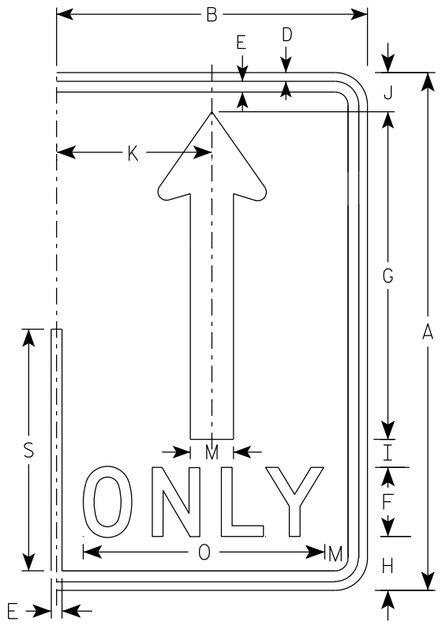
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



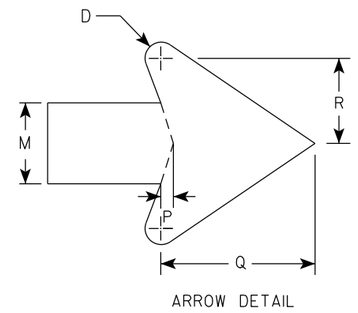
(A)



(A)



(A)



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	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

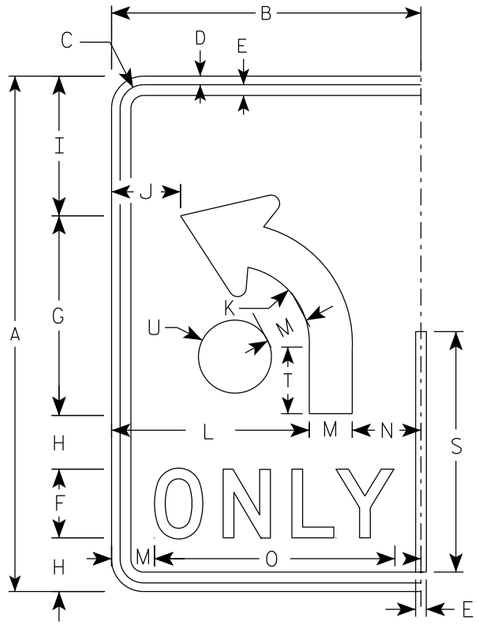
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

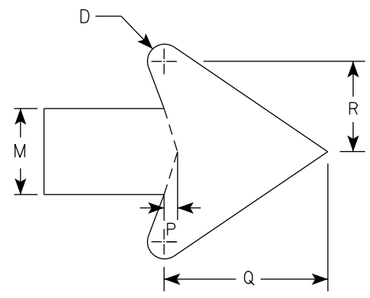
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 68 | E

NOTES

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



(B)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN
R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

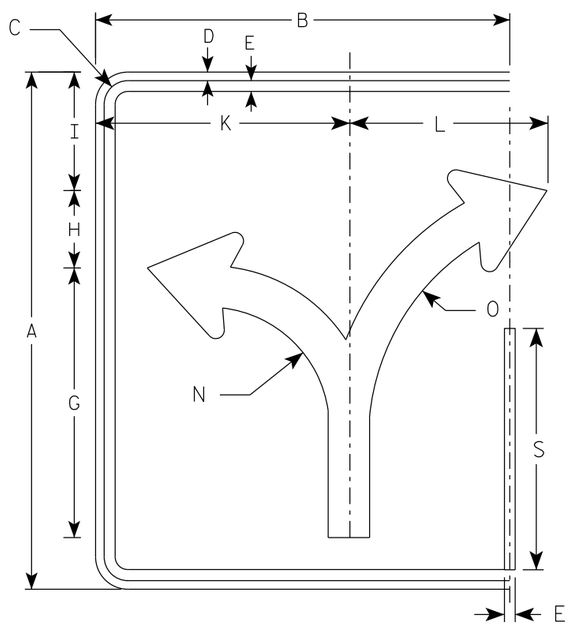
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

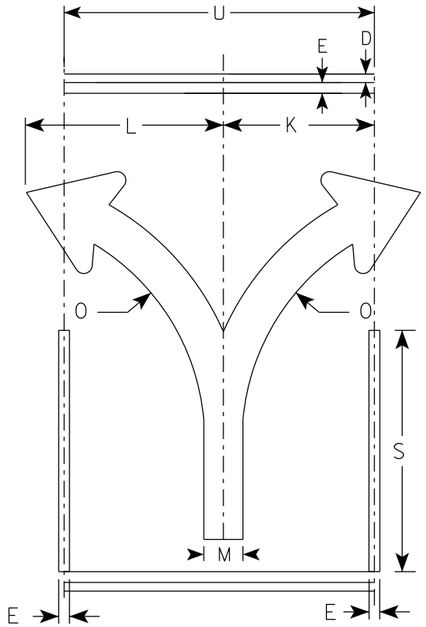
SHEET NO: 69 E

NOTES

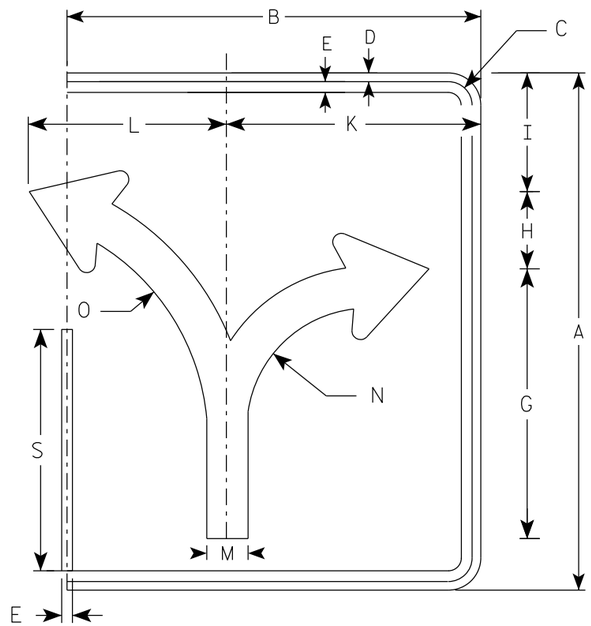
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



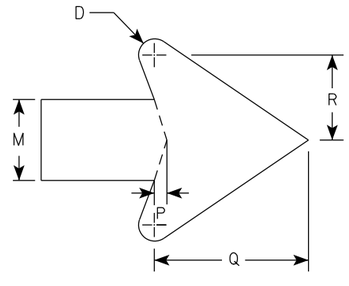
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

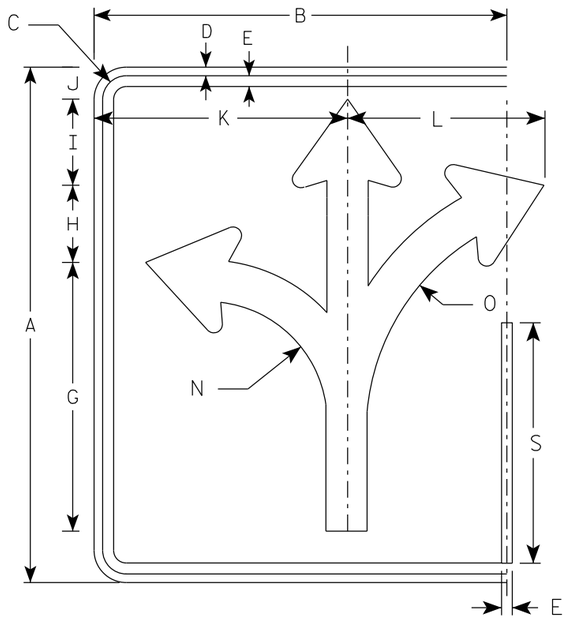
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

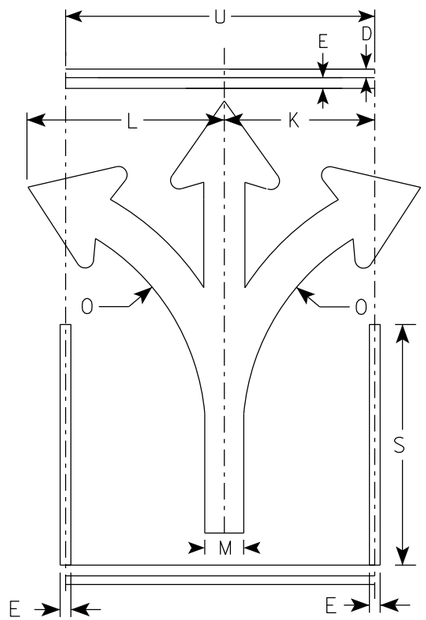
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 70 | E

NOTES

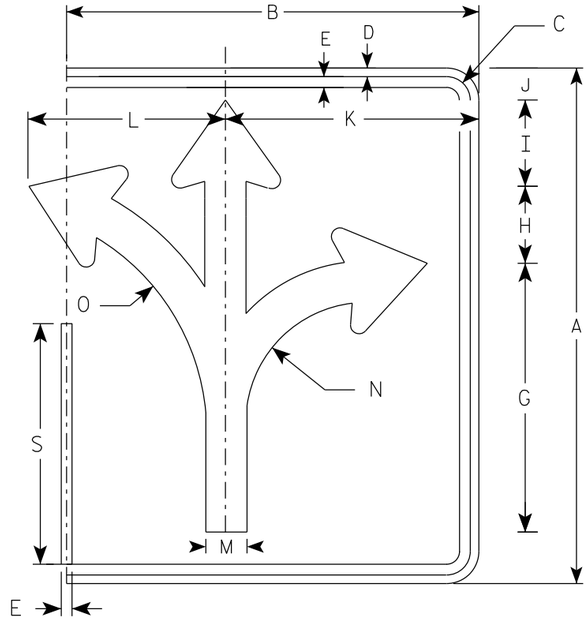
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



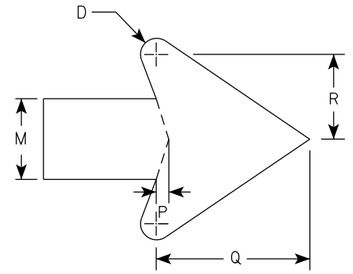
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

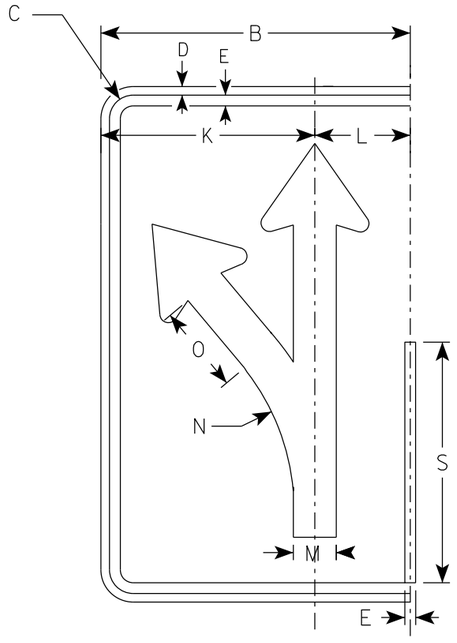
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

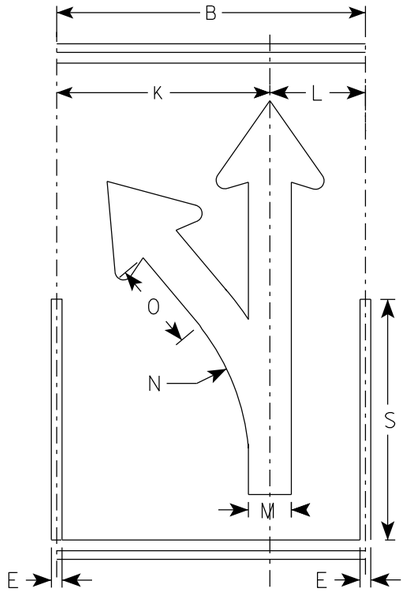
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 71 | E

NOTES

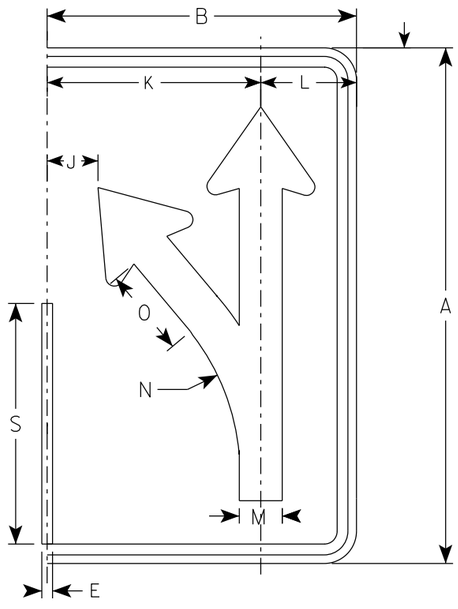
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



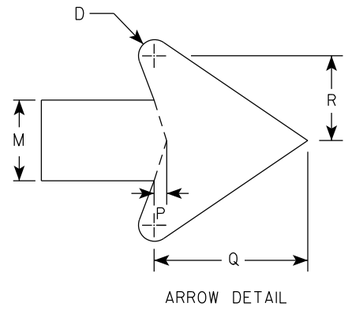
(E)



(E)



(E)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

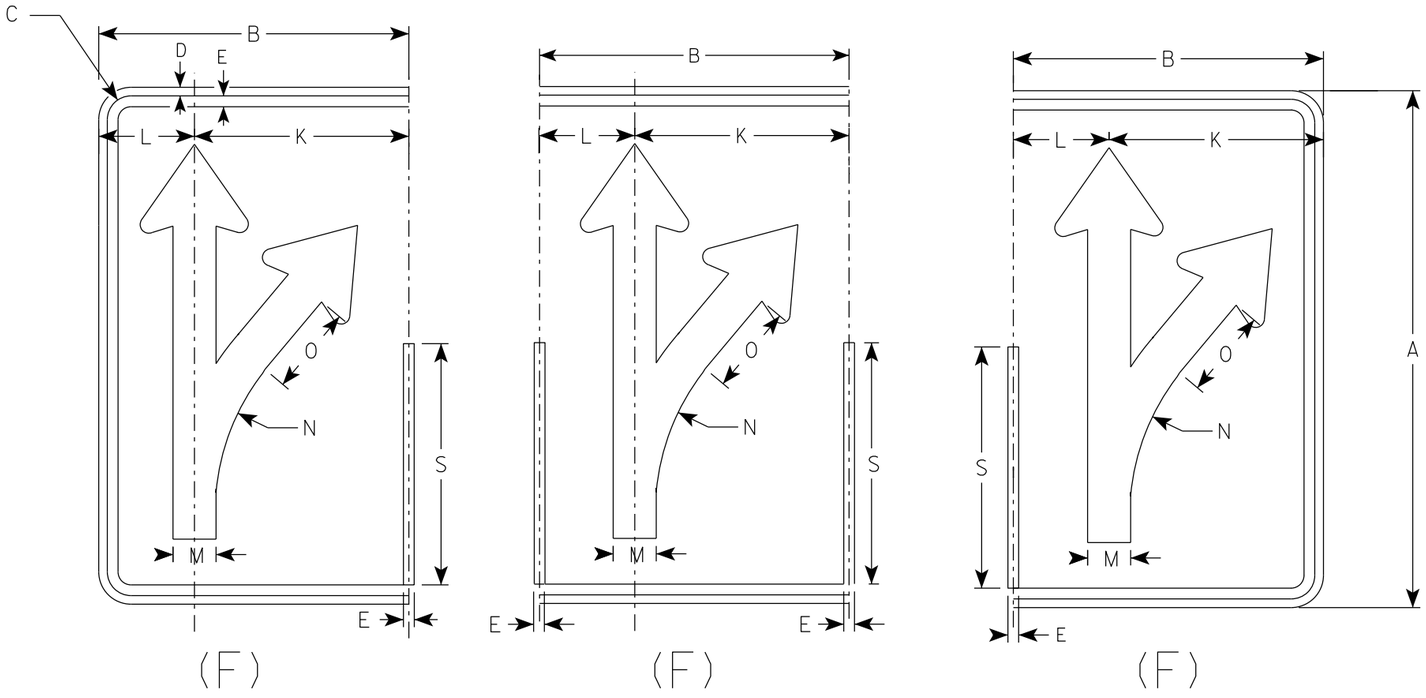
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

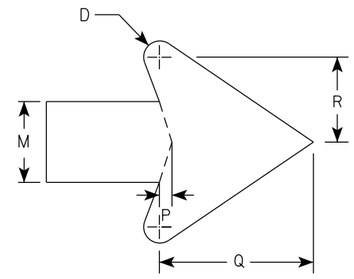
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 72 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(F) (F) (F)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

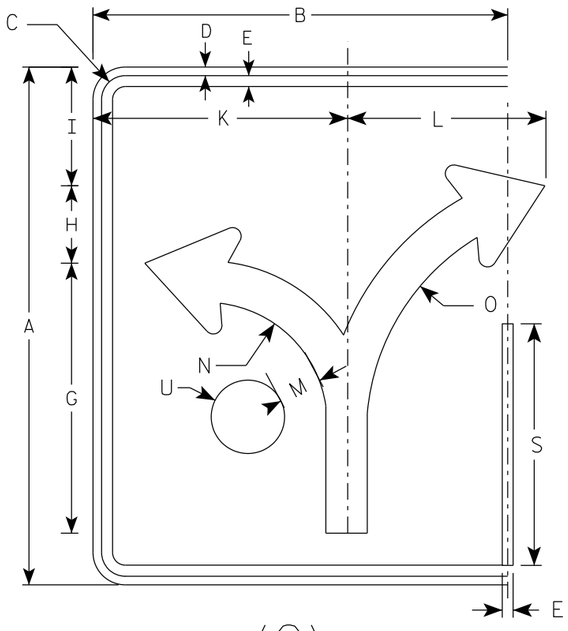
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

