LAX

Dec 13, 2022

PROJECT ID: 7998-00-77

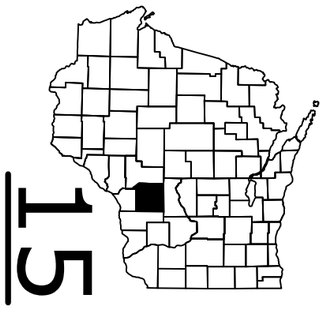
WITH: 7998-00-78

COUNTY: MONROE

ORDER OF SHEETS

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

TOTAL SHEETS = 238



N

DESIGN DESIGNATION

A.A.D.T.	2023	=	15,500
A.A.D.T.	2043	=	15,500
D.H.V.		=	2,000
D.D.		=	51/49
T.		=	14.1%
DESIGN SPEED		=	50 MPH
ESALS		=	3,700,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

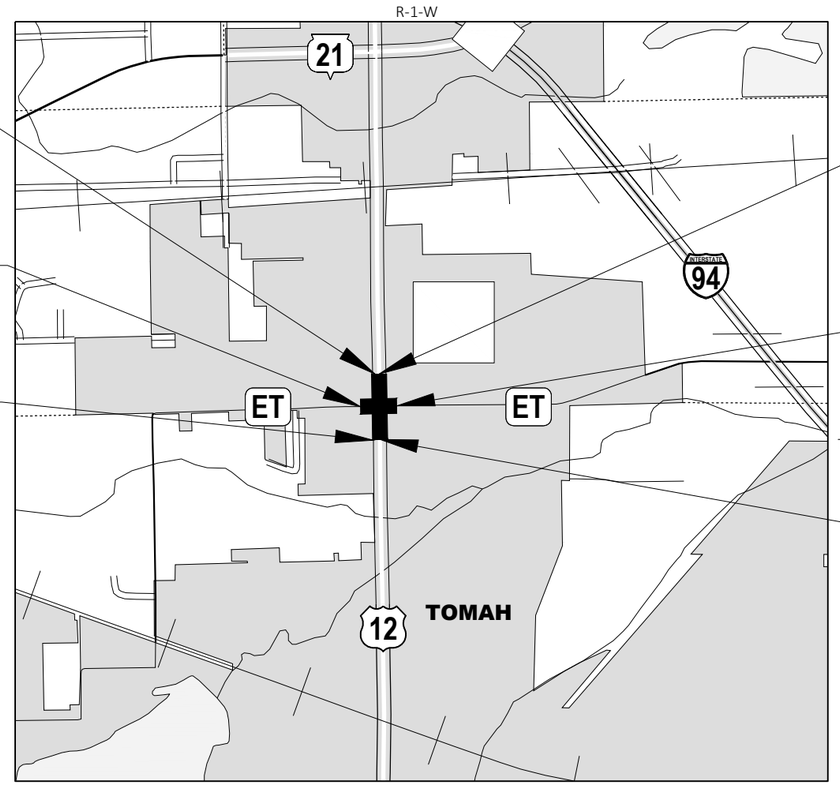
TOMAH - MAUSTON

VETERANS STREET INSTERSECTION AREA

USH 12
MONROE COUNTY

STATE PROJECT NUMBER
7998-00-77

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7998-00-77	WISC 2023097	1



END CONSTRUCTION
STA 111+70.81 'EB'
X=706957.291
Y=400885.448

BEGIN CONSTRUCTION
STA 10+45.00 'ET'
X=706589.964
Y=400378.690

BEGIN CONSTRUCTION
STA 101+00.00 'EB'
X=706969.571
Y=399814.706

END PROJECT
STA 111+68.60 'WB'
X=400886.125
Y=707021.289

END CONSTRUCTION
STA 18+90.00 'ET'
X=707434.177
Y=400397.328

BEGIN PROJECT
STA 101+00.00 'WB'
X=707033.542
Y=399817.594

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.203 MI

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WisDOT
Designer	JERED LEX
Project Manager	JERED LEX
Regional Examiner	SW REGION
Regional Supervisor	DANIEL KLEINERTZ

APPROVED FOR THE DEPARTMENT

DATE: 5/4/2022 (Signature)

E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 4/15/2022 11:03 AM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE	LC.	LONG CHORD
AGG	AGGREGATE	LS	LUMP SUM
<	ANGLE	M.P.	MARKER POST
AE, AEW	APRON ENDWALL	MGAL	1000 GALLONS
ASPH.	ASPHALTIC	N.C.	NORMAL CROWN
A.D.T.	AVERAGE DAILY TRAFFIC	N	NORTH
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
B.F.	BACK FACE	NOR	NORMAL
BM	BENCHMARK	NO.	NUMBER
BTWN	BETWEEN	PAV'T	PAVEMENT
CTR.	CENTER	P.L.E.	PERMANENT LIMITED EASEMENT
C/L	CENTER LINE	P.C.	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	P.I.	POINT OF INTERSECTION
C.E.	COMMERCIAL ENTRANCE	P.T.	POINT OF TANGENCY
CONST.	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	P.E.	PRIVATE ENTRANCE
CMP	CORRUGATED METAL PIPE	PGL	PROFILE GRADE LINE
CO.	COUNTY	P.L.	PROPERTY LINE
CTH	COUNTY TRUNK HIGHWAY	R	RADIUS OR RANGE
CR.	CREEK	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DISCH.	DISCHARGE	S	SOUTH
DMS	DYNAMIC MESSAGE SIGN	SB	SOUTHBOUND
EA	EACH	S.F.	SQUARE FOOT (FEET)
E	EAST	SDD	STANDARD DETAIL DRAWING(S)
EB	EASTBOUND	STH	STATE TRUNK HIGHWAY
ELEC.	ELECTRIC(AL), ELEC. CABLE	STA.	STATION
EL., ELEV.	ELEVATION	S.E.	SUPERELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S/L	SURVEY LINE
EXC.	EXCAVATION	SYM	SYMMETRICAL
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E.	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
GALV.	GALVANIZE	TYP	TYPICAL
H.S.	HIGH STRENGTH	UNCL.	UNCLASSIFIED
CWT	HUNDRED WEIGHT	U.G.	UNDERGROUND (CABLE)
INL	INLET	VAR	VARIABLE
INTER.	INTERSECTION	V.C.	VERTICAL CURVE
IH	INTERSTATE HIGHWAY	V.P.C.	VERTICAL POINT OF CURVATURE
JT.	JOINT	V.P.I.	VERTICAL POINT OF INTERSECTION
LT	LEFT	V.P.T.	VERTICAL POINT OF TANGENCY
L.H.F.	LEFT HAND FORWARD	Wt.	WEIGHT
L.	LENGTH OF CURVE	W	WEST
L.F.	LINEAR FOOT(FEET)	WB	WESTBOUND

GENERAL NOTES

- SHALLOW SANDSTONE BEDROCK HAS BEEN FOUND IN THE AREA DURING SOILS AND PAVEMENT INVESTIGATION.
- APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED PAVEMENT SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.
- PAYMENT FOR REMOVING ASPHALT IS PAID UNDER COMMON EXCAVATION.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT AREAS WITH THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND EROSION MAT.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

ORDER OF DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
INTERSECTION DETAIL
PLAN DETAIL
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
MOVING SIGNS (REMOVALS)
MOVING SIGNS AND NEW SIGNS (INSTALL)
TRAFFIC SIGNAL REMOVAL PLAN
TEMPORARY TRAFFIC SIGNAL PLAN
TEMPORARY SEQUENCE OF OPERATIONS
TRAFFIC SIGNAL PLAN
SEQUENCE OF OPERATIONS
CABLE ROUTING
PAVEMENT MARKING
TRAFFIC CONTROL AND STAGING
DETOUR ROUTE
ALIGNMENT DETAIL
CONTROL POINT DATA SHEET
CONTROL POINT TIE SHEET

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRICITY
PATRICK MCINTYRE
528 INDUSTRIAL AVE
TOMAH, WI 54660
PHONE: 608-372-0340
EMAIL: PATRICKMCINTYRE@ALLIANTENERGY.COM

WE ENERGIES - GAS
TRAVIS KAHL
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
PHONE: 715-421-7256
EMAIL: TRAVIS.KAHL@WE-ENERGIES.COM

ATC MANAGEMENT, INC - ELECTRICITY TRANSMISSION
ANTHONY MARCINIAK
W 234 N 2000 RIDGEVIEW PARKWAY CT
P.O. BOX 47
WAUKESHA, WI 53187
PHONE: 262-506-6814
EMAIL: AMARCINIAK@ATCLLC.COM

CENTURYLINK - COMMUNICATION LINE
TOM MURRAY
333 N FRONT STREET
LA CROSSE, WI 54601
PHONE: 608-780-0895
EMAIL: TOM.L.MURRAY@LUMEN.COM

CITY OF TOMAH PUBLIC WORKS - WATER & SEWER
KIRK ARITY
819 SUPERIOR AVENUE
TOMAH, WI 54660
PHONE: 608-374-7453
EMAIL: KARITY@TOMAHONLINE.COM

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

DESIGN CONTACT

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DNR LIAISON

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ENVIRONMENTAL ANAYLYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
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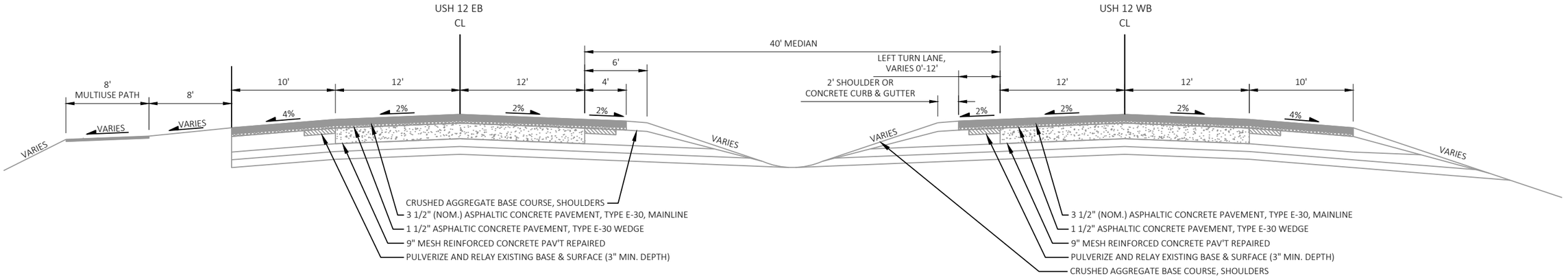
3550 MORMON COULEE RD
LA CROSSE, WI 54601
608-785-9115
KAREN.KALVELAGE@WISCONSIN.GOV

MONROE COUNTY HIGHWAY DEPARTMENT

DAVID OHNSTAD
HIGHWAY COMMISSIONER
803 WASHINGTON ST
SPARTA, WI 54656
PHONE: 608-269-8831
EMAIL: DAVID.OHNSTAD@CO.MONROE.WI.US

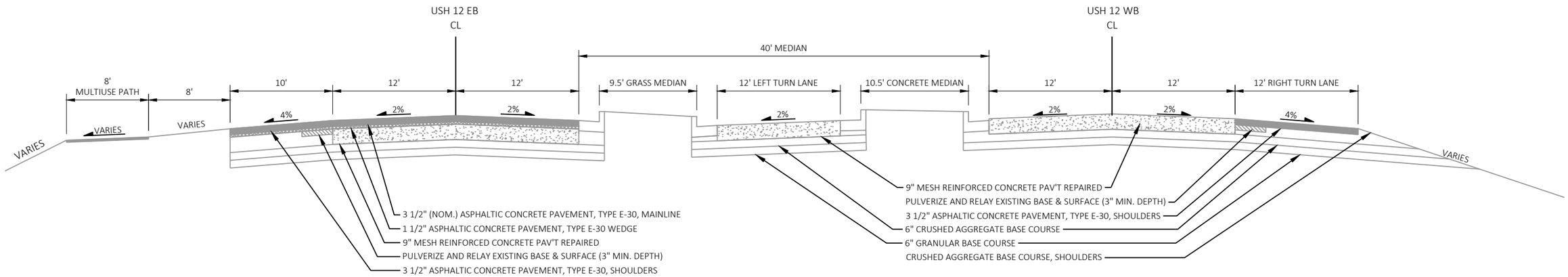
2



EXISTING TYPICAL SECTION

USH 12

STA 101+00 'WB' - 102+01 'WB'
STA 110+14 'WB' - 111+69 'WB'

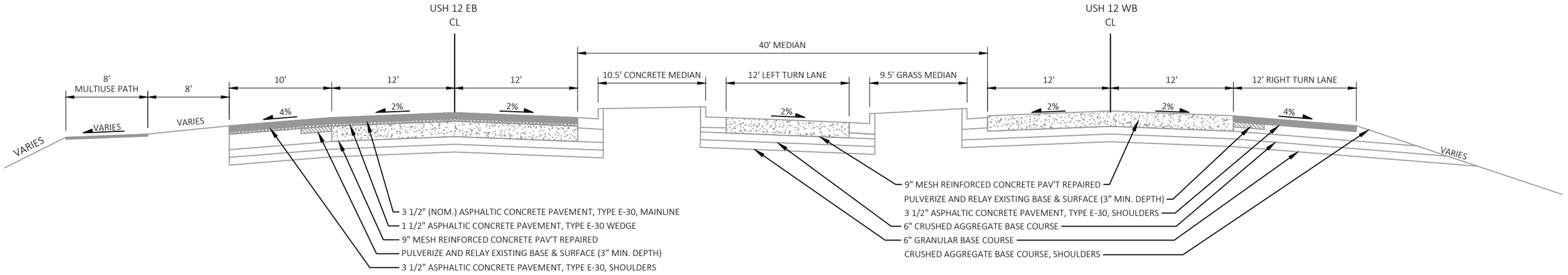


EXISTING TYPICAL SECTION

USH 12

STA 102+01 'WB' - 106+22 'WB'

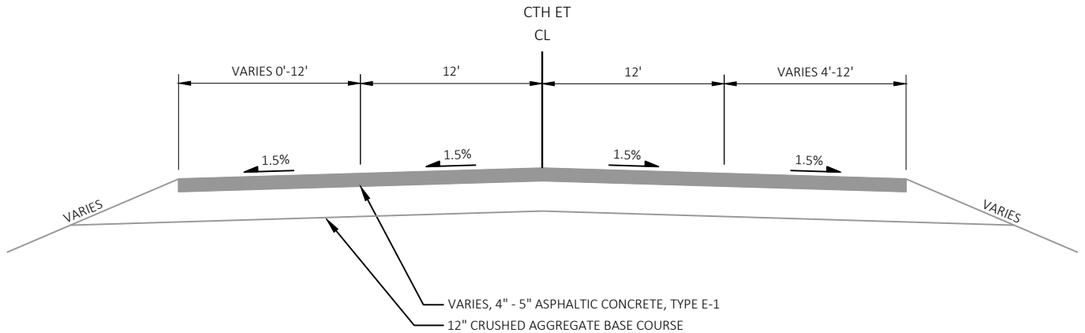
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 3	E



EXISTING TYPICAL SECTION

USH 12

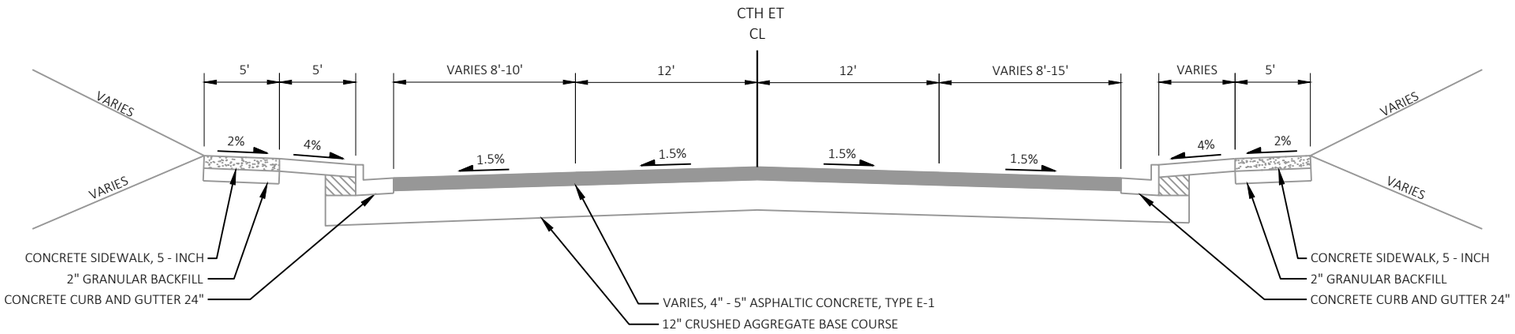
STA 106+88 'WB' - 110+14 'WB'



EXISTING TYPICAL SECTION

CTH ET

STA 10+45.00 'ET' - 13+64.55 'ET'



EXISTING TYPICAL SECTION

CTH ET

STA 15+34.72 'ET' - 18+90 'ET'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020302-ts 1in-10ft

PLOT DATE : 5/4/2022 8:30 AM PLOT BY : BLUM, JOSHUA M PLOT NAME : PLOT SCALE : 1 IN:10 FT

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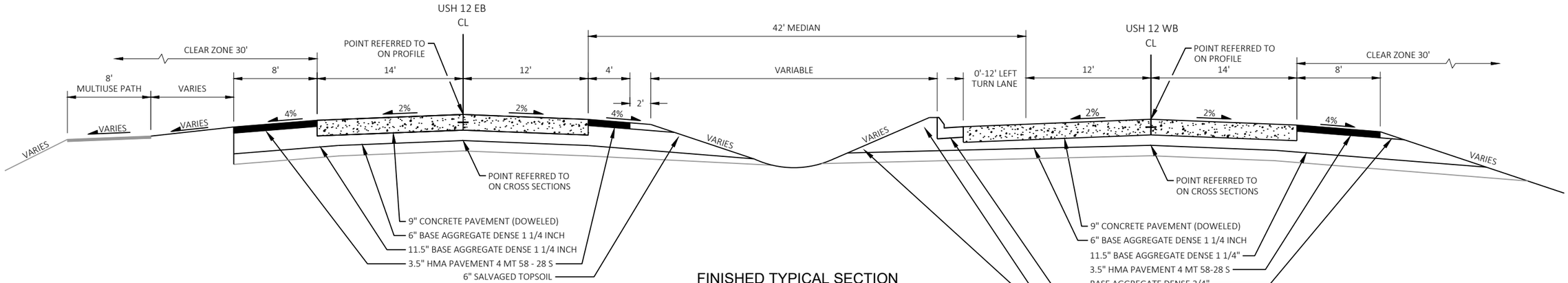
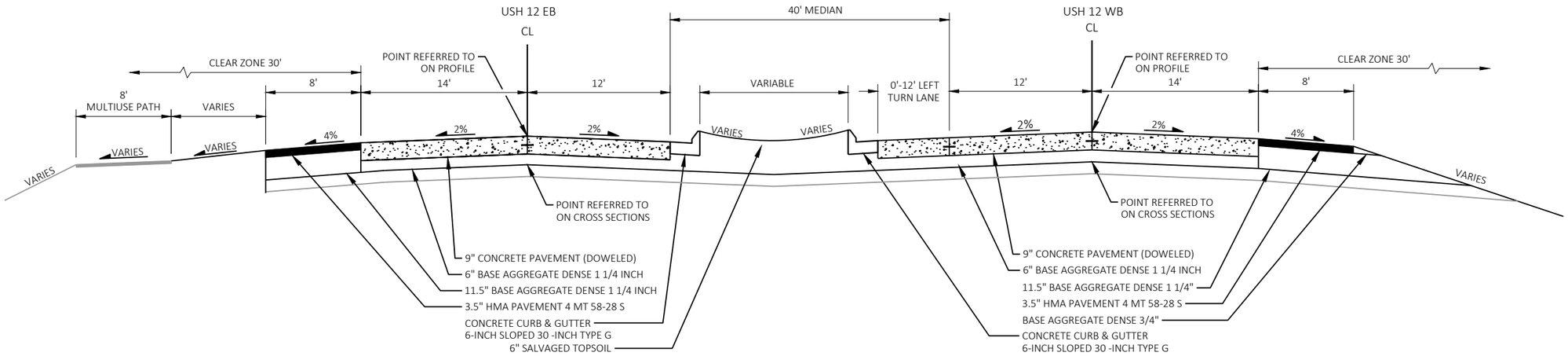


FINISHED TYPICAL SECTION

USH 12

STA 101+00 'WB' - 103+00 'WB'

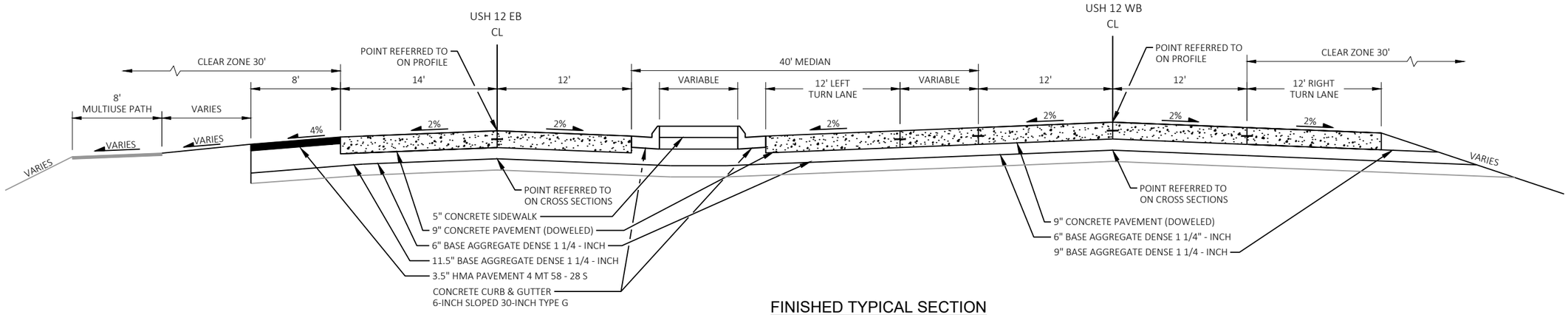


FINISHED TYPICAL SECTION

USH 12

STA 103+00 'WB' - 104+00 'WB'

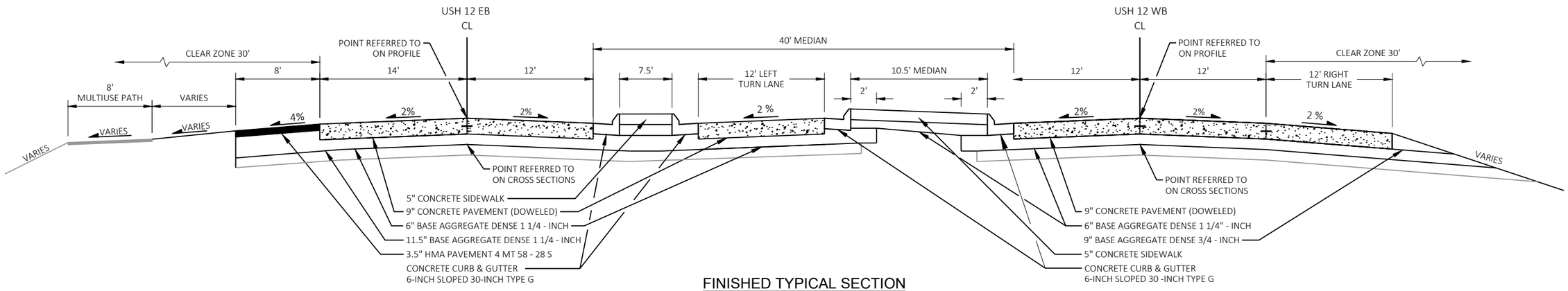
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 5	E



FINISHED TYPICAL SECTION

USH 12

STA 104+00 'WB' - 104+57.54 'WB'



FINISHED TYPICAL SECTION

USH 12

STA 104+57.54 'WB' - 106+14.40 'WB'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\020301-TS.DWG
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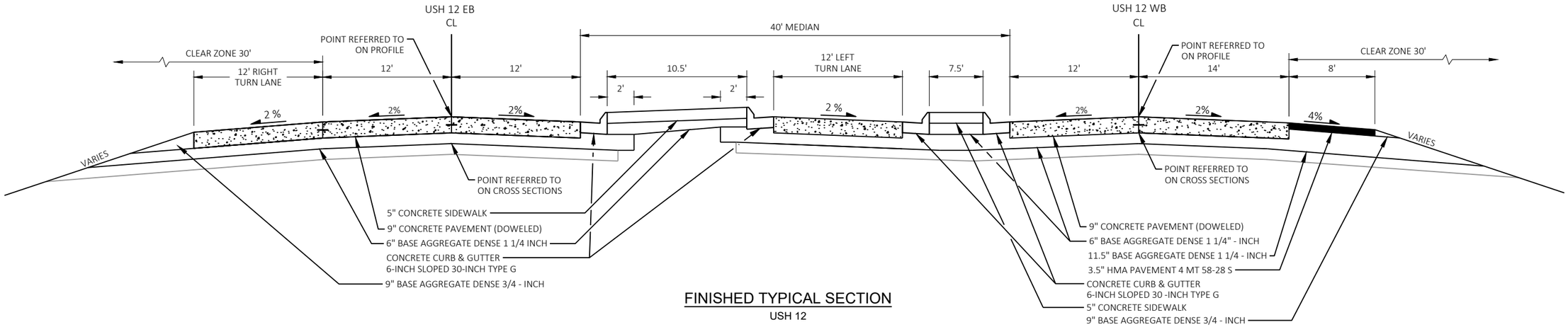
PLOT DATE : 5/4/2022 8:30 AM PLOT BY : BLUM, JOSHUA M PLOT NAME : PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION

USH 12

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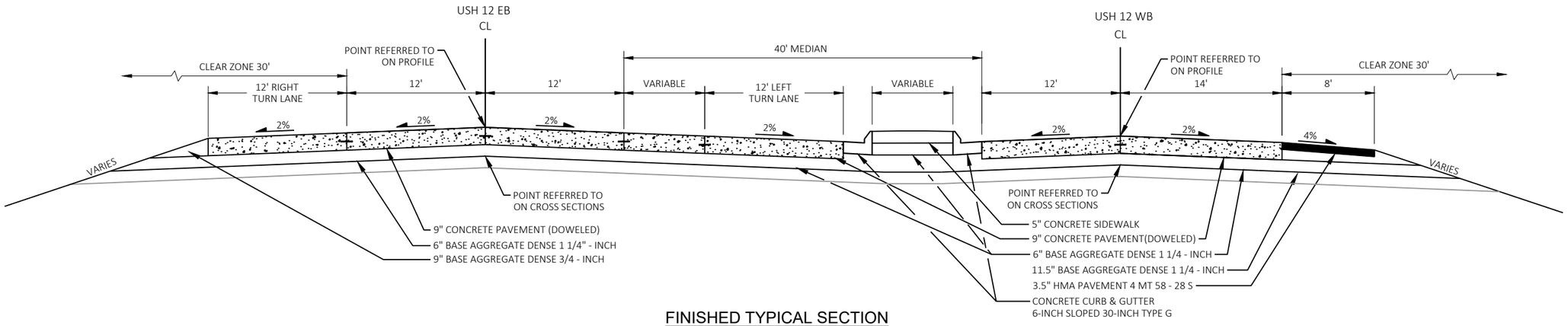

FINISHED TYPICAL SECTION

USH 12

STA 108+11.35 'WB' - 108+50 'WB'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 7	E

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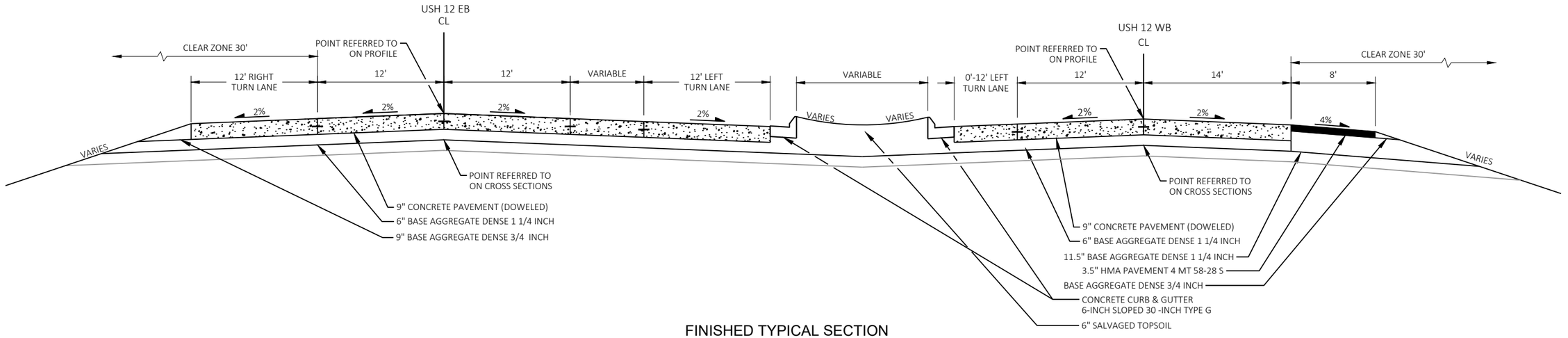

FINISHED TYPICAL SECTION

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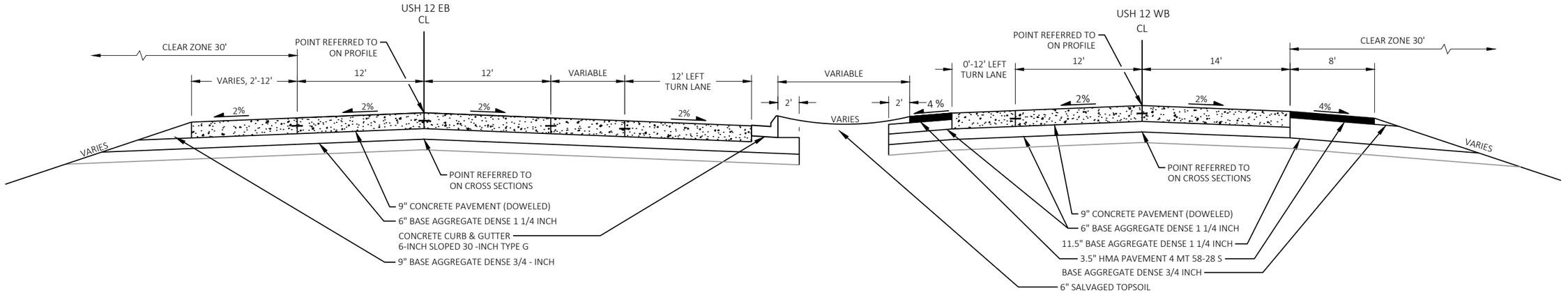
STA 108+50 'WB' - 109+00 'WB'

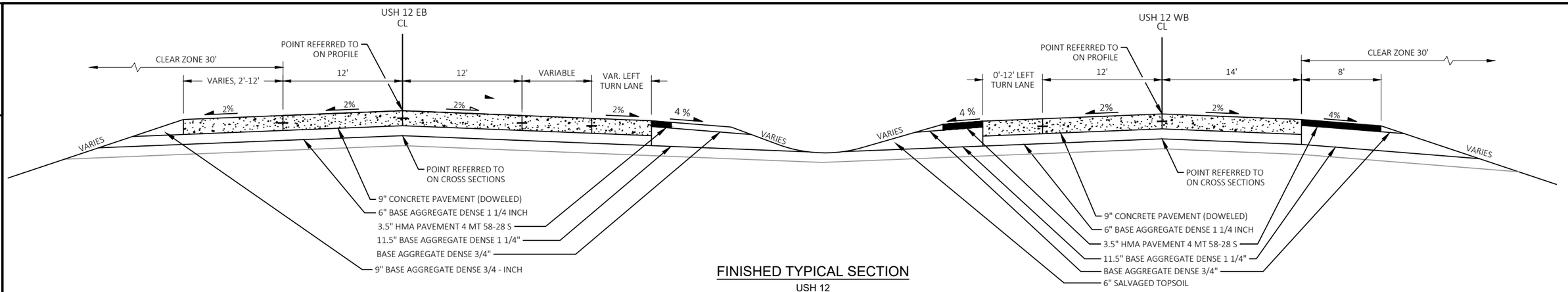


FINISHED TYPICAL SECTION

USH 12

STA 109+00 'WB' - 109+47.58 'WB'

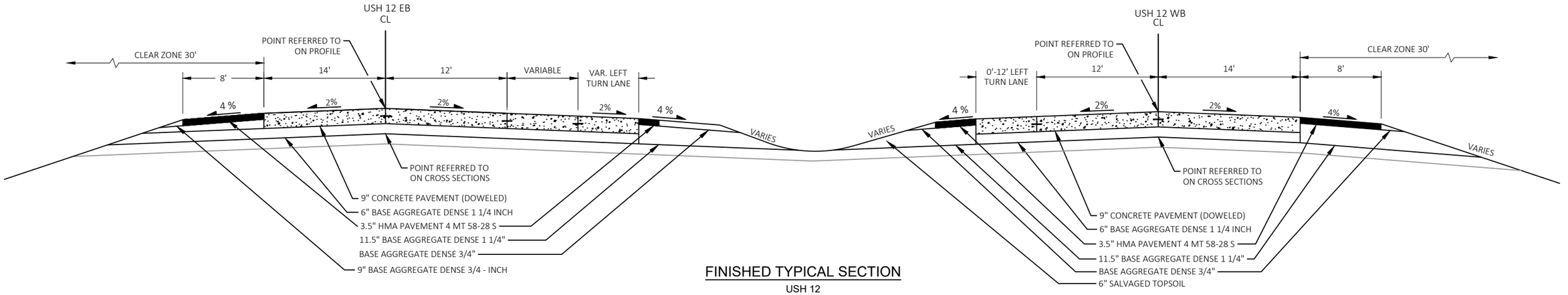
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 8	E



FINISHED TYPICAL SECTION

USH 12

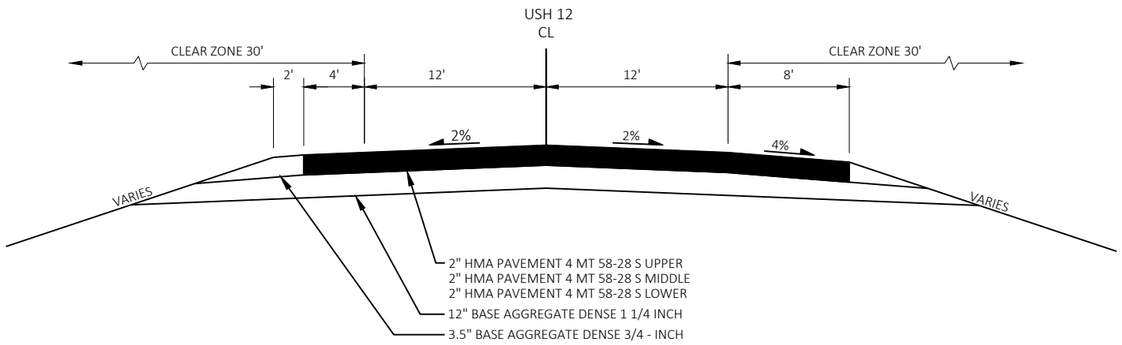
STA 109+47.58 'WB' - 109+95.57 'WB'



FINISHED TYPICAL SECTION

USH 12

STA 109+95.57 'WB' - 111+68.60 'WB'

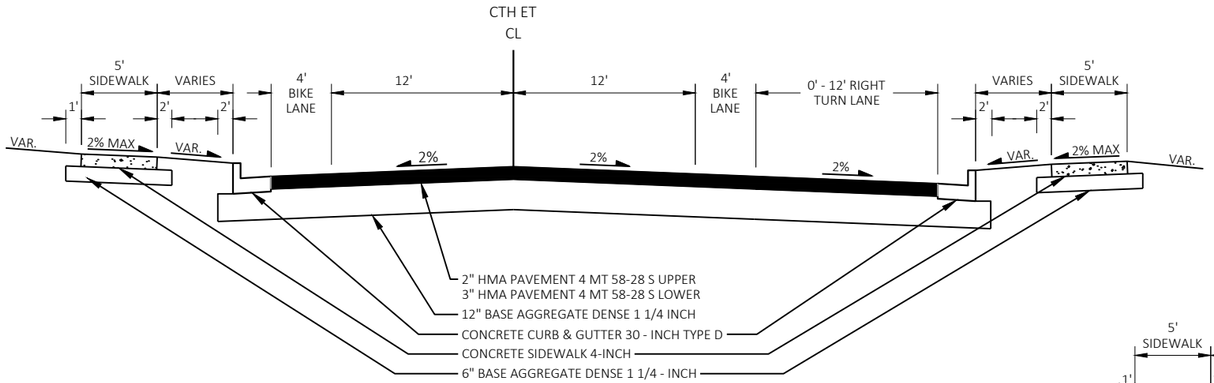


TIE IN TYPICAL FINISHED SECTION

USH 12

STA 100+75 'WB' - 101+00 'WB'
STA 111+68.60 'WB' - 111+93.41 'WB'
STA 100+72.85 'EB' - 100+97.85 'EB'
STA 111+69.20 'EB' - 111+94.15 'EB'

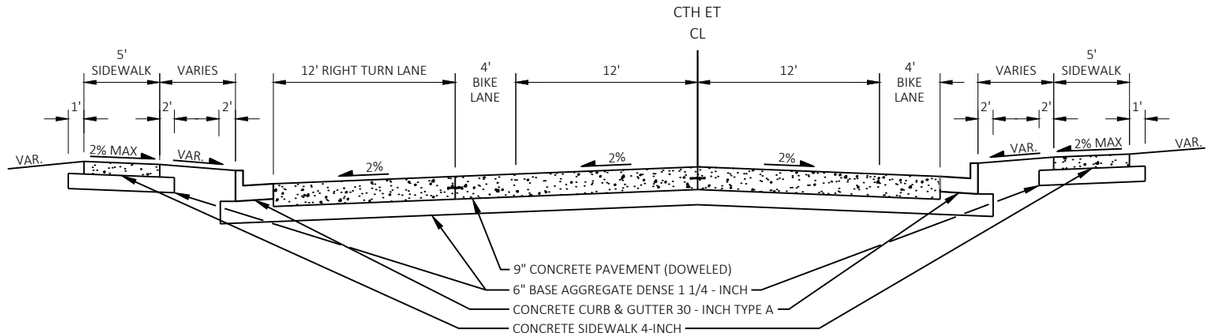
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 9	E



FINISHED TYPICAL SECTION

CTH ET

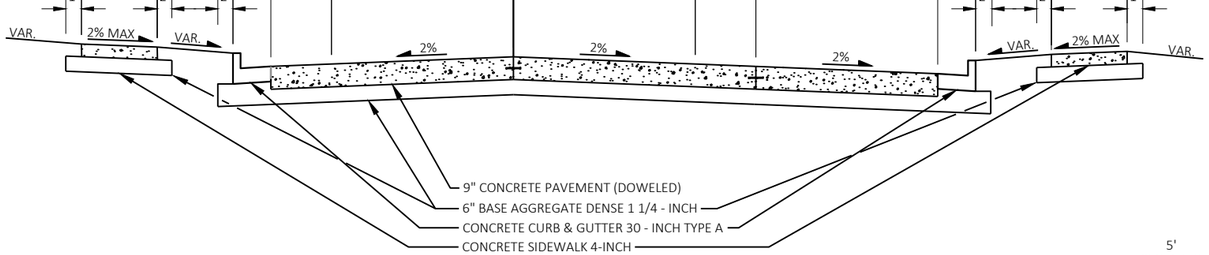
STA 10+45.00 'ET' - 11+93.71 'ET'



FINISHED TYPICAL SECTION

CTH ET

STA 15+34.72 'ET' - 16+03.93 'ET'



FINISHED TYPICAL SECTION

CTH ET

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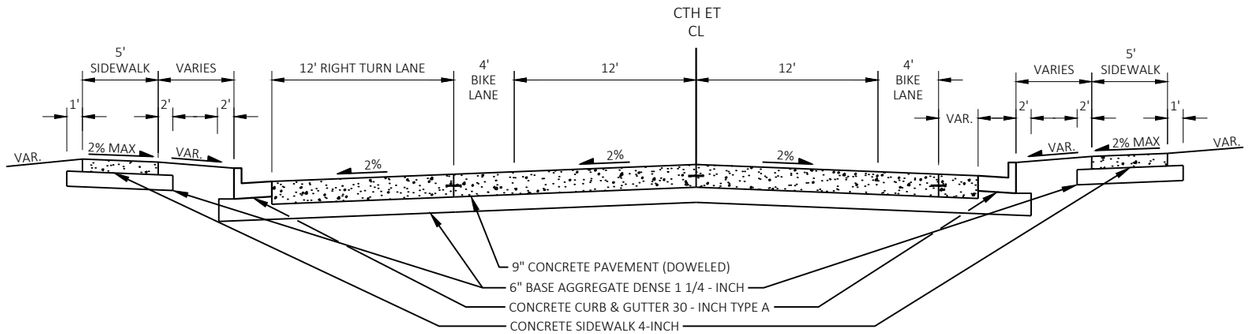


FINISHED TYPICAL SECTION

CTH ET

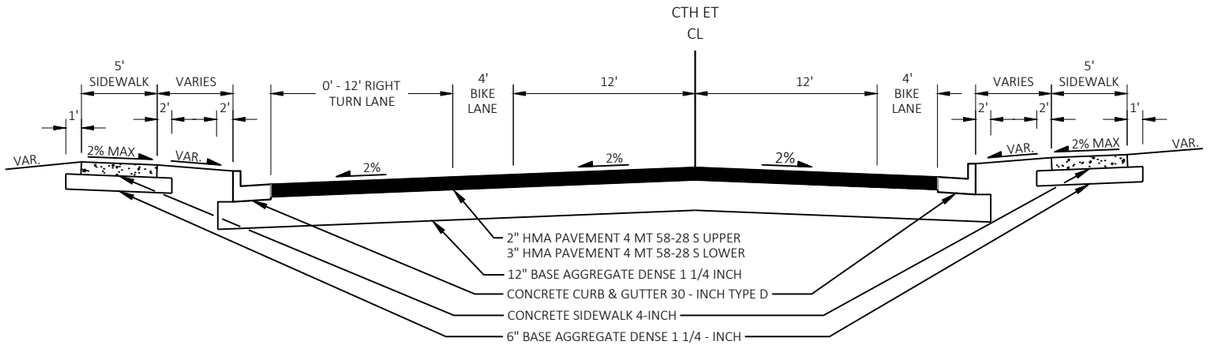
STA 16+03.93 'ET' - 16+55 'ET'

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020308-ts 1in-10ft

PLOT DATE : 5/4/2022 8:30 AM PLOT BY : BLUM, JOSHUA M PLOT NAME : PLOT SCALE : 1 IN:10 FT

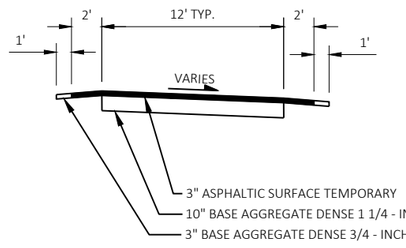
2



FINISHED TYPICAL SECTION

CTH ET

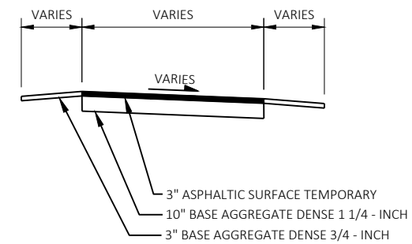
STA 16+55 'ET' - 18+90 'ET'



TEMPORARY CROSSOVERS

VARIOUS LOCATIONS

STA 98+25 'WB' - 101+14 'WB'
STA 110+30 'WB' - 113+35 'WB'



TEMPORARY PAVEMENT

VARIOUS LOCATIONS

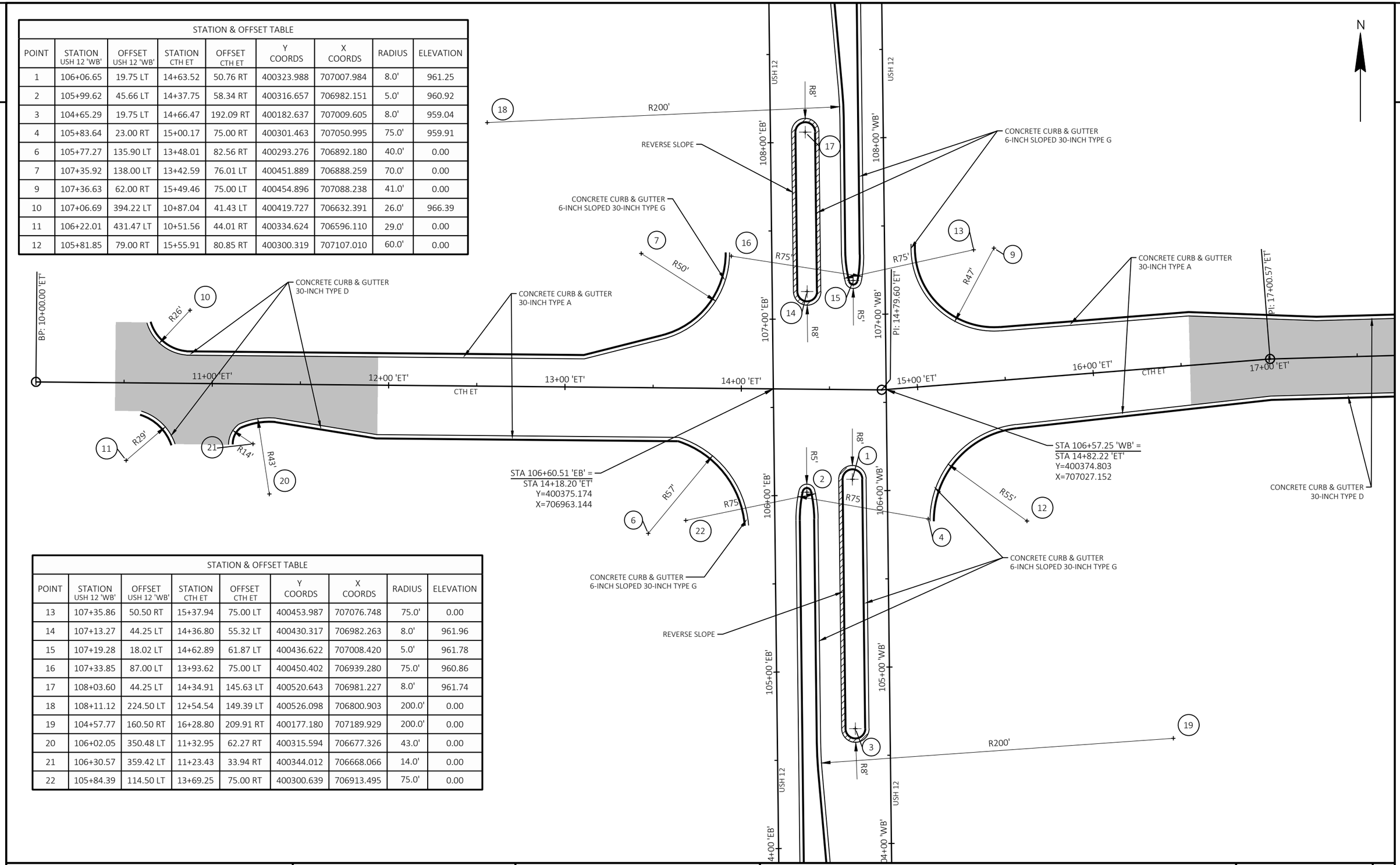
STA 102+51 'WB' - 102+77 'WB'
STA 105+50 'EB' - 106+37 'EB'
STA 11+63 'ET' - 13+30 'ET'
STA 104+15 'WB' - 104+36 'WB'
STA 107+07 'WB' - 107+40 'WB'

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 11	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020309-ts 1in-10ft
PLOT DATE : 5/4/2022 8:30 AM
PLOT BY : BLUM, JOSHUA M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

STATION & OFFSET TABLE								
POINT	STATION USH 12 'WB'	OFFSET USH 12 'WB'	STATION CTH ET	OFFSET CTH ET	Y COORDS	X COORDS	RADIUS	ELEVATION
1	106+06.65	19.75 LT	14+63.52	50.76 RT	400323.988	707007.984	8.0'	961.25
2	105+99.62	45.66 LT	14+37.75	58.34 RT	400316.657	706982.151	5.0'	960.92
3	104+65.29	19.75 LT	14+66.47	192.09 RT	400182.637	707009.605	8.0'	959.04
4	105+83.64	23.00 RT	15+00.17	75.00 RT	400301.463	707050.995	75.0'	959.91
6	105+77.27	135.90 LT	13+48.01	82.56 RT	400293.276	706892.180	40.0'	0.00
7	107+35.92	138.00 LT	13+42.59	76.01 LT	400451.889	706888.259	70.0'	0.00
9	107+36.63	62.00 RT	15+49.46	75.00 LT	400454.896	707088.238	41.0'	0.00
10	107+06.69	394.22 LT	10+87.04	41.43 LT	400419.727	706632.391	26.0'	966.39
11	106+22.01	431.47 LT	10+51.56	44.01 RT	400334.624	706596.110	29.0'	0.00
12	105+81.85	79.00 RT	15+55.91	80.85 RT	400300.319	707107.010	60.0'	0.00

STATION & OFFSET TABLE								
POINT	STATION USH 12 'WB'	OFFSET USH 12 'WB'	STATION CTH ET	OFFSET CTH ET	Y COORDS	X COORDS	RADIUS	ELEVATION
13	107+35.86	50.50 RT	15+37.94	75.00 LT	400453.987	707076.748	75.0'	0.00
14	107+13.27	44.25 LT	14+36.80	55.32 LT	400430.317	706982.263	8.0'	961.96
15	107+19.28	18.02 LT	14+62.89	61.87 LT	400436.622	707008.420	5.0'	961.78
16	107+33.85	87.00 LT	13+93.62	75.00 LT	400450.402	706939.280	75.0'	960.86
17	108+03.60	44.25 LT	14+34.91	145.63 LT	400520.643	706981.227	8.0'	961.74
18	108+11.12	224.50 LT	12+54.54	149.39 LT	400526.098	706800.903	200.0'	0.00
19	104+57.77	160.50 RT	16+28.80	209.91 RT	400177.180	707189.929	200.0'	0.00
20	106+02.05	350.48 LT	11+32.95	62.27 RT	400315.594	706677.326	43.0'	0.00
21	106+30.57	359.42 LT	11+23.43	33.94 RT	400344.012	706668.066	14.0'	0.00
22	105+84.39	114.50 LT	13+69.25	75.00 RT	400300.639	706913.495	75.0'	0.00



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	INTERSECTION DETAIL	SHEET 12	E

2

N

LEGEND

ASPH	ASPHALTIC SURFACE DRIVEWAYS
CD-6	CONCRETE DRIVEWAY 6-INCH
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-6-SLOPE-G	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G
CG-6-SLOPE-G**	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G REVERSE SLOPE
CS-4	CONCRETE SIDEWALK 4-INCH
CS-5	CONCRETE SIDEWALK 5-INCH
AGG.	6-INCHES BASE AGGREGATE DENSE 3/4-INCH

END CTH 'ET' ALIGNMENT/ OFFSET (4000 SERIES POINTS)
BEGIN USH 12 'WB' ALIGNMENT/ OFFSET (3000 SERIES POINTS)

EXISTING R/W

SAW CUT REQ'D

ASPHALT TIE IN

ASPHALTIC FLUME SEE SDD 'CONCRETE SURFACE DRAINS & ASPHALT FLUMES'

CONCRETE MEDIAN BLUNT NOSE SEE SDD 'CONCRETE MEDIAN NOSE'

101+00 'EB' 102+00 'EB' 103+00 'EB' 104+00 'EB' 105+00 'EB' 106+00 'EB'

101+00 'WB' 102+00 'WB' 103+00 'WB' 104+00 'WB' 105+00 'WB' 106+00 'WB'

13+00 'ET' 14+00 'ET' 15+00 'ET'

ASPH CG-6-SLOPE-G CG-30A CS-4 CS-5 CD-6

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN DETAIL - USH 12	SHEET 13 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 18

PLOT DATE : 9/27/2022 9:17 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

ASPH	ASPHALTIC SURFACE DRIVEWAYS
CD-6	CONCRETE DRIVEWAY 6-INCH
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-6-SLOPE-G	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G
CG-6-SLOPE-G**	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G REVERSE SLOPE
CS-4	CONCRETE SIDEWALK 4-INCH
CS-5	CONCRETE SIDEWALK 5-INCH
AGG.	6-INCHES BASE AGGREGATE DENSE 3/4-INCH

N

END CTH 'ET' ALIGNMENT/ OFFSET (4000 SERIES POINTS)
BEGIN USH 12 'WB' ALIGNMENT/ OFFSET (3000 SERIES POINTS)

EXISTING R/W

SAW CUT REQ'D

CONCRETE MEDIAN BLUNT NOSE
SEE SDD 'CONCRETE MEDIAN NOSE'

ASPHALT TIE IN

ASPH

107+00 'EB' 108+00 'EB' 109+00 'EB' 110+00 'EB' 111+00 'EB' 112+00 'EB'

107+00 'WB' 108+00 'WB' 109+00 'WB' 110+00 'WB' 111+00 'WB' 112+00 'WB'

13+00 'ET' 14+00 'ET' 15+00 'ET' 16+00 'ET'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN DETAIL - USH 12	SHEET 14	E

2

N

LEGEND

ASPH	ASPHALTIC SURFACE DRIVEWAYS
CD-6	CONCRETE DRIVEWAY 6-INCH
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-6-SLOPE-G	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G
CG-6-SLOPE-G**	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G REVERSE SLOPE
CS-4	CONCRETE SIDEWALK 4-INCH
CS-5	CONCRETE SIDEWALK 5-INCH
AGG.	6-INCHES BASE AGGREGATE DENSE 3/4-INCH

EXISTING R/W

SAW CUT REQ'D

SAW CUT REQ'D

EXISTING R/W

END CTH 'ET' ALIGNMENT/ OFFSET (4000 SERIES POINTS)
BEGIN USH 12 'WB' ALIGNMENT/ OFFSET (3000 SERIES POINTS)

SAW CUT REQ'D

11+00 'ET'

12+00 'ET'

13+00 'ET'

14+00 'ET'

108+00 'EB'

107+00 'EB'

106+00 'EB'

105+00 'EB'

2

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN DETAIL - CTH ET WEST	SHEET 15 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 20

PLOT DATE : 4/15/2022 10:40 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

LEGEND

ASPH	ASPHALTIC SURFACE DRIVEWAYS
CD-6	CONCRETE DRIVEWAY 6-INCH
CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-6-SLOPE-G	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G
CG-6-SLOPE-G**	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G REVERSE SLOPE
CS-4	CONCRETE SIDEWALK 4-INCH
CS-5	CONCRETE SIDEWALK 5-INCH
AGG.	6-INCHES BASE AGGREGATE DENSE 3/4-INCH

EXISTING R/W
SAW CUT REQ'D
SEC-aprox
END CTH 'ET' ALIGNMENT/ OFFSET (4000 SERIES POINTS)
BEGIN USH 12 'WB' ALIGNMENT/ OFFSET (3000 SERIES POINTS)
EXISTING R/W
15+00 'ET'
16+00 'ET'
17+00 'ET'
18+00 'ET'
19+00 'ET'
20+00 'ET'
105+00 'WB'
106+00 'WB'
107+00 'WB'
108+00 'WB'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN DETAIL - CTH ET EAST	SHEET 16 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 21
PLOT DATE : 4/15/2022 10:40 AM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3000	100+75.00	16.52' LT	956.08	399792.41	707017.31
3001	100+75.00	0.00'	956.36	399792.60	707033.83
3002	100+75.00	21.92' RT	955.94	399792.85	707055.75
3003	100+86.29	22.10' RT	955.92	399804.14	707055.80
3004	101+00.00	22.00' RT	955.91	399817.85	707055.54
3005	101+00.00	0.00'	956.46	399817.59	707033.54
3006	101+00.00	12.00' LT	956.15	399817.46	707021.54
3007	100+92.03	12.00' LT	956.15	399809.49	707021.63
3008	101+06.38	38.09' RT	955.24	399824.41	707071.56
3009	101+32.50	38.07' RT	955.35	399850.53	707071.24
3010	101+24.92	14.00' LT	956.27	399842.35	707019.26
3011	101+49.84	15.99' LT	956.34	399867.25	707016.98
3012	101+74.76	17.99' LT	956.42	399892.14	707014.70
3013	101+99.68	19.98' LT	956.52	399917.04	707012.42
3014	102+24.60	21.98' LT	956.63	399941.93	707010.14
3015	102+20.17	22.00' RT	956.61	399938.01	707054.16
3016	102+50.71	42.99' RT	955.53	399968.79	707074.80
3017	102+76.97	43.41' RT	955.87	399995.05	707074.92
3018	102+51.92	22.00' RT	956.83	399969.76	707053.80
3019	102+76.90	24.00' RT	956.98	399994.76	707055.51

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3020	102+87.61	24.00' RT	957.07	400005.47	707055.39
3021	102+49.85	24.00' LT	956.77	399967.16	707007.83
3022	102+74.45	25.90' LT	956.93	399991.73	707005.64
3023	102+79.43	26.29' LT	956.96	399996.71	707005.20
3024	102+83.42	26.60' LT	956.99	400000.70	707004.84
3025	102+99.37	27.83' LT	957.10	400016.63	707003.42
3026	103+24.30	29.76' LT	957.29	400041.54	707001.21
3027	103+49.22	31.69' LT	957.48	400066.44	706998.99
3028	103+74.15	33.62' LT	957.67	400091.34	706996.78
3029	103+21.73	14.00' RT	957.58	400039.47	707045.00
3030	104+46.73	24.00' RT	958.54	400164.57	707053.56
3031	103+98.79	24.00' RT	958.10	400116.64	707054.11
3032	104+12.82	34.14' RT	957.78	400130.79	707064.09
3033	104+38.03	33.86' RT	958.18	400155.99	707063.52
3034	103+99.07	35.55' LT	957.87	400116.24	706994.56
3035	104+24.00	37.48' LT	958.06	400141.14	706992.35
3036	104+42.33	38.90' LT	958.20	400159.46	706990.72
3037	104+46.19	39.14' LT	958.23	400163.31	706990.44
3038	104+50.04	39.33' LT	958.26	400167.16	706990.20
3039	104+53.91	39.41' LT	958.30	400171.03	706990.07

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3040	104+57.77	39.50' LT	958.33	400174.89	706989.94
3041	104+73.93	39.50' LT	958.59	400191.05	706989.76
3042	104+98.93	39.50' LT	958.99	400216.04	706989.47
3043	105+23.93	39.50' LT	959.38	400241.04	706989.18
3044	105+48.93	39.50' LT	959.78	400266.04	706988.90
3045	105+73.93	39.50' LT	960.18	400291.04	706988.61
3046	105+84.39	39.50' LT	960.34	400301.50	706988.49
3047	105+88.47	39.61' LT	960.40	400305.58	706988.33
3048	105+92.54	39.94' LT	960.45	400309.64	706987.95
3049	105+96.58	40.50' LT	960.50	400313.68	706987.35
3050	106+00.59	41.27' LT	960.53	400317.68	706986.53
3051	106+03.12	42.84' LT	961.01	400320.19	706984.94
3052	106+04.12	45.64' LT	961.00	400321.16	706982.12
3053	106+03.15	48.45' LT	961.03	400320.16	706979.32
3054	106+00.64	50.05' LT	960.51	400317.63	706977.76
3055	104+65.29	27.50' LT	958.69	400182.55	707001.86
3056	104+59.81	25.23' LT	959.15	400177.09	707004.19
3057	104+57.54	19.75' LT	958.73	400174.89	707009.69
3058	104+59.81	14.27' LT	958.94	400177.22	707015.15
3059	104+65.29	12.00' LT	958.95	400182.73	707017.35

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3060	104+81.65	12.00' LT	959.13	400199.09	707017.17
3061	105+06.65	12.00' LT	959.43	400224.08	707016.88
3062	105+31.65	12.00' LT	959.72	400249.08	707016.59
3063	105+56.65	12.00' LT	960.02	400274.08	707016.31
3064	105+81.65	12.00' LT	960.31	400299.08	707016.02
3065	106+06.65	12.00' LT	960.61	400324.08	707015.73
3066	106+12.13	14.27' LT	961.09	400329.53	707013.40
3067	106+14.40	19.75' LT	961.34	400331.74	707007.89
3068	106+12.13	25.23' LT	961.56	400329.41	707002.44
3069	106+06.65	27.50' LT	960.94	400323.90	707000.23
3070	105+74.59	27.50' LT	960.43	400291.83	707000.60
3071	105+49.59	27.50' LT	960.03	400266.83	707000.89
3072	105+24.59	27.50' LT	959.63	400241.84	707001.18
3073	104+99.59	27.50' LT	959.24	400216.84	707001.46
3074	104+74.59	27.50' LT	958.84	400191.84	707001.75
3075	105+82.30	24.00' RT	0.00	400300.13	707052.01
3076	105+82.28	26.50' RT	0.00	400300.14	707054.51
3077	105+86.79	24.00' RT	959.94	400304.63	707051.96
3078	106+16.75	36.49' RT	0.00	400334.73	707064.10
3079	106+14.42	34.68' RT	0.00	400332.38	707062.32

2

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3080	106+18.92	38.36' RT	0.00	400336.92	707065.95
3081	106+22.40	41.84' RT	0.00	400340.44	707069.39
3082	106+31.05	54.40' RT	0.00	400349.23	707081.85
3083	106+33.56	60.25' RT	0.00	400351.81	707087.67
3084	106+36.58	73.51' RT	0.00	400354.98	707100.90
3085	106+36.27	71.00' RT	0.00	400354.64	707098.39
3086	106+22.34	60.51' RT	960.09	400340.59	707088.06
3087	106+14.40	61.05' RT	959.97	400332.66	707088.69
3088	107+04.59	64.94' RT	960.29	400422.89	707091.54
3089	106+99.57	65.28' RT	960.36	400417.88	707091.94
3090	106+97.91	82.08' RT	0.00	400416.41	707108.76
3091	106+89.97	56.41' RT	0.00	400408.17	707083.18
3092	106+91.11	50.32' RT	0.00	400409.24	707077.08
3093	106+89.74	65.19' RT	0.00	400408.04	707091.97
3094	107+02.93	82.16' RT	0.00	400421.43	707108.78
3095	106+99.52	33.16' RT	0.00	400417.46	707059.83
3096	107+02.13	30.09' RT	0.00	400420.03	707056.73
3097	107+05.52	26.77' RT	0.00	400423.38	707053.37
3098	107+18.05	18.83' RT	0.00	400435.82	707045.28
3099	107+36.16	15.00' RT	0.00	400453.88	707041.25

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3100	107+39.64	15.00' RT	961.36	400457.37	707041.21
3101	107+39.64	17.50' RT	961.35	400457.40	707043.71
3102	107+49.68	22.00' RT	961.34	400467.48	707048.09
3103	107+60.60	12.00' LT	961.59	400478.01	707013.97
3104	107+85.60	12.00' LT	961.65	400503.01	707013.68
3105	108+10.60	12.00' LT	961.70	400528.01	707013.39
3106	108+35.60	12.00' LT	961.73	400553.01	707013.11
3107	108+60.60	12.00' LT	961.78	400578.00	707012.82
3108	108+85.60	12.00' LT	961.84	400603.00	707012.53
3109	109+00.00	12.00' LT	961.87	400617.40	707012.37
3110	109+00.00	16.00' LT	962.06	400617.36	707008.37
3111	111+68.92	16.00' LT	961.36	400886.13	707005.29
3112	111+68.89	12.00' LT	961.47	400886.18	707009.29
3113	111+68.60	0.00'	961.67	400886.12	707021.29
3114	111+68.35	22.00' RT	961.05	400886.12	707043.29
3115	111+93.15	21.67' RT	960.98	400911.10	707042.47
3116	111+93.41	0.00'	961.58	400910.93	707020.80
3117	111+93.61	16.77' LT	961.25	400910.79	707004.03
3118	111+93.99	48.38' LT	961.23	400910.55	706972.41
3119	111+94.15	64.00' LT	961.50	400910.40	706956.79

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3120	111+94.39	87.13' LT	960.75	400910.17	706933.66
3121	111+89.83	87.46' LT	960.77	400905.61	706933.42
3122	111+72.75	114.72' LT	961.38	400887.98	706906.51
3123	111+32.44	114.44' LT	961.37	400848.65	706907.27
3124	111+69.25	87.19' LT	961.16	400885.04	706934.10
3125	111+69.18	64.00' LT	961.55	400885.43	706957.29
3126	111+69.16	48.44' LT	961.29	400885.72	706972.84
3127	111+18.66	86.12' LT	961.16	400835.20	706935.74
3128	109+95.77	78.00' LT	961.47	400712.41	706945.28
3129	108+95.77	86.00' LT	961.28	400612.32	706938.42
3130	108+70.77	88.00' LT	961.20	400587.30	706936.71
3131	109+47.82	34.62' LT	961.17	400664.96	706989.20
3132	109+48.01	32.13' LT	961.59	400665.18	706991.69
3133	109+38.19	33.86' LT	961.15	400655.34	706990.07
3134	109+13.27	31.91' LT	961.10	400630.44	706992.31
3135	108+88.35	29.95' LT	961.03	400605.55	706994.56
3136	108+63.42	27.99' LT	960.95	400580.65	706996.80
3137	108+38.50	26.03' LT	960.89	400555.75	706999.04
3138	108+26.78	25.11' LT	960.93	400544.04	707000.10
3139	108+22.87	24.85' LT	960.95	400540.14	707000.41

USH 12 PLAN DETAIL

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3140	108+18.96	24.65' LT	960.97	400536.22	707000.65
3141	108+15.04	24.54' LT	960.99	400532.31	707000.81
3142	108+11.12	24.50' LT	960.97	400528.39	707000.89
3143	107+88.55	24.50' LT	961.08	400505.82	707001.15
3144	107+63.55	24.50' LT	961.20	400480.82	707001.43
3145	107+38.55	24.50' LT	961.32	400455.82	707001.72
3146	107+35.86	24.50' LT	961.33	400453.13	707001.75
3147	107+31.41	24.37' LT	961.35	400448.68	707001.94
3148	107+26.97	23.97' LT	961.35	400444.25	707002.38
3149	107+22.57	23.31' LT	961.35	400439.86	707003.09
3150	107+18.22	22.40' LT	961.84	400435.51	707004.06
3151	107+15.72	20.78' LT	961.78	400433.03	707005.70
3152	107+14.78	17.96' LT	961.79	400432.12	707008.54
3153	107+15.80	15.16' LT	961.85	400433.18	707011.32
3154	107+18.34	13.62' LT	961.38	400435.74	707012.83
3155	107+22.18	12.91' LT	961.43	400439.59	707013.50
3156	107+26.05	12.41' LT	961.46	400443.46	707013.96
3157	107+29.95	12.10' LT	961.49	400447.36	707014.22
3158	107+35.60	12.00' LT	961.51	400453.01	707014.25
3159	107+13.27	36.50' LT	961.60	400430.41	706990.01

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USH 12 PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3160	107+27.95	36.50' LT	961.53	400445.08	706989.84
3161	107+52.95	36.50' LT	961.41	400470.08	706989.56
3162	107+77.95	36.50' LT	961.29	400495.08	706989.27
3163	108+03.60	36.50' LT	961.16	400520.73	706988.98
3164	108+09.08	38.77' LT	961.68	400526.19	706986.64
3165	108+11.35	44.25' LT	961.27	400528.39	706981.14
3166	108+09.08	49.73' LT	961.73	400526.06	706975.68
3167	108+03.60	52.00' LT	961.37	400520.55	706973.48
3168	107+74.24	52.00' LT	961.35	400491.20	706973.81
3169	107+49.24	52.00' LT	961.31	400466.20	706974.10
3170	107+24.24	52.00' LT	961.27	400441.20	706974.39
3171	107+13.27	52.00' LT	961.24	400430.23	706974.51
3172	107+07.79	49.73' LT	961.52	400424.77	706976.85
3173	107+05.52	44.25' LT	961.71	400422.57	706982.35
3174	107+07.79	38.77' LT	962.16	400424.90	706987.81
3175	107+45.95	88.00' LT	960.83	400462.49	706938.14
3176	107+35.96	90.50' LT	961.26	400452.47	706935.76
3177	107+35.96	88.00' LT	960.84	400452.50	706938.26
3178	107+13.53	93.29' LT	0.00	400430.01	706933.22
3179	107+05.52	98.30' LT	0.00	400421.95	706928.30

USH 12 PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3180	106+99.52	103.72' LT	0.00	400415.89	706922.95
3181	106+92.96	112.41' LT	0.00	400409.23	706914.34
3182	106+90.53	117.02' LT	0.00	400406.75	706909.76
3183	106+87.62	125.08' LT	0.00	400403.74	706901.73
3184	106+87.30	126.35' LT	0.00	400403.40	706900.47
3185	106+84.14	139.51' LT	0.00	400400.10	706887.34
3186	107+17.02	124.73' LT	961.12	400433.14	706901.74
3187	107+16.96	119.69' LT	961.10	400433.14	706906.79
3188	106+87.22	148.76' LT	0.00	400403.07	706878.06
3189	106+92.11	149.92' LT	0.00	400407.94	706876.84
3190	106+31.85	136.00' LT	0.00	400347.85	706891.45
3191	106+31.64	126.19' LT	960.16	400347.76	706901.26
3192	106+31.48	118.19' LT	960.11	400347.68	706909.26
3193	106+29.35	136.05' LT	960.65	400345.35	706891.43
3194	106+23.39	137.86' LT	960.72	400339.36	706889.69
3195	106+28.76	111.39' LT	0.00	400345.04	706916.10
3196	106+08.01	87.87' LT	0.00	400324.56	706939.86
3197	106+22.40	101.04' LT	0.00	400338.80	706926.52
3198	106+14.41	92.62' LT	0.00	400330.90	706935.03
3199	105+91.12	106.29' LT	0.00	400307.46	706921.62

USH 12 PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3200	106+12.28	90.88' LT	0.00	400328.79	706936.79
3201	105+81.07	79.00' LT	960.10	400297.73	706949.03
3202	105+81.07	81.50' LT	960.52	400297.70	706946.53
3203	105+71.20	93.84' LT	0.00	400287.69	706934.30
3204	105+71.37	101.84' LT	0.00	400287.77	706926.30
3205	105+71.17	86.00' LT	959.87	400287.75	706942.14
3206	105+64.71	52.00' LT	960.23	400281.67	706976.22
3207	105+39.71	52.00' LT	959.97	400256.68	706976.50
3208	105+14.71	52.00' LT	959.70	400231.68	706976.79
3209	104+89.71	52.00' LT	959.42	400206.68	706977.08
3210	104+64.71	52.00' LT	959.14	400181.68	706977.36
3211	104+39.71	52.00' LT	958.90	400156.68	706977.65
3212	104+14.71	52.00' LT	958.67	400131.68	706977.94
3213	103+89.71	52.00' LT	958.44	400106.69	706978.22
3214	103+64.71	52.00' LT	958.20	400081.69	706978.51
3215	103+39.71	52.00' LT	957.97	400056.69	706978.80
3216	103+14.71	52.00' LT	957.74	400031.69	706979.08
3217	102+98.25	52.00' LT	957.59	400015.23	706979.27
3218	102+90.28	51.97' LT	957.51	400007.27	706979.39
3219	100+97.88	48.00' LT	956.27	399814.92	706985.57

USH 12 PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3220	100+97.85	64.00' LT	956.54	399814.71	706969.57
3221	100+97.50	86.36' LT	956.07	399814.10	706947.22
3222	100+97.85	86.00' LT	956.08	399814.45	706947.57
3223	100+72.85	86.30' LT	955.96	399789.45	706947.56
3224	100+72.85	64.00' LT	956.43	399789.71	706969.86
3225	100+72.85	48.07' LT	956.15	399789.89	706985.79
3226	104+00.00	38.13' LT	958.29	400117.14	706991.97
3227	104+00.00	49.50' LT	958.95	400117.01	706980.61
3228	108+50.07	14.50' LT	962.17	400567.45	707010.44
3229	108+50.12	24.44' LT	961.32	400567.38	707000.50
3230	103+21.73	16.00' RT	957.54	400039.49	707047.00
3231	103+46.73	16.00' RT	957.77	400064.49	707046.71
3232	109+95.77	80.00' LT	961.43	400712.39	706943.28
3233	109+70.77	80.00' LT	961.44	400687.39	706943.56
3234	105+94.71	99.14' LT	959.85	400311.13	706928.73

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CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4000	10+45.00	34.00' LT	967.03	400412.69	706590.28
4001	10+45.00	0.00'	966.67	400378.69	706589.96
4002	10+45.00	16.00' RT	966.35	400362.69	706589.81
4003	10+68.09	19.94' RT	965.94	400358.53	706612.86
4004	10+72.79	23.97' RT	965.84	400354.46	706617.52
4005	10+76.54	28.89' RT	965.75	400349.50	706621.23
4006	10+79.16	34.50' RT	965.57	400343.87	706623.80
4007	11+09.58	34.52' RT	965.58	400343.57	706654.21
4008	11+09.92	31.22' RT	965.52	400346.86	706654.59
4009	11+11.02	28.09' RT	965.46	400349.98	706655.72
4010	11+12.81	25.30' RT	965.40	400352.75	706657.53
4011	11+15.19	23.00' RT	965.24	400355.03	706659.94
4012	11+20.26	21.08' RT	965.20	400356.90	706665.02
4013	11+25.53	19.81' RT	965.13	400358.12	706670.31
4014	11+30.92	19.22' RT	965.05	400358.66	706675.70
4015	11+36.34	19.30' RT	964.95	400358.53	706681.12
4016	11+35.64	25.24' RT	965.52	400352.60	706680.36
4017	11+35.49	30.25' RT	965.57	400347.59	706680.17
4018	11+61.06	23.05' RT	964.36	400354.55	706705.80
4019	11+85.78	26.80' RT	963.68	400350.57	706730.48

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4020	11+93.71	28.00' RT	963.46	400349.29	706738.41
4021	11+93.51	30.50' RT	963.88	400346.79	706738.18
4022	11+93.19	36.50' RT	963.95	400340.80	706737.80
4023	12+10.69	28.00' RT	962.98	400349.13	706755.38
4024	12+35.69	28.00' RT	962.25	400348.89	706780.38
4025	12+60.69	28.00' RT	961.58	400348.66	706805.38
4026	12+85.69	28.00' RT	961.05	400348.42	706830.38
4027	13+10.69	28.00' RT	960.62	400348.19	706855.37
4028	13+23.10	19.22' LT	960.63	400395.28	706868.23
4029	13+11.59	24.00' LT	961.47	400400.18	706856.77
4030	13+11.23	29.00' LT	961.56	400405.18	706856.46
4031	13+10.82	16.00' LT	960.85	400392.19	706855.92
4032	12+78.03	16.00' LT	961.43	400392.49	706823.14
4033	12+53.03	16.00' LT	962.02	400392.73	706798.14
4034	12+28.03	16.00' LT	962.71	400392.97	706773.14
4035	12+03.03	16.00' LT	963.44	400393.20	706748.14
4036	11+93.71	16.00' LT	963.70	400393.29	706738.82
4037	11+93.71	0.00'	964.02	400377.29	706738.67
4038	11+93.71	28.00' RT	963.46	400349.29	706738.41
4039	11+78.03	16.00' LT	964.10	400393.44	706723.14

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4040	11+53.03	16.00' LT	964.68	400393.67	706698.14
4041	11+28.03	16.00' LT	965.16	400393.91	706673.14
4042	11+03.03	16.00' LT	965.56	400394.14	706648.14
4043	10+85.13	16.00' LT	965.80	400394.31	706630.25
4044	10+85.13	24.00' LT	966.44	400402.31	706630.32
4045	10+85.13	29.00' LT	966.52	400407.31	706630.36
4046	10+77.70	17.70' LT	965.98	400396.08	706622.83
4047	10+71.10	21.52' LT	966.39	400399.96	706616.27
4048	10+65.93	27.12' LT	966.61	400405.61	706611.15
4049	15+71.07	16.00' RT	959.68	400365.90	707117.00
4050	15+85.85	39.95' RT	959.73	400343.20	707133.63
4051	16+23.67	23.39' RT	959.57	400362.71	707170.01
4052	15+73.57	24.99' RT	959.49	400357.14	707120.20
4053	16+53.86	22.43' RT	959.74	400366.06	707200.03
4054	16+55.03	0.00'	960.19	400388.51	707199.42
4055	16+99.48	20.97' RT	959.99	400371.14	707245.40
4056	17+22.03	21.00' RT	960.11	400371.72	707266.85
4057	17+47.03	21.00' RT	960.23	400372.41	707291.84
4058	17+45.00	23.00' RT	960.14	400370.36	707289.86
4059	17+09.30	23.00' RT	959.96	400369.38	707254.18

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4060	17+14.30	28.00' RT	960.67	400364.52	707259.32
4061	17+40.03	28.00' RT	960.80	400365.22	707285.03
4062	17+14.30	33.00' RT	960.72	400359.52	707259.45
4063	17+40.03	33.00' RT	960.85	400360.22	707285.17
4064	17+40.03	37.73' RT	959.61	400355.50	707285.30
4065	17+14.30	38.46' RT	959.04	400354.06	707259.60
4066	16+57.75	41.96' RT	960.80	400346.90	707205.47
4067	16+52.97	41.62' RT	960.78	400346.85	707200.67
4068	16+53.39	36.59' RT	960.49	400351.91	707200.69
4069	16+58.16	36.28' RT	960.49	400352.60	707205.42
4070	17+60.19	33.00' RT	960.95	400360.78	707305.32
4071	17+64.11	33.00' RT	960.97	400360.88	707309.24
4072	17+98.23	33.00' RT	961.13	400361.82	707343.35
4073	18+02.56	33.00' RT	961.14	400361.94	707347.67
4074	18+36.82	33.00' RT	961.20	400362.88	707381.92
4075	18+39.26	33.00' RT	961.20	400362.95	707384.37
4076	17+60.16	38.00' RT	961.00	400355.78	707305.43
4077	17+64.19	38.00' RT	961.14	400355.89	707309.46
4078	17+98.19	38.00' RT	961.52	400356.82	707343.44
4079	18+02.57	38.00' RT	961.52	400356.94	707347.83

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4080	18+36.82	38.00' RT	961.47	400357.88	707382.06
4081	18+39.22	38.10' RT	961.42	400357.85	707384.46
4082	17+72.03	21.00' RT	960.36	400373.10	707316.83
4083	17+97.03	21.00' RT	960.47	400373.78	707341.82
4084	18+22.03	21.00' RT	960.54	400374.47	707366.81
4085	18+47.03	21.00' RT	960.55	400375.16	707391.80
4086	18+72.03	21.00' RT	960.50	400375.84	707416.79
4087	18+65.11	28.00' RT	961.12	400368.66	707410.07
4088	18+65.36	33.00' RT	961.17	400363.66	707410.45
4089	18+90.00	30.30' RT	961.31	400367.04	707435.01
4090	18+90.00	25.56' RT	961.27	400371.77	707434.88
4091	18+90.00	21.00' RT	960.74	400376.34	707434.75
4092	18+90.00	0.00'	960.85	400397.33	707434.18
4093	18+90.00	21.00' LT	960.62	400418.32	707433.60
4094	18+90.00	28.00' LT	960.98	400425.32	707433.41
4095	18+90.00	33.00' LT	961.25	400430.32	707433.27
4096	18+65.00	21.00' LT	960.52	400417.63	707408.61
4097	18+60.38	23.50' LT	960.95	400420.01	707403.93
4098	18+55.38	28.00' LT	961.14	400424.37	707398.80
4099	18+55.38	33.00' LT	961.21	400429.36	707398.67

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4100	18+43.38	33.00' LT	961.23	400429.03	707386.67
4101	18+43.38	28.00' LT	961.15	400424.04	707386.81
4102	18+41.36	23.80' LT	960.98	400419.78	707384.90
4103	18+40.00	21.00' LT	960.55	400416.95	707383.62
4104	18+38.76	28.00' LT	961.15	400423.91	707382.19
4105	18+38.76	33.00' LT	961.23	400428.91	707382.05
4106	18+08.76	33.00' LT	961.18	400428.08	707352.06
4107	18+08.76	28.00' LT	961.11	400423.09	707352.20
4108	18+03.76	23.50' LT	960.92	400418.45	707347.32
4109	18+15.00	21.00' LT	960.52	400416.26	707358.63
4110	18+08.76	40.07' LT	962.24	400435.15	707351.87
4111	18+38.76	39.40' LT	961.86	400435.31	707381.87
4112	18+44.24	39.28' LT	961.64	400435.34	707387.35
4113	18+54.61	39.05' LT	961.34	400435.39	707397.73
4114	17+90.00	21.00' LT	960.44	400415.57	707333.64
4115	17+65.00	21.00' LT	960.32	400414.89	707308.65
4116	17+40.00	21.00' LT	960.20	400414.20	707283.66
4117	17+27.49	21.00' LT	960.13	400413.86	707271.15
4118	17+27.72	28.00' LT	961.90	400420.86	707271.18
4119	17+27.88	33.00' LT	961.98	400425.86	707271.21

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4120	17+15.03	21.80' LT	960.06	400414.32	707258.67
4121	16+91.31	23.93' LT	959.89	400415.24	707233.69
4122	16+66.48	26.83' LT	959.71	400416.17	707208.70
4123	16+56.48	28.00' LT	959.64	400416.54	707198.65
4124	16+41.54	28.00' LT	959.56	400415.35	707183.76
4125	16+16.54	28.00' LT	959.44	400413.37	707158.84
4126	15+91.54	28.00' LT	959.39	400411.39	707133.92
4127	15+85.39	34.97' RT	959.10	400348.13	707132.78
4128	16+01.03	49.98' LT	963.18	400434.05	707141.63
4129	16+19.41	48.62' LT	962.86	400434.15	707160.06
4130	17+30.77	41.81' LT	962.94	400434.74	707273.86
4131	17+58.90	41.18' LT	962.90	400434.89	707302.00
4132	15+85.59	44.95' RT	958.55	400338.19	707133.76
4133	16+21.93	45.19' RT	958.44	400340.83	707170.01
4135	16+01.71	26.59' RT	959.89	400357.77	707148.38
4136	16+22.78	38.11' RT	959.83	400347.96	707170.30
4137	16+05.71	33.95' RT	959.83	400350.75	707152.95
4138	16+22.91	33.09' RT	959.91	400352.97	707170.03
4139	16+26.91	25.79' RT	960.01	400360.57	707173.44
4140	16+56.89	35.00' LT	961.43	400423.55	707198.50

CTH ET PLAN DETAIL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4141	16+57.18	40.00' LT	961.50	400428.56	707198.39
4142	10+62.64	34.00' LT	965.74	400412.52	706607.92
4143	10+59.79	16.00' RT	966.14	400362.55	706604.60

2

2

2

N

LEGEND

- LL — LEVEL LANDING
- G — GRASS
- SW4 — CONCRETE SIDEWALK 4-INCH
- PED — CONCRETE PEDESTRIAN CURB
- XXX YYY.YY — POINT NUMBER & ELEVATION

'CTH ET' CurbRamp-#1 TYPE 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	15+49.54	27.99' LT	959.60	400408.05	707092.05
101	15+40.72	28.82' LT	959.67	400408.17	707083.18
102	15+34.72	30.37' LT	959.78	400409.24	707077.08
103	15+18.17	39.93' LT	960.48	400417.46	707059.83
104	15+12.20	46.35' LT	960.65	400423.38	707053.37
105	15+30.91	31.81' LT	959.93	400410.38	707073.17
106	15+15.31	42.70' LT	960.56	400420.00	707056.75
107	15+05.31	58.89' LT	960.90	400435.34	707045.50
108	15+02.54	77.71' LT	961.24	400453.88	707041.25
109	15+43.87	30.85' LT	960.07	400410.44	707086.17
110	15+40.22	31.47' LT	959.61	400410.77	707082.47
111	15+35.22	32.84' LT	959.72	400411.74	707077.38
112	15+35.22	34.84' LT	959.86	400413.73	707077.22
113	15+40.22	34.84' LT	959.77	400414.13	707082.21
114	15+40.22	38.93' LT	960.05	400418.21	707081.88
115	15+35.22	39.27' LT	960.14	400418.15	707076.87
116	15+27.53	36.27' LT	960.54	400414.56	707069.45
117	15+35.56	44.26' LT	960.22	400423.15	707076.81
118	15+40.56	43.92' LT	960.13	400423.21	707081.82

'CTH ET' CurbRamp-#1 TYPE 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
119	15+50.22	42.83' LT	960.29	400422.89	707091.54
120	15+50.22	37.80' LT	960.36	400417.88	707091.94
121	15+25.91	37.24' LT	960.61	400415.39	707067.76
122	15+21.74	40.18' LT	960.30	400418.00	707063.36
123	15+16.07	45.58' LT	960.51	400422.93	707057.28
124	15+13.12	49.32' LT	961.10	400426.42	707054.05
125	15+18.97	45.38' LT	960.52	400422.96	707060.20
126	15+25.44	39.93' LT	960.45	400418.04	707067.08
127	15+25.78	44.92' LT	960.52	400423.04	707067.02
128	15+30.77	44.58' LT	960.53	400423.10	707072.02
129	15+30.43	39.59' LT	960.46	400418.10	707072.08

USH 12 WB

107+00 'WB'

CTH ET

908

SAN

SS

WV

SEC-aprox

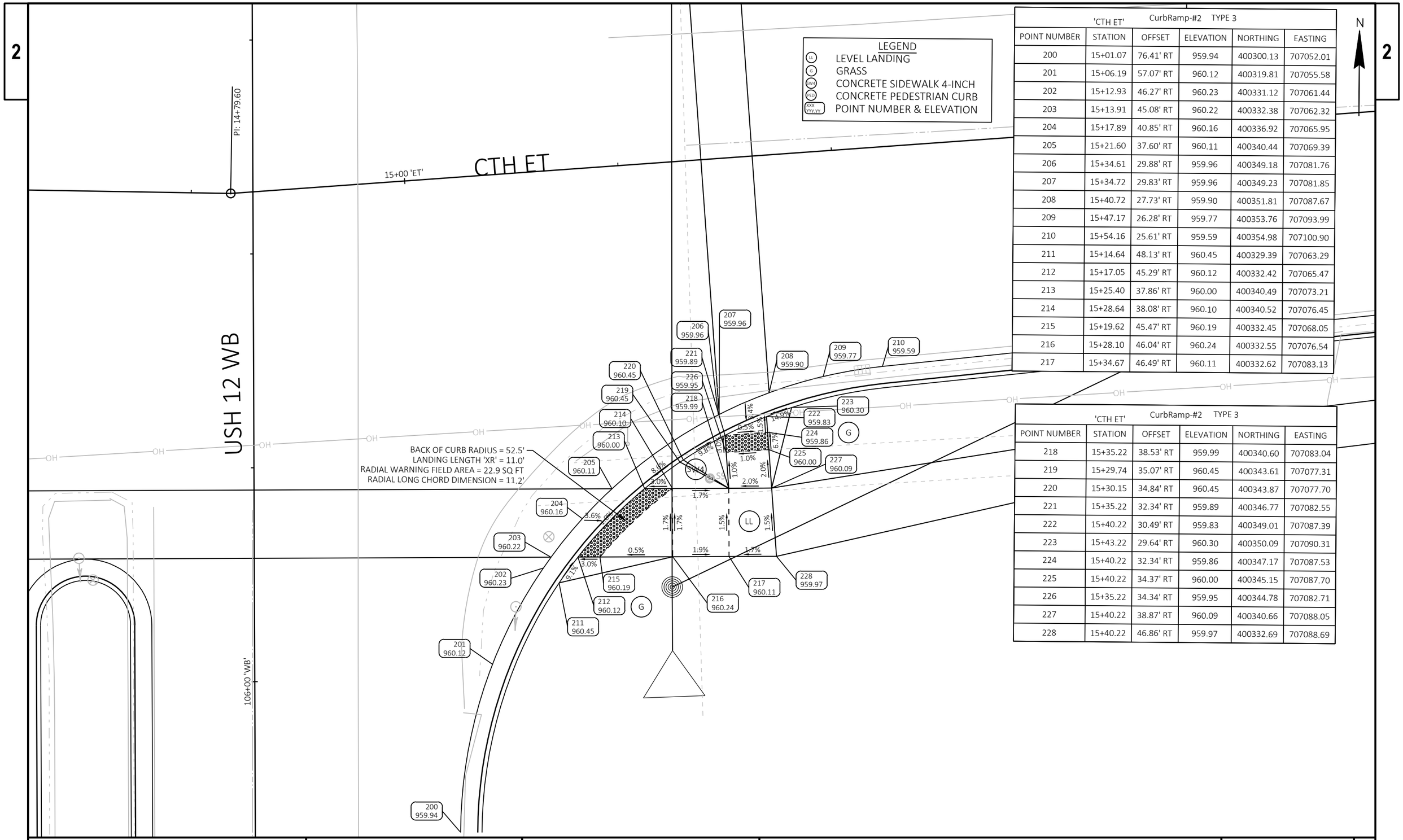
BACK OF CURB RADIUS = 44.5'
LANDING LENGTH 'XR' = 9.7'
RADIAL WARNING FIELD AREA = 16.3 SQ FT
RADIAL LONG CHORD DIMENSION = 7.8'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CURB RAMP DETAILS - #1	SHEET 20	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - CurbRamp-01

PLOT DATE : 4/15/2022 7:39 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42