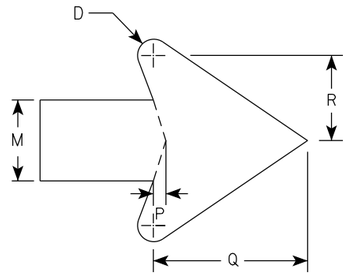
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 73 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



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	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

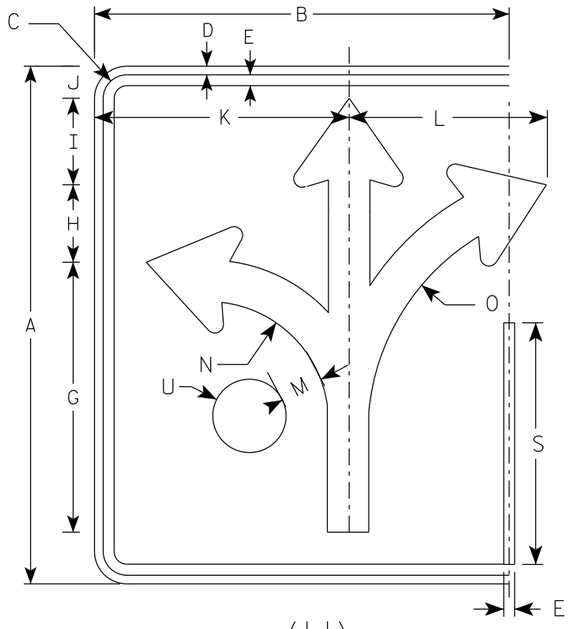
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 74 | E

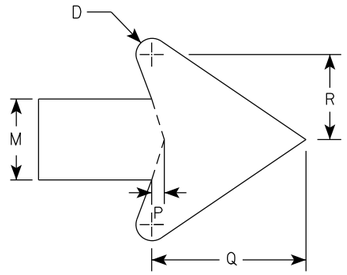
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:38 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



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	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

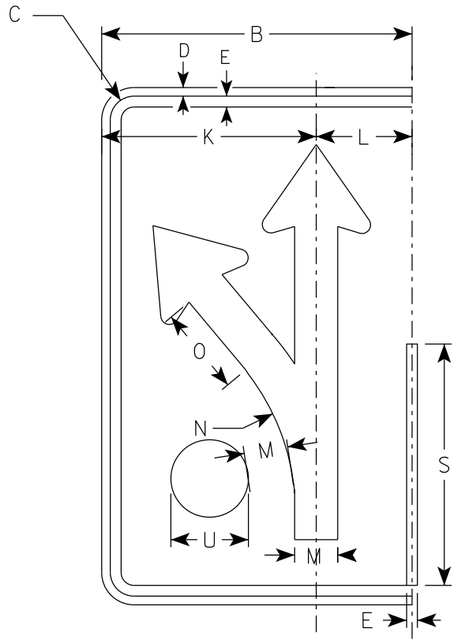
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

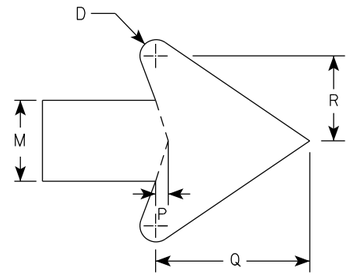
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 75	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



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	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

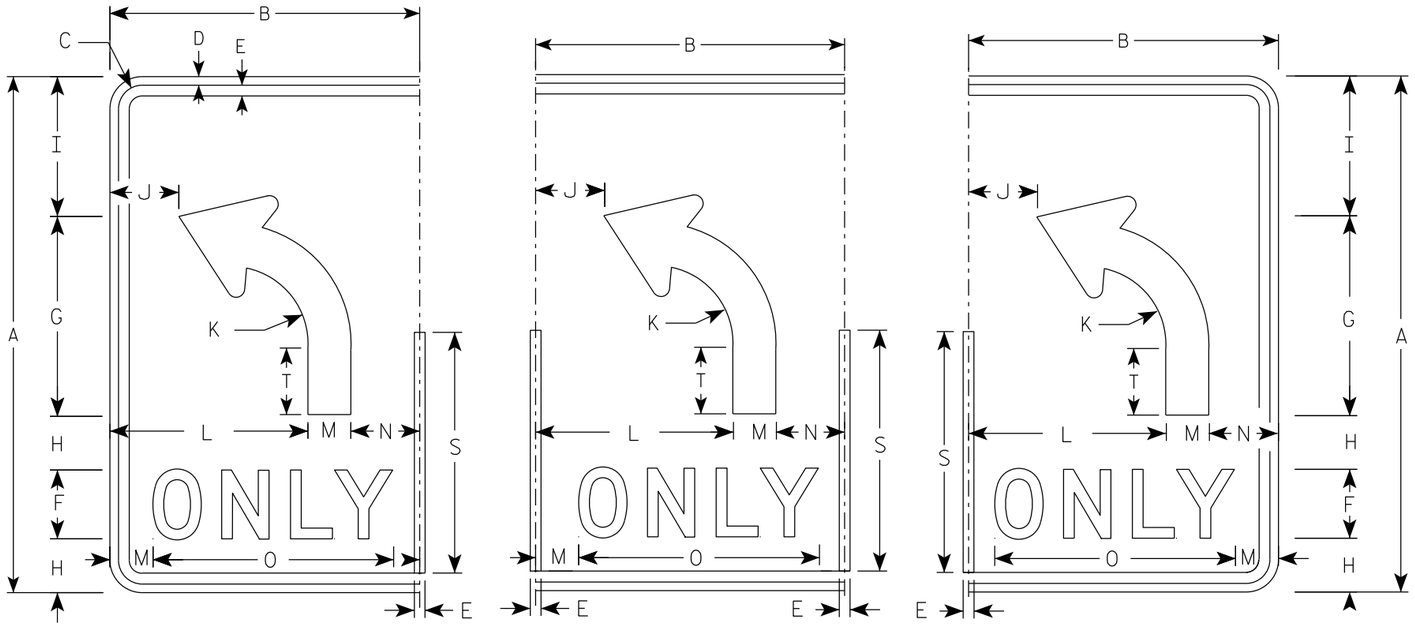
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

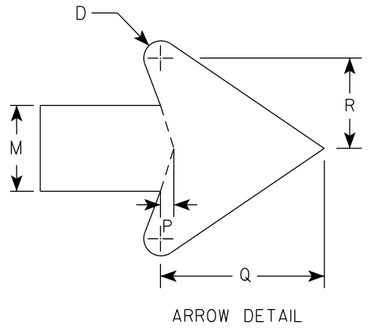
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 76 | E

NOTES

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



(L) (L) (L)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4		5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

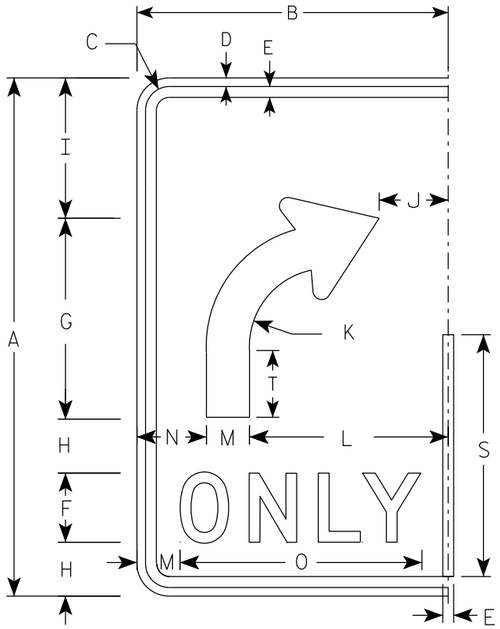
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

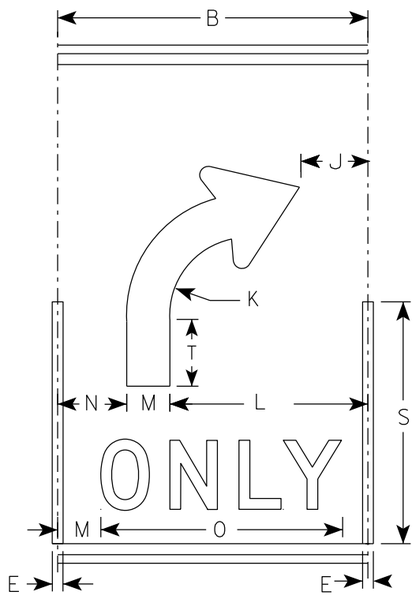
SHEET NO: 77 E

NOTES

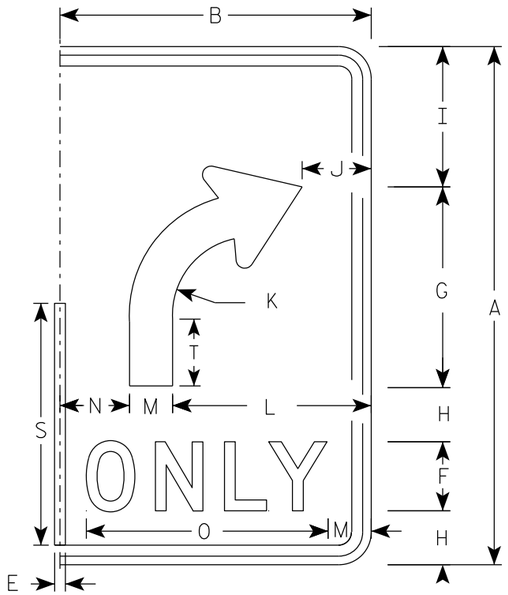
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



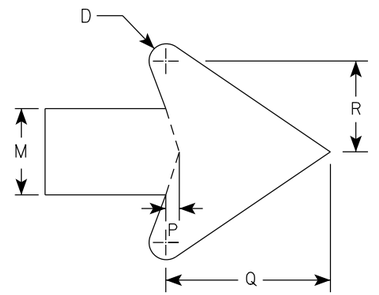
(R)



(R)



(R)



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	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN
R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

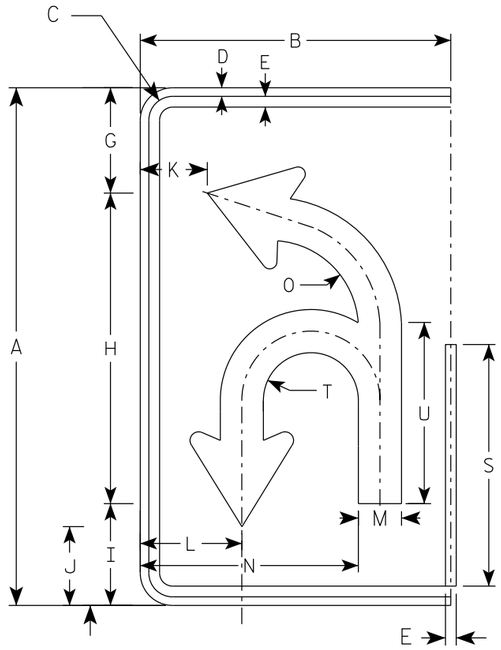
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

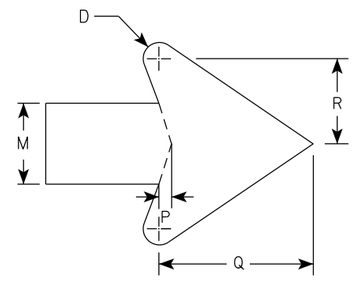
SHEET NO: 78 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



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	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

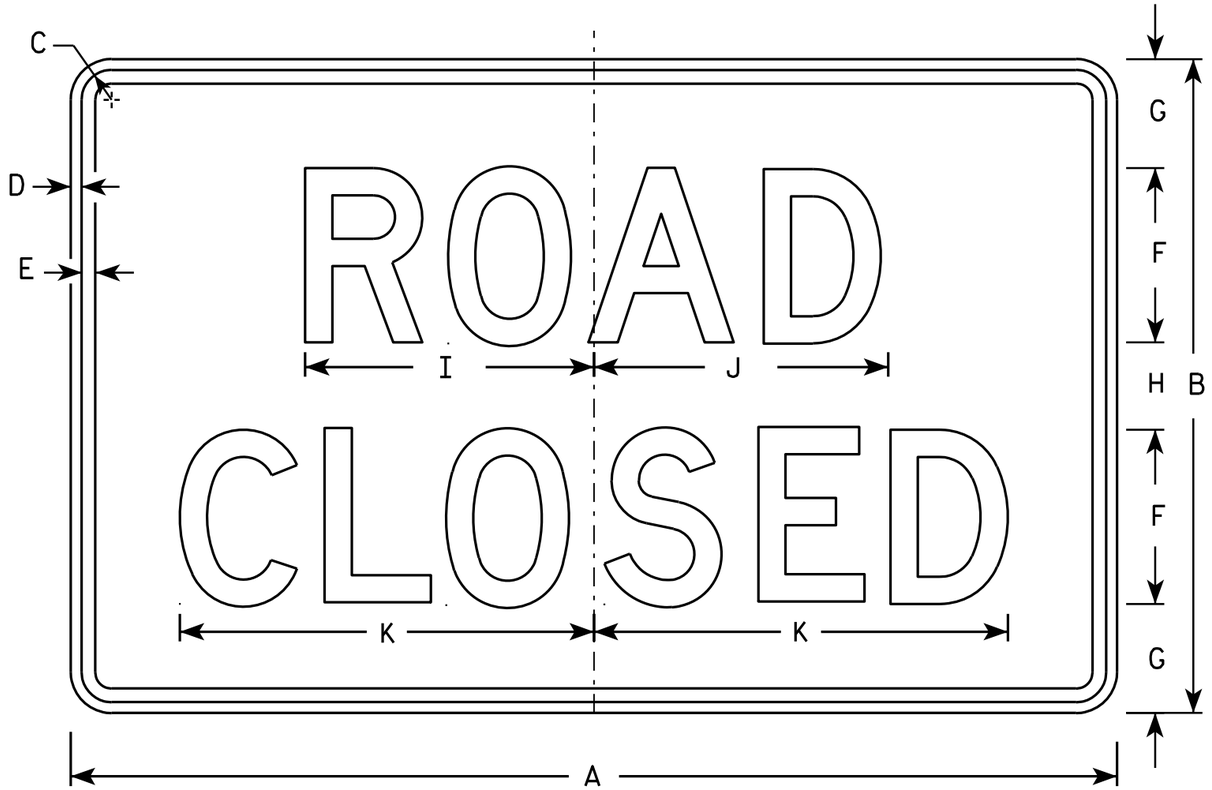
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

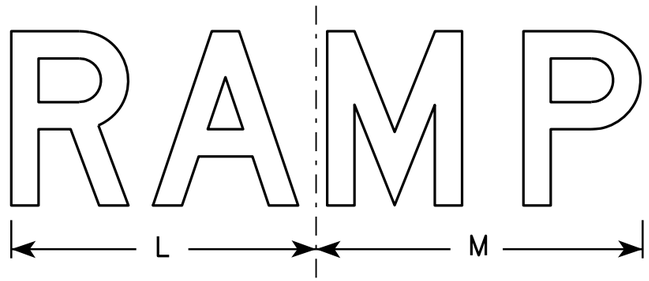
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 79 | E



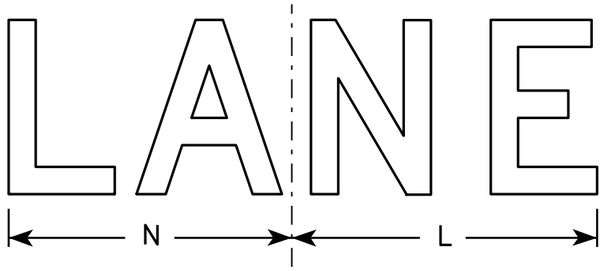
R11-2

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

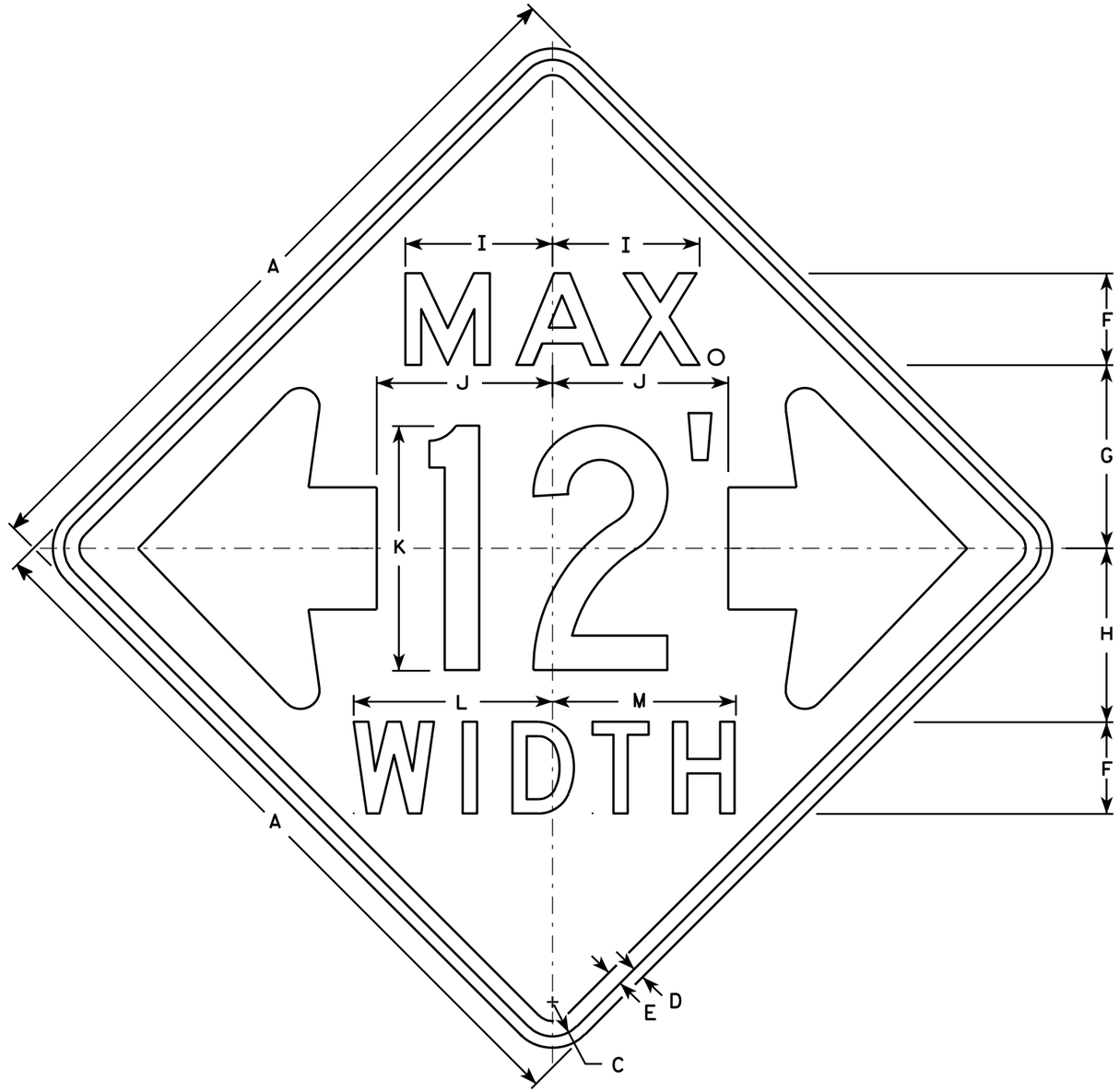
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