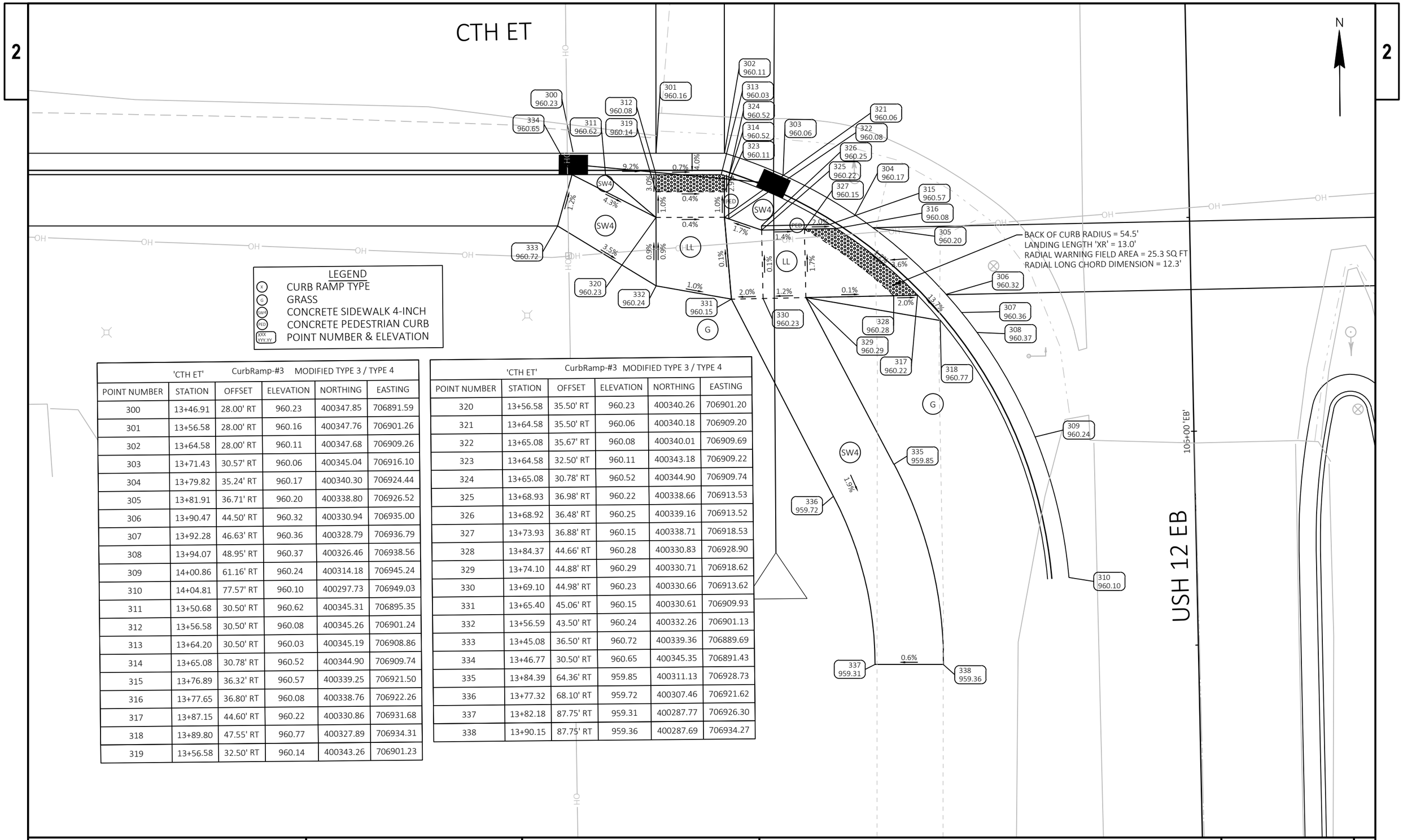
'CTH ET' CurbRamp-#2 TYPE 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	15+01.07	76.41' RT	959.94	400300.13	707052.01
201	15+06.19	57.07' RT	960.12	400319.81	707055.58
202	15+12.93	46.27' RT	960.23	400331.12	707061.44
203	15+13.91	45.08' RT	960.22	400332.38	707062.32
204	15+17.89	40.85' RT	960.16	400336.92	707065.95
205	15+21.60	37.60' RT	960.11	400340.44	707069.39
206	15+34.61	29.88' RT	959.96	400349.18	707081.76
207	15+34.72	29.83' RT	959.96	400349.23	707081.85
208	15+40.72	27.73' RT	959.90	400351.81	707087.67
209	15+47.17	26.28' RT	959.77	400353.76	707093.99
210	15+54.16	25.61' RT	959.59	400354.98	707100.90
211	15+14.64	48.13' RT	960.45	400329.39	707063.29
212	15+17.05	45.29' RT	960.12	400332.42	707065.47
213	15+25.40	37.86' RT	960.00	400340.49	707073.21
214	15+28.64	38.08' RT	960.10	400340.52	707076.45
215	15+19.62	45.47' RT	960.19	400332.45	707068.05
216	15+28.10	46.04' RT	960.24	400332.55	707076.54
217	15+34.67	46.49' RT	960.11	400332.62	707083.13

'CTH ET' CurbRamp-#2 TYPE 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
218	15+35.22	38.53' RT	959.99	400340.60	707083.04
219	15+29.74	35.07' RT	960.45	400343.61	707077.31
220	15+30.15	34.84' RT	960.45	400343.87	707077.70
221	15+35.22	32.34' RT	959.89	400346.77	707082.55
222	15+40.22	30.49' RT	959.83	400349.01	707087.39
223	15+43.22	29.64' RT	960.30	400350.09	707090.31
224	15+40.22	32.34' RT	959.86	400347.17	707087.53
225	15+40.22	34.37' RT	960.00	400345.15	707087.70
226	15+35.22	34.34' RT	959.95	400344.78	707082.71
227	15+40.22	38.87' RT	960.09	400340.66	707088.05
228	15+40.22	46.86' RT	959.97	400332.69	707088.69

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CURB RAMP DETAILS - #2	SHEET 21	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - CurbRamp-02
PLOT DATE : 4/15/2022 7:40 AM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

CTH ET



'CTH ET' CurbRamp-#3 MODIFIED TYPE 3 / TYPE 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	13+46.91	28.00' RT	960.23	400347.85	706891.59
301	13+56.58	28.00' RT	960.16	400347.76	706901.26
302	13+64.58	28.00' RT	960.11	400347.68	706909.26
303	13+71.43	30.57' RT	960.06	400345.04	706916.10
304	13+79.82	35.24' RT	960.17	400340.30	706924.44
305	13+81.91	36.71' RT	960.20	400338.80	706926.52
306	13+90.47	44.50' RT	960.32	400330.94	706935.00
307	13+92.28	46.63' RT	960.36	400328.79	706936.79
308	13+94.07	48.95' RT	960.37	400326.46	706938.56
309	14+00.86	61.16' RT	960.24	400314.18	706945.24
310	14+04.81	77.57' RT	960.10	400297.73	706949.03
311	13+50.68	30.50' RT	960.62	400345.31	706895.35
312	13+56.58	30.50' RT	960.08	400345.26	706901.24
313	13+64.20	30.50' RT	960.03	400345.19	706908.86
314	13+65.08	30.78' RT	960.52	400344.90	706909.74
315	13+76.89	36.32' RT	960.57	400339.25	706921.50
316	13+77.65	36.80' RT	960.08	400338.76	706922.26
317	13+87.15	44.60' RT	960.22	400330.86	706931.68
318	13+89.80	47.55' RT	960.77	400327.89	706934.31
319	13+56.58	32.50' RT	960.14	400343.26	706901.23

'CTH ET' CurbRamp-#3 MODIFIED TYPE 3 / TYPE 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
320	13+56.58	35.50' RT	960.23	400340.26	706901.20
321	13+64.58	35.50' RT	960.06	400340.18	706909.20
322	13+65.08	35.67' RT	960.08	400340.01	706909.69
323	13+64.58	32.50' RT	960.11	400343.18	706909.22
324	13+65.08	30.78' RT	960.52	400344.90	706909.74
325	13+68.93	36.98' RT	960.22	400338.66	706913.53
326	13+68.92	36.48' RT	960.25	400339.16	706913.52
327	13+73.93	36.88' RT	960.15	400338.71	706918.53
328	13+84.37	44.66' RT	960.28	400330.83	706928.90
329	13+74.10	44.88' RT	960.29	400330.71	706918.62
330	13+69.10	44.98' RT	960.23	400330.66	706913.62
331	13+65.40	45.06' RT	960.15	400330.61	706909.93
332	13+56.59	43.50' RT	960.24	400332.26	706901.13
333	13+45.08	36.50' RT	960.72	400339.36	706889.69
334	13+46.77	30.50' RT	960.65	400345.35	706891.43
335	13+84.39	64.36' RT	959.85	400311.13	706928.73
336	13+77.32	68.10' RT	959.72	400307.46	706921.62
337	13+82.18	87.75' RT	959.31	400287.77	706926.30
338	13+90.15	87.75' RT	959.36	400287.69	706934.27

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CURB RAMP DETAILS - #3	SHEET 22	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - CurbRamp-03

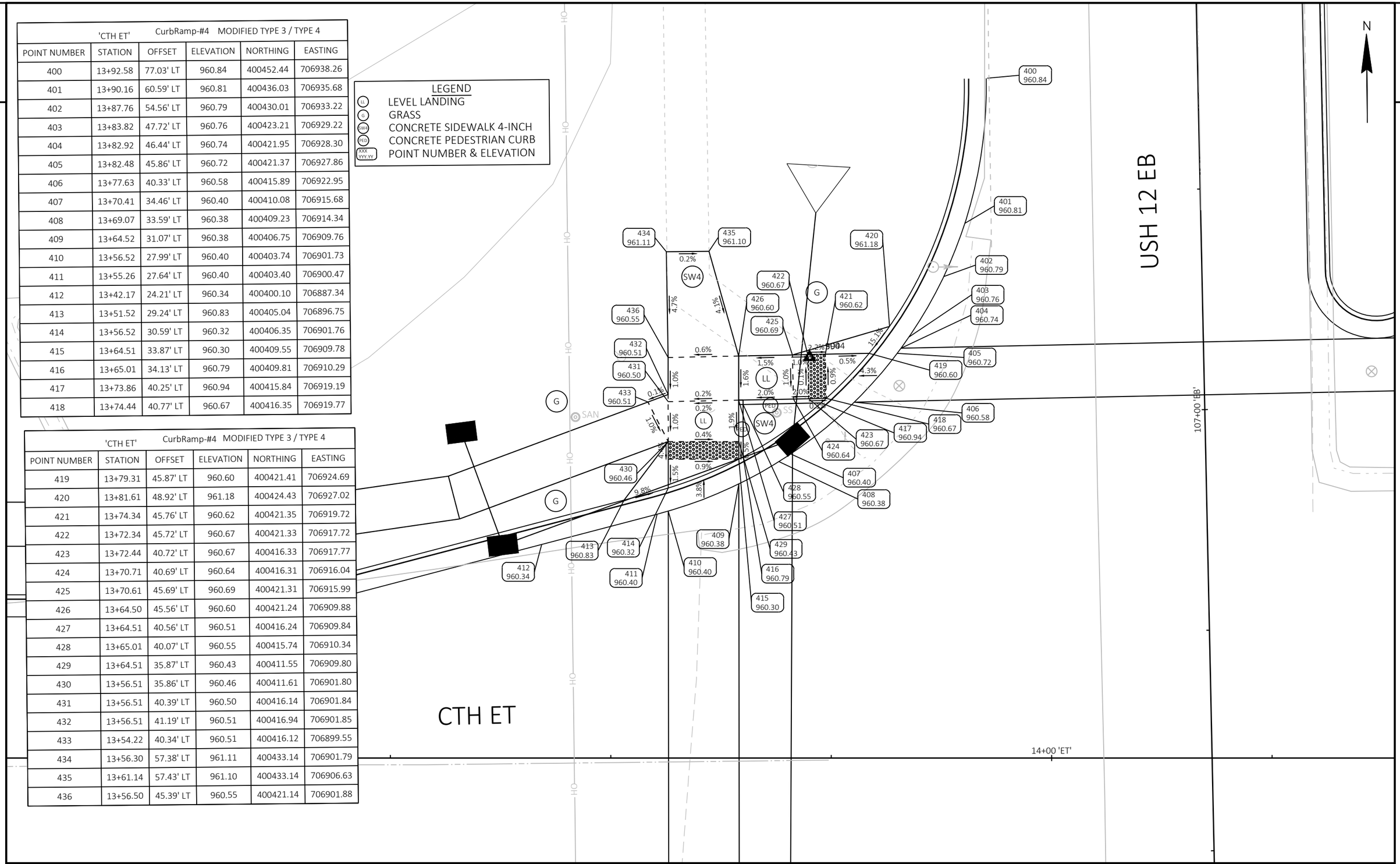
PLOT DATE : 4/15/2022 7:41 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

'CTH ET' CurbRamp-#4 MODIFIED TYPE 3 / TYPE 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
400	13+92.58	77.03' LT	960.84	400452.44	706938.26
401	13+90.16	60.59' LT	960.81	400436.03	706935.68
402	13+87.76	54.56' LT	960.79	400430.01	706933.22
403	13+83.82	47.72' LT	960.76	400423.21	706929.22
404	13+82.92	46.44' LT	960.74	400421.95	706928.30
405	13+82.48	45.86' LT	960.72	400421.37	706927.86
406	13+77.63	40.33' LT	960.58	400415.89	706922.95
407	13+70.41	34.46' LT	960.40	400410.08	706915.68
408	13+69.07	33.59' LT	960.38	400409.23	706914.34
409	13+64.52	31.07' LT	960.38	400406.75	706909.76
410	13+56.52	27.99' LT	960.40	400403.74	706901.73
411	13+55.26	27.64' LT	960.40	400403.40	706900.47
412	13+42.17	24.21' LT	960.34	400400.10	706887.34
413	13+51.52	29.24' LT	960.83	400405.04	706896.75
414	13+56.52	30.59' LT	960.32	400406.35	706901.76
415	13+64.51	33.87' LT	960.30	400409.55	706909.78
416	13+65.01	34.13' LT	960.79	400409.81	706910.29
417	13+73.86	40.25' LT	960.94	400415.84	706919.19
418	13+74.44	40.77' LT	960.67	400416.35	706919.77

'CTH ET' CurbRamp-#4 MODIFIED TYPE 3 / TYPE 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
419	13+79.31	45.87' LT	960.60	400421.41	706924.69
420	13+81.61	48.92' LT	961.18	400424.43	706927.02
421	13+74.34	45.76' LT	960.62	400421.35	706919.72
422	13+72.34	45.72' LT	960.67	400421.33	706917.72
423	13+72.44	40.72' LT	960.67	400416.33	706917.77
424	13+70.71	40.69' LT	960.64	400416.31	706916.04
425	13+70.61	45.69' LT	960.69	400421.31	706915.99
426	13+64.50	45.56' LT	960.60	400421.24	706909.88
427	13+64.51	40.56' LT	960.51	400416.24	706909.84
428	13+65.01	40.07' LT	960.55	400415.74	706910.34
429	13+64.51	35.87' LT	960.43	400411.55	706909.80
430	13+56.51	35.86' LT	960.46	400411.61	706901.80
431	13+56.51	40.39' LT	960.50	400416.14	706901.84
432	13+56.51	41.19' LT	960.51	400416.94	706901.85
433	13+54.22	40.34' LT	960.51	400416.12	706899.55
434	13+56.30	57.38' LT	961.11	400433.14	706901.79
435	13+61.14	57.43' LT	961.10	400433.14	706906.63
436	13+56.50	45.39' LT	960.55	400421.14	706901.88

LEGEND
- LL — LEVEL LANDING
- G — GRASS
- SW4 — CONCRETE SIDEWALK 4-INCH
- PED — CONCRETE PEDESTRIAN CURB
- XXX YYY.YY — POINT NUMBER & ELEVATION



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CURB RAMP DETAILS - #4	SHEET 23	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - CurbRamp-04

PLOT DATE : 4/15/2022 7:41 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

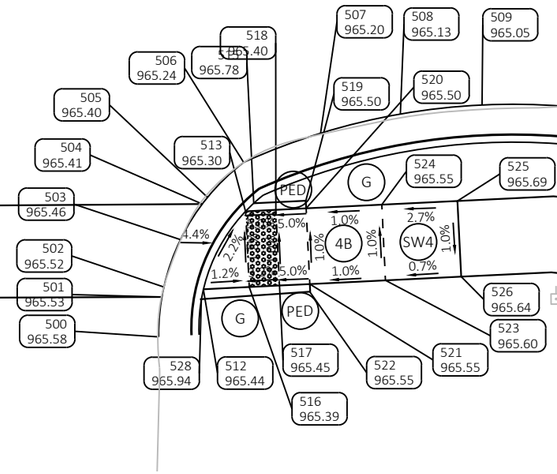
WISDOT/CADDS SHEET 42

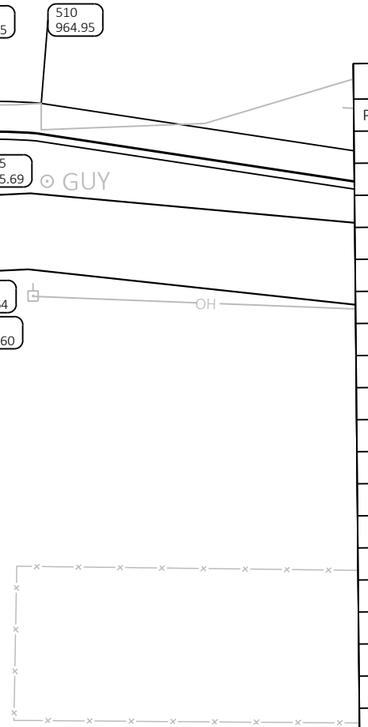
11+00 'ET'

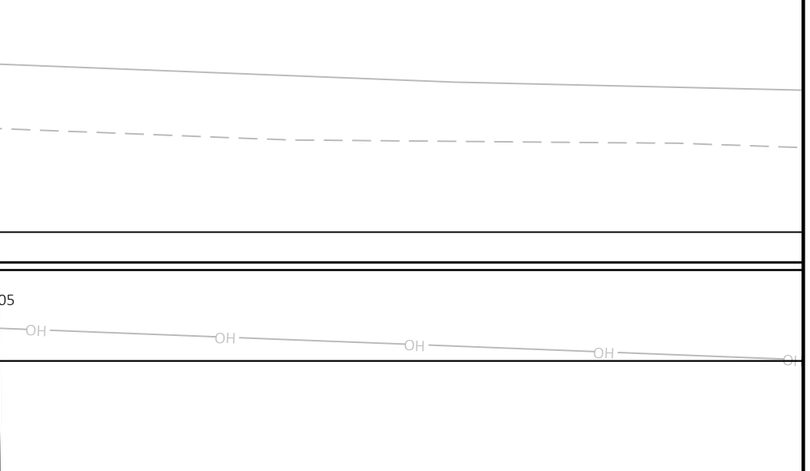
12+00 'ET'

CTH ET

FRONTAGE RD





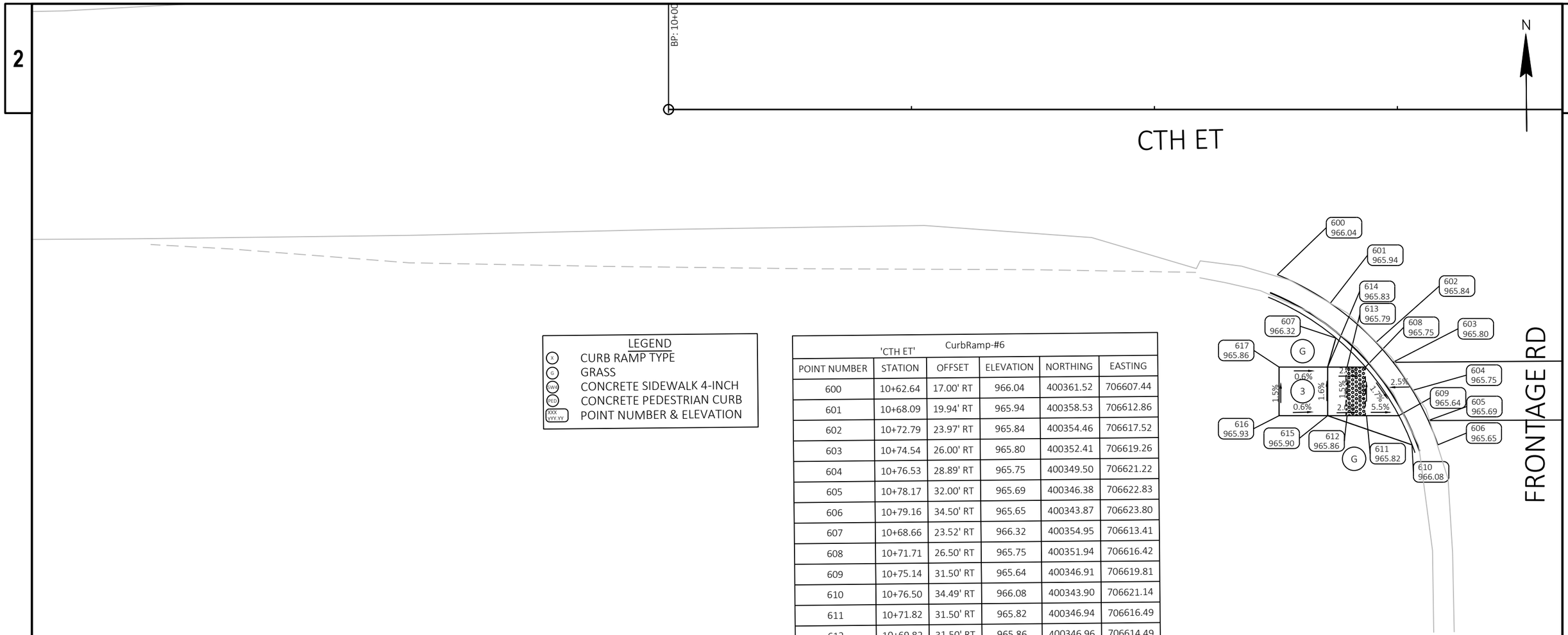


LEGEND

- X — CURB RAMP TYPE
- G — GRASS
- CMS — CONCRETE SIDEWALK 4-INCH
- PED — CONCRETE PEDESTRIAN CURB
- XXX YYY.YY — POINT NUMBER & ELEVATION

'CTH ET' CurbRamp-#5

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
500	11+09.58	34.52' RT	965.58	400343.57	706654.21
501	11+09.79	31.88' RT	965.53	400346.20	706654.45
502	11+09.92	31.22' RT	965.52	400346.86	706654.59
503	11+11.02	28.09' RT	965.46	400349.98	706655.72
504	11+12.46	25.75' RT	965.41	400352.31	706657.18
505	11+12.81	25.30' RT	965.40	400352.75	706657.53
506	11+15.19	23.00' RT	965.24	400355.03	706659.94
507	11+20.26	21.08' RT	965.20	400356.90	706665.02
508	11+25.53	19.81' RT	965.13	400358.12	706670.31
509	11+30.92	19.22' RT	965.05	400358.66	706675.70
510	11+36.34	19.30' RT	964.95	400358.53	706681.12
511	11+12.40	32.02' RT	0.00	400346.04	706657.06
512	11+12.53	31.37' RT	965.44	400346.69	706657.20
513	11+15.31	26.23' RT	965.30	400351.80	706660.03
514	11+15.85	25.70' RT	0.00	400352.32	706660.57
515	11+15.85	25.70' RT	965.78	400352.32	706660.57
516	11+15.56	31.22' RT	965.39	400346.81	706660.22
517	11+17.56	31.12' RT	965.45	400346.88	706662.22
518	11+17.31	26.13' RT	965.40	400351.88	706662.03
519	11+19.29	25.54' RT	965.50	400352.45	706664.01
520	11+19.31	26.03' RT	965.50	400351.96	706664.03
521	11+19.55	31.03' RT	965.55	400346.96	706664.22
522	11+19.56	31.54' RT	965.55	400346.45	706664.22
523	11+24.55	30.78' RT	965.60	400347.16	706669.22
524	11+24.30	25.79' RT	965.55	400352.15	706669.02
525	11+29.30	25.55' RT	965.69	400352.35	706674.02
526	11+29.54	30.54' RT	965.64	400347.35	706674.21
527	11+12.31	32.03' RT	965.94	400346.03	706656.97
528	11+12.40	32.02' RT	965.94	400346.04	706657.06



LEGEND

- X — CURB RAMP TYPE
- G — GRASS
- CWK — CONCRETE SIDEWALK 4-INCH
- PED — CONCRETE PEDESTRIAN CURB
- XX YY.YY — POINT NUMBER & ELEVATION

'CTH ET' CurbRamp-#6

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
600	10+62.64	17.00' RT	966.04	400361.52	706607.44
601	10+68.09	19.94' RT	965.94	400358.53	706612.86
602	10+72.79	23.97' RT	965.84	400354.46	706617.52
603	10+74.54	26.00' RT	965.80	400352.41	706619.26
604	10+76.53	28.89' RT	965.75	400349.50	706621.22
605	10+78.17	32.00' RT	965.69	400346.38	706622.83
606	10+79.16	34.50' RT	965.65	400343.87	706623.80
607	10+68.66	23.52' RT	966.32	400354.95	706613.41
608	10+71.71	26.50' RT	965.75	400351.94	706616.42
609	10+75.14	31.50' RT	965.64	400346.91	706619.81
610	10+76.50	34.49' RT	966.08	400343.90	706621.14
611	10+71.82	31.50' RT	965.82	400346.94	706616.49
612	10+69.82	31.50' RT	965.86	400346.96	706614.49
613	10+69.82	26.50' RT	965.79	400351.96	706614.54
614	10+67.82	26.50' RT	965.83	400351.98	706612.54
615	10+67.82	31.50' RT	965.90	400346.98	706612.49
616	10+62.82	31.50' RT	965.93	400347.02	706607.49
617	10+62.82	26.50' RT	965.86	400352.02	706607.54

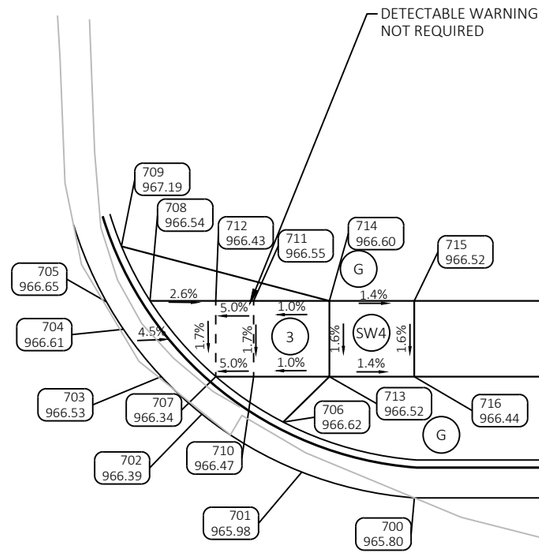
2

N

LEGEND

- (SW4) CURB RAMP TYPE
- (G) GRASS
- (SW4) CONCRETE SIDEWALK 4-INCH
- (PED) CONCRETE PEDESTRIAN CURB
- (XXX YYY.YY) POINT NUMBER & ELEVATION

'CTH ET' CurbRamp-#7					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
700	10+85.13	16.00' LT	965.80	400394.31	706630.25
701	10+77.70	17.70' LT	965.98	400396.08	706622.83
702	10+71.10	21.52' LT	966.39	400399.96	706616.27
703	10+68.42	24.00' LT	966.53	400402.47	706613.61
704	10+65.93	27.12' LT	966.61	400405.61	706611.15
705	10+64.80	28.94' LT	966.65	400407.44	706610.04
706	10+76.47	21.00' LT	966.62	400399.39	706621.63
707	10+72.03	24.00' LT	966.34	400402.43	706617.22
708	10+67.68	29.00' LT	966.54	400407.48	706612.92
709	10+65.80	32.60' LT	967.19	400411.09	706611.07
710	10+74.53	24.00' LT	966.47	400402.41	706619.72
711	10+74.53	29.00' LT	966.55	400407.41	706619.76
712	10+72.03	29.00' LT	966.43	400407.43	706617.26
713	10+79.53	24.00' LT	966.52	400402.36	706624.72
714	10+79.53	29.00' LT	966.60	400407.36	706624.76
715	10+85.13	29.00' LT	966.52	400407.31	706630.36
716	10+85.13	24.00' LT	966.44	400402.31	706630.32



BANK DRIVEWAY

CTH ET

11+00 'ET'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CURB RAMP DETAILS - #7	SHEET 26	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - CurbRamp-07

PLOT DATE : 2/25/2022 11:35 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- SILT FENCE
- EROSION BALE, BARRIER
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- A B C — INLET PROTECTION TYPE
- A/C — PLACE INLET PROTECTION TYPE A UNTIL CURB & GUTTER IS PAVED THEN PLACE INLET PROTECTION TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

STAGE 4 RESTORATION AFTER TEMPORARY CROSSOVERS ARE REMOVED

EXISTING R/W

STAGE 1 B

STAGE 1 C

A/C

STAGE 1 C

STAGE 1 B

STAGE 4 RESTORATION AFTER TEMPORARY CROSSOVERS ARE REMOVED

EXISTING R/W

STAGE 1 C

STAGE 1 C

A/C

A/C

A/C

A/C

EXISTING R/W

EXISTING R/W

1201

905

1214LT

1403

1402

1414LT

906

1416LT

1418LT

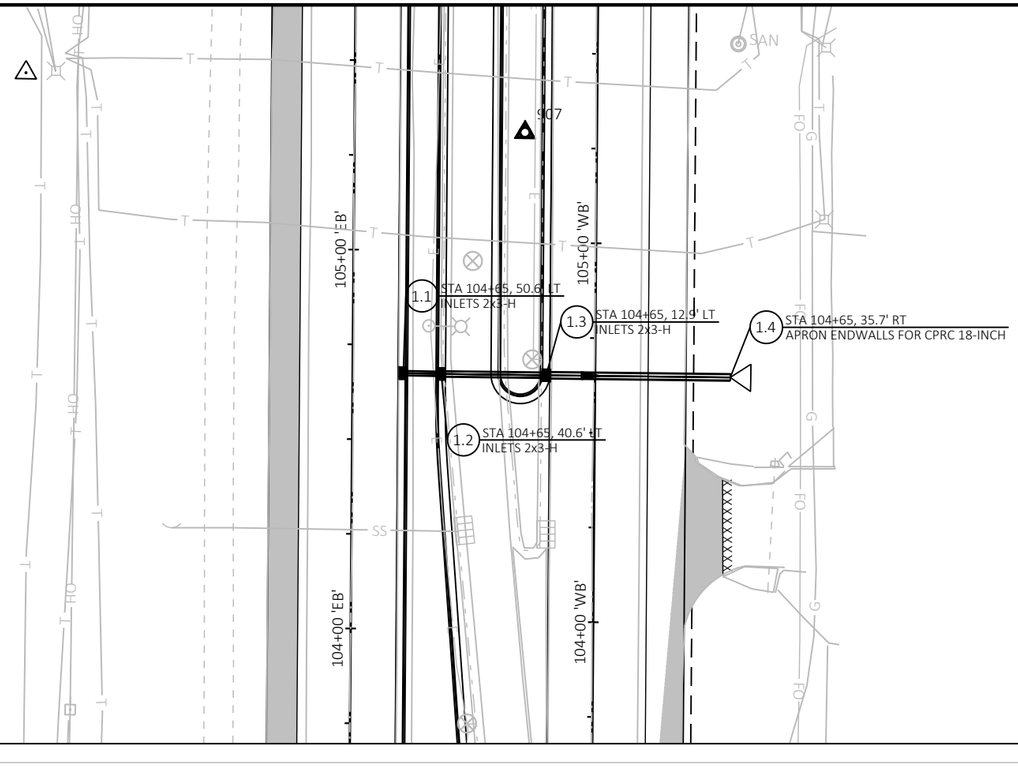
98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	EROSION CONTROL	SHEET 27	E

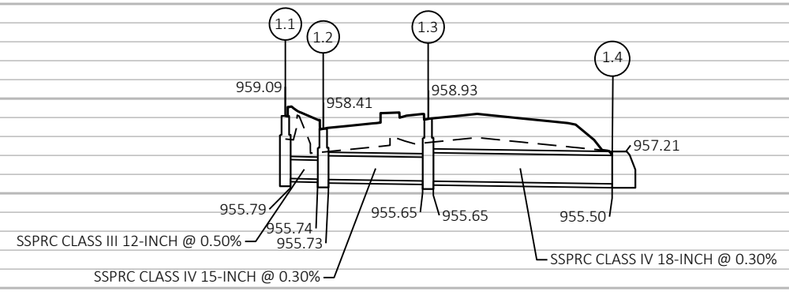
FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2022 11:27 AM PLOT BY : BLUM, JOSHUA M PLOT NAME : PLOT SCALE : 1 IN:100 FT



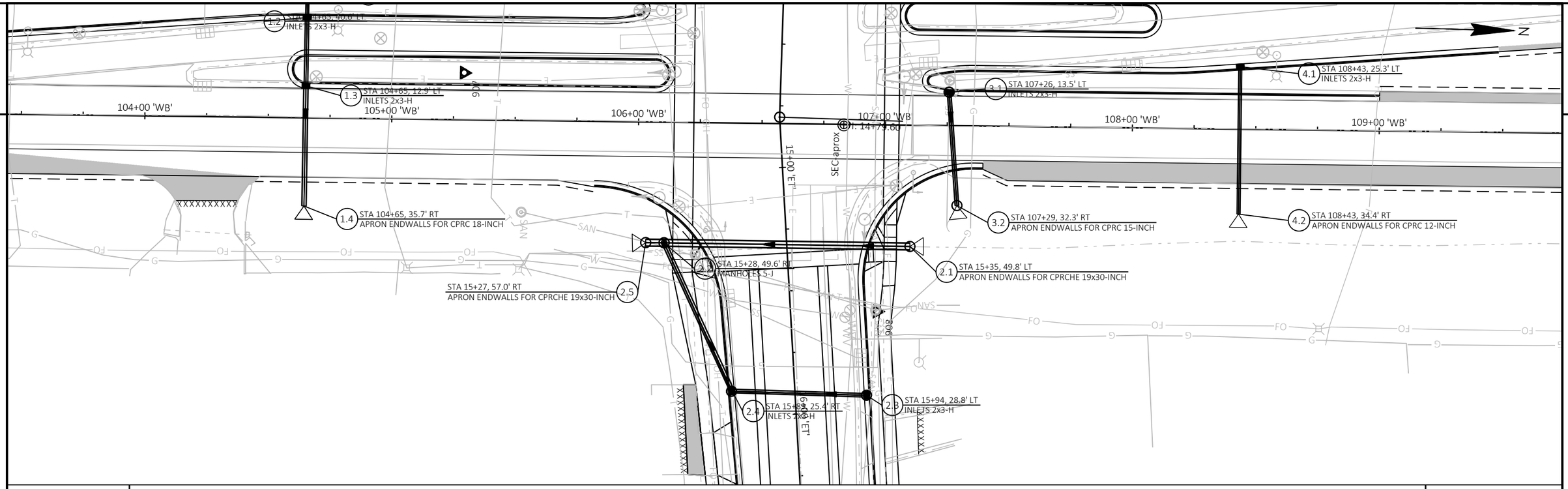
2

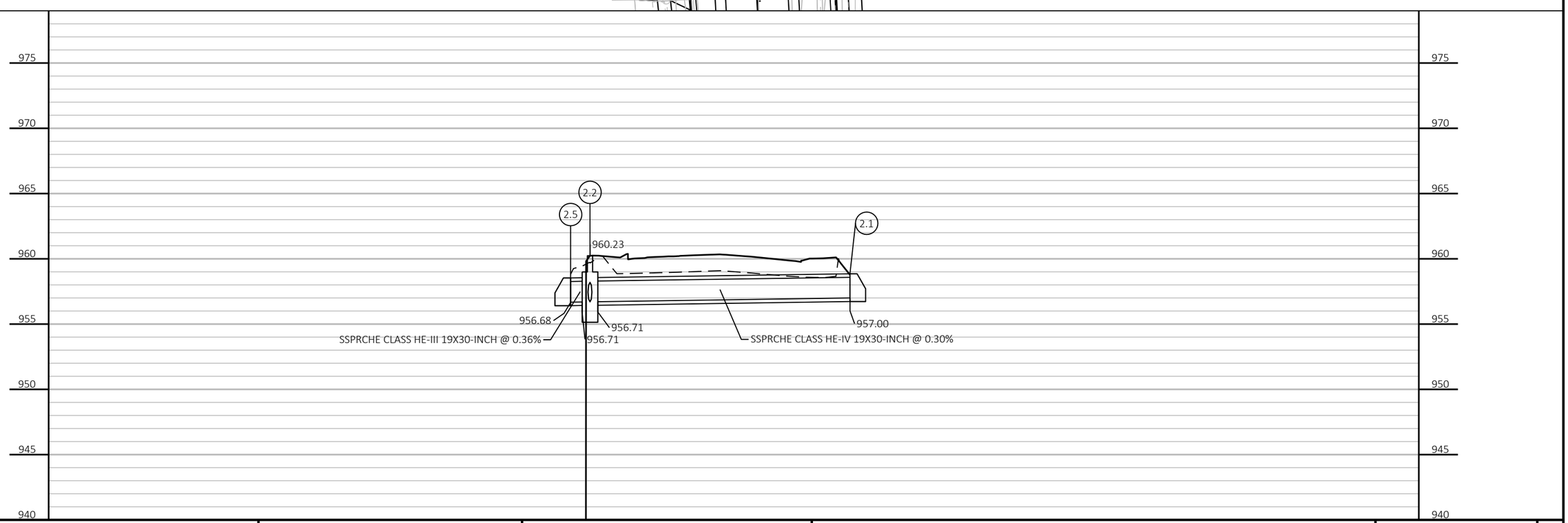
975
970
965
960
955
950
945
940



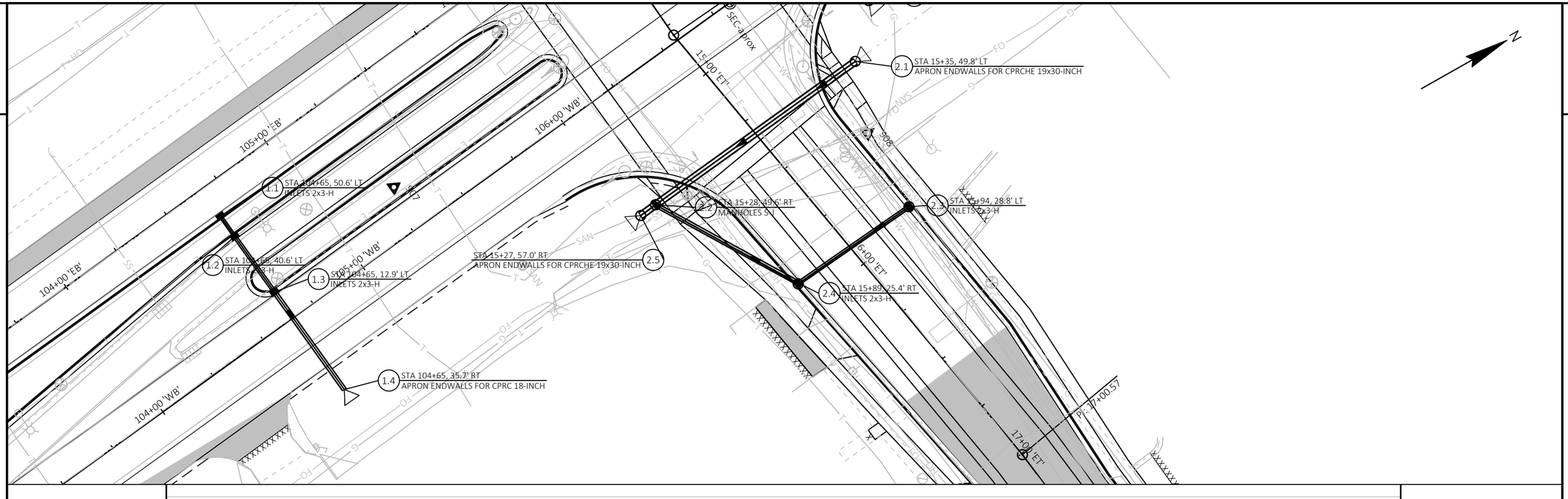
975
970
965
960
955
950
945
940

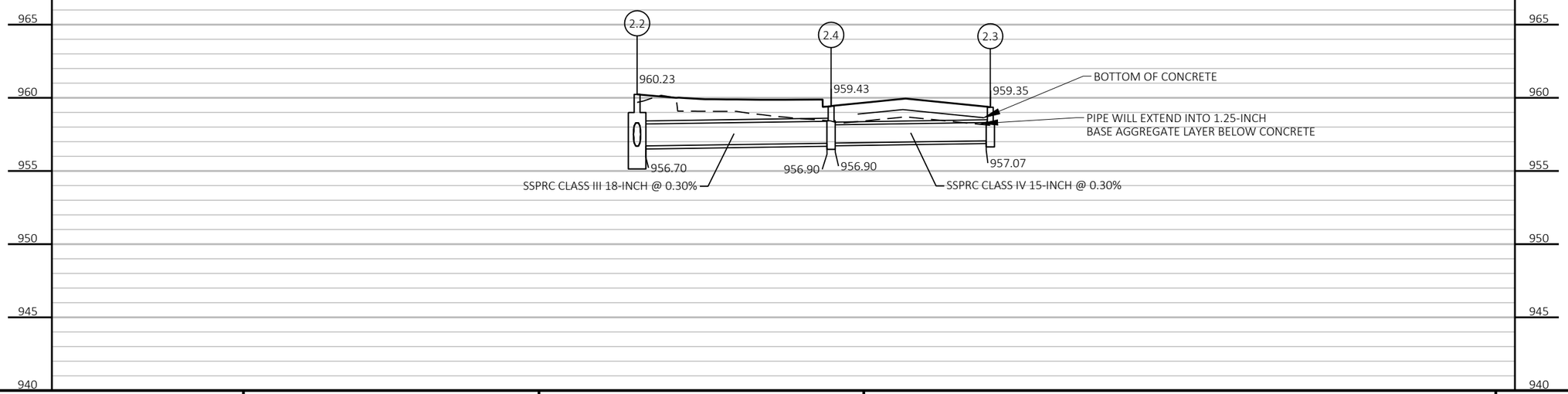
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 28	E


1.2 STA 104+65, 40.0' LT
INLETS 2x3-H
1.3 STA 104+65, 12.9' LT
INLETS 2x3-H
104+00 'WB'
105+00 'WB'
106+00 'WB'
107+00 'WB'
108+00 'WB'
109+00 'WB'
15+00 'ET'
SEC approx
3.1 STA 107+26, 13.5' LT
INLETS 2x3-H
4.1 STA 108+43, 25.3' LT
INLETS 2x3-H
1.4 STA 104+65, 35.7' RT
APRON ENDWALLS FOR CPRC 18-INCH
3.2 STA 107+29, 32.3' RT
APRON ENDWALLS FOR CPRC 15-INCH
4.2 STA 108+43, 34.4' RT
APRON ENDWALLS FOR CPRC 12-INCH
2.2 STA 15+28, 49.6' RT
MANHOLES S-J
2.1 STA 15+35, 49.8' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH
STA 15+27, 57.0' RT
APRON ENDWALLS FOR CPRCHE 19x30-INCH
2.5
2.4 STA 15+83, 25.4' RT
INLETS 2x3-H
2.3 STA 15+94, 28.8' LT
INLETS 2x3-H
96.00 'ET'
N


975
970
965
960
955
950
945
940
2.2
2.5
2.1
960.23
956.68
956.71
956.71
957.00
SSPRCHE CLASS HE-III 19X30-INCH @ 0.36%
SSPRCHE CLASS HE-IV 19X30-INCH @ 0.30%

2





PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 30	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022503

PLOT DATE : 3/11/2022 7:32 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

5.2 STA 13+33, 36.9' LT
INLETS MEDIAN 1G-MS

5.1 STA 13+73, 61.8' LT
APRON ENDWALLS FOR CPRC 18-INCH

3.1 STA 107+26, 13.5' LT
INLETS 2x3-H

3.2 STA 107+29, 32.3' RT
APRON ENDWALLS FOR CPRC 15-INCH

2.1 STA 15+35, 49.8' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH

5.3 STA 13+71, 36.1' LT
CATCH BASINS 5-H

5.4 STA 13+38, 24.1' LT
INLETS 2x3-H

5.6 STA 13+47, 29.3' RT
INLETS 2x3-H

5.5 STA 13+70, 31.5' RT
CATCH BASINS 5-H

2.3 STA 15+94, 28.8' LT
INLETS 2x3-H

108+00 'EB'

108+00 'WB'

107+00 'EB'

107+00 'WB'

SEC-aprox

12+00 'ET'

13+00 'ET'

14+00 'ET'

15+00 'ET'

16+00 'ET'

17+00 'ET'

P.I. 17+00.57

3.1

3.2

961.42

959.94

958.64

958.50

SSPRC CLASS IV 15-INCH @ 0.30%

975 970 965 960 955 950 945 940

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 31	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022504

PLOT DATE : 3/11/2022 7:32 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

N

9003

109+00 'EB'

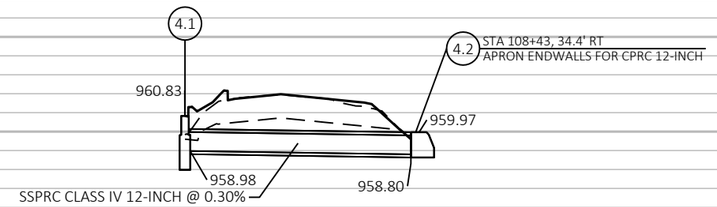
109+00 'WB'

108+00 'EB'

108+00 'WB'

4.1 STA 108+43, 25.3' LT
INLETS 2x3-H

4.2 STA 108+43, 34.4' RT
APRON ENDWALLS FOR CPRC 12-INCH



975 970 965 960 955 950 945 940

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 32	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022505

PLOT DATE : 3/11/2022 7:32 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 41

2

N

13+00 'ET'

14+00 'ET'

3903

STA 13+71, 74.7' RT
APRON ENDWALLS FOR CPRC 18-INCH
5.7

STA 13+47, 29.3' RT
INLETS 2x3-H
5.6

STA 13+70, 31.5' RT
CATCH BASINS 5-H
5.5

STA 13+33, 36.9' LT
INLETS MEDIAN 1G-MS
5.2

STA 13+38, 24.1' LT
INLETS 2x3-H
5.4

STA 13+71, 36.1' LT
CATCH BASINS 5-H
5.3

STA 13+73, 61.8' LT
APRON ENDWALLS FOR CPRC 18-INCH
5.1

104+00 'EB'
105+00 'EB'
106+00 'EB'
107+00 'EB'
108+00 'EB'
109+00 'EB'

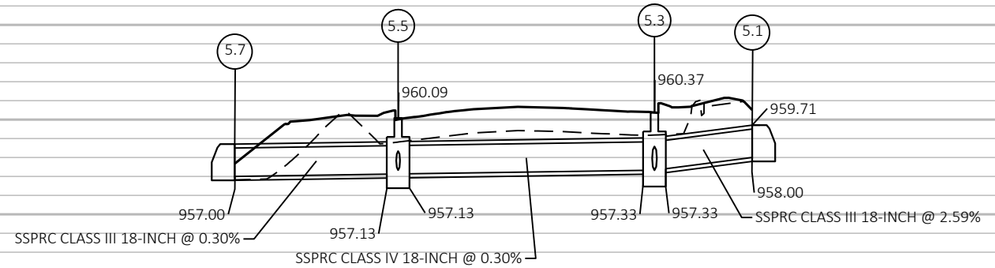
STA 104+65, 50.6' LT
INLETS 2x3-H
1.1

STA 104+65, 70.6' LT
INLETS 2x3-H
1.2

STA 107+26, 13.5' LT
INLETS 2x3-H
3.1

STA 108+43, 25.3' LT
INLETS 2x3-H
4.1

975
970
965
960
955
950
945
940



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 33	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022506

PLOT DATE : 3/11/2022 7:32 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

5.1 STA 13+73, 61.8' LT
APRON ENDWALLS FOR CPRC 18-INCH

5.2 STA 13+33, 36.9' LT
INLETS MEDIAN 1G-MS

5.3 STA 13+71, 36.3' LT
CATCH BASINS 5-H

5.4 STA 13+38, 24.1' LT
INLETS 2x3-H

5.5 STA 13+70, 31.5' RT
CATCH BASINS 5-F

5.6 STA 13+47, 29.3' RT
INLETS 2x3-H

3.1 STA 107+26, 1.5' LT
INLETS 2x3-H

3.2 STA 107+29, 32.3' RT
APRON ENDWALLS FOR CPRC 15-INCH

2.1 STA 15+35, 49.8' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH

2.3 STA 15+94, 28.9' LT
INLETS 2x3-H

2.4 STA 15+89, 28.4' RT
INLETS 2x3-H

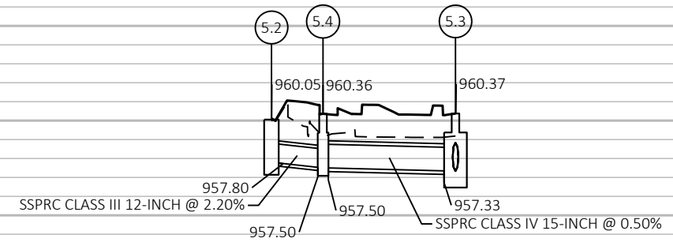
2.2 STA 15+28, 49.6' RT
MANHOLES 5-J

2.5 STA 15+27, 57.0' RT
APRON ENDWALLS FOR CPRCHE 19x30-INCH

11+00 'ET'
12+00 'ET'
13+00 'ET'
14+00 'ET'
15+00 'ET'
16+00 'ET'
106+00 'EB'
107+00 'EB'
107+00 'WB'

SEC-aprox

905
906
907
908

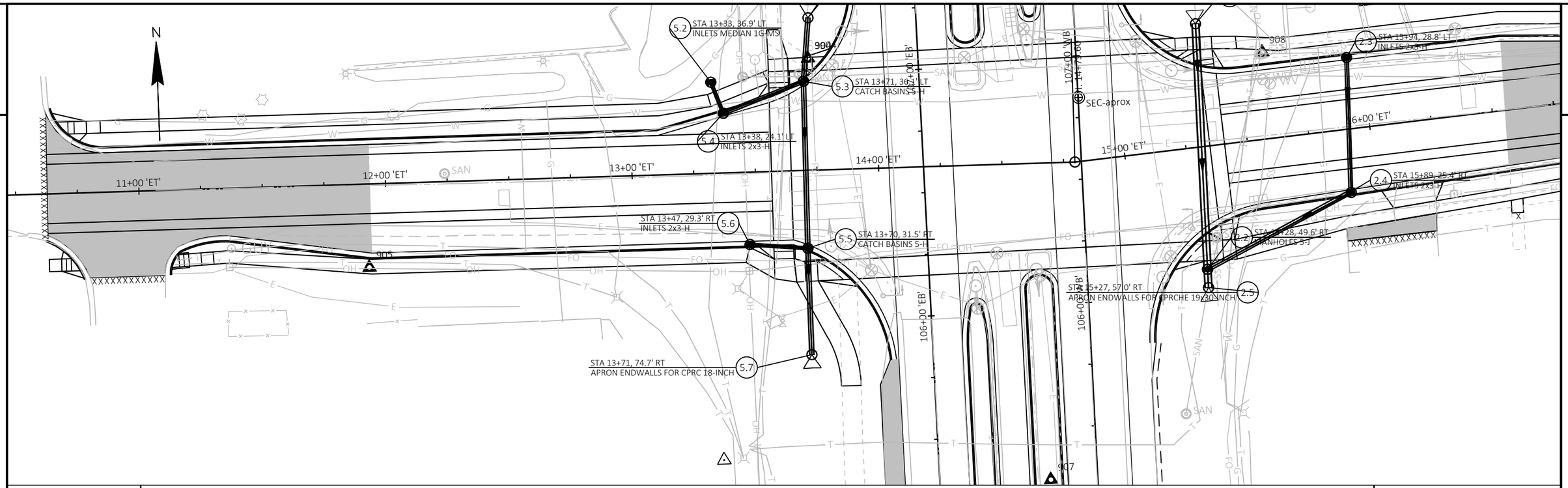


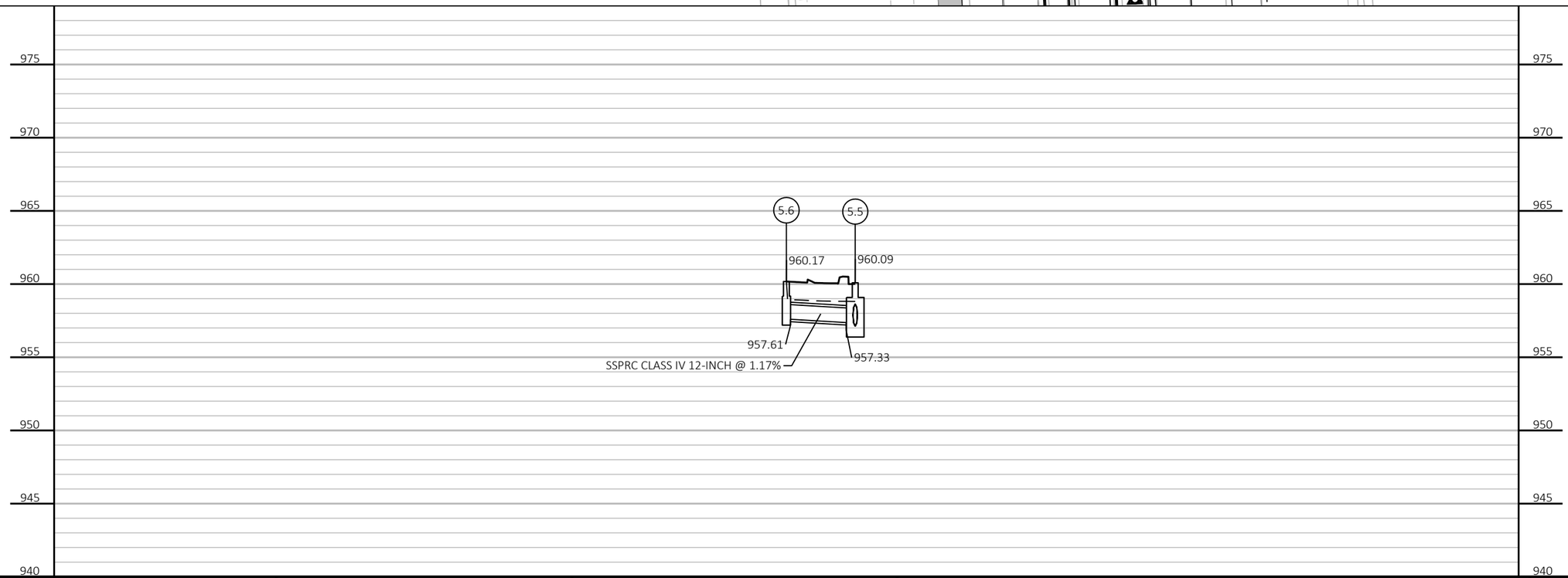
975
970
965
960
955
950
945
940

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 34	E

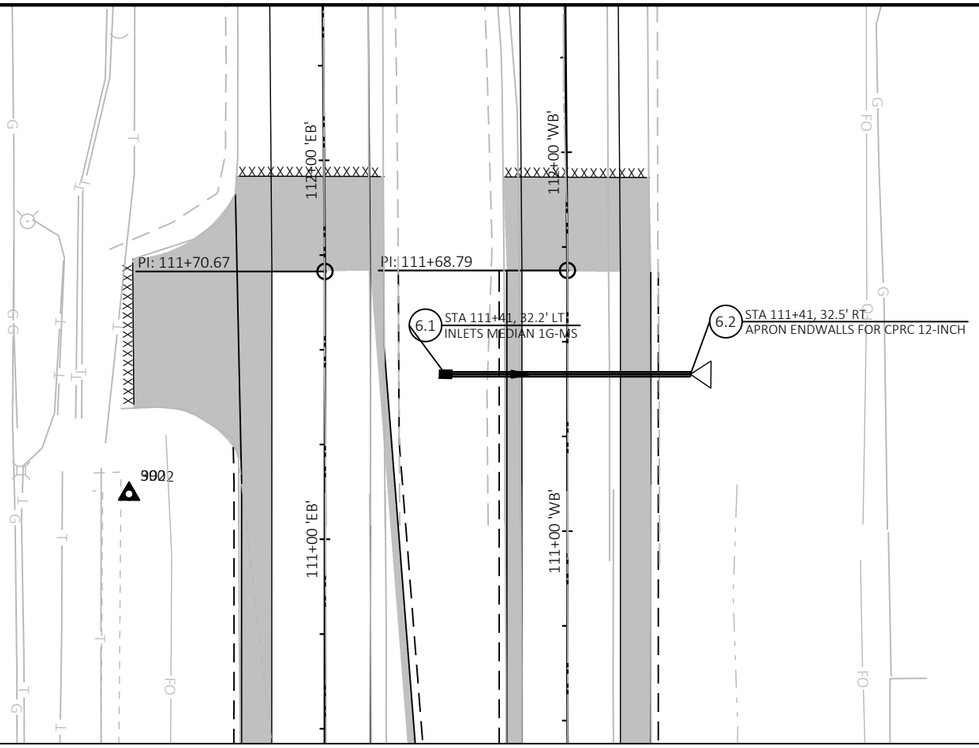
FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022507

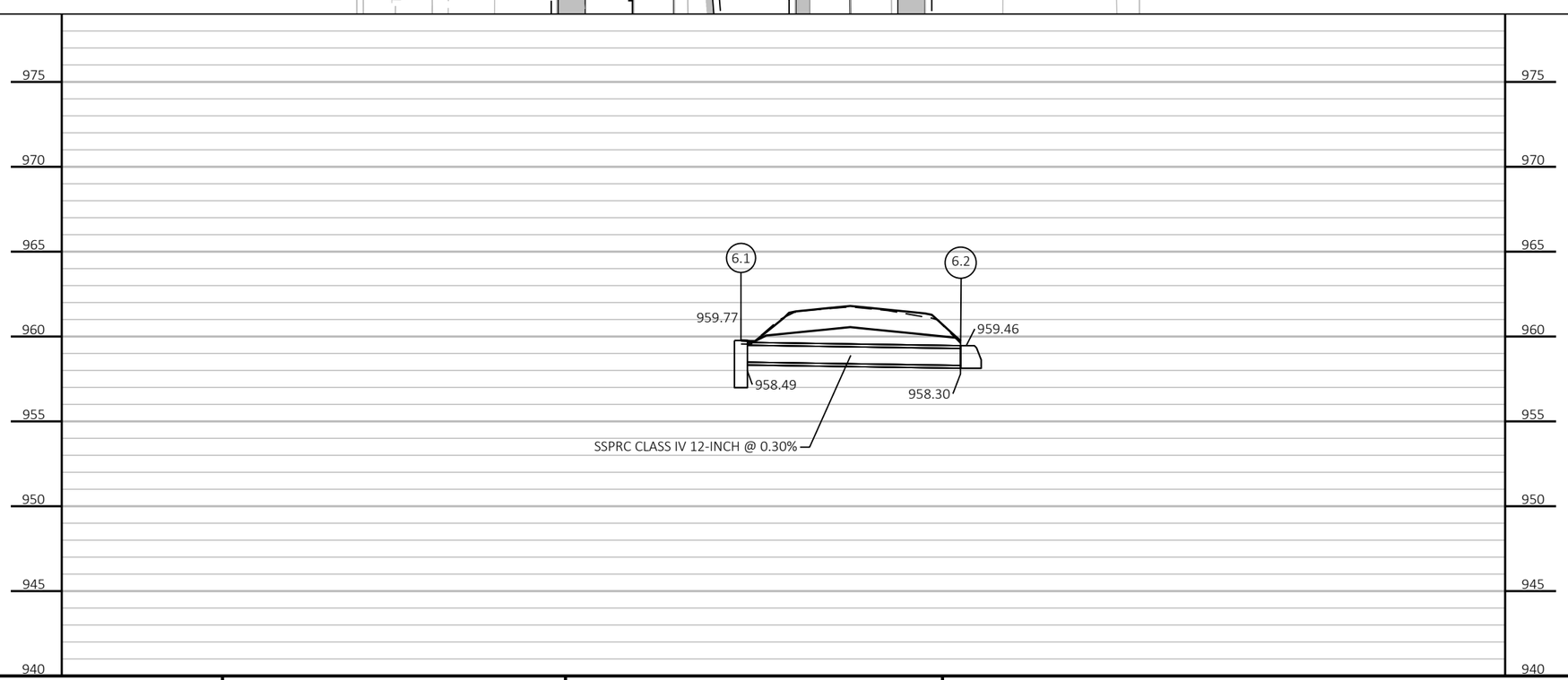
PLOT DATE : 3/11/2022 7:32 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT


N
5.2
STA 13+33, 36.9' LT
INLETS MEDIAN 1G-MS
5.3
STA 13+71, 36.1' LT
CATCH BASINS 5-H
5.4
STA 13+38, 24.1' LT
INLETS 2x3-H
5.6
STA 13+47, 29.3' RT
INLETS 2x3-H
5.5
STA 13+70, 31.5' RT
CATCH BASINS 5-H
5.7
STA 13+71, 74.7' RT
APRON ENDWALLS FOR CPRC 18-INCH
2.3
STA 15+94, 28.8' LT
INLETS 2x3-H
2.4
STA 15+89, 25.4' RT
INLETS 2x3-H
2.2
STA 15+28, 49.6' RT
MANHOLES 5-I
2.5
STA 15+27, 57.0' RT
APRON ENDWALLS FOR CPRCHE 19x30 INCH
SEC-aprox
11+00 'ET'
12+00 'ET'
13+00 'ET'
14+00 'ET'
15+00 'ET'
16+00 'ET'
106+00 'EB'
107+00 'WB'
905
906
907
908
SAN
XXXXXXXXXXXX
XXXXXXXXXXXXXX


975
970
965
960
955
950
945
940
5.6
5.5
960.17
960.09
957.61
957.33
SSPRC CLASS IV 12-INCH @ 1.17%

2





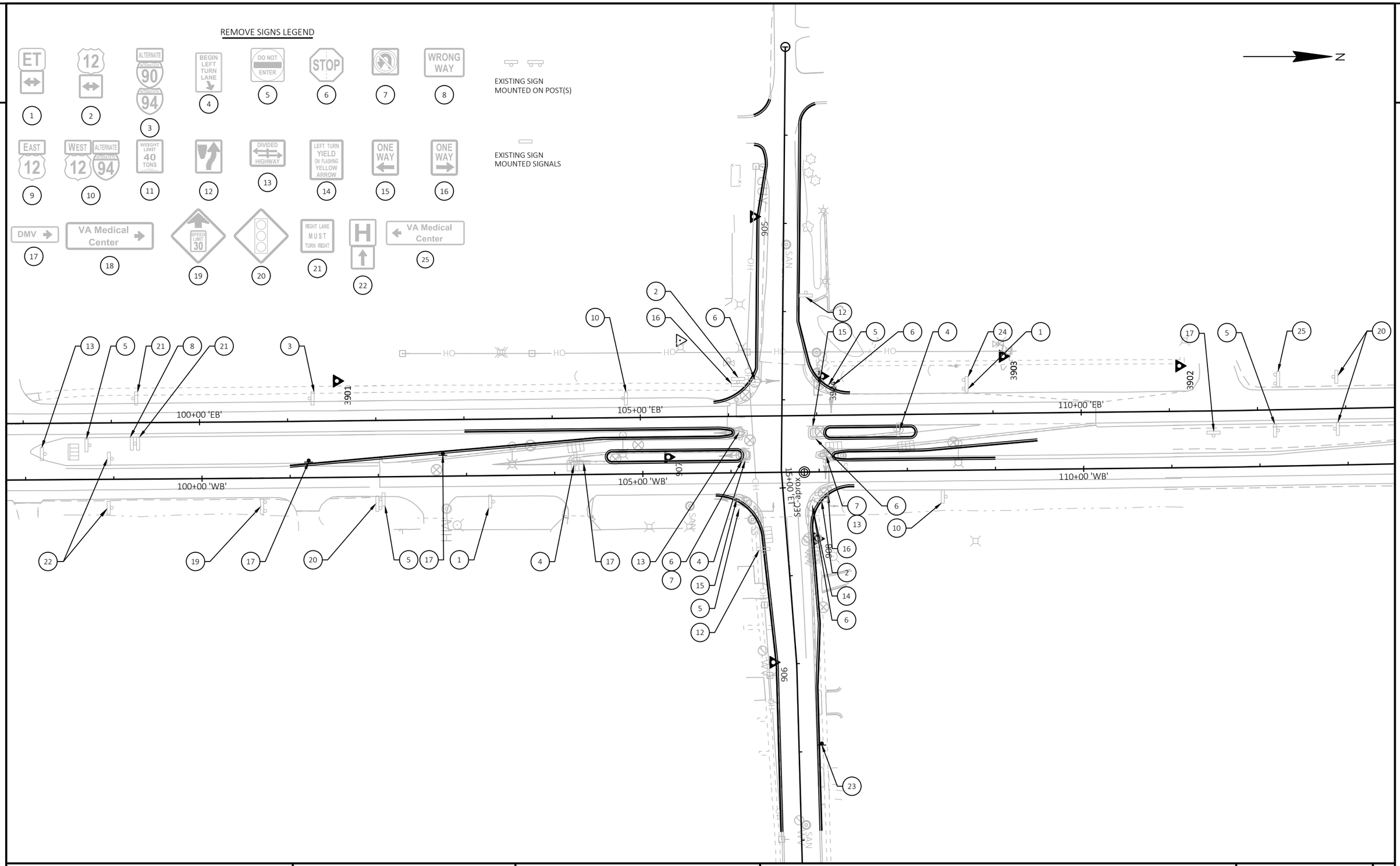
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	STORM SEWER	SHEET 36	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022509
PLOT DATE : 3/11/2022 7:33 PM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

REMOVE SIGNS LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED SIGNALS



2

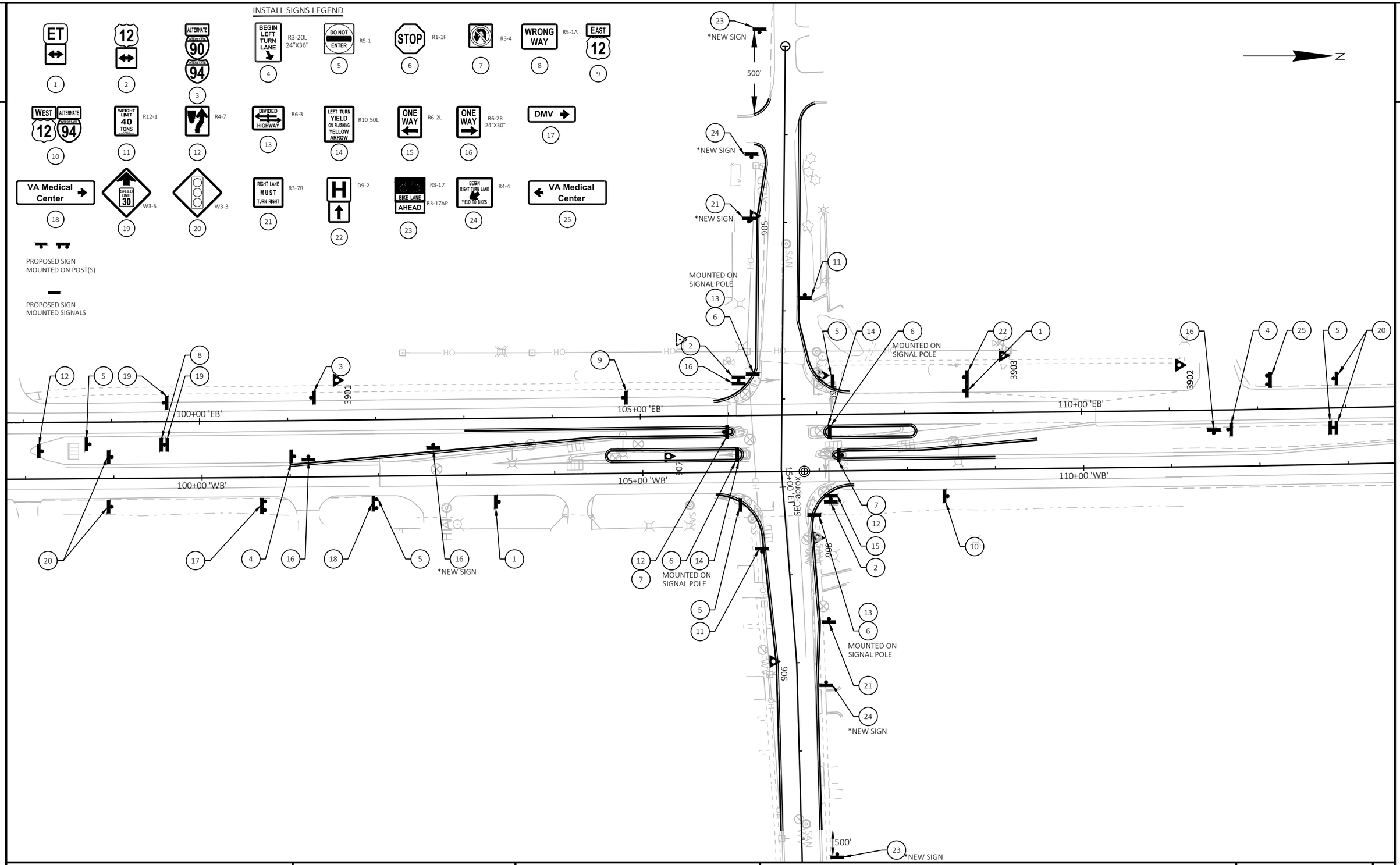
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	MOVING SIGNS - REMOVALS	SHEET 37	E

INSTALL SIGNS LEGEND

1 — ET
2 — 12
3 — ALTERNATE 90 94
4 — BEGIN LEFT TURN LANE — R3-20L 24"X36"
5 — DO NOT ENTER — R5-1
6 — STOP — R1-1F
7 — R3-4
8 — WRONG WAY — R5-1A
9 — EAST 12
10 — WEST ALTERNATE 12 94
11 — WEIGHT LIMIT 40 TONS — R12-1
12 — R4-7
13 — DIVIDED HIGHWAY — R6-3
14 — LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50L
15 — ONE WAY — R6-2L
16 — ONE WAY — R6-2R 24"X30"
17 — DMV
18 — VA Medical Center
19 — SPEED LIMIT 30 — W3-5
20 — W3-3
21 — RIGHT LANE MUST TURN RIGHT — R3-7R
22 — D9-2
23 — BIKE LANE AHEAD — R3-17 / R3-17AP
24 — BEGIN RIGHT TURN LANE YIELD TO BIKES — R4-4
25 — VA Medical Center

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED SIGNALS



2

2

N

SEC-aprox

TRAFFIC SIGNAL REMOVAL MAJOR ITEMS SUMMARY

8 - TYPE 1 BASES
4 - TYPE 2 BASES
3 - TYPE 5 BASES
1 - TYPE 9 SPECIAL CABINET BASE
8 - PEDESTAL BASES
7 - TRANSFORMER BASES
8 - 15 FOOT TRAFFIC SIGNAL STANDARDS
4 - TYPE 3 POLES
3 - TYPE 5 POLES
3 - 20' MAST ARMS
1 - 25' MAST ARM
10 - 12' LUMINAIRE ARM/LED FIXTURES
18 - TRAFFIC SIGNAL FACES
1 - TRAFFIC SIGNAL CONTROL CABINET
19 - STEEL PULL BOXES

TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. S41-0338

REGION CONTACT: COLLIN WEBB
DESIGNED BY:
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC SIGNAL REMOVAL PLAN - USH 12 & CTH ET	SHEET 39	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024001-SR.DWG
LAYOUT NAME - 024001-sr

PLOT DATE : 1/11/2022 2:06 PM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES:

1. FINAL LOCATION OF WOOD POLES, SIGNAL HEADS, AND TEMPORARY CABINET SHALL BE AS DIRECTED BY THE ENGINEER. USE CAUTION WHEN LOCATING WOOD POLES.

2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER. MULTIPLE ADJUSTMENTS MAY BE REQUIRED AND ARE CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL BID ITEM.

3. COORDINATE PLACEMENT OF PEDESTRIAN PUSH BUTTONS TO BE ACCESSIBLE ACCORDING TO ADA REQUIREMENTS DURING ALL STAGES.

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

5. MAINTAIN PROPER SIGNAL HEAD LOCATIONS THROUGH EACH CONSTRUCTION STAGE. ADJUSTMENTS MAY BE REQUIRED IN EACH STAGE AND ARE CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC SIGNAL BID ITEM.

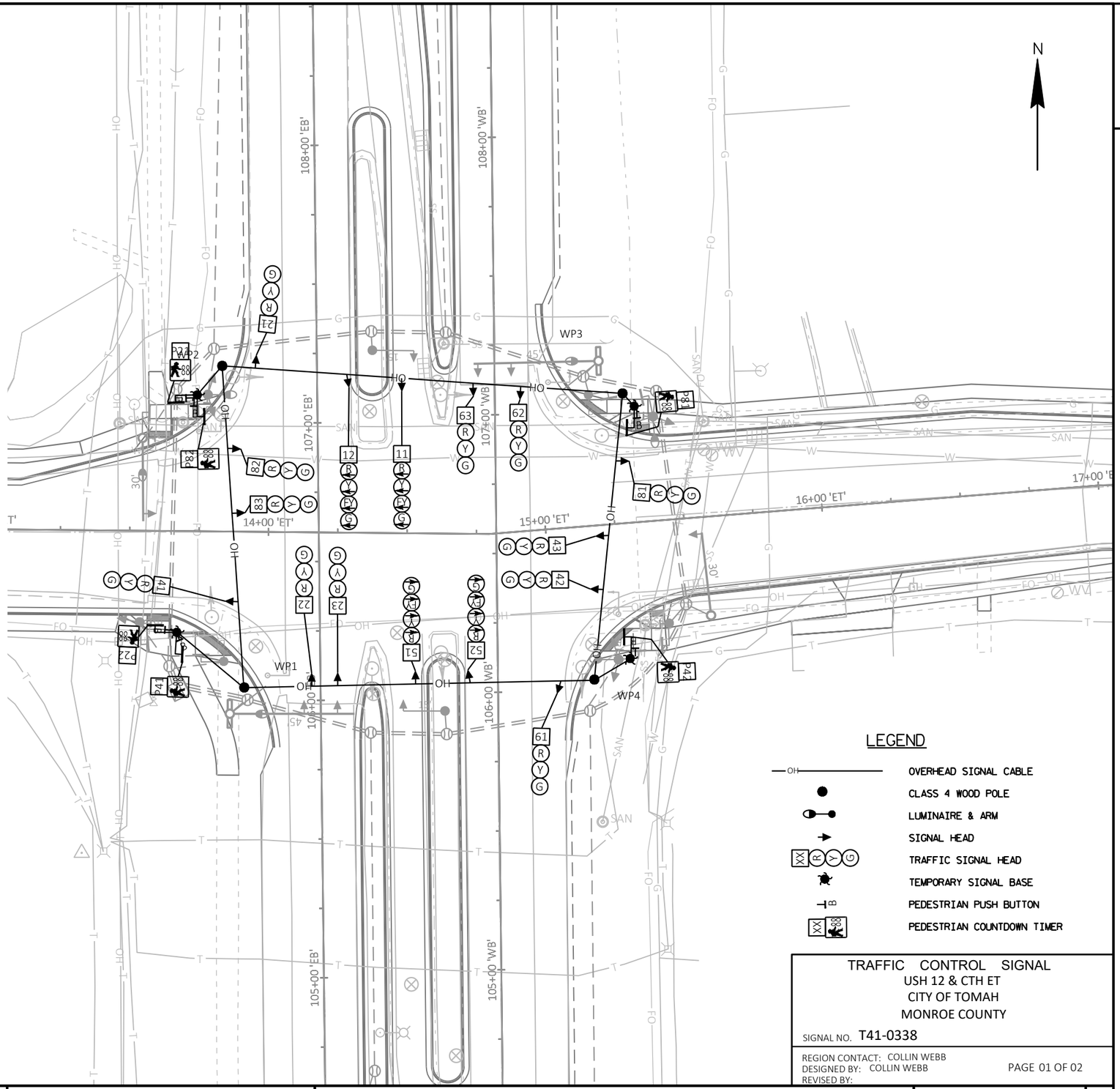
   5.1. FOR THRU INDICATIONS WITH MULTIPLE RECEIVING LANES, MOUNT SIGNAL HEAD OVER EACH RECEIVING LANE.

   5.2. FOR THRU INDICATIONS WITH ONE RECEIVING LANE, MOUNT ONE SIGNAL HEAD DIRECTLY ABOVE RECEIVING LANE AND THE OTHER SIGNAL HEAD 8' TO THE RIGHT.

   5.3. FOR LEFT-TURN INDICATIONS, MOUNT ONE SIGNAL HEAD DIRECTLY IN FRONT OF TURNING LANE. IF SUPPLEMENTARY HEADS ARE SHOWN, MOUNT SIGNAL HEAD 8' TO THE LEFT.

6. ALL EXISTING SIGNAL HEADS MUST BE TURNED, REMOVED OR BAGGED PRIOR TO TURNING TEMPORARY TRAFFIC SIGNAL ON.

7. ALL TEMPORARY SIGNALS MUST BE BAGGED PRIOR TO TURNING TEMPORARY TRAFFIC SIGNAL ON.



TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. T41-0338

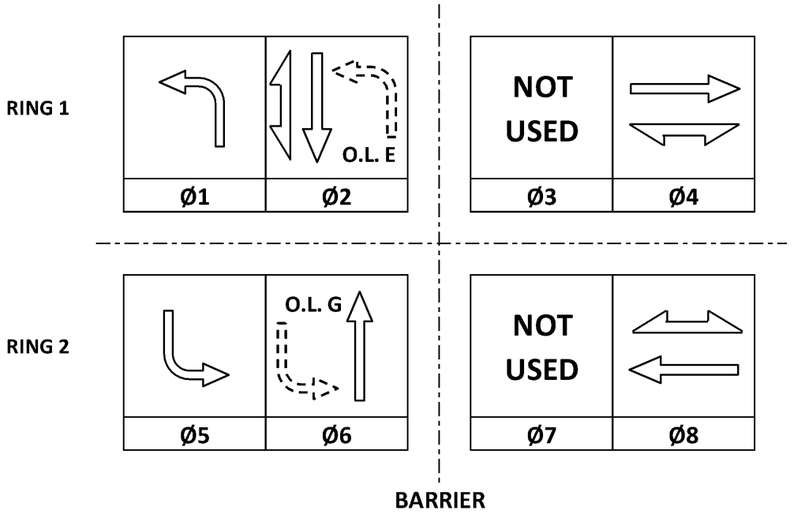
REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

PAGE 01 OF 02

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TEMPORARY TRAFFIC SIGNAL PLAN - USH 12 & CTH ET/VETERANS ST	SHEET 40	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - 024101-st
PLOT DATE : 3/21/2022 2:27 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	11,12	R ←
Ø2	21,22,23	R
Ø4	41,42,43	R
Ø5	51,52	R ←
Ø6	61,62,63	R
Ø8	81,82,83	R
Ø2P	P21,P22	
Ø4P	P41,P42	
Ø8P	P81,P82	
OLE	11,12	-
OLG	51,52	-



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2		6	MIN	X
3				
4		8		X
5				X
6		2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	X
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

VIDEO DETECTION - WISDOT SUPPLIED/MAINTAINED

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR		V11		V51				
CALLED PHASE		1		5				
CALL OPTION		X		X				
DELAY TIME		-		-				
EXTENSION OPTION		X		X				
EXTENSION TIME		-		-				
USE ADDED INITIAL		-		-				
CROSS SWITCH PHASE		-		-				

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR	V41	V21	V81	V61				
CALLED PHASE	3	2	8	6				
CALL OPTION	X	X	X	X				
DELAY TIME	-	-	-	-				
EXTENSION OPTION	X	X	X	X				
EXTENSION TIME	-	-	-	-				
USE ADDED INITIAL	-	-	-	-				
CROSS SWITCH PHASE	-	-	-	-				

TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. T41-0338

REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

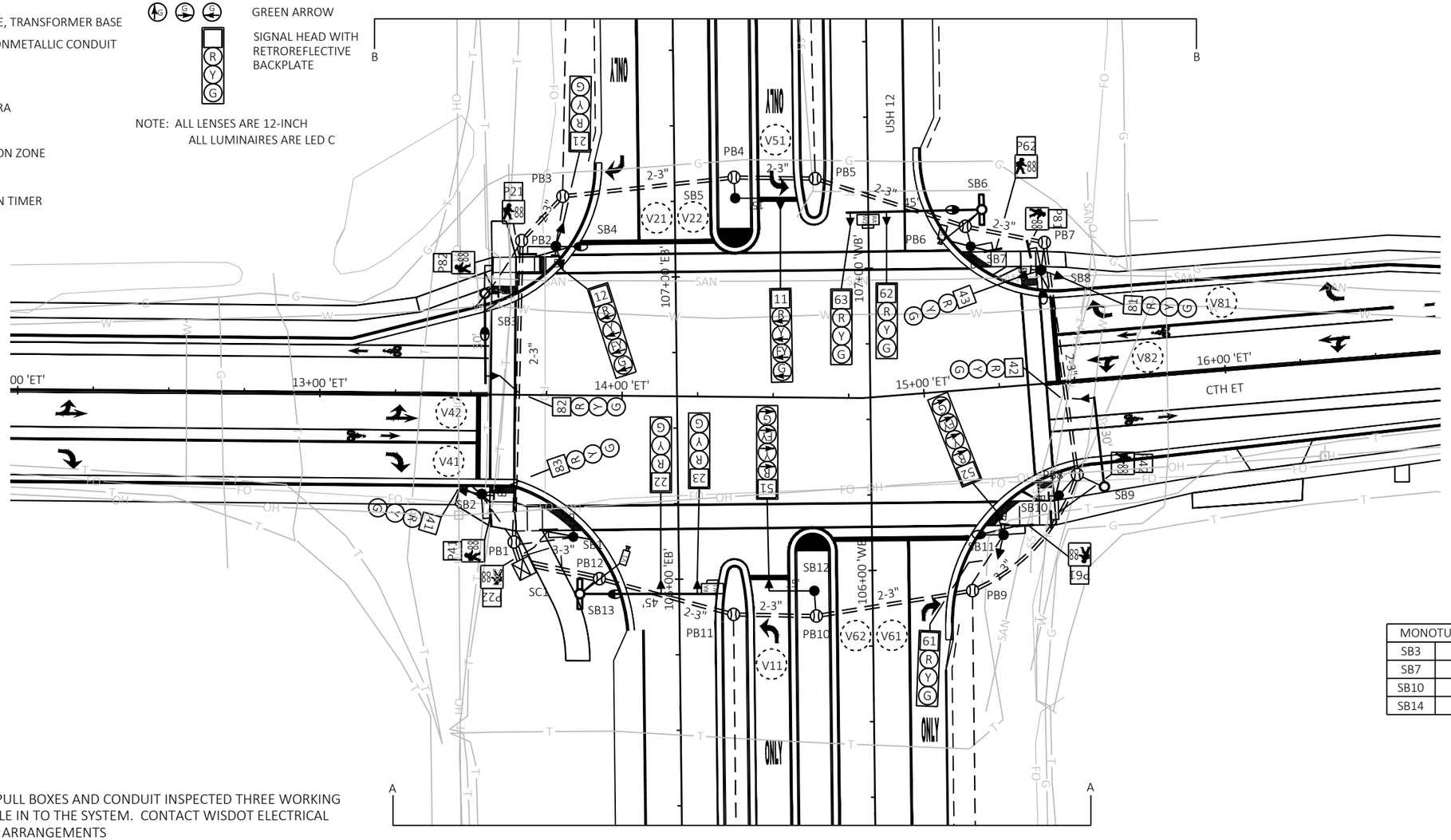
FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - 024102-st
PLOT DATE : 3/21/2022 2:27 PM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- MONOTUBE BASE, POLE, 15'-30' ARM
- MONOTUBE BASE, POLE, 35'-45' ARM
- MONOTUBE BASE, POLE, 50'-55' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 42"
- EVP DETECTOR
- VIDEO DETECTION CAMERA
- RADAR DETECTOR
- NON-INTRUSIVE DETECTION ZONE
- PEDESTRIAN COUNTDOWN TIMER
- PUSH BUTTON
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- SIGNAL HEAD WITH RETROREFLECTIVE BACKPLATE

NOTE: ALL LENSES ARE 12-INCH
ALL LUMINAIRES ARE LED C



MONOTUBE STRUCTURE NUMBERS	
SB3	S-41-0338-08
SB7	S-41-0338-06
SB10	S-41-0338-04
SB14	S-41-0338-02

GENERAL NOTES:

1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT (608-785-9080) TO MAKE ARRANGEMENTS
2) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE
   CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
3) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
4) ALL LUMINAIRES ARE LED C
5) INSTALL RETROREFLECTIVE BACKPLATES ON SIGNAL HEADS:
   11, 12, 21, 22, 23, 51, 52, 61, 62, 63
6) NON-INTRUSIVE DETECTION TO BE INSTALLED BY WISDOT

TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. S41-0338

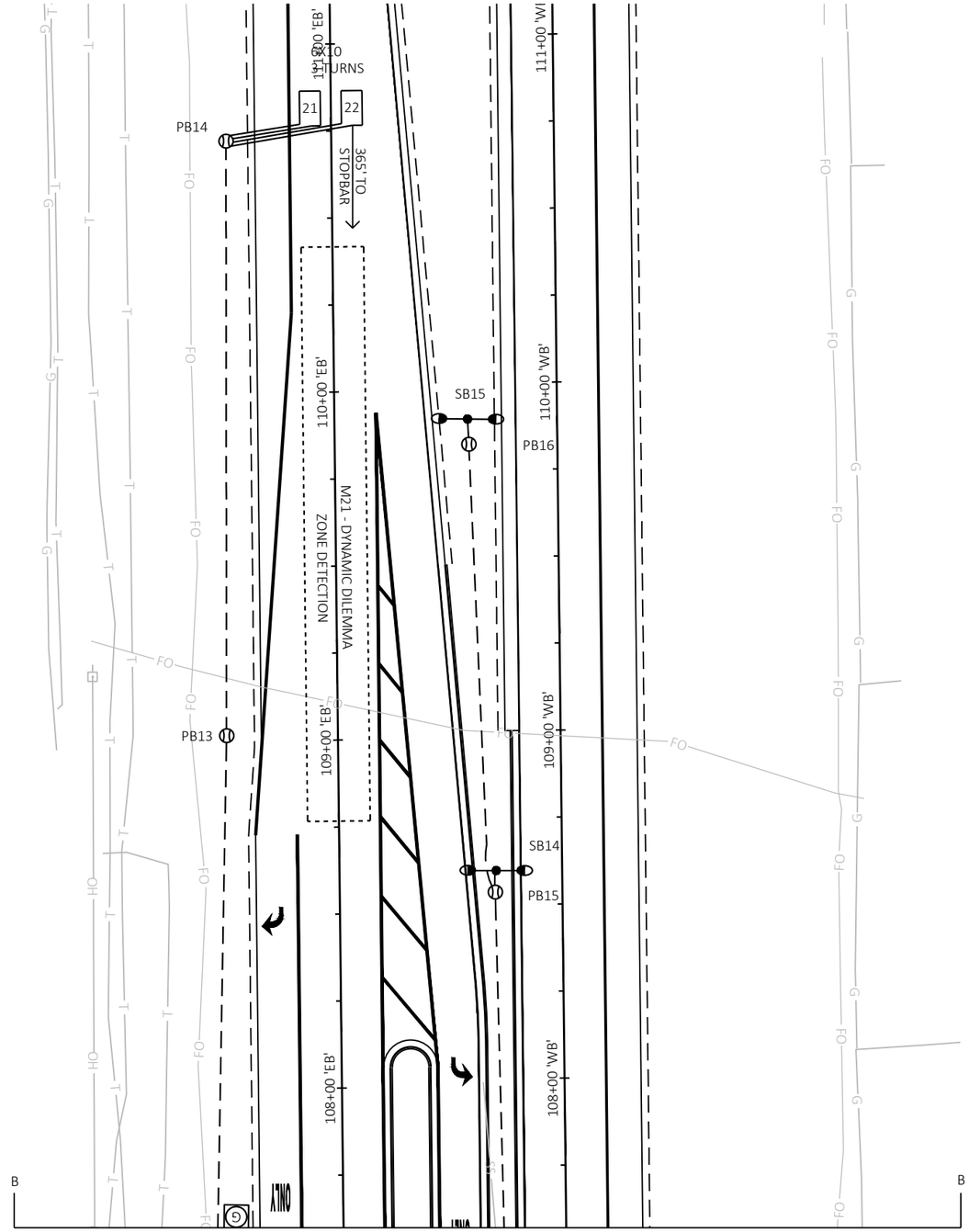
REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

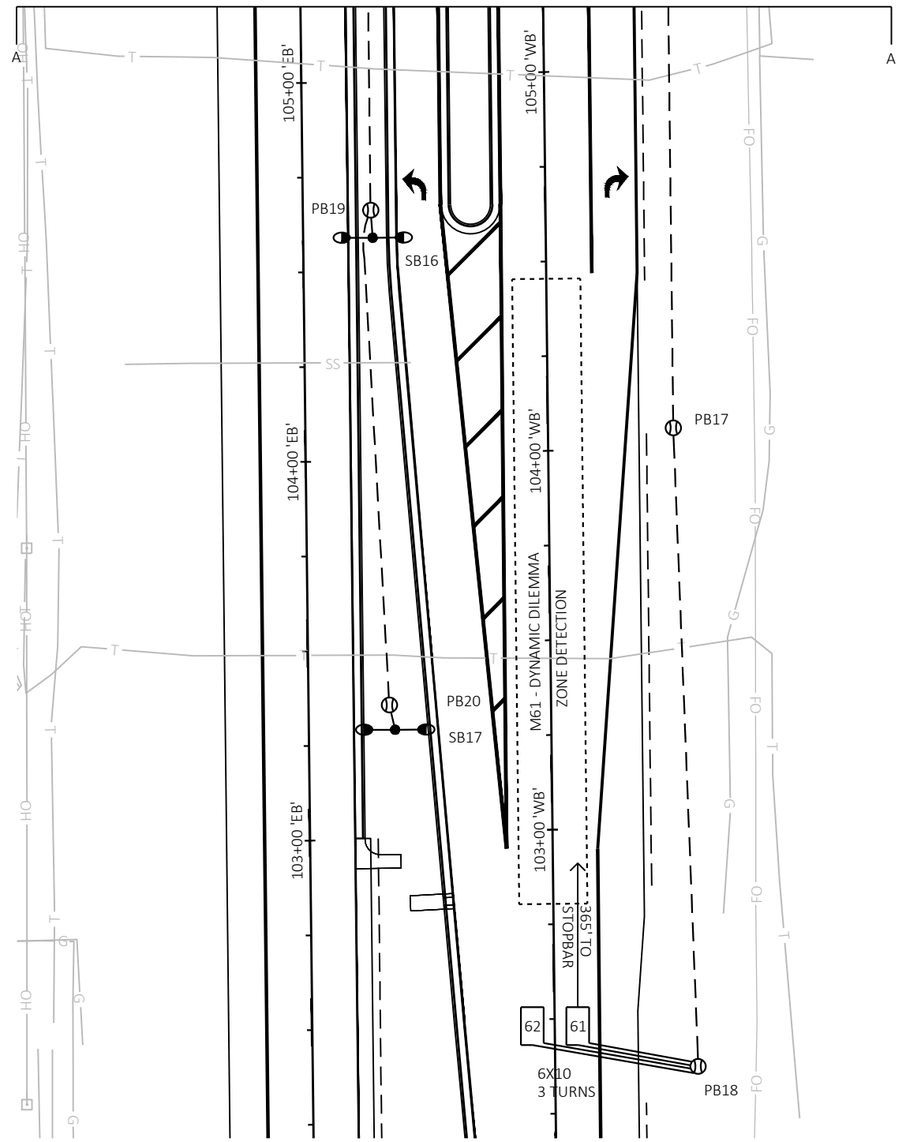
PAGE 01 OF 04

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC SIGNAL PLAN - USH 12 & CTH ET/VETERANS ST	SHEET 42	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024201-sp
PLOT DATE : 9/27/2022 10:03 AM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : ##########

WISDOT/CADDS SHEET 42





TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. S41-0338

REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

PAGE 02 OF 04

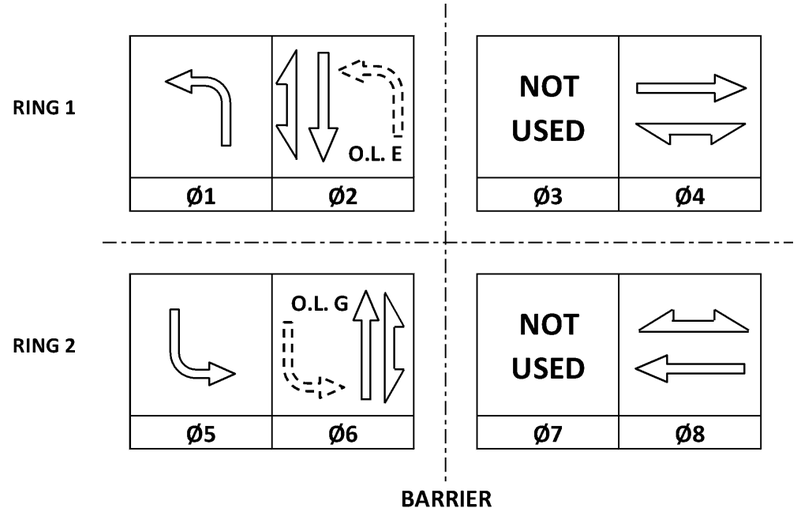
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC SIGNAL PLAN - USH 12 & CTH ET/VETERANS ST	SHEET 43	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024202-sp