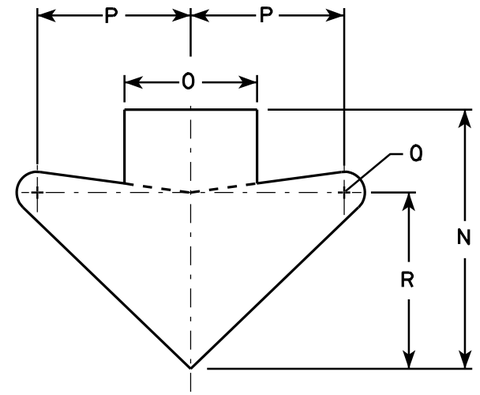
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 80 | E



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

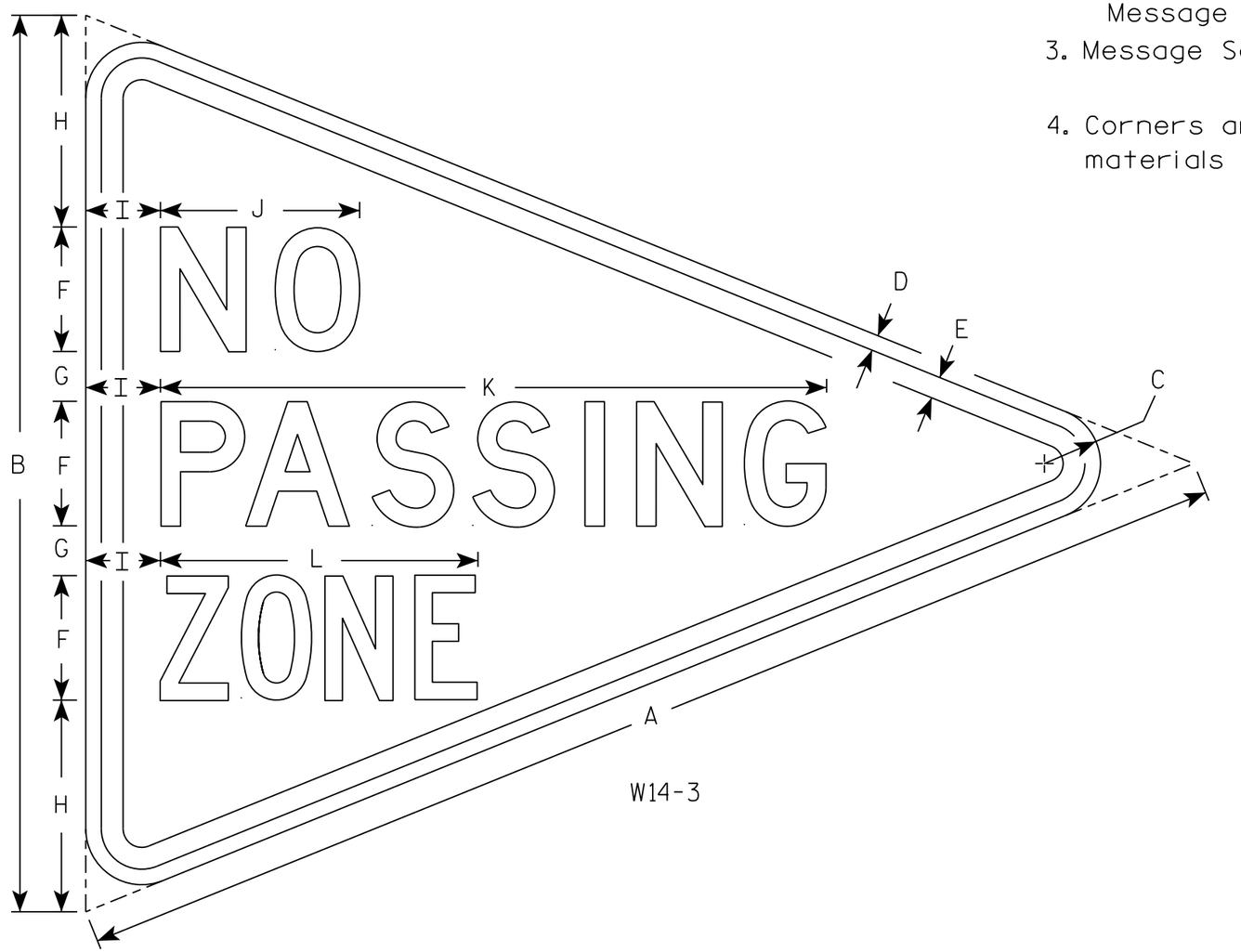
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 81	E

NOTES

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



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

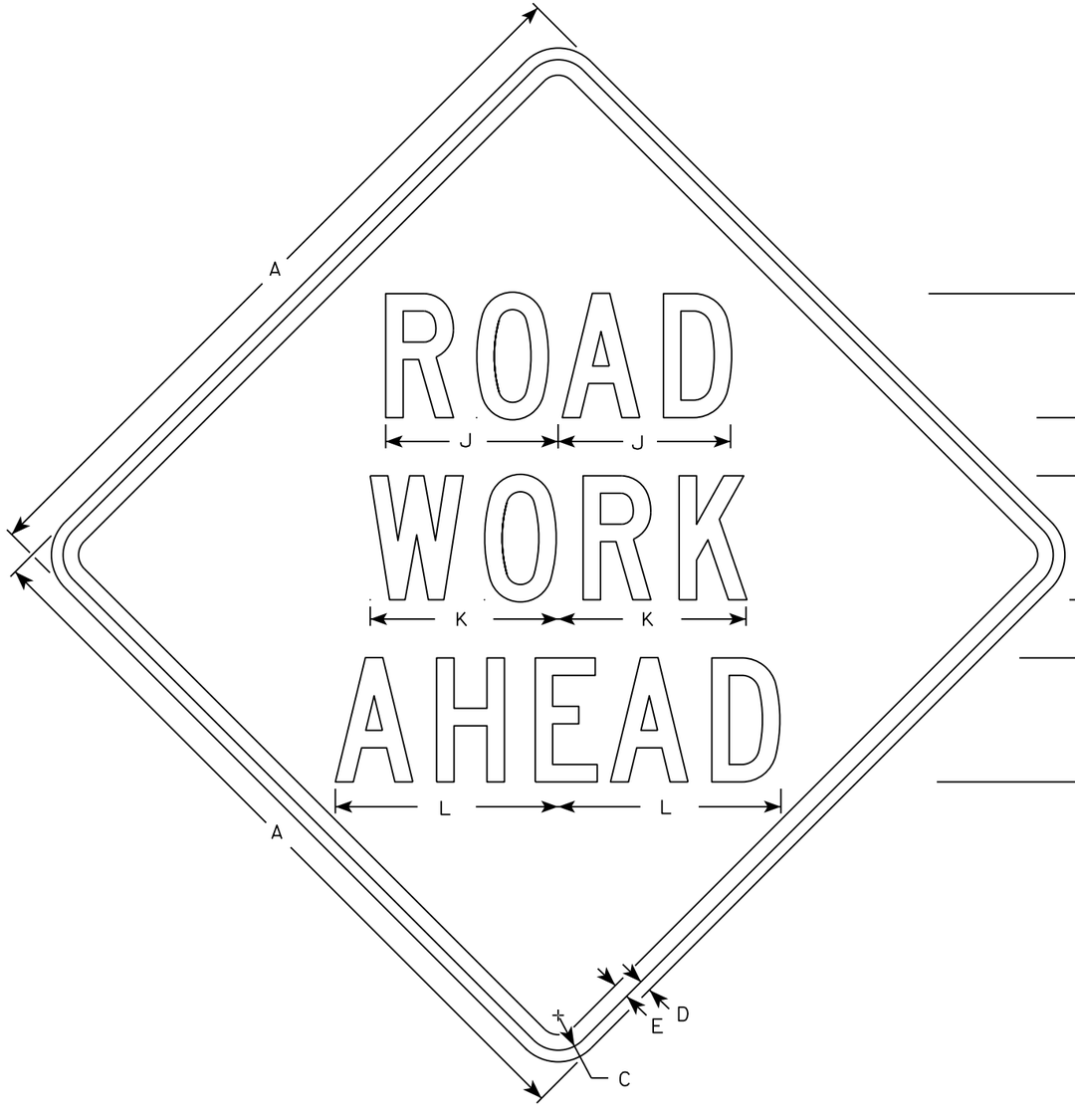
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

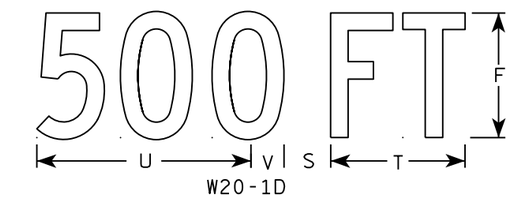
APPROVED Matthew R Rauch
for State Traffic Engineer

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

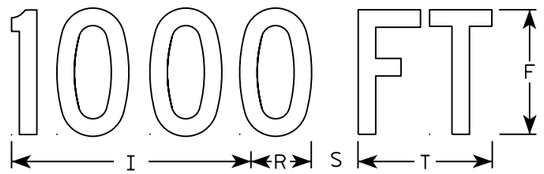
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 82 | E



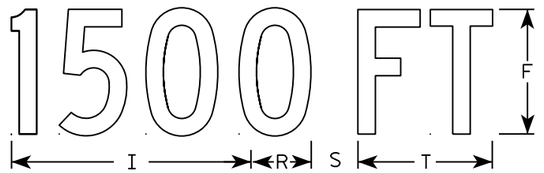
W20-1A



W20-1D

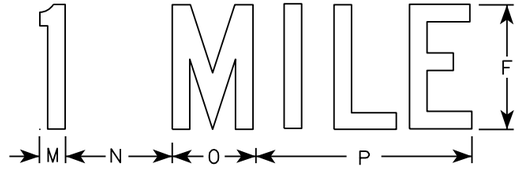


W20-1C

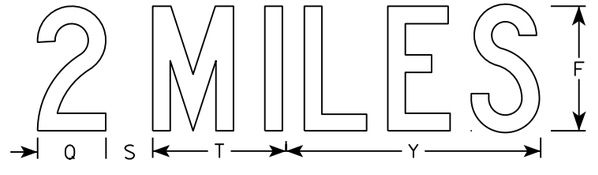


W20-1B

W20-1G



W20-1F



W20-1E

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.

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 3/8	1/2	5/8	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		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, F & G

WISCONSIN DEPT OF TRANSPORTATION

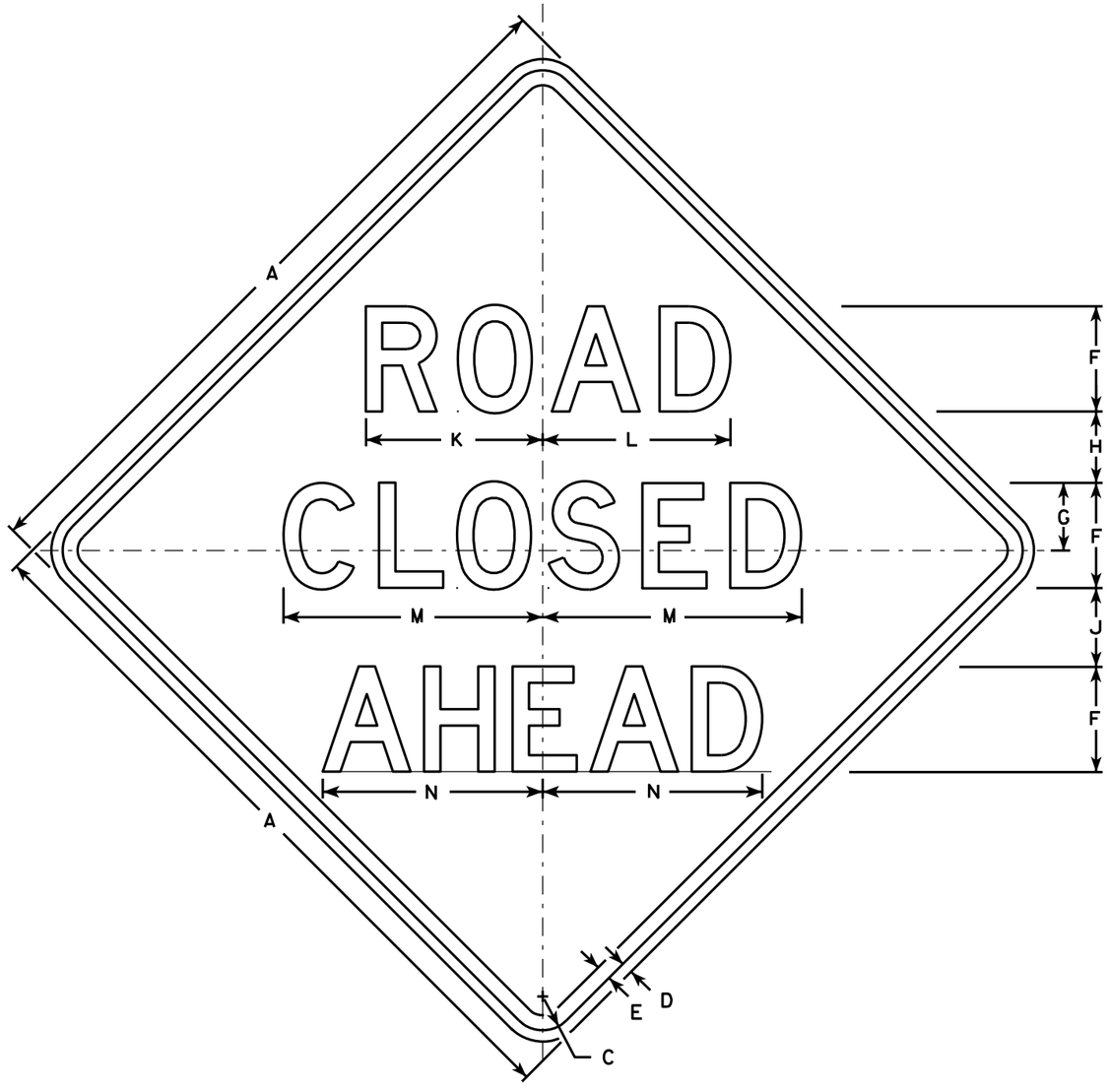
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

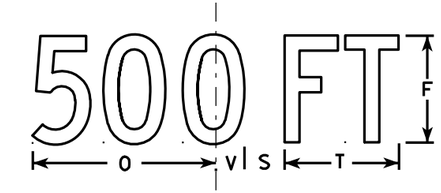
PROJECT NO:

SHEET NO: E

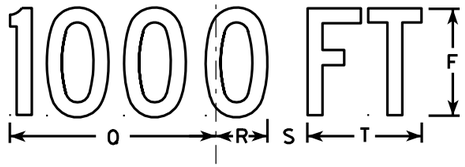
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



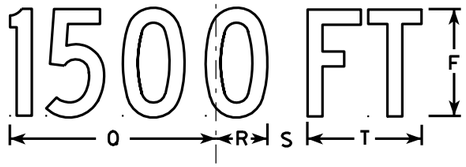
W20-3A



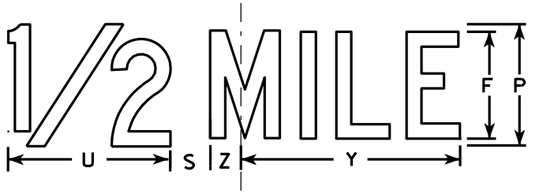
W20-3D



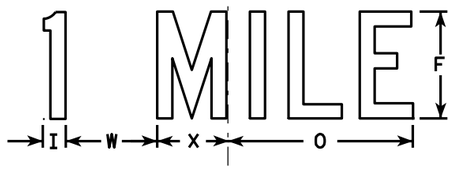
W20-3C



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.