PLOT DATE : 9/27/2022 10:04 AM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	11,12	R ←
Ø2	21,22,23	R
Ø4	41,42,43	R
Ø5	51,52	R ←
Ø6	61,62,63	R
Ø8	81,82,83	R
Ø2P	P21,P22	
Ø4P	P41,P42	
Ø6P	P61,P62	
Ø8P	P81,P82	
OLE	11,12	-
OLG	51,52	-



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2		6	MIN	X
3				
4		8		X
5				X
6		2	MIN	X
7				
8		4		X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	X
CELL MODEM	

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

IN-PAVEMENT FAR DETECTION									VIDEO STOPBAR DETECTION								MICROWAVE DILEMMA ZONE DETECTION								
DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	35	33	39	37	43	41	47	45	DETECTOR INPUT
PLAN LOOP DETECTOR	21	61								V11		V51													PLAN LOOP DETECTOR
CALLED PHASE	2	6								1		5													CALLED PHASE
CALL OPTION	X	X								X		X													CALL OPTION
DELAY TIME	-	-								-		-													DELAY TIME
EXTENSION OPTION	X	X								X		X													EXTENSION OPTION
EXTENSION TIME	-	-								-		-													EXTENSION TIME
USE ADDED INITIAL	DP2	DP2								-		-													USE ADDED INITIAL
CROSS SWITCH PHASE										2		6													CROSS SWITCH PHASE
DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	36	34	40	38	44	42	48	46	DETECTOR INPUT
PLAN LOOP DETECTOR	22	62							V41	V22	V81	V61	V42		V82			M21		M61					PLAN LOOP DETECTOR
CALLED PHASE	2	6							4	2	8	6	4		8			2		6					CALLED PHASE
CALL OPTION	X	X							X	X	X	X	X		X			X		X					CALL OPTION
DELAY TIME	-	-							15	-	15	-	-		-			-		-					DELAY TIME
EXTENSION OPTION	X	X							X	Q	X	Q	X		X			X		X					EXTENSION OPTION
EXTENSION TIME	-	-							-	33	-	33	-		-			-		-					EXTENSION TIME
USE ADDED INITIAL	DP2	DP2							-	-	-	-	-		-			-		-					USE ADDED INITIAL
CROSS SWITCH PHASE	-	-							-	-	-	-	-		-			-		-					CROSS SWITCH PHASE

TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. S41-0338

REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

PAGE 03 OF 04

2

USH 12 AT CTH ET

HOME RUN	CABLE	INDICATION / WIRE COLOR											
		BLACK	WHITE	RED	GREEN	ORANGE	BLUE	WHITE/BLK	RED/BLK	GREEN/BLK	ORANGE/BLK	BLUE/BLK	BLK/WHITE
SC1 - SB1	5/C		NEUTRAL	2-DW	2-WALK								
SC1 - SB2	12/C		NEUTRAL	4-RED	4-GRN	4-YEL			8-RED	8-GRN	8-YEL		
SC1 - SB3	7/C	8-DW	NEUTRAL	8-RED	8-GRN	8-YEL	8-WALK						
SC1 - SB4	12/C	2-DW	NEUTRAL	2-RED	2-GRN	2-YEL	2-WALK		1-R-ARROW	1-G-ARROW	1-Y-ARROW	1-FY-ARROW	
SC1 - SB5	7/C		NEUTRAL	1-R-ARROW	1-G-ARROW	1-Y-ARROW	1-FY-ARROW						
SC1 - SB6	5/C		NEUTRAL	6-RED	6-GRN	6-YEL							
SC1 - SB7	5/C		NEUTRAL	6-DW	6-WALK								
SC1 - SB8	12/C	8-DW	NEUTRAL	4-RED	4-GRN	4-YEL	8-WALK		8-RED	8-GRN	8-YEL		
SC1 - SB9	5/C		NEUTRAL	4-RED	4-GRN	4-YEL							
SC1 - SB10	5/C		NEUTRAL	4-DW	4-WALK								
SC1 - SB11	12/C	6-DW	NEUTRAL	6-RED	6-GRN	6-YEL	6-WALK		5-R-ARROW	5-G-ARROW	5-Y-ARROW	5-FY-ARROW	
SC1 - SB12	7/C		NEUTRAL	5-R-ARROW	5-G-ARROW	5-Y-ARROW	5-FY-ARROW						
SC1 - SB13	5/C		NEUTRAL	2-RED	2-GRN	2-YEL							

TRAFFIC CONTROL SIGNAL
USH 12 & CTH ET
CITY OF TOMAH
MONROE COUNTY

SIGNAL NO. S41-0338

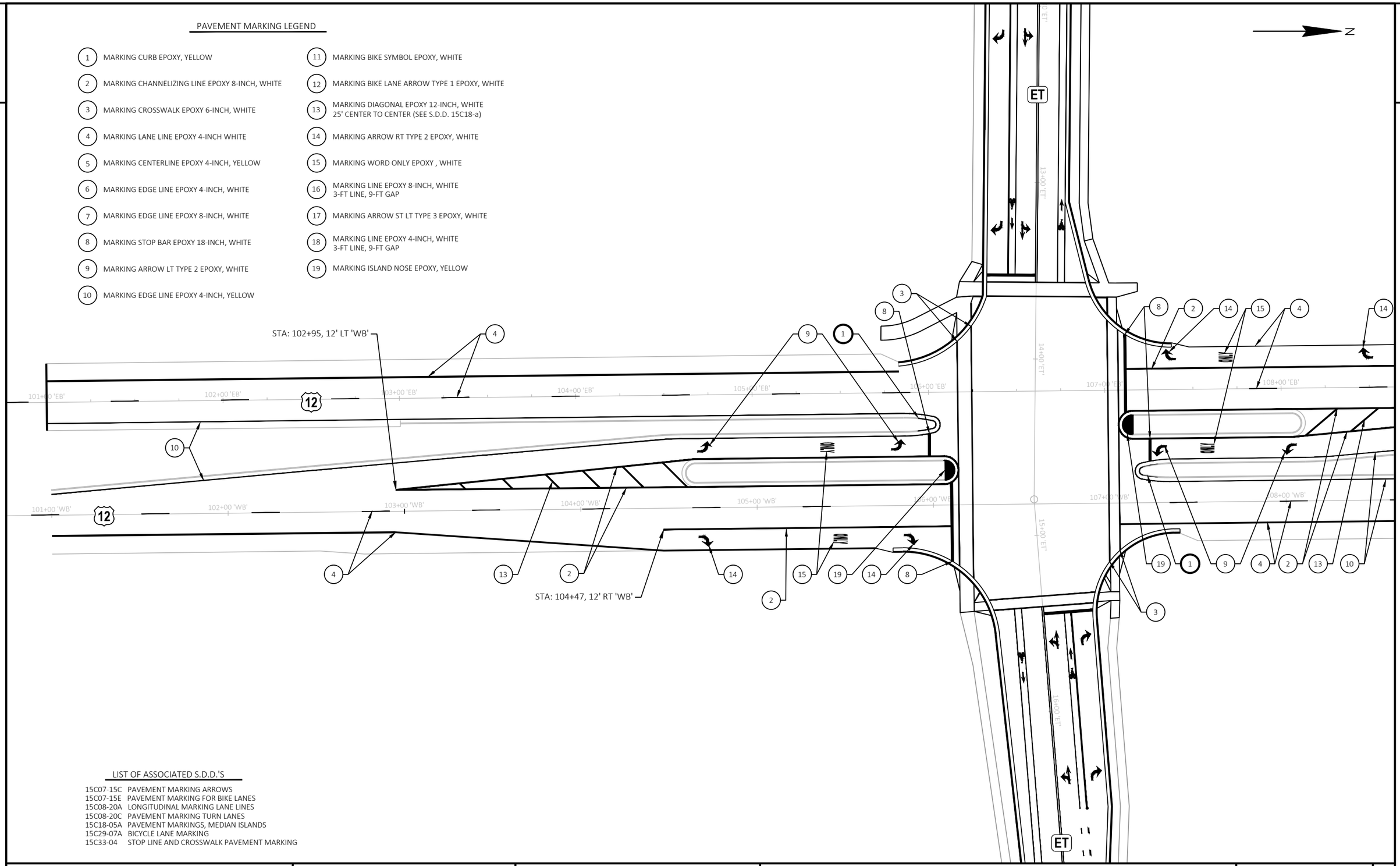
REGION CONTACT: COLLIN WEBB
DESIGNED BY: COLLIN WEBB
REVISED BY:

PAGE 04 OF 04

2

PAVEMENT MARKING LEGEND

1. MARKING CURB EPOXY, YELLOW
2. MARKING CHANNELIZING LINE EPOXY 8-INCH, WHITE
3. MARKING CROSSWALK EPOXY 6-INCH, WHITE
4. MARKING LANE LINE EPOXY 4-INCH WHITE
5. MARKING CENTERLINE EPOXY 4-INCH, YELLOW
6. MARKING EDGE LINE EPOXY 4-INCH, WHITE
7. MARKING EDGE LINE EPOXY 8-INCH, WHITE
8. MARKING STOP BAR EPOXY 18-INCH, WHITE
9. MARKING ARROW LT TYPE 2 EPOXY, WHITE
10. MARKING EDGE LINE EPOXY 4-INCH, YELLOW
11. MARKING BIKE SYMBOL EPOXY, WHITE
12. MARKING BIKE LANE ARROW TYPE 1 EPOXY, WHITE
13. MARKING DIAGONAL EPOXY 12-INCH, WHITE 25' CENTER TO CENTER (SEE S.D.D. 15C18-a)
14. MARKING ARROW RT TYPE 2 EPOXY, WHITE
15. MARKING WORD ONLY EPOXY , WHITE
16. MARKING LINE EPOXY 8-INCH, WHITE 3-FT LINE, 9-FT GAP
17. MARKING ARROW ST LT TYPE 3 EPOXY, WHITE
18. MARKING LINE EPOXY 4-INCH, WHITE 3-FT LINE, 9-FT GAP
19. MARKING ISLAND NOSE EPOXY, YELLOW



LIST OF ASSOCIATED S.D.D.'S

15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING LANE LINES
15C08-20C	PAVEMENT MARKING TURN LANES
15C18-05A	PAVEMENT MARKINGS, MEDIAN ISLANDS
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	PAVEMENT MARKING - USH 12	SHEET 46	E

2

N

ET

14+00 'ET'

15+00 'ET'

16+00 'ET'

17+00 'ET'

105+00 'EB'

106+00 'EB'

107+00 'EB'

108+00 'EB'

109+00 'EB'

110+00 'EB'

111+00 'EB'

112+00 'EB'

105+00 'WB'

106+00 'WB'

107+00 'WB'

108+00 'WB'

109+00 'WB'

110+00 'WB'

111+00 'WB'

12

STA: 108+73, 12' LT 'EB'

STA: 109+94, 12' RT 'EB'

LIST OF ASSOCIATED S.D.D.'S

15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING LANE LINES
15C08-20C	PAVEMENT MARKING TURN LANES
15C18-05A	PAVEMENT MARKINGS, MEDIAN ISLANDS
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING

PAVEMENT MARKING LEGEND

1	MARKING CURB EPOXY, YELLOW
2	MARKING CHANNELIZING LINE EPOXY 8-INCH, WHITE
3	MARKING CROSSWALK EPOXY 6-INCH, WHITE
4	MARKING LANE LINE EPOXY 4-INCH WHITE
5	MARKING CENTERLINE EPOXY 4-INCH, YELLOW
6	MARKING EDGE LINE EPOXY 4-INCH, WHITE
7	MARKING EDGE LINE EPOXY 8-INCH, WHITE
8	MARKING STOP BAR EPOXY 18-INCH, WHITE
9	MARKING ARROW LT TYPE 2 EPOXY, WHITE
10	MARKING EDGE LINE EPOXY 4-INCH, YELLOW
11	MARKING BIKE SYMBOL EPOXY, WHITE
12	MARKING BIKE LANE ARROW TYPE 1 EPOXY, WHITE
13	MARKING DIAGONAL EPOXY 12-INCH, WHITE 25' CENTER TO CENTER (SEE S.D.D. 15C18-a)
14	MARKING ARROW RT TYPE 2 EPOXY, WHITE
15	MARKING WORD ONLY EPOXY , WHITE
16	MARKING LINE EPOXY 8-INCH, WHITE 3-FT LINE, 9-FT GAP
17	MARKING ARROW ST LT TYPE 3 EPOXY, WHITE
18	MARKING LINE EPOXY 4-INCH, WHITE 3-FT LINE, 9-FT GAP
19	MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	PAVEMENT MARKING - USH 12	SHEET 47	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024503-pm

PLOT DATE : 9/27/2022 7:48 AM PLOT BY : BLUM, JOSHUA M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

STA: 11+12, 12' RT 'ET'
STA: 11+28, 16' RT 'ET'
STA: 11+94, 12' RT 'ET'
STA: 11+94, 16' RT 'ET'
STA: 17+28, 12' LT 'ET'
STA: 17+35, 16' LT 'ET'
STA: 16+56, 16' LT 'ET'
STA: 16+56, 12' LT 'ET'

ET

ONLY

12

PAVEMENT MARKING LEGEND

1. MARKING CURB EPOXY, YELLOW
2. MARKING CHANNELIZING LINE EPOXY 8-INCH, WHITE
3. MARKING CROSSWALK EPOXY 6-INCH, WHITE
4. MARKING LANE LINE EPOXY 4-INCH WHITE
5. MARKING CENTERLINE EPOXY 4-INCH, YELLOW
6. MARKING EDGE LINE EPOXY 4-INCH, WHITE
7. MARKING EDGE LINE EPOXY 8-INCH, WHITE
8. MARKING STOP BAR EPOXY 18-INCH, WHITE
9. MARKING ARROW LT TYPE 2 EPOXY, WHITE
10. MARKING EDGE LINE EPOXY 4-INCH, YELLOW
11. MARKING BIKE SYMBOL EPOXY, WHITE
12. MARKING BIKE LANE ARROW TYPE 1 EPOXY, WHITE
13. MARKING DIAGONAL EPOXY 12-INCH, WHITE 25' CENTER TO CENTER (SEE S.D.D. 15C18-a)
14. MARKING ARROW RT TYPE 2 EPOXY, WHITE
15. MARKING WORD ONLY EPOXY , WHITE
16. MARKING LINE EPOXY 8-INCH, WHITE 3-FT LINE, 9-FT GAP
17. MARKING ARROW ST LT TYPE 3 EPOXY, WHITE
18. MARKING LINE EPOXY 4-INCH, WHITE 3-FT LINE, 9-FT GAP
19. MARKING ISLAND NOSE EPOXY, YELLOW

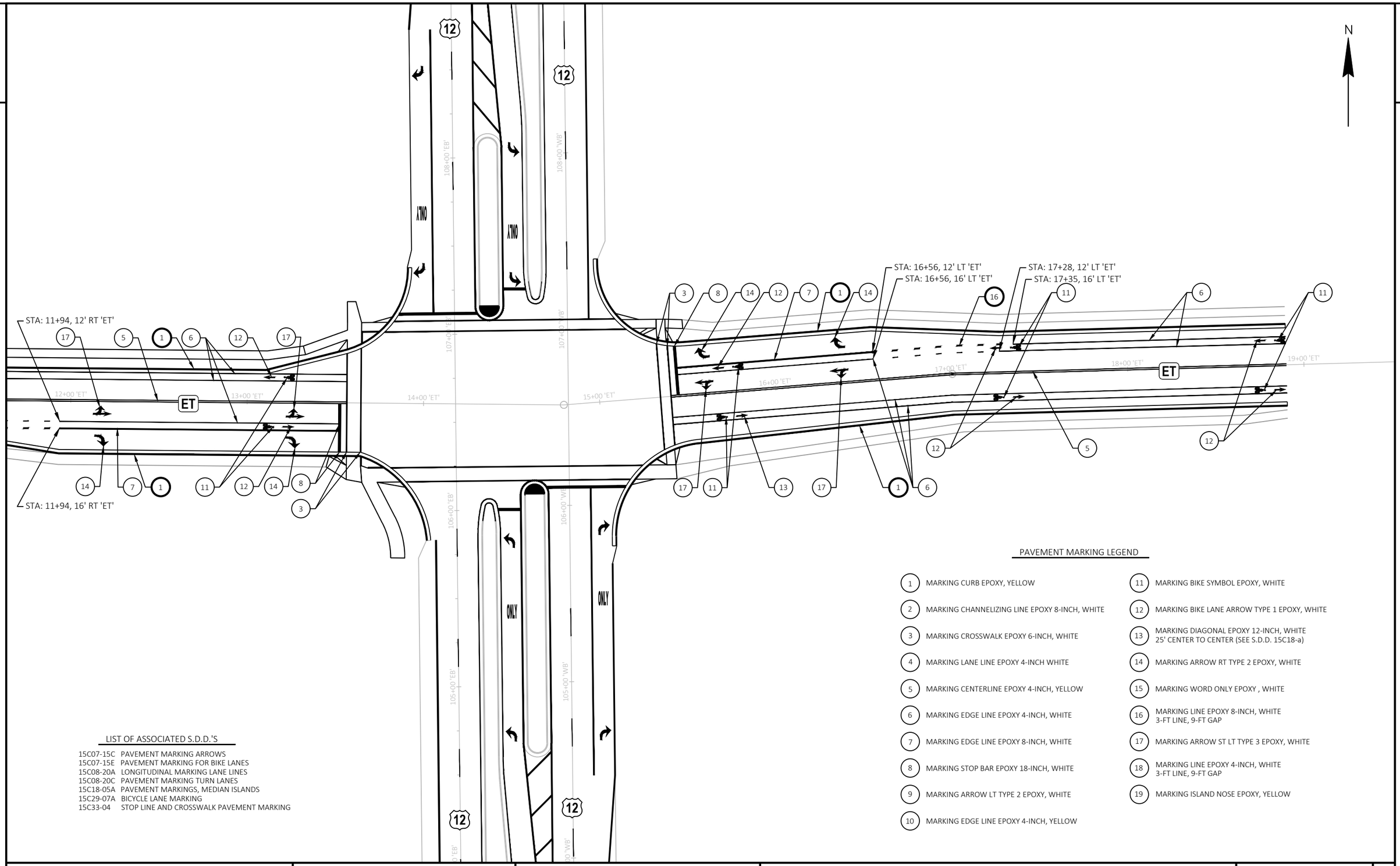
LIST OF ASSOCIATED S.D.D.'S

15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING LANE LINES
15C08-20C	PAVEMENT MARKING TURN LANES
15C18-05A	PAVEMENT MARKINGS, MEDIAN ISLANDS
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	PAVEMENT MARKING - CTH ET	SHEET 48	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024505-pm
PLOT DATE : 9/27/2022 7:48 AM
PLOT BY : BLUM, JOSHUA M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LIST OF ASSOCIATED S.D.D.'S

15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING LANE LINES
15C08-20C	PAVEMENT MARKING TURN LANES
15C18-05A	PAVEMENT MARKINGS, MEDIAN ISLANDS
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING

PAVEMENT MARKING LEGEND

1	MARKING CURB EPOXY, YELLOW
2	MARKING CHANNELIZING LINE EPOXY 8-INCH, WHITE
3	MARKING CROSSWALK EPOXY 6-INCH, WHITE
4	MARKING LANE LINE EPOXY 4-INCH WHITE
5	MARKING CENTERLINE EPOXY 4-INCH, YELLOW
6	MARKING EDGE LINE EPOXY 4-INCH, WHITE
7	MARKING EDGE LINE EPOXY 8-INCH, WHITE
8	MARKING STOP BAR EPOXY 18-INCH, WHITE
9	MARKING ARROW LT TYPE 2 EPOXY, WHITE
10	MARKING EDGE LINE EPOXY 4-INCH, YELLOW
11	MARKING BIKE SYMBOL EPOXY, WHITE
12	MARKING BIKE LANE ARROW TYPE 1 EPOXY, WHITE
13	MARKING DIAGONAL EPOXY 12-INCH, WHITE 25' CENTER TO CENTER (SEE S.D.D. 15C18-a)
14	MARKING ARROW RT TYPE 2 EPOXY, WHITE
15	MARKING WORD ONLY EPOXY , WHITE
16	MARKING LINE EPOXY 8-INCH, WHITE 3-FT LINE, 9-FT GAP
17	MARKING ARROW ST LT TYPE 3 EPOXY, WHITE
18	MARKING LINE EPOXY 4-INCH, WHITE 3-FT LINE, 9-FT GAP
19	MARKING ISLAND NOSE EPOXY, YELLOW

PROJECT NO: 7988-00-77	HWY: USH 12	COUNTY: MONROE	PAVEMENT MARKING - CTH ET	SHEET 49	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024507-pm
PLOT DATE : 9/27/2022 7:48 AM
PLOT BY : BLUM, JOSHUA M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

STAGE 1

1. CONSTRUCT NORTH AND SOUTH TEMPORARY CROSSOVERS
2. INSTALL TEMPORARY TRAFFIC SIGNALS AT INTERSECTION
3. REMOVE EXISTING TRAFFIC SIGNALS AT INTERSECTION
4. CONSTRUCT TEMPORARY WIDENING STA 105+95 'EB' - 106+22 'EB'
5. CONSTRUCT TEMPORARY DRIVEWAY ACCESS, STA 102+51 'WB - 102+77 'WB'
6. REMOVE CURB & GUTTER AND CONCRETE MEDIAN, STA 106+91 'WB' - 107+63 'WB'. PLACE BASE AGGREGATE FOR STAGE 2A TRUCK TURNING LANE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

N

12-INCH X 125' TEMPORARY CULVERT PIPE

CONSTRUCT TEMPORARY CROSSOVERS

12-INCH X 36' TEMPORARY CULVERT PIPE

STA 106+22.84, -18.54' LT

STA 106+22.90, -12.57' LT

STA 105+95.92, -16.71' LT

STA 105+95.92, -12.21' LT

REMOVE CURB AND GUTTER
CONSTRUCT TEMPORARY WIDENING

STA 106+91.50, 12.79' RT

STA 107+04.06, 26.51' RT

STA 107+62.89, 12.17' RT

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

CLOSE USH 12 'EB' LEFT LANE
SHIFT TRAFFIC TO USH 12 'EB' RIGHT LANE
SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL

MB

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

26'

12'ET' 14'ET' 16'ET' 18'ET'

3901 3902 3903 905 906 907 908

MB

CLOSE USH 12 'WB' LEFT LANE
SHIFT TRAFFIC TO USH 12 'WB' RIGHT LANE
SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL

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

CONSTRUCT TEMPORARY DRIVEWAY
STA 102+51 'WB' - 102+77 'WB'
REMOVE CURB & GUTTER
ADD TEMPORARY ASPHALT

12-INCH X 125' TEMPORARY CULVERT PIPE

REMOVE CURB & GUTTER AND CONCRETE MEDIAN
PLACE 1.25-INCH BASE AGGREGATE DENSE
STAGE 2A TRUCK TURNING PATH

CONSTRUCT TEMPORARY CROSSOVERS

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 1	SHEET 50	E

FILE NAME : N:\PDS\C3D\79980007\DESIGN\ALIPROFS\STAGE 1.DWG
LAYOUT NAME - STAGE 1

PLOT DATE : 5/4/2022 7:15 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

STAGE 2A

1. REDUCE POSTED SPEED ON USH 12 TO 35 MPH (25 MPH ADVISORY SPEED THROUGH CROSSOVERS)
2. SHIFT USH 12 TRAFFIC TO EB LANES
1. CLOSE WEST LEG OF CTH ET
2. SHIFT CTH ET EAST LEG TRAFFIC TO SOUTH HALF OF ROAD
3. CONSTRUCT USH 12 WB LANES & NORTH HALF OF CTH ET
4. CONSTRUCT WATER MAIN & SANITARY SEWER
5. INSTALL STORM SEWER STRUCTURES 1.2, 1.3. 1.4, 2.1, 2.3, 3.1, 3.2, 4.1, 4.2, 6.2

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

SEE SDD 'ADVANCED WIDTH RESTRICTION SIGNING' FOR SIGN PLACEMENT LOCATION

MAX. 12' WIDTH
W12-52
48"X48"

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

TEMPORARY PEDESTRIAN BARRICADE REQ'D
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

- CLOSE USH 12 'EB' LEFT LANE, SHIFT TRAFFIC TO USH 12 'EB' RIGHT LANE FOR CROSSOVER
- SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE / SPEED REDUCTION' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES
- SEE SDD 'TRAFFIC CONTROL, SINGLE LANE CROSSOVER'

TRAFFIC CONTROL FLEXIBLE
TUBULAR MARKER POSTS & BASES
25' SPACING TYP
5' SPACING ACROSS FROM ENTRANCES

TEMPORARY MARKING LINE
PAINT 4-INCH WHITE REQ'D

TEMPORARY MARKING LINE
PAINT 4-INCH DOUBLE YELLOW REQ'D

CROSSWALK

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

STA 106+13.73 (1)
STA 105+55.68, -12.00' LT
STA 105+53.89, 0.00'
STA 107+02.09, -21.88' LT
STA 107+02.09, -10.00' LT
STA 107+02.09 (1)
STA 108+02.09, -10.00' LT
STA 108+03.89, 0.00'
STA 109+52.09, -21.94' LT
STA 109+52.09, -10.00' LT
STA 111+02.09, -12.03' LT
STA 111+02.09, 0.00'

R3-1
24"X24"

TYPE III BARRICADE

100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'
100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'
12' 10'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

TEMPORARY DRIVEWAY
STA 102+51 'WB' - 102+77 'WB'

R3-2
24"X24"

TEMPORARY PEDESTRIAN BARRICADE REQ'D
EACH SIDE OF CROSSWALK
SEE SDD 15D30

GAP CURB & GUTTER FOR STAGE 2A & 2C DRIVEWAY
STA 104+13 'WB' - 10104+39 'WB'

INSTALL 2.4, 2.2, 2.5
IN STAGE 3B

INSTALL INLET 1.1 IN STAGE 3A

INSTALL INLET 6.1 IN STAGE 4

STA 15+31.49 (1)

TEMPORARY ASHPALT REQ'D FOR STAGE 3 TRAFFIC
GAP CURB AND GUTTER FROM STA 107+07 'WB' - 107+40 'WB'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

- CLOSE USH 12 'WB' RIGHT LANE, MINIMUM 500' PRIOR TO CROSSOVER
- SHIFT TRAFFIC TO USH 12 'WB' LEFT LANE FOR CROSSOVER
- SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE / SPEED REDUCTION' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES
- SEE SDD 'TRAFFIC CONTROL, SINGLE LANE CROSSOVER'

TEMPORARY MARKING LINE
PAINT 4-INCH WHITE REQ'D

TEMPORARY MARKING LINE
PAINT 4-INCH DOUBLE YELLOW REQ'D

PEDESTRIAN ACCESS
USE EXISTING SIDEWALK

(1) TEMPORARY MARKING STOP LINE
REMOVABLE TAPE 18-INCH

MAX. 12' WIDTH
W12-52
48"X48"

SEE SDD 'ADVANCED WIDTH RESTRICTION SIGNING' FOR SIGN PLACEMENT LOCATION

STA 19+06.19, 1.00' RT
STA 19+06.04, 11.00' RT
STA 19+05.88, 21.00' RT

STA 19+83.64, -10.00' LT
STA 19+83.65, 0.00'
STA 19+83.66, 10.00' RT

MAX. 10' WIDTH
W12-52
48"X48"

SEE SDD 'ADVANCED WIDTH RESTRICTION SIGNING' FOR SIGN PLACEMENT LOCATION

CLOSE CTH ET SIDEWALK
AT HEELER AVE
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 2A	SHEET 51	E

STAGE 2B

1. CLOSE EAST LEG OF CTH ET FOR MAXIMUM OF 18 WORKING DAYS
2. ACTIVATE TEMPORARY CTH ET EAST DETOUR ROUTE
3. COMPLETE WATER MAIN & SANITARY SEWER
4. PAVE CONCRETE AND ASPHALT ON CTH ET EAST LEG
5. CONSTRUCT USH 12 WB LANES THROUGH INTERSECTION
6. INSTALL STORM SEWER STRUCTURES 2.2, 2.4, 2.5

N

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

CROSSWALK

R3-2 24"X24"
R3-1 24"X24"
R3-1 24"X24"
R3-2 24"X24"

3901
3902
3903
3904
905
906
907
908

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'
98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY DRIVEWAY
STA 104+13 'WB - 104+39 'WB'
GAP CURB & GUTTER ON USH 12 WB LEFT TURN LANE
TEMP ASPHALT REQ'D

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY ASPHALT REQ'D
MATCH NEW WB LANES AND EXISTING EB LANES

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY ASHPALT REQ'D FOR STAGE 3 TRAFFIC
GAP CURB AND GUTTER FROM STA 107+07 'WB' - 107+40 'WB'

PEDESTRIAN ACCESS
USE NEW SIDEWALK

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

CLOSE CTH ET SIDEWALK
AT HEELER AVE
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 2B	SHEET 52	E

2

STAGE 2C

1. OPEN EAST LEG OF CTH ET TO TRAFFIC
2. CONSTRUCT REMAINING WORK ON SOUTH SIDE OF CTH ET EAST LEG
3. COMPLETE ANY REMAINING WORK ON USH 12 WB LANES

N

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
SEE SDD 15D30

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

CROSSWALK

3901 3902 3903 3904

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY DRIVEWAY
STA 104+13 'WB - 104+39 'WB'

TEMPORARY ASHPALT REQ'D FOR STAGE 3 TRAFFIC
GAP CURB AND GUTTER FROM STA 107+07 'WB' - 107+40 'WB'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
EACH SIDE OF CROSSWALK
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

STA 15+32.49 (1)

PEDESTRIAN ACCESS
USE NEW SIDEWALK
CONSTRUCTED IN STAGE 2A

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE REQ'D

TRAFFIC CONTROL DRUM
50' SPACING TYP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH DOUBLE YELLOW REQ'D

CLOSE CTH ET SIDEWALK
AT HEELER AVE
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

(1) TEMPORARY MARKING STOP LINE
REMOVABLE TAPE 18-INCH

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 2C	SHEET 53	E

FILE NAME : N:\PDS\C3D\79980007\DESIGN\ALIPROFS\STAGE 2C.DWG
LAYOUT NAME - STAGE 2C

PLOT DATE : 5/4/2022 7:22 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

STAGE 3A

1. SHIFT USH 12 TRAFFIC TO WB LANES
2. CONSTRUCT USH 12 EB LANES
3. INSTALL STORM SEWER STRUCTURES 1.1, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7

N

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

- CLOSE USH 12 'EB' RIGHT LANE, MINIMUM 500' PRIOR TO CROSSOVER PER SDD 15D11
- SHIFT TRAFFIC TO USH 12 'EB' LEFT LANE FOR CROSSOVER
- SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE / SPEED REDUCTION' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES
- SEE SDD 'TRAFFIC CONTROL, SINGLE LANE CROSSOVER'

INSTALL 5.5, 5.6, 5.7 IN STAGE 3B

STA 106+81.04, -96.82' LT
STA 106+87.04, -96.92' LT

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

TEMPORARY PEDESTRIAN BARRICADE REQ'D
EACH SIDE OF CROSSWALK
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

TEMPORARY PEDESTRIAN BARRICADE REQ'D
STA 101+00 'EB' - 106+23 'EB'
SEE SDD 'TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS FOR VARIOUS CLOSURES'

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

STA 101+65.26, -0.13' LT
STA 101+63.51, 11.97' RT
STA 103+14.31, 10.00' RT
STA 103+14.30, 22.00' RT
STA 105+83.82 (1)
CROSSWALK
STA 106+09.42, 10.00' RT
STA 106+79.84, -39.47' LT
STA 106+85.90, -42.10' LT
STA 107+58.95 (1)
STA 107+05.52, -24.50' LT
STA 106+99.52, -21.82' LT
STA 108+35.28, 0.00'
STA 108+35.28, 10.00' RT
STA 108+35.28, 22.00' RT
STA 15+44.72 (1)
STA 109+84.56, 0.00'
STA 109+85.28, 12.03' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH DOUBLE YELLOW REQ'D

TRAFFIC CONTROL FLEXIBLE
TUBULAR MARKER POSTS & BASES
25' SPACING TYP
5' ACROSS FROM ENTRANCE

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE REQ'D

R3-2
24"X24"

PEDESTRIAN ACCESS
USE NEW SIDEWALK

CLOSE RIGHT TURN LANE

PEDESTRIAN ACCESS
USE NEW SIDEWALK

PERMANENT PAVEMENT MARKING INSTALLED

- CLOSE USH 12 'WB' LEFT LANE, SHIFT TRAFFIC TO USH 12 'WB' RIGHT LANE FOR CROSSOVER
- SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE / SPEED REDUCTION' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES
- SEE SDD 'TRAFFIC CONTROL, SINGLE LANE CROSSOVER'

(1) TEMPORARY MARKING STOP LINE
REMOVABLE TAPE 18-INCH

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 3A	SHEET 54	E

FILE NAME : N:\PDS\C3D\79980007\DESIGN\ALIPROFS\STAGE 3A.DWG
LAYOUT NAME - STAGE 3A

PLOT DATE : 4/15/2022 12:33 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

STAGE 3B

1. RE-ROUTE PEDESTRIAN TRAFFIC TO ALLOW CONCRETE PAVING ON USH 12 EB LANES
2. PAVE ALL CONCRETE AND ASPHALT ON CTH ET WEST LEG AND IN INTERSECTION
3. CONSTRUCT USH 12 EB LANES GAP FROM STAGE 3A
4. COMPLETE REMAINING WORK ON CTH ET WEST LEG

N

CTH ET CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

PEDESTRIAN ACCESS
TEMPORARY CURB RAMP & TEMPORARY
PEDESTRIAN SURFACE REQ'D
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
EACH SIDE OF CROSSWALK
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
STA 101+00 'EB' - 106+23 'EB'
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

TEMPORARY PEDESTRIAN
BARRICADE REQ'D
EACH SIDE OF CROSSWALK
SEE SDD 'TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION'

USH 12 CLOSURE
SEE SDD 'BARRICADES AND SIGNS
FOR VARIOUS CLOSURES'

3901 3903 3902

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

12' 12' 12' 10' 12' 10' 12' 12' 12

2

STAGE 4

1. CLOSE USH 12 'WB' LEFT LANE AND USH 12 'EB' LEFT LANE
2. REMOVE TEMPORARY ASPHALT AND CONSTRUCT CURB & GUTTER STA 107+07 'WB' - 107+40 'WB' RT
3. REMOVE TEMPORARY TRAFFIC SIGNALS
4. REMOVE TEMPORARY CROSSOVERS
5. INSTALL STORM SEWER STRUCTURE 6.1

N

2

CLOSE USH 12 'EB' LEFT LANE, SHIFT TRAFFIC TO USH 12 'EB' RIGHT LANE
SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES

REMOVE TEMPORARY CROSSOVER

INSTALL INLET 6.1

REMOVE TEMPORARY CROSSOVER

TRAFFIC CONTROL DRUM
50' SPACING TYP

12'ET

14'ET

98'EB' 100'EB' 102'EB' 104'EB' 106'EB' 108'EB' 110'EB' 112'EB'

98'WB' 100'WB' 102'WB' 104'WB' 106'WB' 108'WB' 110'WB' 112'WB'

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

PERMANENT PAVEMENT MARKING INSTALLED
SEE PAVEMENT MARKING PLAN SHEETS

REMOVE TEMPORARY ASPHALT
INSTALL CURB & GUTTER
CLOSE USH 12 'WB' RIGHT LANE BEFORE OR AFTER
USH 12 'WB' LEFT LANE IS CLOSED FOR CROSSOVER REMOVAL
SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE'

CLOSE USH 12 'WB' LEFT LANE, SHIFT TRAFFIC TO USH 12 'WB' RIGHT LANE
SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE' FOR TAPER RATES AND REQ'D TRAFFIC CONTROL DEVICES

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

16'ET

18'ET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- WORK AREA
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	TRAFFIC CONTROL AND CONSTRUCTION STAGING - STAGE 4	SHEET 56	E

FILE NAME : N:\PDS\C3D\79980007\DESIGN\ALIPROFS\STAGE 4.DWG
LAYOUT NAME - STAGE 4

PLOT DATE : 4/15/2022 12:37 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

W. WARREN STREET

MARK AVE.

12

ET

N. GLENDALE AVE.

FOOTHILL AVE.

LEMONWEIR PKWY

DETOUR ROUTE

MILL STREET

ARTHUR STREET

FORBES ROAD

I-94

PARKVIEW DR.

JONES CT.

E

BUTTS AVE.

W. JACKSON ST

E. JACKSON ST

TOWNLINE ROAD

LEGEND

DETOUR	M4-8 24"X12"	DETOUR	M4-8 24"X12"	DETOUR	M4-8 24"X12"	WEST / COUNTY ET	M3-4 24"X12" / M1-5A 24"X24"
WEST	M3-4 24"X12"	WEST	M3-4 24"X12"	WEST	M3-4 24"X12"		
COUNTY ET	M1-5A 24"X24"	COUNTY ET	M1-5A 24"X24"	COUNTY ET	M1-5A 24"X24"		
5		M5-1R 21"X21"		M5-1L 21"X21"			
END DETOUR	M4-8A 24"X18"	4		3			
6							

DETOUR AHEAD W20-2A — 2

ROAD CLOSED AHEAD W20-3A — 1

WORK ZONE

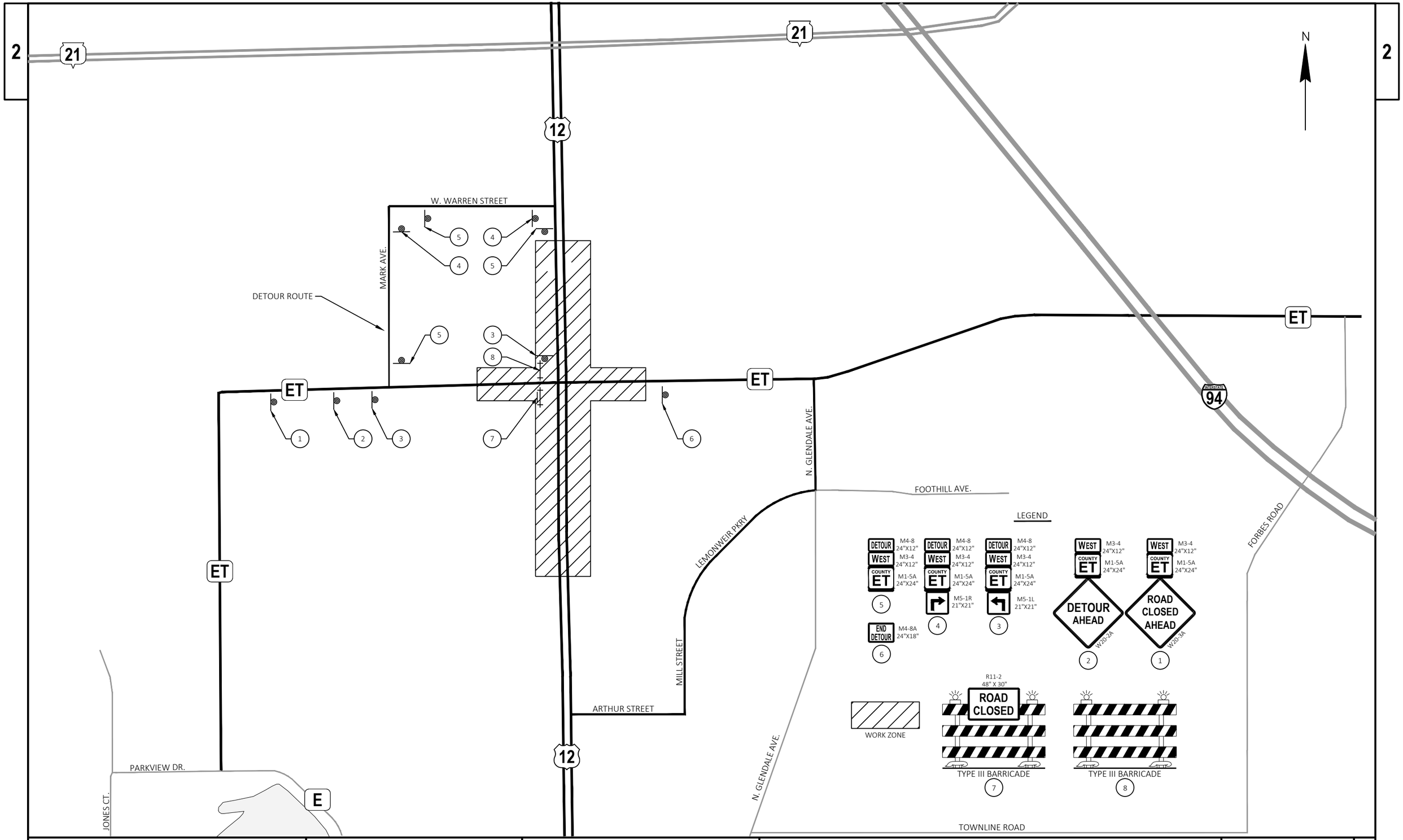
R11-2 48" X 30" ROAD CLOSED — TYPE III BARRICADE — 7

TYPE III BARRICADE — 8

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	DETOUR ROUTE STAGE 2B CTH ET	SHEET 57	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 027001-dt

PLOT DATE : 2/25/2022 12:33 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:1000 FT



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	DETOUR ROUTE - CTH ET WEST CLOSURE	SHEET 58	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 027003-dt

PLOT DATE : 5/4/2022 10:37 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

N

USH 12 EB SUPER ELEVATION DATA				
STA	DESCRIPTION	LT OUTSIDE LANE	LT INSIDE LANE	RT LANE
104+72	END NORMAL CROWN	-2.0%	-2.0%	-2.0%
105+68	LEVEL CROWN	-2.0%	-2.0%	0.0%
106+16.5	BEGIN FULL SUPER	-1.0%	-1.0%	1.0%

USH 12 EB SUPER ELEVATION DATA				
STA	DESCRIPTION	LT OUTSIDE LANE	LT INSIDE LANE	RT LANE
107+02	END FULL SUPER	-1.0%	-1.0%	1.0%
107+49	LEVEL CROWN	-1.0%	-1.0%	0.0%
104+45	BEGIN NORMAL CROWN	-2.0%	-2.0%	-2.0%

USH 12 WB SUPER ELEVATION DATA				
STA	DESCRIPTION	LT LANE	RT INSIDE LANE	RT OUTSIDE LANE
104+70	END NORMAL CROWN	-2.0%	-2.0%	-2.0%
105+66	LEVEL CROWN	0.0%	-2.0%	-2.0%
106+14	BEGIN FULL SUPER	1.0%	-1.0%	-1.0%

USH 12 WB SUPER ELEVATION DATA				
STA	DESCRIPTION	LT LANE	RT INSIDE LANE	RT OUTSIDE LANE
107+00	END FULL SUPER	1.0%	-1.0%	-1.0%
107+48	LEVEL CROWN	0.0%	-2.0%	-2.0%
108+44	BEGIN NORMAL CROWN	-2.0%	-2.0%	-2.0%

BP: 10+00.00 'ET'

BEGIN PROJECT
STA 10+45.00 'ET'
Y=400378.690
X=706589.964

CTH ET

905
479.60'
S89°27'37"E
12'ET

BEGIN PROJECT
STA 101+00.00 'EB'
Y=399814.706
X=706969.571

BP: 101+00.10 'WB-LTL"
PI: 100+71.23 'EB'
3901
PI: 102+50.43 "WB-LTL"
PC: 104+43.49 "WB-LTL"
PT: 104+58.94 "WB-LTL"

STA 106+60.51 'EB' =
STA 14+18.20 'ET'
Y=400375.174
X=706963.144

EP: 106+59.01 "WB-LTL"
14'ET
3904
PC: 108+12.92 'EB-LTL'
PT: 108+28.59 'EB-LTL'
3903
3902
EP: 111+72.06 'EB-LTL'
PI: 111+70.67 'EB'

END PROJECT
STA 111+70.81 'EB'
Y=400885.448
X=706957.291

PI: 113+82.63 'EB'

N0°24'39"W 332.29' 100'EB'
102'EB'
N0°39'25"W 1099.44' 104'EB'
106'EB'
USH 12 EB
108'EB'
110'EB'
112'EB'
N1°08'25"W 211.96'
114'EB'

N5°14'08"W 150.33'
102"WB-LTL"
N5°05'04"W 193.06'
104"WB-LTL"
L=15.455, R=200.000
N0°39'25"W 200.07'
106"WB-LTL"
N0°39'25"W 153.60'
108'EB-LTL'
L=15.675, R=200.000
N5°08'51"W 343.47'
110'EB-LTL'

N0°24'39"W 331.21' 100'WB'
102'WB'
USH 12 WB
104'WB'
N0°39'25"W 1099.85'
907
106'WB'
108'WB'
USH 12 WB
110'WB'
112'WB'
N1°08'25"W 211.62'
114'WB'

PI: 14+79.60 'ET'

STA 106+57.25 'WB' =
STA 14+82.22 'ET'
Y=400374.803
X=707027.152

BP: 106+59.32 'EB-LTL'
220.97'
N85°27'01"E
16'ET
908

BEGIN PROJECT
STA 101+00.00 'WB'
Y=399817.594
X=707033.542

PI: 100+68.94 'WB'

END PROJECT
STA 111+68.60 'WB'
Y=400886.125
X=707021.289

PI: 111+68.79 'WB'

PI: 113+80.41 'WB'

CTH ET

PI: 17+00.57 'ET'
906

18'ET
348.84'
N88°25'33"E

END PROJECT
STA 18+90.00 'ET'
Y=400397.328
X=707434.177

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	ALIGNMENT DETAIL	SHEET 59	E

2

2

N

CONTROL POINT 905
Y=400343.58
X=706736.90
ELEV=963.73'
REBAR W/O CAP

CONTROL POINT 3901
Y=399870.66
X=706923.24
ELEV=954.43'
FENO MARKER

TOP BOLT OF FIREPLUG

CONTROL POINT 3904
Y=400421.06
X=706917.87
ELEV=960.93'
MAG NAIL

CONTROL POINT 3903
Y=400625.92
X=706895.08
ELEV=959.61'
NAIL W/ RIBBON

CONTROL POINT 3902
Y=400826.05
X=706906.09
ELEV=961.31'
FENO MARKER

CTH ET

USH 12 EB

USH 12 WB

SECTION CORNER

CONTROL POINT 907
Y=400246.54
X=707009.46
ELEV=960.09'
MAG NAIL W/3
WITNESS PK NAILS

CONCRETE SEAM AT CL

TOP BOLT OF FIREPLUG

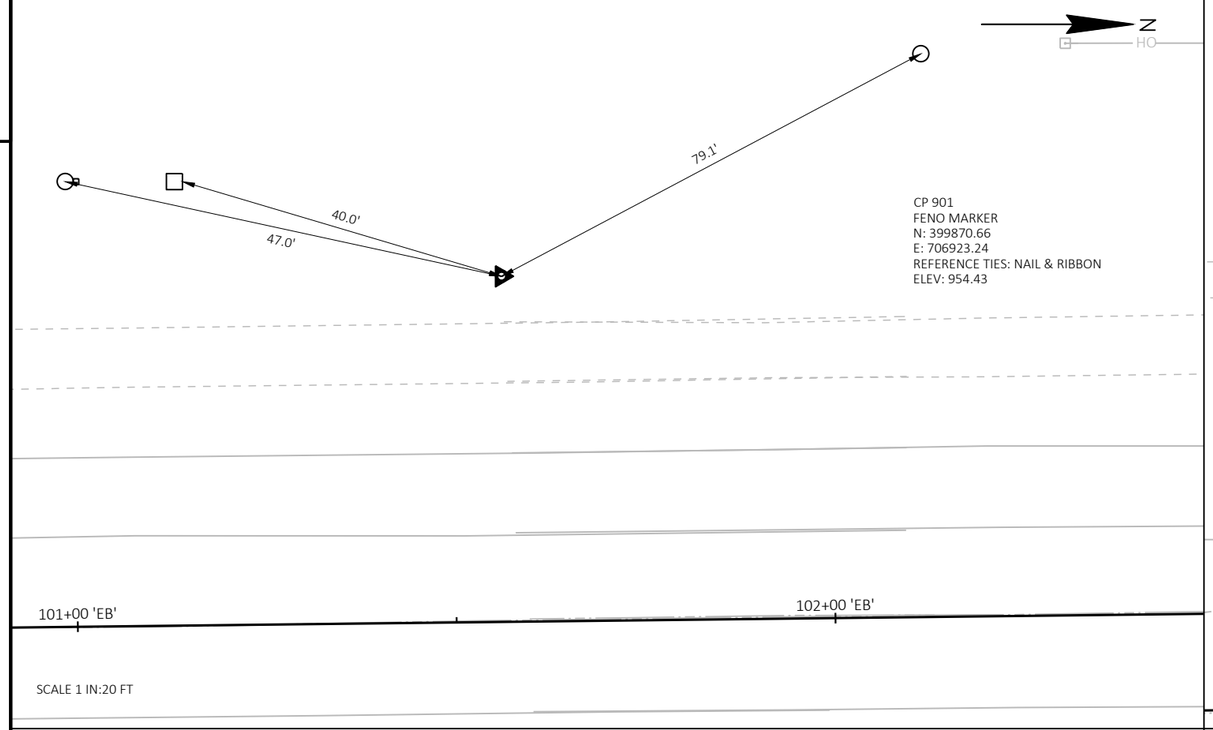
CONTROL POINT 908
Y=400416.06
X=707102.05
ELEV=960.74'
CHIZZLED X ON
MANHOLE RIM

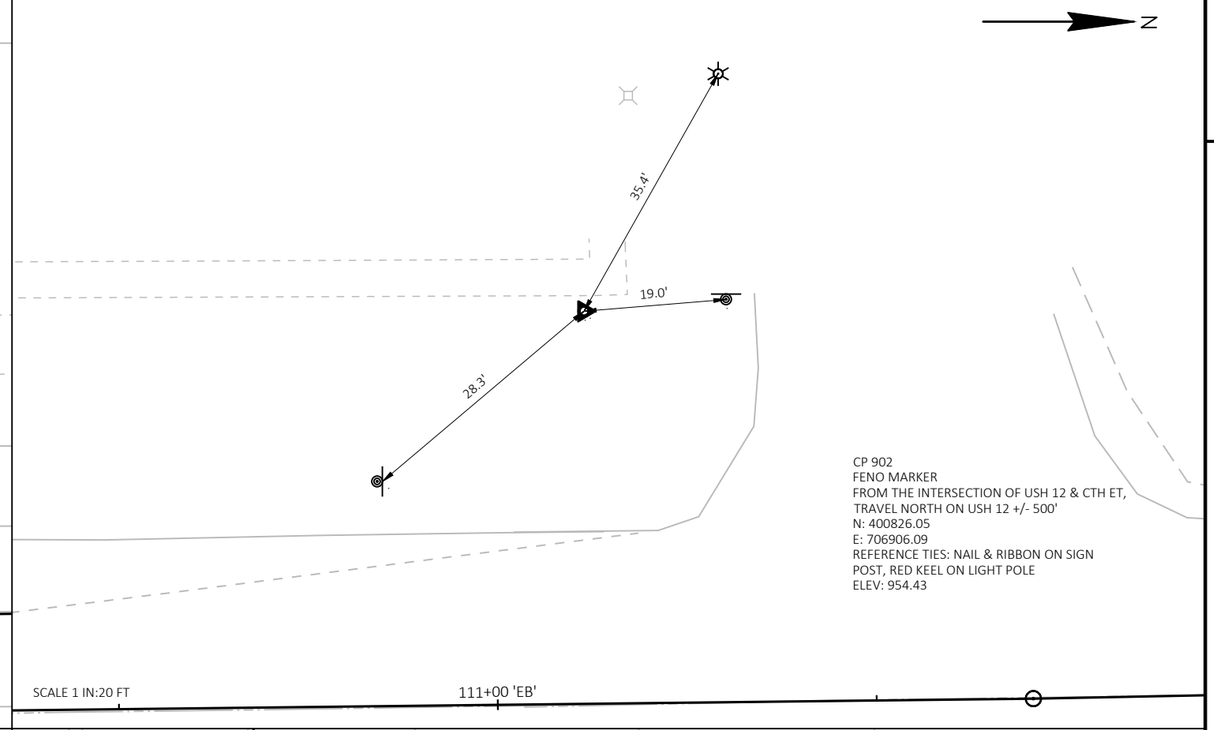
CONTROL POINT 906
Y=400365.75
X=707242.19
ELEV=960.56'
REBAR W/O CAP

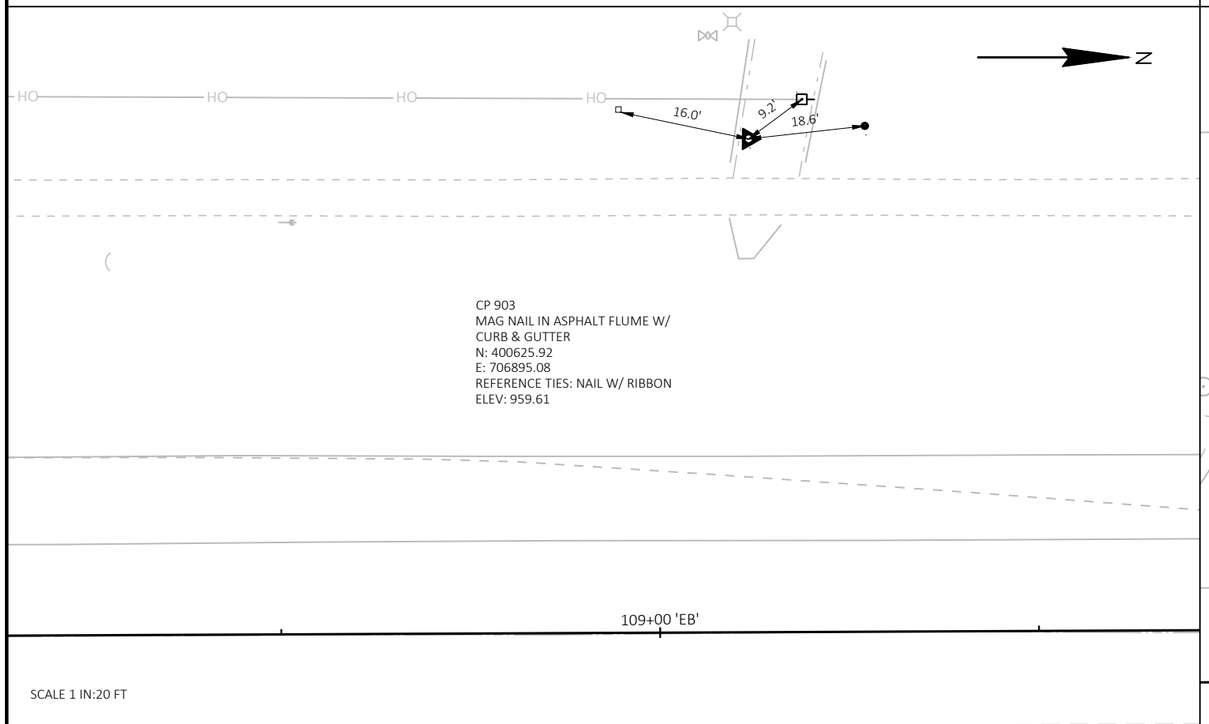
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CONTROL POINT DATA SHEET	SHEET 60	E

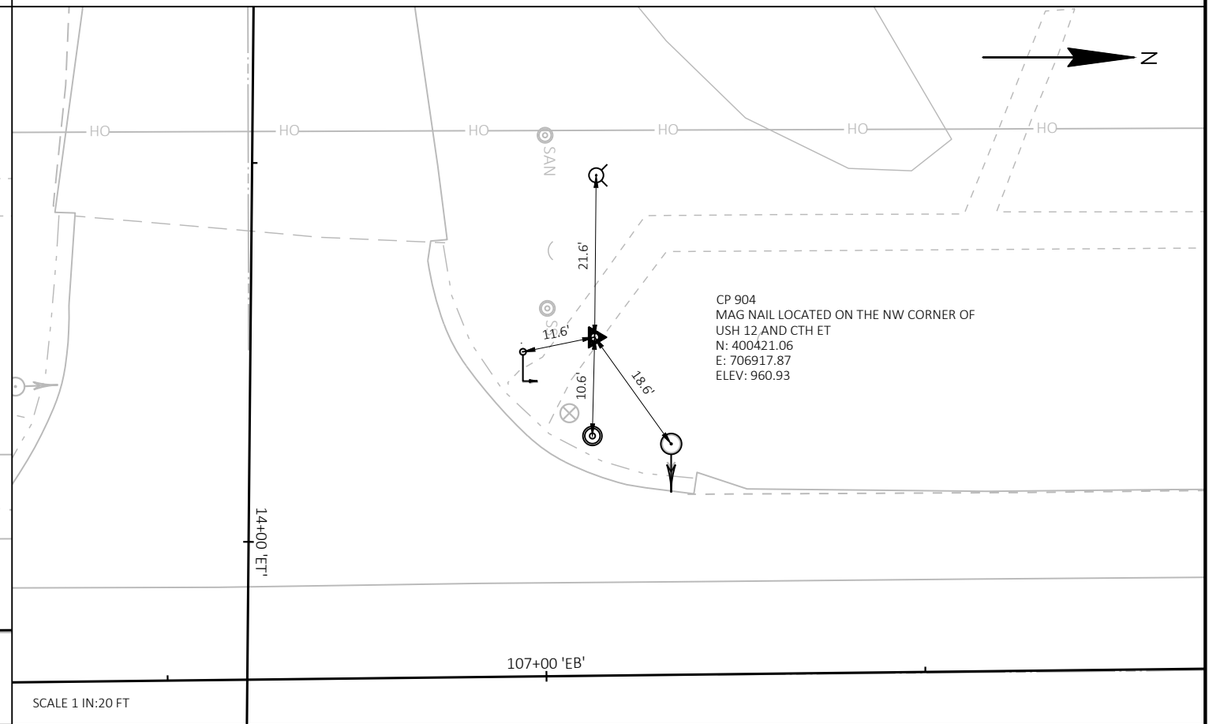
FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 2/25/2022 12:39 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT









PROJECT NO: 7889-00-77	HWY: USH 12	COUNTY: MONROE	CONTROL POINT TIE SHEET	SHEET 61	E

2

N

12+00 'ET'

SAN

GUY

55.4'

OH

38.1'

23.5'

CP 905
REBAR W/O CAP
FROM THE INTERSECTION OF USH 12 & CTH ET, TRAVEL WEST ON CTH ET +/- 300 FT
N: 400343.58
E: 706736.90
REFERENCE TIES: NAIL W/ RIBBON IN POWER POLE
ELEV: 963.73

SCALE 1 IN:20 FT

N

2

17+00 'ET'

PK NAIL

16+00 'ET'

CP 906
REBAR W/O CAP
FROM THE INTERSECTION OF USH 12 & CTH ET, TRAVEL EAST ON CTH ET +/- 300 FT
N: 400365.75
E: 707242.19
REFERENCE TIES: NAIL W/ RIBBON IN POWER POLES
ELEV: 960.56

25.3'

16.5'

64.7'

OH

WV

SCALE 1 IN:20 FT

N

14+00 'ET'

104+00 'EB'

105+00 'EB'

106+00 'EB'

58'

103'

85'

104+00 'WB'

105+00 'WB'

106+00 'WB'

15+00 'ET'

SEC-aprox

CP 907
REBAR W/O CAP
FROM THE INTERSECTION OF USH 12 & CTH ET, TRAVEL SOUTH ON USH 12 +/- 100 FT
N: 400246.54
E: 707009.46
REFERENCE TIES: MAG NAIL W/3 WITNESS PK NAILS
ELEV: 960.06

SCALE 1 IN:40 FT

N

CP 908
CHIZZLED X ON MANHOLE RIM
FROM THE INTERSECTION OF USH 12 & CTH ET, TRAVEL EAST ON CTH ET +/- 100 FT
N: 400416.06
E: 707102.05
REFERENCE TIES: MAG NAIL W/3 WITNESS PK NAILS
ELEV: 960.74

27'

37'

SAN

WV

107+00 'WB'

SEC-aprox

15+00 'ET'

16+00 'ET'

SCALE 1 IN:20 FT

PROJECT NO: 7889-00-77	HWY: USH 12	COUNTY: MONROE	CONTROL POINT TIE SHEET	SHEET 62	E

7998-00-77

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0100	Removing Concrete Pavement	SY	7,187.000	7,187.000
0006	204.0110	Removing Asphaltic Surface	SY	196.000	196.000
0008	204.0150	Removing Curb & Gutter	LF	1,031.000	1,031.000
0010	204.0155	Removing Concrete Sidewalk	SY	433.000	433.000
0012	204.0190	Removing Surface Drains	EACH	1.000	1.000
0014	204.0195	Removing Concrete Bases	EACH	16.000	16.000
0016	204.0210	Removing Manholes	EACH	3.000	3.000
0018	204.0215	Removing Catch Basins	EACH	1.000	1.000
0020	204.0220	Removing Inlets	EACH	5.000	5.000
0022	204.0245	Removing Storm Sewer (size) 01. 12-INCH	LF	242.000	242.000
0024	204.0245	Removing Storm Sewer (size) 02. 18-INCH	LF	59.000	59.000
0026	204.0245	Removing Storm Sewer (size) 03. 24-INCH	LF	134.000	134.000
0028	205.0100	Excavation Common	CY	8,617.000	8,617.000
0030	213.0100	Finishing Roadway (project) 01. 7998-00-77	EACH	1.000	1.000
0034	305.0110	Base Aggregate Dense 3/4-Inch	TON	938.000	938.000
0036	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,831.000	8,831.000
0038	415.0090	Concrete Pavement 9-Inch	SY	10,705.000	10,705.000
0040	415.0210	Concrete Pavement Gaps	EACH	2.000	2.000
0042	415.4100	Concrete Pavement Joint Filling	SY	10,705.000	10,705.000
0044	416.0160	Concrete Driveway 6-Inch	SY	100.000	100.000
0046	416.0620	Drilled Dowel Bars	EACH	400.000	400.000
0048	450.4000	HMA Cold Weather Paving	TON	1,009.000	1,009.000
0050	455.0605	Tack Coat	GAL	189.000	189.000
0052	460.2000	Incentive Density HMA Pavement	DOL	690.000	690.000
0054	460.6224	HMA Pavement 4 MT 58-28 S	TON	1,073.000	1,073.000
0056	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	82.000	82.000
0058	465.0125	Asphaltic Surface Temporary	TON	214.000	214.000
0060	465.0315	Asphaltic Flumes	SY	19.000	19.000
0062	465.0400	Asphaltic Shoulder Rumble Strips	LF	1,172.000	1,172.000
0064	520.2012	Culvert Pipe Temporary 12-Inch	LF	286.000	286.000
0066	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0068	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0070	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	3.000	3.000
0072	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	108.000	108.000
0074	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0076	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	543.000	543.000
0078	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	711.000	711.000
0080	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	2,132.000	2,132.000
0082	601.0600	Concrete Curb Pedestrian	LF	43.000	43.000
0084	602.0405	Concrete Sidewalk 4-Inch	SF	7,657.000	7,657.000
0086	602.0410	Concrete Sidewalk 5-Inch	SF	9,119.000	9,119.000
0088	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	82.000	82.000
0090	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	64.000	64.000
0092	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	24.000	24.000
0094	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	135.000	135.000
0096	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	149.000	149.000
0098	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	163.000	163.000
0100	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	116.000	116.000

7998-00-77

Line	Item	Item Description	Unit	Total	Qty
0102	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0104	611.0624	Inlet Covers Type H	EACH	11.000	11.000
0106	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0108	611.1005	Catch Basins 5-FT Diameter	EACH	2.000	2.000
0110	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0112	611.3230	Inlets 2x3-FT	EACH	9.000	9.000
0114	611.3901	Inlets Median 1 Grate	EACH	2.000	2.000
0116	611.8105	Adjusting Catch Basin Covers	EACH	2.000	2.000
0118	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0120	611.8115	Adjusting Inlet Covers	EACH	13.000	13.000
0122	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7998-00-77	EACH	1.000	1.000
0126	619.1000	Mobilization	EACH	0.980	0.980
0128	620.0200	Concrete Median Blunt Nose	SF	716.000	716.000
0130	624.0100	Water	MGAL	133.110	133.110
0132	625.0500	Salvaged Topsoil	SY	6,978.000	6,978.000
0134	628.1504	Silt Fence	LF	2,972.000	2,972.000
0136	628.1520	Silt Fence Maintenance	LF	6,000.000	6,000.000
0138	628.1905	Mobilizations Erosion Control	EACH	10.000	10.000
0140	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0142	628.2006	Erosion Mat Urban Class I Type A	SY	6,978.000	6,978.000
0144	628.7005	Inlet Protection Type A	EACH	12.000	12.000
0146	628.7010	Inlet Protection Type B	EACH	3.000	3.000
0148	628.7015	Inlet Protection Type C	EACH	16.000	16.000
0150	628.7504	Temporary Ditch Checks	LF	120.000	120.000
0152	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0154	629.0210	Fertilizer Type B	CWT	4.800	4.800
0156	630.0140	Seeding Mixture No. 40	LB	125.000	125.000
0158	630.0200	Seeding Temporary	LB	178.000	178.000
0160	630.0500	Seed Water	MGAL	156.000	156.000
0162	633.1100	Delineators Temporary	EACH	48.000	48.000
0164	633.5200	Markers Culvert End	EACH	8.000	8.000
0166	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	17.000	17.000
0168	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	22.000	22.000
0170	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	3.000	3.000
0172	637.2210	Signs Type II Reflective H	SF	41.250	41.250
0174	638.2102	Moving Signs Type II	EACH	53.000	53.000
0176	638.3000	Removing Small Sign Supports	EACH	31.000	31.000
0178	642.5001	Field Office Type B	EACH	1.000	1.000
0180	643.0300	Traffic Control Drums	DAY	22,000.000	22,000.000
0182	643.0420	Traffic Control Barricades Type III	DAY	2,200.000	2,200.000
0184	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	230.000	230.000
0186	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	230.000	230.000
0188	643.0715	Traffic Control Warning Lights Type C	DAY	4,326.000	4,326.000
0190	643.0800	Traffic Control Arrow Boards	DAY	290.000	290.000
0192	643.0900	Traffic Control Signs	DAY	5,450.000	5,450.000
0194	643.1050	Traffic Control Signs PCMS	DAY	56.000	56.000
0196	643.3105	Temporary Marking Line Paint 4-Inch	LF	5,008.000	5,008.000
0198	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	5,650.000	5,650.000
0200	643.3205	Temporary Marking Line Paint 8-Inch	LF	297.000	297.000

7998-00-77

Line	Item	Item Description	Unit	Total	Qty
0202	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	48.000	48.000
0204	643.3550	Temporary Marking Arrow Removable Tape	EACH	16.000	16.000
0206	643.5000	Traffic Control	EACH	0.980	0.980
0208	644.1420	Temporary Pedestrian Surface Plywood	SF	130.000	130.000
0210	644.1601	Temporary Pedestrian Curb Ramp	DAY	171.000	171.000
0212	644.1810	Temporary Pedestrian Barricade	LF	1,263.000	1,263.000
0214	646.1020	Marking Line Epoxy 4-Inch	LF	8,005.000	8,005.000
0216	646.3020	Marking Line Epoxy 8-Inch	LF	1,899.000	1,899.000
0218	646.5020	Marking Arrow Epoxy	EACH	26.000	26.000
0220	646.5120	Marking Word Epoxy	EACH	4.000	4.000
0222	646.5220	Marking Symbol Epoxy	EACH	10.000	10.000
0224	646.6120	Marking Stop Line Epoxy 18-Inch	LF	162.000	162.000
0226	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	8,005.000	8,005.000
0228	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	1,899.000	1,899.000
0230	646.7120	Marking Diagonal Epoxy 12-Inch	LF	168.000	168.000
0232	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	838.000	838.000
0234	646.8120	Marking Curb Epoxy	LF	897.000	897.000
0236	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0238	646.9000	Marking Removal Line 4-Inch	LF	2,093.000	2,093.000
0240	646.9100	Marking Removal Line 8-Inch	LF	174.000	174.000
0242	650.4000	Construction Staking Storm Sewer	EACH	22.000	22.000
0244	650.4500	Construction Staking Subgrade	LF	3,365.000	3,365.000
0246	650.5000	Construction Staking Base	LF	3,365.000	3,365.000
0248	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,491.000	3,491.000
0250	650.7000	Construction Staking Concrete Pavement	LF	3,105.000	3,105.000
0252	650.8501	Construction Staking Electrical Installations (project) 01. USH 12 & CTH ET	EACH	1.000	1.000
0254	650.9000	Construction Staking Curb Ramps	EACH	11.000	11.000
0256	650.9911	Construction Staking Supplemental Control (project) 01. 7998-00-77	EACH	1.000	1.000
0258	650.9920	Construction Staking Slope Stakes	LF	3,365.000	3,365.000
0260	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,363.000	1,363.000
0262	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,226.000	1,226.000
0264	652.0800	Conduit Loop Detector	LF	380.000	380.000
0266	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	20.000	20.000
0268	653.0905	Removing Pull Boxes	EACH	15.000	15.000
0270	654.0101	Concrete Bases Type 1	EACH	4.000	4.000
0272	654.0102	Concrete Bases Type 2	EACH	5.000	5.000
0274	654.0105	Concrete Bases Type 5	EACH	4.000	4.000
0276	654.0110	Concrete Bases Type 10	EACH	2.000	2.000
0278	654.0113	Concrete Bases Type 13	EACH	2.000	2.000
0280	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0282	655.0210	Cable Traffic Signal 3-14 AWG	LF	120.000	120.000
0284	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,999.000	1,999.000
0286	655.0240	Cable Traffic Signal 7-14 AWG	LF	562.000	562.000
0288	655.0260	Cable Traffic Signal 12-14 AWG	LF	823.000	823.000
0290	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,890.000	1,890.000
0292	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,258.000	1,258.000
0294	655.0610	Electrical Wire Lighting 12 AWG	LF	2,127.000	2,127.000
0296	655.0700	Loop Detector Lead In Cable	LF	3,884.000	3,884.000
0298	655.0800	Loop Detector Wire	LF	1,180.000	1,180.000

7998-00-77

Line	Item	Item Description	Unit	Total	Qty
0300	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. USH 12 & CTH ET	EACH	1.000	1.000
0302	657.0100	Pedestal Bases	EACH	4.000	4.000
0304	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	9.000	9.000
0306	657.0305	Poles Type 2	EACH	2.000	2.000
0308	657.0315	Poles Type 4	EACH	3.000	3.000
0310	657.0322	Poles Type 5-Aluminum	EACH	4.000	4.000
0312	657.0345	Poles Type 9	EACH	1.000	1.000
0314	657.0350	Poles Type 10	EACH	1.000	1.000
0316	657.0361	Poles Type 13-Over Height	EACH	2.000	2.000
0318	657.0415	Traffic Signal Standards Aluminum 11-FT	EACH	3.000	3.000
0320	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	1.000	1.000
0322	657.0530	Monotube Arms 30-FT	EACH	2.000	2.000
0324	657.0545	Monotube Arms 45-FT	EACH	1.000	1.000
0326	657.0550	Monotube Arms 50-FT	EACH	1.000	1.000
0328	657.0585	Trombone Arms 15-FT	EACH	2.000	2.000
0330	657.0709	Luminaire Arms Truss Type 4-Inch Clamp 12-FT	EACH	3.000	3.000
0332	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	8.000	8.000
0334	657.0815	Luminaire Arms Steel 15-FT	EACH	3.000	3.000
0336	657.0825	Luminaire Arms Steel Type 13 Pole Clamp 15-FT	EACH	2.000	2.000
0338	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000
0340	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0342	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0344	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000
0346	658.5070	Signal Mounting Hardware (location) 01. USH 12 & CTH ET	EACH	1.000	1.000
0348	659.1125	Luminaires Utility LED C	EACH	14.000	14.000
0350	659.5100.S	Lamp, Ballast, LED, Switch Disposal by Department	EACH	26.000	26.000
0352	661.0201	Temporary Traffic Signals for Intersections (location) 01. USH 12 & CTH ET	EACH	1.000	1.000
0354	690.0150	Sawing Asphalt	LF	631.000	631.000
0356	690.0250	Sawing Concrete	LF	127.000	127.000
0358	715.0715	Incentive Flexural Strength Concrete Pavement	DOL	3,212.000	3,212.000
0360	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0362	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000
0366	SPV.0060	Special 01. Removing Traffic Signal - USH 12 & CTH ET	EACH	1.000	1.000
0368	SPV.0060	Special 02. Retroreflective Backplate 3S	EACH	6.000	6.000
0370	SPV.0060	Special 03. Retroreflective Backplate 4S	EACH	4.000	4.000
0372	SPV.0060	Special 05. Removing Trees	EACH	3.000	3.000
0374	SPV.0060	Special 06. Landmark Reference Monuments Special	EACH	1.000	1.000
0376	SPV.0060	Special 07. Verify Landmark Reference Monuments	EACH	1.000	1.000
0416	SPV.0090	Special 01. Install State-Supplied Non-Intrusive Detection Cable	LF	1,087.000	1,087.000

SPV.0060.05

CATEGORY	STATION	LOCATION	SPV.0060.05 SPECIAL (05. REMOVING TREES) EACH	REMARKS
0010	11+26 'ET'	30' LT	1	
0010	11+42 'ET'	28' LT	1	
0010	12+04 'ET'	27' LT	1	
		TOTAL 0010	3	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	13+62 'ET'	LT/RT	1	RCCP, 24" X 101'
0010	15+27 'ET'	LT/RT	1	RCCP, 24" X 112'
		TOTAL 0010	2	

REMOVING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	REMARKS
0010	101+00 'WB'	-	111+70 'WB'	WB LANES	2,960	
0010	102+11 'WB'	-	106+21 'WB'	WB LEFT TURN LANE	507	
0010	105+99 'EB'	-	110+16 'EB'	EB LANES	2,930	
0010	106+96 'EB'	-	110+16 'EB'	EB LEFT TURN LANE	401	
0010	106+21 'WB'	-	106+95 'WB'	CENTER OF INTERSECTION	310	AREA BETWEEN WB & EB DRIVING LANES
0010	16+00 'ET'		16+22 'ET'	LT	11	DRIVEWAY APRON
0010	17+08 'ET'		17+45 'ET'	RT	31	DRIVEWAY APRON
0010	17+29 'ET'		17+60 'ET'	LT	15	DRIVEWAY APRON
				TOTAL 0010	7,165	
0020	18+16 'ET'		18+61 'ET'	LT	22	DRIVEWAY APRON
				TOTAL 0020	22	
				PROJECT TOTAL	7187	

REMOVING ASPHALT SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	REMARKS
0010	15+85 'ET'	-	16+22 'ET'	RT	100	DRIVEWAY
0010	16+00 'ET'	-	16+20 'ET'	LT	22	DRIVEWAY
0010	15+85 'ET'	-	16+20 'ET'	RT	48	DRIVEWAY
0010	17+32 'ET'	-	17+57 'ET'	LT	26	DRIVEWAY
0010						
				TOTAL 0010	196	

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	REMARKS
0010	10+63 'ET'	-	10+73 'ET'	LT	15	
0010	11+10 'ET'	-	11+37 'ET'	RT	35	
0010	13+56 'ET'	-	14+07 'ET'	RT	62	
0010	13+60 'ET'	-	13+93 'ET'	LT	53	
0010	15+02 'ET'	-	17+60 'ET'	RT	277	
0010	14+98 'ET'	-	17+60 'ET'	LT	282	
0010	16+03 'ET'	-	16+03 'ET'	LT	14	
0010	16+21 'ET'	-	16+21 'ET'	LT	14	
0010	17+31 'ET'	-	17+31 'ET'	LT	10	
0010	17+57 'ET'	-	17+57 'ET'	LT	9	
				TOTAL 0010	771	
0020	17+60 'ET'	-	18+90 'ET'	RT	130	
0020	17+60 'ET'	-	18+90 'ET'	LT	130	
				TOTAL 0020	260	
				PROJECT TOTAL	1031	

REMOVING CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	REMARKS
0010	13+56 'ET'	-	13+84 'ET'	LT	19	
0010	13+82 'ET'		13+90 'ET'	RT	7	
0010	15+13 'ET'	-	17+60 'ET'	RT	126	
0010	15+02 'ET'	-	17+60 'ET'	LT	138	
				TOTAL 0010	290	
0020	17+60 'ET'	-	17+60 'ET'	RT	75	
0020	15+42 'ET'	-	17+60 'ET'	LT	68	
				TOTAL 0020	143	
				PROJECT TOTAL	433	

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REMOVING SURFACE DRAINS

CATEGORY	STATION	LOCATION	204.0190 REMOVING SURFACE DRAINS EACH	REMARKS
0010	102+03 'WB'	LT	1	
		TOTAL 0010	1	

REMOVING INLETS, MANHOLES AND CATCH BASINS

CATEGORY	STATION	LOCATION	204.0210 REMOVING MANHOLES EACH	204.0215 REMOVING CATCH BASINS EACH	204.0220 REMOVING INLETS EACH	REMARKS
0010	104+23 'WB'	13' LT	-	-	1	
0010	104+23 'WB'	35' LT	-	-	1	
0010	107+17 'WB'	24.5' LT	-	-	1	
0010	107+25 'WB'	18' LT	1	-		
0010	107+99 'WB'	23' LT	-	1	-	
0010	13+69 'ET'	39' LT	1	-	-	
0010	15+33 'ET'	37' RT	1	-	-	
0010	15+51 'ET'	25' RT	-	-	1	
0010	15+78 'ET'	26' LT	-	-	1	
		TOTAL 0010	3	1	5	

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REMOVING STORM SEWER

CATEGORY	STATION	TO	STATION	LOCATION	204.0245.01 REMOVING STORM SEWER (12-INCH) LF	204.0245.02 REMOVING STORM SEWER (SIZE) (02. 18-INCH) LF	204.0245.03 REMOVING STORM SEWER (SIZE) (03. 24-INCH) LF	REMARKS
0010	104+23 'WB'	-	104+23 'WB'	LT	98	-	-	12 INCH
0010	107+17 'WB'	-	107+25 'WB'	LT	11	-	-	12 INCH
0010	108+00 'WB'	-	107+25 'WB'	LT	74	-	-	12 INCH
0010	107+25 'WB'	-	107+25 'WB'	LT/ RT	59	-	-	
0010	13+61 'ET'	-	13+69 'ET'	LT	-	-	8	24 INCH
0010	13+69 'ET'	-	13+69 'ET'	LT/RT	-	-	76	24 INCH
0010	15+33 'ET'	-	15+33 'ET'	RT	-	-	28	24 INCH
0010	15+52 'ET'	-	15+33 'ET'	RT	-	-	22	24 INCH
0010	15+79 'ET'	-	15+33 'ET'	RT	-	59	-	18 INCH
				TOTAL 0010	242	59	134	

COMMON EXCAVATION

CATEGORY	STATION	TO	STATION	LOCATION	205.0100 EXCAVATION COMMON CY	REMARKS
0010	BOP	-	EOP	PROJECT	7,529	SEE EARTHWORK SHEETS
0010	BOP	-	EOP	UNDISTRIBUTED EBS	70	2% OF PAVEMENT UNDISTRIBUTED EBS QUANTITY
0010	98+30 'WB'	-	101+08 'WB'	SOUTH TEMPORARY CROSSOVER	61	USE USEABLE MATERIAL FOR TEMPORARY CROSSOVER FILL
0010	110+32 'WB'	-	113+18 'WB'	NORTH TEMPORARY CROSSOVER	65	USE USEABLE MATERIAL FOR TEMPORARY CROSSOVER FILL
0010	98+30 'WB'	-	101+08 'WB'	SOUTH TEMPORARY CROSSOVER	140	REMOVING SOUTH TEMPORARY CROSSOVER
0010	110+32 'WB'	-	113+18 'WB'	NORTH TEMPORARY CROSSOVER	150	REMOVING NORTH TEMPORARY CROSSOVER
0010	102+51 'WB'	-	102+77 'WB'	TEMPORARY DRIVEWAY	60	INCLUDES INSTALLATION AND REMOVAL
0010	104+13 'WB'	-	104+39 'WB'	TEMPORARY DRIVEWAY	25	INCLUDES INSTALLATION AND REMOVAL
0010	105+50 'EB'	-	106+38 'EB'	TEMPORARY WIDENING	10	INCLUDES INSTALLATION AND REMOVAL
0010	107+07 'WB'	-	107+40 'WB'	TEMPORARY WIDENING	8	INCLUDES INSTALLATION AND REMOVAL
0010	99+44 'WB'	-	99+90 'WB'	LEFT SHOULDER	10	REMOVAL OF LEFT SHOULDER BETWEEN CROSSOVER LANES
0010	99+44 'EB'	-	99+90 'EB'	LEFT SHOULDER	10	REMOVAL OF LEFT SHOULDER BETWEEN CROSSOVER LANES
0010	111+53 'WB'	-	112+04 'WB'	LEFT SHOULDER	10	REMOVAL OF LEFT SHOULDER BETWEEN CROSSOVER LANES
0010	111+53 'EB'	-	112+04 'EB'	LEFT SHOULDER	10	REMOVAL OF LEFT SHOULDER BETWEEN CROSSOVER LANES
				TOTAL 0010	8,158	
0020	17+60 'ET'	-	18+90 'ET'		459	SEE EARTHWORK SHEETS
				TOTAL 0020	459	
				PROJECT TOTAL	8617	

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BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
0010	101+00 'WB'	-	111+70 'WB'	WB LANES	150	2,214	35.46	
0010	101+00 'WB'	-	106+11 'WB'	WB LEFT TURN LANE		386	5.79	
0010	101+00 'EB'	-	111+70 'EB'	EB LANES	101	1,987	31.32	
0010	107+10 'EB'	-	111+70 'EB'	EB LEFT TURN LANE	-	329	5.00	
0010	106+11 'WB'	-	107+07 'WB'	12' LT - 52' LT		126	1.89	AREA OF INTERSECTION BETWEEN NB & SB LANES
0010	10+45 'ET'	-	14+00 'ET'	ET' WEST, LT/RT	-	1,030	2.00	
0010	15+06 'ET'	-	17+60 'ET'	ET' EAST, LT/RT	-	636	9.50	
0010	13+55 'ET'	-	14+00 'ET'	LT SIDEWALK	19	-	0.30	
0010	13+55 'ET'	-	14+00 'ET'	RT SIDWEWALK	27	-	0.40	
0010	15+10 'ET'	-	15+42 'ET'	LT SIDEWALK	12	-	0.20	
0010	15+10 'ET'	-	15+42 'ET'	RT SIDWEWALK	18	-	0.20	
0010	98+25 'WB'	-	101+13 'WB'	SOUTH CROSSOVER	30	700	10.95	
0010	110+30 'WB'	-	113+35 'WB'	NORTH CROSSOVER	30	700	10.95	
0010	103+00 'WB'	-	106+00 'WB'	NB LEFT TURN LANE MEDIAN	62	-	0.90	
0010	106+60 'WB'	-	106+14 'WB'	NB CHANNELIZING ISLAND	30	-	0.50	
0010	107+20 'EB'	-	110+00 'EB'	SB LEFT TURN LANE MEDIAN	57	-	0.90	
0010	107+11 'EB'	-	108+10 'EB'	SB CHANNELIZING ISLAND	20	-	0.30	
					40	250	4.35	UNDISTRIBUTED
				TOTAL 0010	596	8,358	120.91	
0020	10+63 'ET'	-	13+55 'ET'	LT SIDEWALK	78	-	1.20	
0020	10+63 'ET'	-	10+78 'ET'	RT SIDEWALK	4	-	0.10	
0020	11+11 'ET'	-	13+55 'ET'	RT SIDEWALK	67	-	1.00	
0020	17+60 'ET'	-	18+90 'ET'	LT/ RT	-	473	7.10	
0020	15+42 'ET'	-	18+90 'ET'	LT SIDEWALK	96	-	1.40	
0020	15+42 'ET'	-	18+90 'ET'	RT SIDEWALK	97	-	1.40	
				TOTAL 0020	342	473	12.20	
				PROJECT TOTAL	938	8831	133.11	

CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	415.4100 CONCRETE PAVEMENT JOINT FILLING SY	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0620 DRILLED DOWEL BARS EACH	REMARKS
0010	101+00 'WB'	-	111+70 'WB'	DRIVING LANES & RTL	3,292	2	3,292	-	200	
0010	101+00 'WB'	-	106+13 'WB'	WB LEFT TURN LANE	769	-	769	-	-	
0010	106+13 'WB'	-	107+07 'WB'	CENTER OF INTERSECTION	432	-	432	-	-	15' LT - 50' LT
0010	101+00 'EB'	-	111+70 'EB'	DRIVING LANES & RTL	3,255	-	3,255	-	200	
0010	107+09 'EB'	-	111+70 'EB'	EB LEFT TURN LANE	759	-	759	-	-	
0010	11+94 'ET'	-	13+99 'ET'	LT/RT	1,207	-	1,207	-	-	
0010	15+06 'ET'	-	16+56 'ET'	LT/RT	991	-	991	-	-	
0010	16+01 'ET'	-	16+28 'ET'	RT	-	-	-	18	-	
0010	17+09 'ET'	-	17+45 'ET'	RT	-	-	-	30	-	
0010	17+99 'ET'	-	18+60 'ET'	LT	-	-	-	52	-	
				TOTAL 0010	10,705	2	10,705	100	400	

HMA PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
0010	101+00 'WB'	-	104+47 'WB'	RT SHOULDER	65	-	65	39	-	
0010	107+40 'WB'	-	111+68 'WB'	RT SHOULDER	93	-	93	-	-	
0010	110+00 'WB'	-	111+69 'WB'	LT SHOULDER	15	-	15	-	-	
0010	101+02 'EB'	-	103+00 'EB'	LT SHOULDER	17	-	17	-	-	
0010	101+02 'EB'	-	105+84 'EB'	RT SHOULDER	105	-	105	-	-	
0010	108+73 'EB'	-	111+70 'EB'	RT SHOULDER	54	-	54	22	-	
0010	100+75 'WB'	-	101+00 'WB'	TIE IN	36	11	36	-	-	
0010	111+68 'WB'	-	111+93 'WB'	TIE IN	36	11	36	-	-	
0010	100+78 'EB'	-	101+02 'EB'	TIE IN	36	11	36	-	-	
0010	111+70 'EB'	-	111+97 'EB'	TIE IN	36	11	36	-	-	
0010	10+45 'ET'	-	11+94 'ET'	CTH ET WEST	200	65	200	-	-	
0010	16+56 'ET'	-	17+60 'ET'	LT/RT	146	50	146	-	-	
0010	15+85 'ET'	-	16+22 'ET'	RT DRIVEWAY	-	-	-	8	-	
0010	17+14 'ET'	-	17+40 'ET'	CTH ET RT	-	-	-	5	-	
0010	18+08 'ET'	-	18+39 'ET'	LT DRIVEWAY	-	-	-	5	-	
0010	18+43 'ET'	-	18+55 'ET'	LT DRIVEWAY	-	-	-	3	-	
0010	98+25 'WB'	-	101+13 'WB'	SOUTH CROSSOVER	-	-	-	-	83	
0010	110+30 'WB'	-	113+35 'WB'	NORTH CROSSOVER	-	-	-	-	88	
0010	102+51 'WB'	-	102+77 'WB'	MEDIAN	-	-	-	-	16	
0010	104+13 'WB'	-	104+39 'WB'	MEDIAN	-	-	-	-	7	
0010	105+96 'EB'	-	106+23 'EB'	12' - 18' LT	-	-	-	-	5	TEMPORARY WIDENING
0010	106+23 'WB'	-	106+80 'WB'	60' LT	-	-	-	-	11	
0010	107+07 'WB'	-	107+40 'WB'	19' RT	-	-	-	-	4	TEMPORARY WIDENING
0010	98+44 'WB'		100+75 'WB'	14' LT	-	-	20	-	-	REPLACE SHOULDER - STAGE 4
0010	98+44 'EB'		100+75 'EB'	14'RT	-	-	20	-	-	REPLACE SHOULDER - STAGE 4
0010	111+96 'EB'		113+25 'EB'	14' RT	-	-	12	-	-	REPLACE SHOULDER - STAGE 4
0010	111+94 'WB'		113+25 'WB'	14' LT	-	-	12	-	-	REPLACE SHOULDER - STAGE 4
				TOTAL 0010	839	159	903	82	214	
0020	17+60 'ET'	-	18+90 'ET'	CTH ET EAST	170	30	170	-	-	
				TOTAL 0020	170	30	170	0	0	
				PROJECT TOTAL	1009	189	1073	82	214	

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	REMARKS
0010	101+00 'WB'	20' LT	8	
0010	102+81 'WB'	30' LT	5	
0010	102+93 'WB'	48' LT	6	
		TOTAL 0010	19	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
0010	98+45 'WB'	-	101+00 'WB'	LT SHOULDER	255	
0010	109+00 'WB'	-	112+75 'WB'	LT SHOULDER	375	
0010	98+63 'EB'	-	103+00 'EB'	LT SHOULDER	437	
0010	111+70 'EB'	-	112+75 'EB'	LT SHOULDER	105	
				TOTAL 0010	1,172	

TEMPORARY CULVERT PIPES 12-INCH

CATEGORY	STATION	TO	STATION	LOCATION	520.2012 CULVERT PIPE TEMPORARY 12-INCH LF	REMARKS
0010	99+02 'WB'	-	100+27 'WB'	MEDIAN	125	SOUTH CROSSOVER
0010	111+13 'WB'	-	112+38 'WB'	MEDIAN	125	NORTH CROSSOVER
0010	102+45 'WB'	-	108+81 'WB'	MEDIAN	36	TEMPORARY DRIVEWAY
				TOTAL 0010	286	

STORM SEWER

CATEGORY	STATION	TO	STATION	STRUCTURE NO.	TO	STRUCTURE NO.	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL LF	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL EACH	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF
0010	104+65.22 'WB'	-	104+65.22 'WB'	1.1	-	1.2	-	-	-	-	-	10	-	-	-	-
0010	104+65.22 'WB'	-	104+65.08 'WB'	1.2	-	1.3	-	-	-	-	-	-	-	-	28	-
0010	104+65.08 'WB'	-	104+64.88 'WB'	1.3	-	1.4	-	-	1	-	-	-	-	-	-	48
0010	15+34.83 'ET'	-	15+27.78 'ET'	2.1	-	2.2	-	-	-	100	1	-	-	-	-	-
0010	15+93.96 'ET'	-	15+89.20 'ET'	2.3	-	2.4	-	-	-	-	-	-	-	-	54	-
0010	15+89.20 'ET'	-	15+27.78 'ET'	2.4	-	2.2	-	-	-	-	-	-	66	-	-	-
0010	15+27.78 'ET'	-	15+25.30 'ET'	2.2	-	2.5	-	-	-	8	1	-	-	-	-	-
0010	107+25.61 'WB'	-	107+33.74 'WB'	3.1	-	3.2	-	1	-	-	-	-	-	-	46	-
0010	108+43.40 'WB'	-	108+43.40 'WB'	4.1	-	4.2	1	-	-	-	-	-	-	60	-	-
0010	13+73.25 'ET'	-	13+70.62 'ET'	5.1	-	5.3	-	-	1	-	-	-	26	-	-	-
0010	13+33.05 'ET'	-	13+37.76 'ET'	5.2	-	5.4	-	-	-	-	-	14	-	-	-	-
0010	13+37.76'ET'	-	13+70.62 'ET'	5.4	-	5.3	-	-	-	-	-	-	-	-	35	-
0010	13+70.62 'ET'	-	13+70.31 'ET'	5.3	-	5.5	-	-	-	-	-	-	-	-	-	68
0010	13+46.92 'ET'	-	13+70.31 'ET'	5.6	-	5.5	-	-	-	-	-	-	-	24	-	-
0010	13+70.31 'ET'	-	13+70.60 'ET'	5.5	-	5.7	-	-	1	-	-	-	43	-	-	-
0010	111+41.39 'WB'	-	111+41.40 'WB'	6.1	-	6.2	1	-	-	-	-	-	-	65	-	-
						TOTAL 0010	2	1	3	108	2	24	135	149	163	116