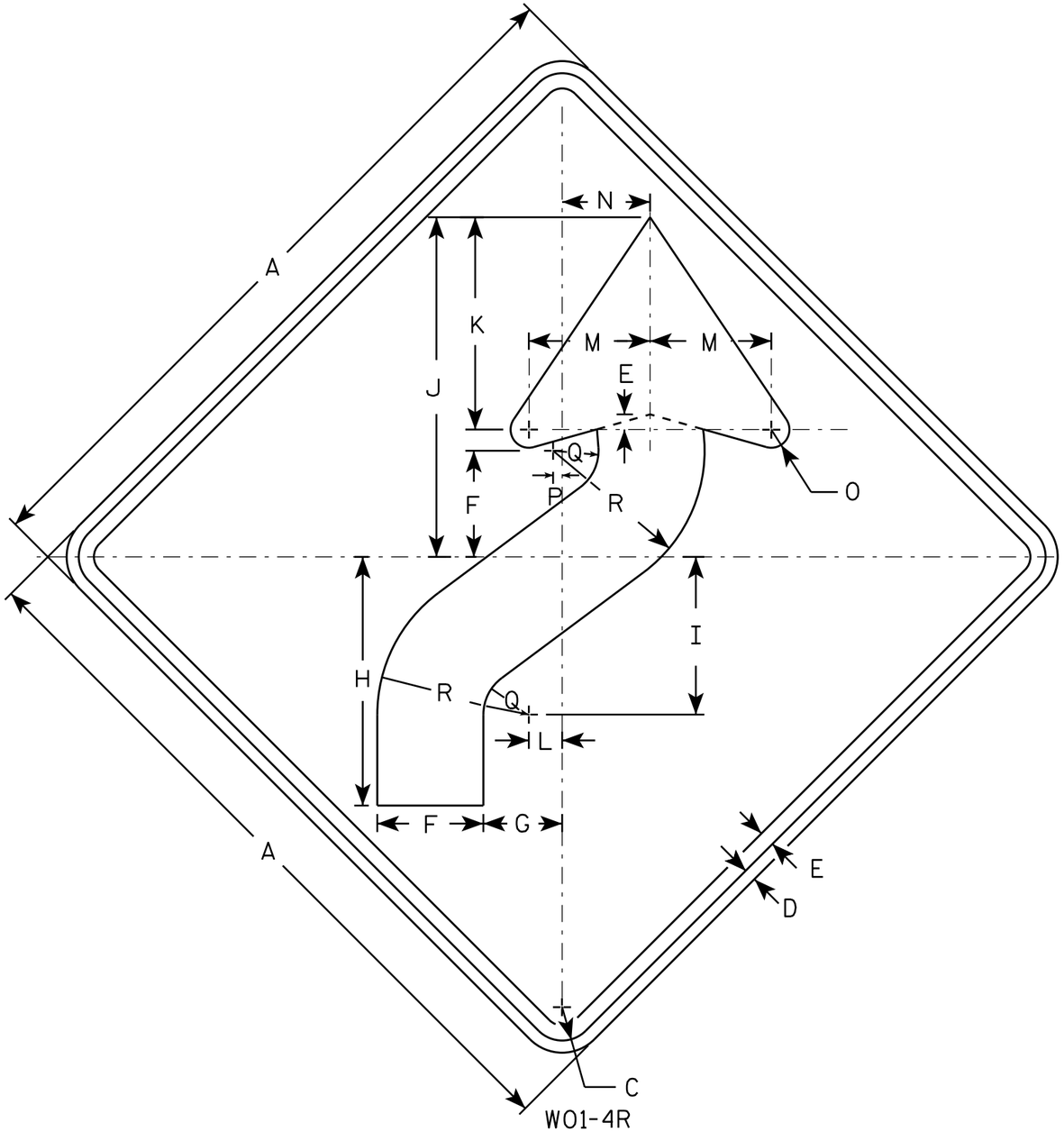
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	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: 84 | 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

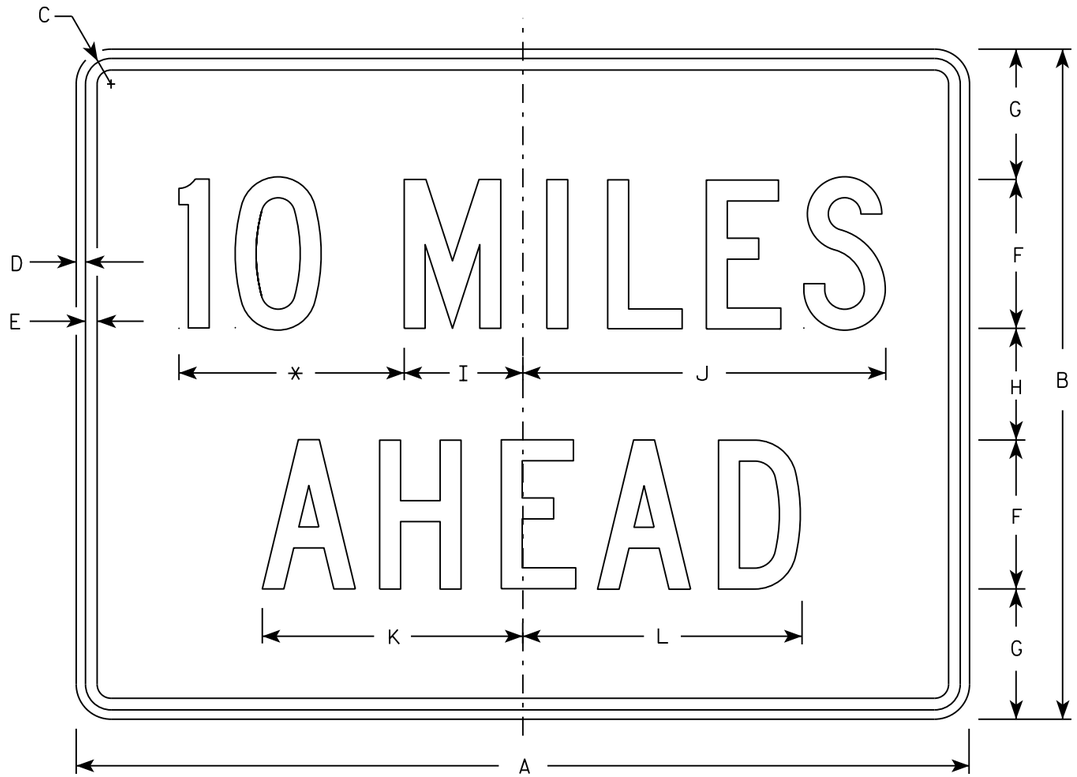
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

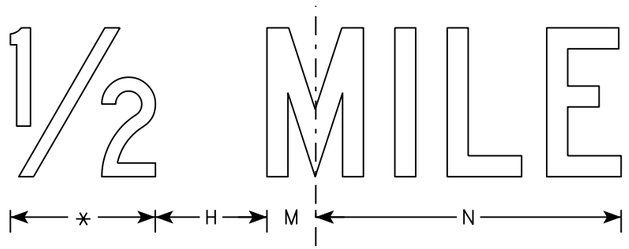
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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



W057-52



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.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

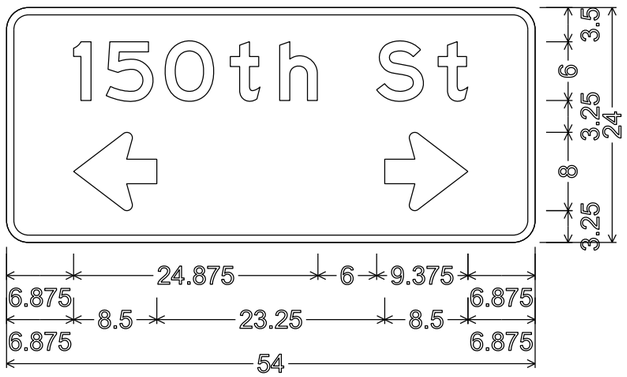
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

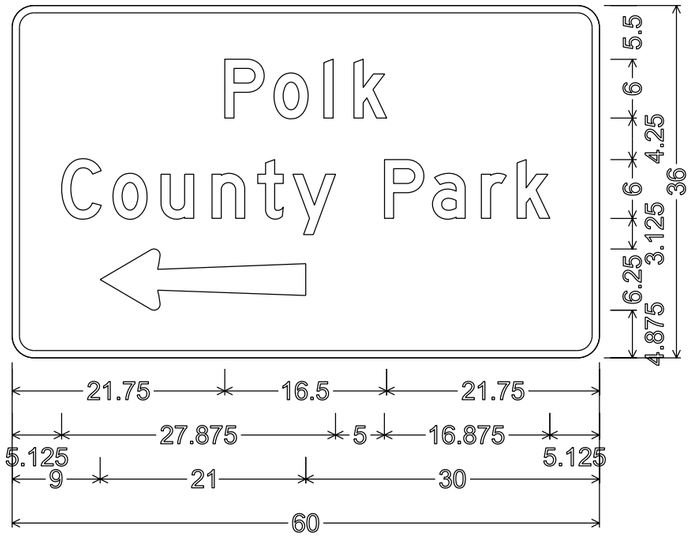
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 86	E

NOTES

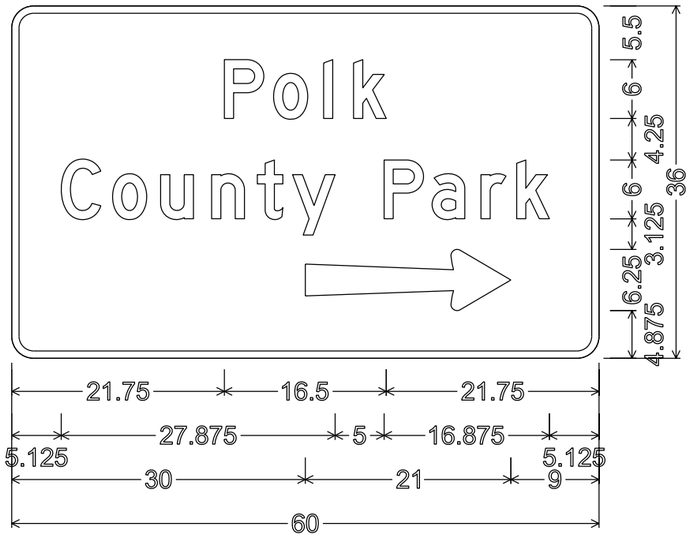
1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted



D1-61 ; 2.250" Radius, 0.750" Border



D7-68L ; 2.250" Radius, 0.750" Border, White on Brown; "Polk" D; "County" D ; "Park" D



D7-68R ; 2.250" Radius, 0.750" Border, White on Brown; "Polk" D; "County" D ; "Park" D

7

7

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	PERMANENT SIGNING	SHEET NO: 87	E

STATION	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
													Expanded				Reduced Marsh	Reduced EBS	
	Cut	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Fill	Marsh Backfill	Rock	EBS Backfill	in Fill	in Fill	Mass Ordinate
												1.00	1.25	1.75	1.00	1.25	0.50	0.75	
						Note 1	Note 2	Note 3				Note 1		Note 4		Note 5	Note 6	Note 7	Note 8
USH 8																			
460+27.97	68.22	31.93	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
460+50	68.94	27.02	0.00	0.00	0.00	56	0	24	0	0	0	56	30	0	0	0	0	0	26
461+00	69.52	21.72	0.00	0.00	0.00	128	0	45	0	0	0	184	86	0	0	0	0	0	98
461+50	70.63	18.34	0.00	0.00	0.00	130	0	37	0	0	0	314	133	0	0	0	0	0	181
462+00	71.24	19.88	0.00	0.00	0.00	131	0	35	0	0	0	445	177	0	0	0	0	0	268
462+50	70.67	34.44	0.00	0.00	0.00	131	0	50	0	0	0	577	240	0	0	0	0	0	337
463+00	70.08	65.27	0.00	0.00	0.00	130	0	92	0	0	0	707	355	0	0	0	0	0	352
463+50	70.70	65.43	0.00	0.00	0.00	130	0	121	0	0	0	837	507	0	0	0	0	0	331
464+00	69.07	48.23	0.00	0.00	0.00	129	0	105	0	0	0	967	638	0	0	0	0	0	329
464+50	66.91	67.27	0.00	0.00	0.00	126	0	107	0	0	0	1,093	772	0	0	0	0	0	321
465+00	60.54	57.78	7.44	0.00	0.00	118	0	116	7	0	0	1,211	917	12	0	0	3	0	294
465+50	59.79	60.65	8.67	0.00	0.00	111	0	110	15	0	0	1,322	1,054	38	0	0	11	0	268
466+00	62.78	56.80	8.54	0.00	0.00	113	0	109	16	0	0	1,436	1,190	66	0	0	19	0	246
466+50	68.82	57.44	7.36	0.00	0.00	122	0	106	15	0	0	1,557	1,322	92	0	0	26	0	236
467+00	71.45	60.82	0.00	0.00	0.00	130	0	110	7	0	0	1,687	1,459	104	0	0	30	0	229
467+50	71.31	50.94	0.00	0.00	0.00	132	0	103	0	0	0	1,820	1,588	104	0	0	30	0	231
468+00	74.25	16.50	0.00	0.00	0.00	135	0	62	0	0	0	1,954	1,666	104	0	0	30	0	288
468+50	134.46	10.41	0.00	0.00	0.00	193	0	25	0	0	0	2,148	1,697	104	0	0	30	0	450
469+00	153.53	9.97	0.00	0.00	0.00	267	0	19	0	0	0	2,414	1,721	104	0	0	30	0	693
469+50	75.06	27.86	0.00	0.00	0.00	212	0	35	0	0	0	2,626	1,765	104	0	0	30	0	861
470+00	72.25	69.60	0.00	0.00	0.00	136	0	90	0	0	0	2,762	1,877	104	0	0	30	0	885
470+50	69.42	77.19	0.00	0.00	0.00	131	0	136	0	0	0	2,893	2,047	104	0	0	30	0	846
471+00	58.66	105.17	8.28	0.00	0.00	119	0	169	8	0	0	3,012	2,258	117	0	0	33	0	754
471+50	56.07	138.01	8.08	0.00	0.00	106	0	225	15	0	0	3,118	2,540	144	0	0	41	0	578
472+00	68.00	197.08	0.00	0.00	0.00	115	0	310	7	0	0	3,233	2,928	157	0	0	45	0	305
472+44.79	88.14	163.54	0.00	0.00	0.00	129	0	299	0	0	0	3,363	3,302	157	0	0	45	0	61
472+47.5	90.16	168.48	0.00	0.00	0.00	9	0	17	0	0	0	3,372	3,322	157	0	0	45	0	49
472+52.5	93.95	175.33	0.00	0.00	0.00	17	0	32	0	0	0	3,389	3,362	157	0	0	45	0	26
472+57.5	97.48	193.02	0.00	0.00	0.00	18	0	34	0	0	0	3,406	3,405	157	0	0	45	0	1
472+62.5	101.10	216.41	0.00	0.00	0.00	18	0	38	0	0	0	3,425	3,452	157	0	0	45	0	-28
472+67.5	106.17	221.38	0.00	0.00	0.00	19	0	41	0	0	0	3,444	3,503	157	0	0	45	0	-59
472+72.5	108.28	201.03	0.00	0.00	0.00	20	0	39	0	0	0	3,464	3,552	157	0	0	45	0	-88
472+77.5	114.04	147.87	0.00	0.00	0.00	21	0	32	0	0	0	3,484	3,592	157	0	0	45	0	-108
472+82.5	122.33	80.46	0.00	0.00	0.00	22	0	21	0	0	0	3,506	3,619	157	0	0	45	0	-112
472+87.5	127.37	26.25	0.00	0.00	0.00	23	0	10	0	0	0	3,529	3,631	157	0	0	45	0	-102
472+92.5	122.82	1.22	0.00	0.00	0.00	23	0	3	0	0	0	3,553	3,634	157	0	0	45	0	-82
472+97.5	115.91	0.00	0.00	0.00	0.00	22	0	0	0	0	0	3,575	3,634	157	0	0	45	0	-60
473+02.5	100.25	0.00	0.00	0.00	0.00	20	0	0	0	0	0	3,595	3,634	157	0	0	45	0	-40
473+07.5	82.67	0.00	0.00	0.00	0.00	17	0	0	0	0	0	3,612	3,634	157	0	0	45	0	-23
473+12.5	61.49	0.00	0.00	0.00	0.00	13	0	0	0	0	0	3,625	3,634	157	0	0	45	0	-9

STATION	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
												Expanded					Reduced Marsh	Reduced EBS	
	Cut	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Fill	Marsh Backfill	Rock	EBS Backfill	in Fill	in Fill	Mass Ordinate
												1.00	1.25	1.75	1.00	1.25	0.50	0.75	
						Note 1	Note 2	Note 3				Note 1		Note 4		Note 5	Note 6	Note 7	Note 8
150TH ST SOUTH																			
48+49.07	73.21	40.60	0.00	0.00	0.00	0	0	0	0	0	0	3,625	3,634	0	0	0	0	0	-9
48+50	73.32	52.38	0.00	0.00	0.00	3	0	2	0	0	0	3,627	3,636	0	0	0	0	0	-9
48+60	74.56	72.73	0.00	0.00	0.00	27	0	23	0	0	0	3,655	3,665	0	0	0	0	0	-10
48+70	72.17	85.41	0.00	0.00	0.00	27	0	29	0	0	0	3,682	3,702	0	0	0	0	0	-20
48+80	72.77	91.74	0.00	0.00	0.00	27	0	33	0	0	0	3,709	3,743	0	0	0	0	0	-34
48+90	73.36	98.66	0.00	0.00	0.00	27	0	35	0	0	0	3,736	3,787	0	0	0	0	0	-51
49+00	73.95	106.19	0.00	0.00	0.00	27	0	38	0	0	0	3,763	3,834	0	0	0	0	0	-71
49+10	74.69	114.07	0.00	0.00	0.00	28	0	41	0	0	0	3,791	3,885	0	0	0	0	0	-95
49+18.25	75.76	124.78	0.00	0.00	0.00	23	0	36	0	0	0	3,814	3,931	0	0	0	0	0	-117
49+20	75.92	129.82	0.00	0.00	0.00	5	0	8	0	0	0	3,819	3,941	0	0	0	0	0	-123
49+25	76.24	148.64	0.00	0.00	0.00	14	0	26	0	0	0	3,833	3,974	0	0	0	0	0	-141
49+30	76.38	170.49	0.00	0.00	0.00	14	0	30	0	0	0	3,847	4,010	0	0	0	0	0	-164
49+35	76.17	202.79	0.00	0.00	0.00	14	0	35	0	0	0	3,861	4,054	0	0	0	0	0	-193
49+40	76.37	221.73	0.00	0.00	0.00	14	0	39	0	0	0	3,875	4,103	0	0	0	0	0	-228
49+45	74.66	218.16	0.00	0.00	0.00	14	0	41	0	0	0	3,889	4,154	0	0	0	0	0	-265
49+50	73.44	173.04	0.00	0.00	0.00	14	0	36	0	0	0	3,903	4,199	0	0	0	0	0	-296
49+55	72.79	89.17	0.00	0.00	0.00	14	0	24	0	0	0	3,916	4,229	0	0	0	0	0	-313
49+60	77.20	18.98	0.00	0.00	0.00	14	0	10	0	0	0	3,930	4,242	0	0	0	0	0	-312
49+65	87.78	0.00	0.00	0.00	0.00	15	0	2	0	0	0	3,946	4,244	0	0	0	0	0	-299
49+70	75.18	0.00	0.00	0.00	0.00	15	0	0	0	0	0	3,961	4,244	0	0	0	0	0	-283
49+75	56.53	0.00	0.00	0.00	0.00	12	0	0	0	0	0	3,973	4,244	0	0	0	0	0	-271
49+80	41.19	0.00	0.00	0.00	0.00	9	0	0	0	0	0	3,982	4,244	0	0	0	0	0	-262
49+85	16.36	0.00	0.00	0.00	0.00	5	0	0	0	0	0	3,987	4,244	0	0	0	0	0	-257