INLETS MANHOLES AND CATCHBASINS

CATEGORY	STATION	OFFSET	STRUCTURE NO.	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.0642 INLET COVERS TYPE MS EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.8105 ADJUSTING CATCH BASIN COVERS EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	REMARKS
0010	104+65.33 'WB'	-50.631	1.1	-	1	-	-	-	1	-	-	-	1	
0010	104+65.22 'WB'	-40.627	1.2	-	1	-	-	-	1	-	-	-	1	
0010	104+65.08 'WB'	-12.928	1.3	-	1	-	-	-	1	-	-	-	1	
0010	15+27.78 'ET'	49.575	2.2	1	-	-	-	1	-	-	-	1	-	
0010	15+93.96 'ET'	-28.841	2.3	-	1	-	-	-	1	-	-	-	1	
0010	15+89.20 'ET'	25.359	2.4	-	1	-	-	-	1	-	-	-	1	
0010	107+25.61 'WB'	-13.465	3.1	-	1	-	-	-	1	-	-	-	1	
0010	108+43.40 'WB'	-25.306	4.1	-	1	-	-	-	1	-	-	-	1	
0010	13+33.05 'ET'	-36.902	5.2	-	-	1	-	-	-	1	-	-	1	
0010	13+70.62 'ET'	-36.117	5.3	-	1	-	1	-	-	-	1	-	1	
0010	13+37.76 'ET'	-24.140	5.4	-	1	-	-	-	1	-	-	-	1	
0010	13+70.31 'ET'	31.542	5.5	-	1	-	1	-	-	-	1	-	1	
0010	13+46.92 'ET'	29.330	5.6	-	1	-	-	-	1	-	-	-	1	
0010	111+41.39 'WB'	-32.174	6.1	-	-	1	-	-	-	1	-	-	1	
			TOTAL 0010	1	11	2	2	1	9	2	2	1	13	

3

CONCRETE CURB AND GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0413 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	620.0200 CONCRETE MEDIAN BLUNT NOSE SF	REMARKS
0010	10+63 'ET'	-	11+93 'ET'	LT	-	135	-	-	
0010	11+93 'ET'	-	13+53 'ET'	LT	160	-	-	-	
0010	13+53 'ET'	-	14+00 'ET'	LT	-	-	68	-	
0010	10+63 'ET'	-	10+79 'ET'	RT	-	26	-	-	
0010	11+09 'ET'	-	11+93 'ET'	RT	-	90	-	-	
0010	11+93 'ET'	-	13+51 'ET'	RT	155	-	-	-	
0010	13+51 'ET'	-	14+00 'ET'	RT	-	-	80	-	
0010	15+00 'ET'	-	15+43 'ET'	LT	-	-	71	-	
0010	15+53 'ET'	-	16+56 'ET'	LT	113	-	-	-	
0010	16+56 'ET'	-	17+60 'ET	LT	-	100	-	-	
0010	15+00 'ET'	-	15+43 'ET'	RT	-	-	67	-	
0010	15+43 'ET'	-	16+56 'ET'	RT	115	-	-	-	
0010	16+56 'ET	-	17+60 'ET'	RT	-	100	-	-	
0010	101+00 'WB'	-	106+03 'WB'	EB LEFT TURN LANE	-	-	505	-	
0010	104+58 'WB'	-	106+13 'WB'	CHANNELIZING ISLAND	-	-	319	-	
0010	107+14 'WB'	-	110+00 'WB'	LT	-	-	185	-	
0010	103+00 'EB'	-	106+05 'EB'	RT	-	-	308	-	
0010	107+08 'EB'	-	108+12 'EB'	CHANNELIZING ISLAND	-	-	217	-	
0010	107+18 'EB'	-	111+71 'EB'	WB LEFT TURN LANE	-	-	312	-	
0010	104+60 'WB'			19' LT MEDIAN NOSE	-	-	-	124	ROUNDED NOSE
0010	106+10 'WB'			19' LT MEDIAN NOSE	-	-	-	124	ROUNDED NOSE
0010	107+17 'WB'			18' LT MEDIAN NOSE	-	-	-	110	ROUNDED NOSE
0010	106+03 'EB'			18' RT MEDIAN NOSE	-	-	-	110	ROUNDED NOSE
0010	107+09 'EB'			19' RT MEDIAN NOSE	-	-	-	124	ROUNDED NOSE
0010	108+11 'EB'			19' RT MEDIAN NOSE	-	-	-	124	ROUNDED NOSE
				TOTAL 0010	543	451	2,132	716	
0020	17+60 'ET'	-	18+90 'ET'	LT	-	130	-	-	
0020	17+60 'ET'	-	18+90 'ET'	RT	-	130	-	-	
				TOTAL 0020	0	260	0	0	
				PROJECT TOTALS	543	711	2132	716	

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CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	REMARKS
0010	13+55 'ET'	-	14+00 'ET'	LT SIDEWALK	17	348	-	
0010	13+55 'ET'	-	14+00 'ET'	RT SIDEWALK	14	779	-	
0010	15+06 'ET'	-	15+42 'ET'	LT SIDEWALK		272	-	
0010	15+06 'ET'	-	15+42 'ET'	RT SIDEWALK		250	-	
0010	103+00 'WB'	-	106+00 'WB'	WB LEFT TURN LANE MEDIAN		-	3,172	CURB & GUTTER ISLAND
0010	106+60 'WB'	-	106+14 'WB'	WB CHANNELIZING ISLAND		-	1,556	CURB & GUTTER ISLAND
0010	107+20 'EB'	-	110+00 'EB'	EB LEFT TURN LANE MEDIAN		-	2,931	CURB & GUTTER ISLAND
0010	107+11 'EB'	-	108+10 'EB'	EB CHANNELIZING ISLAND		-	970	CURB & GUTTER ISLAND
				TOTAL 0010	31	1,649	8,629	
0020	10+36 'ET'	-	13+55 'ET'	LT		1,453	-	
0020	10+36 'ET'	-	10+79 'ET'	RT	12	68	-	
0020	11+11 'ET'	-	13+55 'ET'	RT		1,429	-	
0020	15+42 'ET'	-	18+04 'ET'	LT		1,329	-	
0020	18+04 'ET'	-	18+55 'ET'	LT		-	258	
0020	18+55 'ET'	-	18+90 'ET'	LT		173	-	
0020	15+42 'ET'	-	16+06 'ET'	RT		370	-	
0020	16+06 'ET'	-	16+24 'ET'	RT		-	86	
0020	16+24 'ET'	-	17+13 'ET'	RT		440	-	
0020	17+13 'ET'	-	17+41 'ET'	RT		-	146	
0020	17+41 'ET'	-	18+90 'ET'	RT		746	-	
				TOTAL 0020	12	6,008	490	
				PROJECT TOTAL	43	7657	9119	

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CURB RAMP DETECTABLE WARNING FIELDS

CATEGORY	STATION	LOCATION	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
0010	15+20 'ET'	43' LT	-	16
0010	15+37 'ET'	34' LT	10	-
0010	15+37 'ET'	33' RT	10	-
0010	15+22 'ET'	42' RT	-	23
0010	13+81 'ET'	41' RT	-	25
0010	13+60 'ET'	32' RT	16	-
0010	13+60 'ET'	35' LT	16	-
0010	13+74 'ET'	43' LT	10	-
0010	10+70 'ET'	28' RT	10	-
0010	11+16 'ET'	28' RT	10	-
		TOTAL 0010	82	64

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SILT FENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	REMARKS
0010	101+33 'WB'	-	102+45 'WB'	RT	115	-	
0010	102+77 'WB'	-	104+10 'WB'	RT	132	-	
0010	104+41 'WB'	-	105+00 'WB'	RT	150	-	
0010	107+27 'WB'	-	111+90 'WB'	RT	460	-	
0010	100+75 'WB'	-	105+84 'WB'	LT	525	-	
0010	107+30 'WB'	-	111+30 'WB'	LT	400	-	
0010	10+63 'ET'	-	13+53 'ET'	LT	300	-	
0010	10+57 'ET'	-	10+76 'ET'	RT	32	-	
0010	11+12 'ET'	-	13+45 'ET'	RT	250	-	
0010	15+43 'ET'	-	15+96 'ET'	LT	70	-	
0010	16+19 'ET'	-	17+30 'ET'	LT	113	-	
0010	17+59 'ET'	-	18+07 'ET'	LT	50	-	
0010	18+56 'ET'	-	18+90 'ET	LT	35	-	
0010	15+38 'ET'	-	17+15 'ET'	RT	180	-	
0010	17+40 'ET'	-	18+90 'ET'	RT	160	-	
0010	PROJECT				-	6,000	UNDISTRIBUTED
				TOTAL 0010	2,972	6,000	

EROSION CONTROL MOBILIZATION

CATEGORY	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010			10	4	
		TOTAL 0010	10	4	

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TOPSOIL - EROSION MAT - SEEDING

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
0010	101+00 'WB'	-	106+25 'WB'	RT	567	567	0.4	10	15	13	
0010	101+00 'WB'	-	104+00 'WB'	MEDIAN	747	747	0.5	13	20	17	
0010	107+00 'WB'	-	111+70 'WB'	RT	794	794	0.5	14	21	18	
0010	108+50 'WB'	-	111+70 'WB'	MEDIAN	753	753	0.5	14	20	17	
0010	101+00 'EB'	-	106+25 'EB'	LT	494	494	0.3	9	13	11	
0010	107+00 'EB'	-	111+70 'EB'	LT	578	578	0.4	10	16	13	
0010	98+00 'WB'	-	101+00 'WB'	MEDIAN	791	791	0.5	14	21	18	TEMPORARY CROSSOVER
0010	111+70 'WB'	-	113+00 'WB'	MEDIAN	461	461	0.3	8	12	10	TEMPORARY CROSSOVER
				UNDISTRIBUTED	500	500	0.5	10	5	10	
				TOTAL 0010	5,685	5,685	3.9	102	143	127	
0020	10+63 'ET'	-	13+55 'ET'	RT	110	110	0.1	2	3	3	
0020	10+63 'ET'	-	13+55 'ET'	LT	281	281	0.2	5	8	6	
0020	15+42 'ET'	-	18+90 'ET'	RT	442	442	0.3	8	12	10	
0020	15+42 'ET'	-	18+90 'ET'	LT	460	460	0.3	8	12	10	
				TOTAL 0020	1,293	1,293	0.9	23	35	29	
				PROJECT TOTAL	6978	6978	4.8	125	178	156	

INLET PROTECTION

CATEGORY	STATION	LOCATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
0010	98+50 'WB'	31' LT	-	1	-	
0010	104+23 'WB'	35' LT	-	-	1	
0010	104+23 'WB'	13' LT	-	-	1	
0010	107+16 'WB'	24' LT	-	-	1	
0010	108+00 'WB'	25' LT	-	1	-	
0010	15+51 'ET'	25' RT	-	-	1	
0010	15+78 'ET'	26' LT	-	-	1	
0010	104+65 'WB'	50' LT	1	-	1	
0010	104+65 'WB'	40' LT	1	-	1	
0010	104+65 'WB'	13' LT	1	-	1	
0010	15+94 'ET'	28' LT	1	-	1	
0010	15+95 'ET'	16' RT	1	-	1	
0010	107+25 'WB'	13' LT	1	-	1	
0010	108+43 'WB'	25' LT	1	-	1	
0010	111+41 'WB'	32' LT	-	1	-	
0010	13+33 'ET'	36' LT	1	-	-	
0010	13+72 'ET'	32' LT	1	-	1	
0010	13+40 'ET'	17' LT	1	-	1	
0010	13+71 'ET'	30' RT	1	-	1	
0010	13+50 'ET'	29' RT	1	-	1	
		TOTAL 0010	12	3	16	

CULVERT PIPE CHECKS AND MARKERS

CATEGORY	STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	104+65 'WB'	36' RT	-	1	ENDWALL 1.4
0010	15+27 'ET'	57' RT	-	1	ENDWALL 2.5
0010	13+72 'ET'	57' RT	-	1	ENDWALL 5.7
0010	13+73 'ET'	62'LT	4	1	ENDWALL 5.1
0010	15+35 'ET'	50' LT	4	1	ENDWALL 2.1
0010	107+29 'WB'	32' RT	-	1	ENDWALL 3.2
0010	108+43 'WB'	34' RT	-	1	ENDWALL 4.2
0010	111+41 'WB'	32' RT	-	1	ENDWALL 6.2
		TOTAL 0010	8	8	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	REMARKS
0010	101+95 'WB'	RT DITCH	12	
0010	103+61 'WB'	RT DITCH	12	
0010	105+28 'WB'	RT DITCH	12	
0010	105+63 'WB'	LT DITCH	12	
0010	107+80 'WB'	RT DITCH	12	
0010	107+88 'WB'	LT DITCH	12	
0010	109+90 'WB'	RT DITCH	12	
0010	110+53 'WB'	LT DITCH	12	
0010	12+81 'ET'	LT DITCH	12	
0010	13+00 'ET'	RT DITCH	12	
		TOTAL 0010	120	

638-SIGNS

CATEGORY	STATION	LOCATION	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	98+23 'EB'	35' RT	1	-	-	-	1	1	R4-7 - 24" x 36" (12)
0010	98+73 'EB'	26' RT	1	-	-	-	1	1	R5-1 - 30" x 30" (5)
0010	98+97 'EB'	39' RT	1	-	-	-	1	1	W3-3 36" x 36" (20)
0010	98+97 'EB'	96' RT	1	-	-	-	1	1	W3-3 36" x 36" (20)
0010	99+25 'EB'	26' RT	1	-	-	-	1	1	M3-2 24" x 12" (9)
0010	99+25 'EB'	26' RT	-	-	-	-	1		M1-54 24" x 24" (9)
0010	99+25 'EB'	26' RT	-	1	-	-	1		W3-5 36" x 36" (19)
0010	99+25 'EB'	21' LT	-	1	-	-	1	1	W3-5 36" x 36" (19)
0011	101+07 'EB'	40 RT	1	-	-	-	1	1	R3-20L 24" x 36" (4)
0010	100+71 'EB"	96' RT	2	-	-	-	1	2	DRIVER LICENSING (17)
0010	101+22 'EB'	41' RT	1	-	-	-	1	1	R6-2R 24" x 30" (16)
0010	101+29 'EB'	26' LT	-	-	1	-	1	1	M4-1 24" x 12" (3)
0010	101+29 'EB'	26' LT	-	-	-	-	1		M1-1 24" x 24" (3)
0010	101+29 'EB'	26' LT	-	-	-	-	1		M1-1 24" x 24" (3)
0010	101+96 'EB'	96' RT	-	2	-	-	1	2	VA MEDICAL CENTER (18)
0010	101+96 'EB'	96' RT	1	-	-	-	1		R5-1 - 30" x 30" (5)
0011	102+64 'EB'	30 RT	1	-	-	5.00	-	-	R6-2R 24" x 30" (16)
0010	103+35 'EB'	96' RT	-	1	-	-	1	1	M1-55 24" x 20" (1)
0010	103+35 'EB'	96' RT	-	-	-	-	1		M6-4 21" x 21" (1)
0010	104+79 'EB'	21' LT	-	1	-	-	1	1	M3-2 24" x 12" (9)
0010	104+79 'EB'	21' LT	-	-	-	-	1		M1-54 24" x 24" (9)
0010	105+95 'EB'	18' RT	1	-	-	-	1		R4-7 - 24" x 36" (12)
0010	105+95 'EB'	18' RT	-	-	-	-	1		R3-4 24" x 24" (7)
0010	106+08 'EB'	43' RT	-	-	-	-	1		R1-1F 30" x 30" (6)
0010	106+08 'EB'	43' RT	-	-	-	-	1		R10-50L 30" x 36" (14)
0010	106+11 'EB'	40' LT	-	1	-	-	1	1	R6-2R 24" x 30" (16)
0010	106+11 'EB'	40' LT	-	-	-	-	1		M1-54 24" x 24" (2)
0010	106+11 'EB'	40' LT	-	-	-	-	1		M6-4 21" x 21" (2)
0010	106+27 'EB'	47' LT	-	-	-	-	1		R6-3 30" x 24" (13)
0010	106+27 'EB'	47' LT	-	-	-	-	1	1	R1-1F 30" x 30" (6)
0010	5+50 'ET'	RT	-	1	-	2.50	-		R3-17AP 30" x 12"(23)
0010	5+50 'ET'	RT	-	-	-	5.00	-		R3-17 30" x 24" (23)
0010	11+36 'ET'	RT	-	1	-	7.50	-		R4-4 36" x 30" (24)
0010	11+94 'ET'	RT	-	1	-	6.25	-		R3-7R 30" x 30" (21)
0010	12+84 'ET'	26' LT	-	1	-	-	1	1	R12-1 24" x 30" (11)
0010	15+70 'ET'	26' RT	-	-	-	-	1	1	R12-1 24" x 30"
0010	17+28 'ET'	LT	-	1	-	7.50	-		R4-4 36" x 30" (24)
0010	17+93 'ET'	26' RT	-	-	-	-	1	1	R3-7R 30" x 30"
0010	24+00 'ET'	RT	-	1	-	2.50	-		R3-17AP 30" x 12"(23)
0010	24+00 'ET'	RT	-	-	-	5.00	-		R3-17 30" x 24" (23)
0010	107+13 'EB'	19' RT	-	-	-	-	1		R1-1F 30" x 30" (6)
0010	107+13 'EB'	19' RT	-	-	-	-	1		R10-50L 30" x 36" (14)
0010	107+13 'EB'	92' RT	-	1	-	-	1	1	R6-2L 24" x 30" (15)
0010	107+13 'EB'	92' RT	-	-	-	-	1		M1-54 24" x 24" (2)
0010	107+13 'EB'	92' RT	-	-	-	-	1		M6-4 21" x 21" (2)
0010	107+28 'EB'	46' RT	1	-	-	-	1		R3-4 24" x 24" (7)
0010	107+28 'EB'	46' RT	-		1	-	1		R4-7 - 24" x 36" (12)
0010	108+45 'EB'	95' RT	1	-	-	-	1	1	M3-4 24" x 12" (7)
0010	108+45 'EB'	95' RT	-	1	-	-	1		M1-55 24" x 20" (1)
0010	108+45 'EB'	95' RT	-	-	1	-	1		M4-1 24" x 12" (3)
0010	108+45 'EB'	95' RT	-	1	-	-	1		M1-1 24" x 24" (3)
0010	111+66 'EB'	22' RT	1	-	-	-	1	1	R3-20L 24" x 36" (4)
0010	108+69 'EB'	26' LT	-	-	-	-	1	2	D9-2 24" x 24" (3)
0010	108+69 'EB'	26' LT	-	1	-	-	1		M6-1 21" x 21" (22)
0010	108+69 'EB'	26' LT	-	1	-	-	1		M1-55 24" x 20" (1)
0010	108+69 'EB'	26' LT	-	-	-	-	1		M6-4 21" x 21" (1)
0010	111+49 'EB'	23' RT	1	-	-	-	1	1	R6-2R 24" x 30" (16)
0010	112+14 'EB'	30' RT	-	2	-	-	1	2	VA MEDICAL CENTER (18)
0010	112+19 'EB'	20 RT	1	-	-	-	1	1	R5-1 - 30" x 30" (5)
0010	112+88 'EB'	33 LT	-	1	-	-	1	1	W3-3 36" x 36" (20)
0010	112+88 'EB'	22 RT	-	1	-	-	1	1	W3-3 36" x 36" (20)
		TOTAL 0010	17	22	3	41.25	53	31	

TRAFFIC CONTROL

CATEGORY	LOCATION	633.1100 DELINEATORS TEMPORARY EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	STAGE 1	-	4,000	250	-	-	500	50	800	14	0.98	
0010	STAGE 2A	24	3,500	300	115	115	800	40	800	14	-	
0010	STAGE 2B	-	3,000	360	-	-	720	40	1,200	-	-	
0010	STAGE 2C	-	2,500	250	-	-	576	30	650	-	-	
0010	STAGE 3A	24	3,500	500	115	115	800	60	800	14	-	
0010	STAGE 3B	-	3,000	400	-	-	630	40	700	-	-	
0010	STAGE 4	-	2,500	140	-	-	300	30	500	14	-	
	TOTAL 0010	48	22,000	2,200	230	230	4,326	290	5,450	56	0.98	

PEDESTRIAN ACCOMODATIONS

CATEGORY	STATION	TO	STATION	LOCATION	644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	REMARKS
0010	13+84 'ET'			35' RT	80	15	-	STAGE 1
0010	13+84 'ET'			35'RT	50	20	-	STAGE 2A
0010	101+00 'EB'	-	106+23 'EB'	28' LT	-	-	523	STAGE 3A
0010	106+21 'WB'			43' LT - 30' RT	-	-	200	STAGE 2A
0010	13+79 'ET'			0' - 30' LT	-	-	50	STAGE 2A
0010	13+84 'ET'			35'RT	-	18	-	STAGE 2B
0010	13+81 'ET'			36' LT	-	18	-	STAGE 2B
0010	13+84 'ET'			35'RT	-	12	-	STAGE 2C
0010	13+81 'ET'			36' LT	-	12	-	STAGE 2C
0010	13+84 'ET'			35'RT	-	20	-	STAGE 3A
0010	13+81 'ET'			36' LT	-	20	-	STAGE 3A
0010	106+85 'EB'			40' LT - 50' RT	-	-	180	STAGE 3A
0010	13+84 'ET'			35'RT	-	18	-	STAGE 3B
0010	13+81 'ET'			36' LT	-	18	-	STAGE 3B
0010	106+08 'EB'			18' LT - 52' RT	-	-	140	STAGE 3B
0010	107+05 'EB'			35' LT - 50' RT	-	-	170	STAGE 3B
				TOTAL 0010	130	171	1,263	

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.3020 MARKING LINE EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.5220 MARKING SYMBOL EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.6464 COLD WEATHER MARKING EPOXY 4-INCH LF	646.6468 COLD WEATHER MARKING EPOXY 8-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
0010	100+75 'WB'	-	111+93 'WB'	CL	280	-	-	-	-	-	280	-	-	-	-	-
0010	100+75 'WB'	-	106+04 'WB'	LEFT EDGELINE	533	-	-	-	-	-	533	-	-	-	-	-
0010	100+75 'WB'	-	105+87 'WB'	RIGHT EDGELINE	517	-	-	-	-	-	517	-	-	-	-	-
0010	102+95 'WB'	-	106+06 'WB'	GORE/ ISLAND	-	624	-	-	-	-	-	624	75	-	-	-
0010	104+46 'WB'	-	106+10 'WB'	RIGHT TURN LANE CHANNELIZING	-	164	2	1	-	-	-	164	-	-	-	-
0010	104+70 'WB'	-	105+80 'WB'	LEFT TURN LANE	-	-	2	1	-	-	-	-	-	-	-	-
0010	105+98 'WB'			LEFT TURN LANE STOP LINE	-	-	-	-	-	13	-	-	-	-	-	-
0010	106+10 'WB'			19' LT, MEDIAN NOSE	-	-	-	-	-	-	-	-	-	-	-	1
0010	106+10 'WB'			WEST BOUND STOP LINE	-	-	-	-	-	44	-	-	-	-	-	-
0010	106+14 'WB'			CROSSWALK	-	-	-	-	-	-	-	-	-	122	-	-
0010	106+22 'WB'			CROSSWALK	-	-	-	-	-	-	-	-	-	142	-	-
0010	107+00 'WB'			CROSSWALK	-	-	-	-	-	-	-	-	-	136	-	-
0010	107+06 'WB'			CROSSWALK	-	-	-	-	-	-	-	-	-	125	-	-
0010	107+15 'WB'	-	111+93 'WB'	LEFT EDGELINE	488	-	-	-	-	-	488	-	-	-	-	-
0010	107+40 'WB'	-	111+93 'WB'	RIGHT EDGELINE	460	-	-	-	-	-	460	-	-	-	-	-
0010	107+15 'WB'			18' LEFT, MEDIAN NOSE	-	-	-	-	-	-	-	-	-	-	16	-
0010	100+75 'EB'	-	111+93 'EB'	CL	280	-	-	-	-	-	280	-	-	-	-	-
0010	100+75 'EB'	-	106+06 'EB'	RT EDGELINE	540	-	-	-	-	-	540	-	-	-	-	-
0010	100+75 'EB'	-	105+83 'EB'	LT EDGELINE	515	-	-	-	-	-	515	-	-	-	-	-
0010	106+06 'EB'			18' RT, MEDIAN NOSE	-	-	-	-	-	-	-	-	-	-	16	-
0010	107+08 'EB'			19' RT, MEDIAN NOSE	-	-	-	-	-	-	-	-	-	-	-	1
0010	107+12 'EB'			USH 12 EB STOP LINE	-	-	-	-	-	44	-	-	-	-	-	-
0010	107+15 'EB'	-	109+94 'EB'	GORE / ISLAND	-	557	-	-	-	-	-	557	93	-	-	-
0010	107+17 'EB'	-	111+93 'EB'	RIGHT EDGELINE	481	-	-	-	-	-	481	-	-	-	-	-
0010	107+24 'EB'	-	108+12 'EB'	LEFT TURN LANE	-	-	2	1	-	-	-	-	-	-	-	-
0010	107+25 'EB'			LEFT TURN LANE STOP LINE	-	-	-	-	-	13	-	-	-	-	-	-
0010	107+25 'EB'	-	108+73 'EB'	RIGHT TURN LANE	-	148	2	1	-	-	-	148	-	-	-	-
0010	107+38 'EB'	-	111+93 'EB'	LEFT EDGELINE	457	-	-	-	-	-	457	-	-	-	-	-
0010	10+45 'ET'	-	13+52 'ET'	CL & BIKE LANES	1,470	290	8	-	4	-	1,470	290	-	-	-	-
0010	10+72 'ET'	-	11+14 'ET'	CROSSWALK	-	-	-	-	-	-	-	-	-	79	-	-
0010	13+52 'ET'			STOP LINES	-	-	-	-	-	24	-	-	-	-	-	-
0010	13+56 'ET'			CROSSWALK	-	-	-	-	-	-	-	-	-	56	-	-
0010	13+64 'ET'			CROSSWALK	-	-	-	-	-	-	-	-	-	60	-	-
0010	15+34 'ET'			CROSSWALK	-	-	-	-	-	-	-	-	-	61	-	-
0010	15+40 'ET'			CROSSWALK	-	-	-	-	-	-	-	-	-	57	-	-
0010	15+40 'ET'	-	18+90 'ET'	CL & BIKE LANES	1,984	116	10	-	6	-	1,984	116	-	-	-	-
0010	15+44 'ET'			STOPE LINES	-	-	-	-	-	24	-	-	-	-	-	-
				TOTAL 0010	8,005	1,899	26	4	10	162	8,005	1,899	168	838	32	2
0020	10+72 'ET'	-	13+56 'ET'	LT - NO PARKING ZONE	-	-	-	-	-	-	-	-	-	-	282	-
0020	11+15 'ET'	-	13+56 'ET'	RT - NO PARKING ZONE	-	-	-	-	-	-	-	-	-	-	237	-
0020	15+41 'ET'	-	17+27 'ET'	LT - NO PARKING ZONE	-	-	-	-	-	-	-	-	-	-	188	-
0020	15+41 'ET'	-	17+02 'ET'	RT - NO PARKING ZONE	-	-	-	-	-	-	-	-	-	-	158	-
				TOTAL 0020	0	0	0	0	0	0	0	0	0	0	865	0
				PROJECT TOTAL	8005	1899	26	4	10	162	8005	1899	168	838	897	2

MARKING LINE REMOVAL

CATEGORY	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	REMARKS
0010	100+25 'EB'	-	110+75 'EB'	CL	233	-	
0010	100+25 'EB'	-	110+75 'EB'	LEFT EDGELINE	930	-	
0010	100+25 'EB'	-	110+75 'EB'	RIGHT EDGELINE	930	-	
0010	107+18 'EB'	-		STOP LINE, RT LANE ONLY	-	12	
0010	107+18 'EB'	-	108+80 'EB'	RIGHT TURN LANE	-	162	
				TOTAL 0010	2,093	174	

TEMPORARY PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH LF	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	643.3250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH LF	643.3205 TEMPORARY MARKING LINE PAINT 8-INCH LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF
0010	98+25 'WB'	-	101+14 'EB'	SOUTH CROSSOVER	-	-	-	-	300
0010	98+25 'WB'	-	101+14 'EB'	SOUTH CROSSOVER	-	-	-	-	300
0010	110+16 'EB'	-	113+34 'WB'	NORTH CROSSOVER	-	-	-	-	300
0010	110+16 'EB'	-	113+34 'WB'	NORTH CROSSOVER	-	-	-	-	300
0010	101+14 'EB'	-	106+23 'EB'	LT & RT LANES	764	-	-	-	-
0010	101+14 'EB'	-	106+23 'EB'	CL	764	-	-	-	-
0010	104+50 'EB'	-	106+23 'EB'	USH 12 WB LEFT TURN LANE	-	4	-	175	-
0010	106+17 'EB'			LEFT TURN LANE & THROUGH LANE	-	-	-	22	-
0010	107+02 'EB'	-	110+16 'EB'	LT & RT LANES	630	-	-	-	-
0010	107+02 'EB'	-	110+16 'EB'	CL	630	-	-	-	-
0010	107+02 'EB'	-	108+02 'EB'	USH 12 EB LEFT TURN LANE	-	-	-	100	-
0010	14+30 'ET'	-	19+83 'ET'	LT & RT EDGELINE	1110	-	-	-	-
0010	14+30 'ET'	-	19+83 'ET'	CL	1110	-	-	-	-
0010	98+60 'EB'	-	101+14 'WB'	SOUTH CROSSOVER	-	-	-	-	300
0010	98+60 'EB'	-	101+14 'WB'	SOUTH CROSSOVER	-	-	-	-	300
0010	110+30 'WB'	-	113+23 'EB'	NORTH CROSSOVER	-	-	-	-	300
0010	110+30 'WB'	-	113+23 'EB'	NORTH CROSSOVER	-	-	-	-	300
0010	101+14 'WB'	-	106+14 'WB'	USH 12 WB LT & RT LANES	-	-	-	-	925
0010	101+14 'WB'	-	106+14 'WB'	USH 12 WB CL	-	-	-	-	925
0010	106+15 'WB'			STOP LINE	-	4	24	-	-
0010	107+10 'WB'			STOP LINE	-	4	24	-	-
0010	107+10 'WB'	-	110+30 'WB'	LT & RT LANES	-	4	-	-	700
0010	107+10 'WB'	-	110+30 'WB'	CL	-	-	-	-	700
				TOTAL 0010	5,008	16	48	297	5,650

PROJECT STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. TBD) EACH
0010				PROJECT	22	3,235	3,235	3,231	3,105	11	3,235	1
				TOTAL 0010	22	3,235	3,235	3,231	3,105	11	3,235	1
0020	STA 17+60 'ET'	-	18+90 'ET'			130	130	260			130	
				TOTAL 0020	0	130	130	260	0	0	130	0
				PROJECT TOTAL	22	3365	3365	3491	3105	11	3365	1

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
0010	101+00 'WB'			LT/RT	44	24	
0010	101+06 'WB'	-	101+32 'WB'	38' RT	26	-	
0010	102+50 'WB'	-	102+77 'WB'	43' RT	26	-	
0010	104+12 'WB'	-	104+43 'WB'	34' RT	35	-	
0010	111+70 'WB'	-		LT/RT	38	24	
0010	101+00 'EB'			LT/RT	38	24	
0010	111+27 'EB'	-	111+70 'EB'	26' LT	43	-	
0010	111+70 'EB'			26' LT - RT	42	24	
0010	10+45 'ET'			LT/RT	85	-	
0010	16+00 'ET'	-	16+17 'ET'	48' LT	19	-	
0010	16+05 'ET'	-	16+22 'ET'	40' RT	17	-	
0010	17+14 'ET'	-	17+40 'ET	37' RT	26	-	
0010	17+32 'ET	-	17+56 'ET	41' LT	24	-	
0010	18+90 'ET'			LT/RT	41	-	
0010	13+56 'ET'	-	13+61 'ET'	57' LT	-	5	
0010	13+82 'ET'	-	13+90 'ET'	66' RT	8	-	
0010	16+00 'ET'	-	16+17 'ET'	57' LT	30	-	
0010	15+85 'ET'	-	16+22 'ET'	59' RT	35	-	
0010	16+53 'ET'	-	16+57 'ET'	42' RT	-	5	
0010	17+14 'ET'	-	17+40 'ET'	38'RT	26	-	
0010	17+33 'ET'	-	17+57 'ET'	41' LT	28	-	
0010	18+90 'ET'	-	18+90 'ET'	LT & RT	-	10	
				TOTAL 0010	631	116	
0020	17+60 'ET'	-	17+65 'ET'	38'RT	-	4	
0020	17+98 'ET'	-	18+03 'ET'	38' RT	-	4	
0020	18+37 'ET'	-	18+40 'ET'		-	3	
				TOTAL 0020	0	11	
				PROJECT TOTAL	631	127	

SPV- SURVEY

CATEGORY	LOCATION	SPV.0060.06 SPECIAL (06. LANDMARK REFERENCE MONUMENTS SPECIAL) EACH	SPV.0060.07 SPECIAL (07. VERIFY LANDMARK REFERENCE MONUMENTS) EACH	REMARKS
0010	PROJECT	1	1	
	TOTAL 0010	1	1	

Pull Boxes

Category	Station	Dir	Location	653.0164 Pull Boxes Non-Conductive 24x42-Inch EACH	Description
0010	106 + 12	LEFT	54	1	PB1
0010	107 + 13	LEFT	51	1	PB2
0010	107 + 27	LEFT	37	1	PB3
0010	107 + 33	RIGHT	20	1	PB4
0010	107 + 32	RIGHT	46	1	PB5
0010	107 + 16	RIGHT	96	1	PB6
0010	107 + 10	RIGHT	122	1	PB7
0010	106 + 33	RIGHT	132	1	PB8
0010	105 + 95	RIGHT	97	1	PB9
0010	105 + 87	RIGHT	45	1	PB10
0010	105 + 88	RIGHT	18	1	PB11
0010	106 + 1	LEFT	26	1	PB12
0010	109 + 2	LEFT	32	1	PB13
0010	110 + 72	LEFT	30	1	PB14
0010	108 + 56	RIGHT	45	1	PB15
0010	109 + 84	RIGHT	38	1	PB16
0010	104 + 8	RIGHT	97	1	PB17
0010	102 + 39	RIGHT	102	1	PB18
0010	104 + 66	RIGHT	18	1	PB19
0010	103 + 35	RIGHT	21	1	PB20
			Total	**20**	

Signal Bases

Category	Station	Dir	Location	654.0101 Concrete Bases Type 1 EACH	654.0102 Concrete Bases Type 2 EACH	654.0105 Concrete Bases Type 5 EACH	654.0110 Concrete Bases Type 10 EACH	654.0113 Concrete Bases Type 13 EACH	Description
0010	106 + 15	LEFT	35	1					SB1
0010	106 + 29	LEFT	65	1					SB2
0010	106 + 95	LEFT	63				1		SB3
0010	107 + 11	LEFT	39		1				SB4
0010	107 + 26	RIGHT	20		1				SB5
0010	107 + 21	RIGHT	101					1	SB6
0010	107 + 9	RIGHT	98	1					SB7
0010	107 + 1	RIGHT	121		1				SB8
0010	106 + 29	RIGHT	141				1		SB9
0010	106 + 26	RIGHT	126	1					SB10
0010	106 + 13	RIGHT	107		1				SB11
0010	105 + 96	RIGHT	45		1				SB12
0010	105 + 96	LEFT	33					1	SB13
0010	108 + 62	RIGHT	45			1			SB14
0010	109 + 92	RIGHT	38			1			SB15
0010	104 + 59	RIGHT	18			1			SB16
0010	103 + 29	RIGHT	23			1			SB17
			Total	**4**	**5**	**4**	**2**	**2**	

Electrical Conduit

Category	Station	to	Station	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch LF	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch LF	652.0800 Conduit Loop Detector LF	Description
0010	110 + 72					75	LOOP 21 - PB14
0010	110 + 72					100	LOOP 22 - PB14
0010	102 + 39					90	LOOP 61 - PB18
0010	102 + 39					115	LOOP 62 - PB18
0010	106 + 04	to	106 12 EB + 12		39		SC1 to PB1
0010	106 + 12	to	107 12 EB + 13		203		PB1 to PB2
0010	107 + 13	to	107 12 EB + 27		40		PB2 to PB3
0010	107 + 27	to	107 12 EB + 33		115		PB3 to PB4
0010	107 + 33	to	107 12 EB + 32		53		PB4 to PB5
0010	107 + 32	to	107 12 EB + 16		105		PB5 to PB6
0010	107 + 16	to	107 12 EB + 10		54		PB6 to PB7
0010	107 + 10	to	106 12 EB + 33		156		PB7 to PB8
0010	106 + 33	to	105 12 EB + 95		104		PB8 to PB9
0010	105 + 95	to	105 12 EB + 87		106		PB9 to PB10
0010	105 + 87	to	105 12 EB + 88		55		PB10 to PB11
0010	105 + 88	to	106 12 EB + 01		92		PB11 to PB12
0010	106 + 01	to	106 12 EB + 04		55		PB12 to SC1
0010	107 + 27	to	109 12 EB + 02	176			PB3 to PB13
0010	109 + 02	to	110 12 EB + 72	171			PB13 to PB14
0010	107 + 32	to	108 12 EB + 56	125			PB5 to PB15
0010	108 + 56	to	109 12 EB + 84	129			PB15 to PB16
0010	105 + 95	to	104 12 EB + 08	187			PB9 to PB17
0010	104 + 08	to	102 12 EB + 39	170			PB17 to PB18
0010	105 + 88	to	104 12 EB + 66	122			PB11 to PB19
0010	104 + 66	to	103 12 EB + 35	132			PB19 to PB20
0010	106 + 12	to	106 12 EB + 15	20			PB1 to SB1
0010	106 + 12	to	106 12 EB + 29	21			PB1 to SB2
0010	107 + 13	to	106 12 EB + 95		22		PB2 to SB3
0010	107 + 27	to	107 12 EB + 11	17			PB3 to SB4
0010	107 + 33	to	107 12 EB + 26	7			PB4 to SB5
0010	107 + 16	to	107 12 EB + 21		8		PB6 to SB6
0010	107 + 16	to	107 12 EB + 09	8			PB6 to SB7
0010	107 + 10	to	107 12 EB + 01	10			PB7 to SB8
0010	106 + 33	to	106 12 EB + 29		10		PB8 to SB9
0010	106 + 33	to	106 12 EB + 26	10			PB8 to SB10
0010	105 + 95	to	106 12 EB + 13	21			PB9 to SB11
0010	105 + 87	to	105 12 EB + 96	9			PB10 to SB12
0010	106 + 01	to	105 12 EB + 96		9		PB12 to SB13
0010	108 + 56	to	108 12 EB + 62	6			PB15 to SB14
0010	109 + 84	to	109 12 EB + 92	8			PB16 to SB15
0010	104 + 66	to	104 12 EB + 59	7			PB19 to SB16
0010	103 + 35	to	103 12 EB + 29	7			PB20 to SB17
			Total	**1363**	**1226**	**380**	

Poles, Arms & Equipment

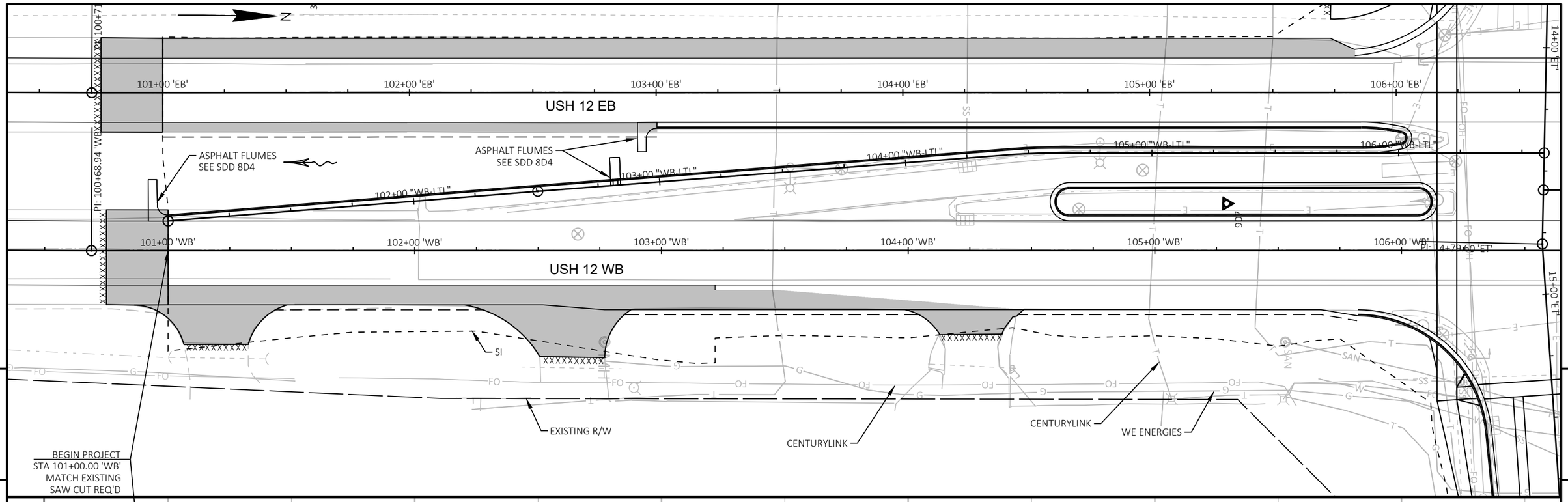
Category	Station	Dir	Location	657.0345 Poles Type 9 EACH	657.0350 Poles Type 10 EACH	657.0361 Poles Type 13 Over Height EACH	657.0530 Monotube Arms 30-FT EACH	657.0545 Monotube Arms 45-FT EACH	657.0550 Monotube Arms 50-FT EACH	657.0815 Luminaire Arms Steel 15-FT EACH	657.0825 Luminaire Arms Steel Type 13 Pole Clamp 15-FT EACH	657.0100 Pedestal Bases EACH	657.0255 Transformer Bases Breakaway 11 1/2 Inch Bolt Circle EACH	657.0415 Traffic Signal Standard Aluminum 11' EACH	657.0425 Traffic Signal Standard Aluminum 15' EACH	657.0305 Poles Type 2 EACH	657.0315 Poles Type 4 EACH	657.0585 Trombone Arms 15-FT EACH	657.0322 Poles Type 5-Aluminum EACH	657.0710 Luminaire Arms Truss Member 4.5-Inch Clamp 12-FT EACH	657.0709 Luminaire Arms Truss Member 4-Inch Clamp 12-FT EACH	658.0173 Traffic Signal Face 3S 12-Inch EACH	658.0174 Traffic Signal Face 4S 12-Inch EACH	SPV.0060.02 Retroreflective Backplate 3S EACH	SPV.0060.03 Retroreflective Backplate 4S EACH	658.0500 Pedestrian Push Button EACH	658.0416 Pedestrian Signal Face Ped 16-inch EACH	659.1125 Luminaires Utility LED C EACH	Desc
0010	106 + 15	LEFT	35									1		1												1	1		SB1
0010	106 + 29	LEFT	65									1			1								2			1	1		SB2
0010	106 + 95	LEFT	63		1		1			1	1												1			1	1	1	SB3
0010	107 + 11	LEFT	39										1				1				1	1	1	1	1	1	1	1	SB4
0010	107 + 26	RIGHT	20										1			1		1					1		1				SB5
0010	107 + 21	RIGHT	101			1		1		1													2	2				1	SB6
0010	107 + 9	RIGHT	98									1		1												1	1		SB7
0010	107 + 1	RIGHT	121										1				1				1	2				1	1	1	SB8
0010	106 + 29	RIGHT	141	1			1															1							SB9
0010	106 + 26	RIGHT	126									1		1												1	1		SB10
0010	106 + 13	RIGHT	107										1				1				1	1	1	1	1	1	1	1	SB11
0010	105 + 96	RIGHT	45										1			1		1					1		1				SB12
0010	105 + 96	LEFT	33			1			1	1	1											2		2				1	SB13
0010	108 + 62	RIGHT	45										1						1	2								2	SB14
0010	109 + 92	RIGHT	38										1						1	2								2	SB15
0010	104 + 59	RIGHT	18										1						1	2								2	SB16
0010	103 + 29	RIGHT	23										1						1	2								2	SB17
		Total		**1**	**1**	**2**	**2**	**1**	**1**	**3**	**2**	**4**	**9**	**3**	**1**	**2**	**3**	**2**	**4**	**8**	**3**	**12**	**4**	**6**	**4**	**8**	**8**	**14**	

Electrical Items

Category	Station	Dir	Location	656.0201 Electrical Service Meter Breaker Pedestal EACH	650.8501 Construction Staking Electrical Installations EACH	658.5070 Signal Mounting Hardware EACH	654.0217 Concrete Control Cabinet Bases Type 9 Special EACH	SPV.0060.01 Remove Traffic Signals (USH 12 & CTH ET) EACH	661.0201 Temporary Traffic Signals for Intersections (USH 12 & CTH ET) EACH	204.0195 Removing Concrete Bases EACH	653.0905 Removing Pull Boxes EACH	659.5100.S Lamp, Ballast, LED, Switch Disposal by Department Each	Description
0010	106 + 4	LEFT	44	1		1	1	1	1	16	15	26	SC1
0010	106 + 4	LEFT	44		1								Project
		Total		**1**	**1**	**1**	**1**	**1**	**1**	**16**	**15**	**26**	

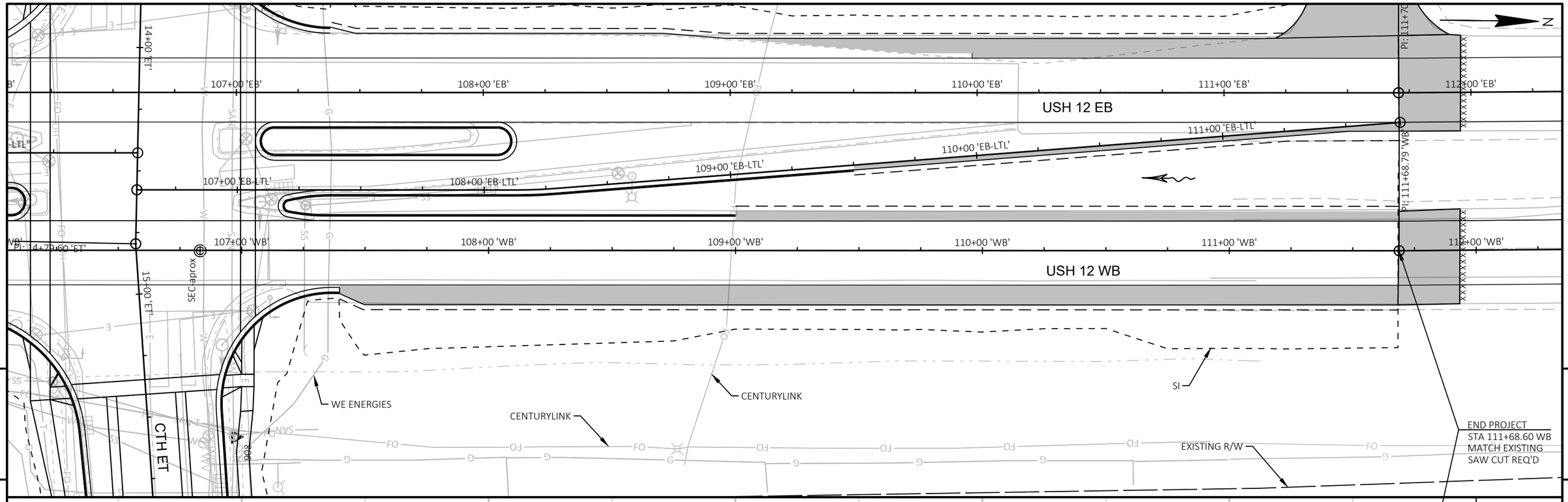
Signal Wire

Category	Station	to Station	655.0210 Cable Traffic Signal 3-14 AWG LF	655.0230 Cable Traffic Signal 5-14 AWG LF	655.0240 Cable Traffic Signal 7-14 AWG LF	655.0260 Cable Traffic Signal 12-14 AWG LF	655.0305 Cable Type UF 2-12 AWG Grounded LF	655.0515 Electrical Wire Traffic Signals 10 AWG LF	655.0610 Electrical Wire Traffic Lighting 12 AWG LF	655.0700 Loop Dectector Lead in Cable LF	655.0800 Loop Detector Wire LF	SPV.0090.01 Install State-Supplied Non-Intrusive Detection Cable LF	Description
0010	110 12 EB + 72										235		PB14 LOOP 21
0010	110 12 EB + 72										310		PB14 LOOP 22
0010	102 12 EB + 39										280		PB18 LOOP 61
0010	102 12 EB + 39										355		PB18 LOOP 62
0010	106 12 EB + 15		15										SB1 - Up Pole
0010	106 12 EB + 29		15	40									SB2 - Up Pole
0010	106 12 EB + 95		15	58					159				SB3 - Up Pole
0010	107 12 EB + 11		15	40					150				SB4 - Up Pole
0010	107 12 EB + 26			42									SB5 - Up Pole
0010	107 12 EB + 21			142					159				SB6 - Up Pole
0010	107 12 EB + 9		15										SB7 - Up Pole
0010	107 12 EB + 1		15	40					150				SB8 - Up Pole
0010	106 12 EB + 29			58									SB9 - Up Pole
0010	106 12 EB + 26		15										SB10 - Up Pole
0010	106 12 EB + 13		15	40					150				SB11 - Up Pole
0010	105 12 EB + 96			42									SB12 - Up Pole
0010	105 12 EB + 96			152					159				SB13 - Up Pole
0010	108 12 EB + 62								300				SB14 - Up Pole
0010	109 12 EB + 92								300				SB15 - Up Pole
0010	104 12 EB + 59								300				SB16 - Up Pole
0010	103 12 EB + 29								300				SB17 - Up Pole
0010	106 12 EB + 04	to 106 12 EB + 15		54									SC1 to SB1
0010	106 12 EB + 04	to 106 12 EB + 29				55							SC1 to SB2
0010	106 12 EB + 04	to 106 12 EB + 95			168								SC1 to SB3
0010	106 12 EB + 04	to 107 12 EB + 11				193							SC1 to SB4
0010	106 12 EB + 04	to 107 12 EB + 26			251								SC1 to SB5
0010	106 12 EB + 04	to 107 12 EB + 21		352								834	SC1 to SB6
0010	106 12 EB + 04	to 107 12 EB + 9		352									SC1 to SB7
0010	106 12 EB + 04	to 107 12 EB + 1				357							SC1 to SB8
0010	106 12 EB + 04	to 106 12 EB + 29		269									SC1 to SB9
0010	106 12 EB + 04	to 106 12 EB + 26		269									SC1 to SB10
0010	106 12 EB + 04	to 106 12 EB + 13				218							SC1 to SB11
0010	106 12 EB + 04	to 105 12 EB + 96			143								SC1 to SB12
0010	106 12 EB + 04	to 105 12 EB + 96		49								253	SC1 to SB13
0010	106 12 EB + 04	to 106 12 EB + 15								54			SC1 to SB1
0010	106 12 EB + 04	to 106 12 EB + 29								55			SC1 to SB2
0010	106 12 EB + 04	to 106 12 EB + 95								168			SC1 to SB3
0010	106 12 EB + 04	to 107 12 EB + 11								193			SC1 to SB4
0010	106 12 EB + 04	to 107 12 EB + 9								352			SC1 to SB7
0010	106 12 EB + 04	to 107 12 EB + 1								357			SC1 to SB8
0010	106 12 EB + 04	to 106 12 EB + 26								269			SC1 to SB10
0010	106 12 EB + 04	to 106 12 EB + 13								218			SC1 to SB11
0010	106 12 EB + 04	to 110 12 EB + 72								539			SC1 to PB14
0010	106 12 EB + 04	to 110 12 EB + 72								539			SC1 to PB14
0010	106 12 EB + 04	to 102 12 EB + 39								570			SC1 to PB18
0010	106 12 EB + 04	to 102 12 EB + 39								570			SC1 to PB18
0010	106 12 EB + 04	to 106 12 EB + 95					168						SC1 to SB3
0010	106 12 EB + 95	to 107 12 EB + 26					128						SB3 to SB5
0010	107 12 EB + 26	to 107 12 EB + 21					252						SB5 to SB6
0010	107 12 EB + 26	to 108 12 EB + 62					322						SB5 to SB14
0010	108 12 EB + 62	to 109 12 EB + 92					171						SB14 to SB15
0010	106 12 EB + 04	to 105 12 EB + 96					49						SC1 to SB13
0010	105 12 EB + 96	to 106 12 EB + 13					205						SB13 to SB11
0010	106 12 EB + 13	to 107 12 EB + 1					199						SB11 to SB8
0010	105 12 EB + 96	to 104 12 EB + 59					222						SB13 to SB16
0010	104 12 EB + 59	to 103 12 EB + 29					174						SB16 to SB17
0010	106 12 EB + 04	to 107 12 EB + 11						371					SC1 to SB4 Grounding Conductor
0010	107 12 EB + 11	to 107 12 EB + 1						338					SB4 to SB8 Grounding Conductor
0010	107 12 EB + 01	to 105 12 EB + 96						374					SB8 to SB12 Grounding Conductor
0010	105 12 EB + 96	to 106 12 EB + 4						175					SB12 to SC1 Grounding Conductor
		Total	**120**	**1999**	**562**	**823**	**1890**	**1258**	**2127**	**3884**	**1180**	**1087**	



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 WB	SHEET 85 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101
PLOT DATE : 4/15/2022 10:21 AM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 WB	SHEET 86	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050102

PLOT DATE : 4/15/2022 10:21 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

N

CENTURYLINK

ALLIANT ENERGY

ATC

CHARTER

EXISTING R/W

3901

SI

101+00 'EB' 102+00 'EB' 103+00 'EB' 104+00 'EB' 105+00 'EB' 106+00 'EB'

USH 12 EB

ASPHALT FLUMES SEE SDD 8D4

ASPHALT FLUMES SEE SDD 8D4

102+00 "WB-LTL"

103+00 "WB-LTL"

104+00 "WB-LTL"

105+00 "WB-LTL"

106+00 "WB-LTL"

BEGIN PROJECT STA 101+00.00 'EB' MATCH EXISTING SAW CUT REQ'D

PI: 100+68.94 'WB'

PI: 100+71.23 'EB'

101+00 'WB' 102+00 'WB' 103+00 'WB' 104+00 'WB' 105+00 'WB' 106+00 'WB'

PI: 104+79.60 'ET'

USH 12 WB

5

5

965

960

955

953

VPC STA 101+03.95
VPC EL 956.57

VCL = 200.00

K = 346.05

VPI STA 102+03.95
VPI EL 956.93

VPT STA 103+03.95
VPT EL 957.86

0.93%

VPC STA 104+79.17
VPC EL 959.49

VCL = 562.13

K = 523.31

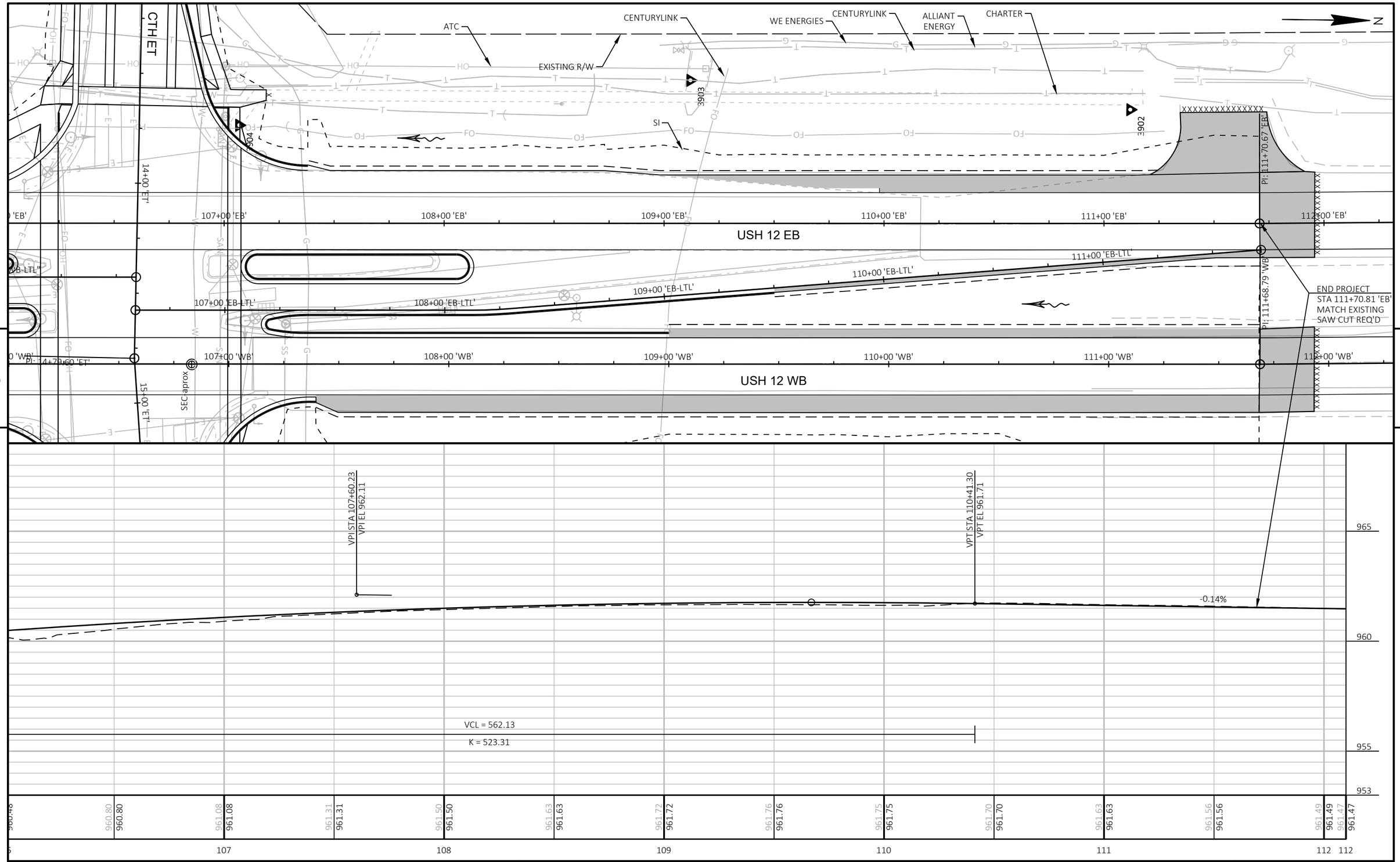
956.38	956.56	956.77	957.05	957.40	957.82	958.29	958.75	959.22	959.68	960.10	960.48	960.80
956.38	956.56	956.77	957.05	957.40	957.82	958.29	958.75	959.22	959.68	960.10	960.48	960.80

100 101 102 103 104 105 106

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 EB	SHEET 87	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050103

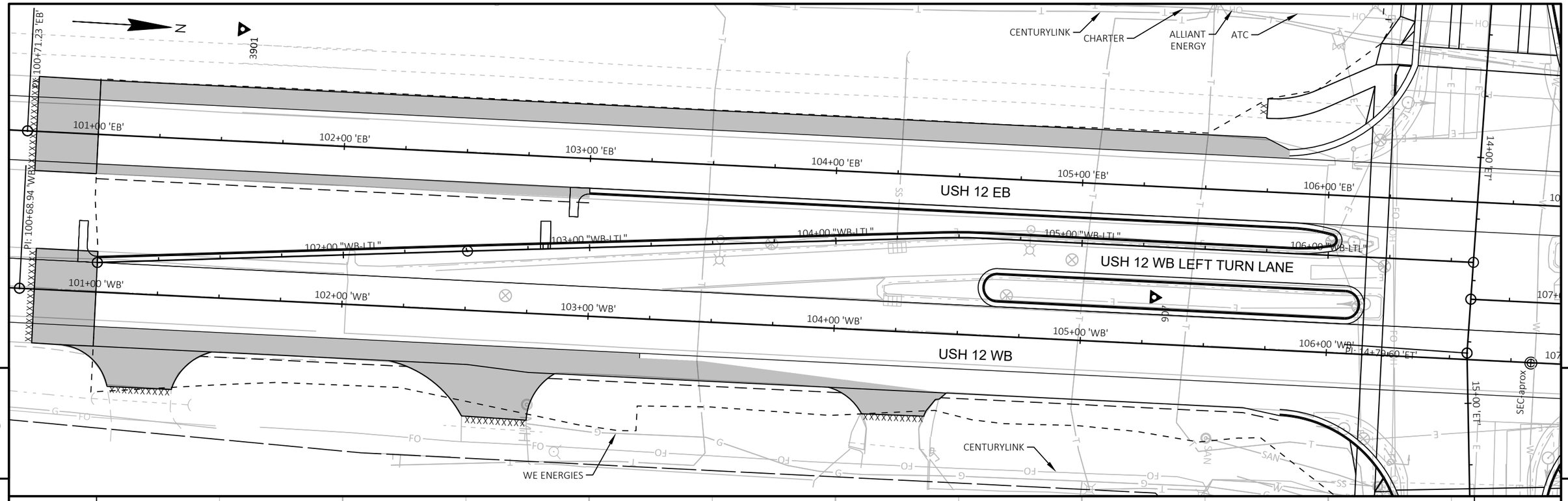
PLOT DATE : 4/15/2022 10:21 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

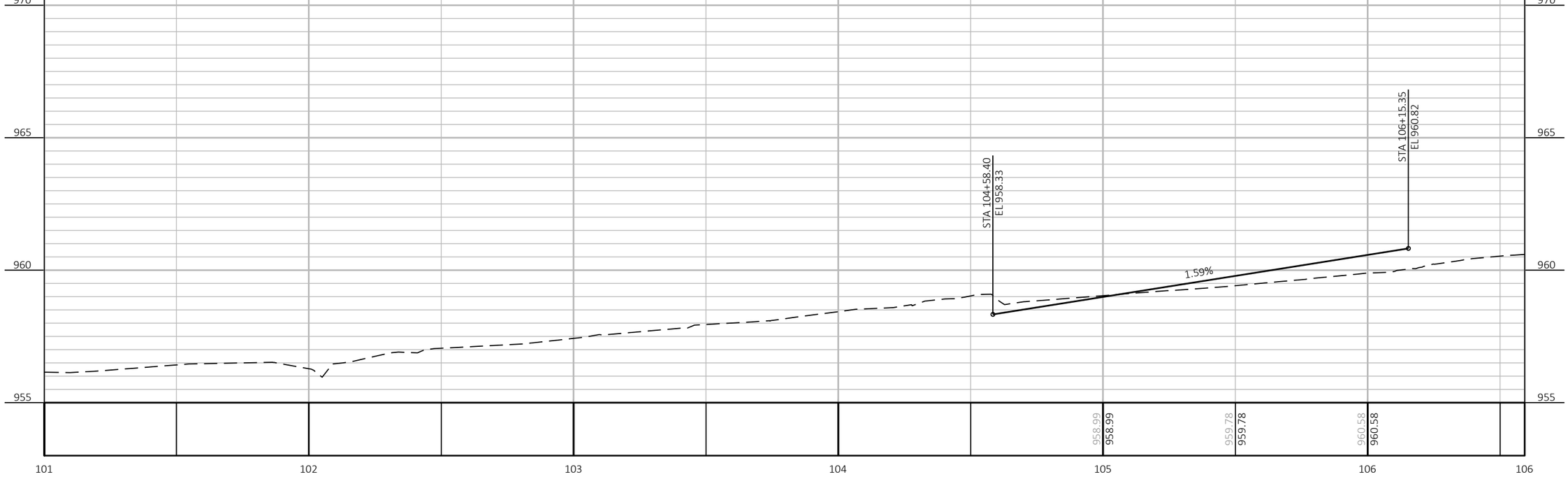


PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 EB	SHEET 88	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050104

PLOT DATE : 4/15/2022 10:21 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

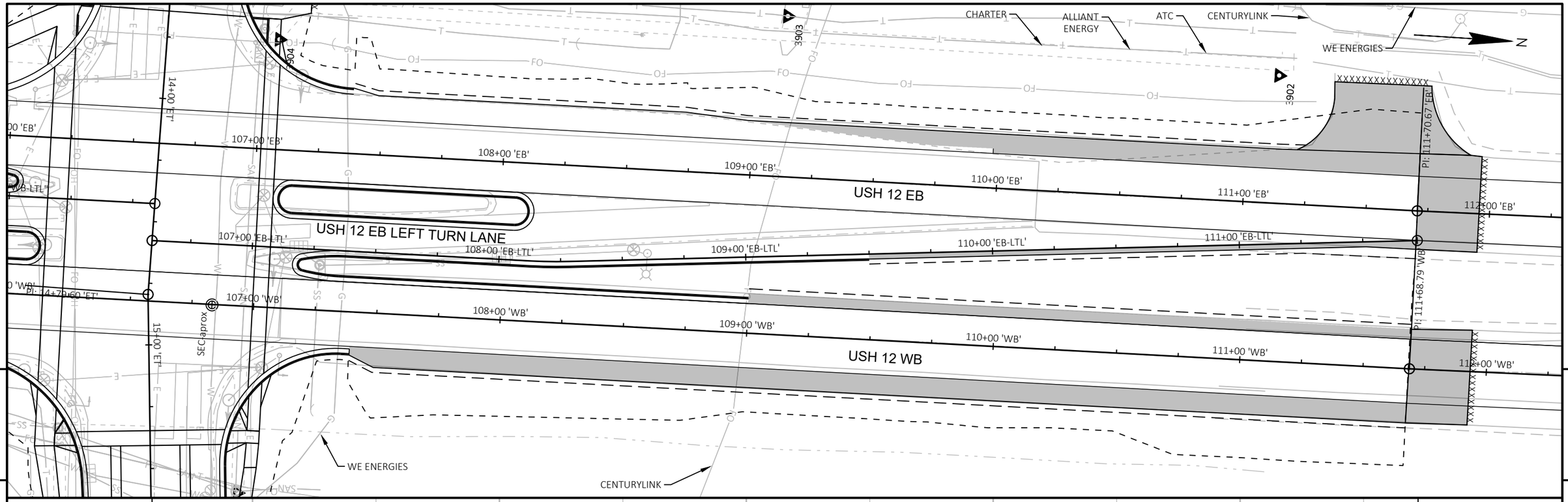


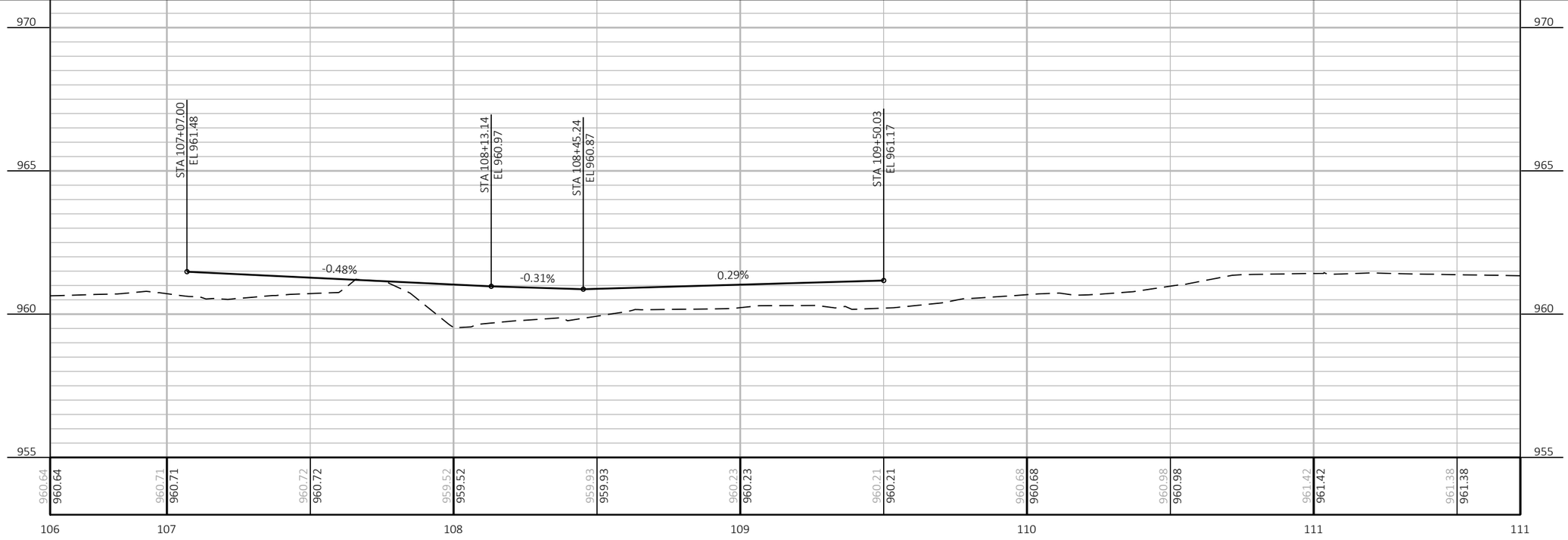


PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 WB LEFT TURN LAN	SHEET 89	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050105

PLOT DATE : 4/15/2022 10:21 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT



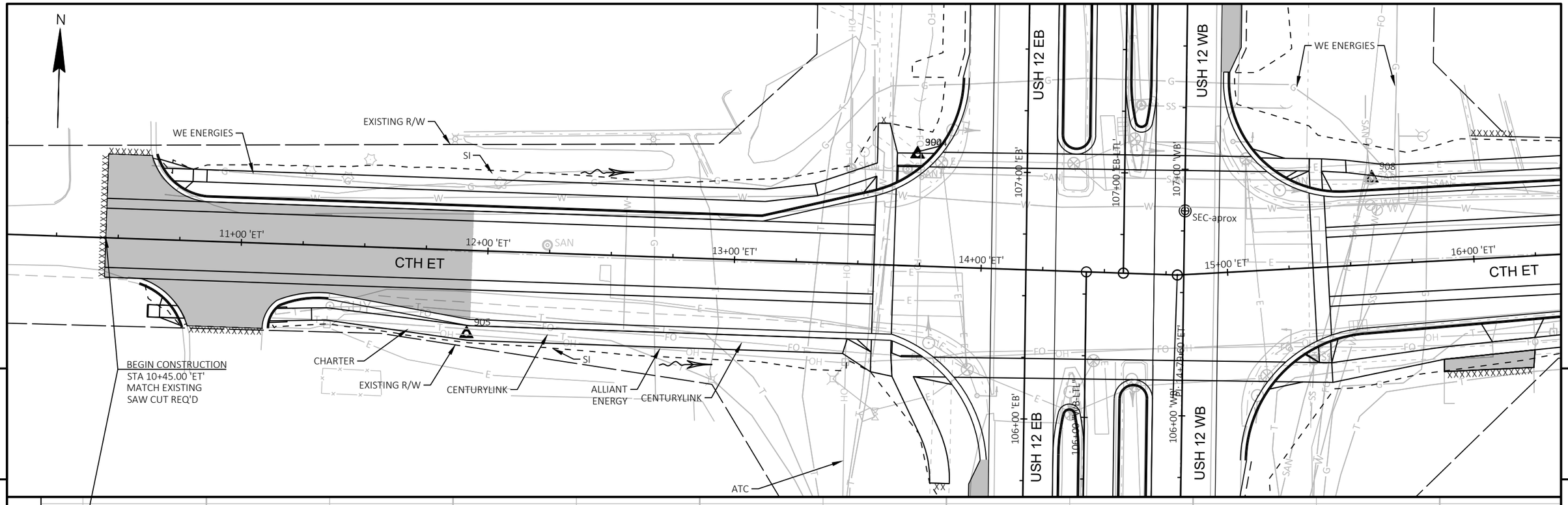


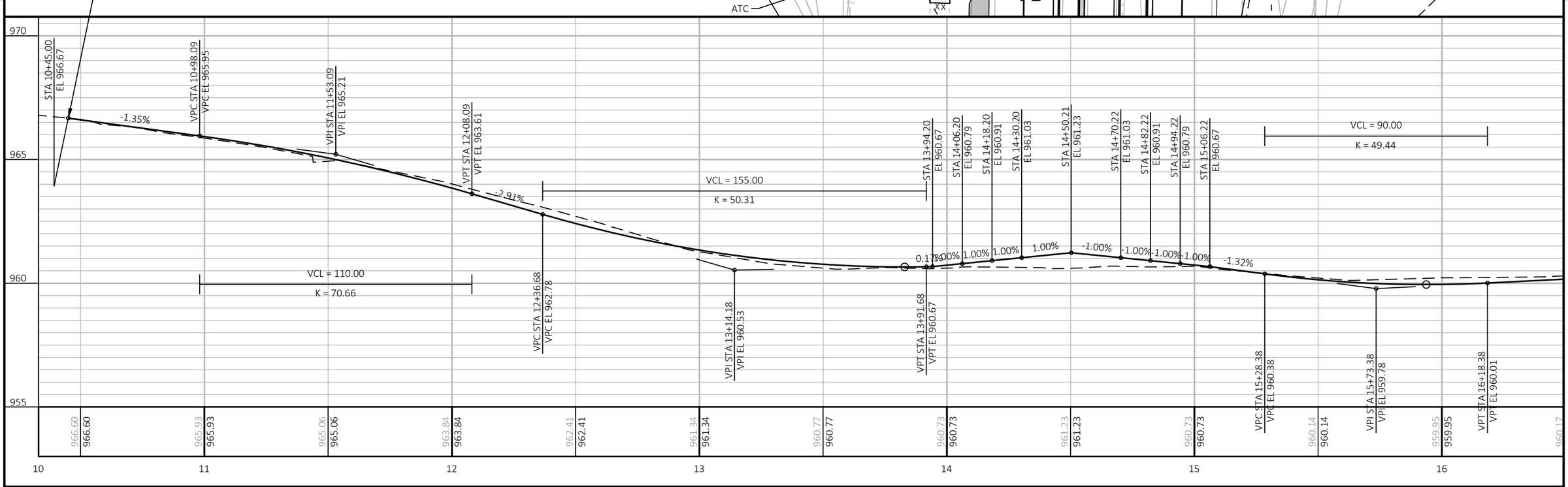
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 EB LEFT TURN LANE	SHEET 90 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050106

PLOT DATE : 4/15/2022 10:21 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

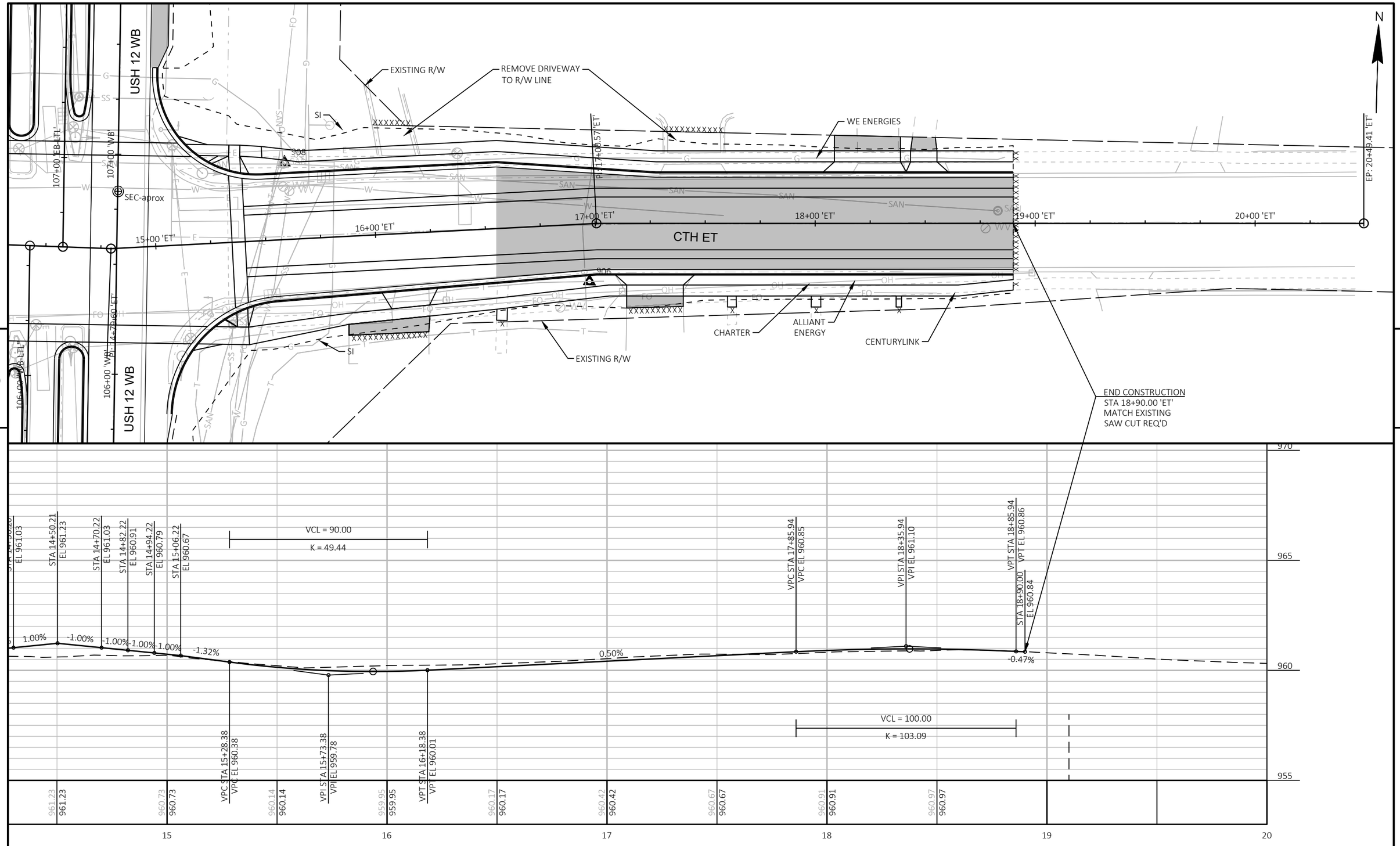
WISDOT/CADDS SHEET 44





PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: CTH ET	SHEET 91	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050107
PLOT DATE : 4/15/2022 10:22 AM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

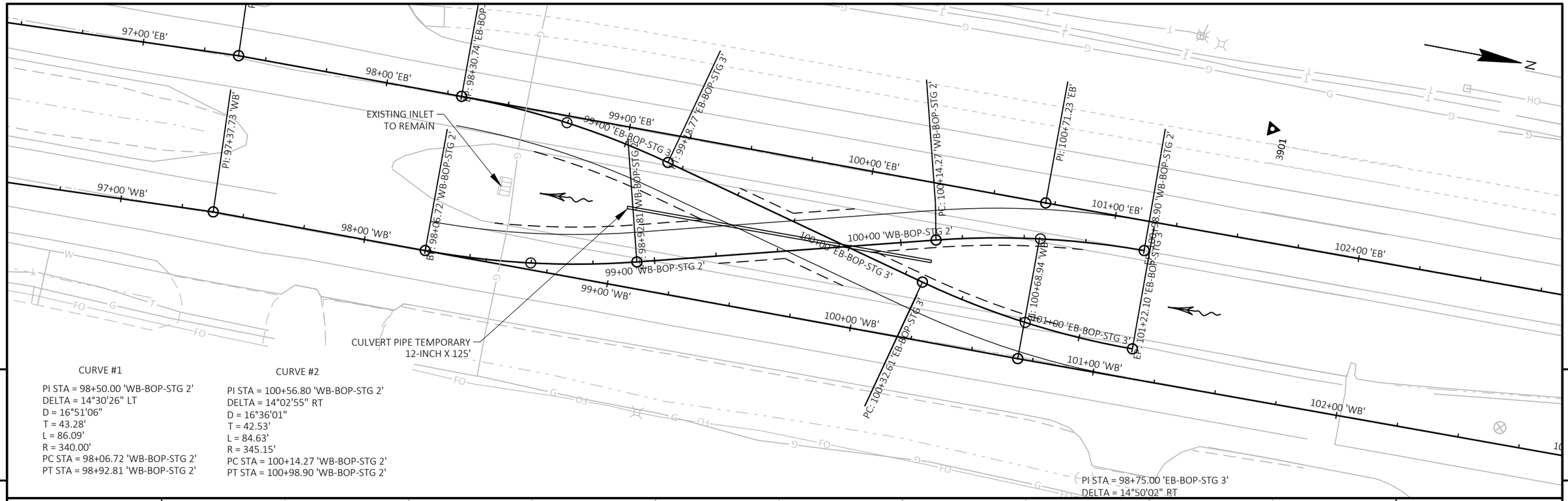


PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: CTH ET	SHEET 92	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050108

PLOT DATE : 4/15/2022 10:22 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



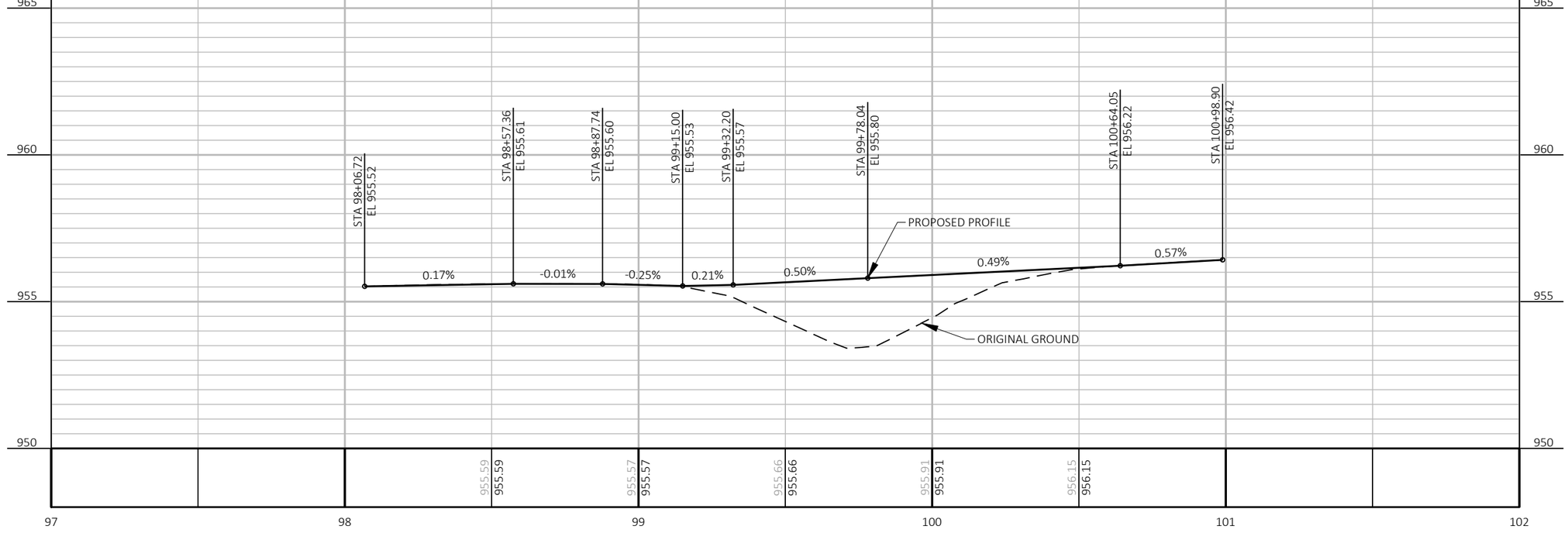
CURVE #1

PI STA = 98+50.00 'WB-BOP-STG 2'
DELTA = 14°30'26" LT
D = 16°51'06"
T = 43.28'
L = 86.09'
R = 340.00'
PC STA = 98+06.72 'WB-BOP-STG 2'
PT STA = 98+92.81 'WB-BOP-STG 2'

CURVE #2

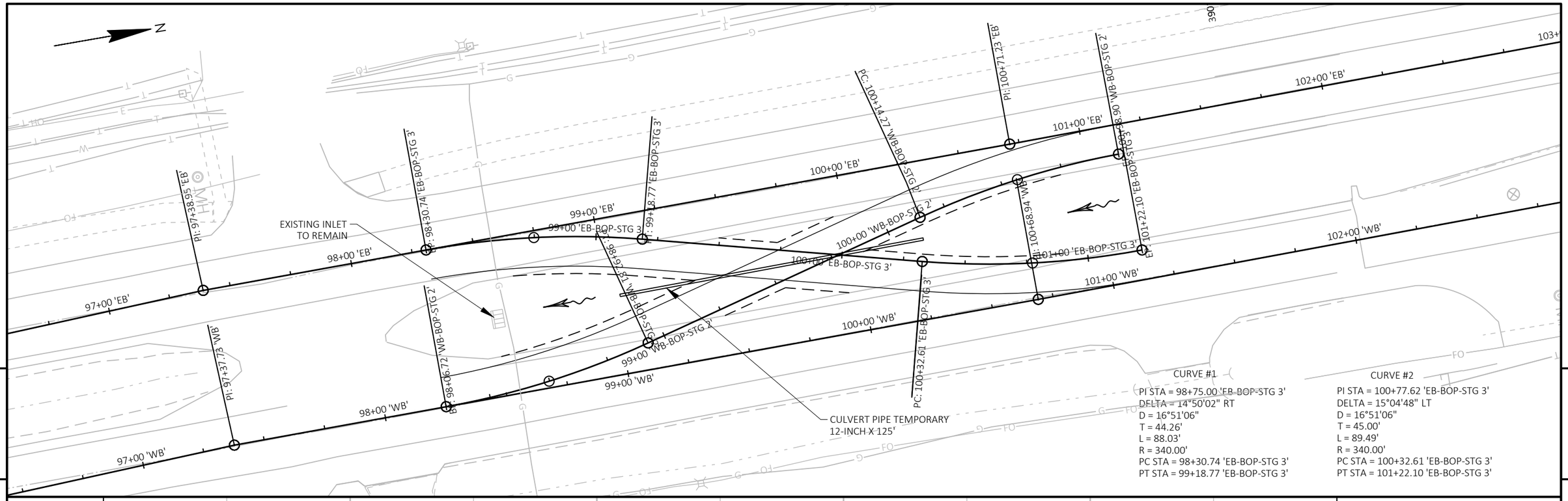
PI STA = 100+56.80 'WB-BOP-STG 2'
DELTA = 14°02'55" RT
D = 16°36'01"
T = 42.53'
L = 84.63'
R = 345.15'
PC STA = 100+14.27 'WB-BOP-STG 2'
PT STA = 100+98.90 'WB-BOP-STG 2'

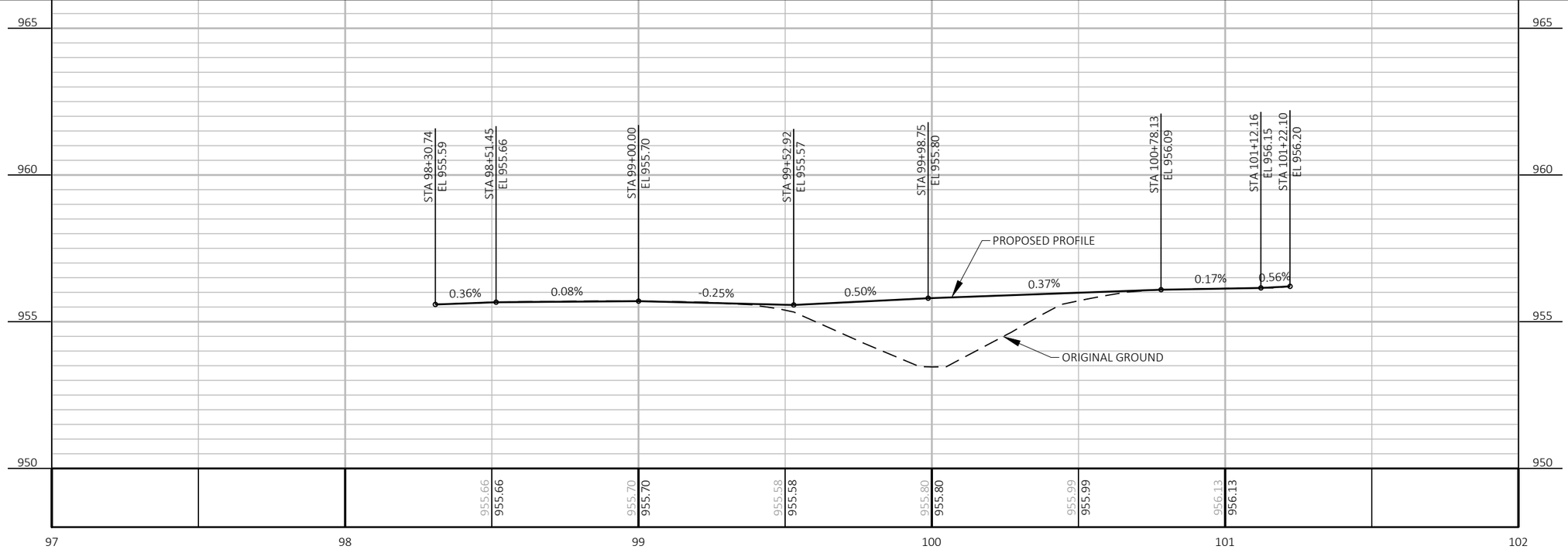
PI STA = 98+75.00 'EB-BOP-STG 3'
DELTA = 14°50'02" RT



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 WB - BOP - STAGE 2 CROSSOVER	SHEET 93	E

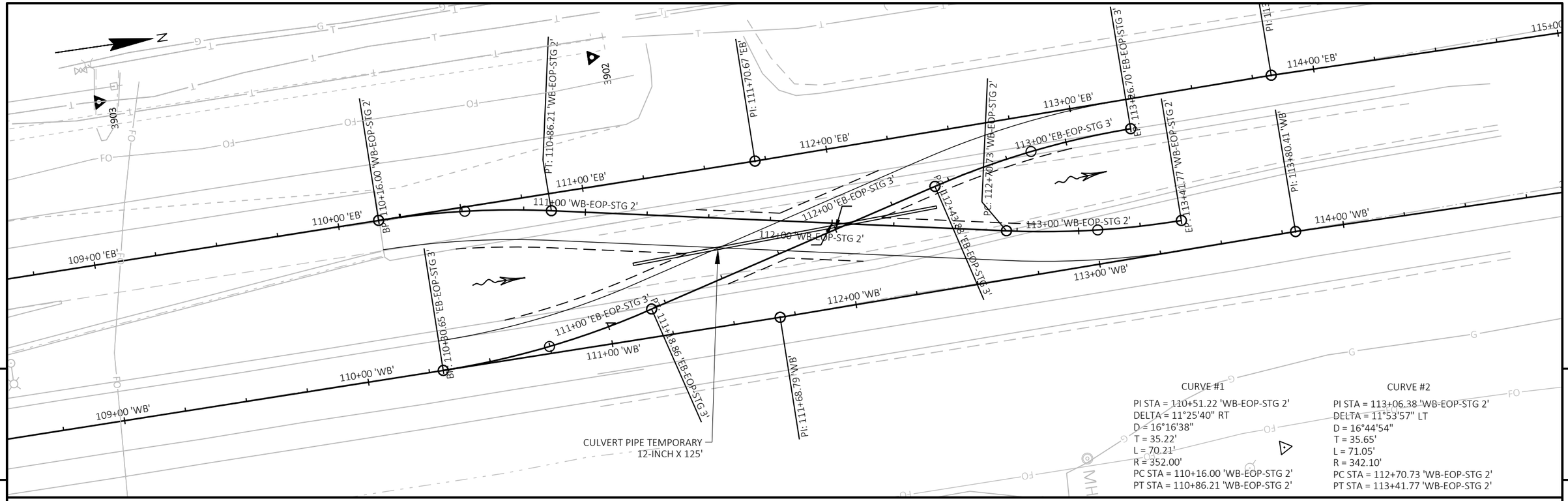
FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101_PP_CROSSOVER.DWG
LAYOUT NAME - 03
PLOT DATE : 4/15/2022 11:12 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 EB BOP STAGE 3 CROSSOVER	SHEET 94	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\050101_PP_CROSSOVER.DWG
LAYOUT NAME - 04
PLOT DATE : 4/15/2022 11:12 AM
PLOT BY : LEX, JERED ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

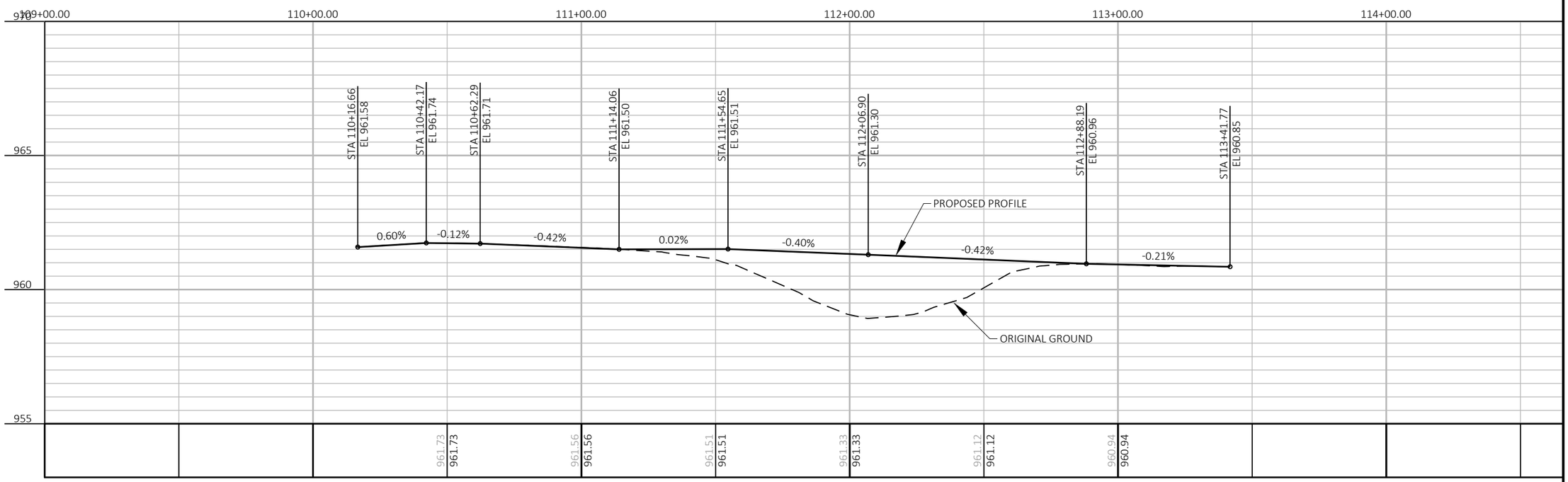


CURVE #1

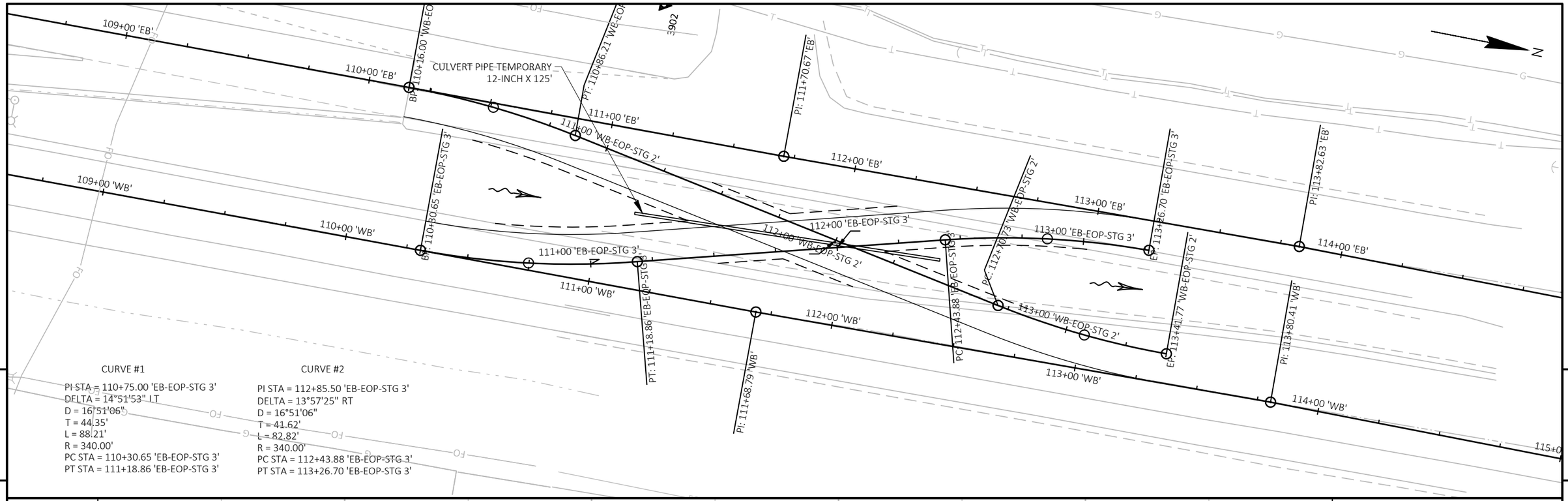
PI STA = 110+51.22 'WB-EOP-STG 2'
DELTA = 11°25'40" RT
D = 16°16'38"
T = 35.22'
L = 70.21'
R = 352.00'
PC STA = 110+16.00 'WB-EOP-STG 2'
PT STA = 110+86.21 'WB-EOP-STG 2'

CURVE #2

PI STA = 113+06.38 'WB-EOP-STG 2'
DELTA = 11°53'57" LT
D = 16°44'54"
T = 35.65'
L = 71.05'
R = 342.10'
PC STA = 112+70.73 'WB-EOP-STG 2'
PT STA = 113+41.77 'WB-EOP-STG 2'



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 WB EOP STAGE 2 CROSSOVER	SHEET 95	E

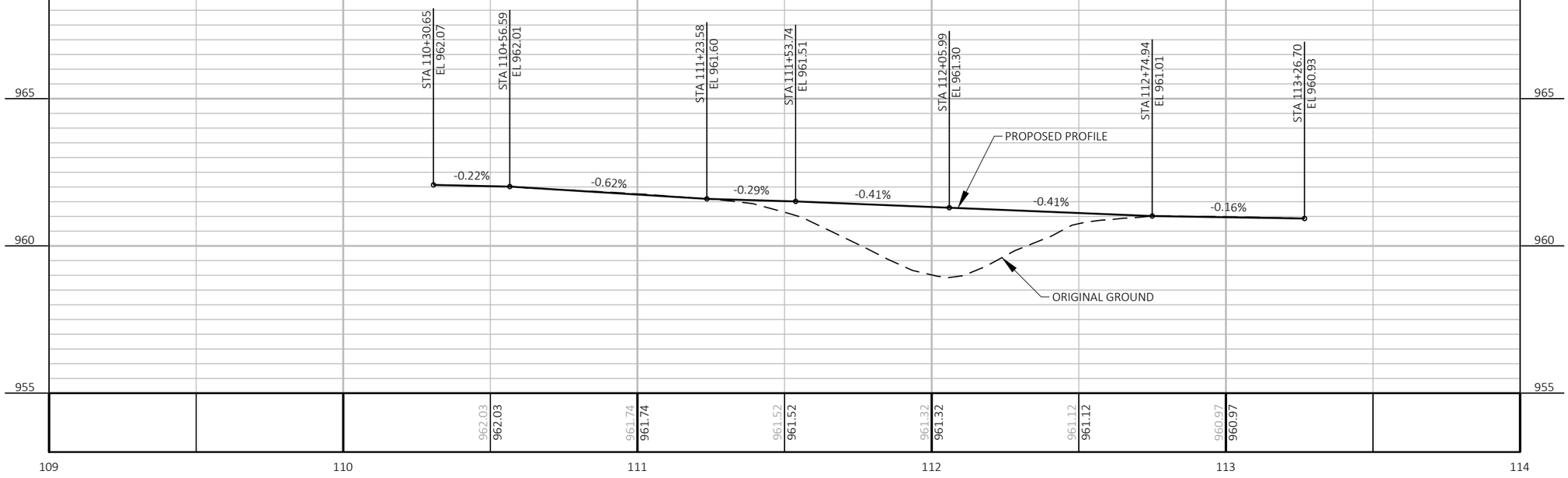


CURVE #1

PI STA = 110+75.00 'EB-EOP-STG 3'
DELTA = 14°51'53" LT
D = 16°51'06"
T = 44.35'
L = 88.21'
R = 340.00'
PC STA = 110+30.65 'EB-EOP-STG 3'
PT STA = 111+18.86 'EB-EOP-STG 3'

CURVE #2

PI STA = 112+85.50 'EB-EOP-STG 3'
DELTA = 13°57'25" RT
D = 16°51'06"
T = 41.62'
L = 82.82'
R = 340.00'
PC STA = 112+43.88 'EB-EOP-STG 3'
PT STA = 113+26.70 'EB-EOP-STG 3'



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	PLAN AND PROFILE: USH 12 EB EOP STAGE 3 CROSSOVER	SHEET 96	E

Standard Detail Drawing List

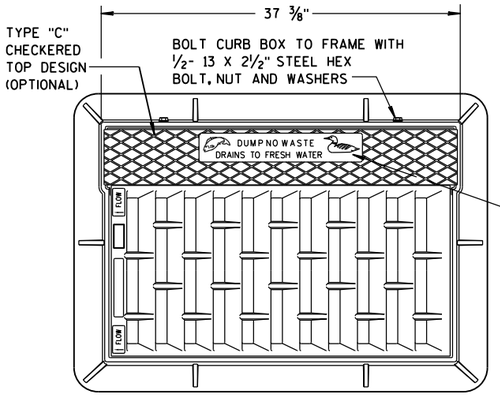
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D19-03	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09E12-01D	OVER HEIGHT TYPE 13 POLE 35'-55' MONOTBE ARM
09E12-01E	GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-13A	RURAL DOWELED CONCRETE PAVEMENT
13C11-13B	RURAL DOWELED CONCRETE PAVEMENT
13C13-10	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END

6

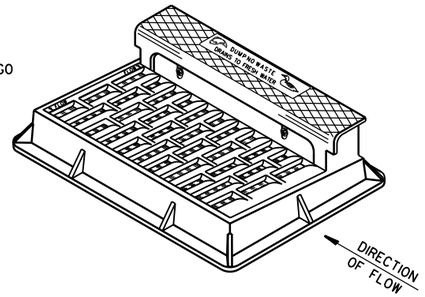
Standard Detail Drawing List

15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-21C	PAVEMENT MARKING (TURN LANES)
15C08-21D	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-06A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-06B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D11-08	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-10A	TRAFFIC CONTROL, LANE CLOSURE
15D12-10B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D30-07A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-07C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-07J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

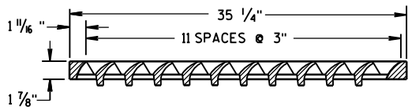
6

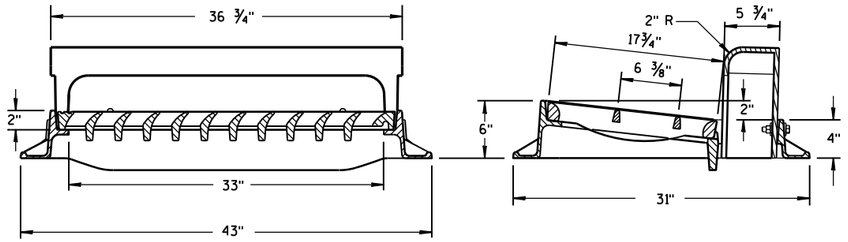


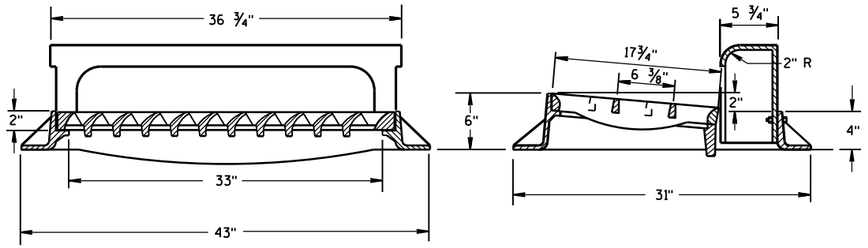
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

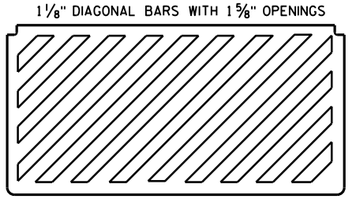






TYPE "H"

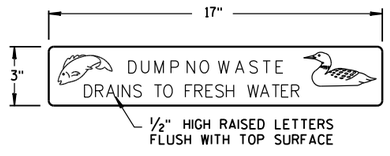
NOTE: EITHER CASTING IS ACCEPTABLE



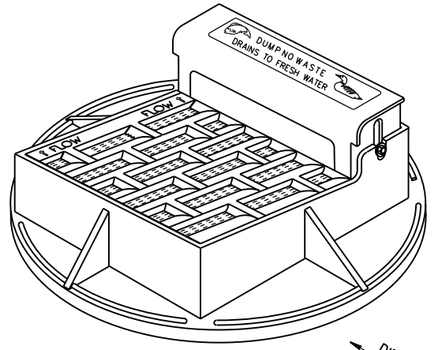
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

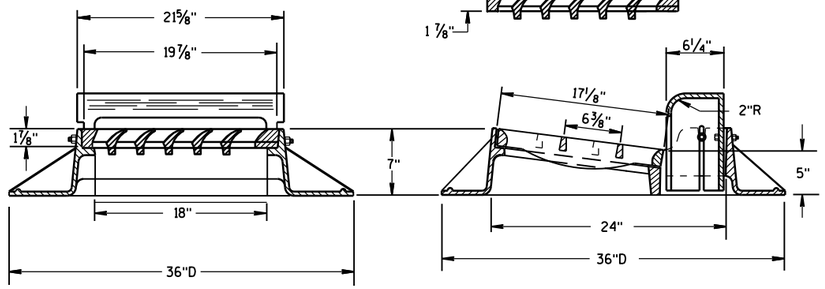


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



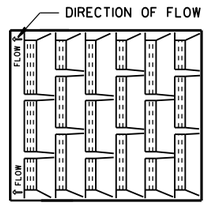
TYPE "A"

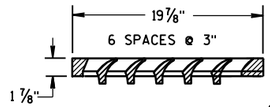
GENERAL NOTES

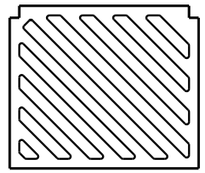
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



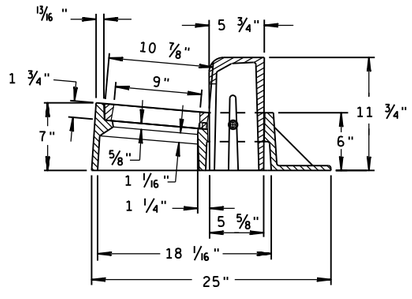


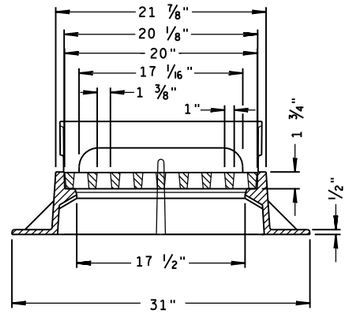


SPECIAL GRATE FOR TYPE "A" COVER

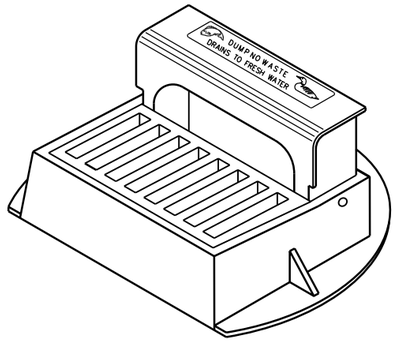
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



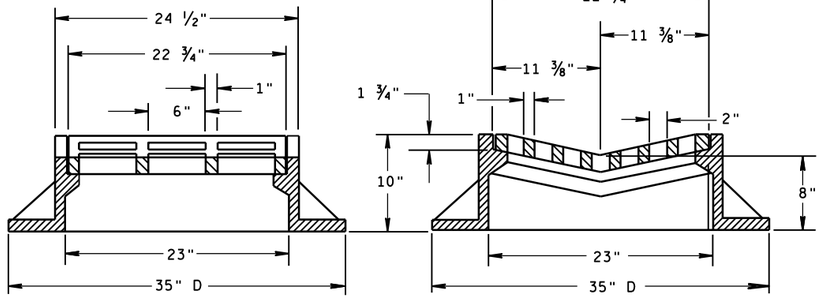
INLET COVERS TYPE A, H, A-S, H-S & Z

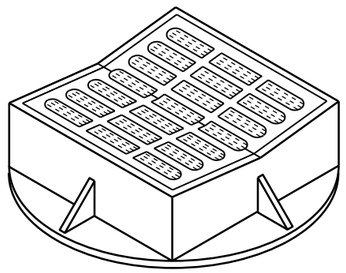
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

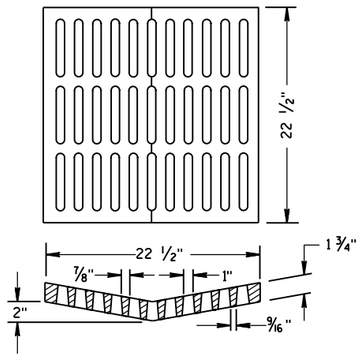
6

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



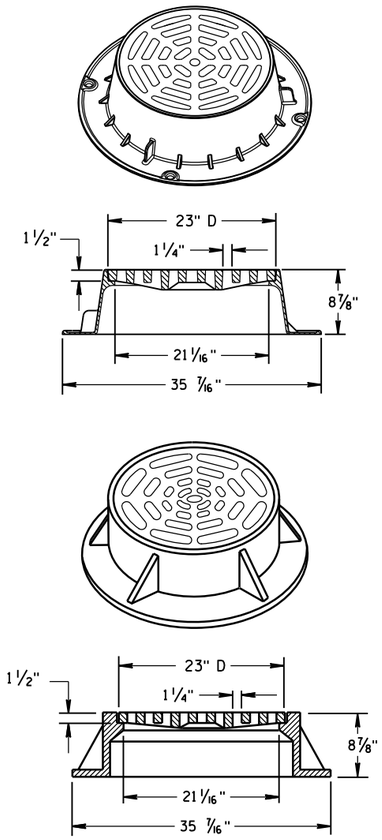


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

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



TYPE "C"

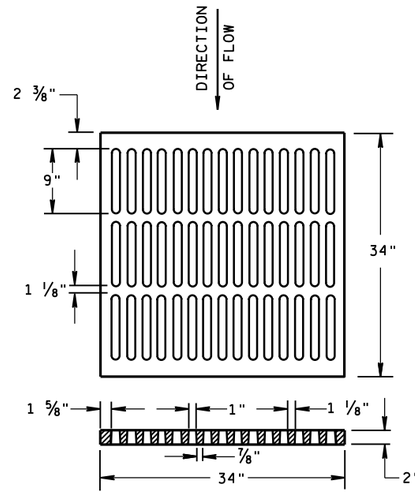
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

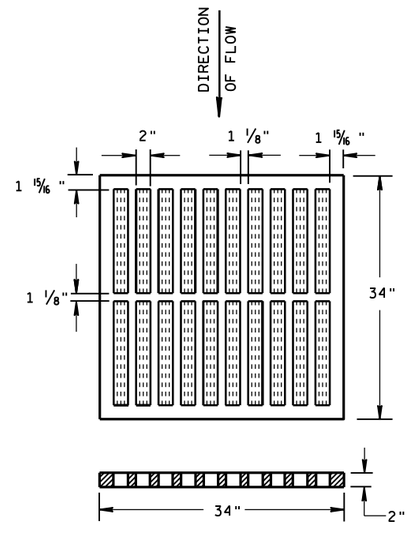
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



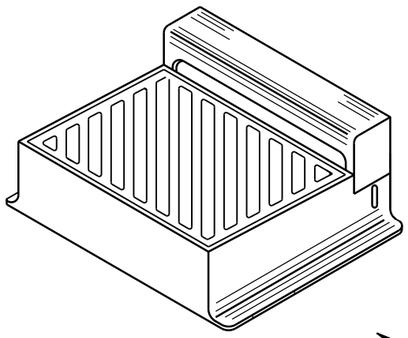
ALTERNATIVE TYPE "MS"

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

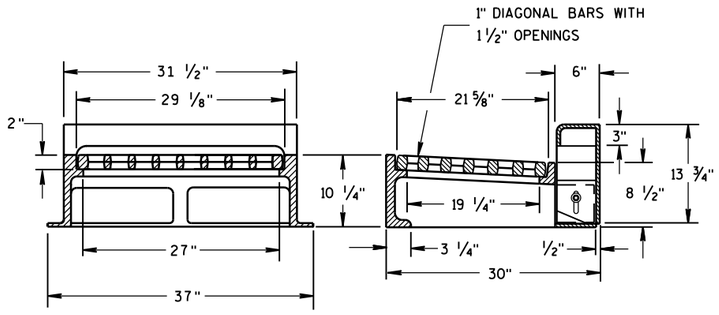


TYPE "MS"

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



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

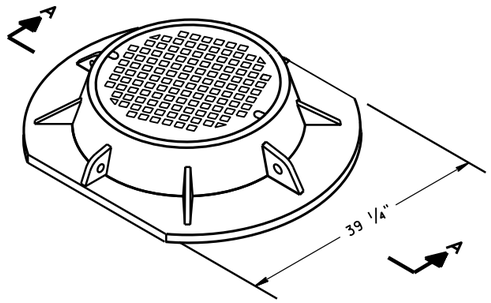
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

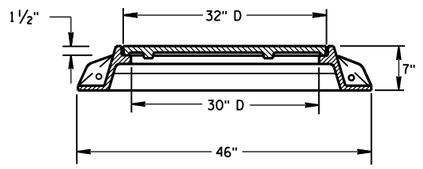
6

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

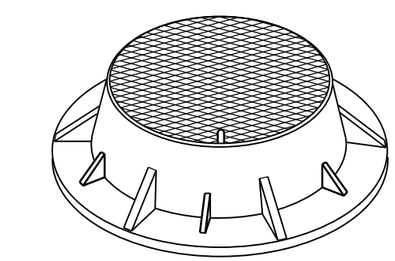
6

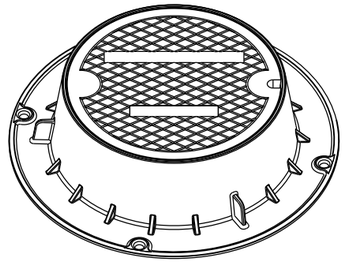
S.D.D. 8 A 5-19b

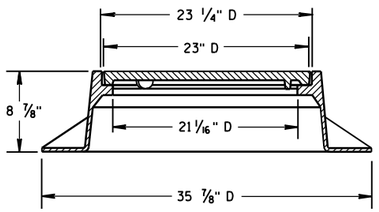


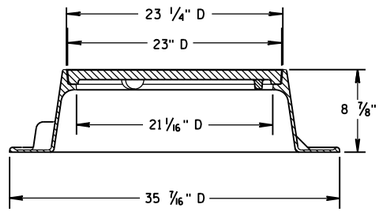


SECTION A-A
TYPE "K"









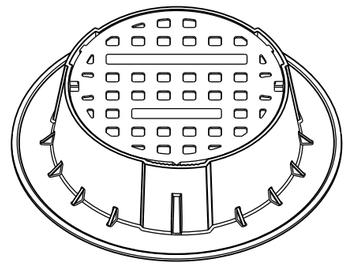
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

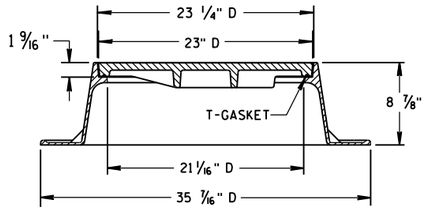
GENERAL NOTES

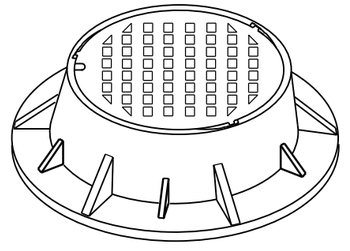
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

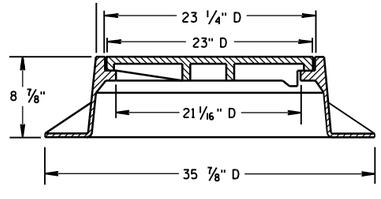
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

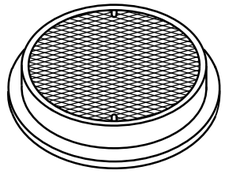


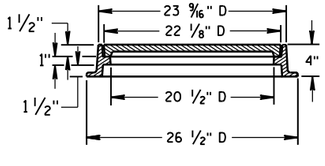




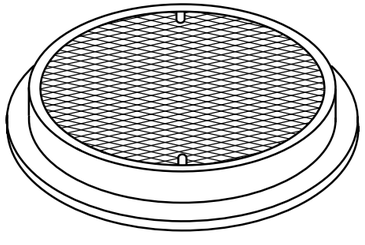


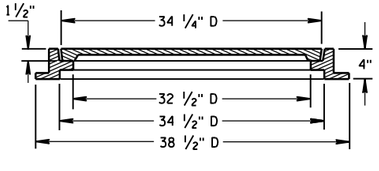
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



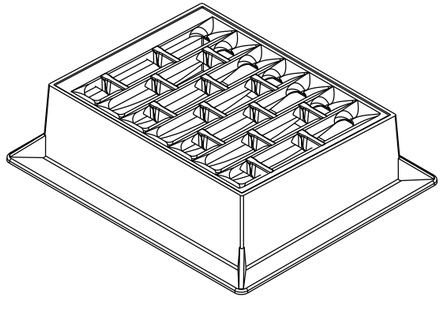


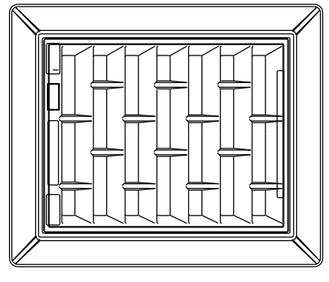
TYPE "L"

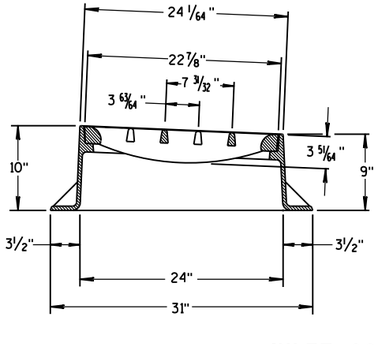


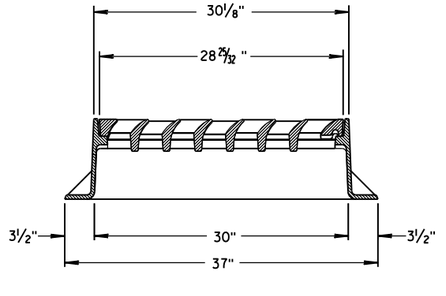


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

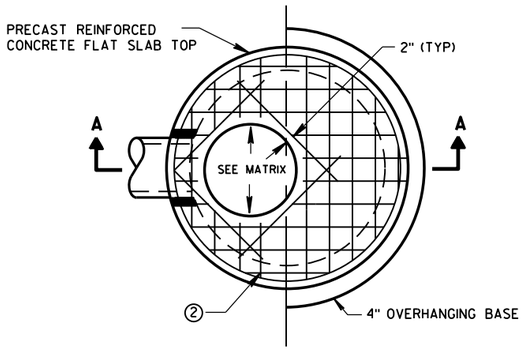
APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

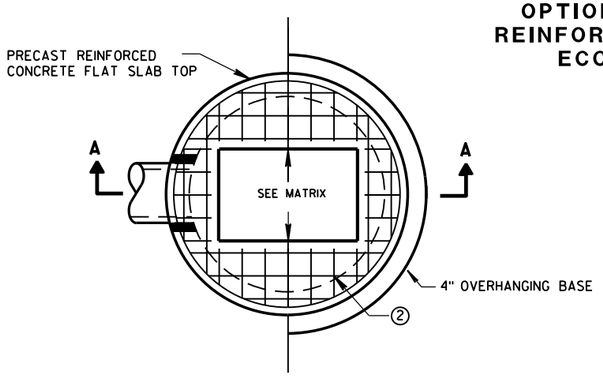
S.D.D. 8 A 5-19d

6

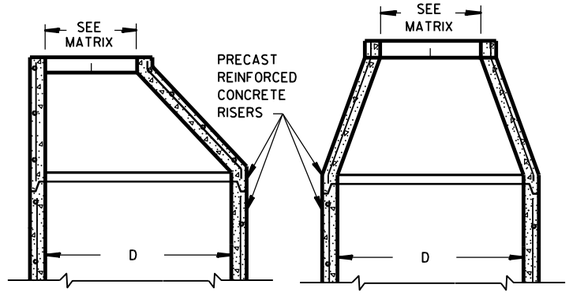
S.D.D. 8 A 5-19d



PLAN VIEW CIRCULAR OPENING

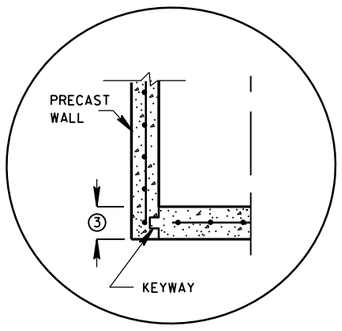


PLAN VIEW RECTANGULAR OPENING

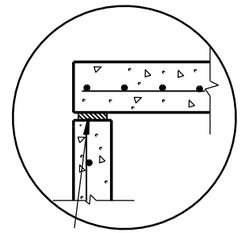


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

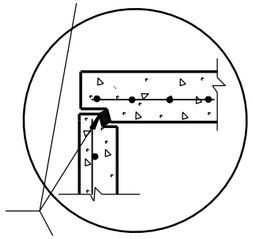
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

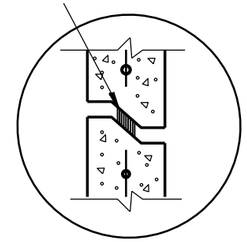


TOP WITH PLAIN END JOINT



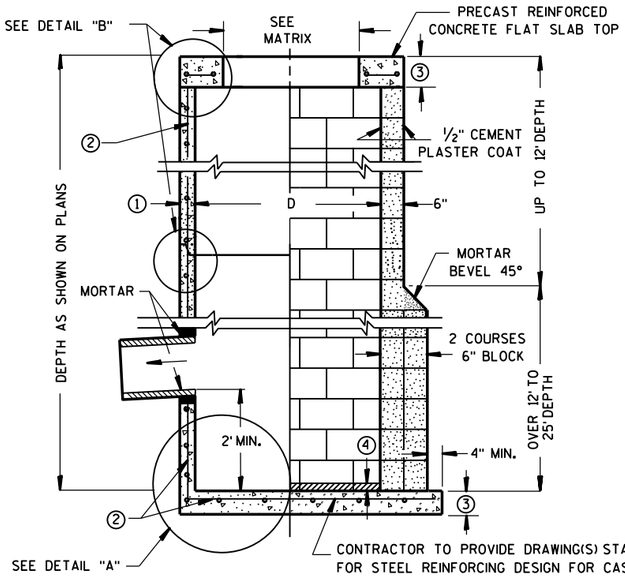
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

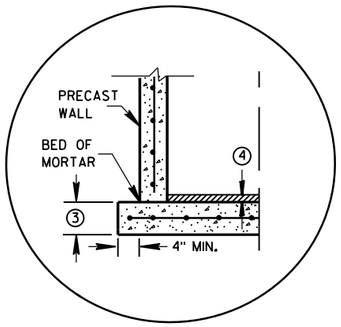


CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

SECTION A-A

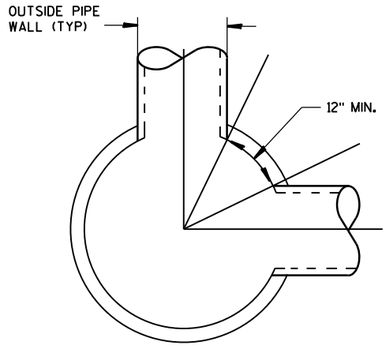
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

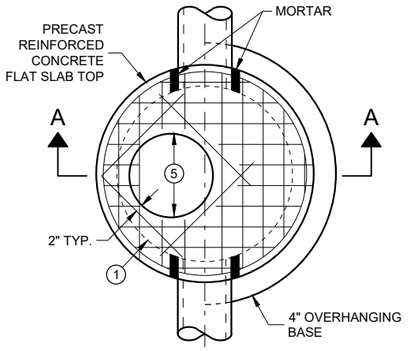
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

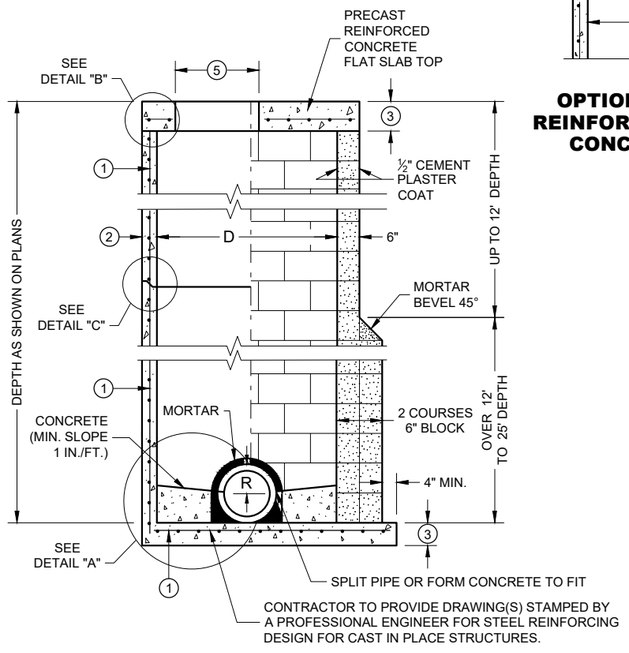
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

S.D.D. 8 A 8-2



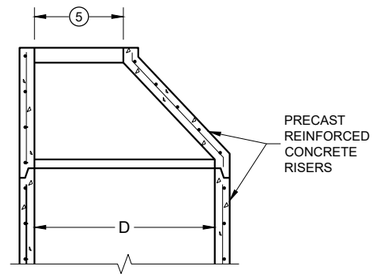
PLAN VIEW
CIRCULAR OPENING



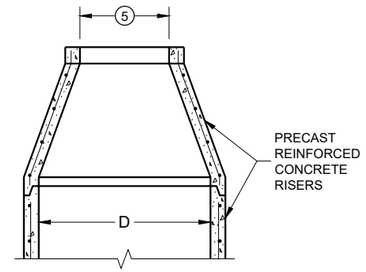
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

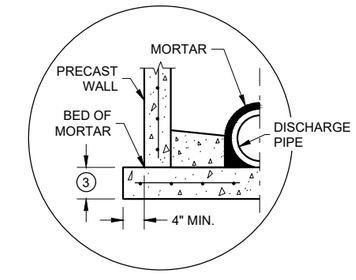
MANHOLE COVER OPENING MATRIX

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

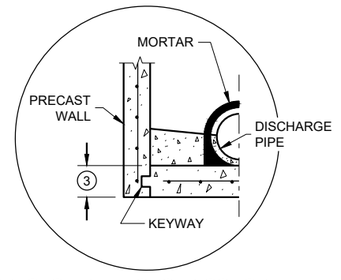
PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

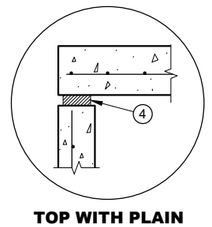


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

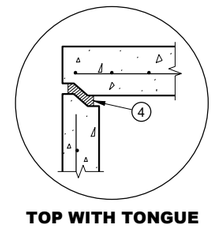


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

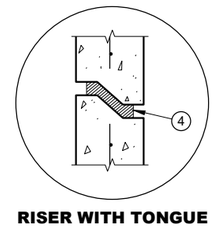
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

GENERAL NOTES

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

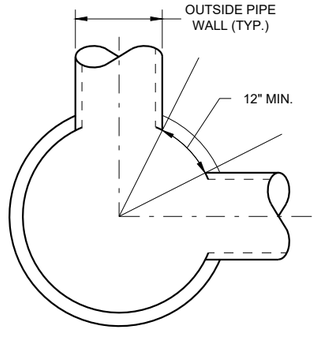
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

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

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

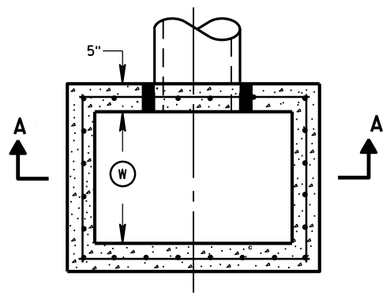
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

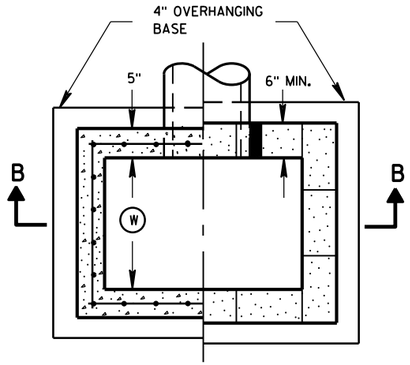
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

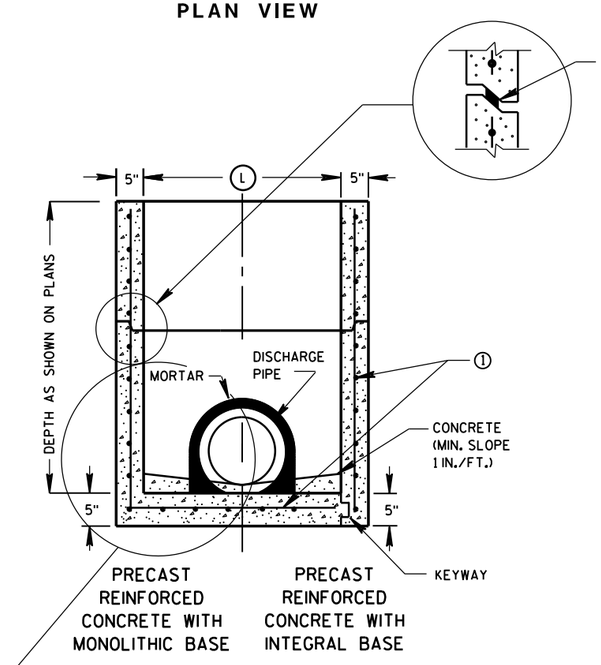
SDD 08B09 - 03



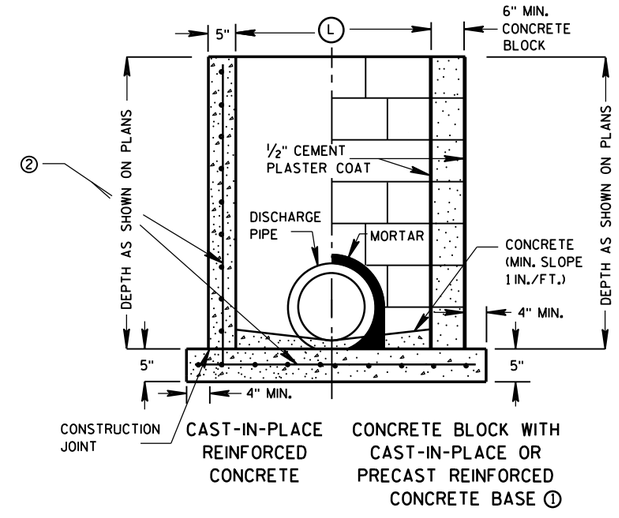
PLAN VIEW



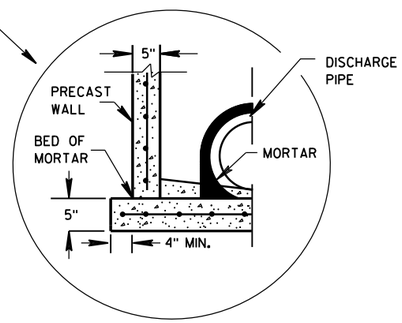
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

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

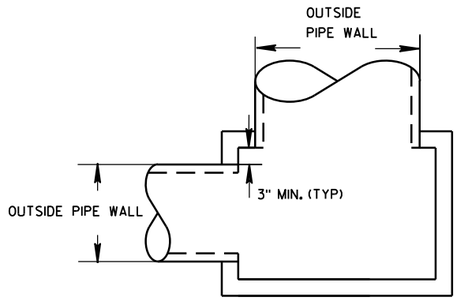
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



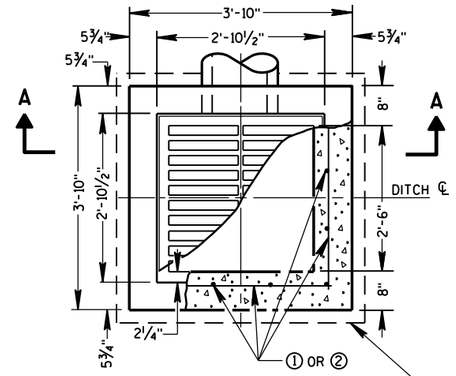
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

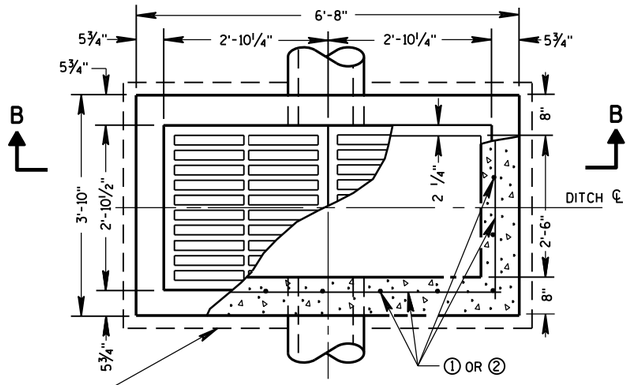
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

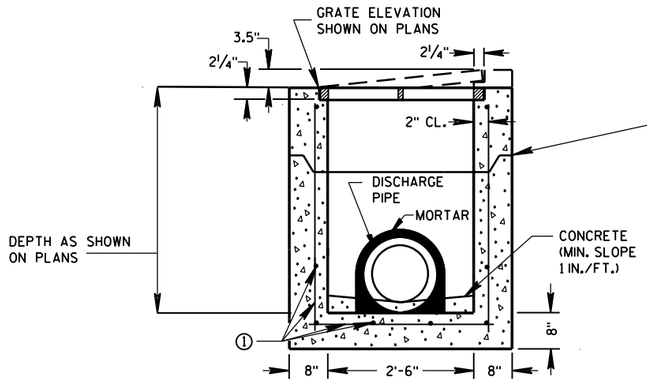


PLAN VIEW

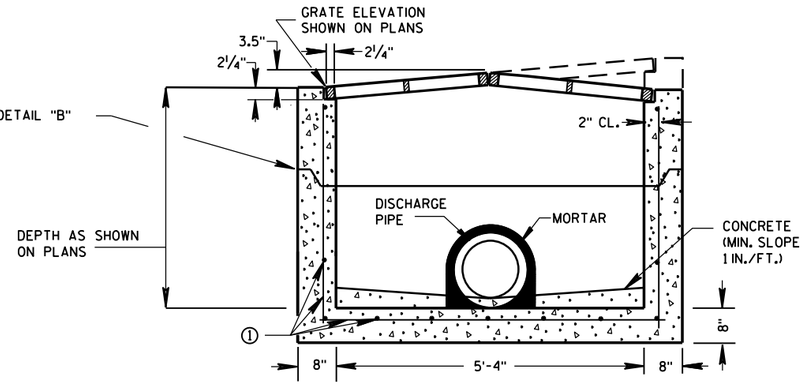


PLAN VIEW

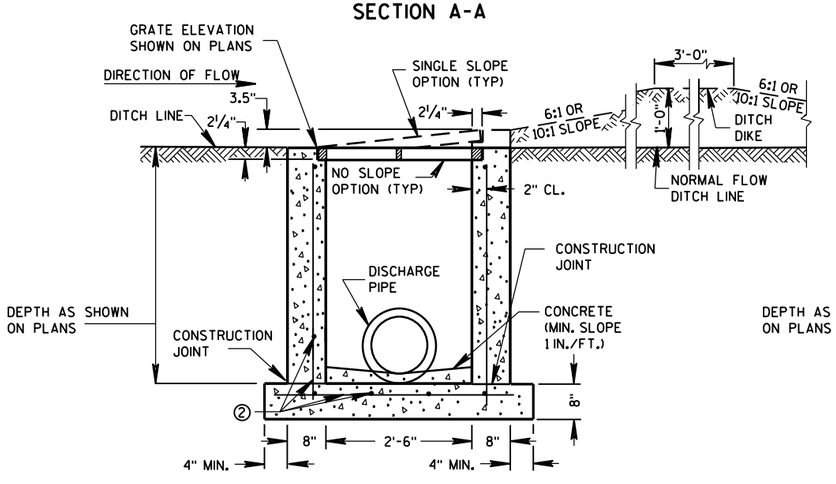
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



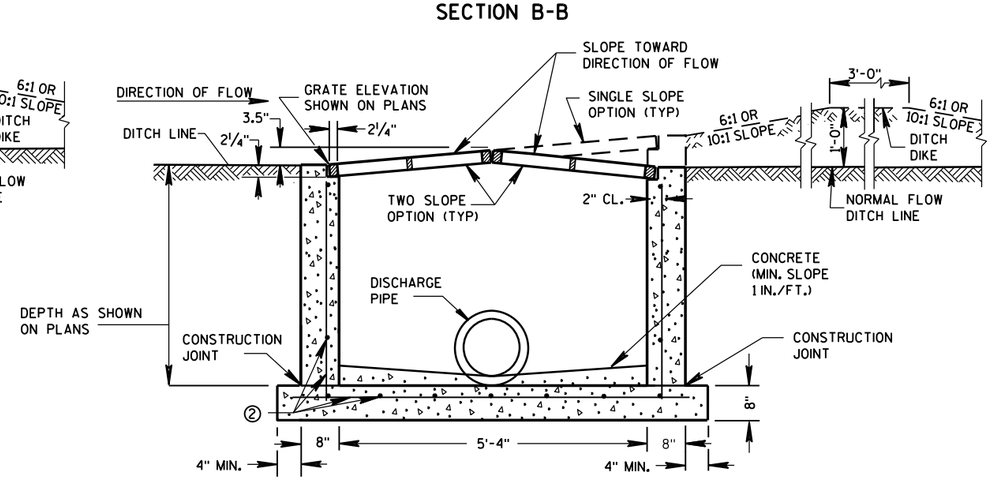
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

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

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

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

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

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

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

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

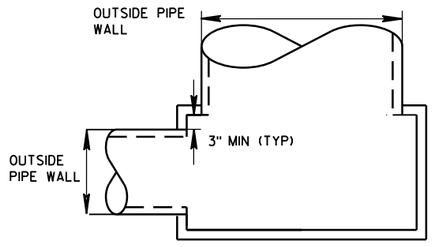
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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

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

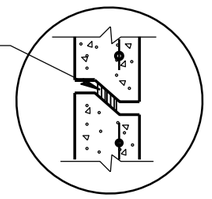
PIPE MATRIX

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



DETAIL "A"

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



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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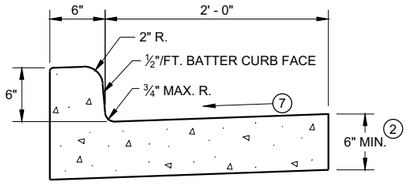
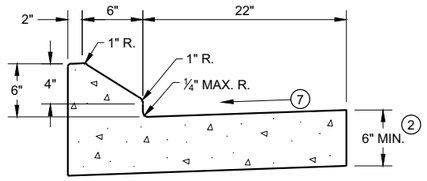
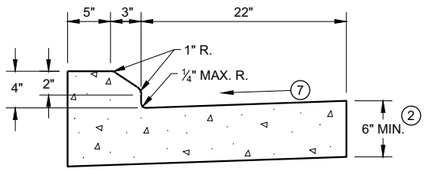
S.D.D. 8 C 8-2



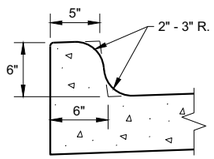
TYPES A (1) & D



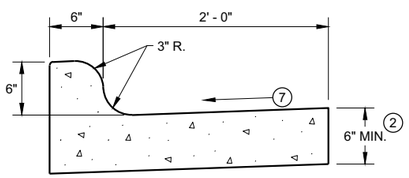
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

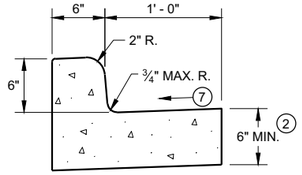


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



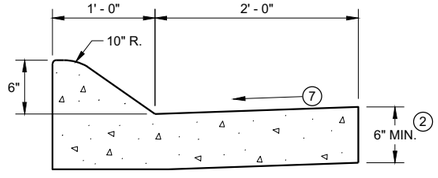
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

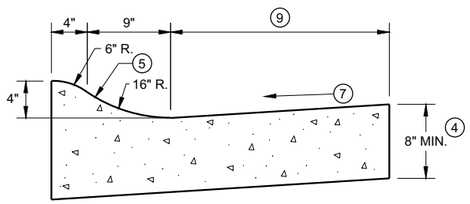
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

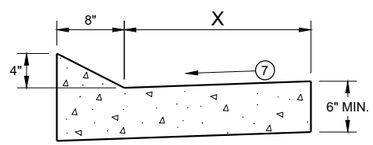
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

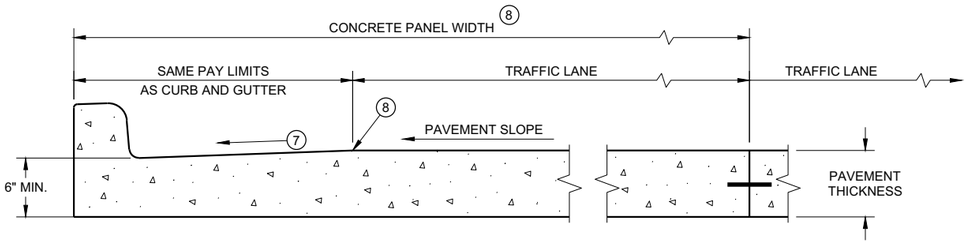


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

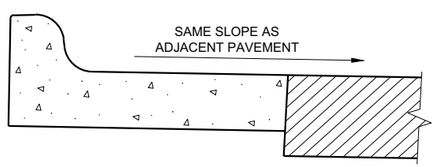
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES 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.

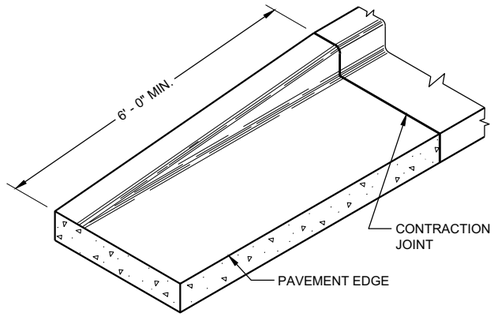
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

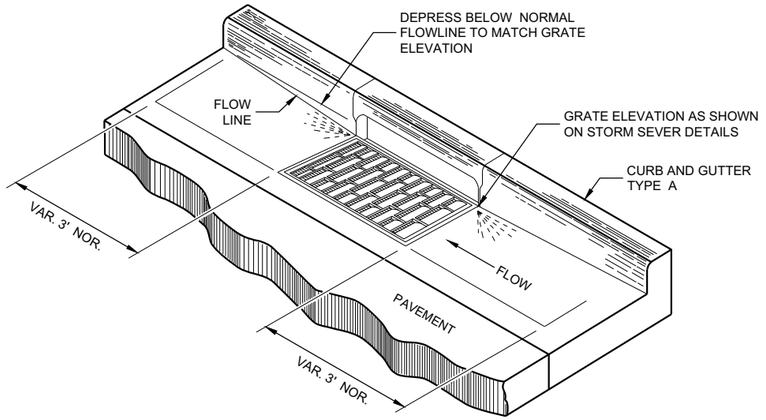
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

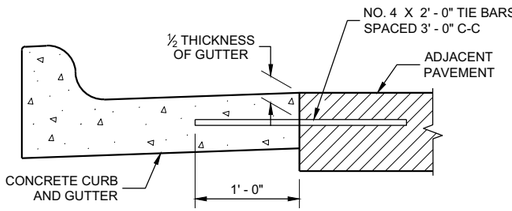
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

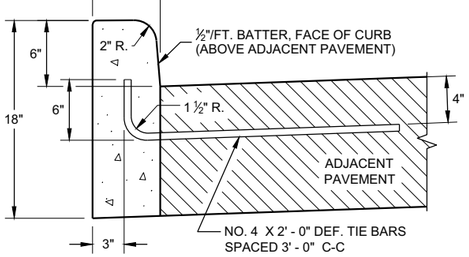
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

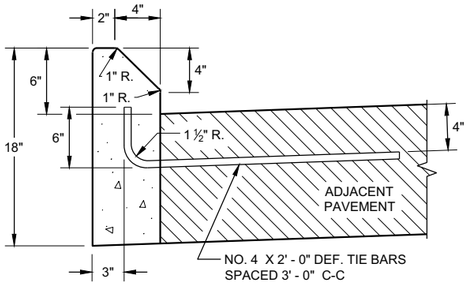
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

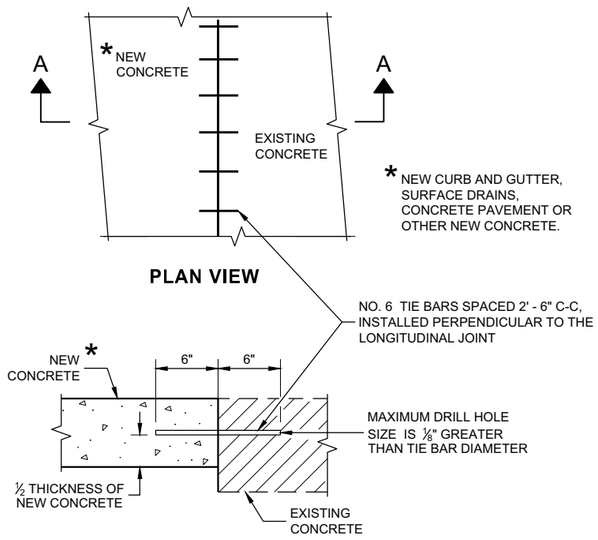


TYPES A (1) & D



TYPES G (1) & J

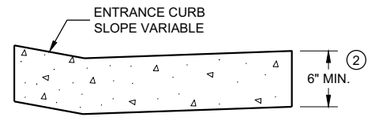
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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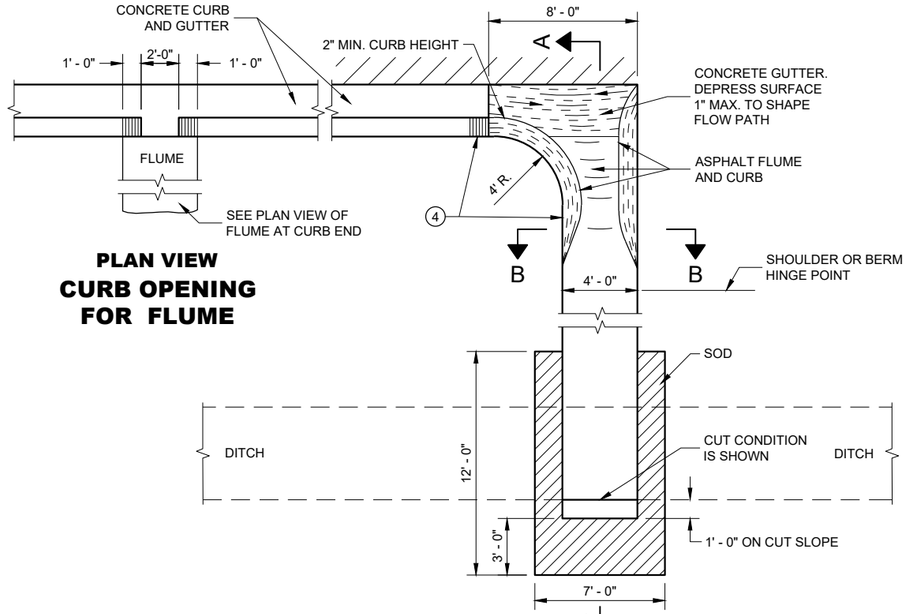
SDD 08D01 - 22b

6

SDD 08D01 - 22b

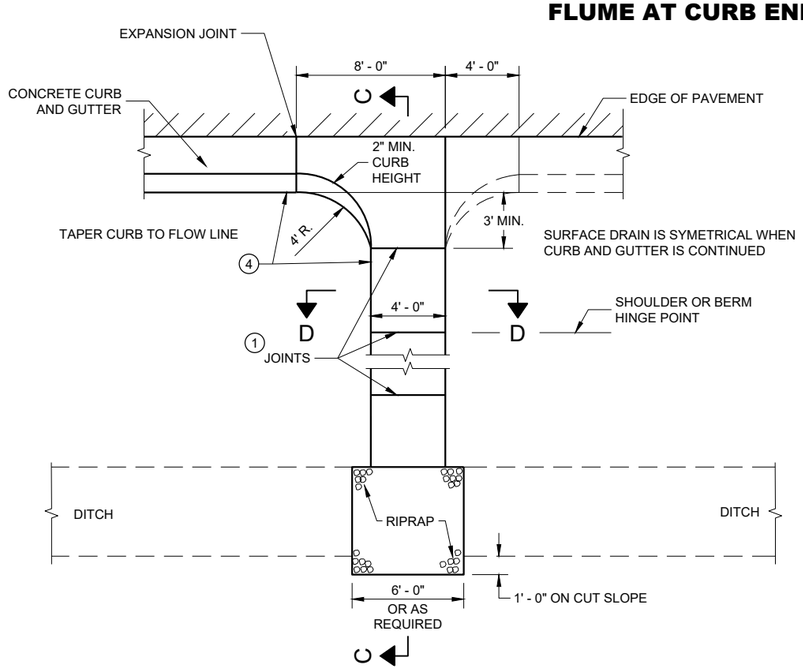
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



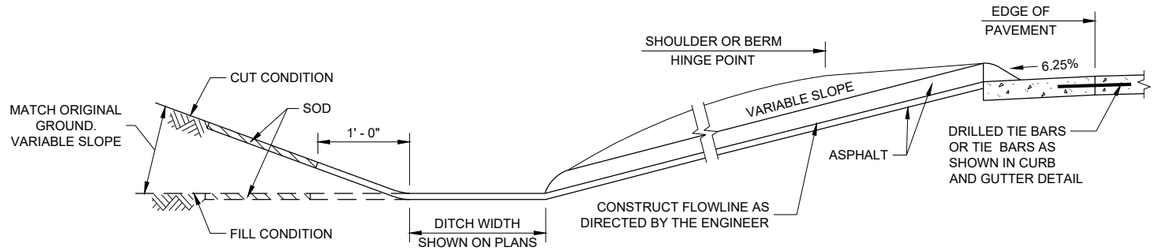
PLAN VIEW
CONCRETE SURFACE DRAIN

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.

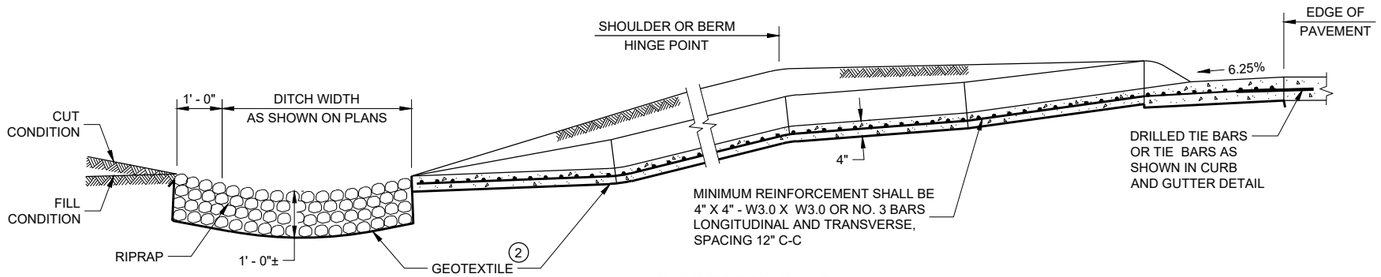
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE 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.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

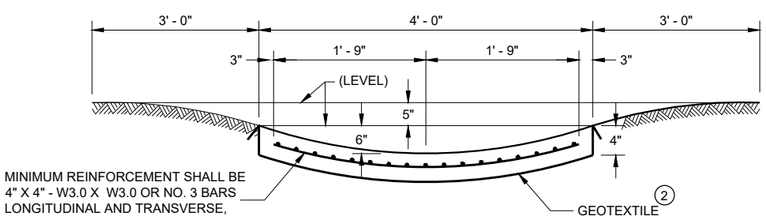


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

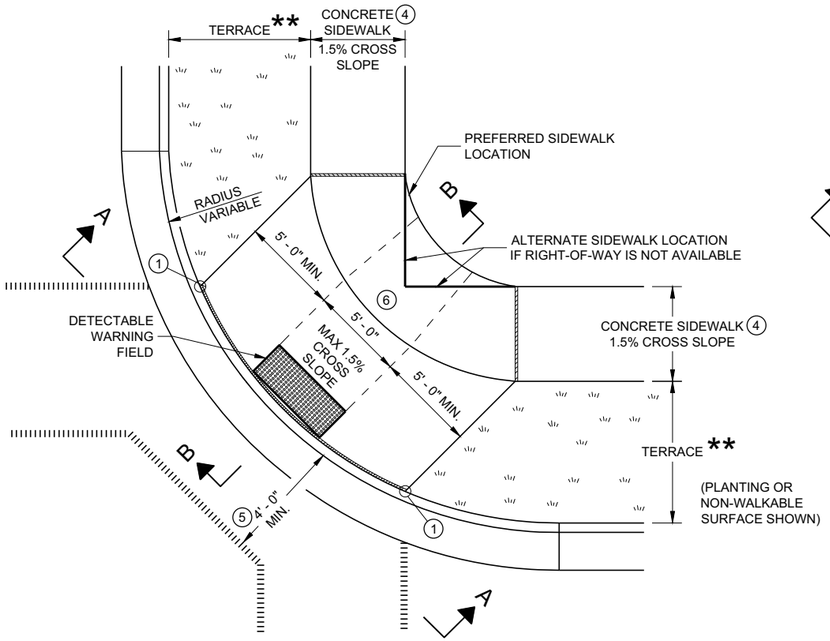
FHWA

6

SDD 08D04 - 06

6

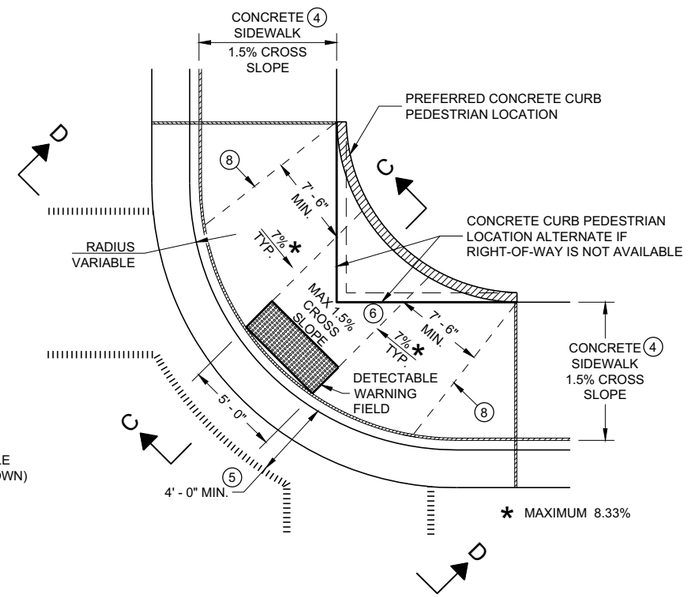
SDD 08D04 - 06



PLAN VIEW

CURB RAMP TYPE 1

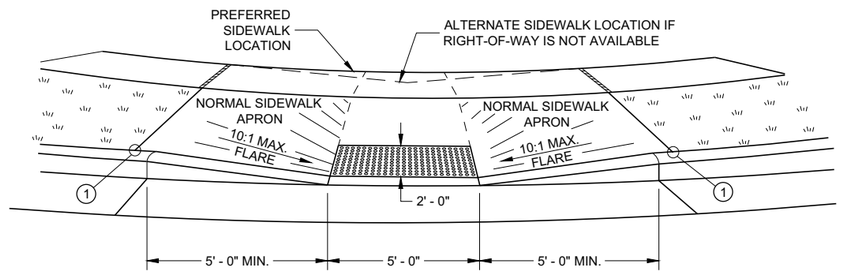
(CENTER OF CORNER RADIUS)



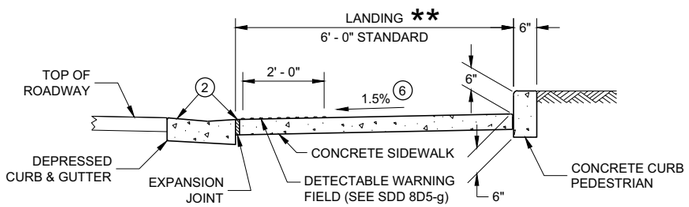
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

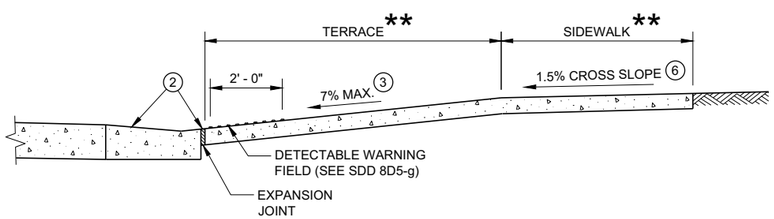


VIEW A - A FOR TYPE 1

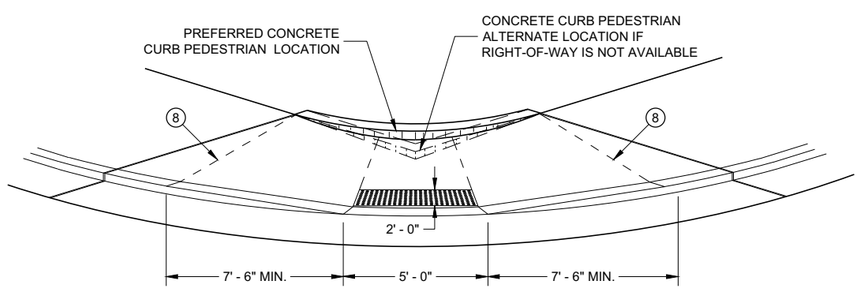


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

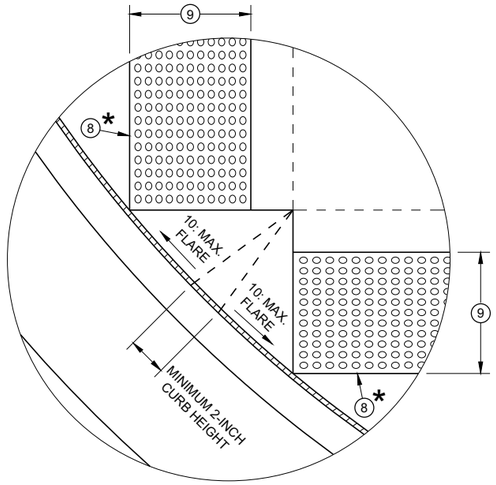
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

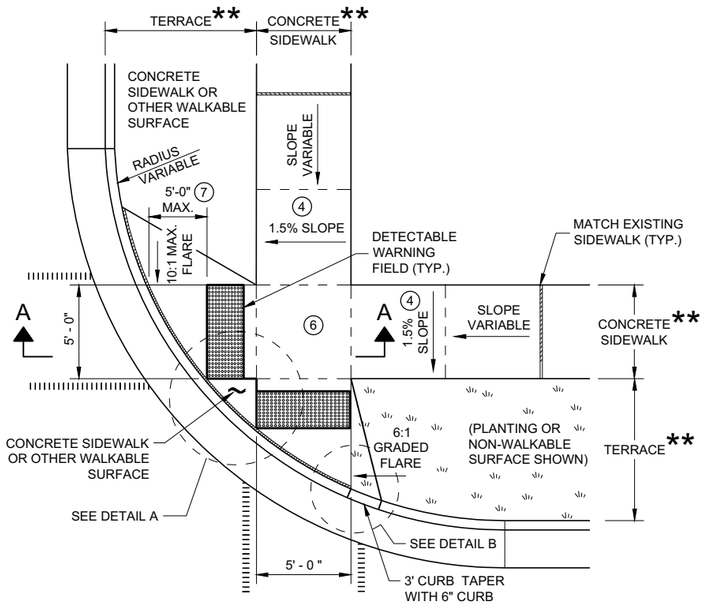
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

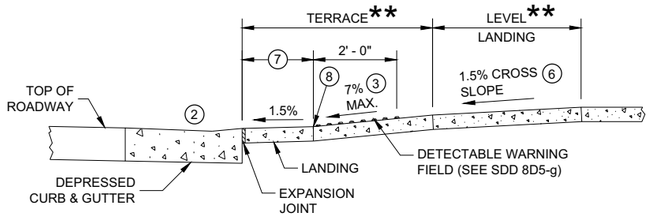
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

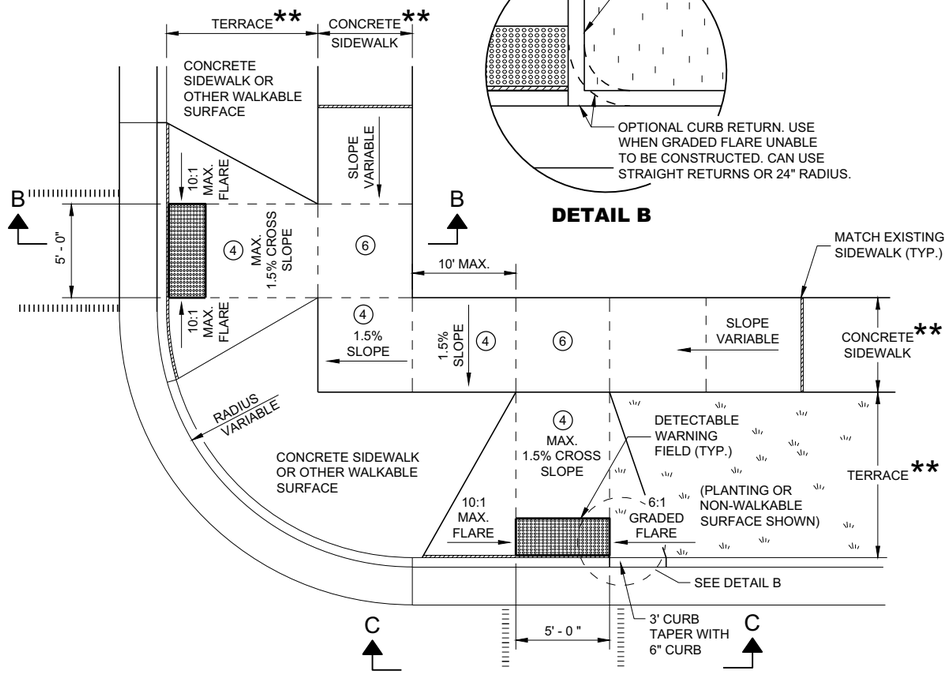
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

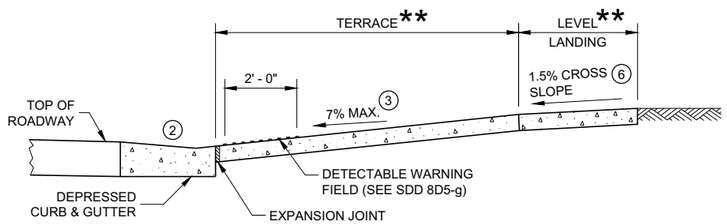
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

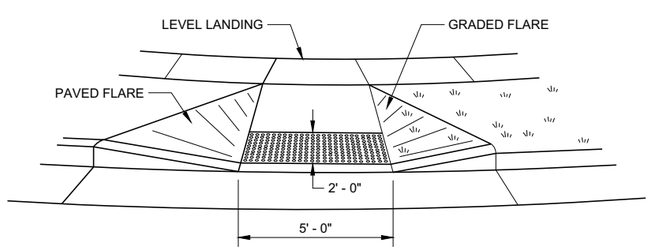


DETAIL B

PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

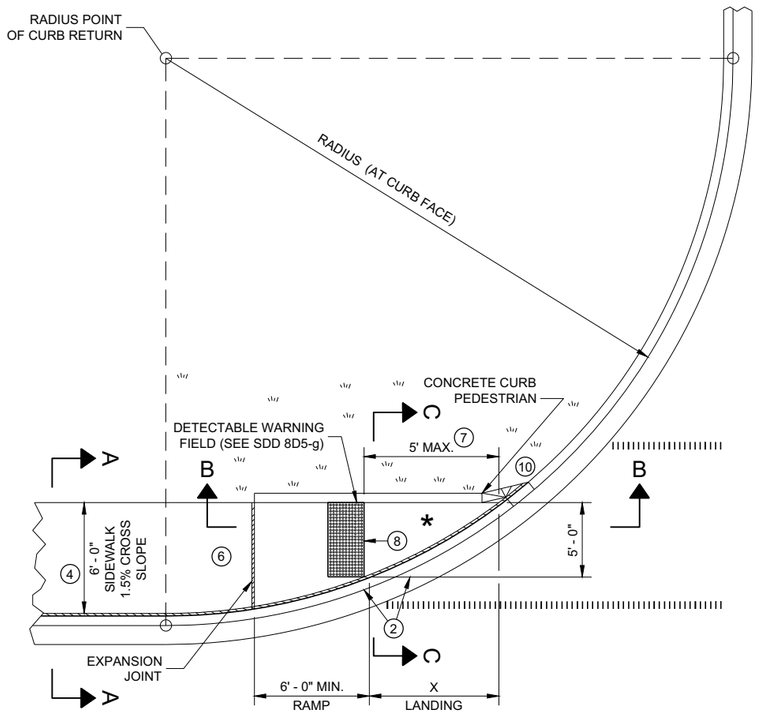
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

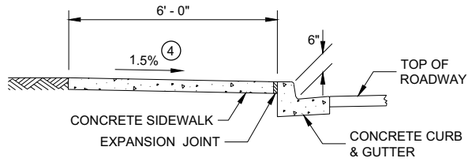


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

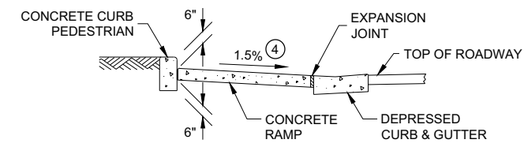
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

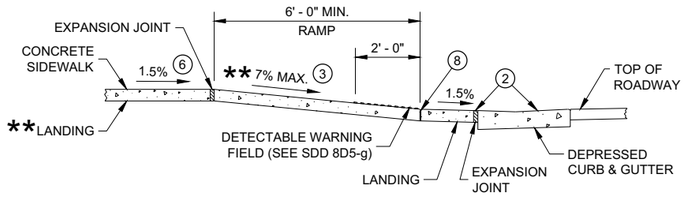
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



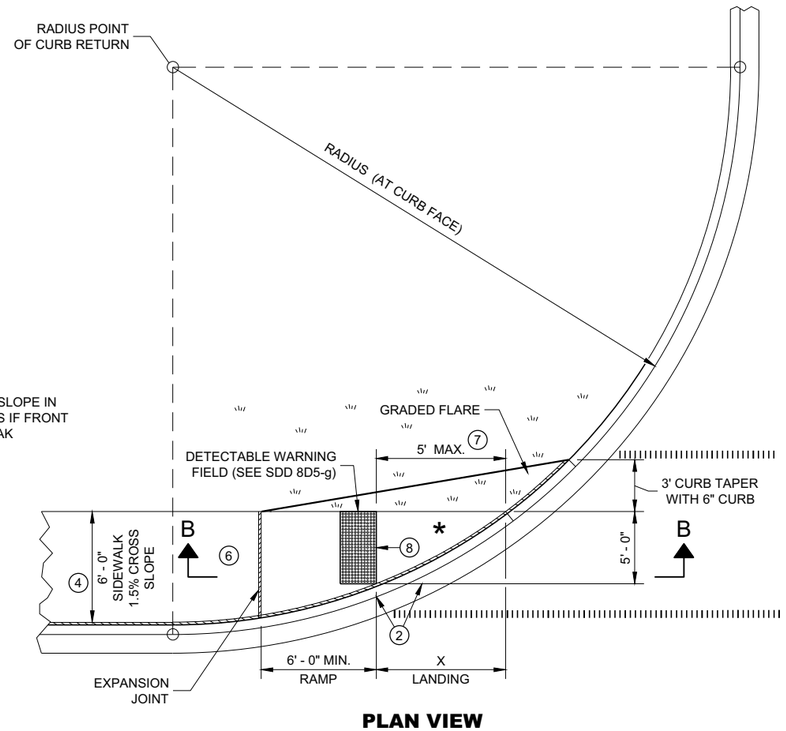
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

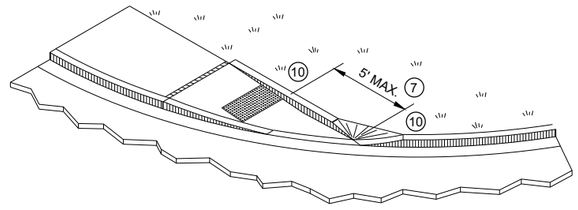
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

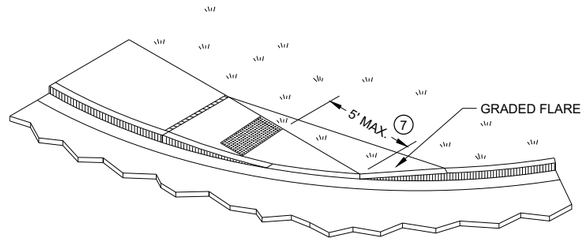


PLAN VIEW

CURB RAMP TYPE 4A1

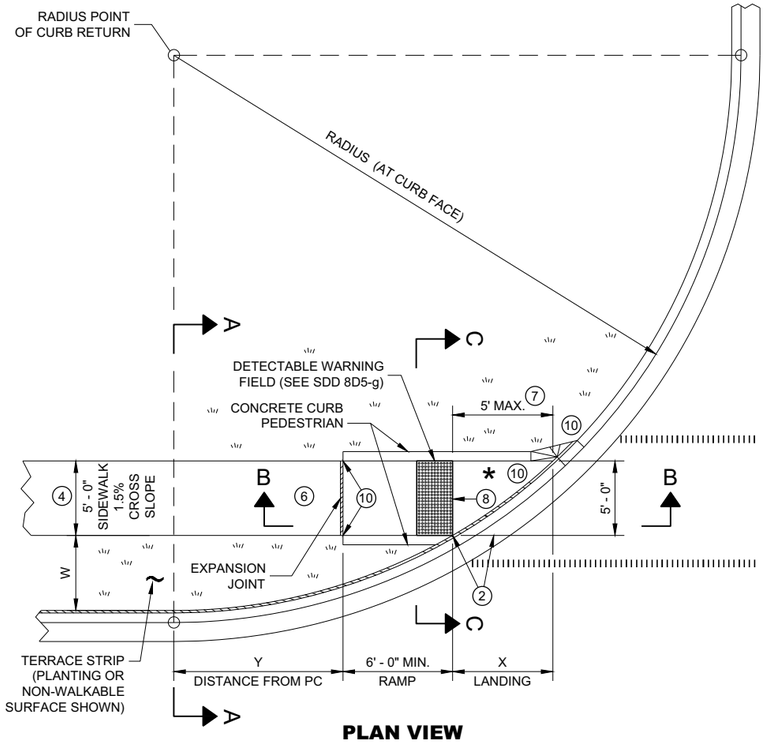


ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

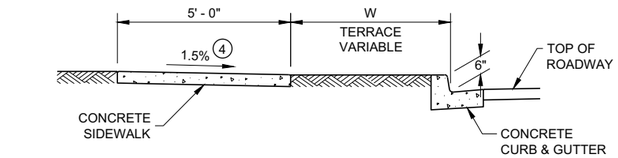
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

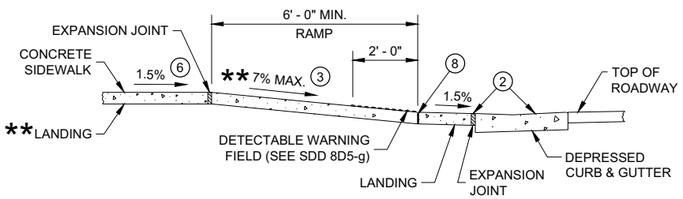
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

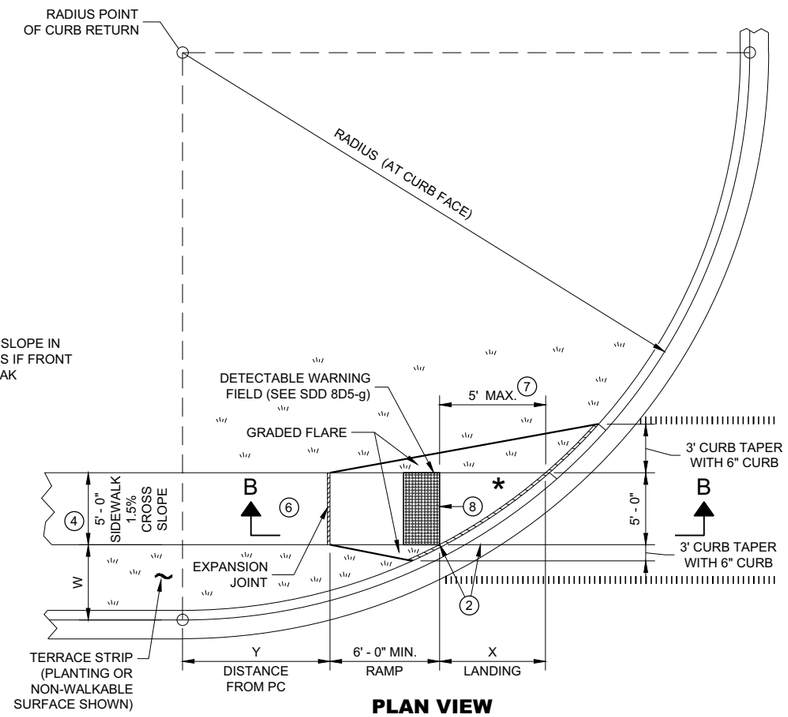


SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

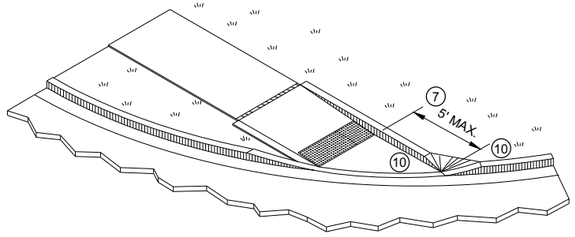
SECTION B - B FOR TYPE 4B AND TYPE 4B1



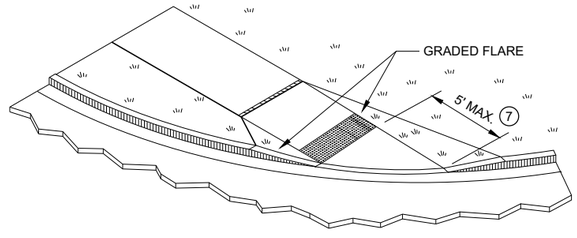
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

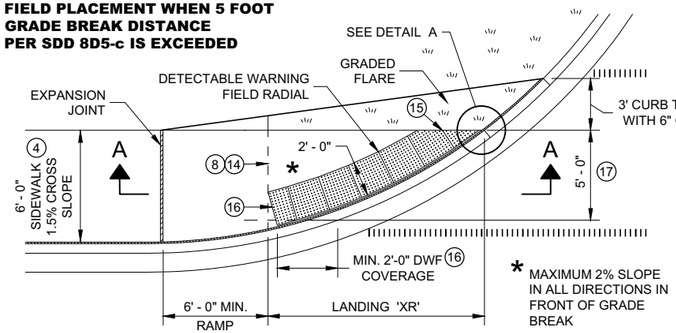
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20d

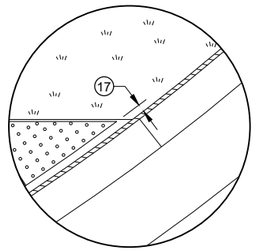
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



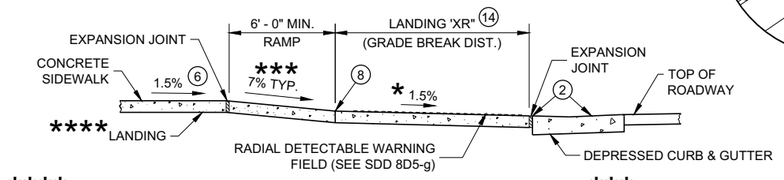
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

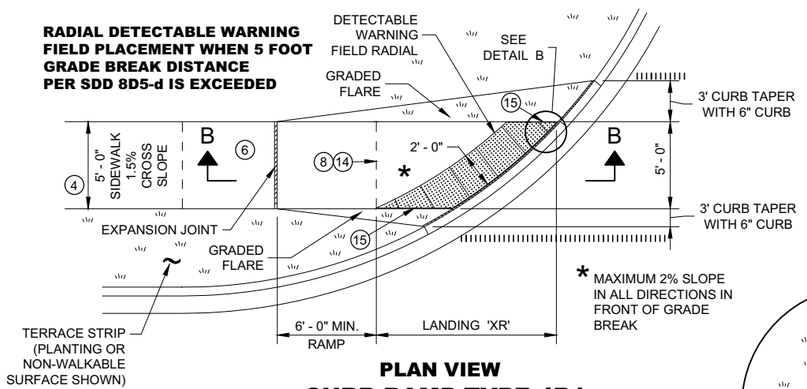


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

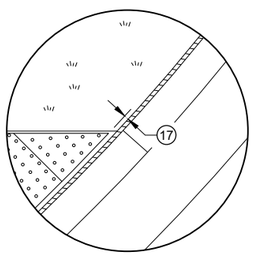
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



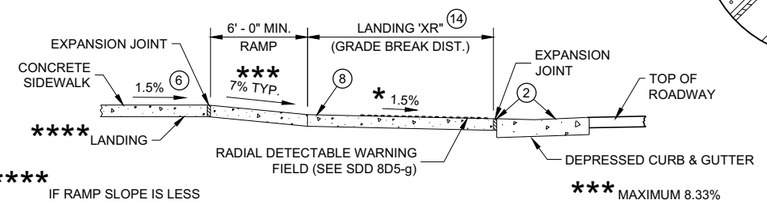
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

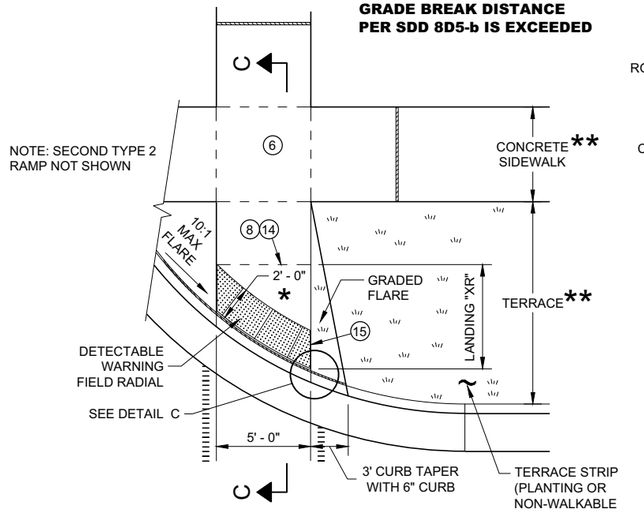
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

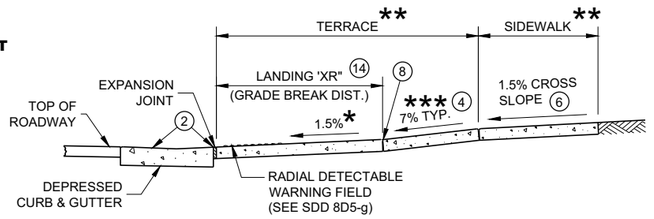


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

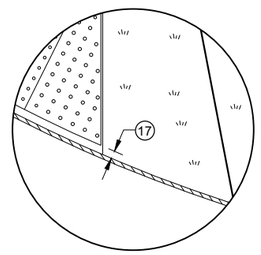


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

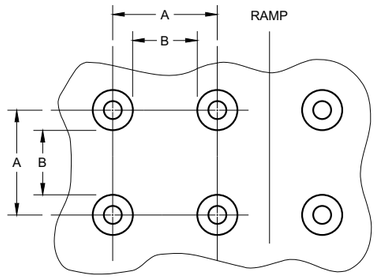
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

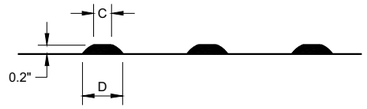
SDD 08D05 - 20f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

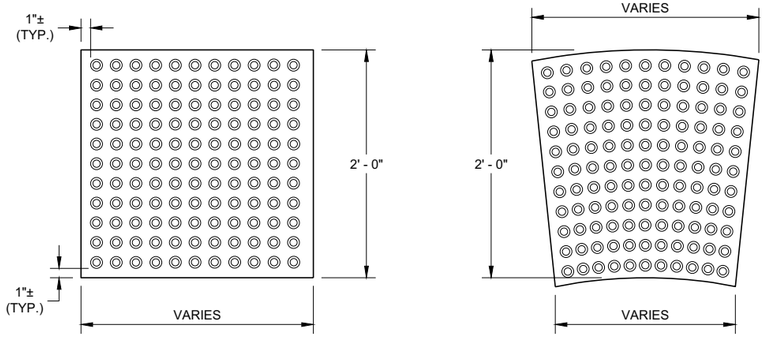


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

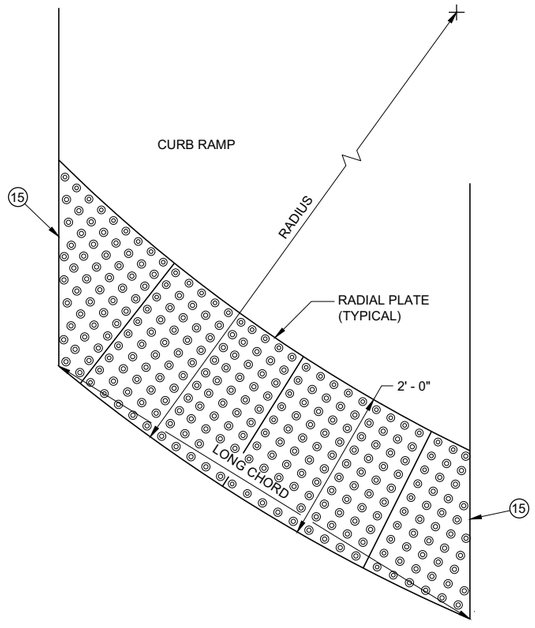
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

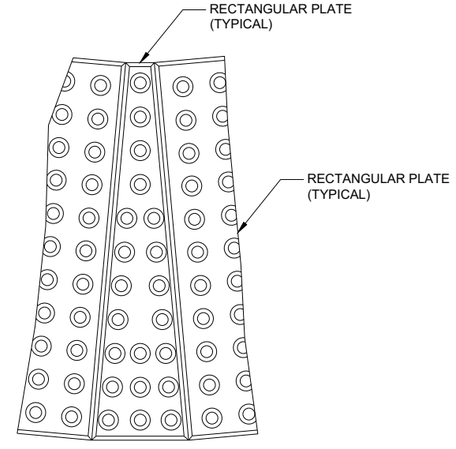
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

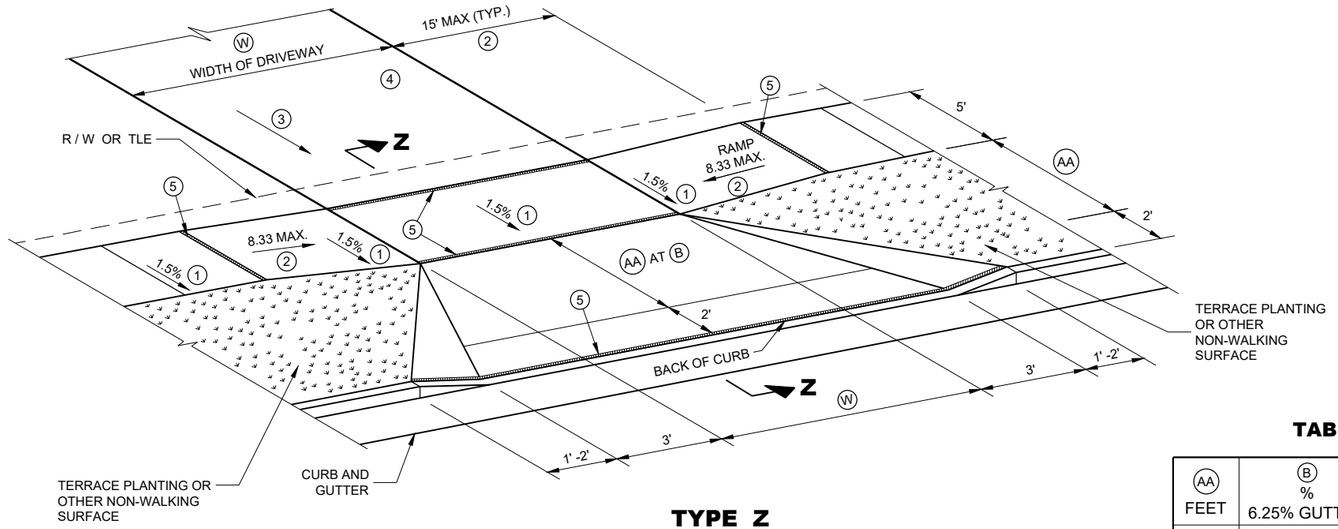
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6
SDD 08D05 - 20g



TYPE Z
SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

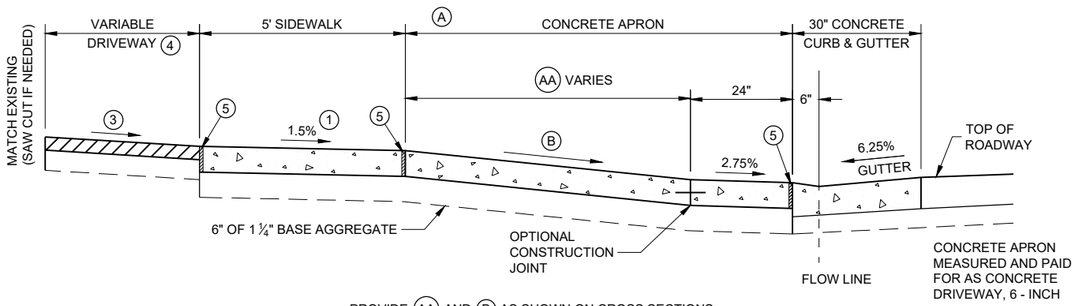
(5) ½" EXPANSION JOINT FILLER.