Notes:		
1 - Cut	Cut includes Salvaged/Unusable Pavement material	
2 - Salvaged/Unusable Pavement Mat	This does not show up in cross sections	
3 - Fill	Does not include Unusable Pavement Exc volume	
4 - Expanded Marsh Backfill	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 4 - Select one based on input dialog selection
6 - Reduced Marsh in Fill	Reduced Marsh Excavation that can be used in Fill	Note 6 - If excavated Marsh can be used in Fill
7 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill	Note 7 - If excavated EBS can be used in Fill
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [Cut - Salvaged Pavt - ((Fill - Reduced Marsh in Fill - Reduced EBS in Fill - Expanded Rock) * Fill Factor)]	EBS and Marsh Exc used outside 1:1 in fill slopes

STATION	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
													Expanded				Reduced Marsh	Reduced EBS	
	Cut	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Fill	Marsh Backfill	Rock	EBS Backfill	in Fill	in Fill	Mass Ordinate
						1.00						1.00	1.25	1.75	1.00	1.25	0.50	0.75	
						Note 1	Note 2	Note 3				Note 1		Note 4		Note 5	Note 6	Note 7	Note 8
150TH ST NORTH																			
50+25	5.35	0.00	0.00	0.00	0.00	0	0	0	0	0	0	3,987	4,244	0	0	0	0	0	-257
50+30	30.83	0.00	0.00	0.00	0.00	3.35	0	0	0	0	0	3,991	4,244	0	0	0	0	0	-254
50+35	51.35	0.00	0.00	0.00	0.00	7.61	0	0	0	0	0	3,998	4,244	0	0	0	0	0	-246
50+40	73.26	0.00	0.00	0.00	0.00	11.54	0	0	0	0	0	4,010	4,244	0	0	0	0	0	-234
50+45	93.51	0.00	0.00	0.00	0.00	15.44	0	0	0	0	0	4,025	4,244	0	0	0	0	0	-219
50+50	112.42	0.00	0.00	0.00	0.00	19.07	0	0	0	0	0	4,044	4,244	0	0	0	0	0	-200
50+55	123.28	7.09	0.00	0.00	0.00	21.82	0	1	0	0	0	4,066	4,245	0	0	0	0	0	-179
50+60	115.40	23.28	0.00	0.00	0.00	22.10	0	3	0	0	0	4,088	4,248	0	0	0	0	0	-160
50+65	107.10	31.05	0.00	0.00	0.00	20.60	0	5	0	0	0	4,109	4,255	0	0	0	0	0	-146
50+70	100.49	24.14	0.00	0.00	0.00	19.22	0	5	0	0	0	4,128	4,261	0	0	0	0	0	-133
50+75	98.42	19.28	0.00	0.00	0.00	18.42	0	4	0	0	0	4,146	4,266	0	0	0	0	0	-120
50+80	101.54	22.54	0.00	0.00	0.00	18.52	0	4	0	0	0	4,165	4,271	0	0	0	0	0	-106
50+85	97.40	34.90	0.00	0.00	0.00	18.42	0	5	0	0	0	4,183	4,278	0	0	0	0	0	-94
50+90	94.03	30.36	0.00	0.00	0.00	17.72	0	6	0	0	0	4,201	4,285	0	0	0	0	0	-84
50+93.44	94.44	24.77	0.00	0.00	0.00	12.01	0	4	0	0	0	4,213	4,289	0	0	0	0	0	-76
51+00	91.29	40.27	0.00	0.00	0.00	22.56	0	8	0	0	0	4,236	4,299	0	0	0	0	0	-64
51+10	89.42	38.24	0.00	0.00	0.00	33.47	0	15	0	0	0	4,269	4,318	0	0	0	0	0	-49
51+20	87.61	35.63	0.00	0.00	0.00	32.78	0	14	0	0	0	4,302	4,335	0	0	0	0	0	-33
51+30	85.62	33.01	0.00	0.00	0.00	32.08	0	13	0	0	0	4,334	4,351	0	0	0	0	0	-17
51+40	83.69	33.79	0.00	0.00	0.00	31.35	0	12	0	0	0	4,365	4,366	0	0	0	0	0	-1
51+50	83.69	29.02	0.00	0.00	0.00	31.00	0	12	0	0	0	4,396	4,381	0	0	0	0	0	16
51+51	83.80	27.96	0.00	0.00	0.00	3.10	0	1	0	0	0	4,399	4,382	0	0	0	0	0	18

Notes:		
1 - Cut	Cut includes Salvaged/Unusable Pavement material	
2 - Salvaged/Unusable Pavement Mat	This does not show up in cross sections	
3 - Fill	Does not include Unusable Pavement Exc volume	
4 - Expanded Marsh Backfill	Will be backfilled with Granular Backfill (or Cut, or Borrow)	Note 4 - Select one based on input dialog selection
6 - Reduced Marsh in Fill	Reduced Marsh Excavation that can be used in Fill	Note 6 - If excavated Marsh can be used in Fill
7 - Reduced EBS in Fill	Reduced EBS Excavation that can be used in Fill	Note 7 - If excavated EBS can be used in Fill
8 - Mass Ordinate	If Marsh and EBS to be backfilled with Granular: [Cut - Salvaged Pavt - ((Fill - Reduced Marsh in Fill - Reduced EBS in Fill - Expanded Rock) * Fill Factor)]	EBS and Marsh Exc used outside 1:1 in fill slopes

STATION	AREA (SF)					Incremental Vol (CY) (Unadjusted)						Cumulative Vol (CY)							
													Expanded				Reduced Marsh	Reduced EBS	
	Cut	Fill	Marsh Exc	Rock Exc	EBS	Cut	Salvaged/Unusable Pavement Material	Fill	Marsh Exc	Rock Exc	EBS	Cut	Fill	Marsh Backfill	Rock	EBS Backfill	in Fill	in Fill	Mass Ordinate
												1.00	1.25	1.75	1.00	1.25	0.50	0.75	
						Note 1	Note 2	Note 3				Note 1		Note 4		Note 5	Note 6	Note 7	Note 8
USH 8																			
473+17.5	59.13	0.00	0.00	0.00	0.00	11	0	0	0	0	0	4,411	4,382	157	0	0	45	0	29
473+20	59.85	0.00	0.00	0.00	0.00	6	0	0	0	0	0	4,416	4,382	157	0	0	45	0	34
473+25	82.83	0.00	0.00	0.00	0.00	13	0	0	0	0	0	4,429	4,382	157	0	0	45	0	47
473+30	103.68	0.00	0.00	0.00	0.00	17	0	0	0	0	0	4,447	4,382	157	0	0	45	0	65
473+35	122.61	0.00	0.00	0.00	0.00	21	0	0	0	0	0	4,467	4,382	157	0	0	45	0	86
473+40	140.43	0.00	0.00	0.00	0.00	24	0	0	0	0	0	4,492	4,382	157	0	0	45	0	110
473+45	145.32	4.00	0.00	0.00	0.00	26	0	0	0	0	0	4,518	4,382	157	0	0	45	0	136
473+50	137.65	50.58	0.00	0.00	0.00	26	0	5	0	0	0	4,544	4,389	157	0	0	45	0	156
473+55	127.00	98.17	0.00	0.00	0.00	25	0	14	0	0	0	4,569	4,406	157	0	0	45	0	163
473+60	119.30	129.49	0.00	0.00	0.00	23	0	21	0	0	0	4,592	4,432	157	0	0	45	0	160
473+65	112.13	149.22	0.00	0.00	0.00	21	0	26	0	0	0	4,613	4,464	157	0	0	45	0	149
473+70	107.41	152.71	0.00	0.00	0.00	20	0	28	0	0	0	4,634	4,499	157	0	0	45	0	134
473+75	107.20	155.76	0.00	0.00	0.00	20	0	29	0	0	0	4,653	4,535	157	0	0	45	0	118
473+80	110.95	162.58	0.00	0.00	0.00	20	0	29	0	0	0	4,674	4,572	157	0	0	45	0	102
473+85	110.12	177.91	0.00	0.00	0.00	20	0	32	0	0	0	4,694	4,611	157	0	0	45	0	83
473+87.3	110.85	180.06	0.00	0.00	0.00	9	0	15	0	0	0	4,703	4,630	157	0	0	45	0	73
474+00	117.79	244.38	0.00	0.00	0.00	54	0	100	0	0	0	4,757	4,755	157	0	0	45	0	2
474+50	58.40	172.57	14.44	0.00	0.00	163	0	386	13	0	0	4,920	5,238	180	0	0	51	0	-317
475+00	63.18	178.60	0.00	0.00	0.00	113	0	325	13	0	0	5,033	5,644	204	0	0	58	0	-611
475+50	61.89	102.30	0.00	0.00	0.00	116	0	260	0	0	0	5,149	5,969	204	0	0	58	0	-821
476+00	68.03	41.06	0.00	0.00	0.00	120	0	133	0	0	0	5,269	6,135	204	0	0	58	0	-866
476+50	71.67	48.84	0.00	0.00	0.00	129	0	83	0	0	0	5,398	6,239	204	0	0	58	0	-841
477+00	74.55	29.85	0.00	0.00	0.00	135	0	73	0	0	0	5,534	6,330	204	0	0	58	0	-797
477+50	76.85	22.68	0.00	0.00	0.00	140	0	49	0	0	0	5,674	6,391	204	0	0	58	0	-717
478+00	78.09	23.91	0.00	0.00	0.00	143	0	43	0	0	0	5,817	6,445	204	0	0	58	0	-628
478+50	71.19	70.38	0.00	0.00	0.00	138	0	87	0	0	0	5,956	6,554	204	0	0	58	0	-599
479+00	71.08	125.17	0.00	0.00	0.00	132	0	181	0	0	0	6,087	6,781	204	0	0	58	0	-693
479+50	66.66	90.32	0.00	0.00	0.00	128	0	200	0	0	0	6,215	7,030	204	0	0	58	0	-815
480+00	65.45	31.87	0.00	0.00	0.00	122	0	113	0	0	0	6,337	7,171	204	0	0	58	0	-834
480+50	65.17	40.32	0.00	0.00	0.00	121	0	67	0	0	0	6,458	7,255	204	0	0	58	0	-797
481+00	61.46	50.24	0.00	0.00	0.00	117	0	84	0	0	0	6,575	7,360	204	0	0	58	0	-784
481+50	56.35	67.22	0.00	0.00	0.00	109	0	109	0	0	0	6,685	7,496	204	0	0	58	0	-811
482+00	48.71	123.85	0.00	0.00	0.00	97	0	177	0	0	0	6,782	7,717	204	0	0	58	0	-935
482+50	48.75	144.61	0.00	0.00	0.00	90	0	249	0	0	0	6,872	8,028	204	0	0	58	0	-1,156
483+00	53.02	129.27	0.00	0.00	0.00	94	0	254	0	0	0	6,966	8,345	204	0	0	58	0	-1,378
483+50	65.95	53.79	0.00	0.00	0.00	110	0	169	0	0	0	7,076	8,556	204	0	0	58	0	-1,480
484+00	70.18	37.29	0.00	0.00	0.00	126	0	84	0	0	0	7,203	8,662	204	0	0	58	0	-1,459
484+50	72.62	37.22	0.00	0.00	0.00	132	0	69	0	0	0	7,335	8,748	204	0	0	58	0	-1,413
485+00	75.67	36.52	0.00	0.00	0.00	137	0	68	0	0	0	7,472	8,833	204	0	0	58	0	-1,361
485+50	72.70	37.54	0.00	0.00	0.00	137	0	69	0	0	0	7,609	8,919	204	0	0	58	0	-1,310
486+00	72.59	35.52	0.00	0.00	0.00	135	0	68	0	0	0	7,744	9,004	204	0	0	58	0	-1,260
486+04.73	35.93	19.23	0.00	0.00	0.00	10	0	5	0	0	0	7,753	9,010	204	0	0	58	0	-1,256

Division Division 1	From/To Station	205.0100 Common Excavation (1)		Available Material (5)	205.0500 Marsh Excavation (6)	Reduced Marsh in Fill (8)	Expanded Marsh Backfill (10)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	208.1100 Select Borrow	Comment:
		Cut (2)	EBS Excavation (3)			Factor 0.50	Factor 1.75		Factor 1.25				
	USH 8	6,979	0	6,979	117	58	204	7,753	9,010	-1,256	5,358	204	Marsh Bkfill
	150th S.	362	0	362								5,154	Subgrade
	150th N.	412	0	412								1,256	Overall Deficit
Subtotal		7,753	0	7,753	117	58	204	7,753	9,010	-1,256			
Grand Total		7,753	0	7,753	117	58	204	7,753	9,010	-1,256	5,358	6,614	
Total Common Exc		7,753											

Notes:

(1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100

(2) Salvaged/Unusable Pavement Material is included in Cut.

(3) EBS Excavation to be backfilled with Select Borrow material.

(4) Salvaged/Unusable Pavement Material

5) Available Material = Cut

(6) Marsh Excavation - to be backfilled with Select Borrow Material. Item number 205.0500

(8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.5

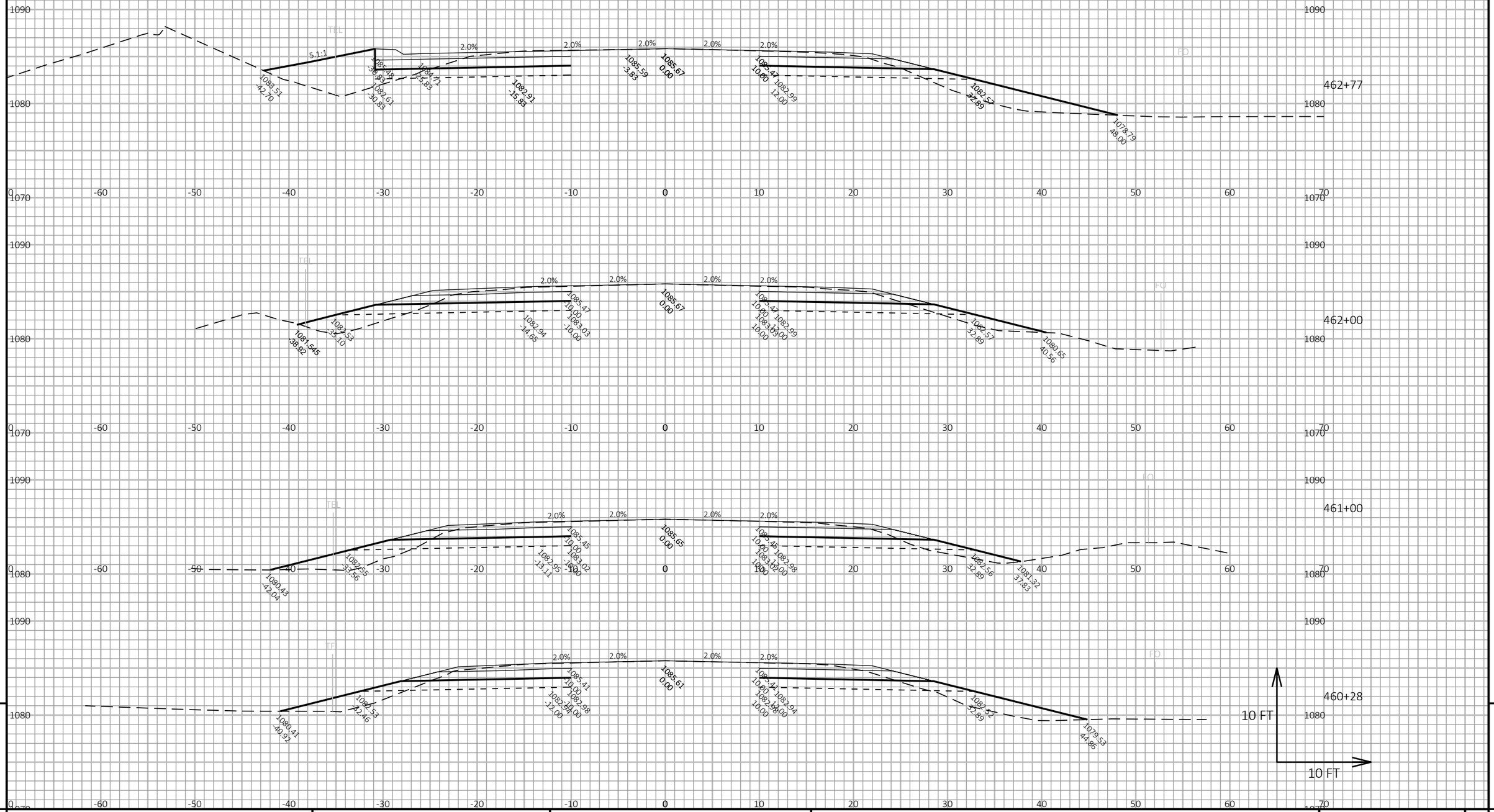
(10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.75. Item number 208.1100

(11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.25. Item number 208.1100

(13) Expanded Fill Factor = 1.25 Expanded Fill = (Unexpanded Fill - Expanded Rock - Reduced EBS) * 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.

USH 8



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 93 E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x1

PLOT DATE : 7/31/2019 9:20 AM

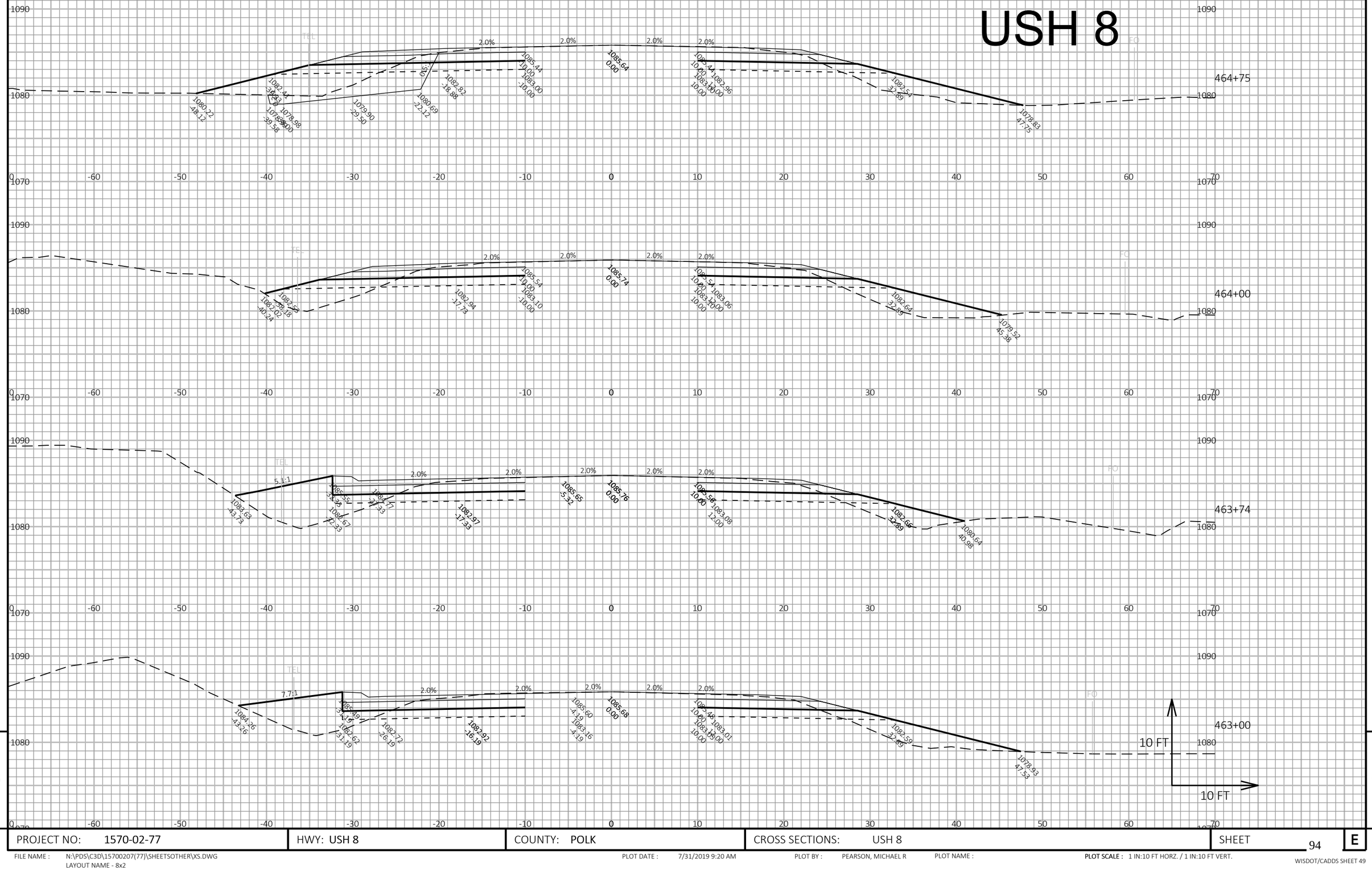
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 94 E

FILE NAME : N:\PDS\C3D\157002077(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x2

PLOT DATE : 7/31/2019 9:20 AM

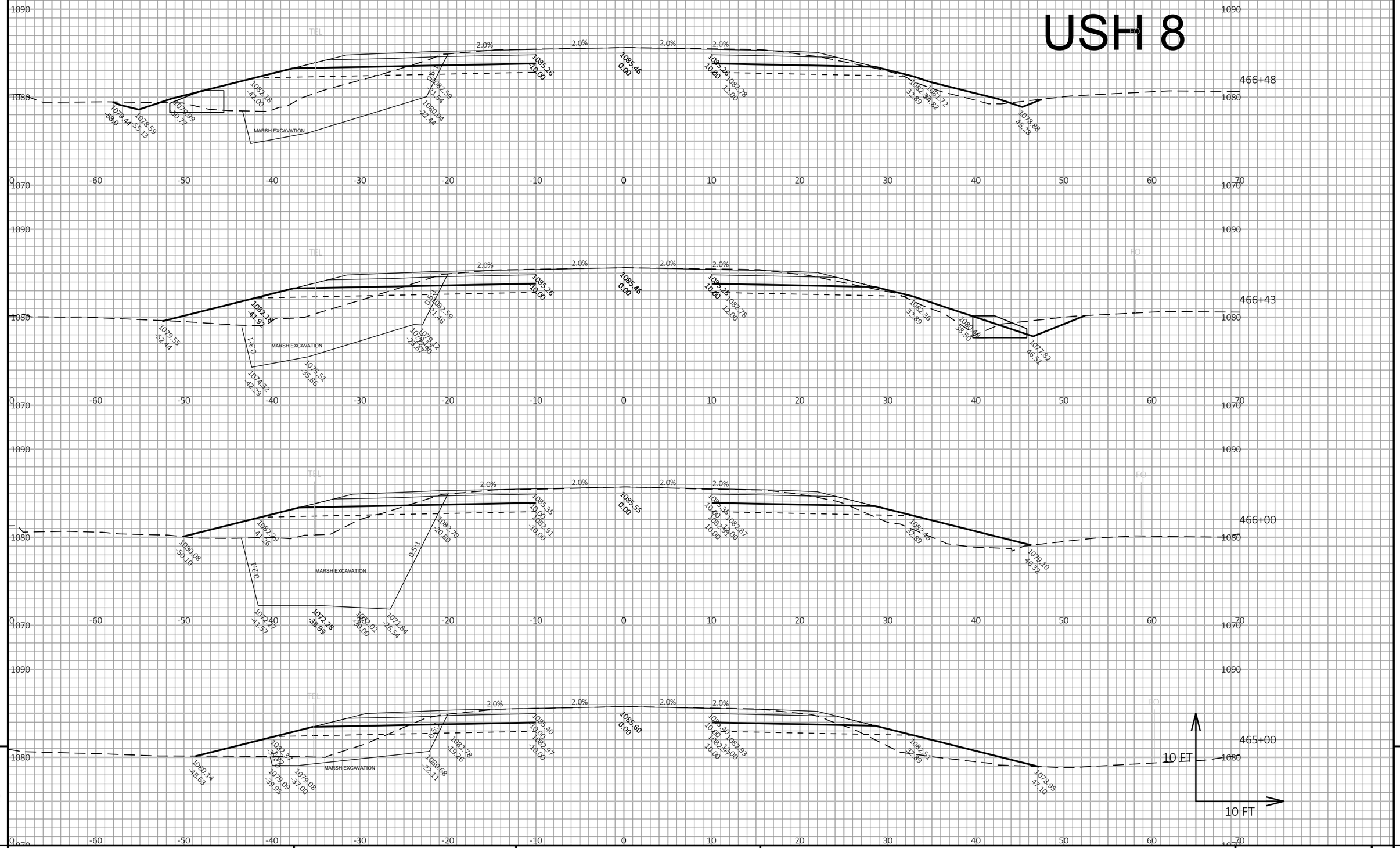
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



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9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 95	E

FILE NAME : N:\PDS\C3D\157002077(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x3

PLOT DATE : 7/31/2019 9:20 AM

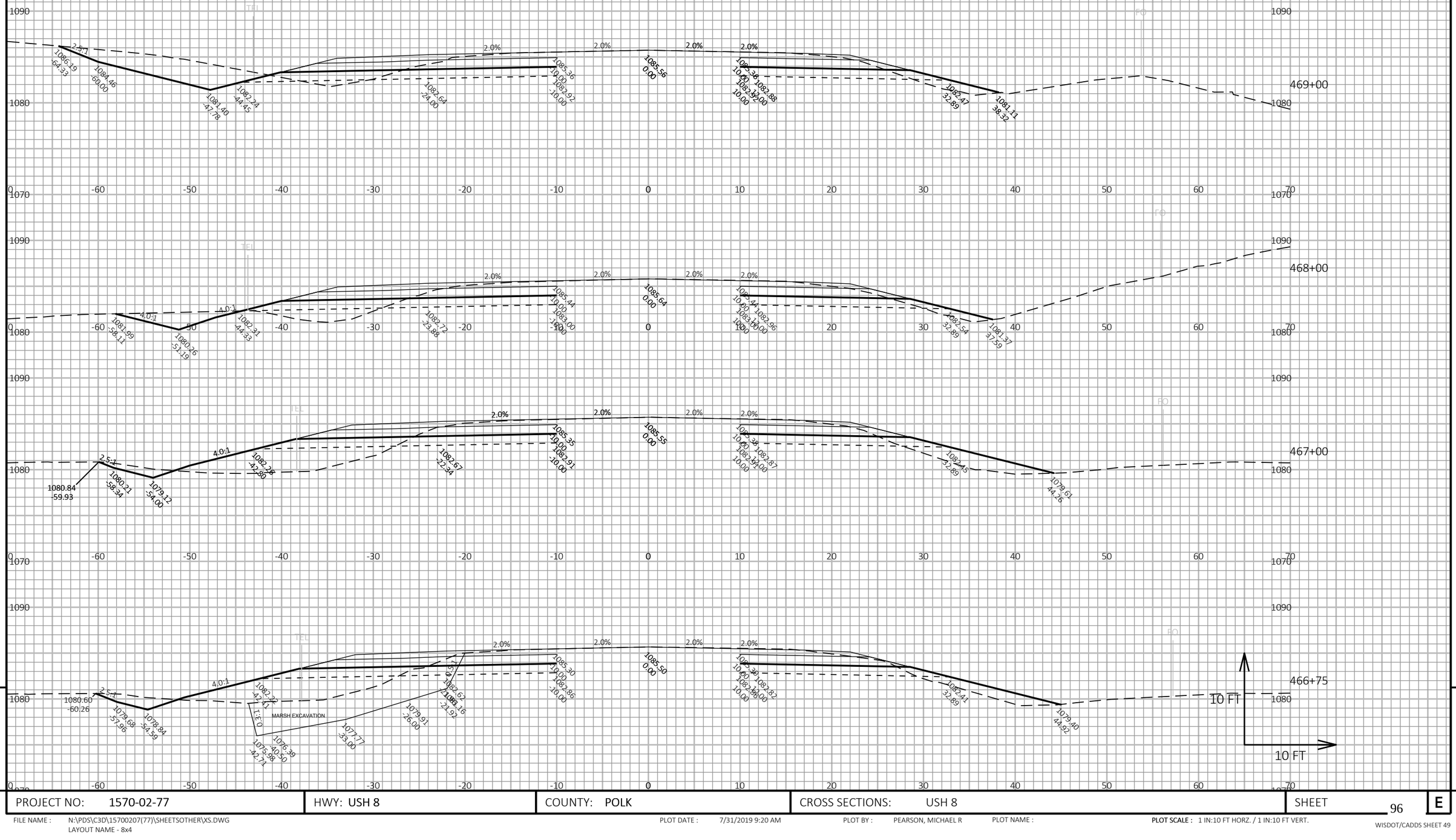
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



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PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 96	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x4

PLOT DATE : 7/31/2019 9:20 AM

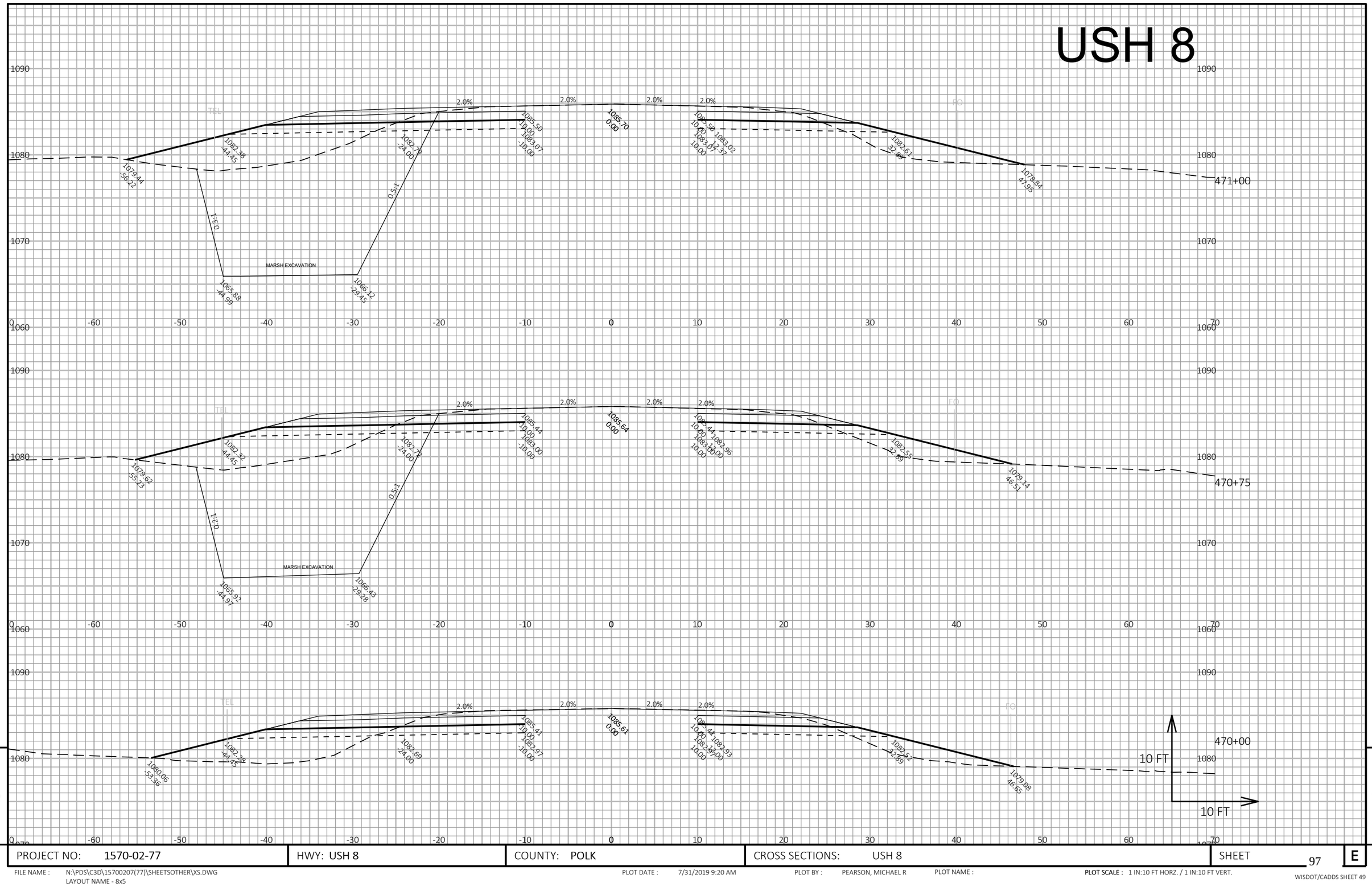
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



9

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PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 97	E

FILE NAME : N:\PDS\C3D\157002O7(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x5

PLOT DATE : 7/31/2019 9:20 AM

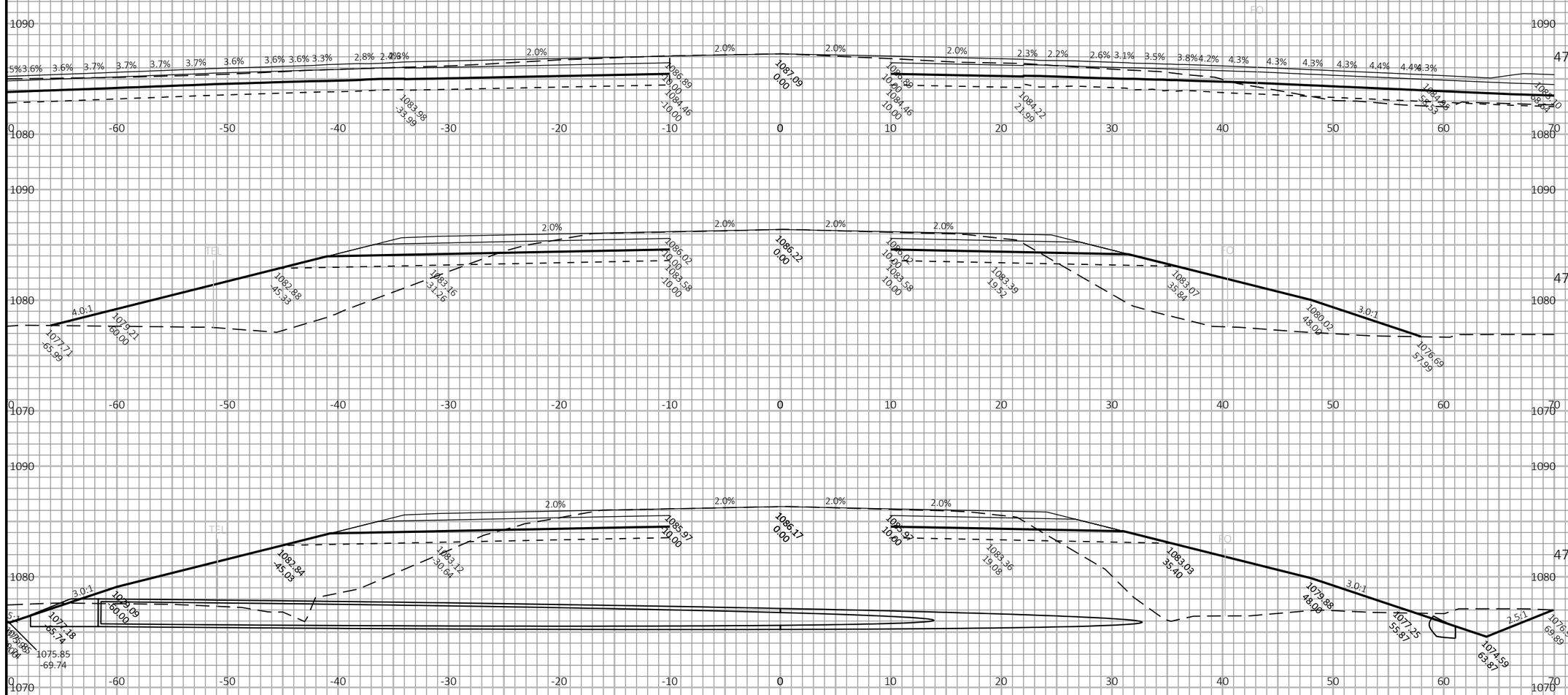
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