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

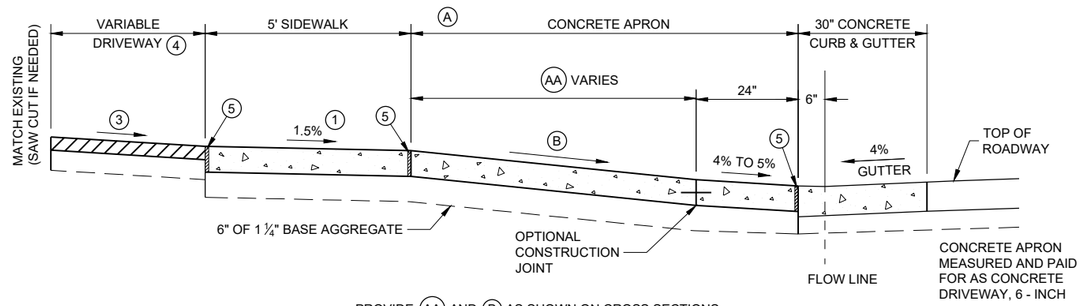
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z - Z

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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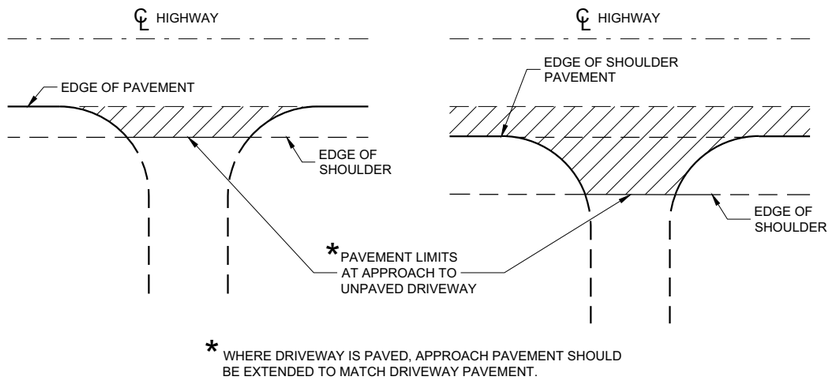
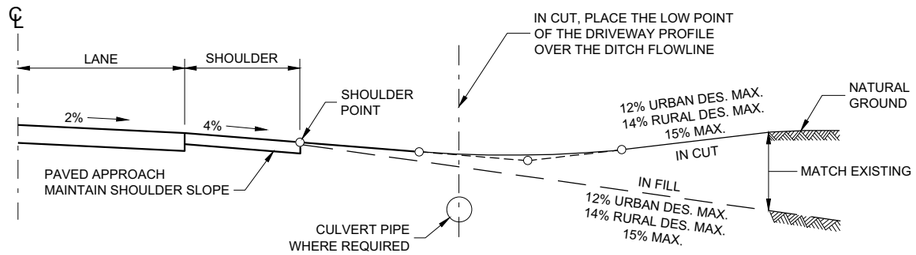
SDD 08D19 - 03



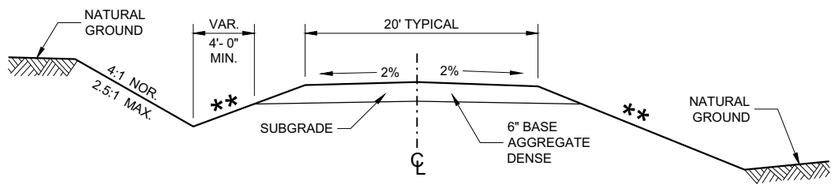
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

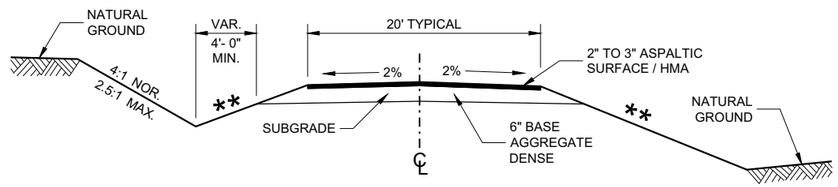


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

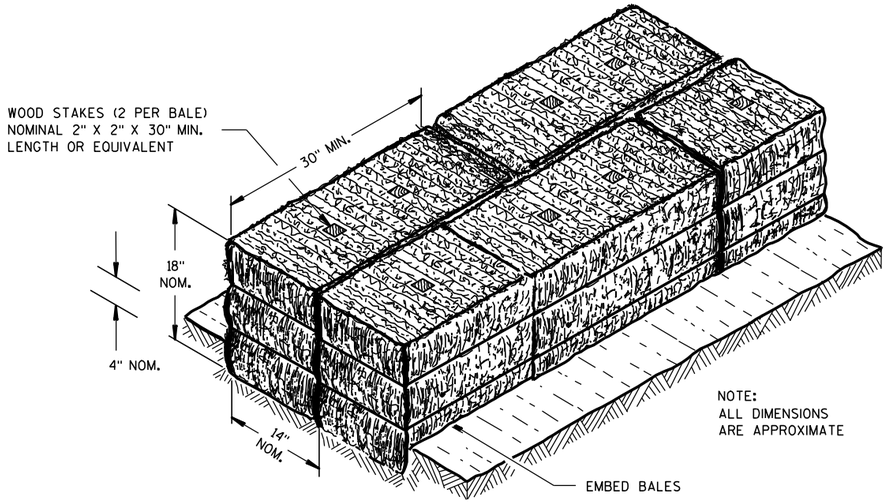
DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

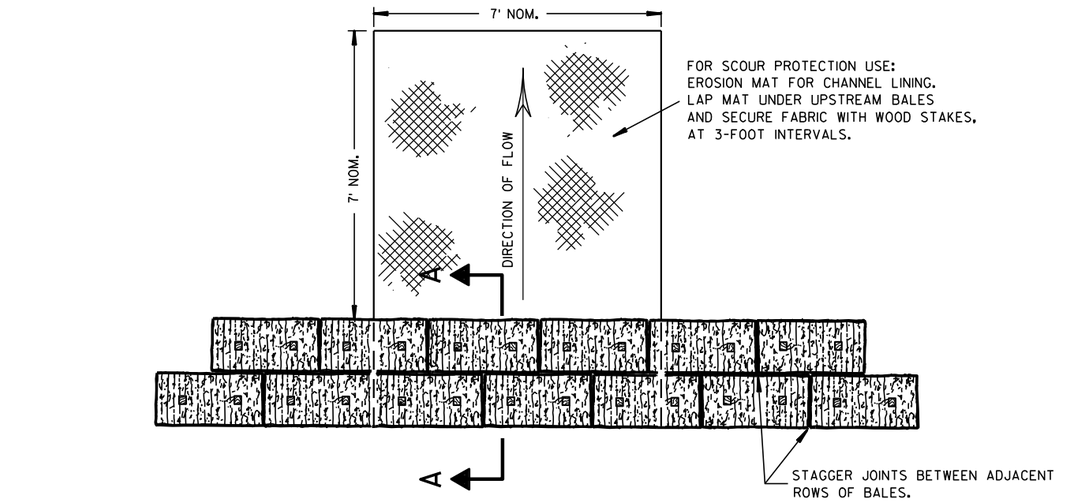
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

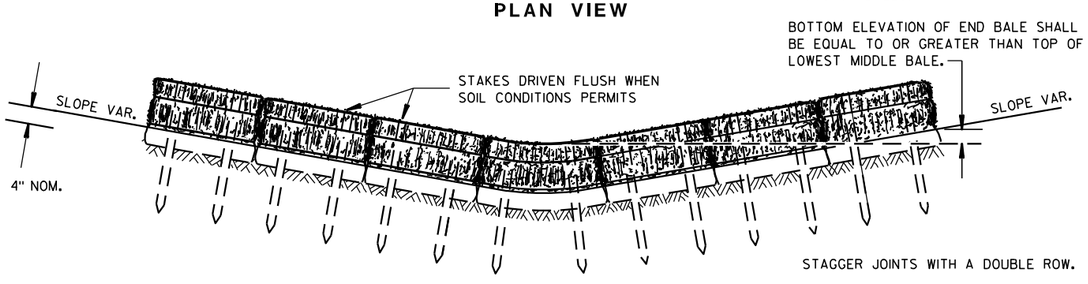
FHWA



SECTION A-A



PLAN VIEW



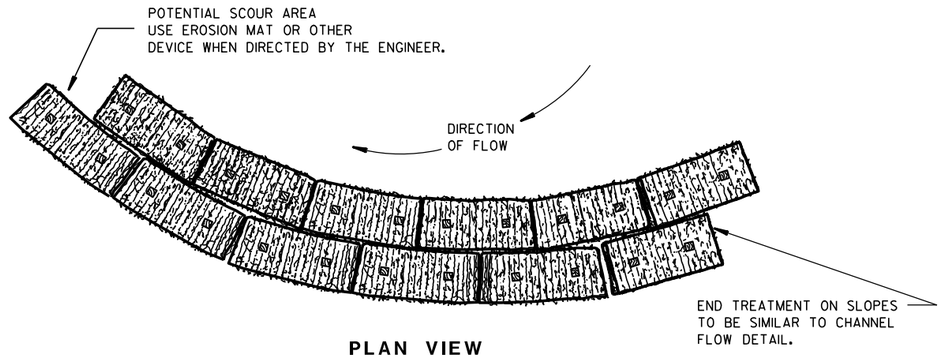
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

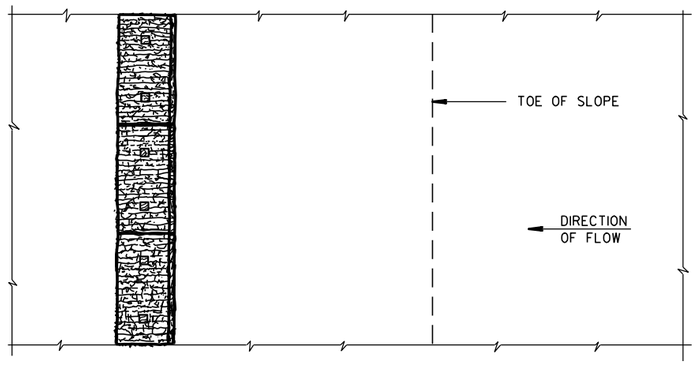
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

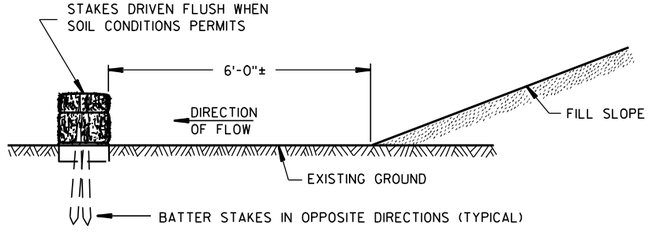


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

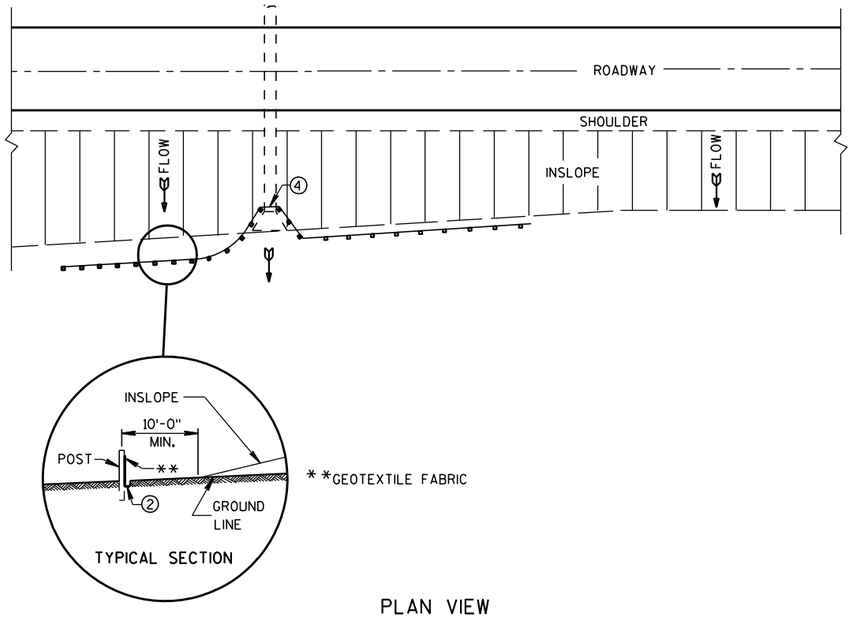
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

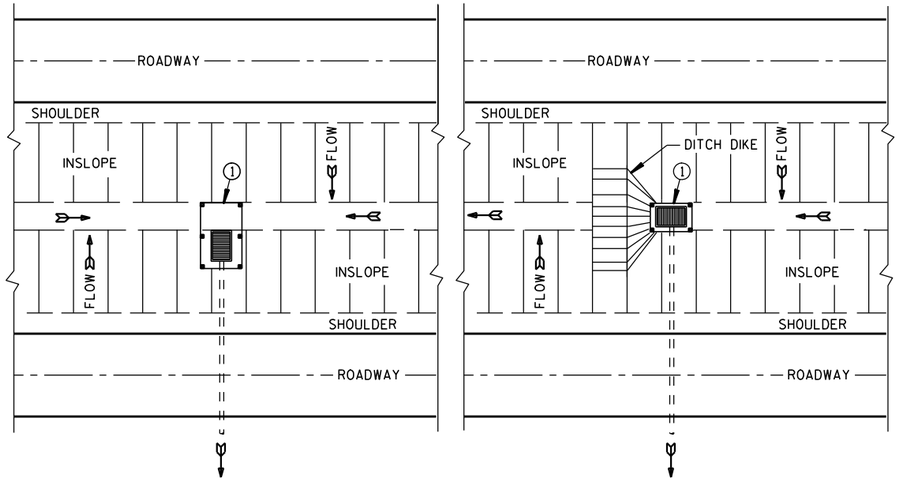
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



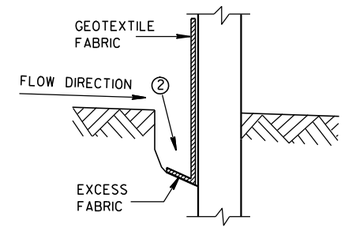
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

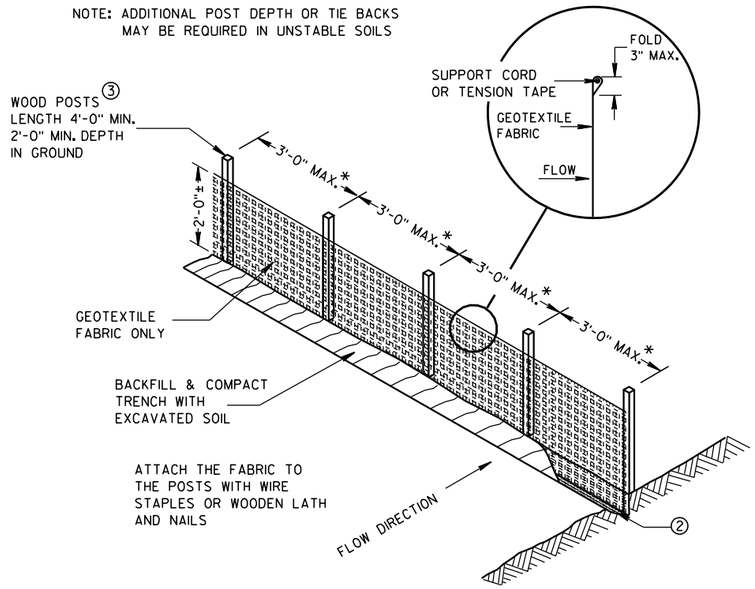
GENERAL NOTES

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

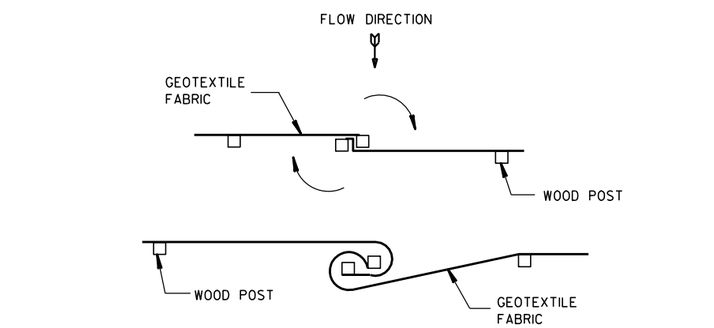
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



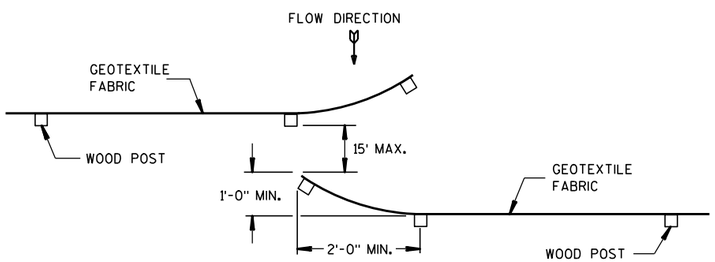
TRENCH DETAIL



SILT FENCE

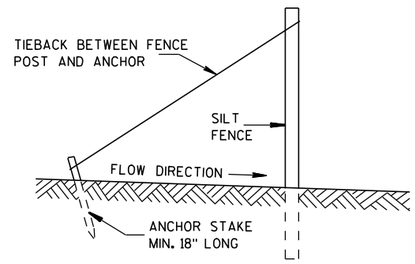


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

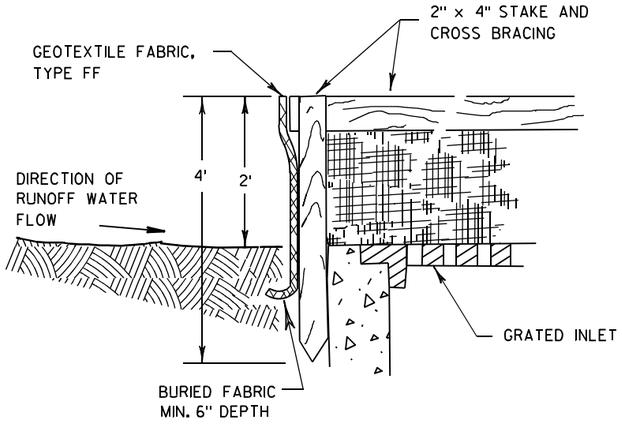
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

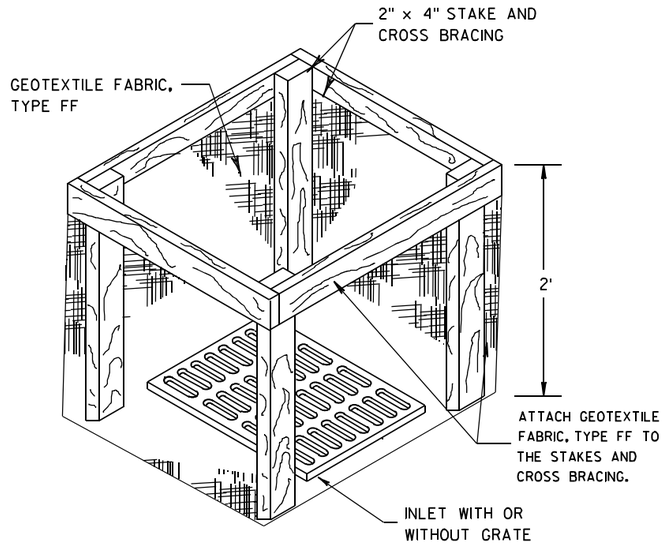
6

S.D.D. 8 E 9-6

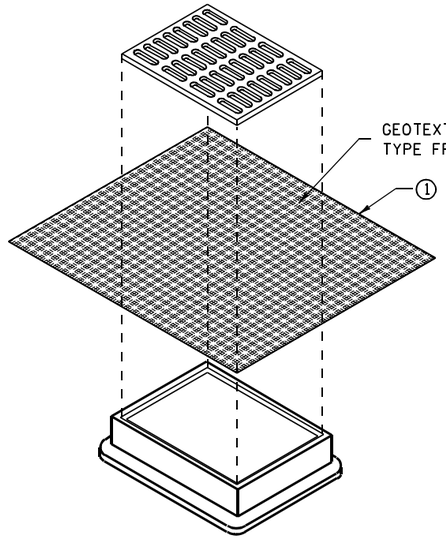
6

S.D.D. 8 E 9-6



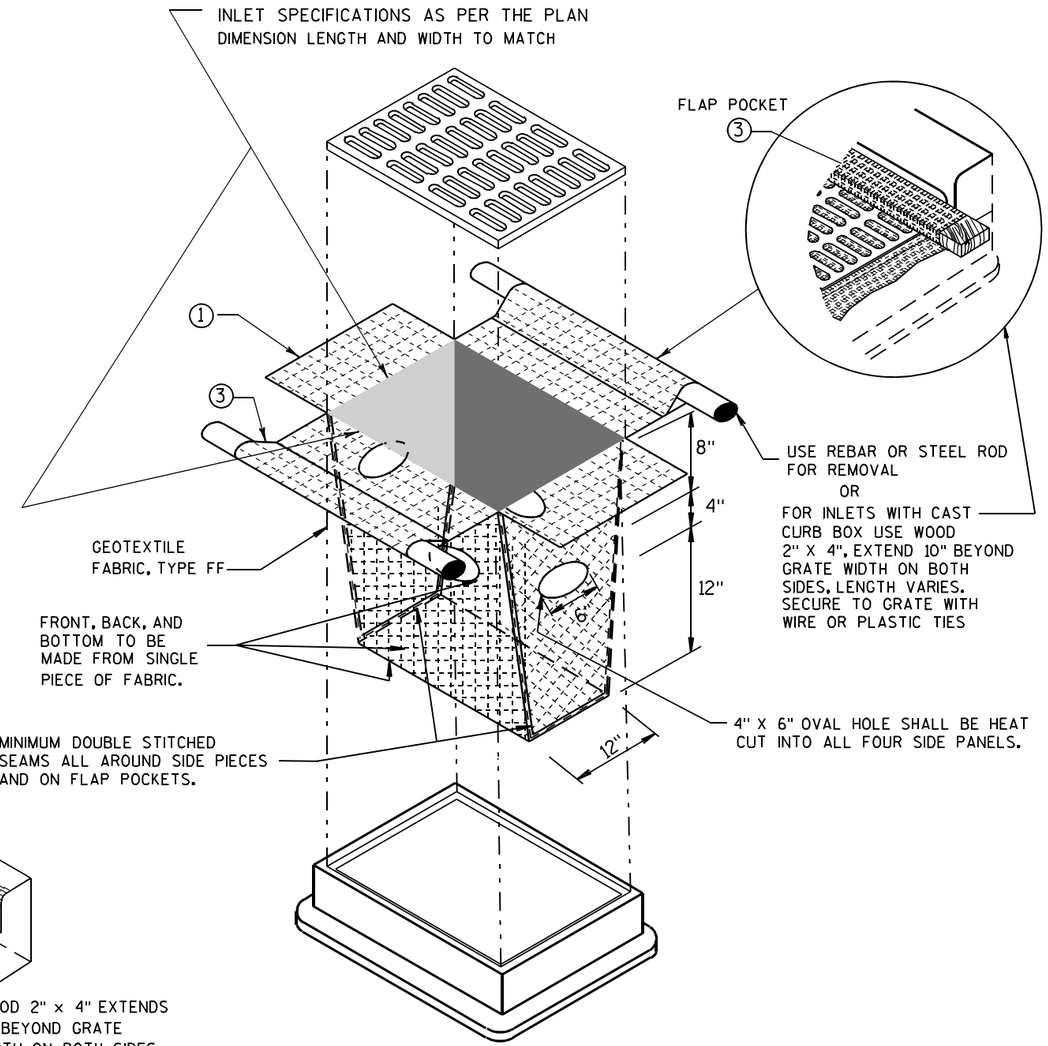


INLET PROTECTION, TYPE A



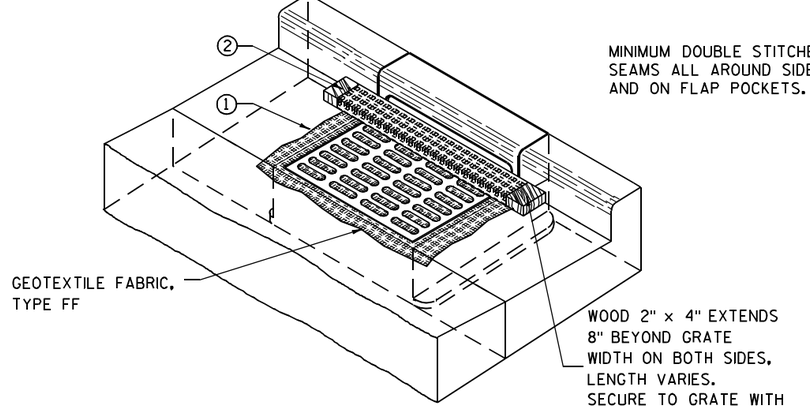
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

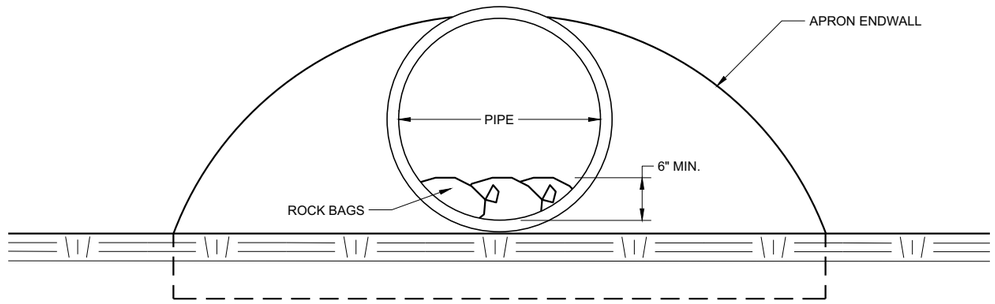
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

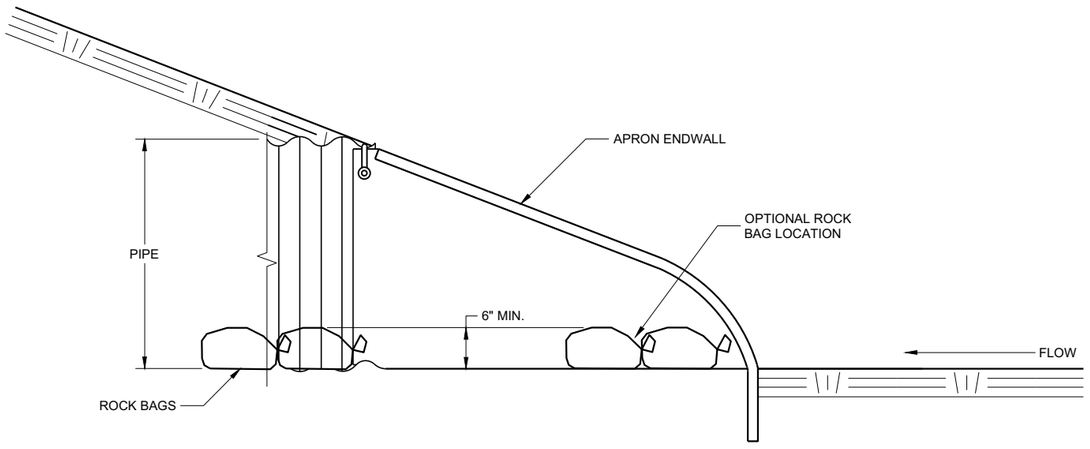
FHWA

6

S.D.D. 8 E 10-2



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	

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SDD 08E15 - 01

METAL APRON ENDWALLS

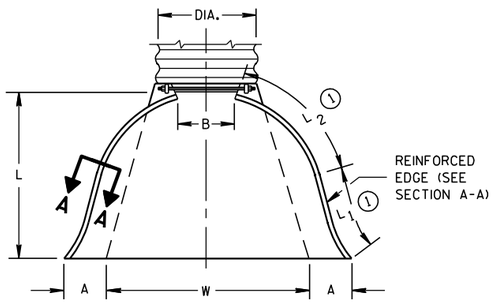
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

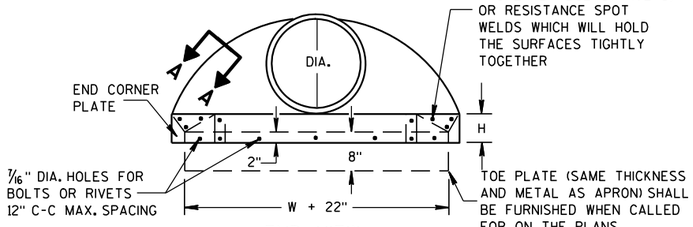
REINFORCED CONCRETE APRON ENDWALLS

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

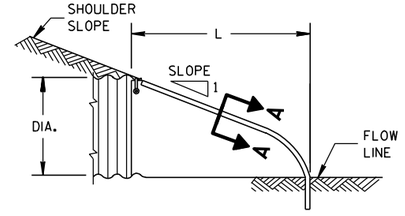
*MINIMUM
**MAXIMUM



PLAN VIEW

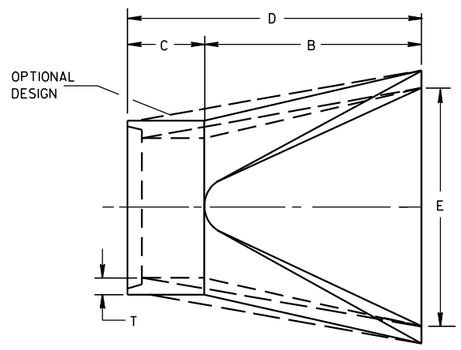


END VIEW

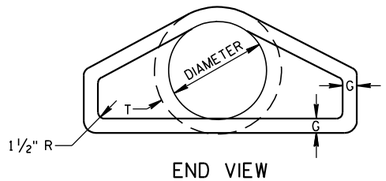


SIDE ELEVATION

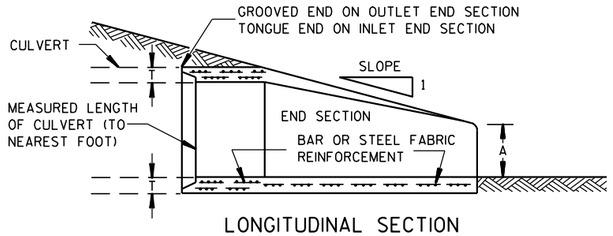
METAL ENDWALLS



PLAN

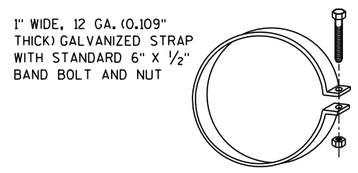


END VIEW



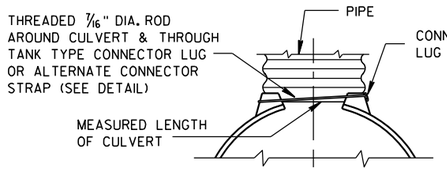
LONGITUDINAL SECTION

CONCRETE ENDWALLS

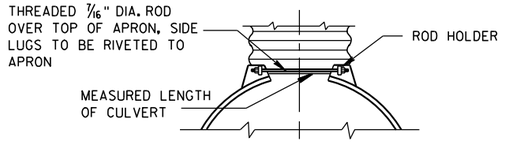


ALTERNATE FOR TYPE 1 CONNECTION

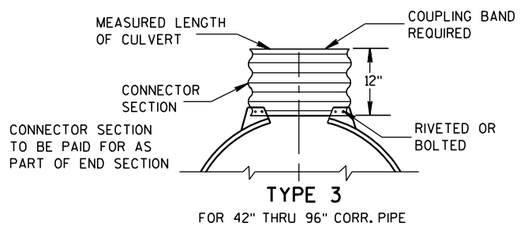
END SECTION CONNECTOR STRAP



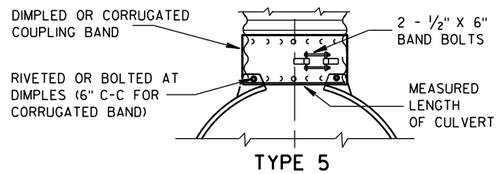
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

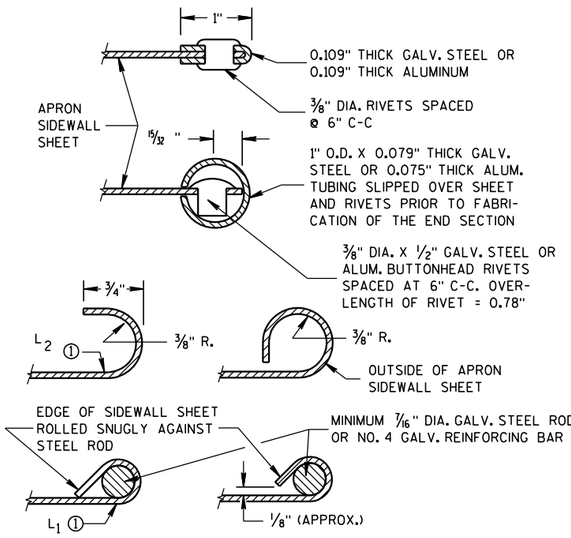
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

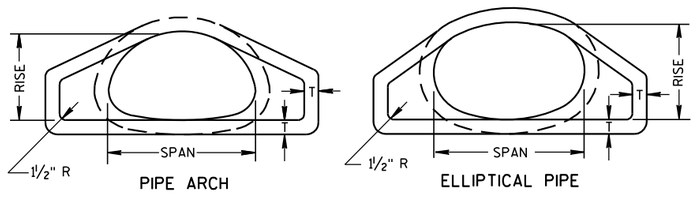
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

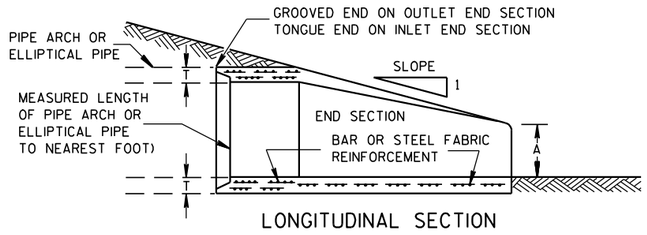
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

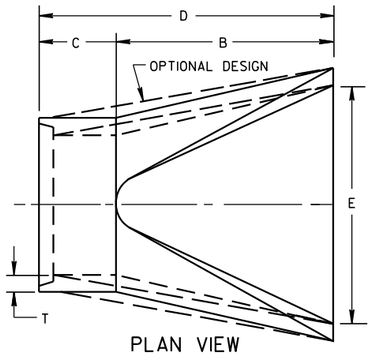
S.D.D. 8 F 1-11



END VIEW

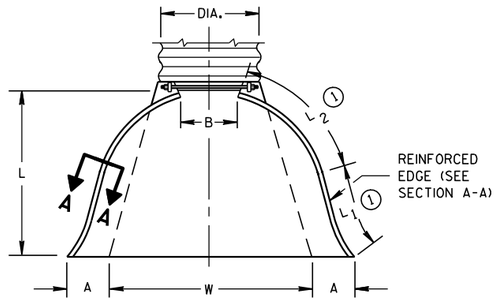


LONGITUDINAL SECTION

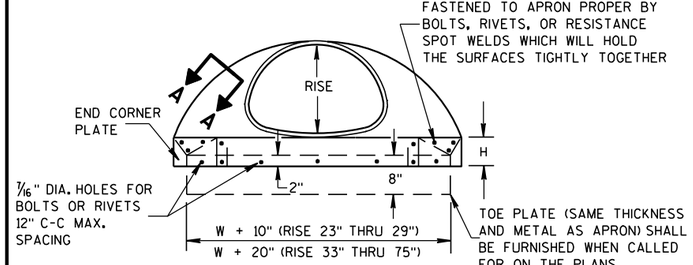


PLAN VIEW

CONCRETE ENDWALLS

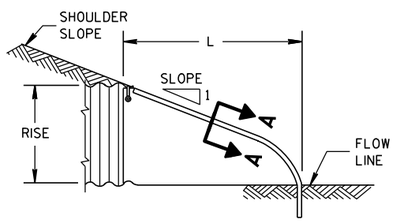


PLAN VIEW



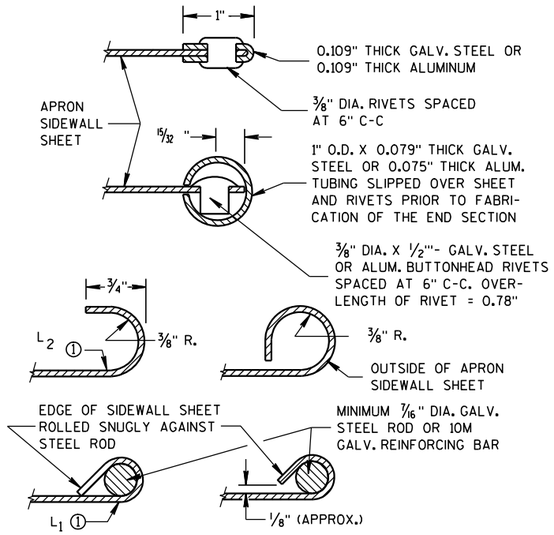
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

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

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

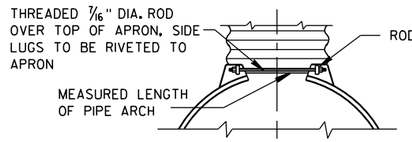
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

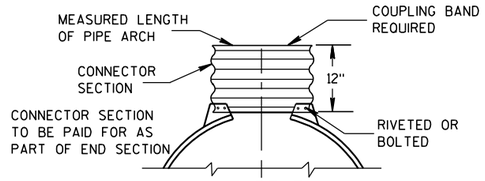
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



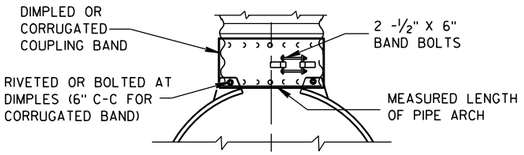
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 F 2-1

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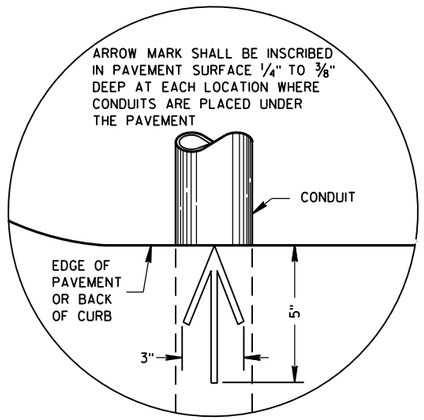
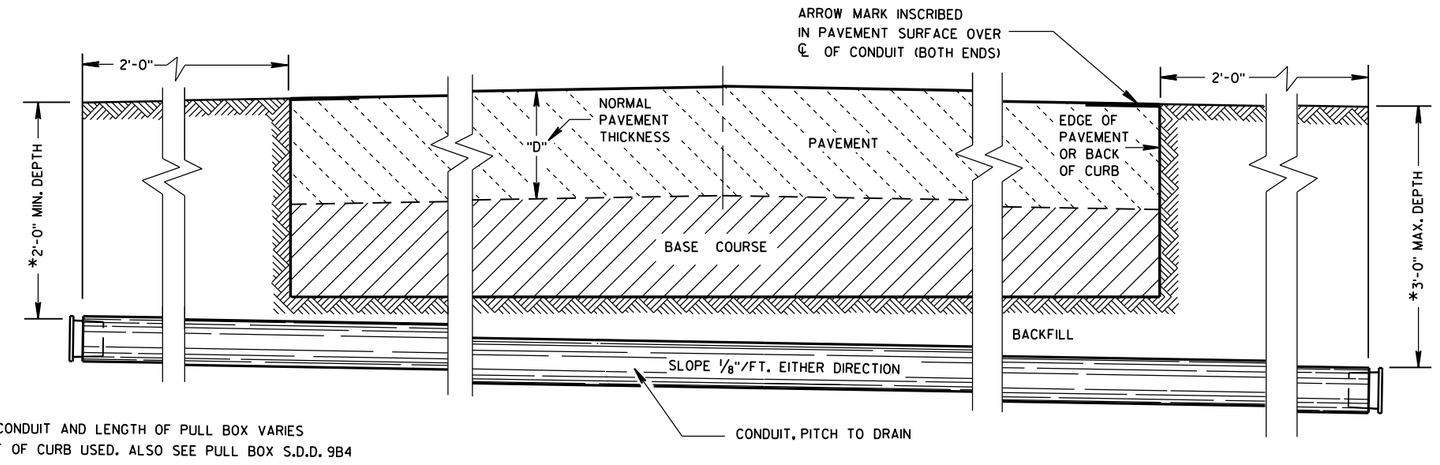
S.D.D. 8 F 2-1



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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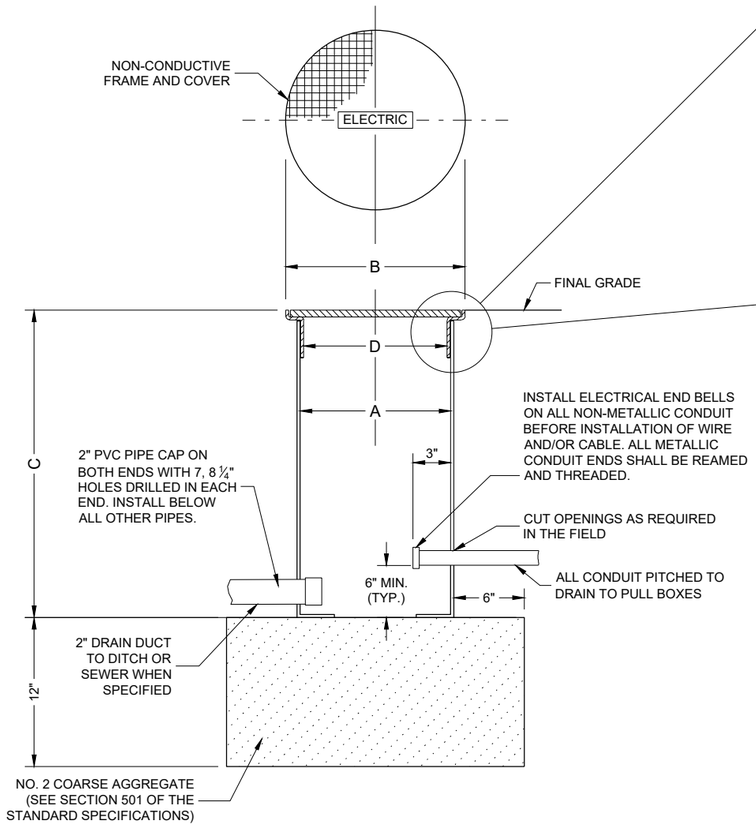
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

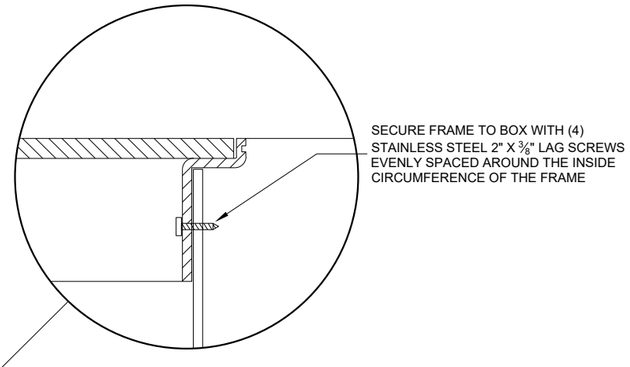
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

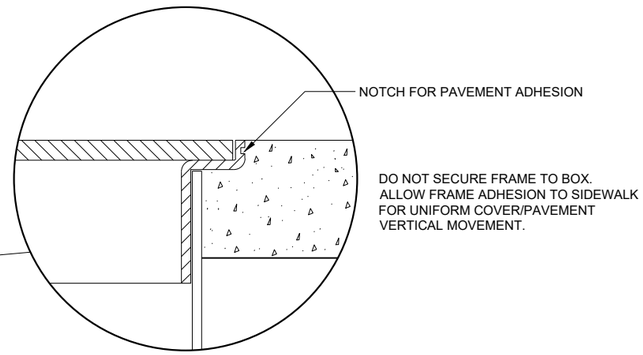
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



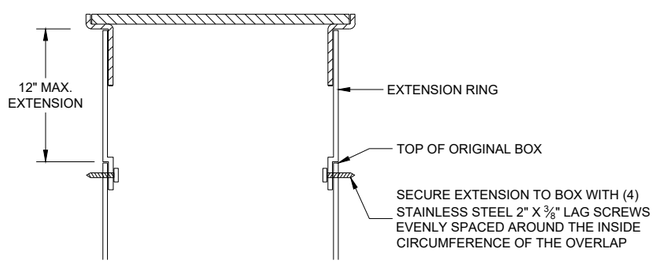
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

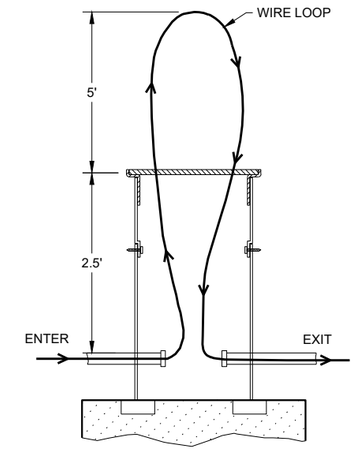
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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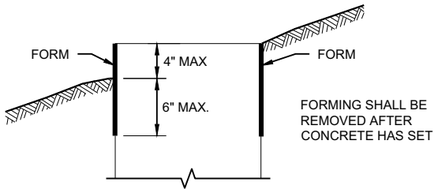
SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

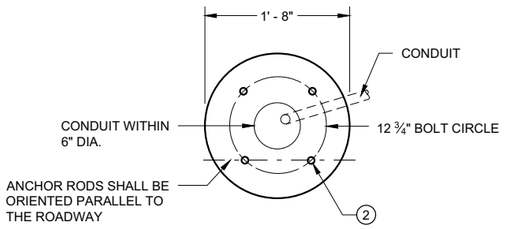
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

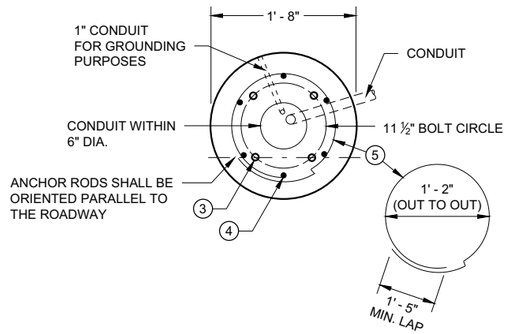
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

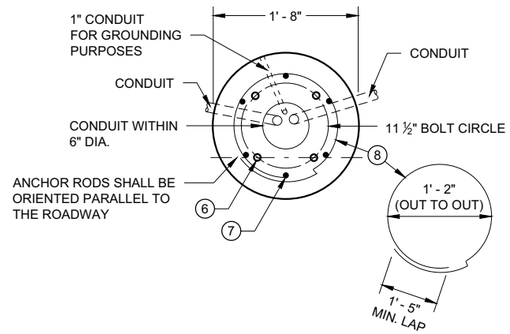
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

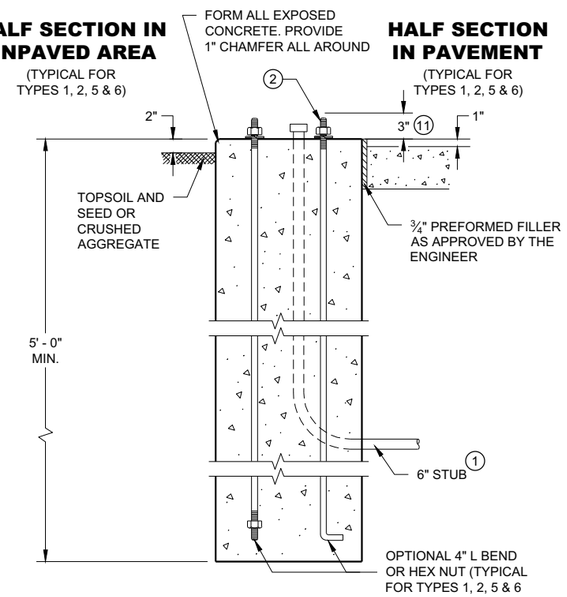
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

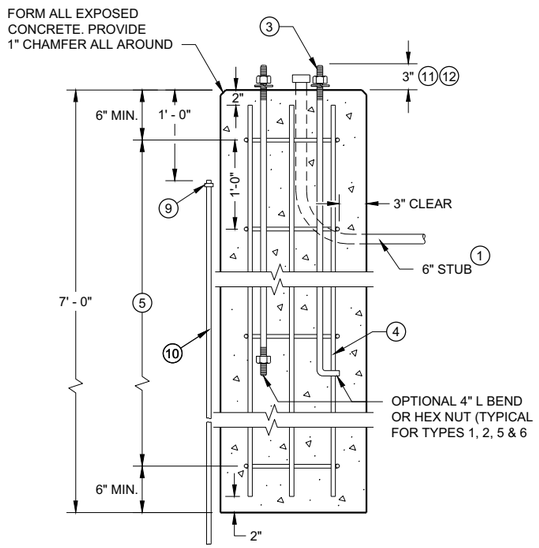
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



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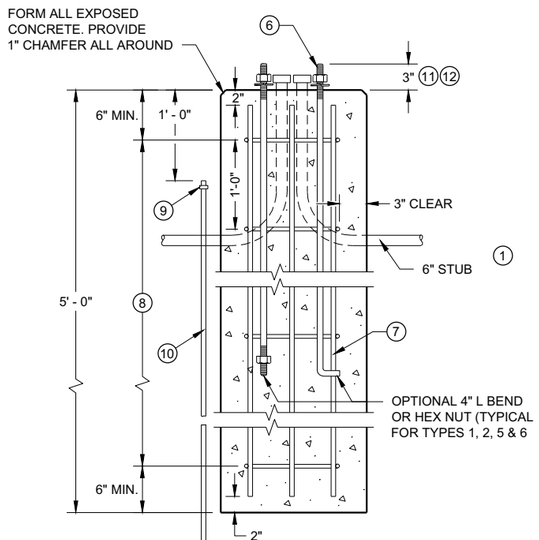


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 125
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

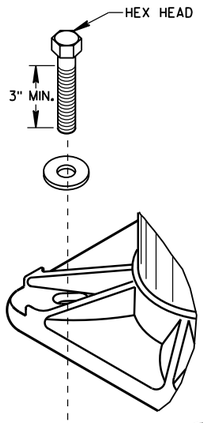
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

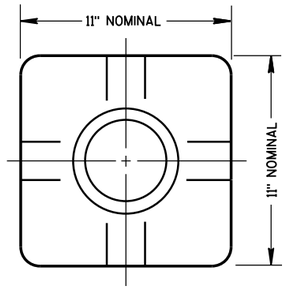
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

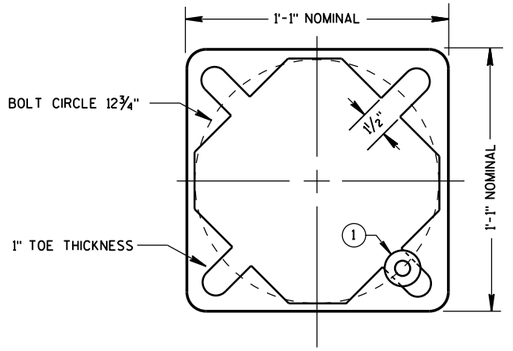
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

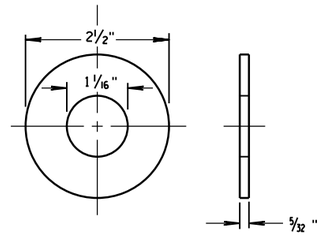




TOP VIEW
(PEDESTAL BASE)

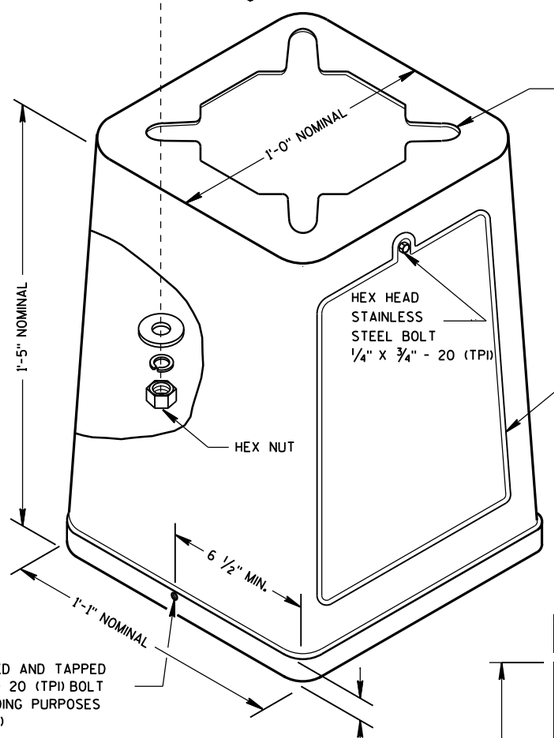


BOTTOM VIEW
(PEDESTAL BASE)

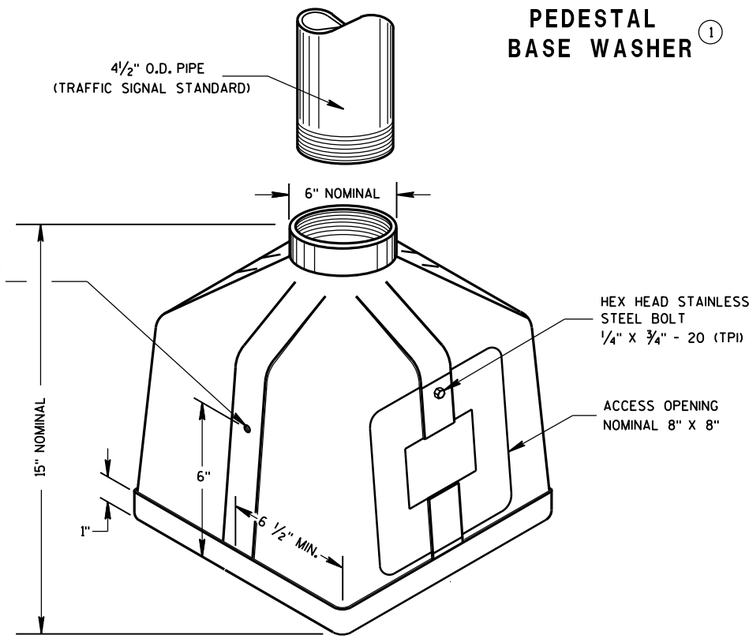


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

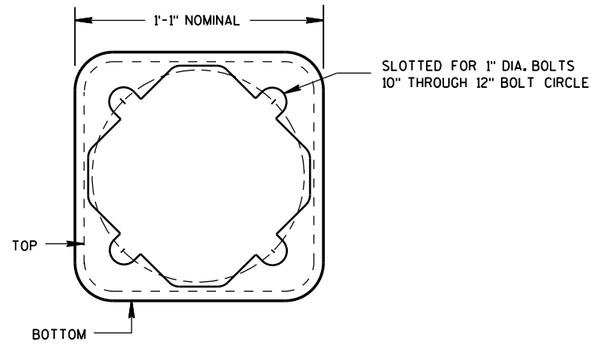


ISOMETRIC VIEW

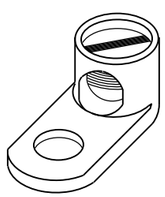


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

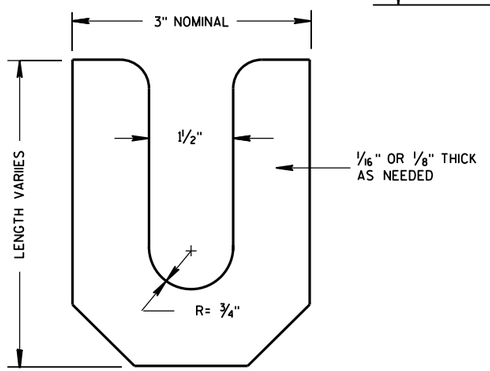


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4

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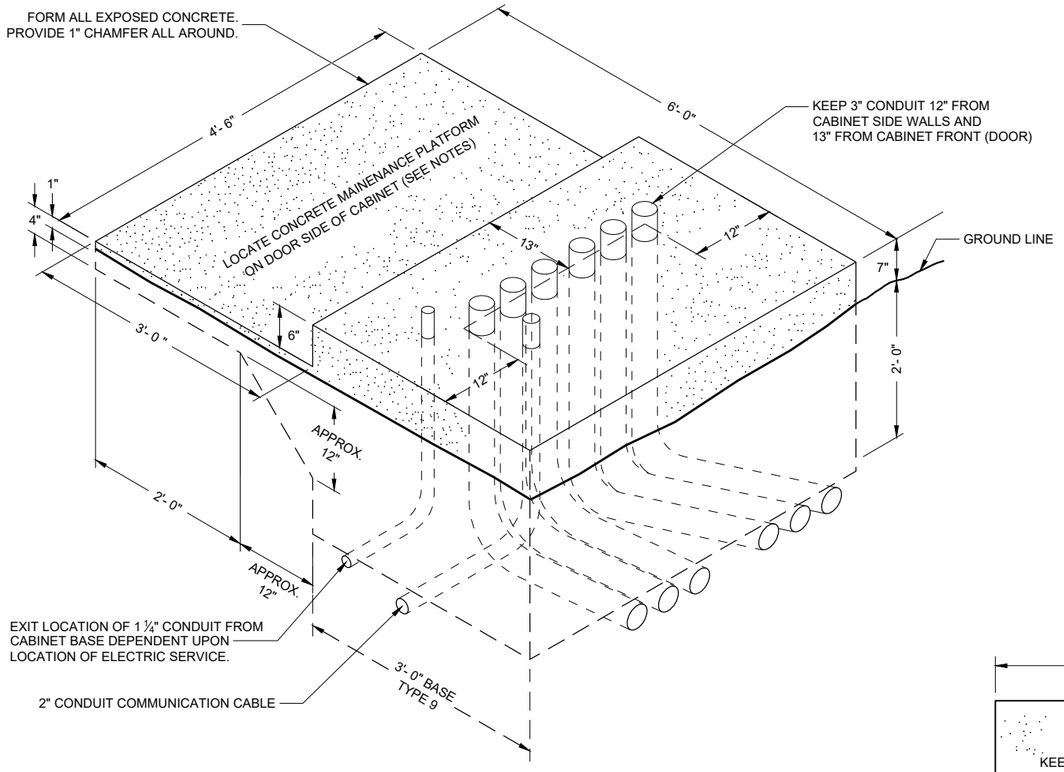
S.D.D. 9 C 3-4

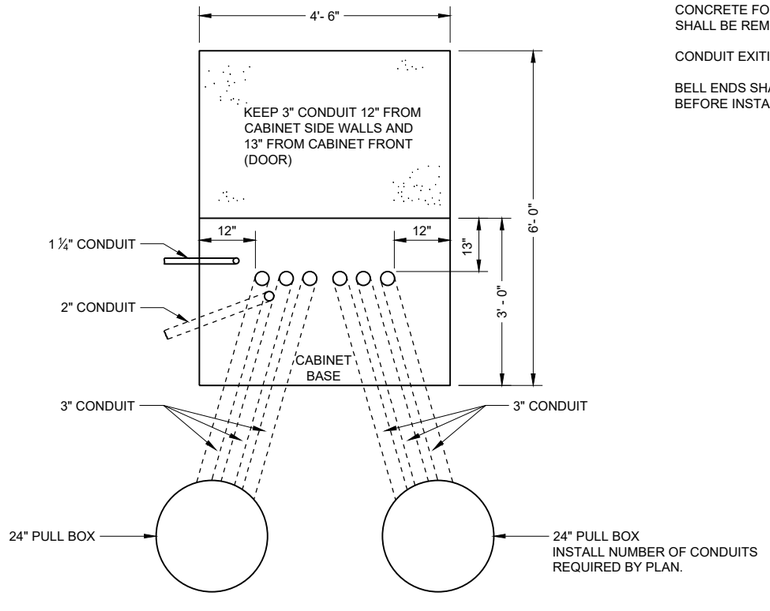
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09C06 - 07

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

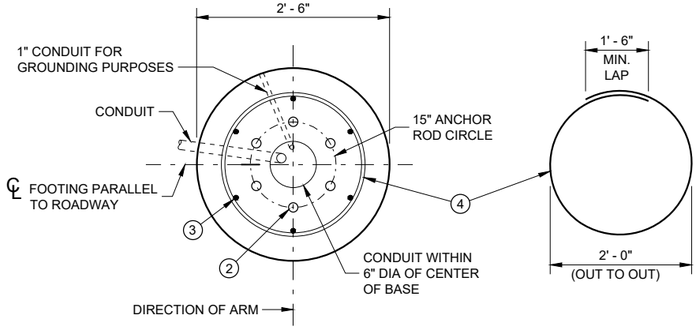
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

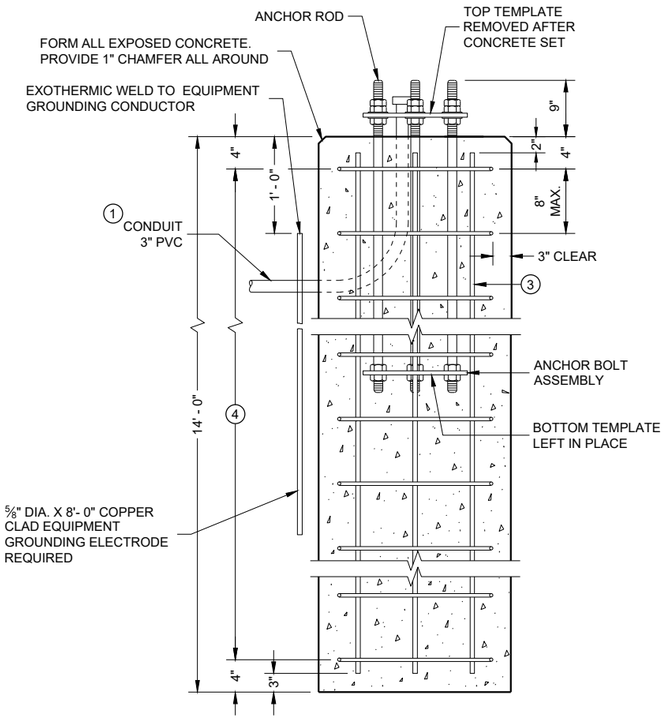
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

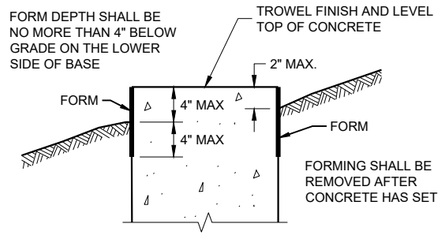
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



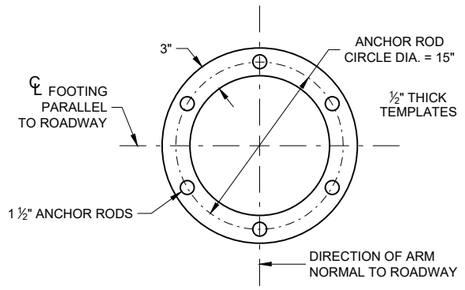


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

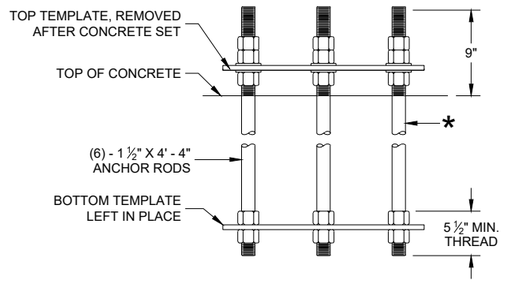
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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SDD 09C11 - 10

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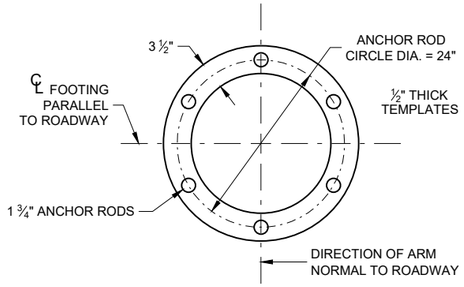
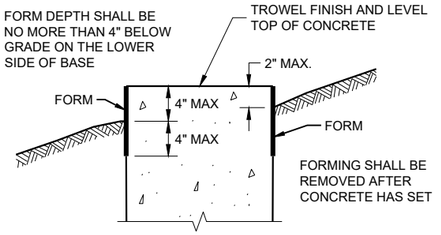
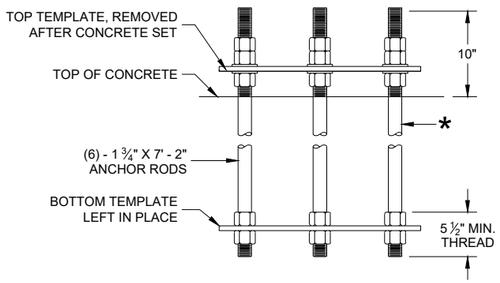
SDD 09C11 - 10



TOP AND BOTTOM TEMPLATE



FORMING DETAIL



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 11" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017
DATE
/S/ Ahmet Demirbilek
WIND LOADED STRUCTU
PROGRAM LEADER
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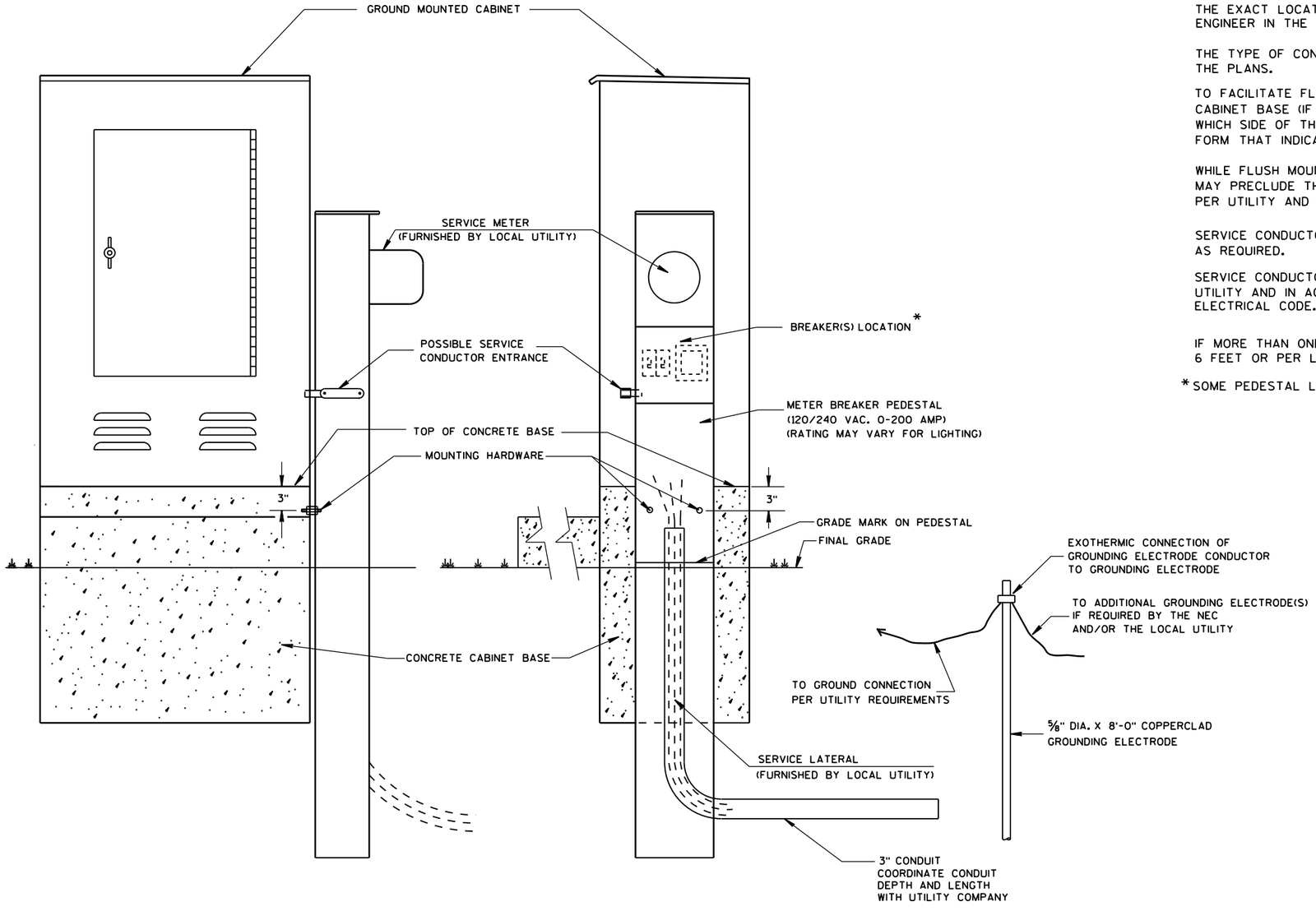
SDD 09C12 - 09b

SDD 09C12 - 09b



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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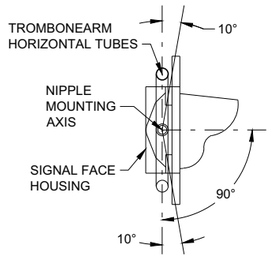
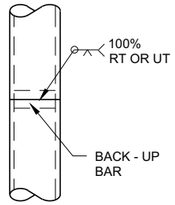


SECTION A-A

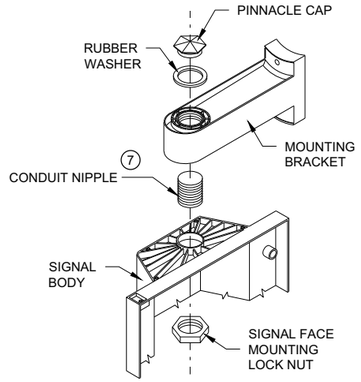
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING,PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) ASREQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

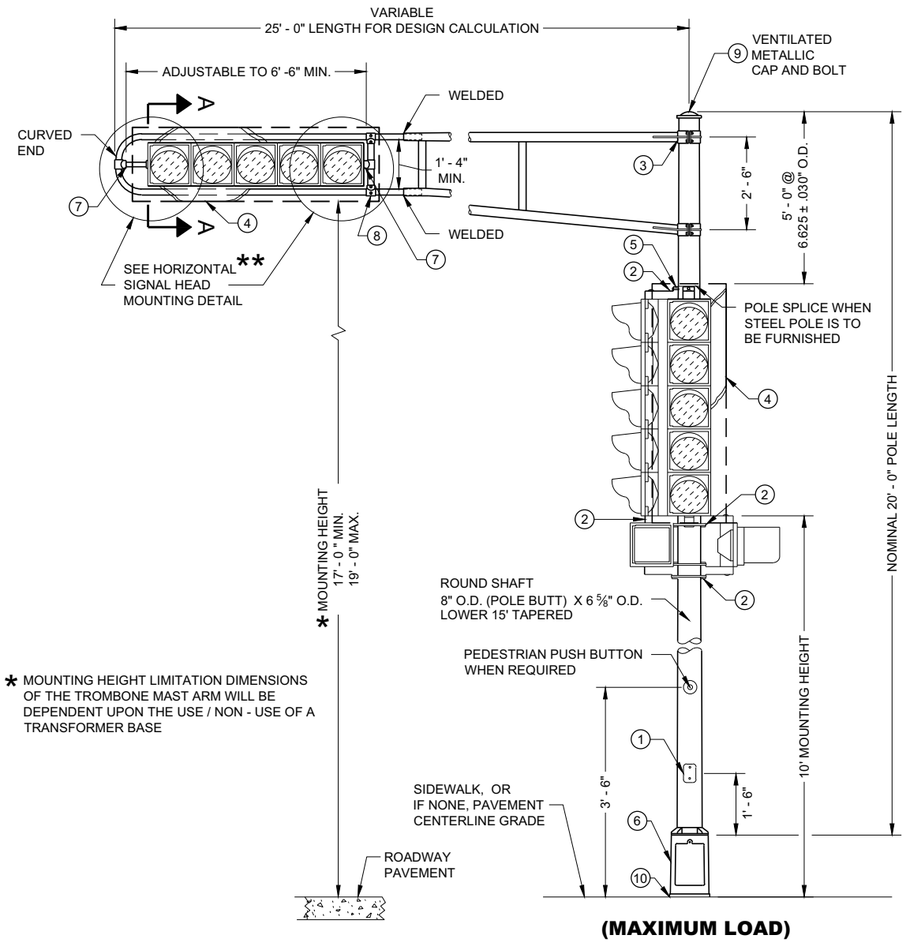
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTIS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

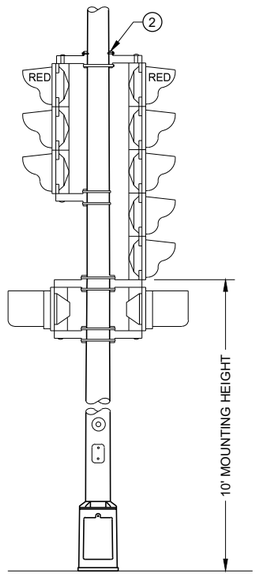
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

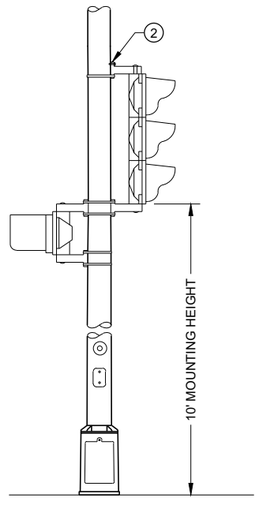


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

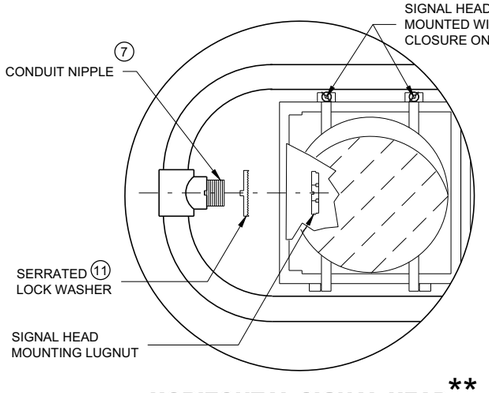
(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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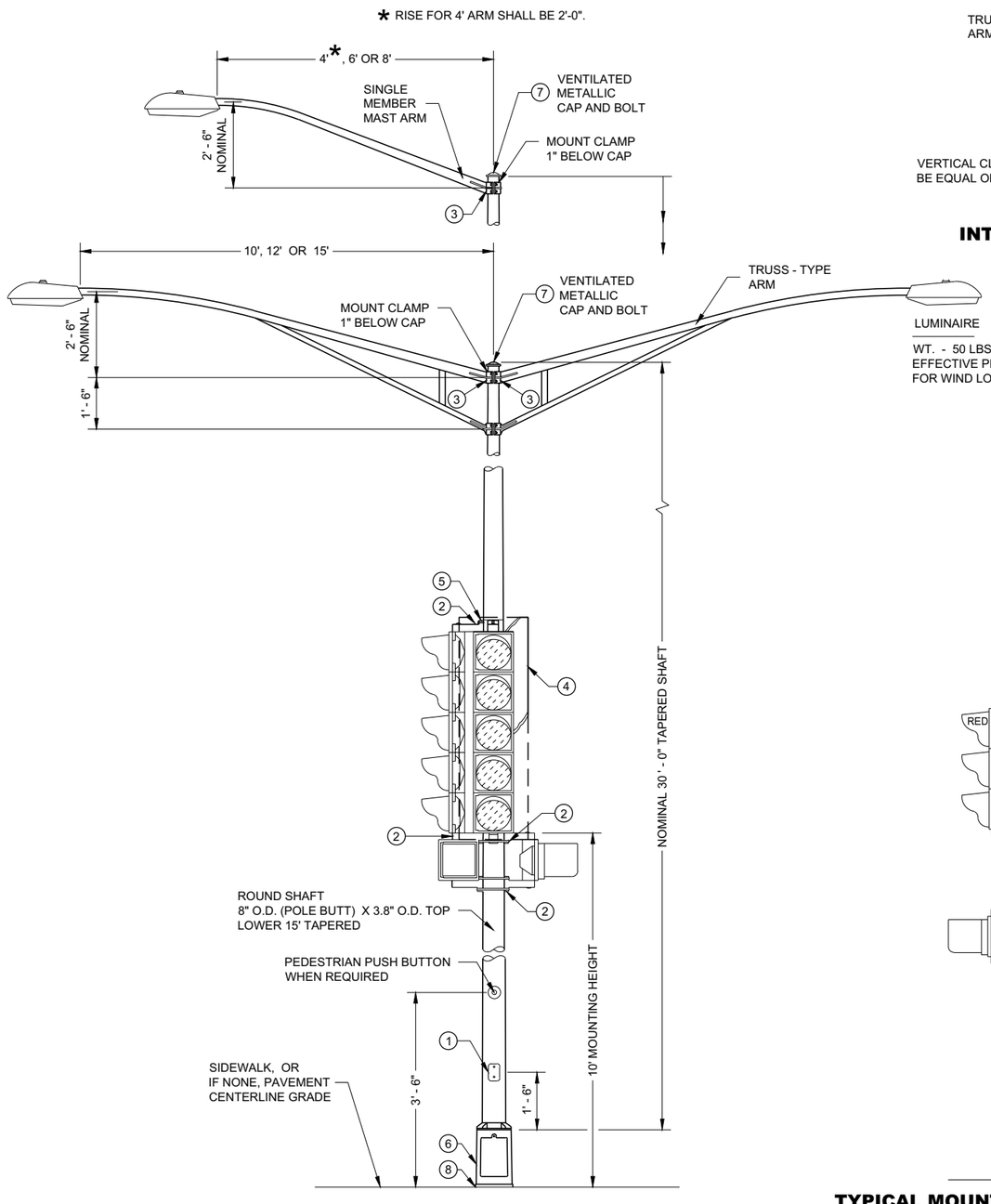

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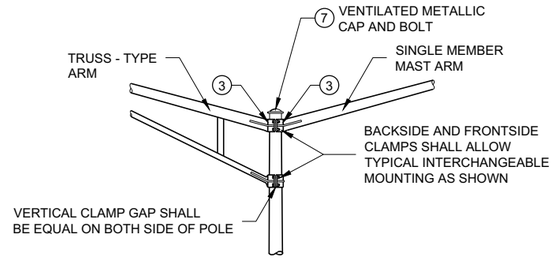


INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

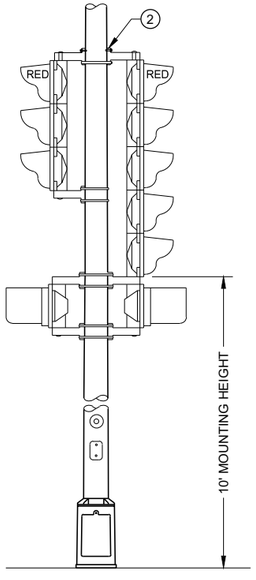
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

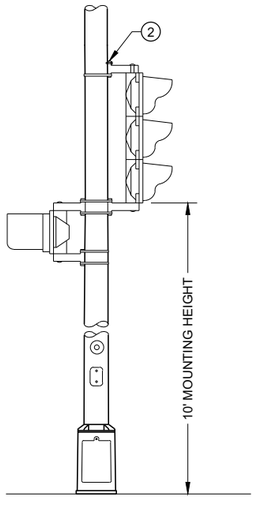
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

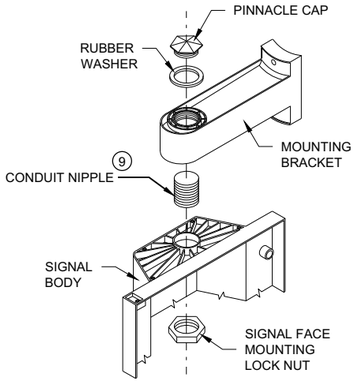
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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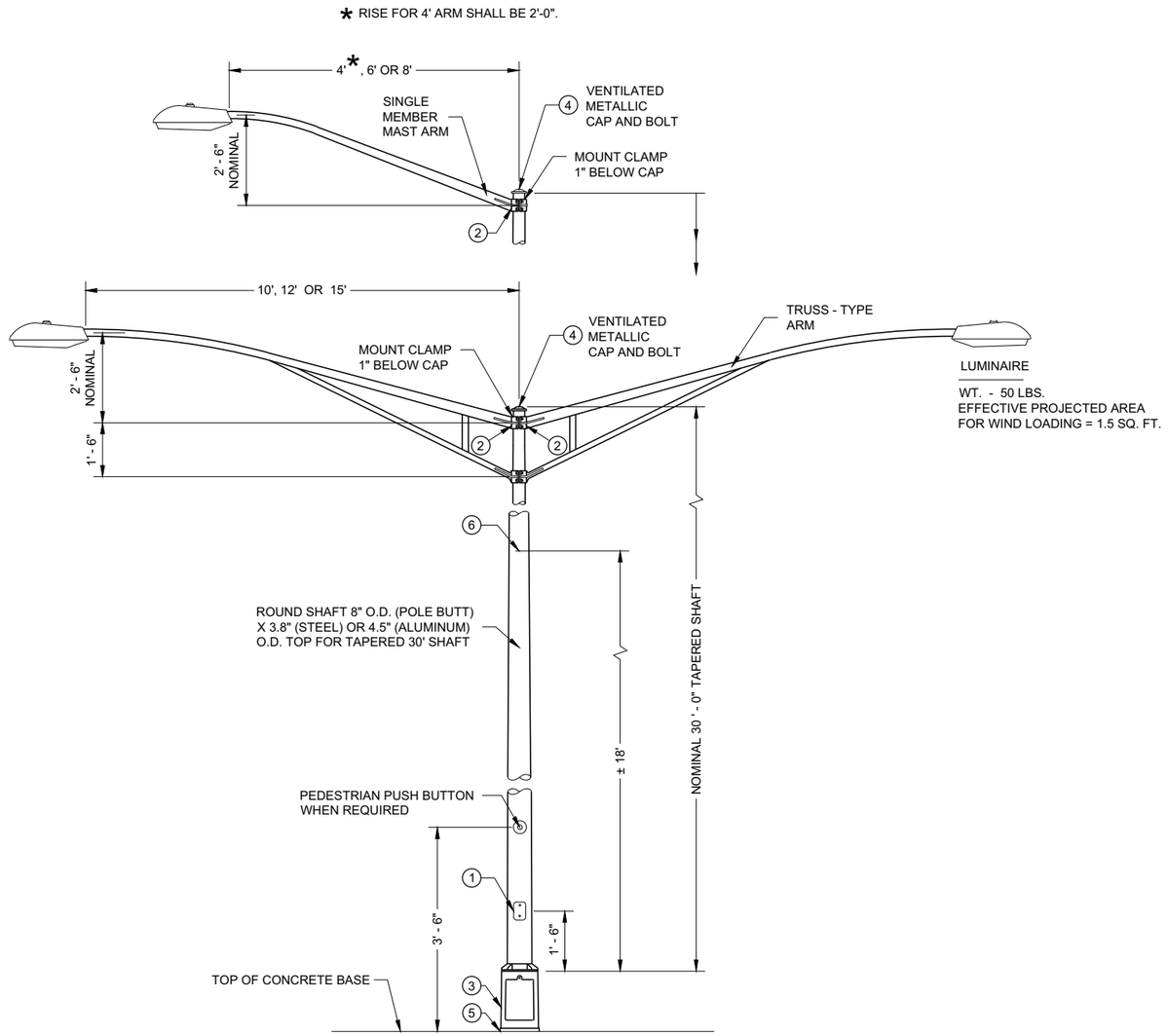
SDD 09E01 - 15c



TYPE 5 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

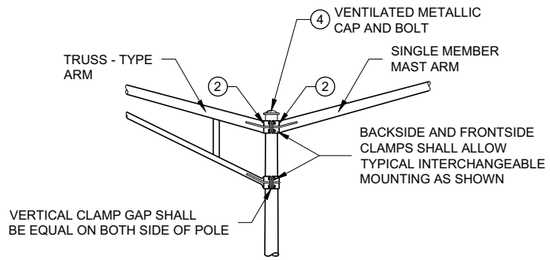
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

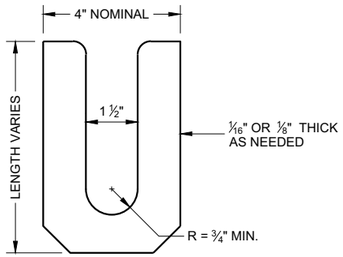
(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

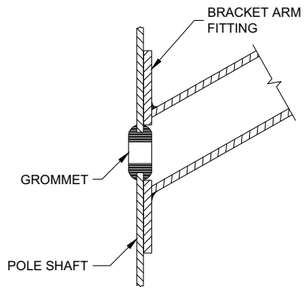


INTERCHANGEABLE MOUNTING DETAIL

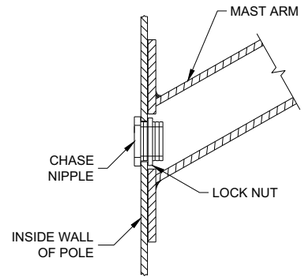
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

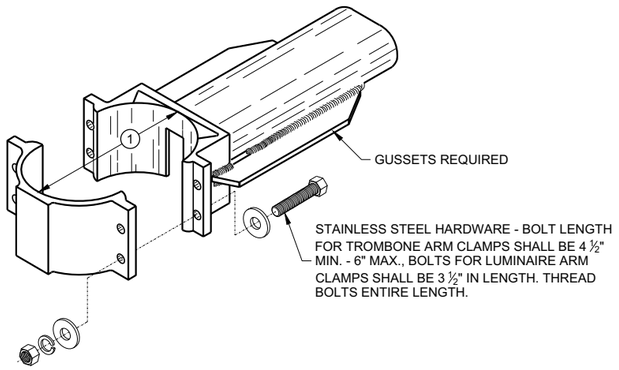
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

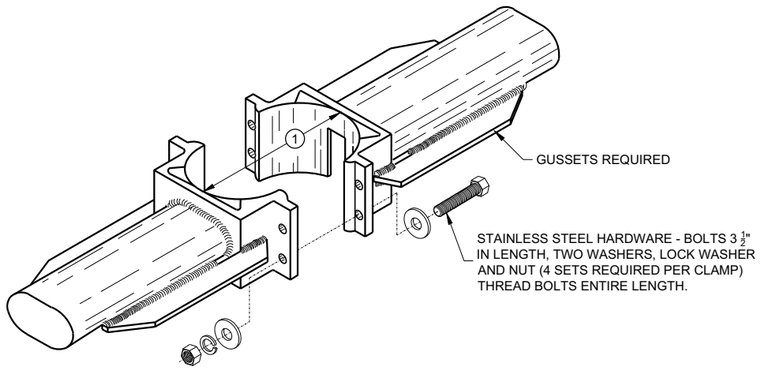
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

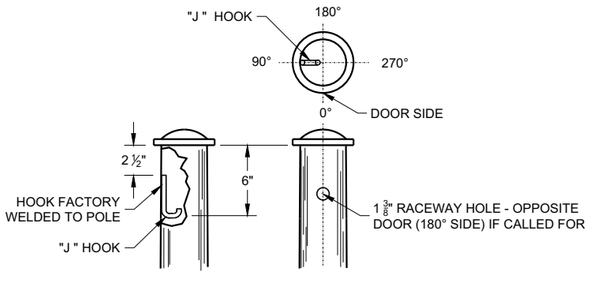
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