9

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PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 98	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x6

PLOT DATE : 7/31/2019 9:20 AM

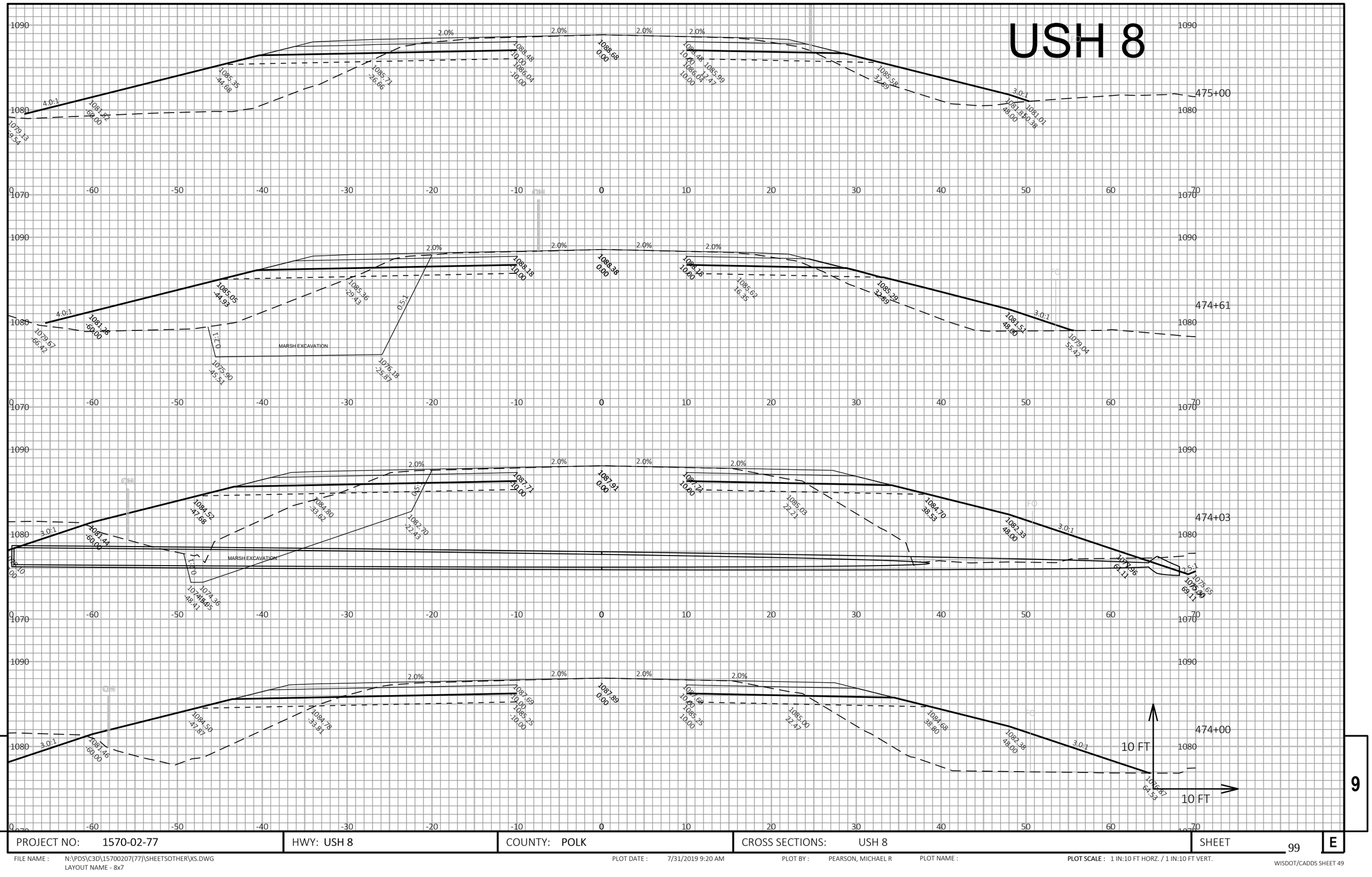
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 99	E

FILE NAME : N:\PDS\C3D\157002077(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x7

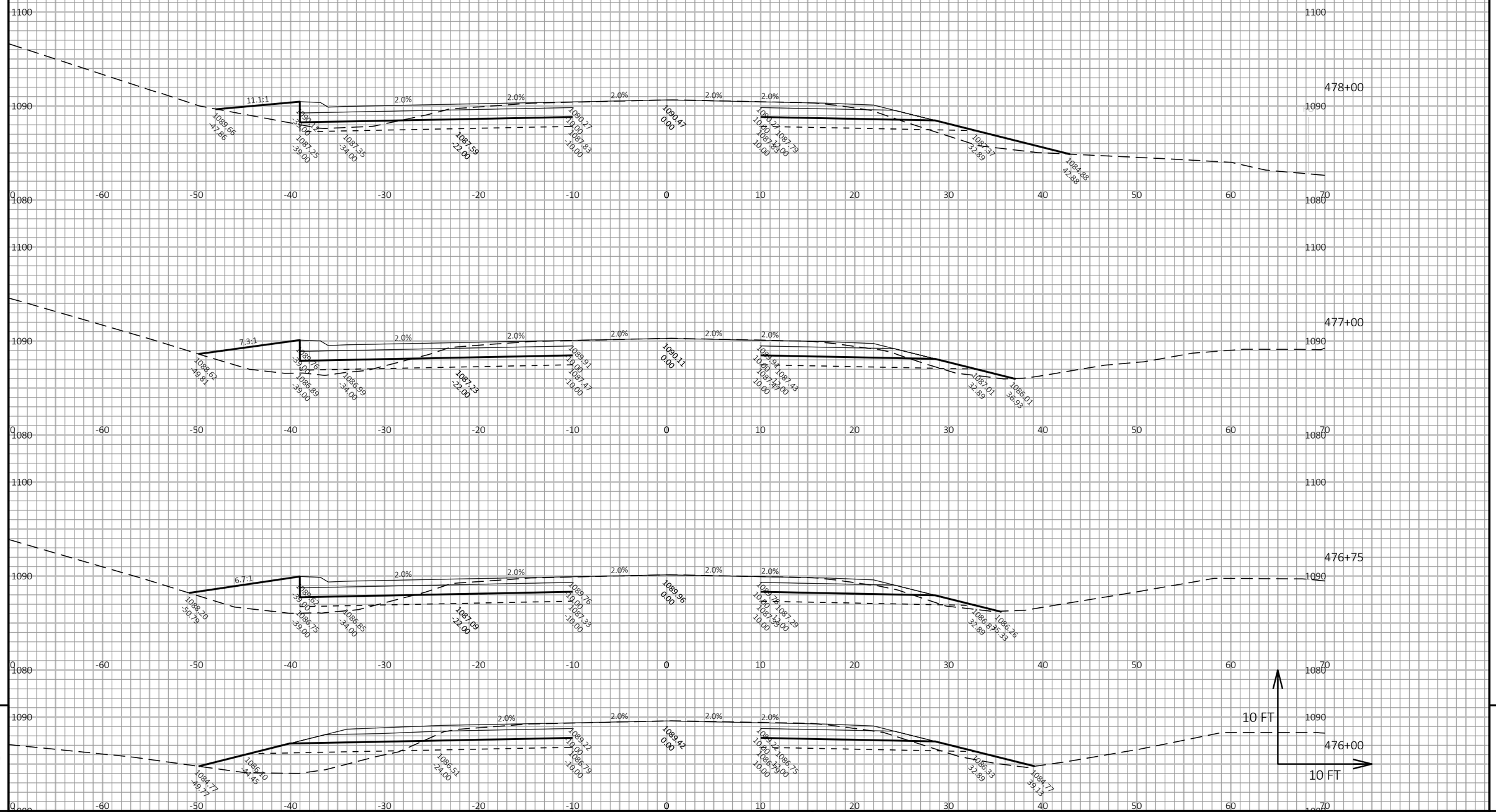
PLOT DATE : 7/31/2019 9:20 AM

PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

USH 8



9

9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 100	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x8

PLOT DATE : 7/31/2019 9:21 AM

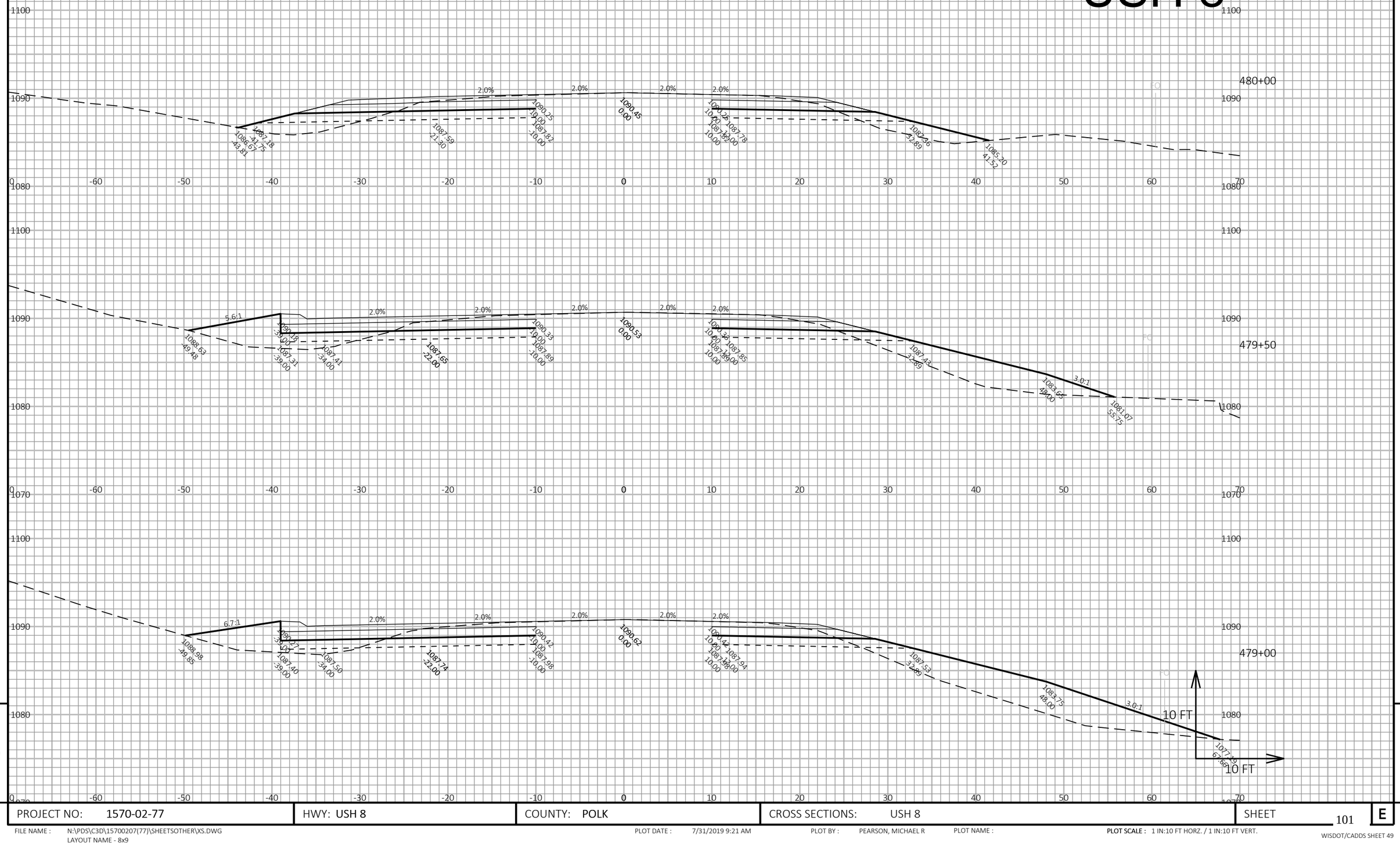
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



9

9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 101	E

FILE NAME : N:\PDS\C3D\157002077(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x9

PLOT DATE : 7/31/2019 9:21 AM

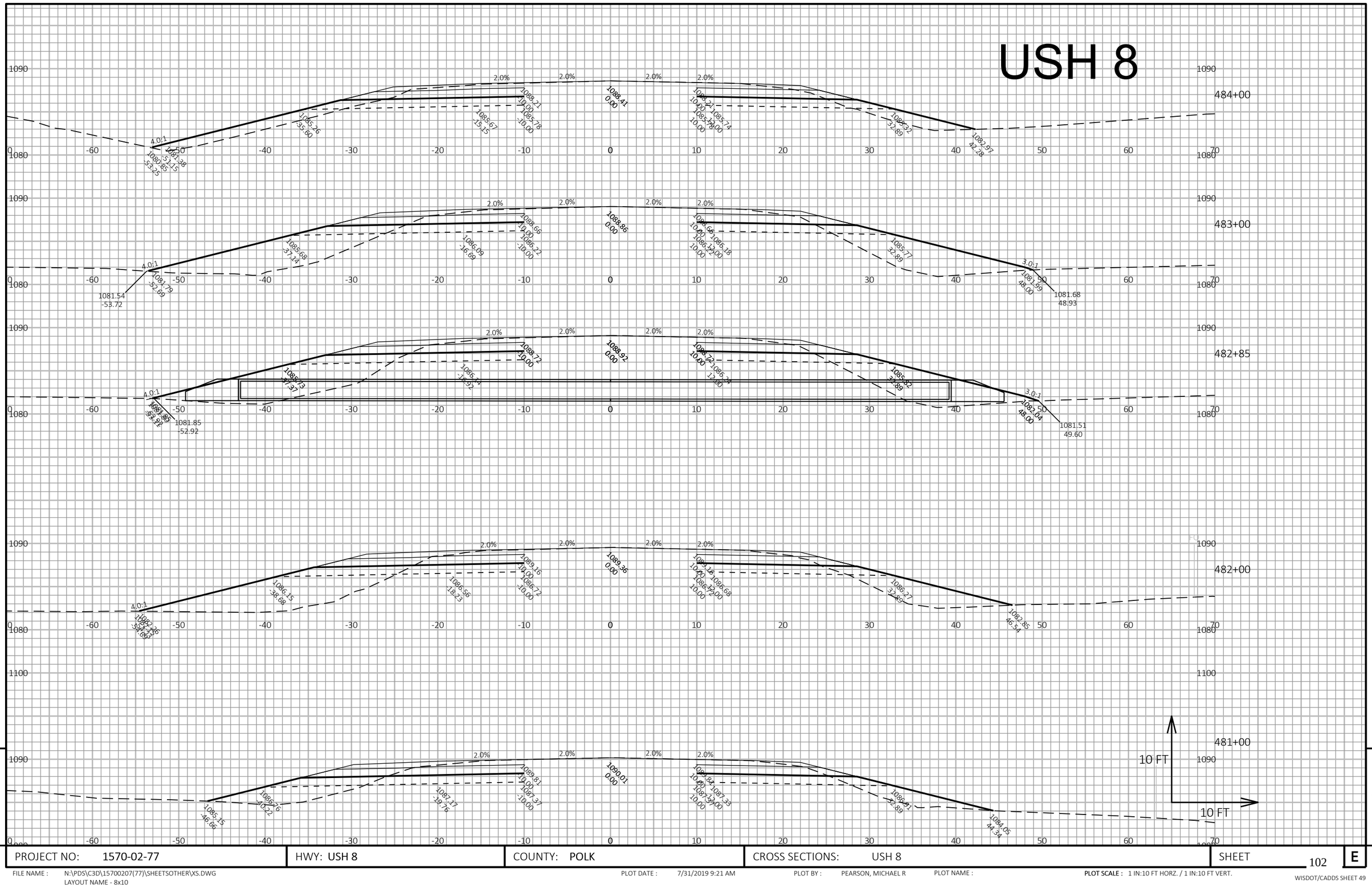
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 102 E

FILE NAME : N:\PDS\C3D\157002O7(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x10