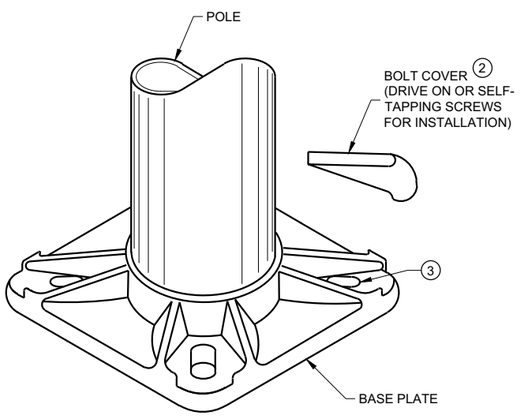
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



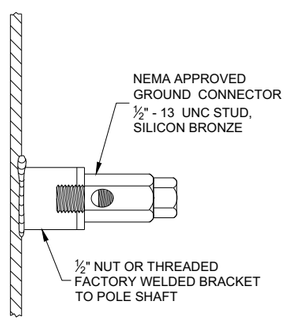
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

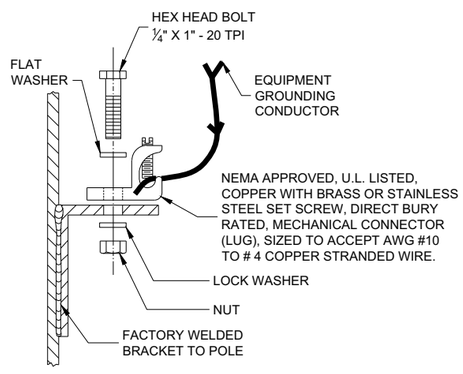


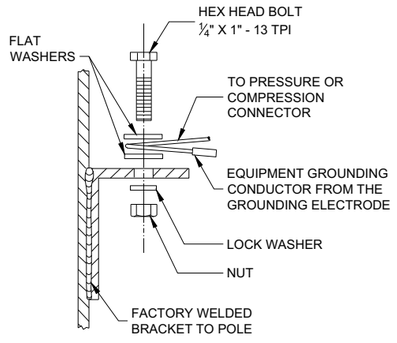
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

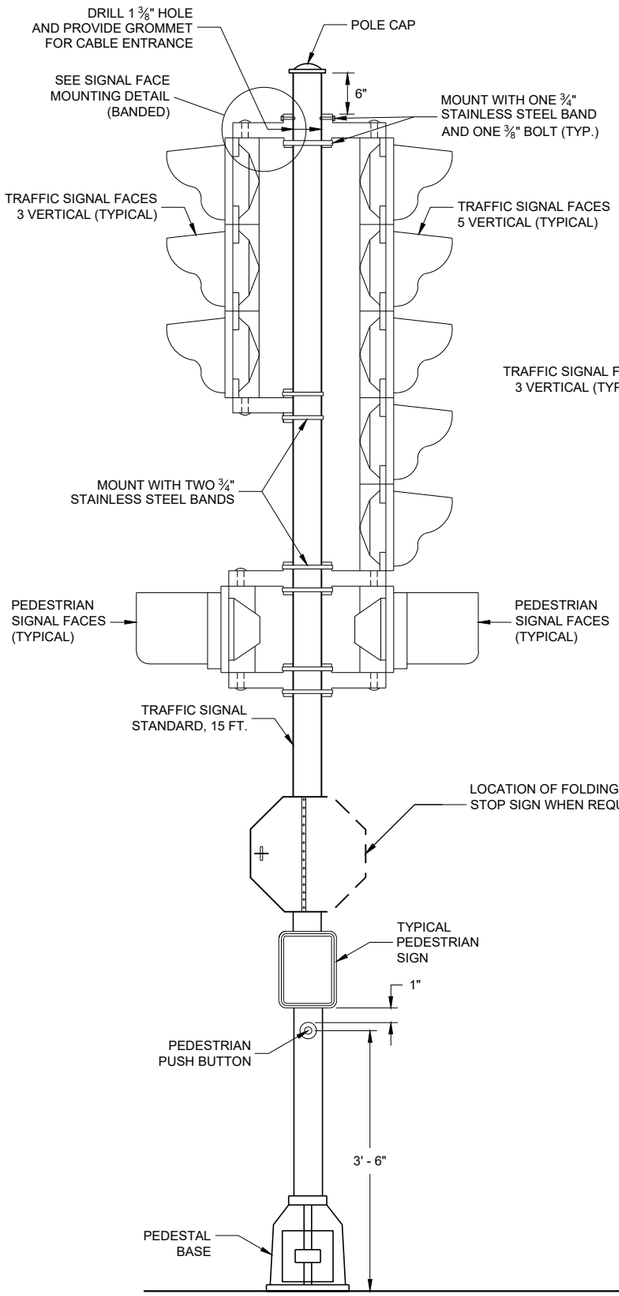
HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

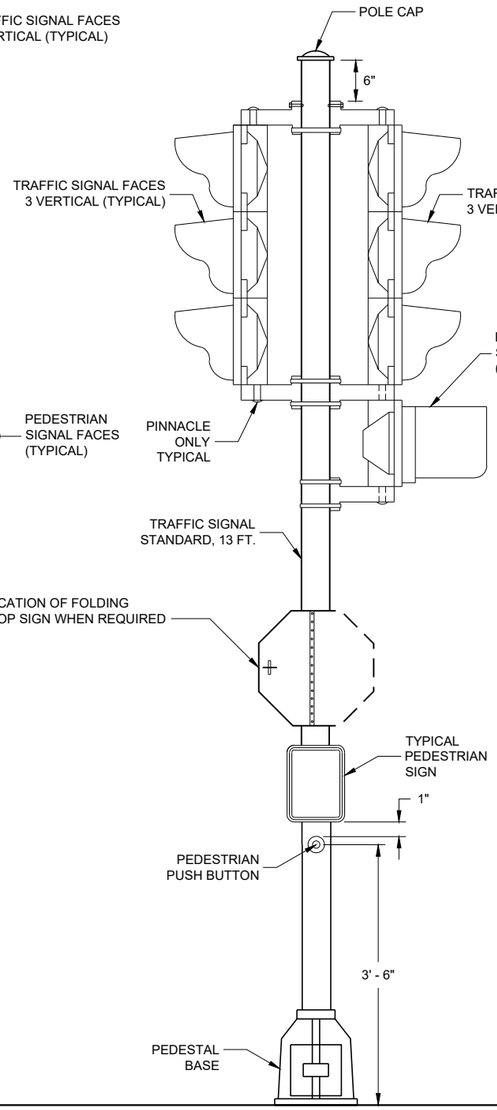
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

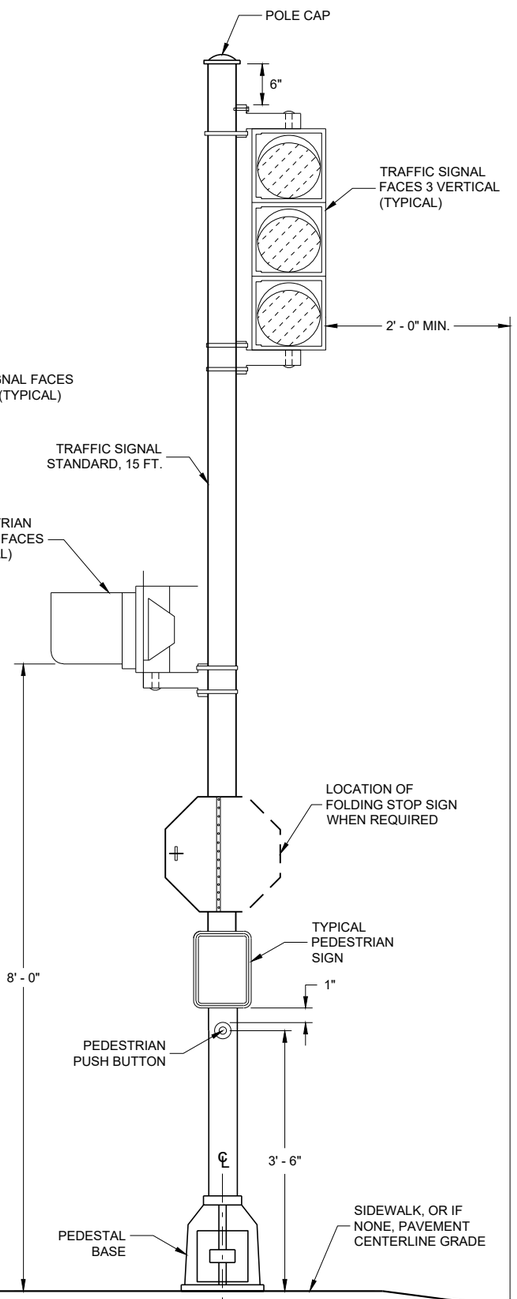
FHWA



TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

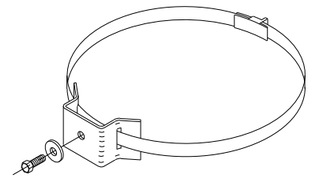
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

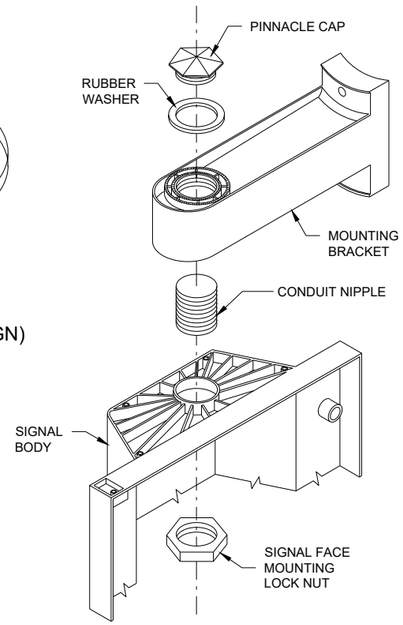
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 135

FHWA

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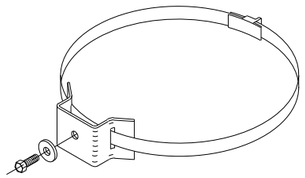
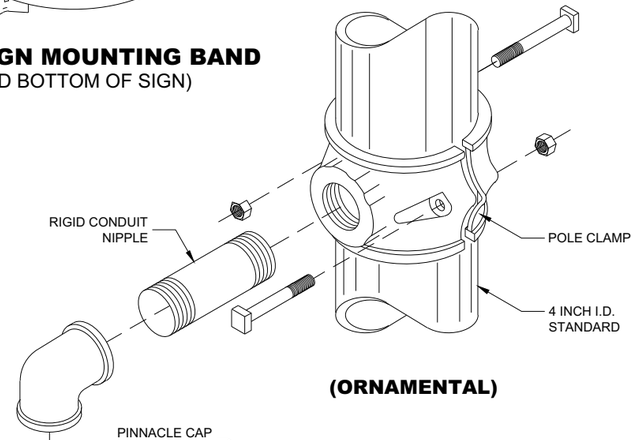
SDD 09E06 - 05



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



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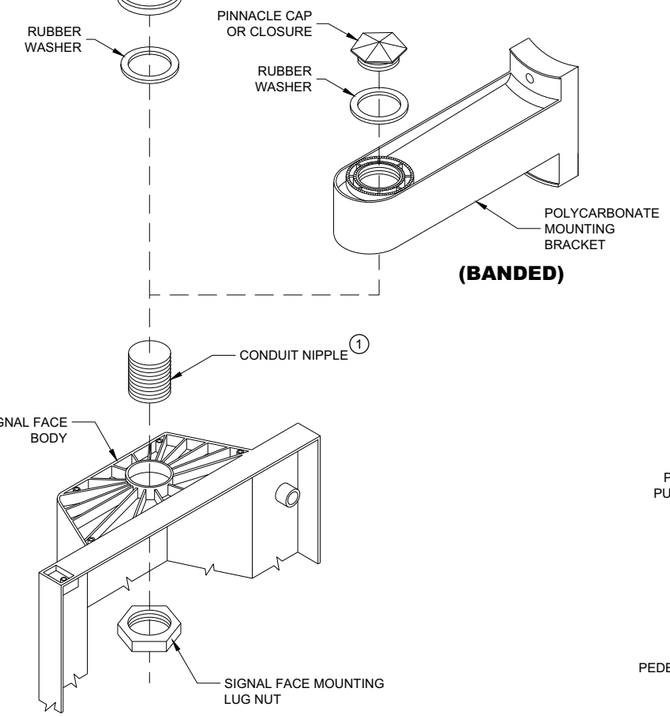

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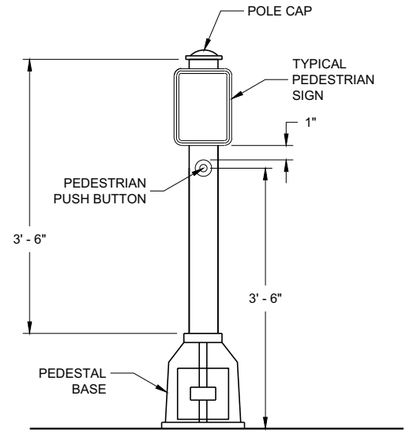
SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

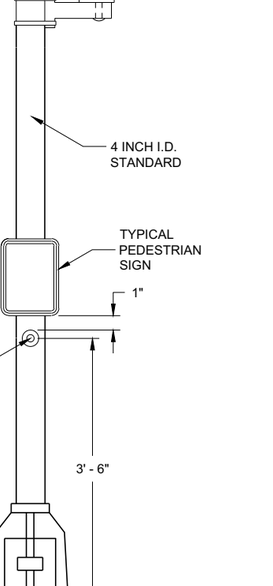
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

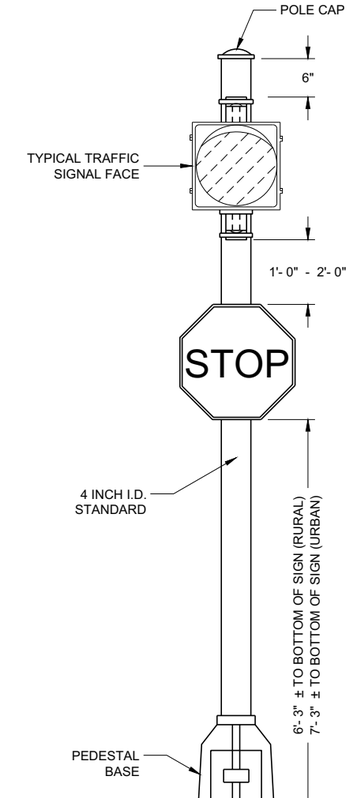
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

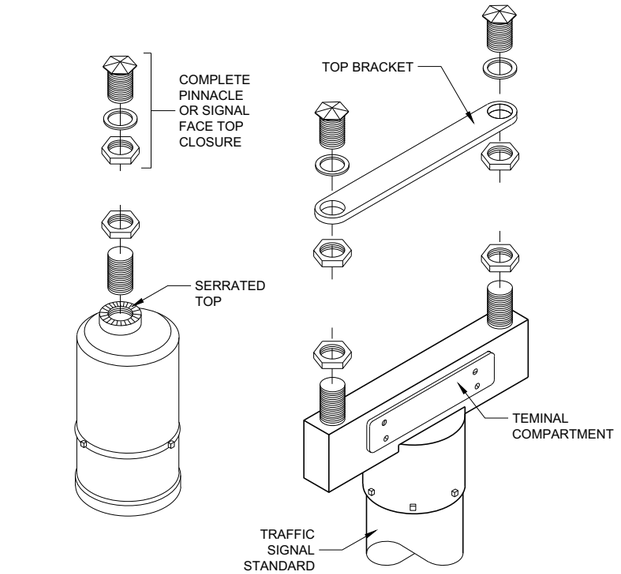
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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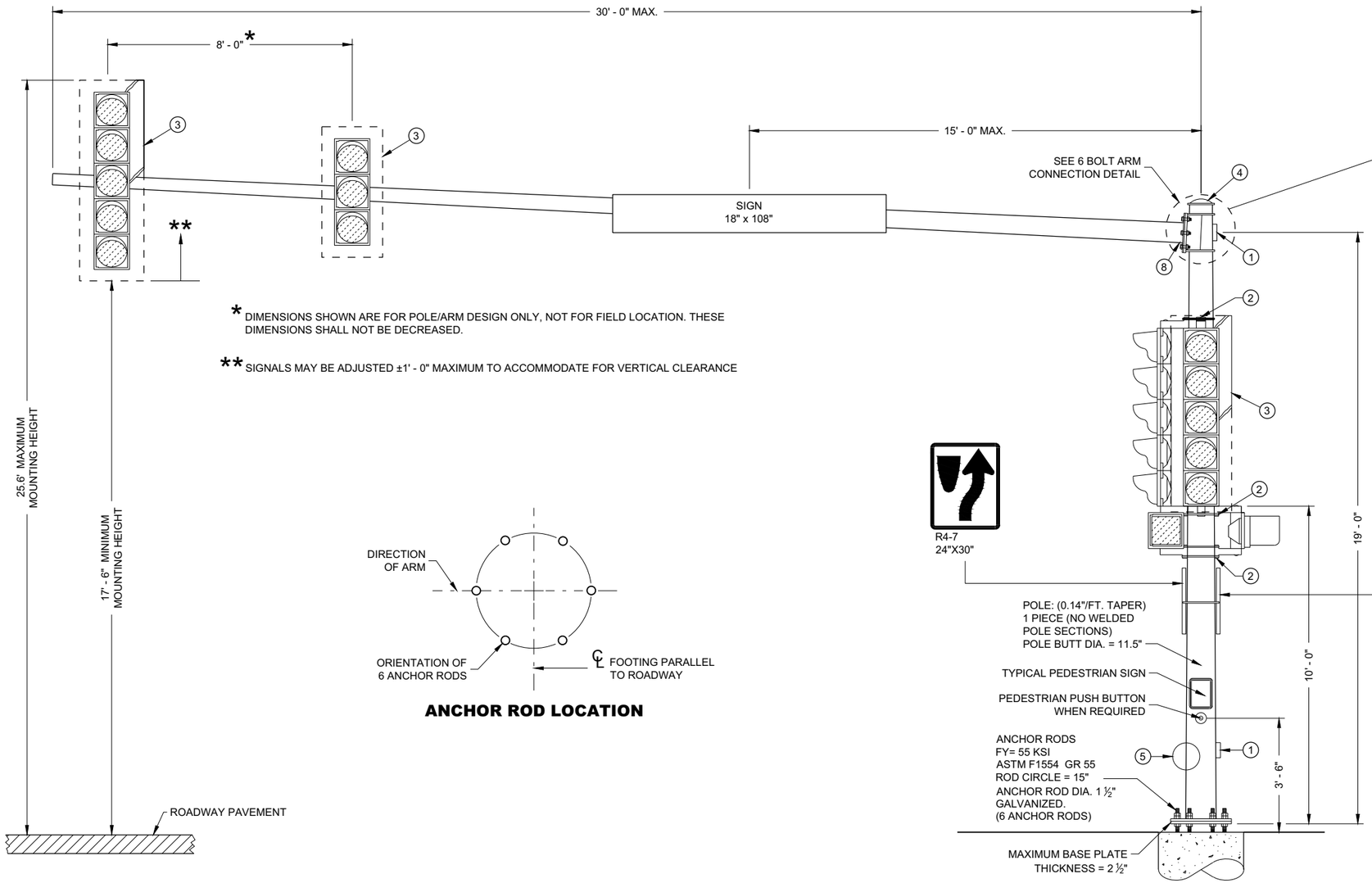
SDD 09E07 - 06

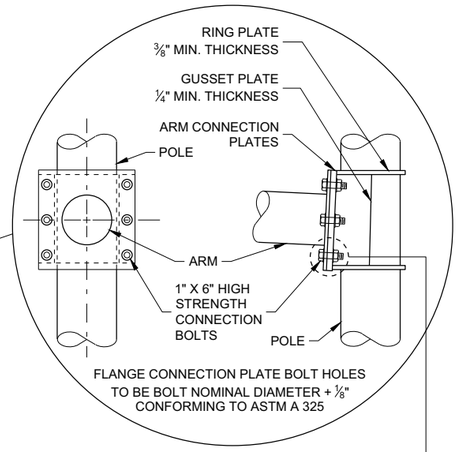
SDD 09E07 - 06



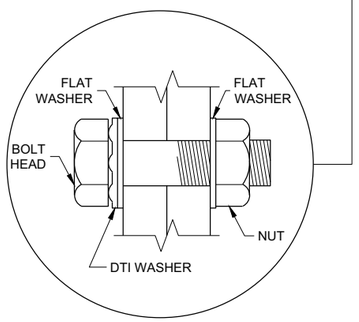
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

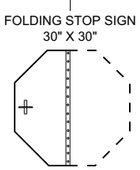
ANCHOR ROD LOCATION



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



TYPE 9 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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SDD 09E08 - 09a

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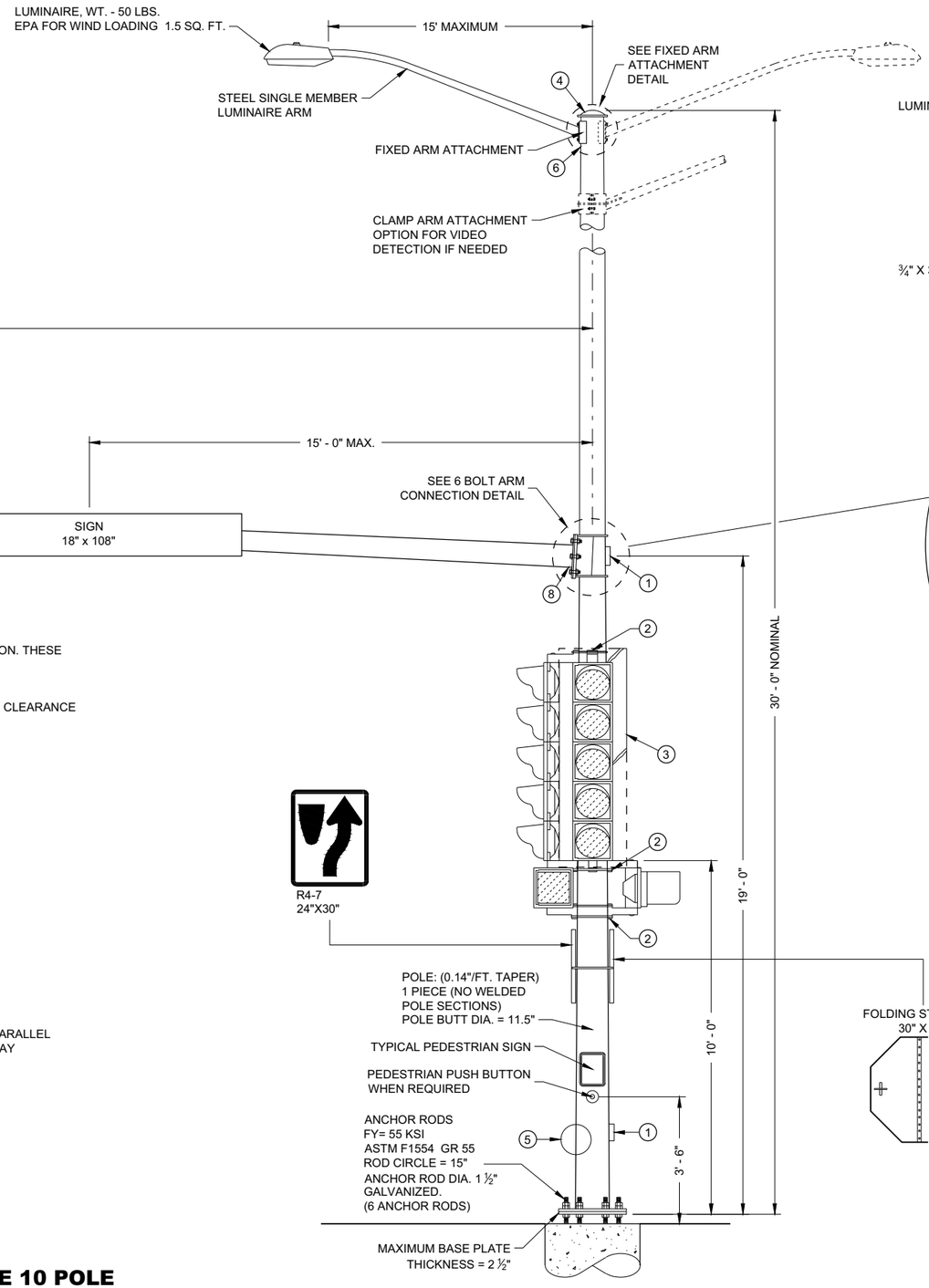

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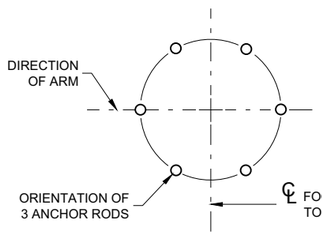
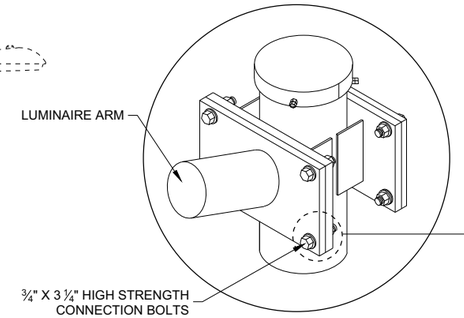
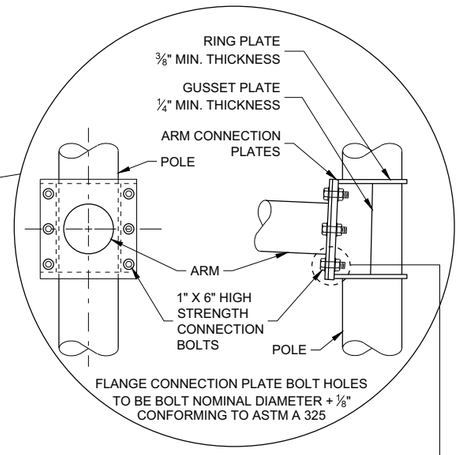
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



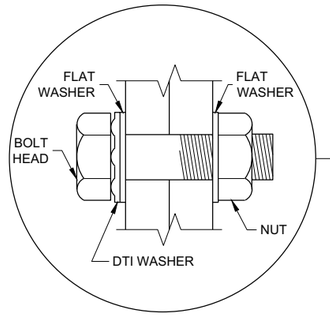
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09E08 - 09e

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

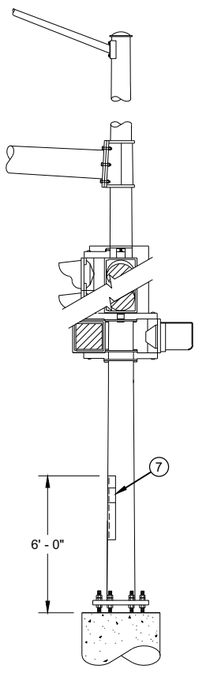
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

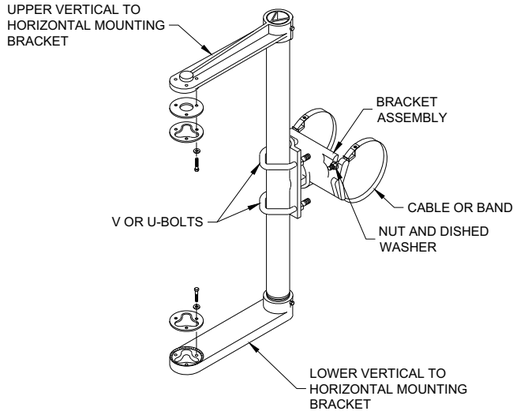
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

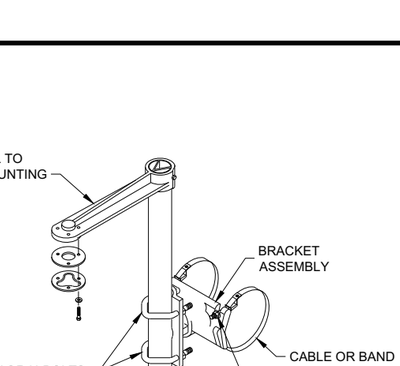


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



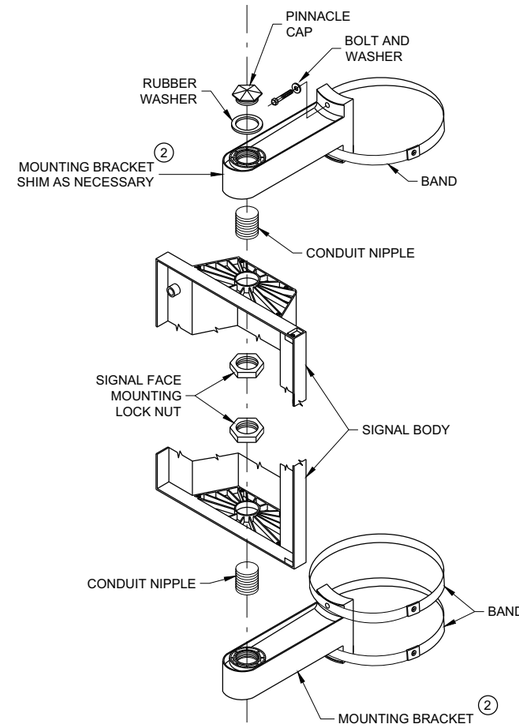
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

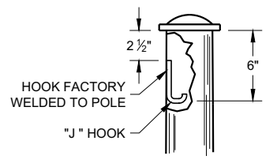


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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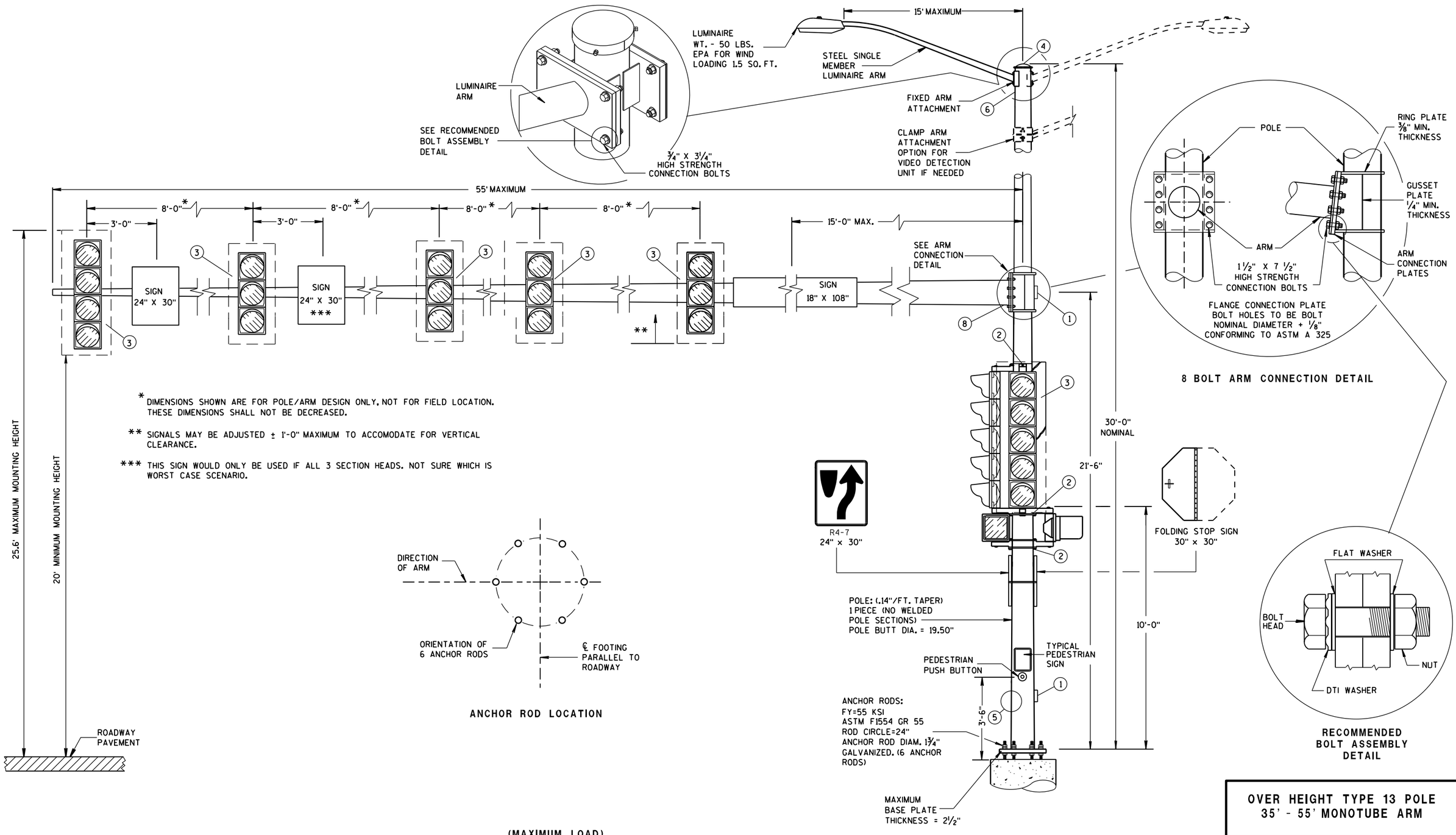
SDD 09E08 - 09k



* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY. NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.

*** THIS SIGN WOULD ONLY BE USED IF ALL 3 SECTION HEADS. NOT SURE WHICH IS WORST CASE SCENARIO.

8 BOLT ARM CONNECTION DETAIL

ANCHOR ROD LOCATION

RECOMMENDED BOLT ASSEMBLY DETAIL

(MAXIMUM LOAD)

OVER HEIGHT TYPE 13 POLE 35'- 55' MONOTUBE ARM

OVER HEIGHT TYPE 13 POLE 35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 E 12-1d

GENERAL NOTES

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

OVER HEIGHT POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

OVER HEIGHT POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING 2017 INTERIM REVISIONS) AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

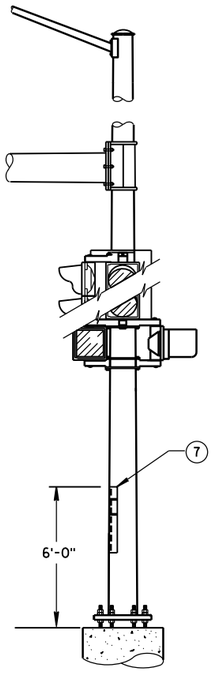
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

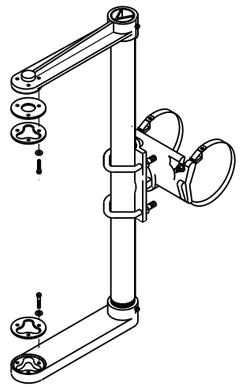
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

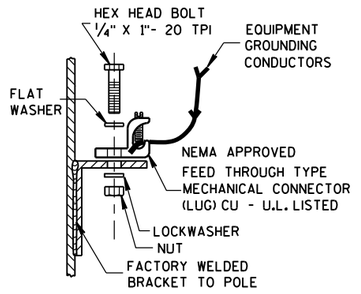


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



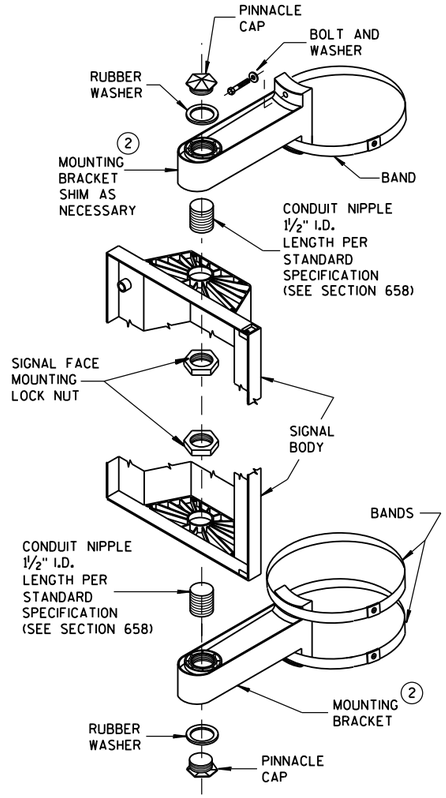
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

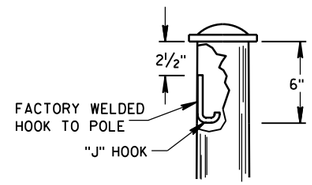


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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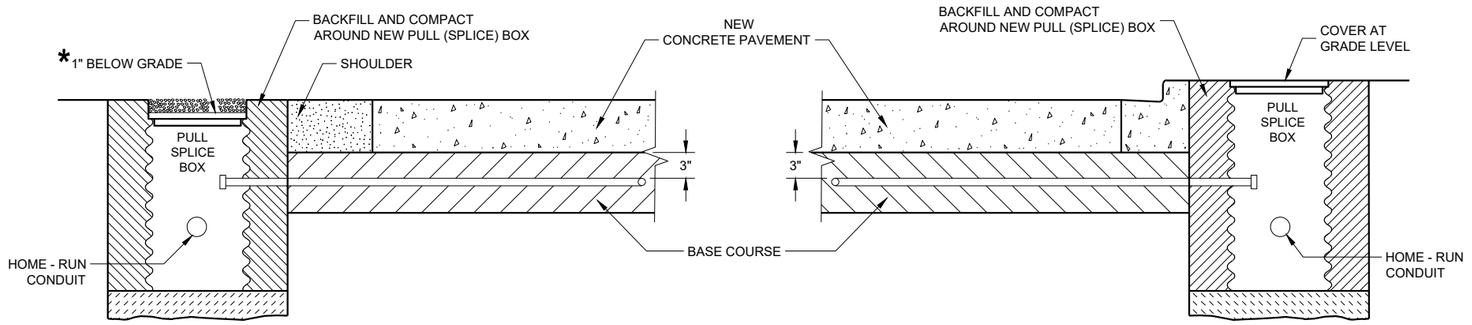
S.D.D. 9 E 12-1e



SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

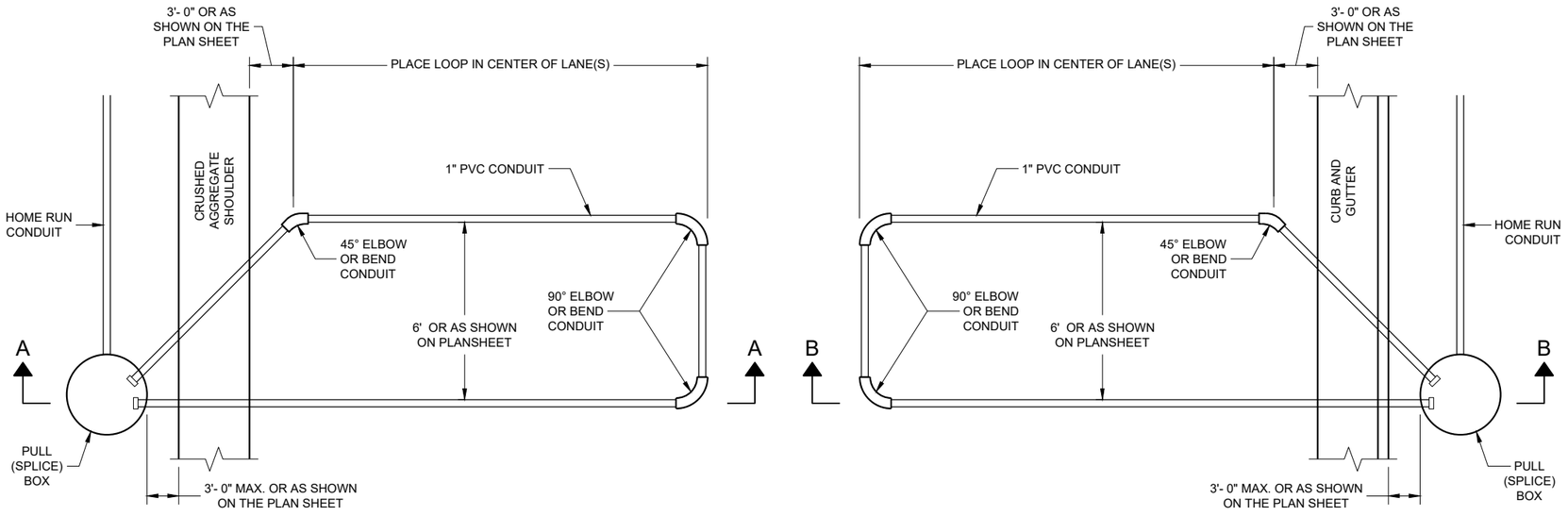
THE #12 AWG LOOP WIRE IN THE ROADSIDE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
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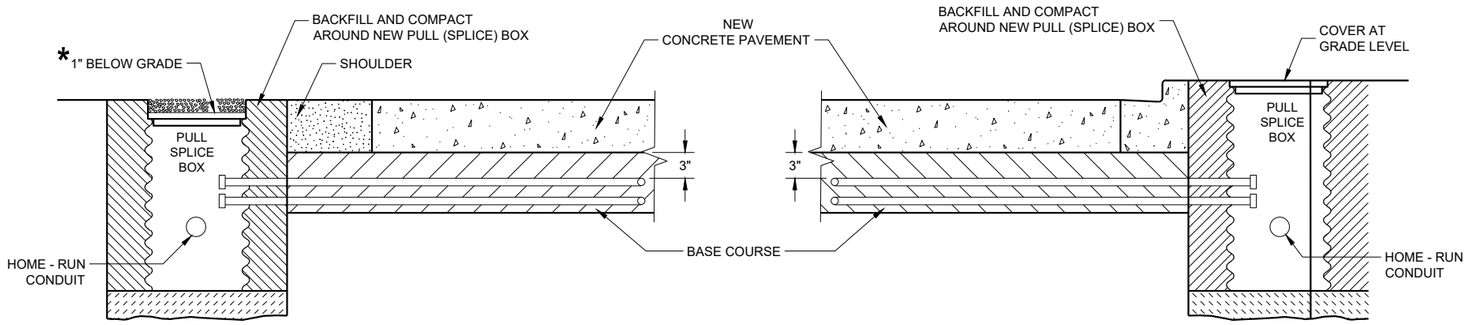


SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

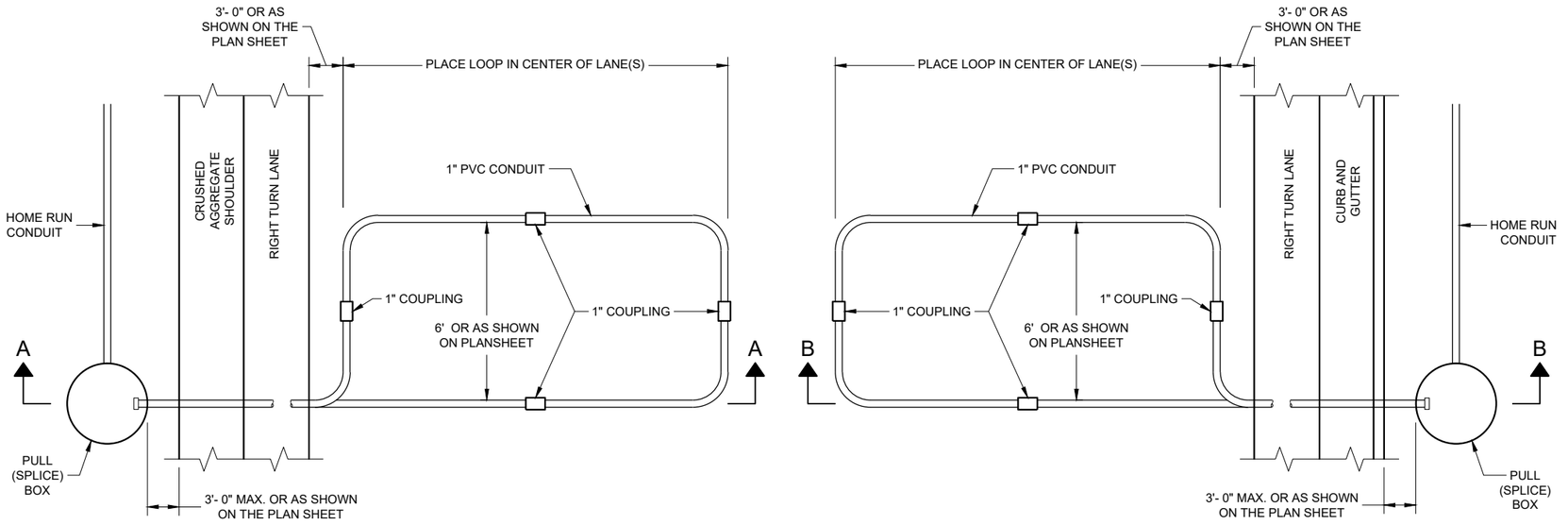
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

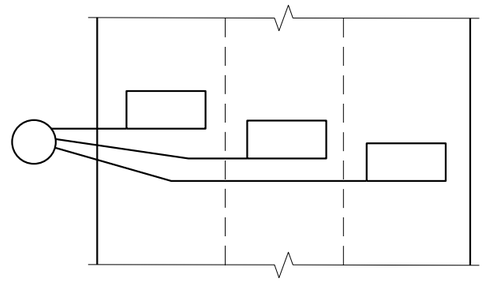
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
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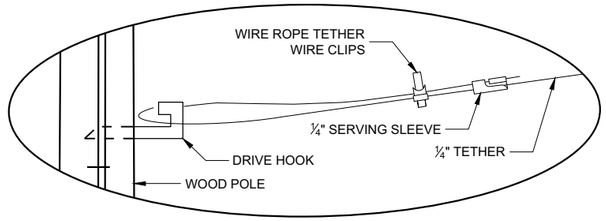
MINIMUM POLE LENGTHS	POLE BURIAL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

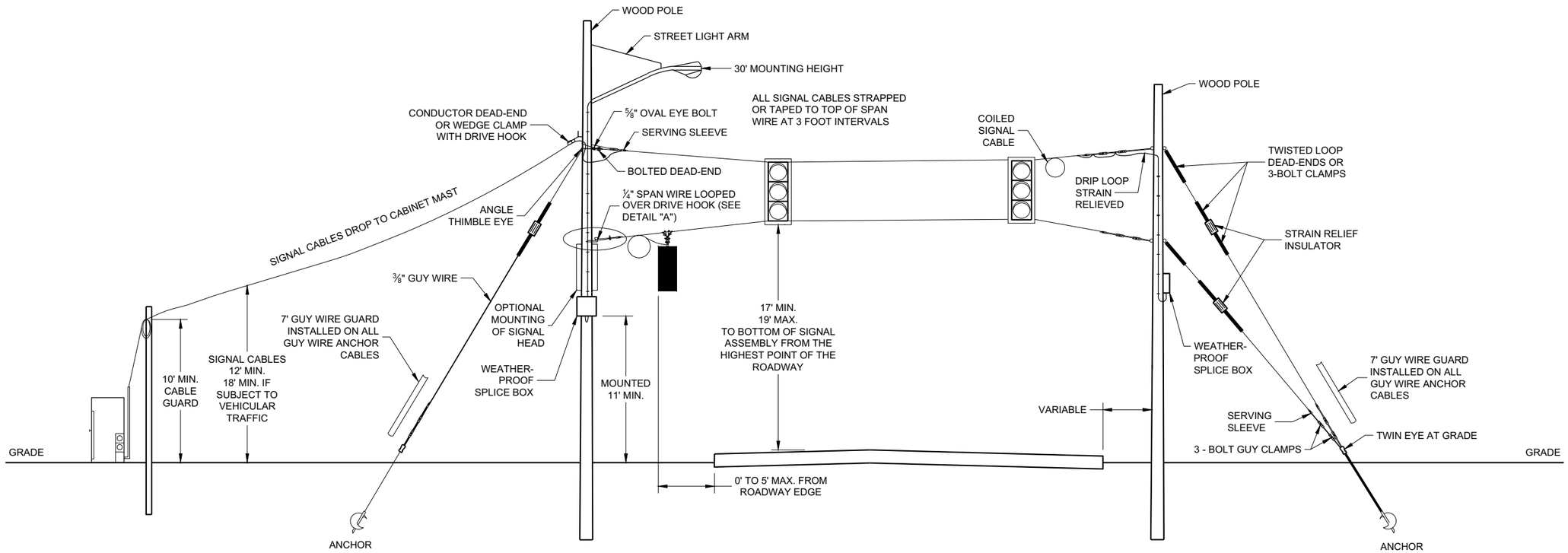


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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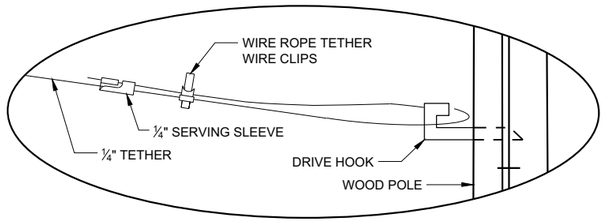
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

GENERAL NOTES

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   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
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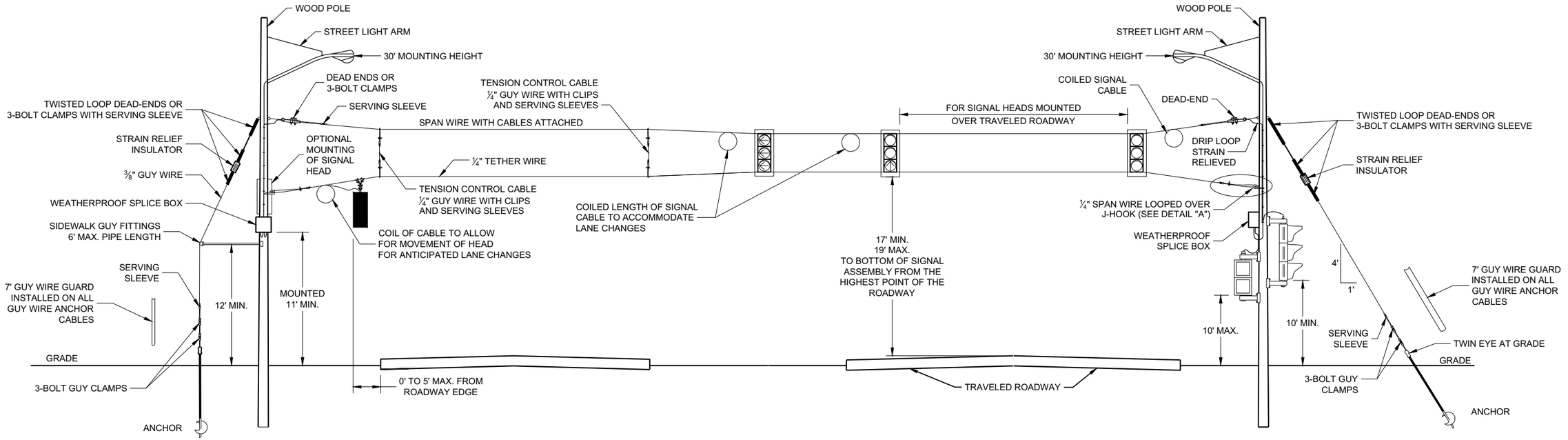

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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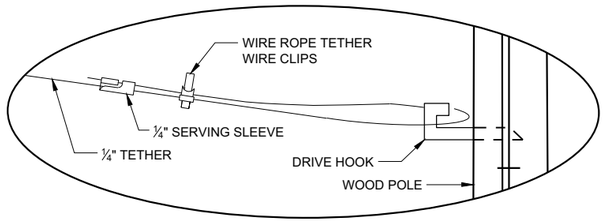
MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'



DETAIL "A"

GENERAL NOTES

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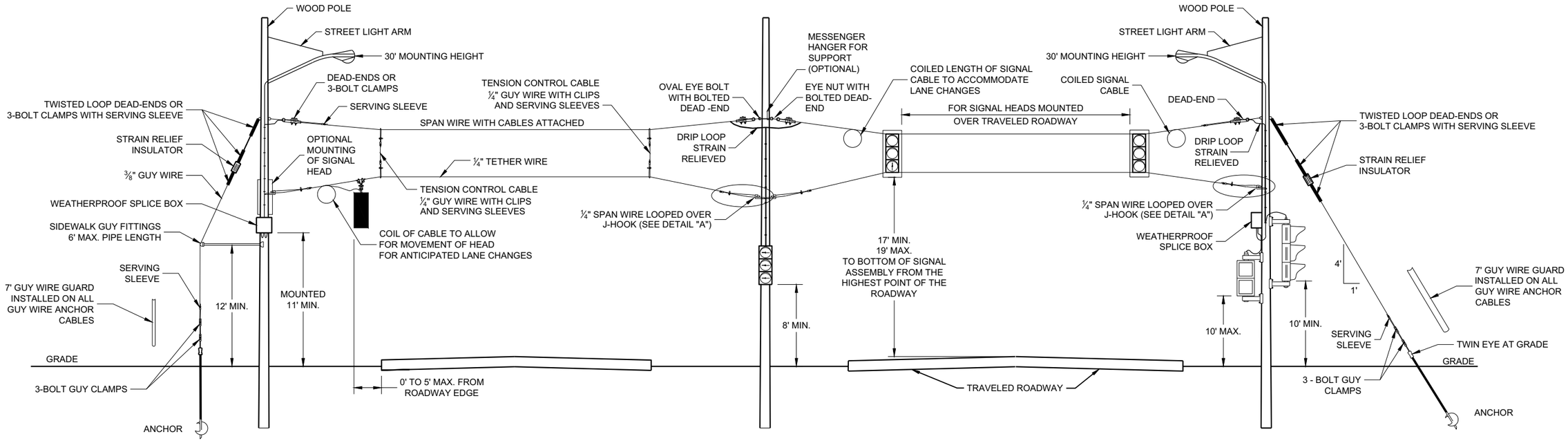

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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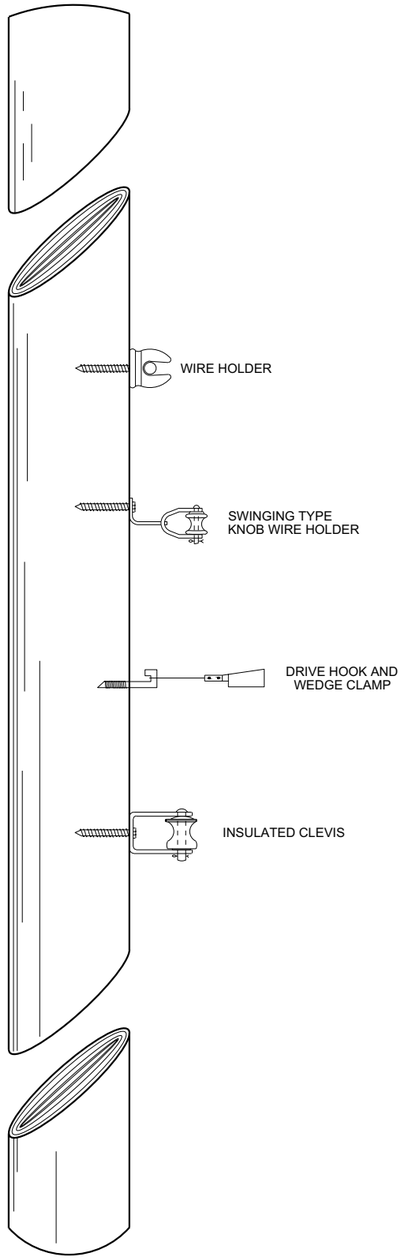

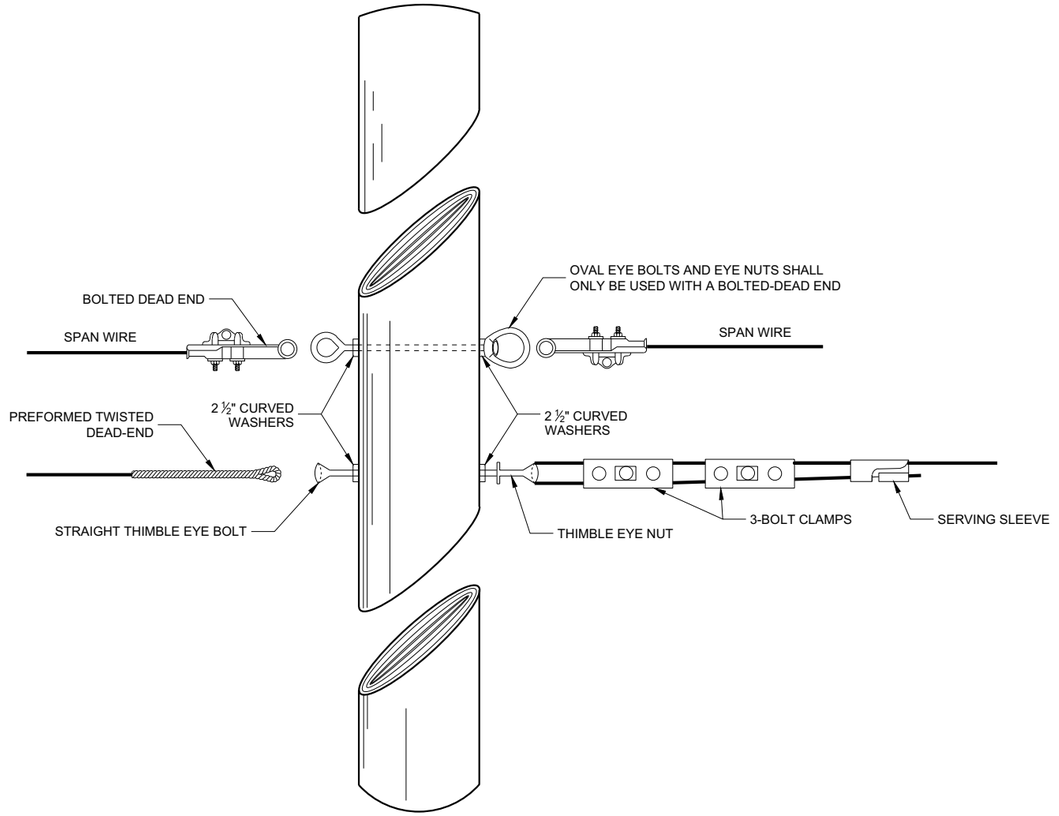

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SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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ROADWAY STANDARDS DEVE ENGINEER

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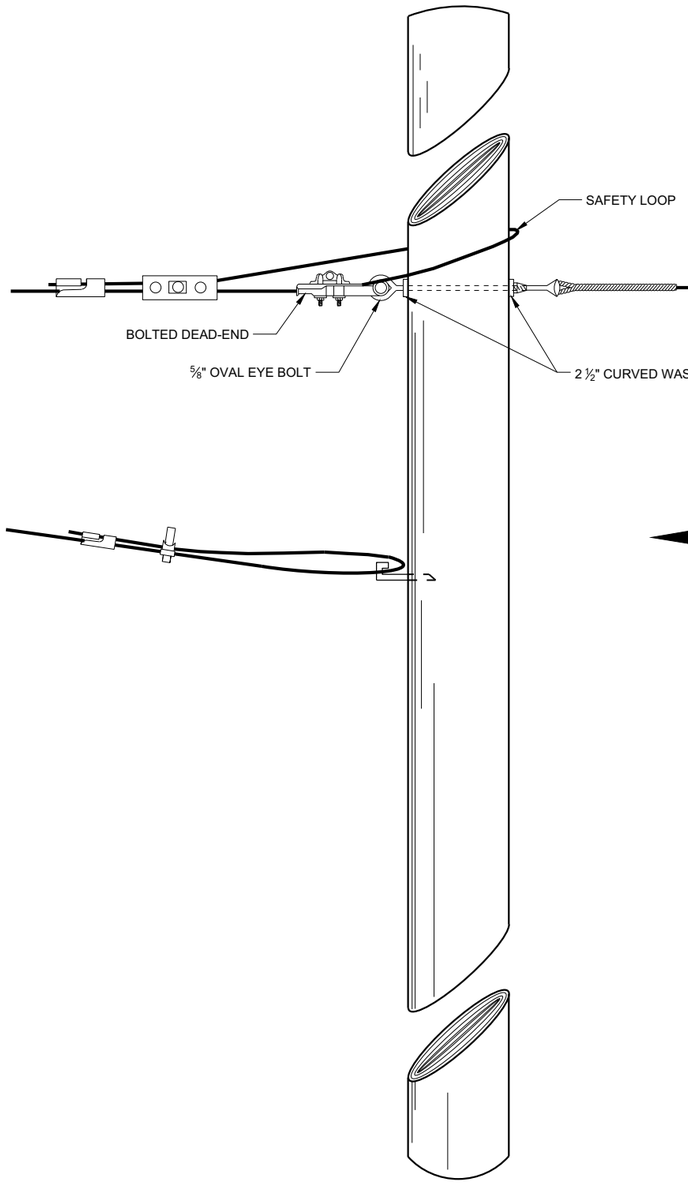
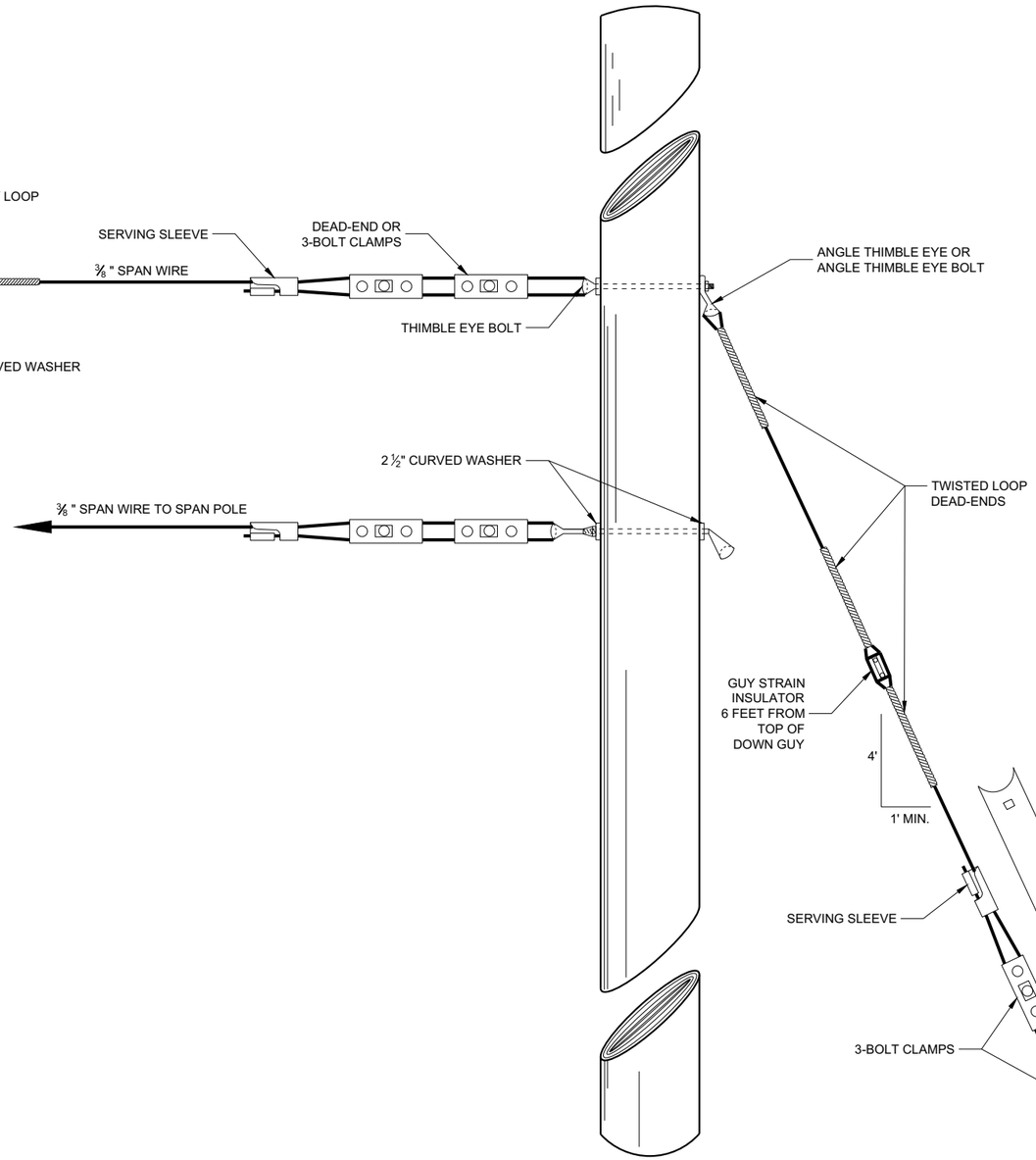
GENERAL NOTES

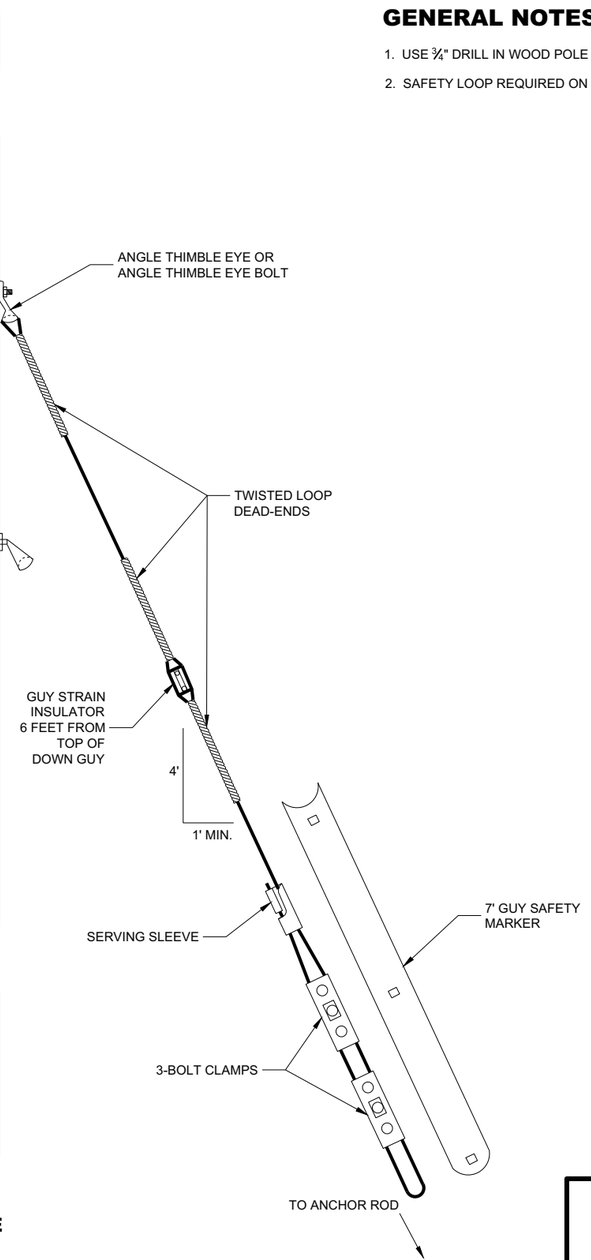
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

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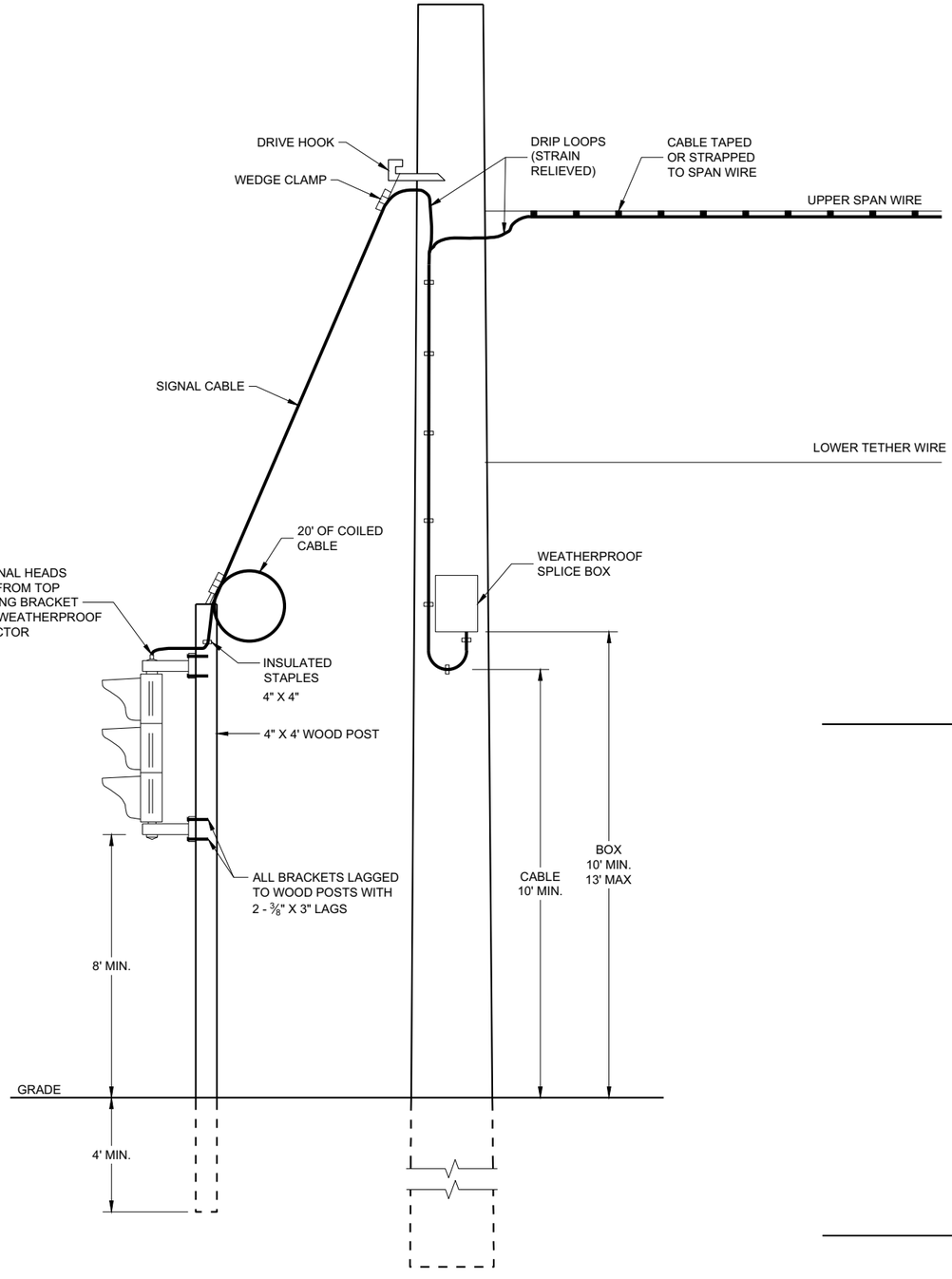
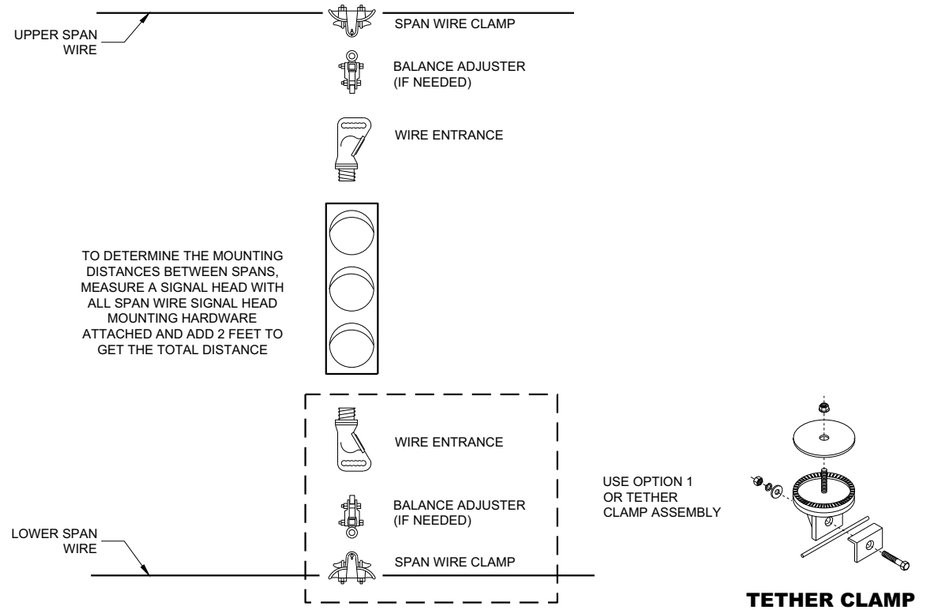


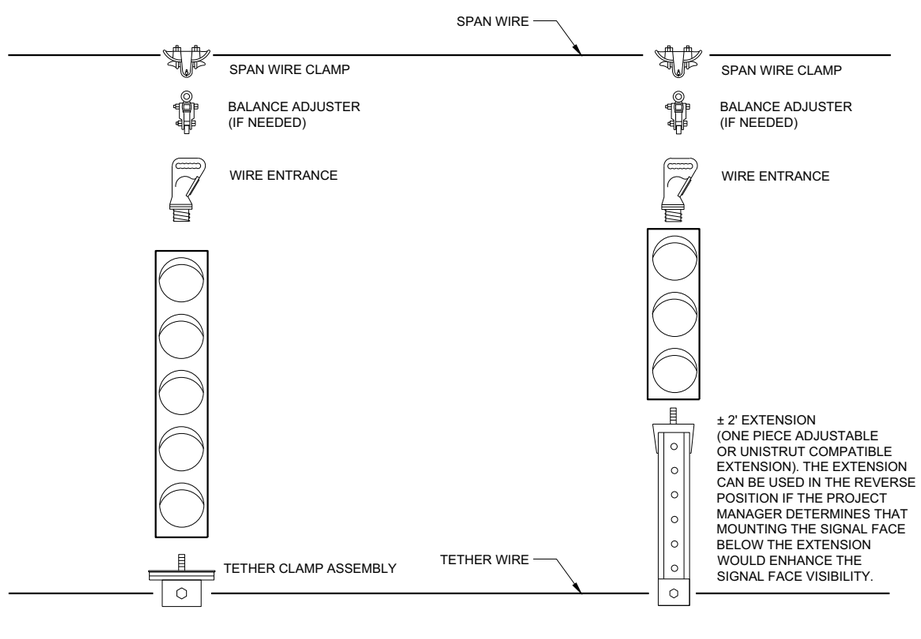
TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



OPTION 1

TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

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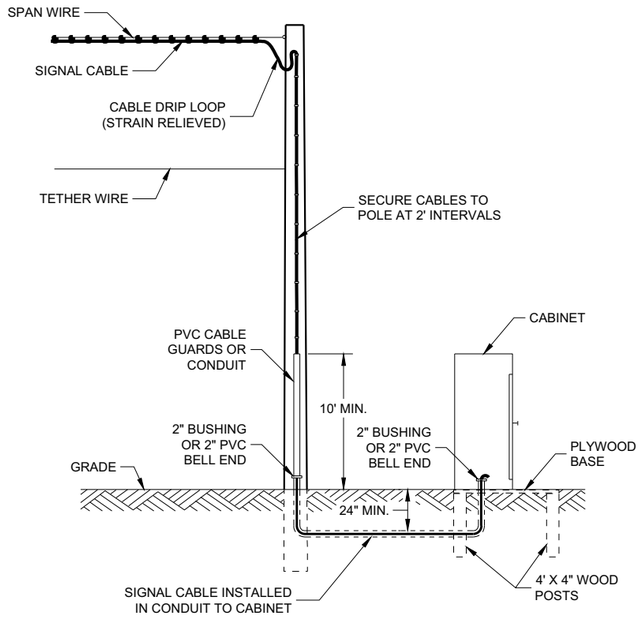
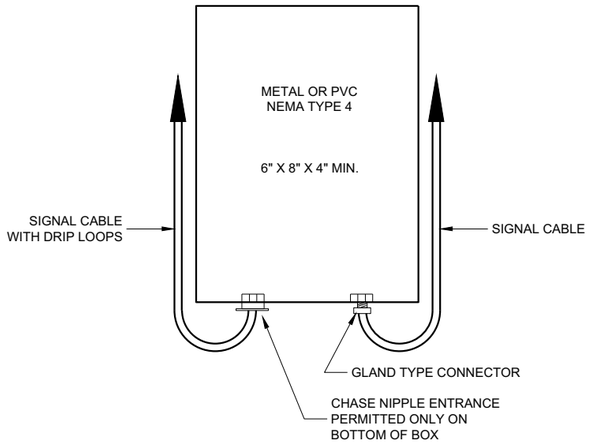
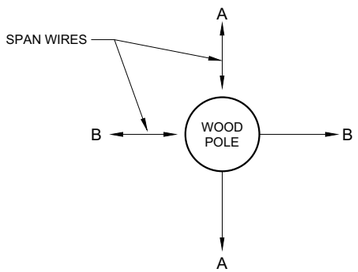




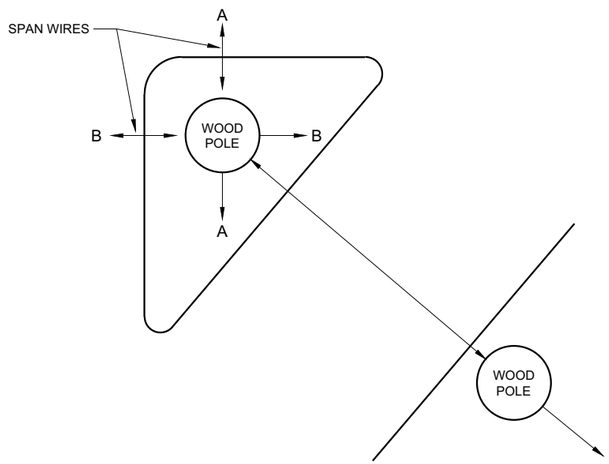
SPLICE BOX

TYPICAL SKID TYPE TEMPORARY

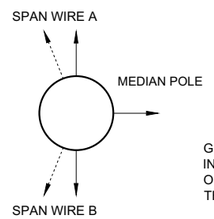


ALL DOWN OR SIDEWALK GUYS SHALL BE INSTALLED IN THE OPOSITE DIRECTION OF THE STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
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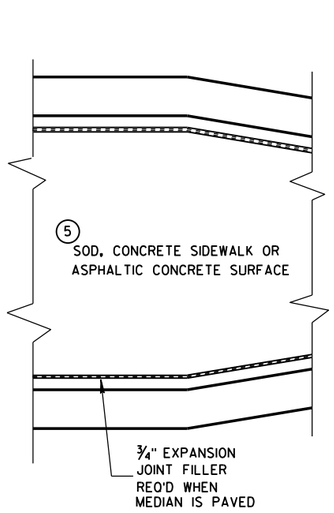
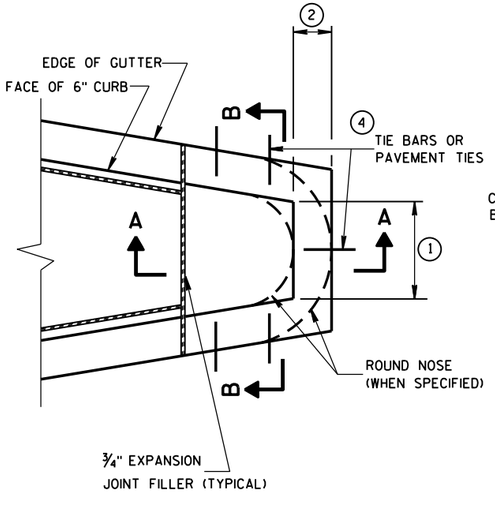
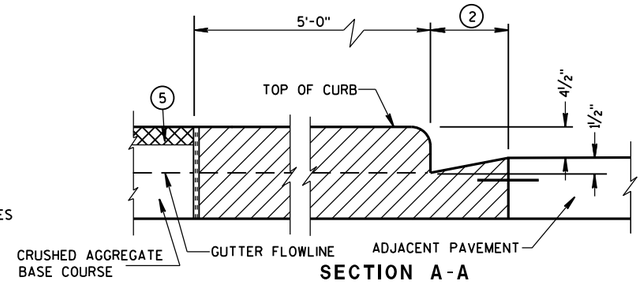
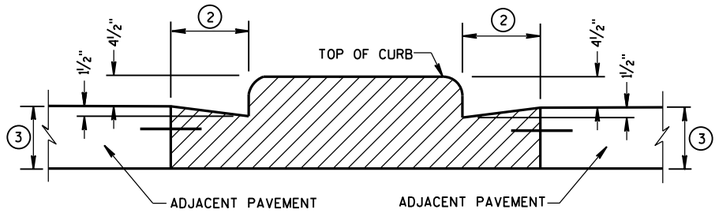






SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

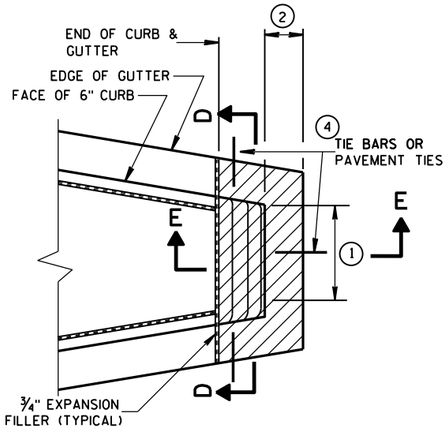
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

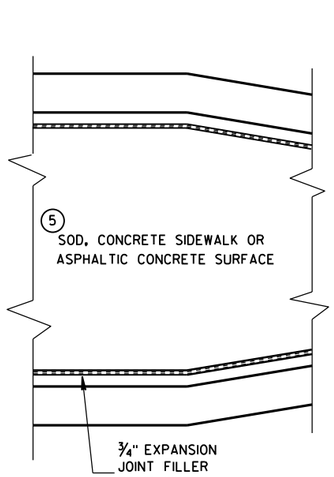
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

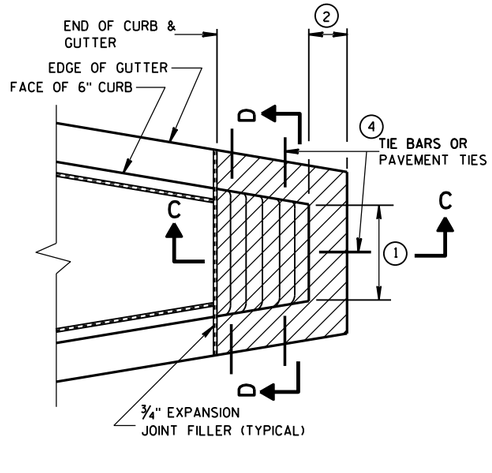
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

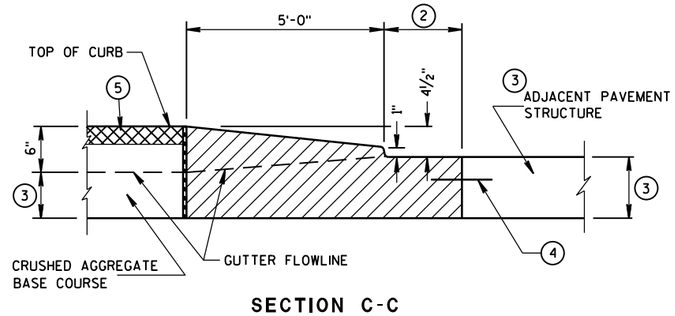
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



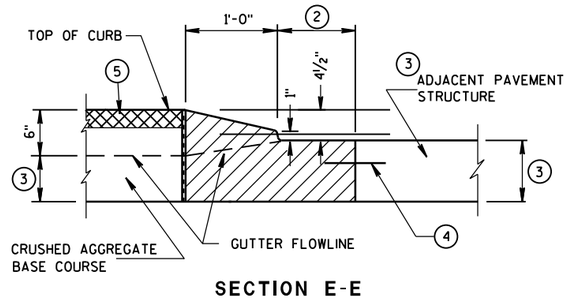




CONCRETE MEDIAN SLOPED NOSE TYPE 1

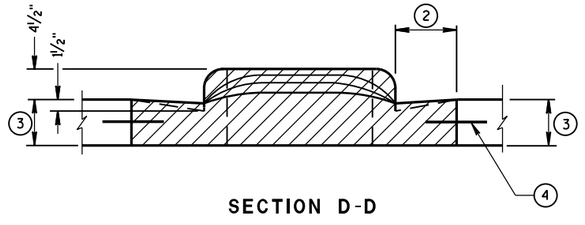


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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S.D.D. 11 B 2-2

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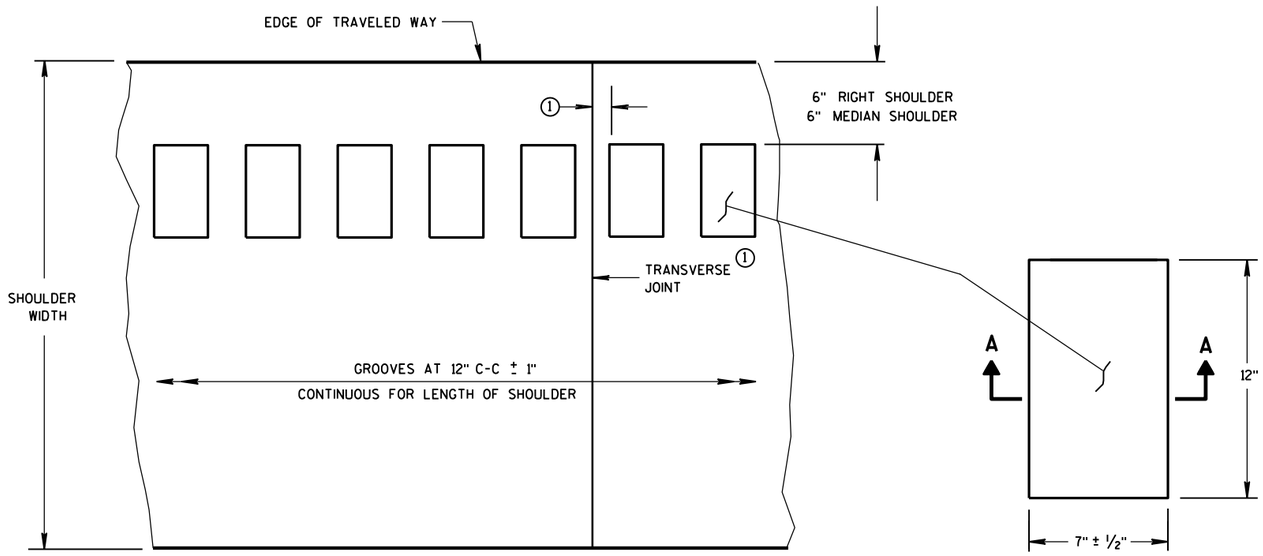
S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

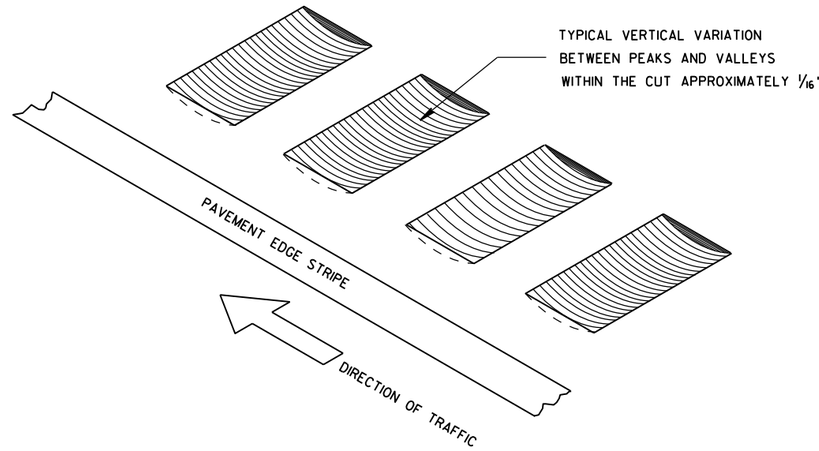
GENERAL NOTES

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

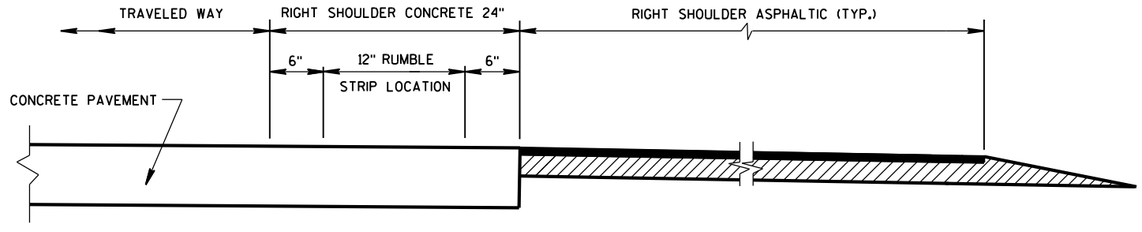
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

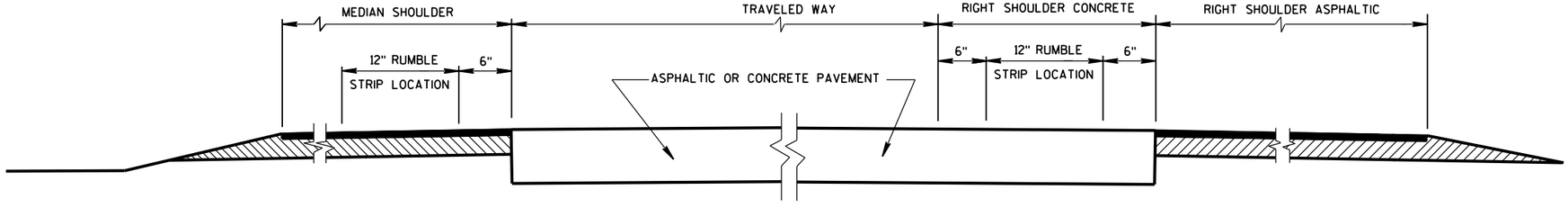
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



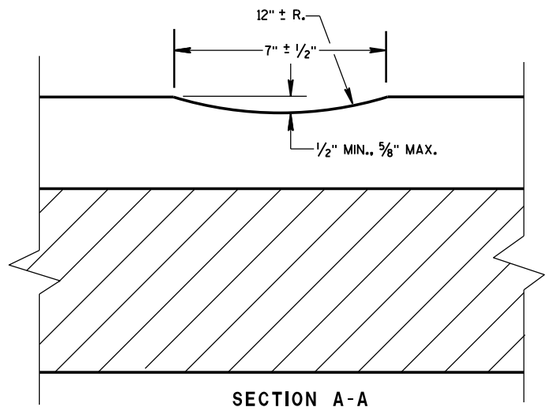
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

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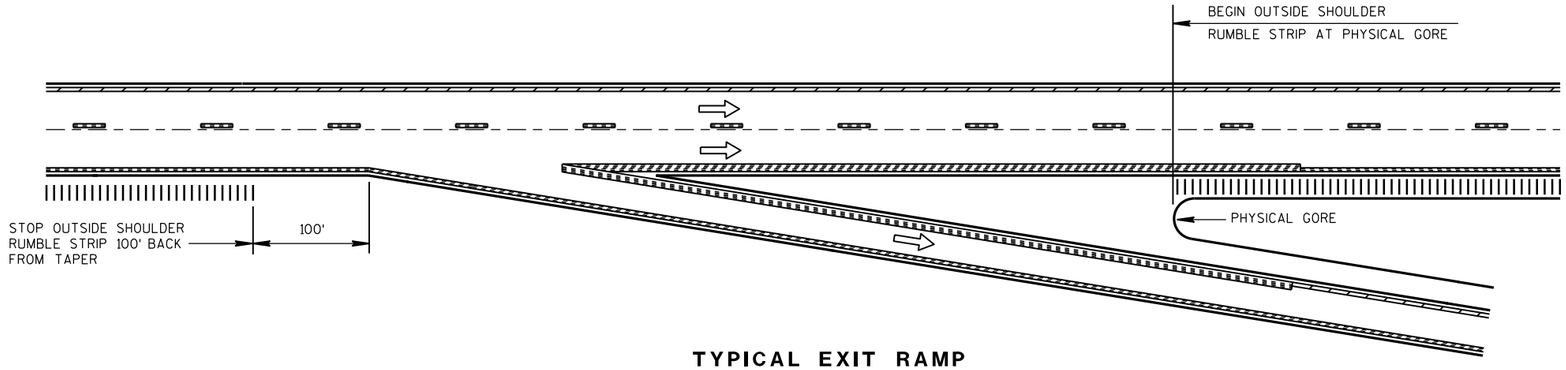
S.D.D. 13 A 5-5a