PLOT DATE : 7/31/2019 9:21 AM

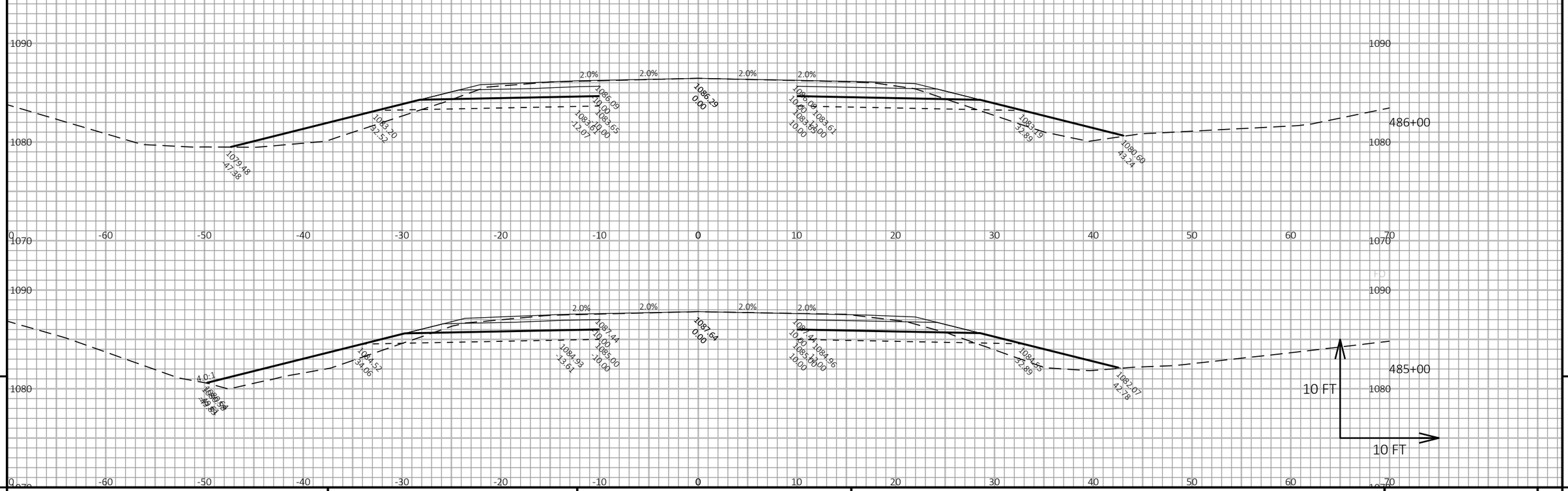
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

USH 8



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: USH 8	SHEET 103	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - 8x11

PLOT DATE : 7/31/2019 9:21 AM

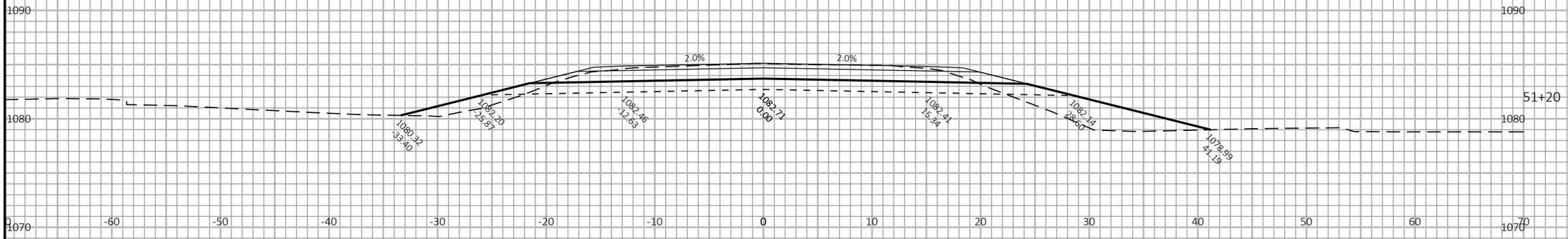
PLOT BY : PEARSON, MICHAEL R

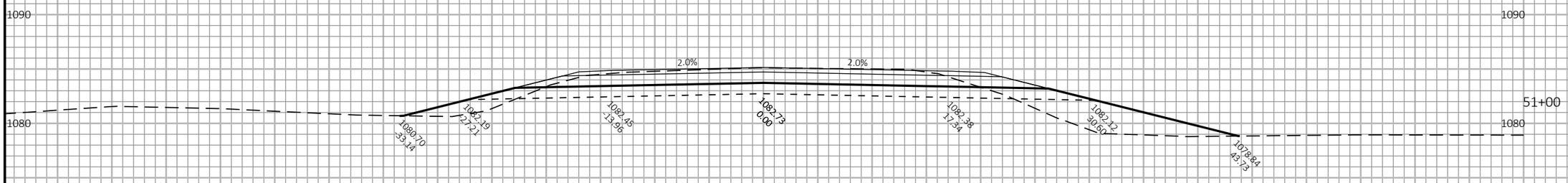
PLOT NAME :

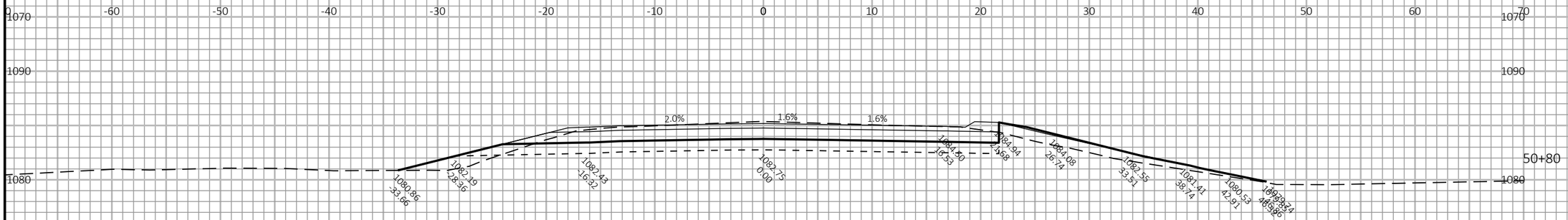
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

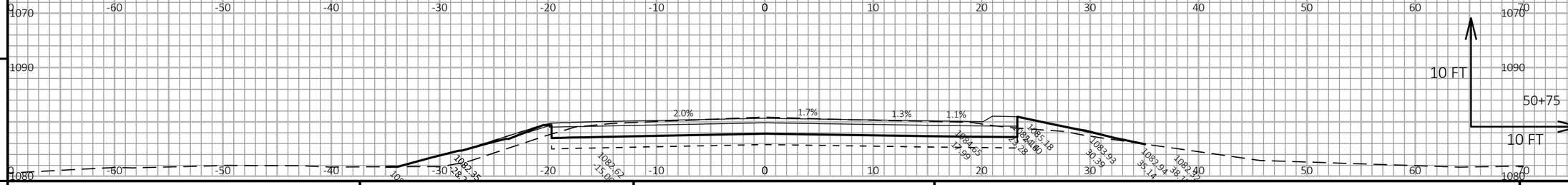
WISDOT/CADDS SHEET 49

150TH ST. NORTH









9

9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: 150th St. North	SHEET 104	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - NX1

PLOT DATE : 7/31/2019 9:21 AM

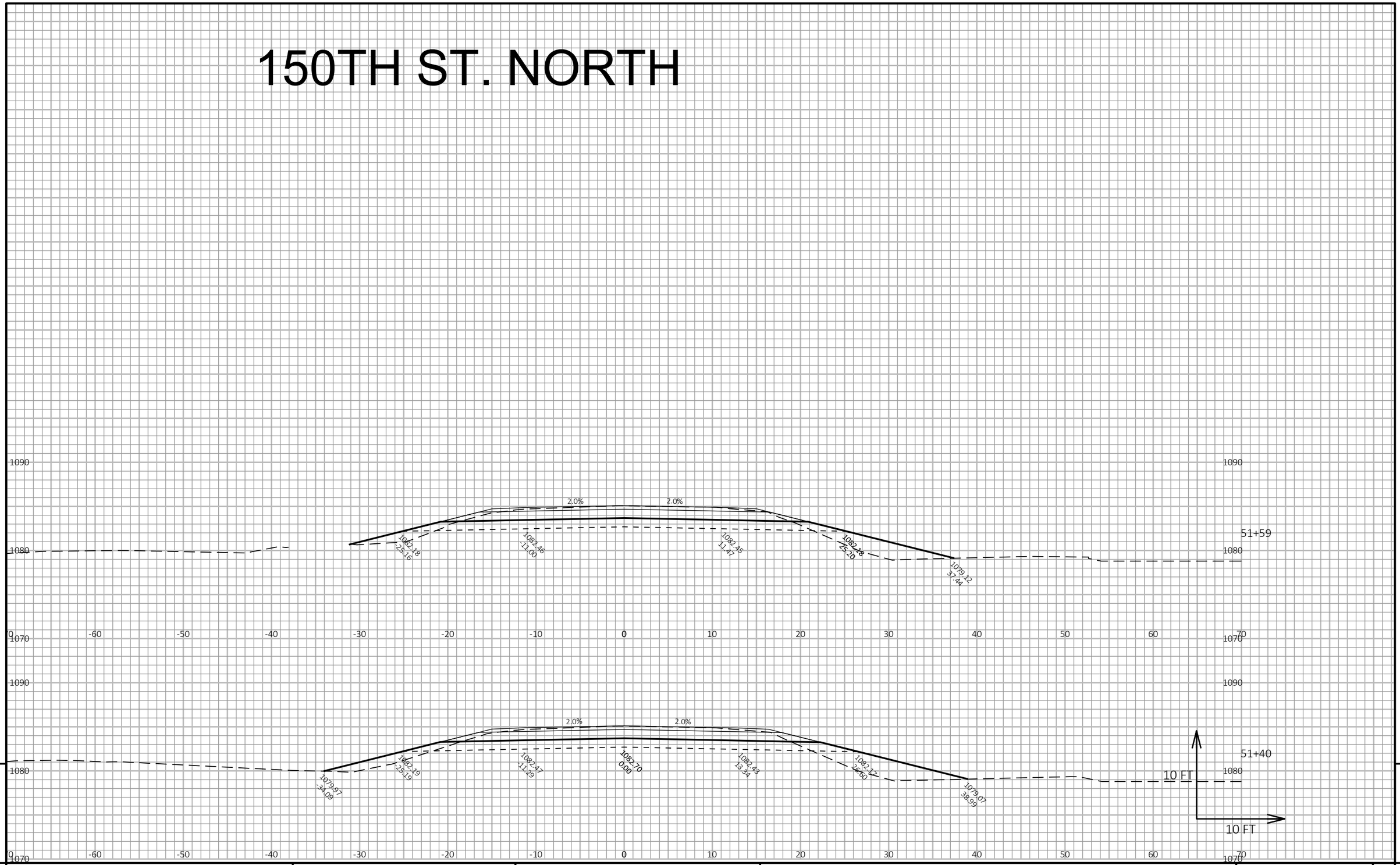
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

150TH ST. NORTH



PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: 150th St. North	SHEET 105 E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - NX2

PLOT DATE : 7/31/2019 9:21 AM

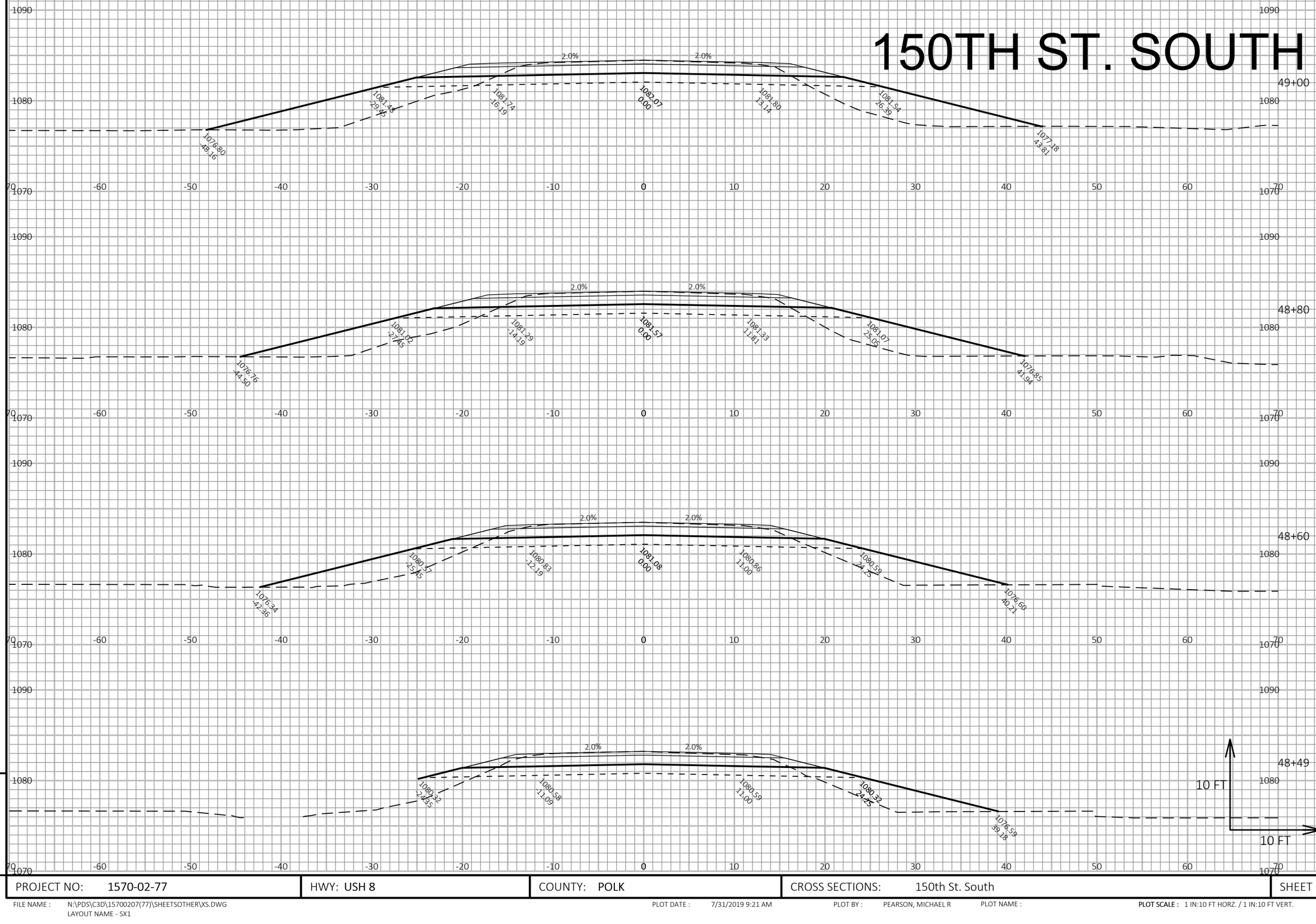
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

150TH ST. SOUTH



9

9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: 150th St. South	SHEET 106	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - SX1

PLOT DATE : 7/31/2019 9:21 AM

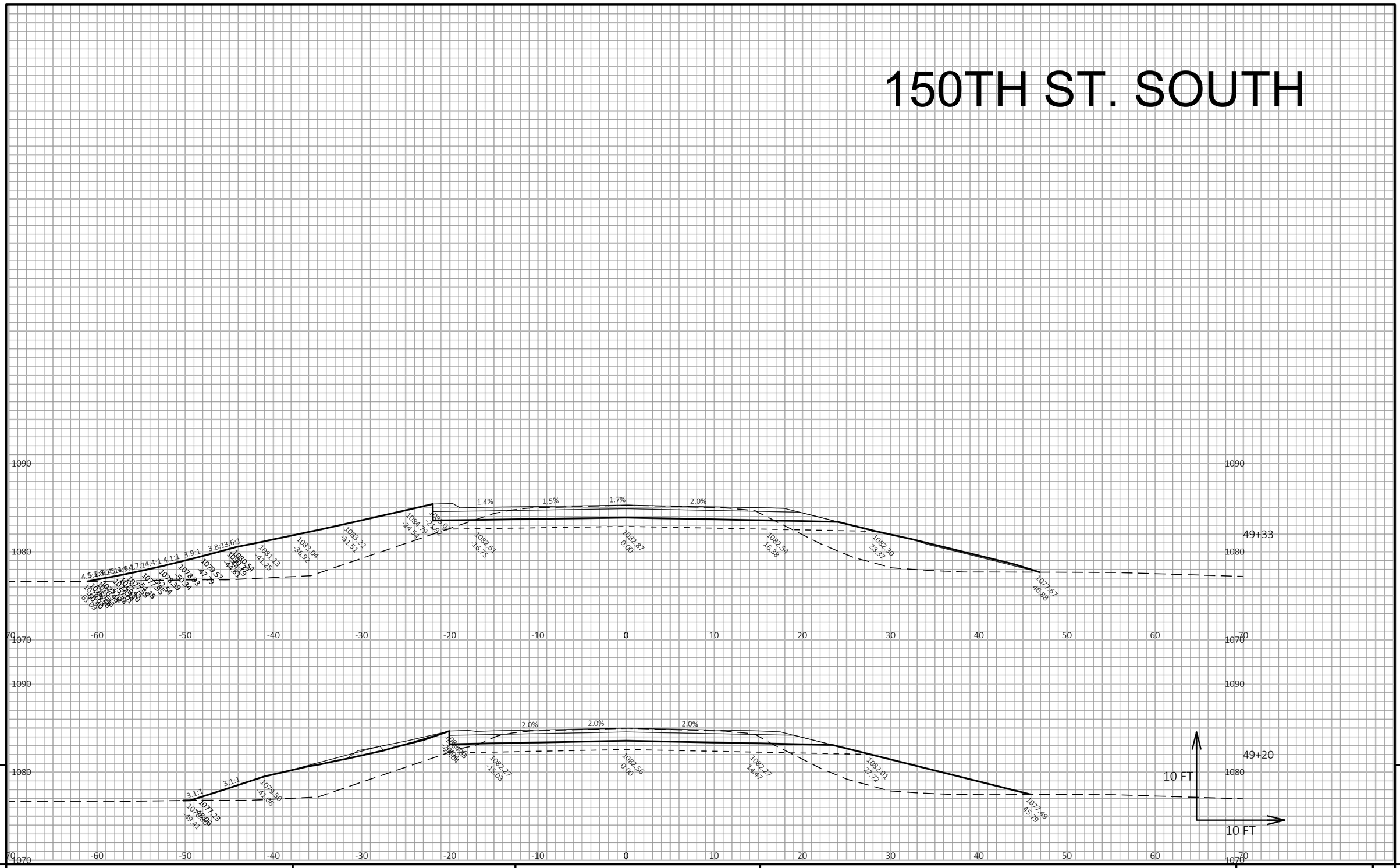
PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

150TH ST. SOUTH



9

9

PROJECT NO: 1570-02-77	HWY: USH 8	COUNTY: POLK	CROSS SECTIONS: 150th St. South	SHEET 107	E

FILE NAME : N:\PDS\C3D\15700207(77)\SHEETSOTHER\XS.DWG
LAYOUT NAME - SX2

PLOT DATE : 7/31/2019 9:21 AM

PLOT BY : PEARSON, MICHAEL R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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