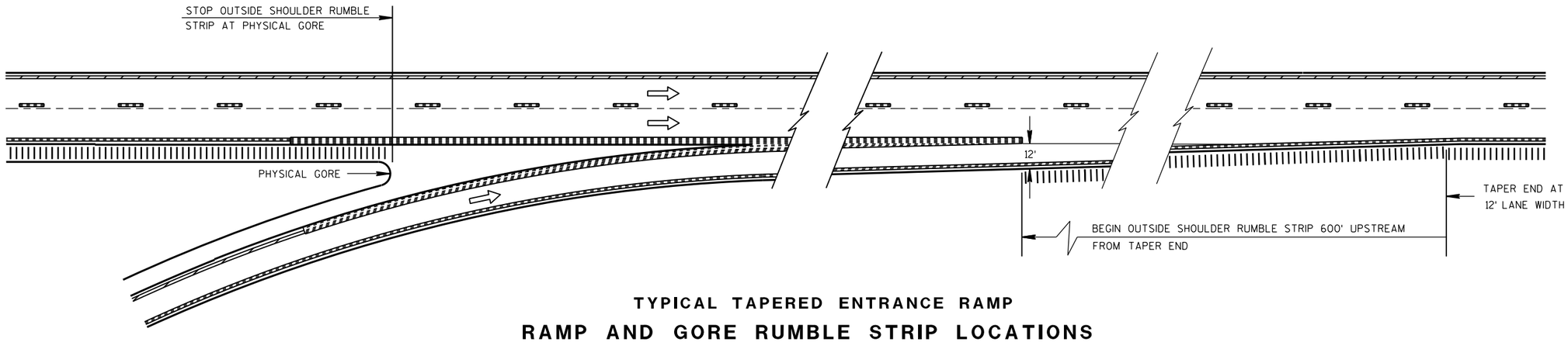
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

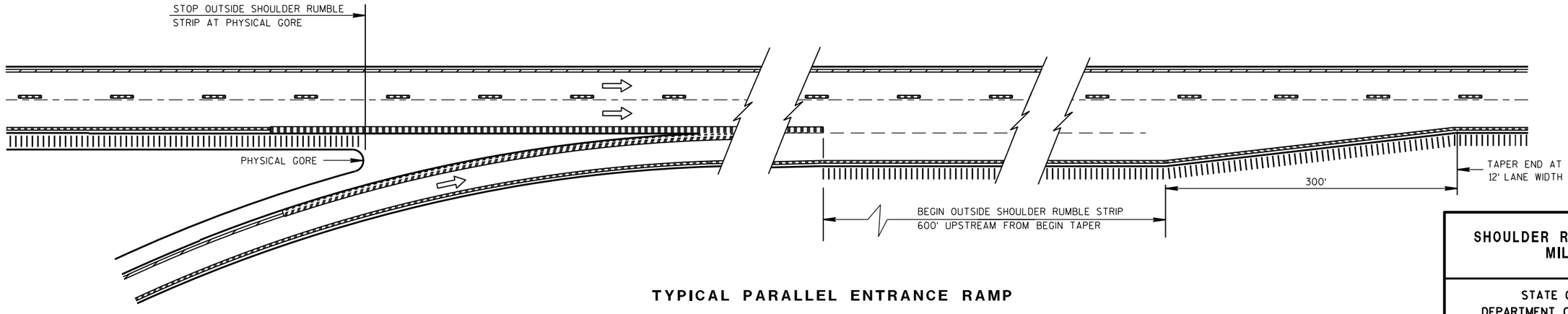
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

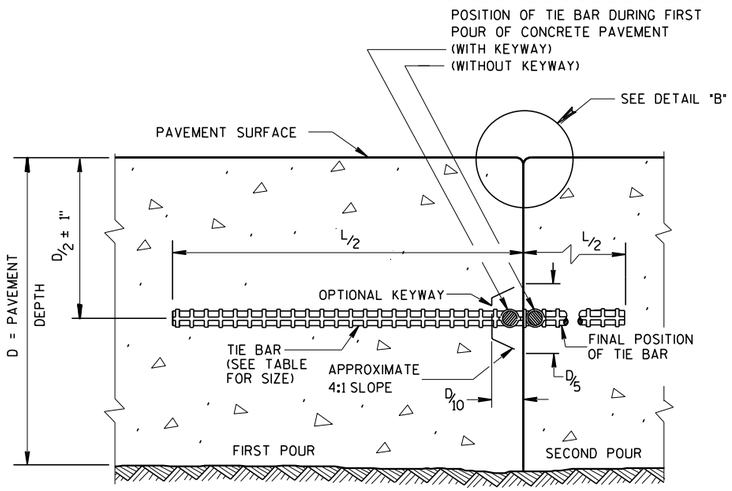
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

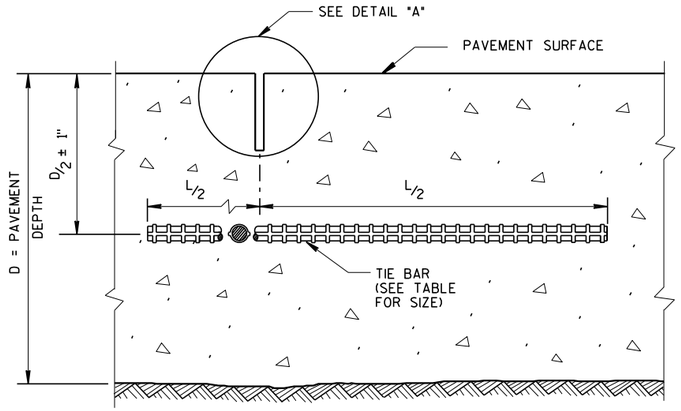
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 13 A 5-5b



CONSTRUCTION JOINT



SAWED JOINT

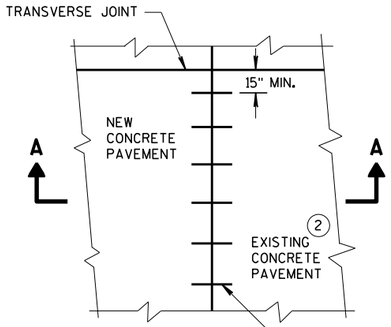
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

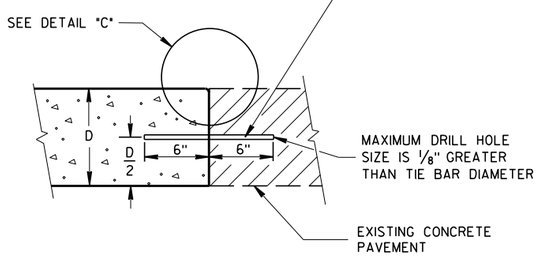
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

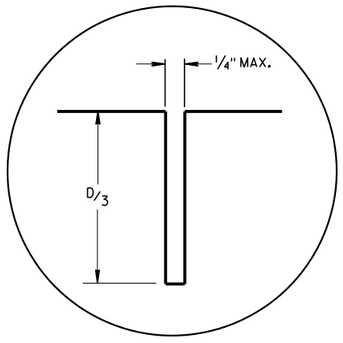


PLAN VIEW

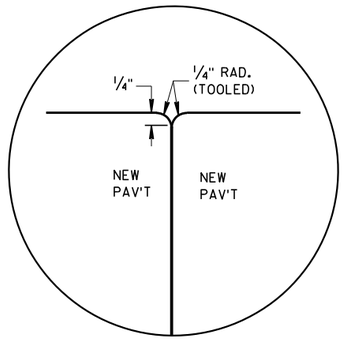


SECTION A-A

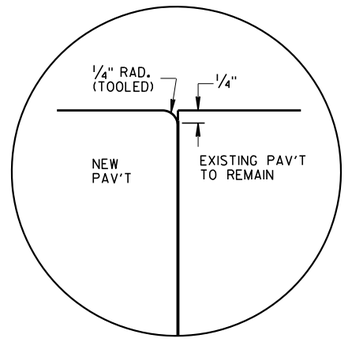
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



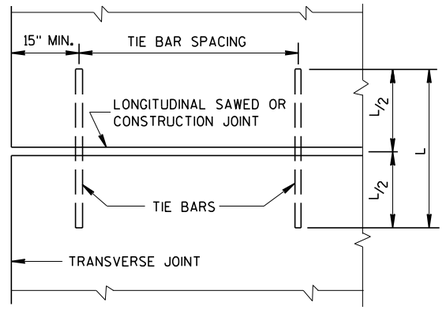
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

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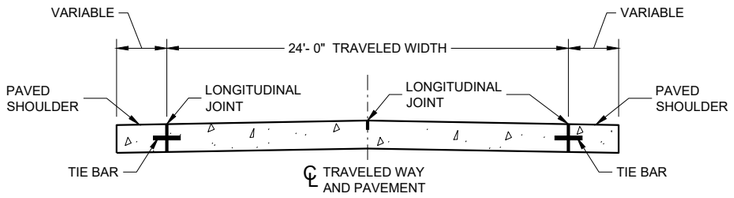
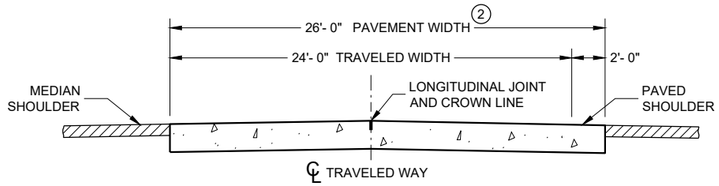
S.D.D. 13 C 1-19

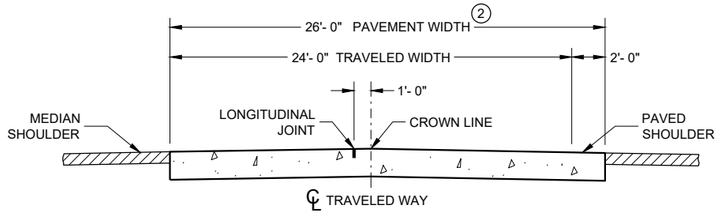


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

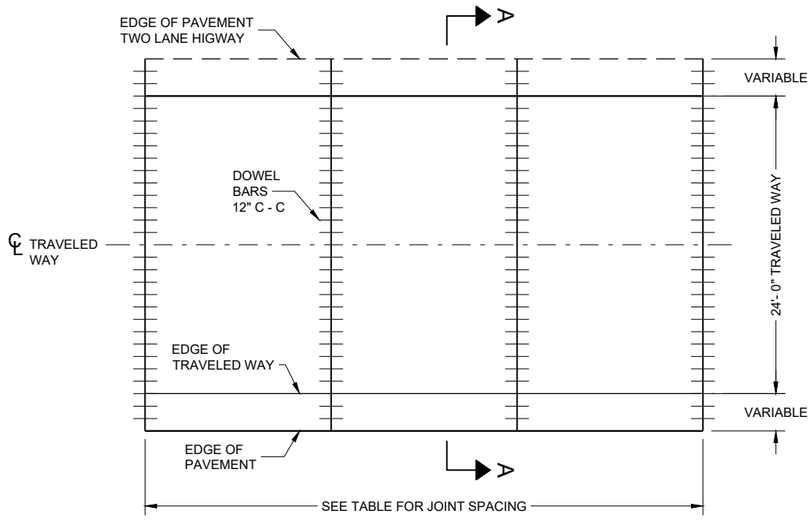
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

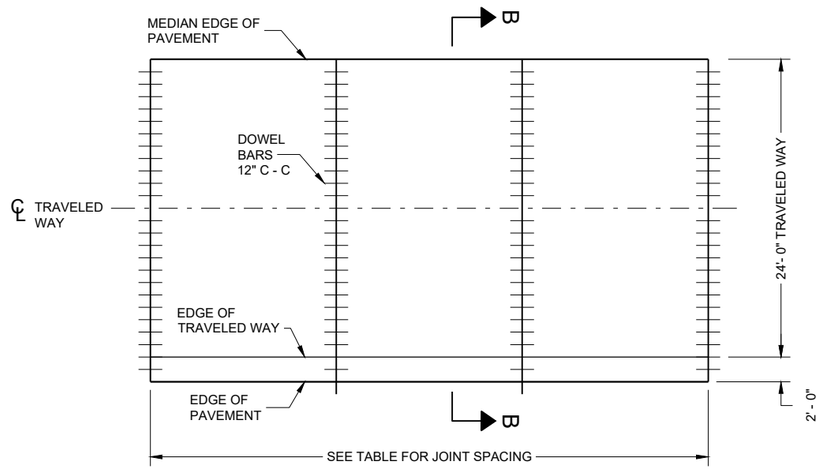
(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9" & ABOVE	1 ¼"	15'



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C11 - 13a

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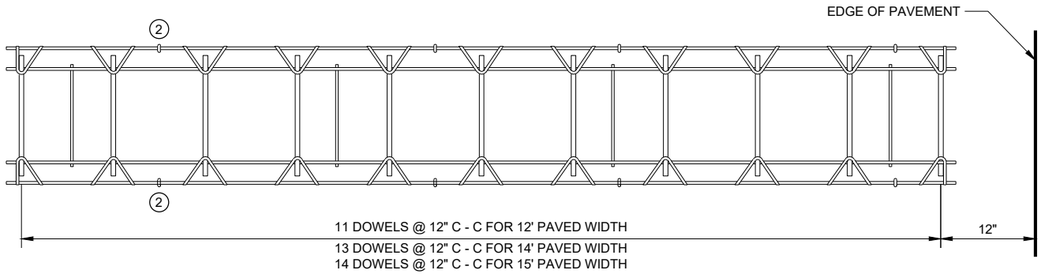
SDD 13C11 - 13a



PLAN VIEW

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

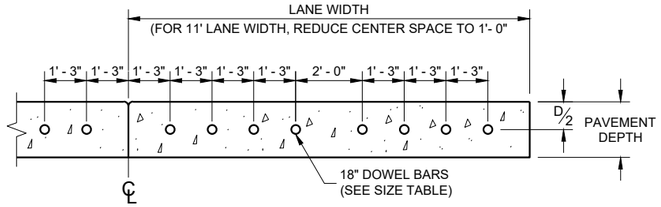
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

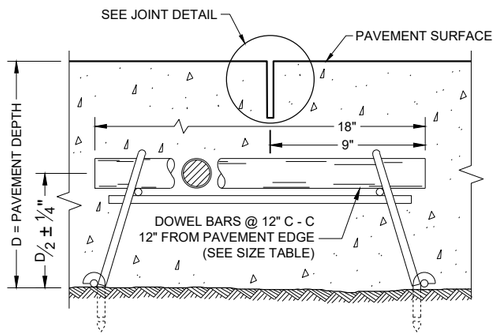
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

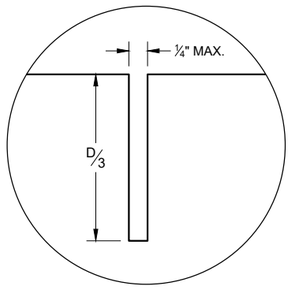
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



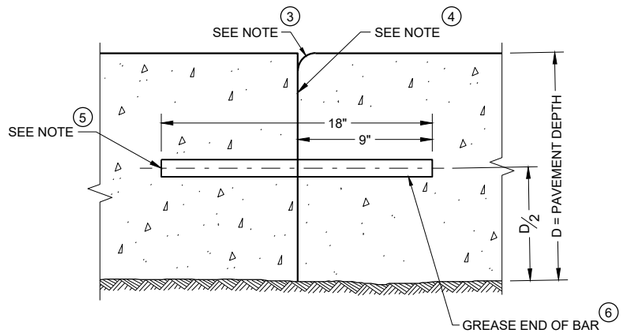
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
00-00-00 DATE
/S/ <AUTHOR> PAVEMENT SUPERVIS

FHWA

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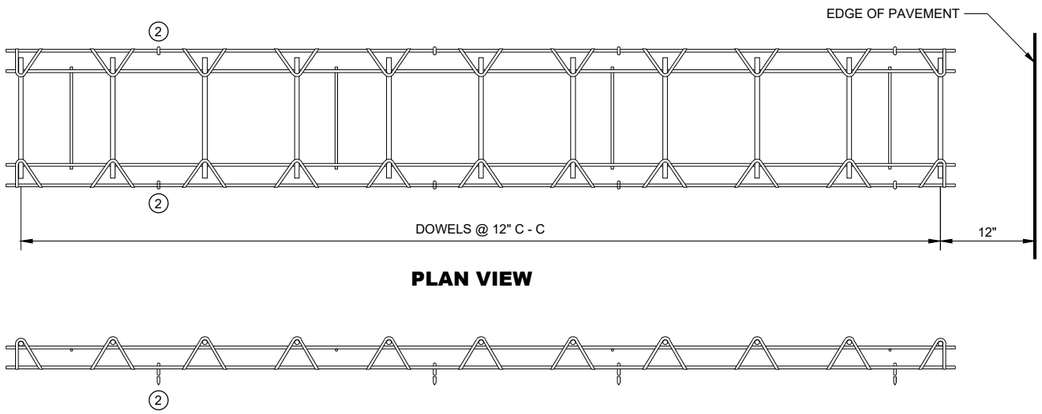
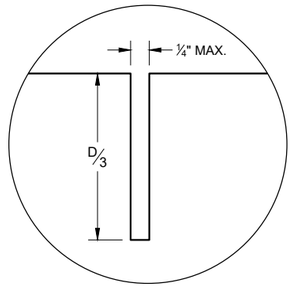
SDD 13C11 - 13b
SDD 13C11 - 13b



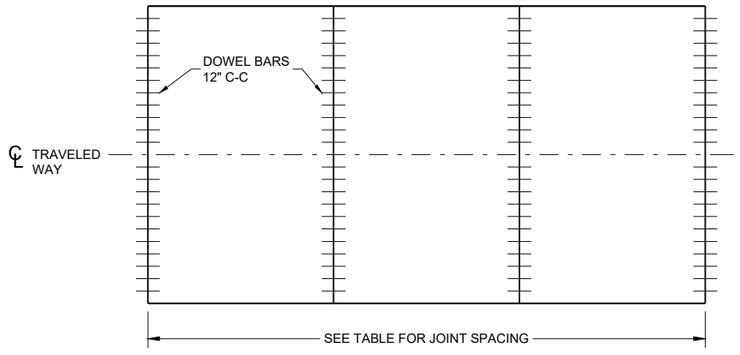
PLAN VIEW

SIDE VIEW

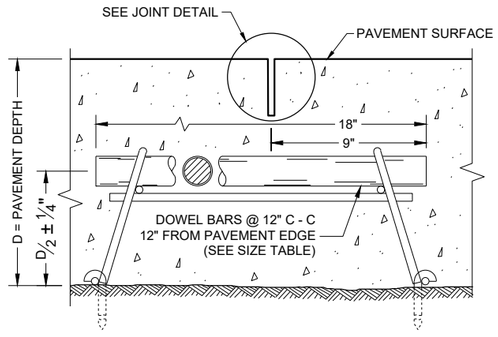
CONTRACTION JOINT DOWEL ASSEMBLY (1)



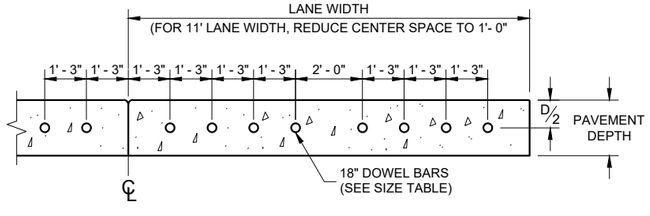
JOINT DETAIL



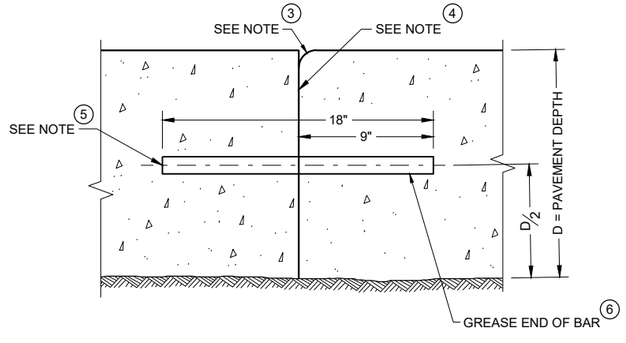
CONTRACTION JOINT LOCATIONS



DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9" & ABOVE	1 ¼"	15'

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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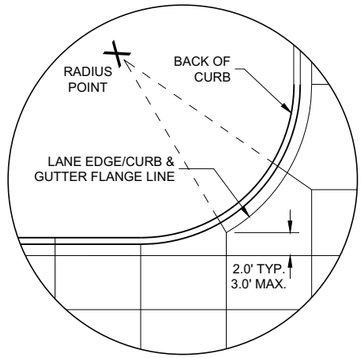
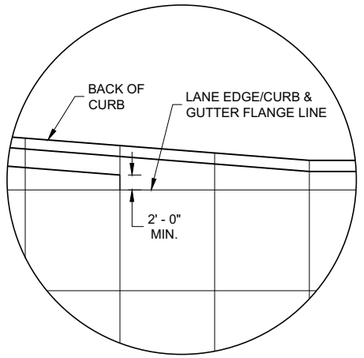
SDD 13C13 - 10



DETAIL "A"



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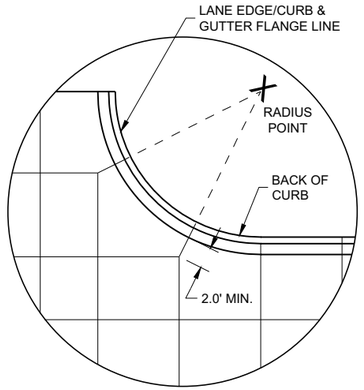

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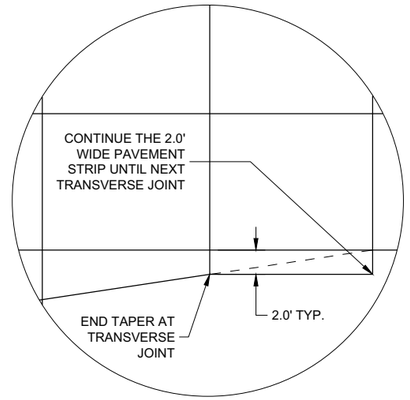


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

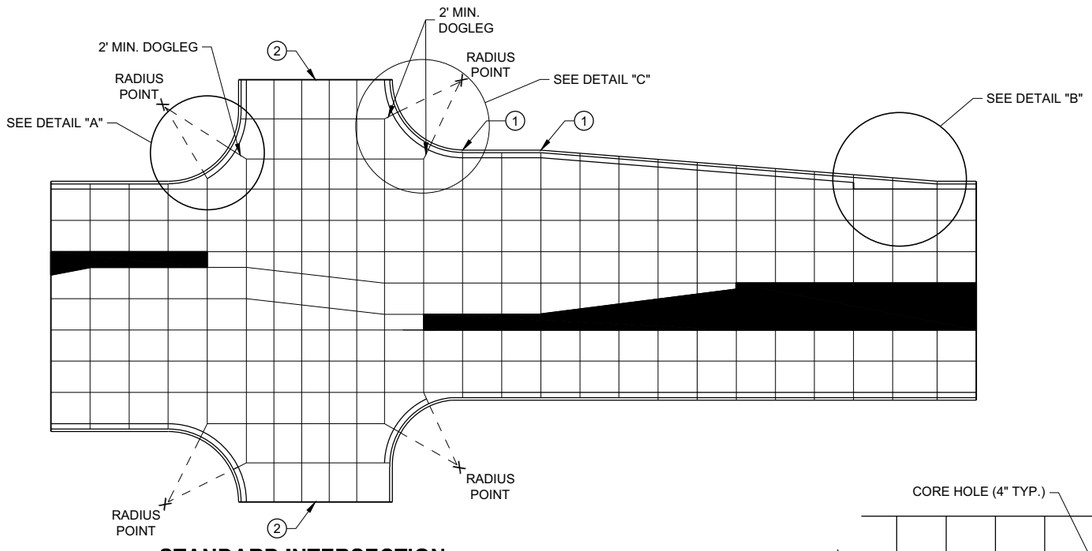
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

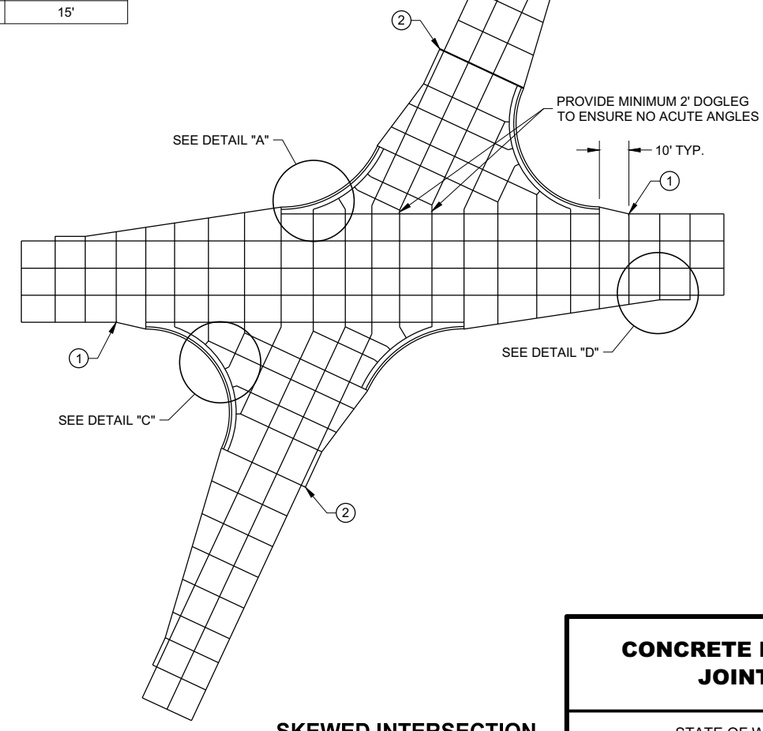
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



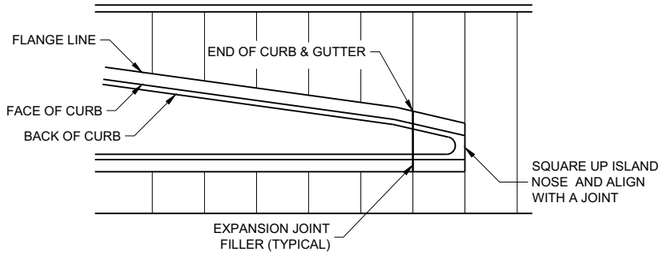
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

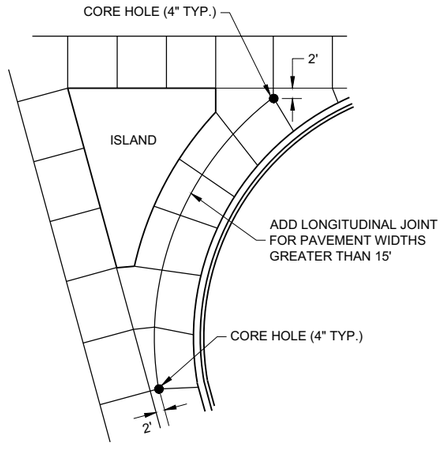
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

6

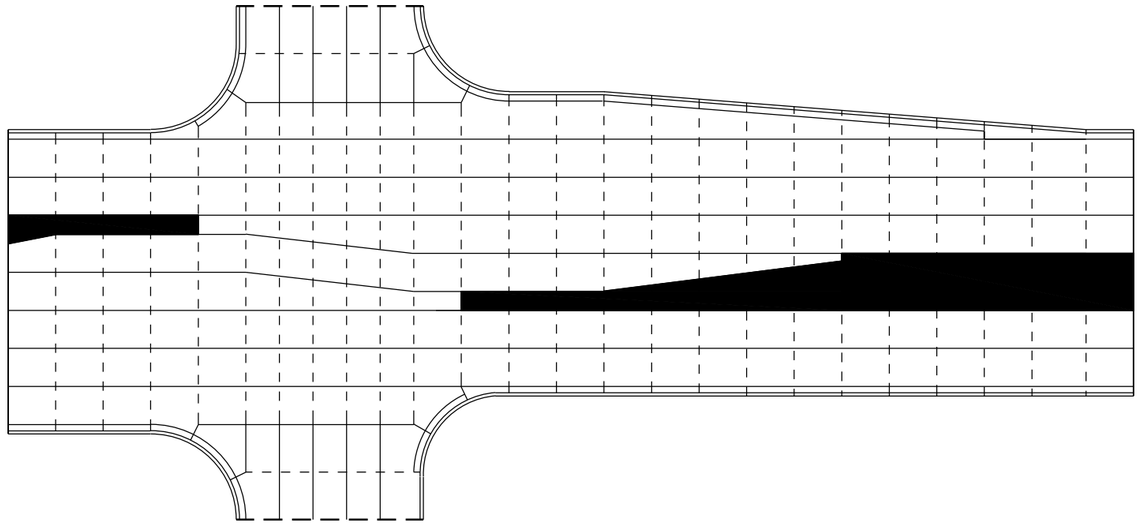
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

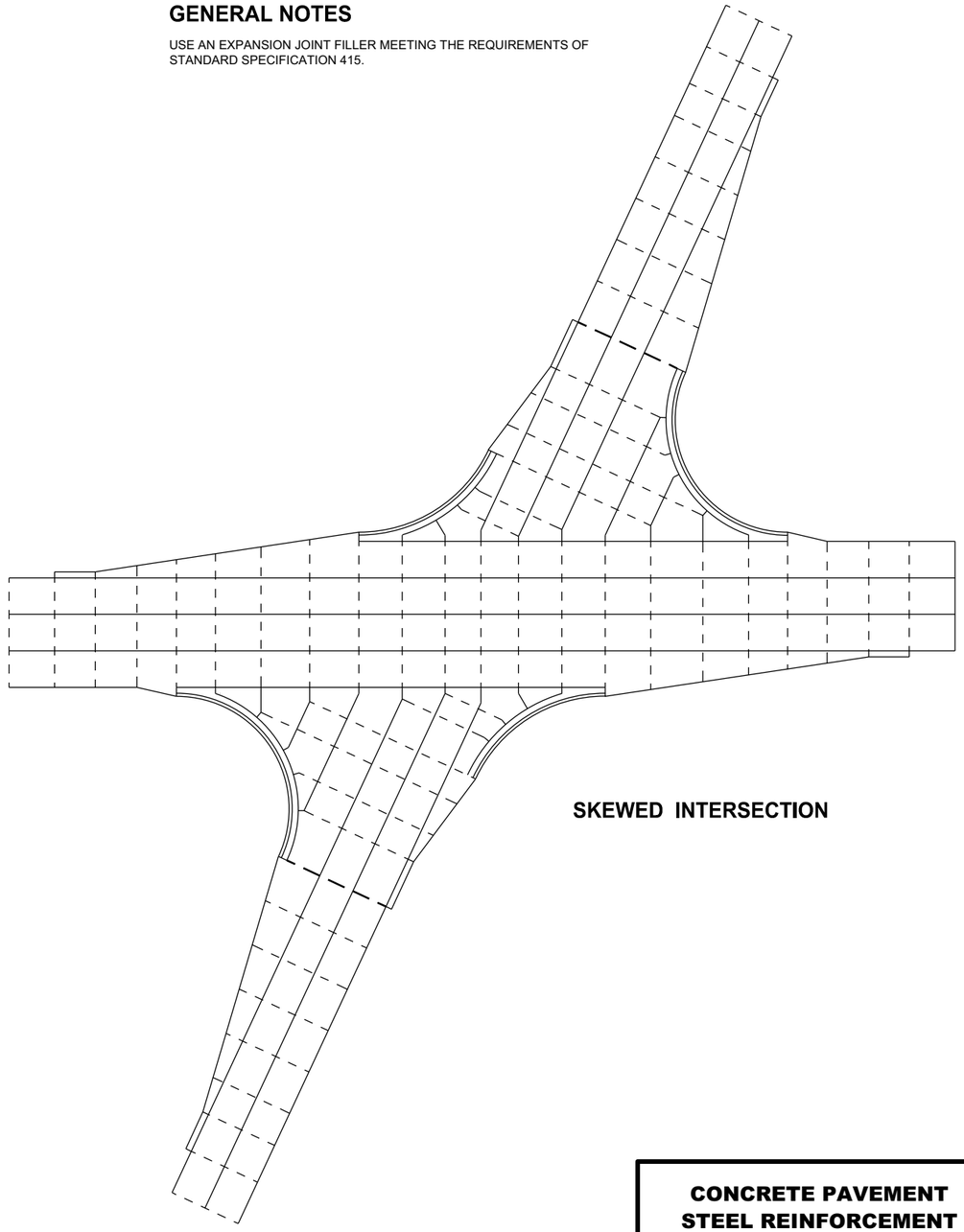
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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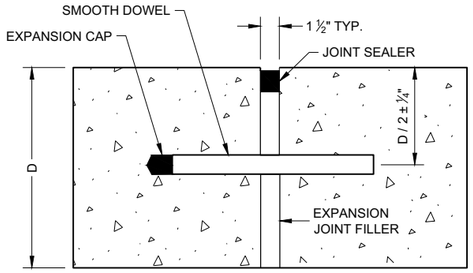
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

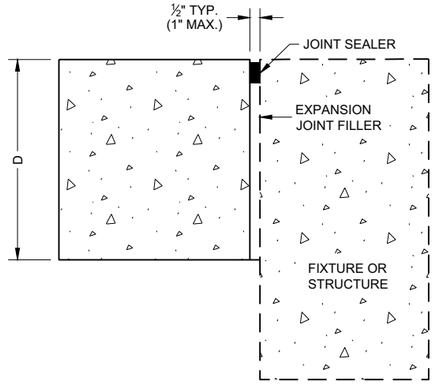
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

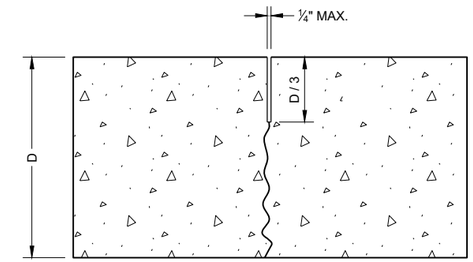
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

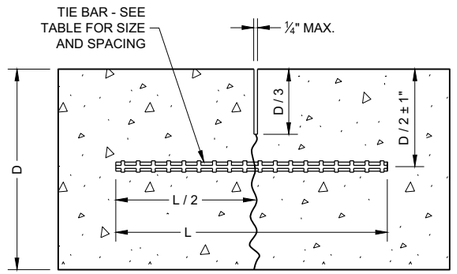
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

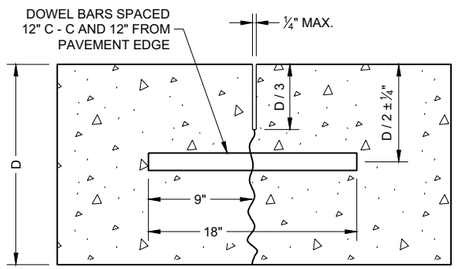
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

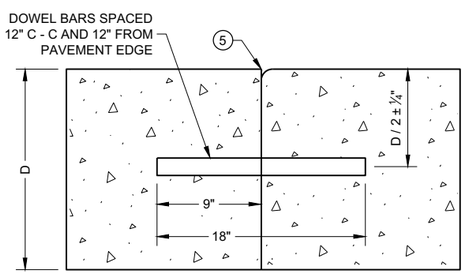


TIED LONGITUDINAL

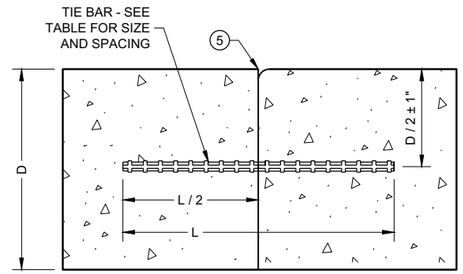


DOWELED TRANSVERSE

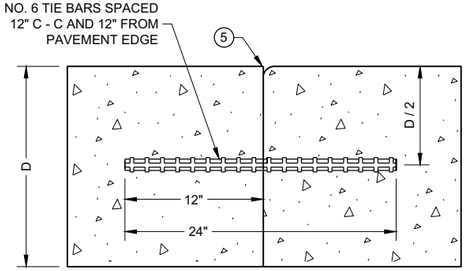
CONTRACTION JOINTS (2)



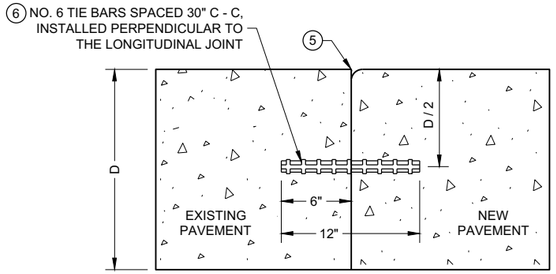
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

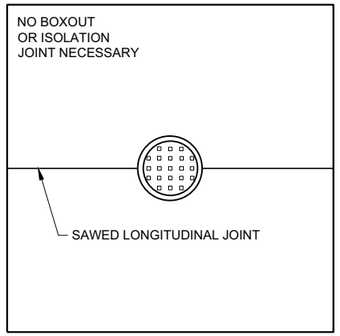
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

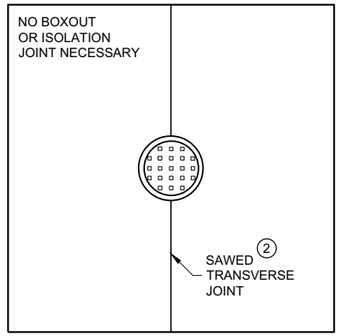
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

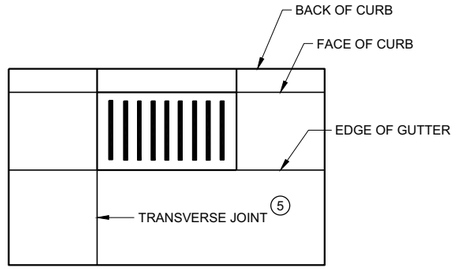
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



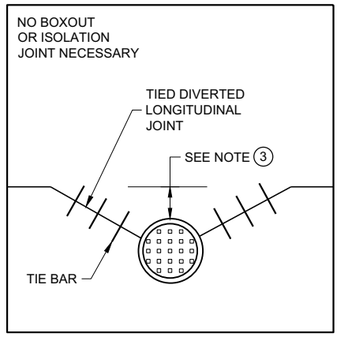
MANHOLE WITH TRANSVERSE JOINT



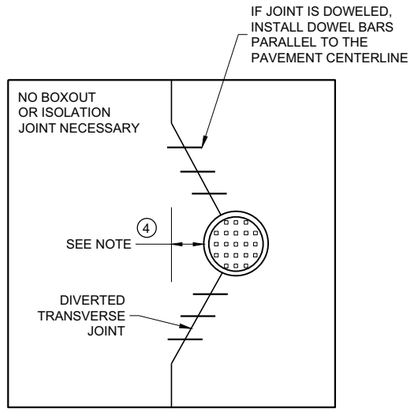
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

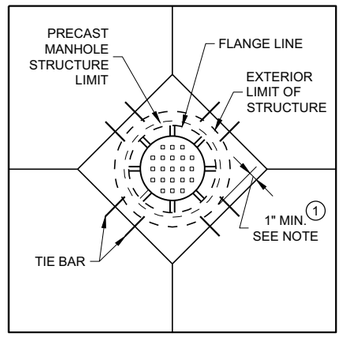
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD13C18 - 07d

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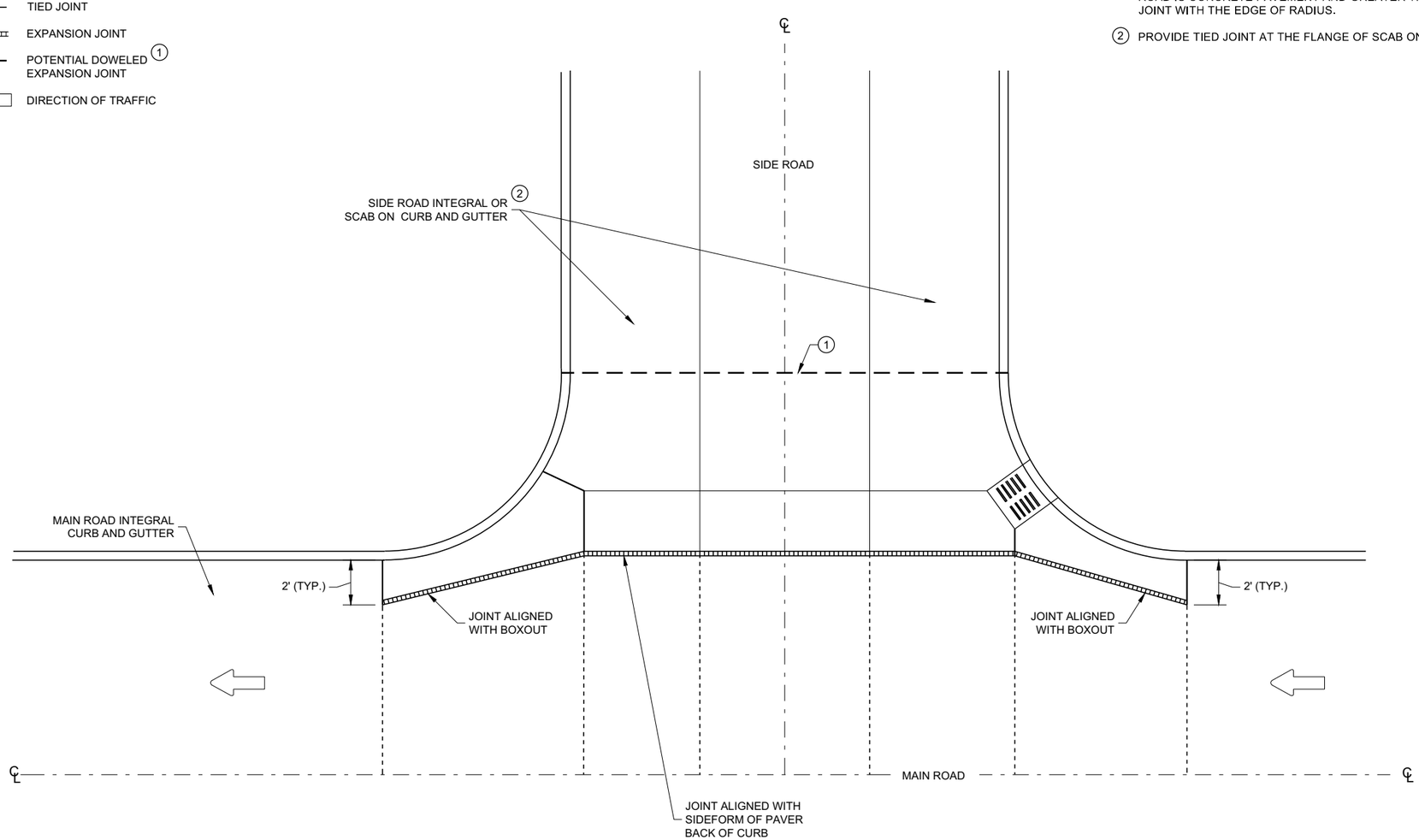
LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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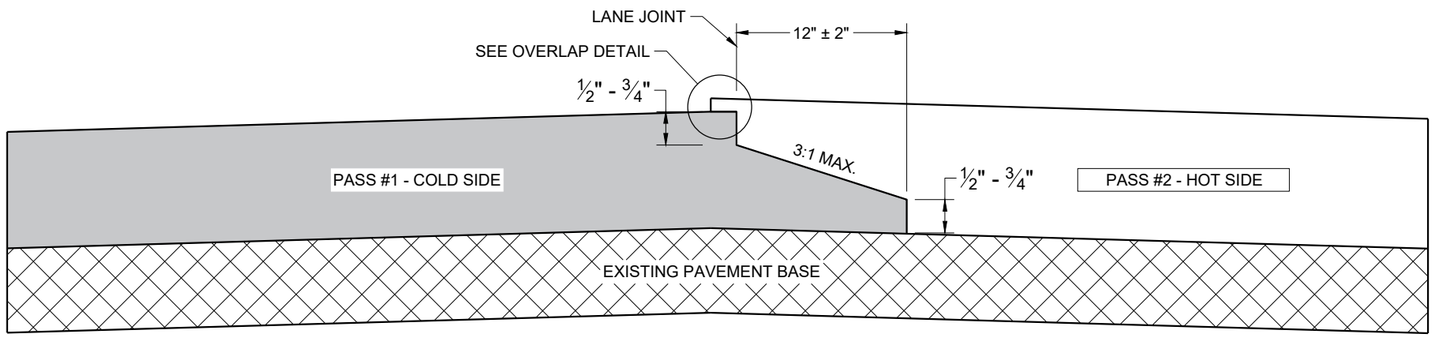
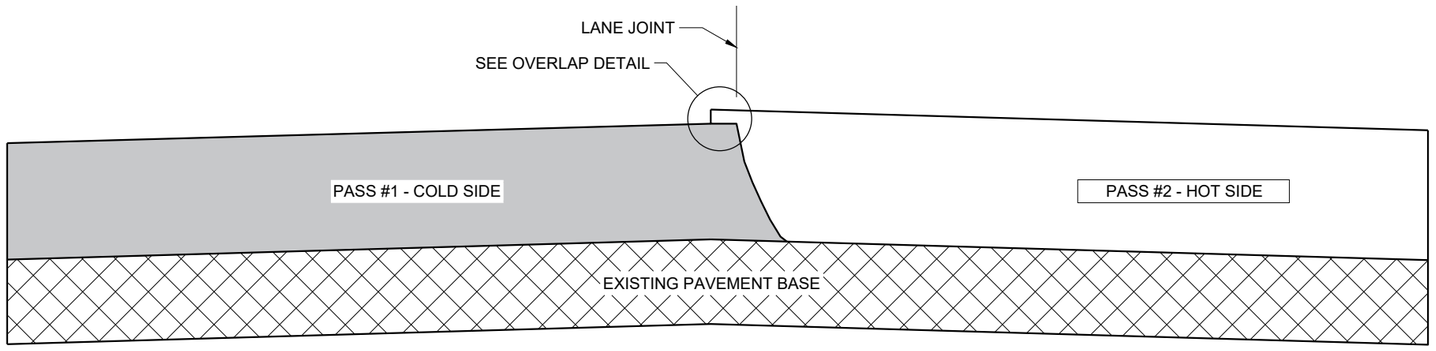
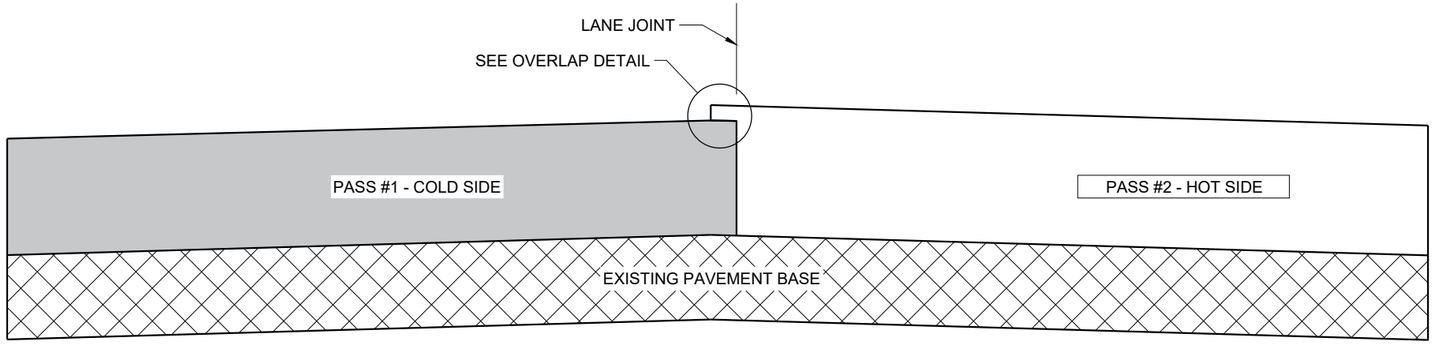
SDD 13C18 - 07f



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

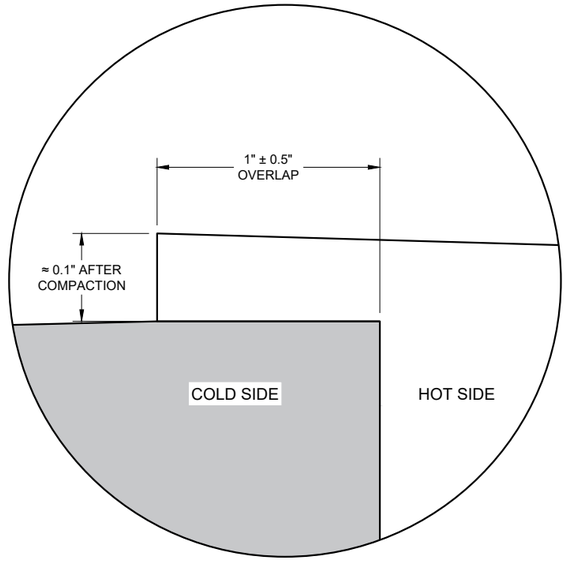
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

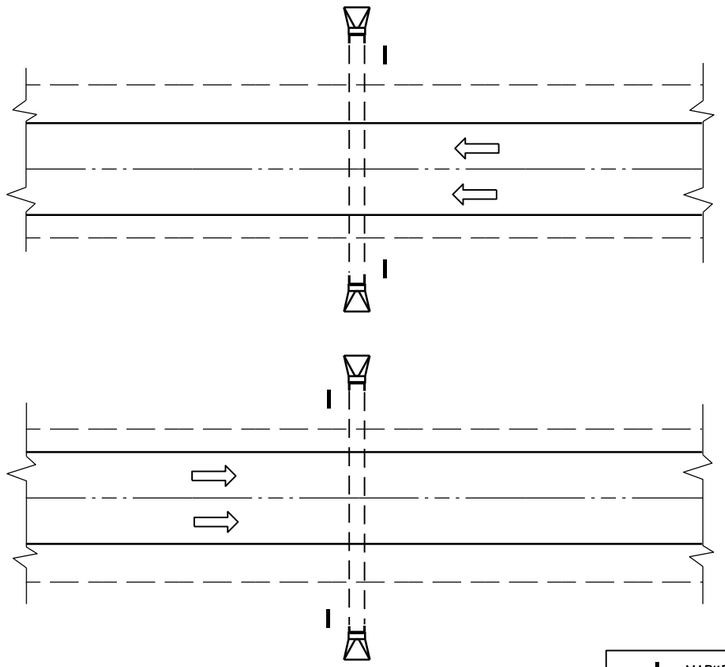
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

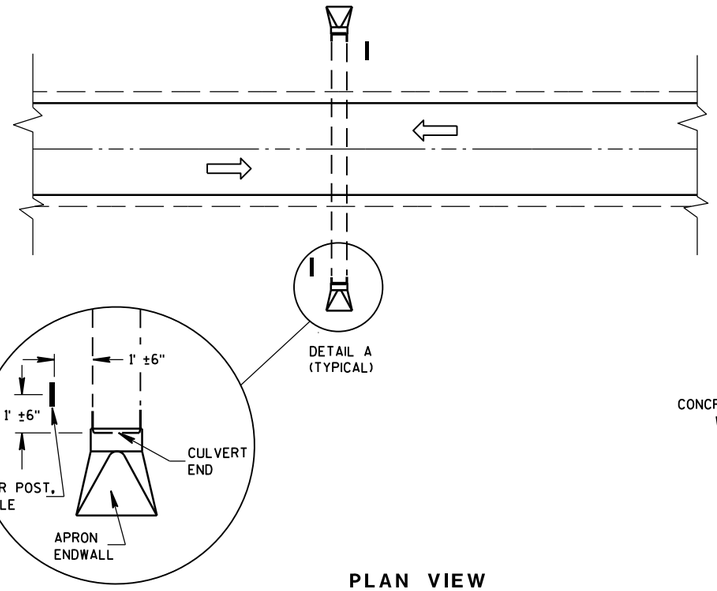
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

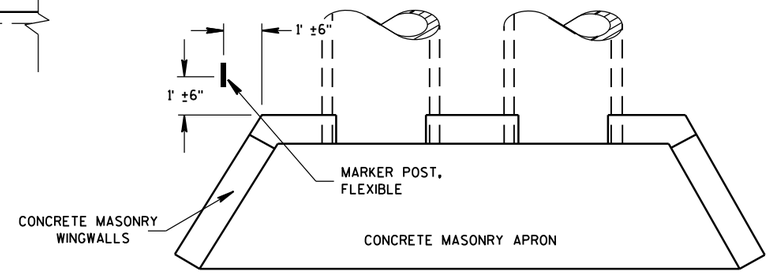
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

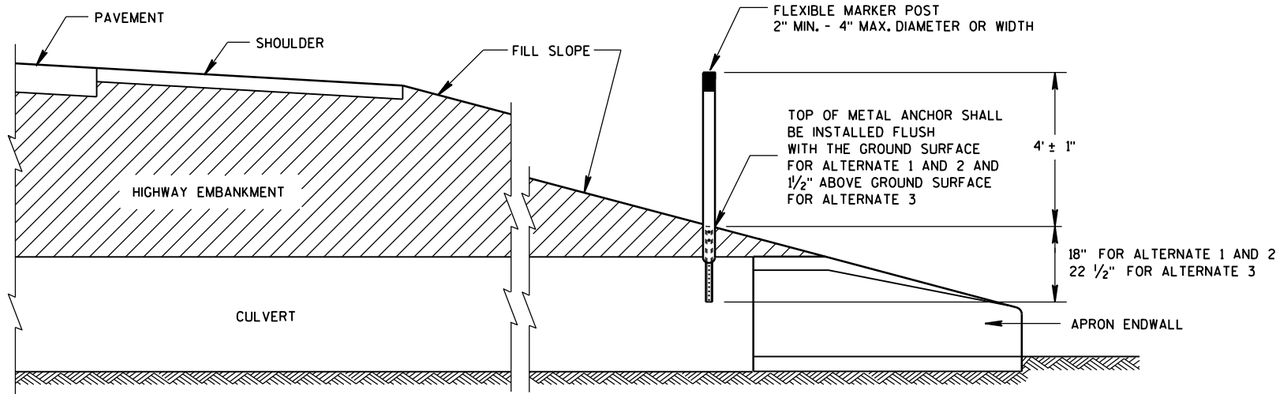
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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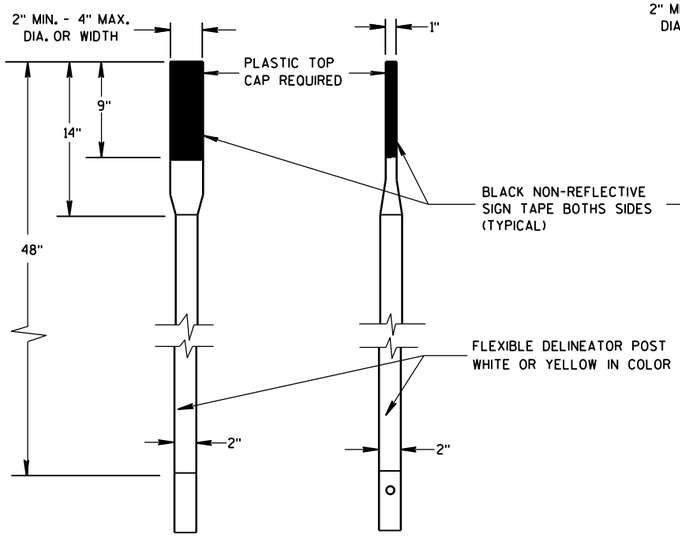
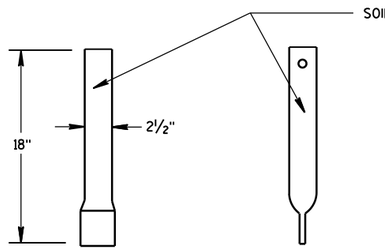
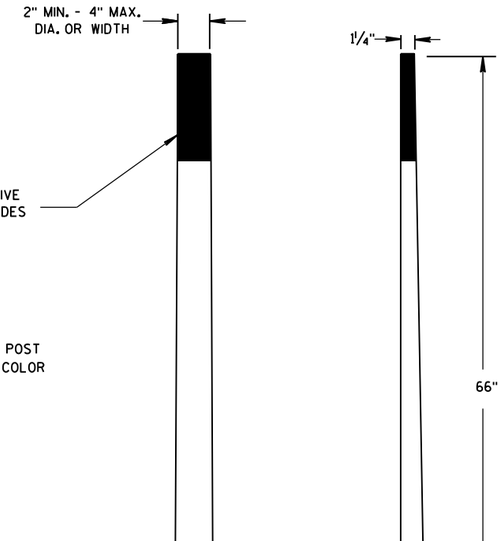
S.D.D. 15 A 3-2a





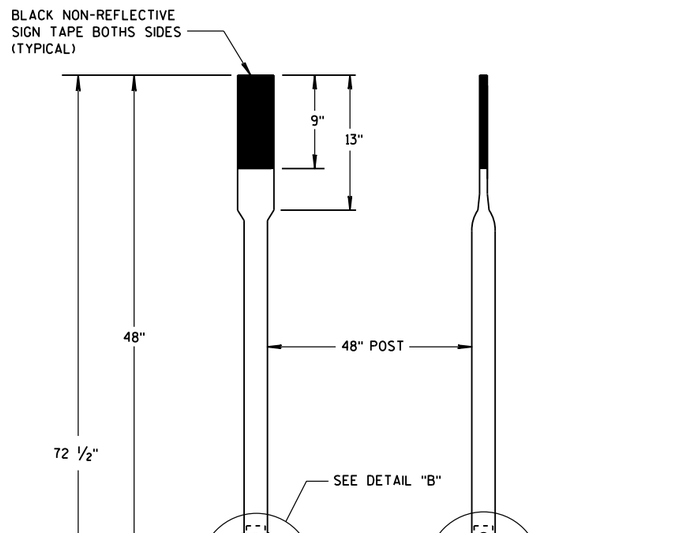
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

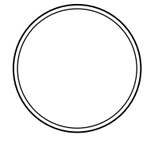
ALTERNATE 2



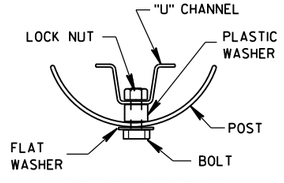
FRONT VIEW SIDE VIEW

ALTERNATE 3

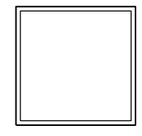
FLEXIBLE MARKER POSTS



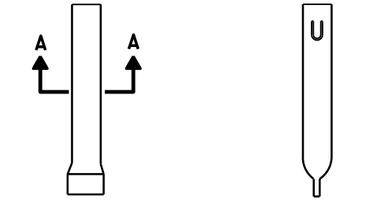
SECTION A-A



SECTION B-B

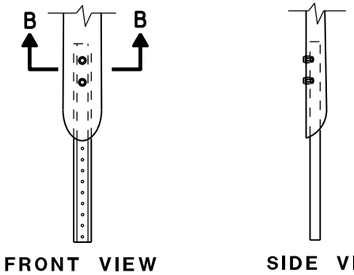


SECTION C-C



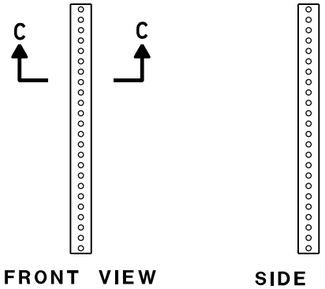
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

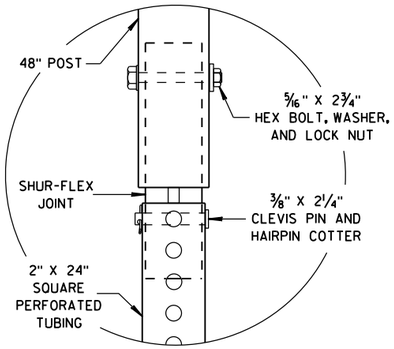
ALTERNATE 2



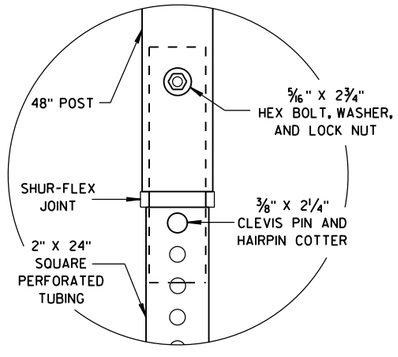
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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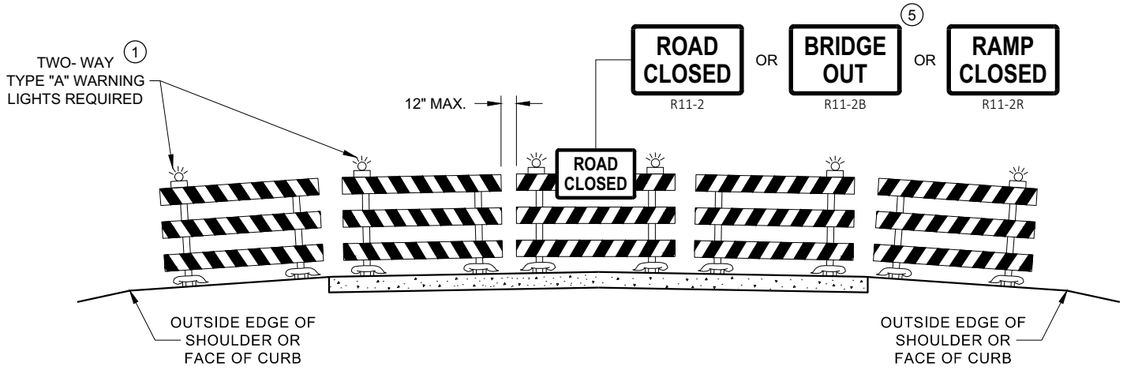
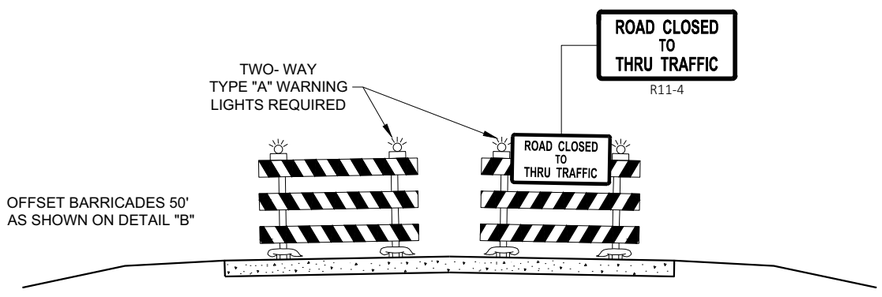
S.D.D. 15 A 3-2b



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 15C02 - 08b

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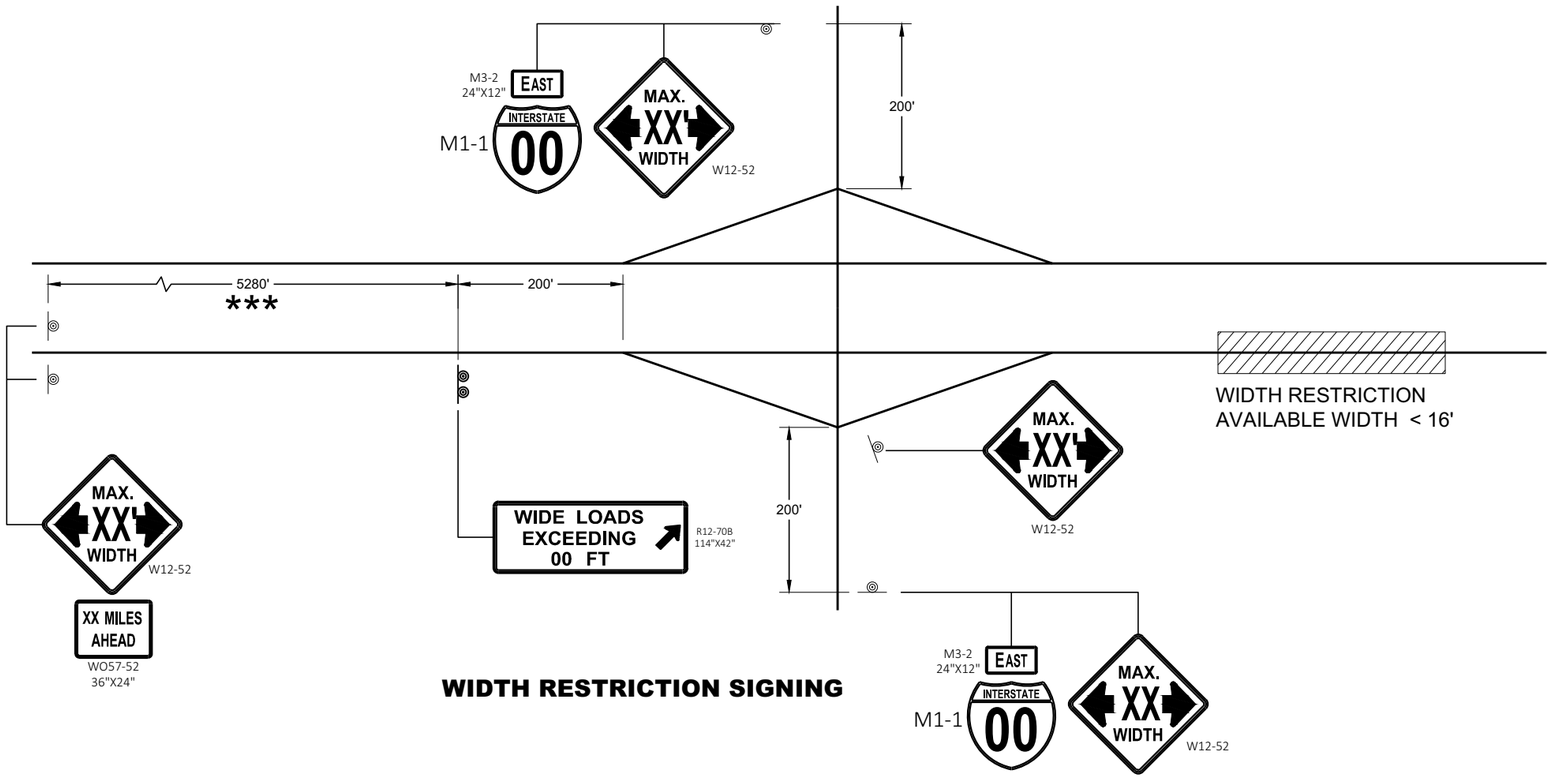
SDD 15C02 - 08b



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.

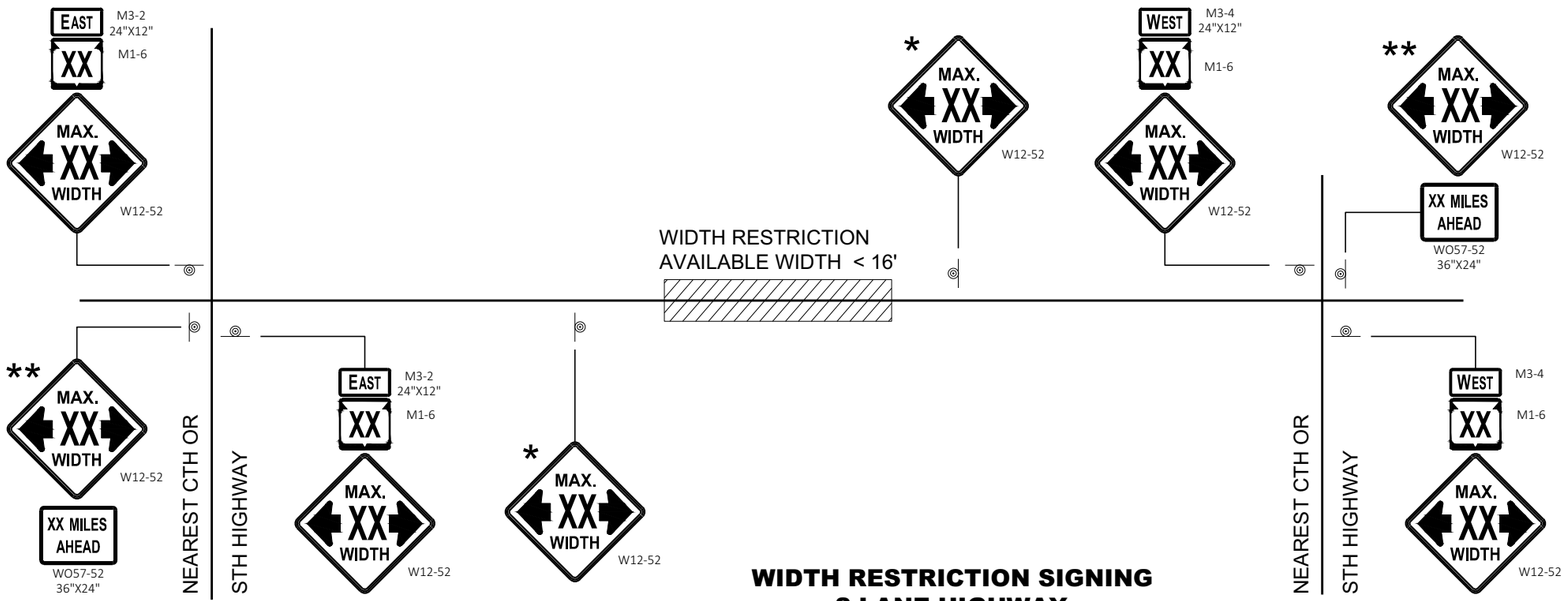
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER 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
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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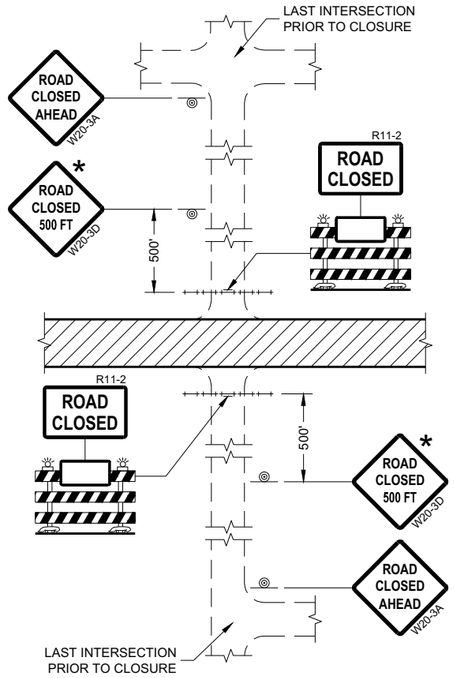
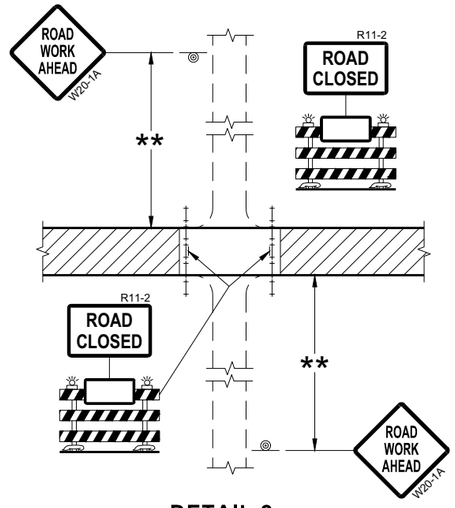
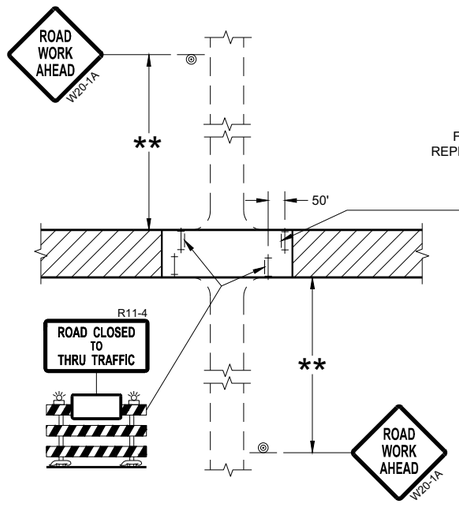
SDD 15C02 - 08f



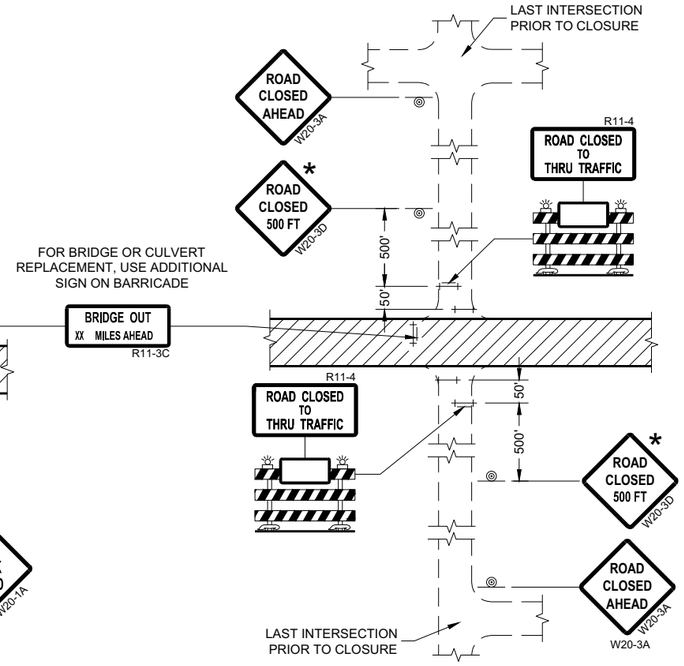
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

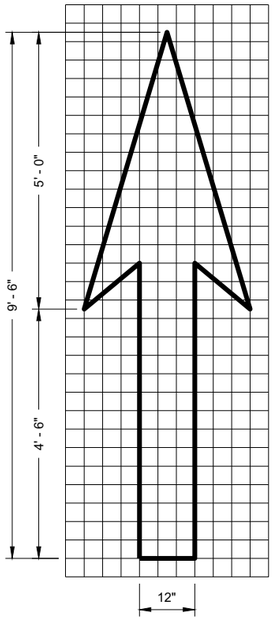
SDD 15C03 - 05

6

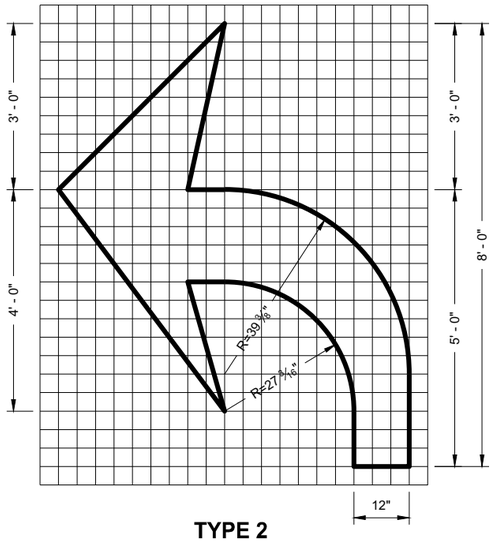
SDD 15C03 - 05

GENERAL NOTES

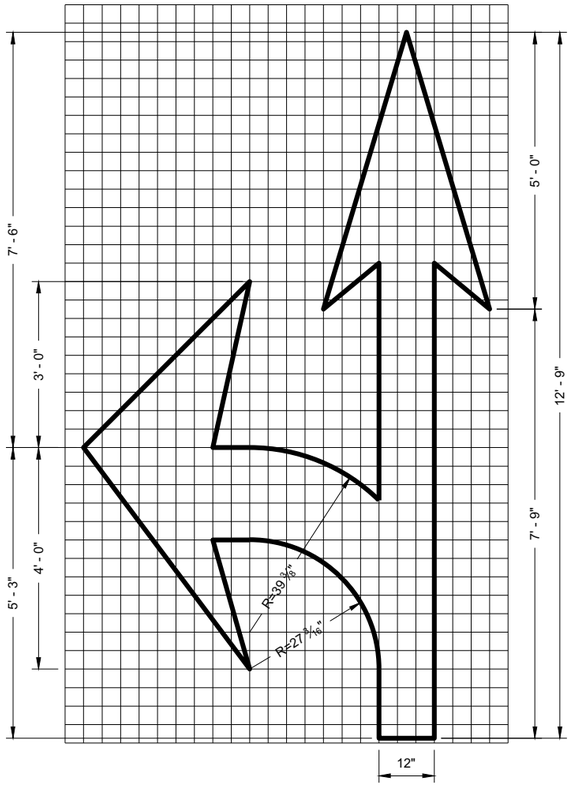
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 1



TYPE 2



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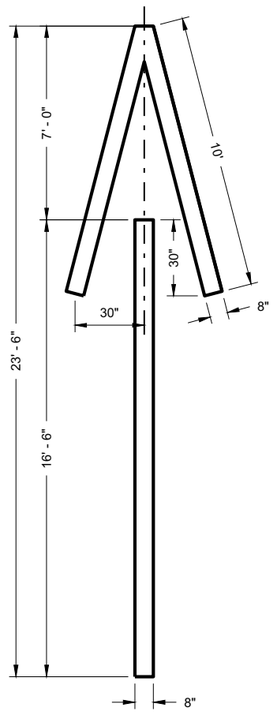

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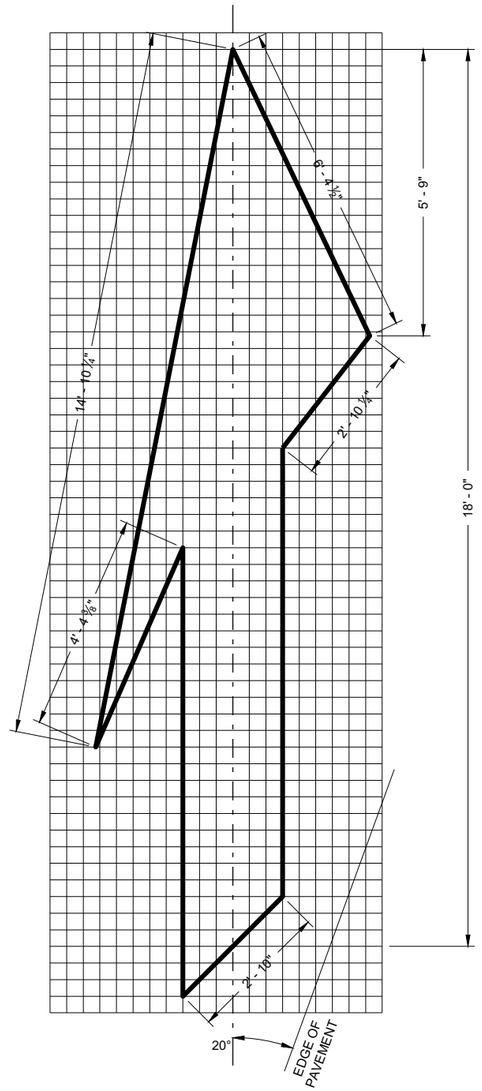
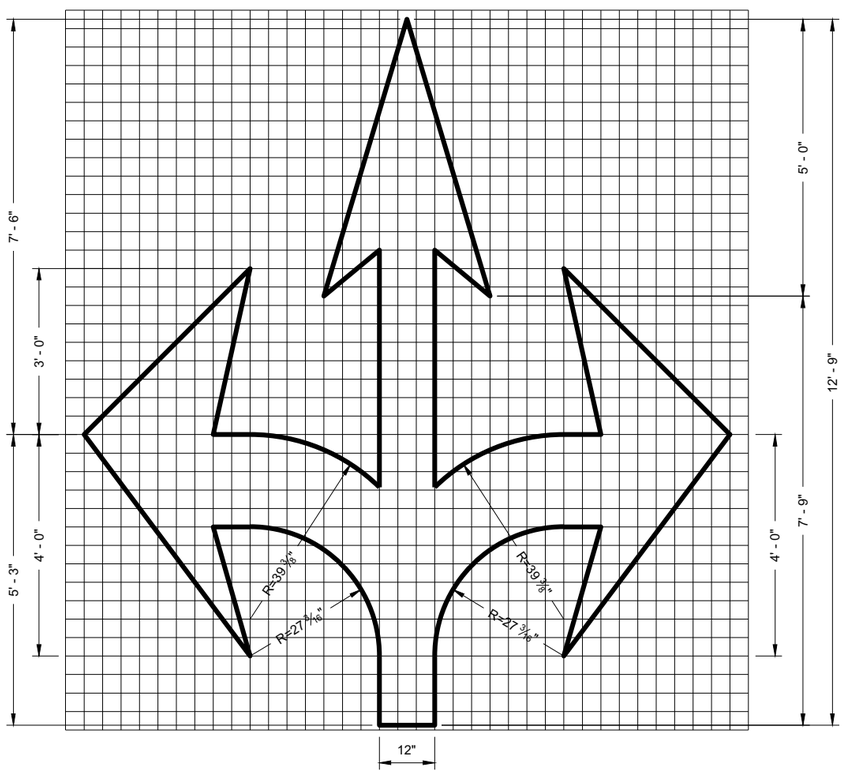
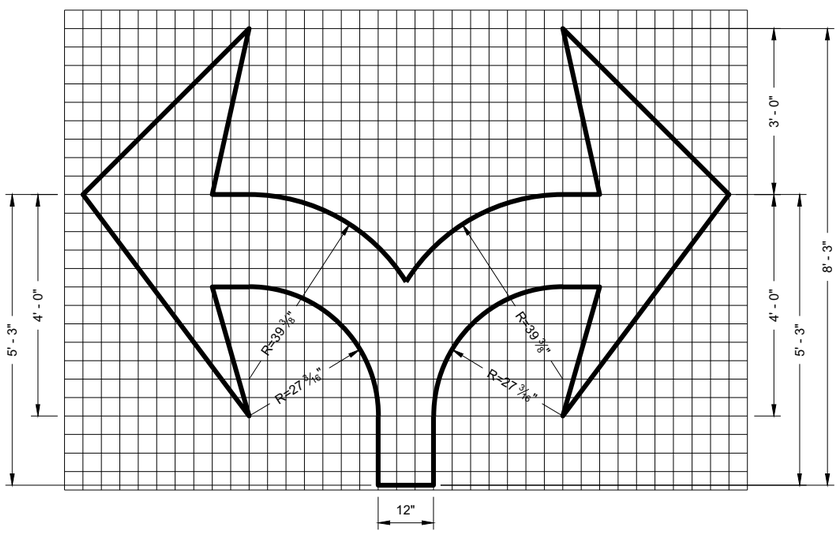


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

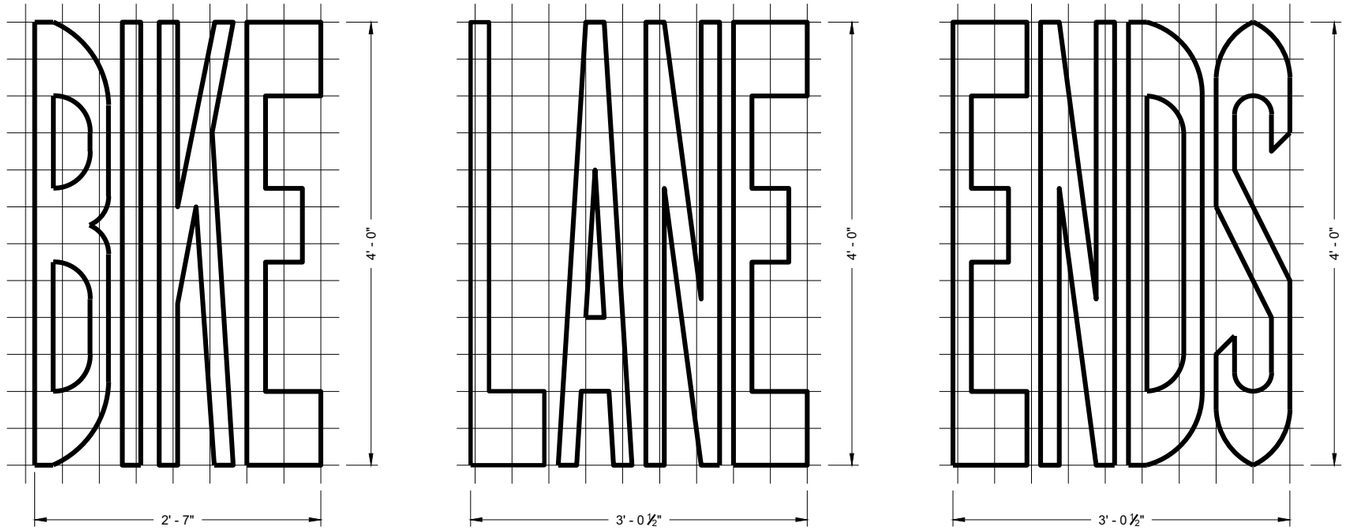
6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

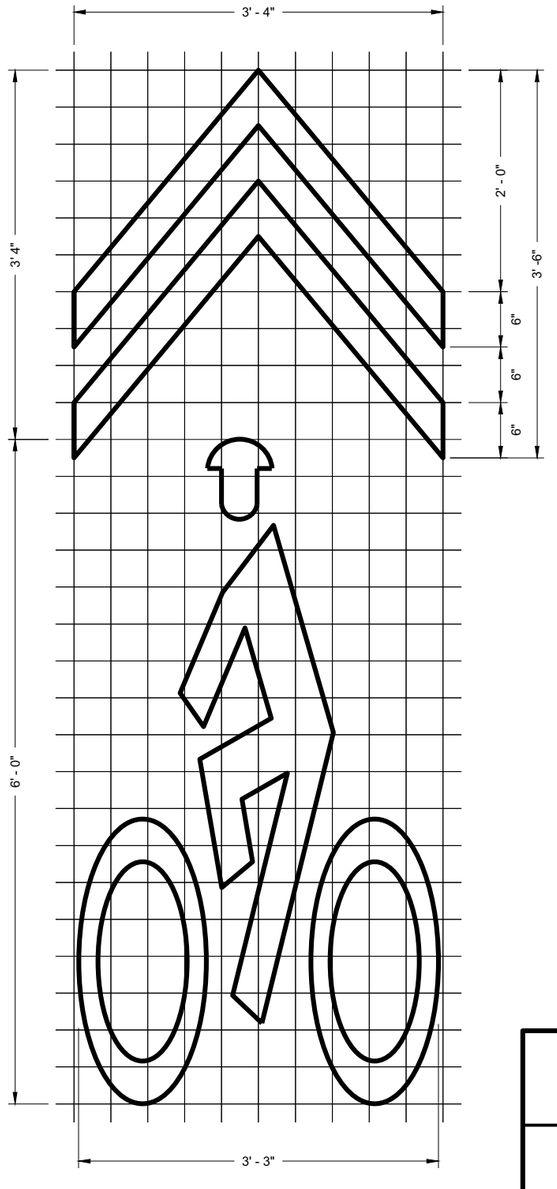
SDD 15C7-e Pavement Marking For Bike Lanes

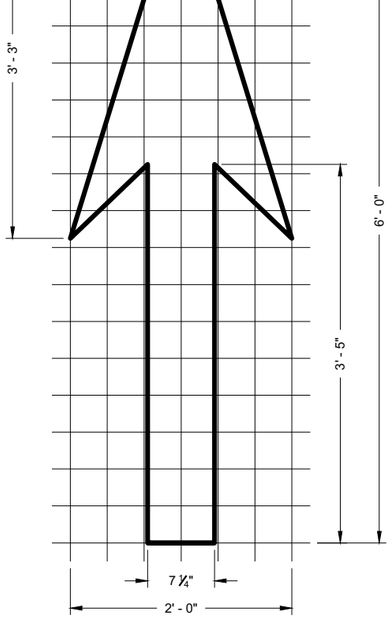


BIKE LANE WORDS

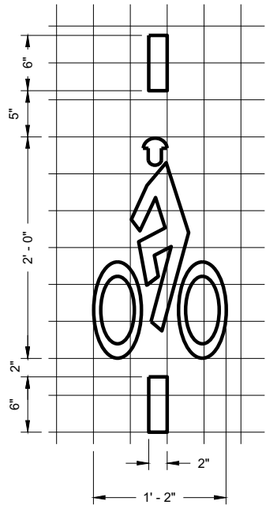
GENERAL NOTES

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.

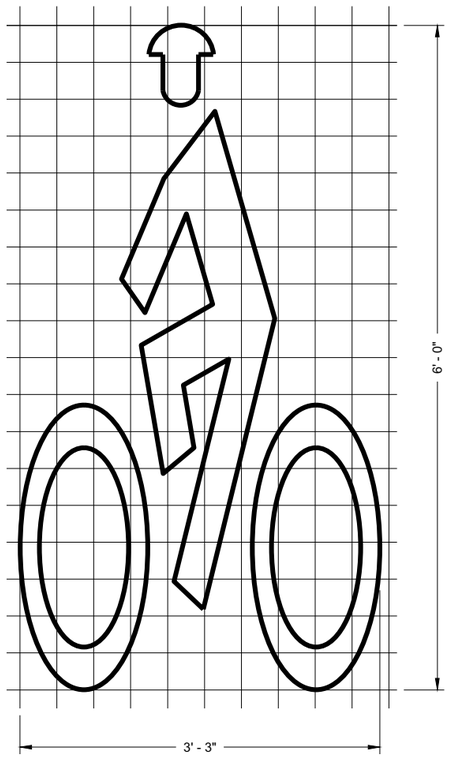




BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

BIKE LANE SYMBOL FOR SHARED LANE

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

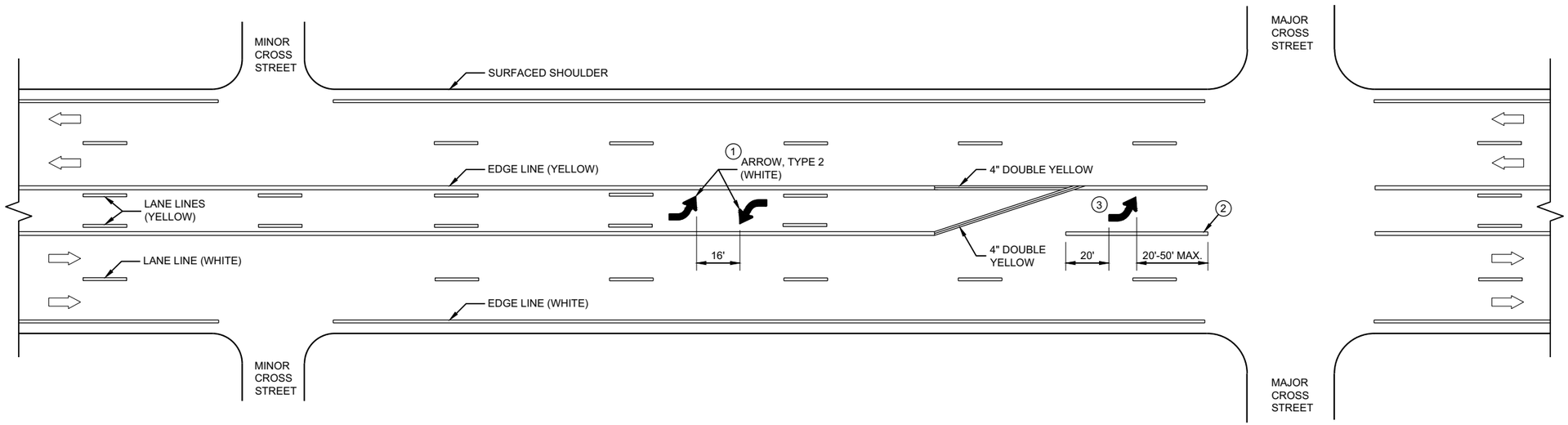
6

SDD15C07 - 15e

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

6

SDD 15C08 - 20b

SDD 15C08 - 20b

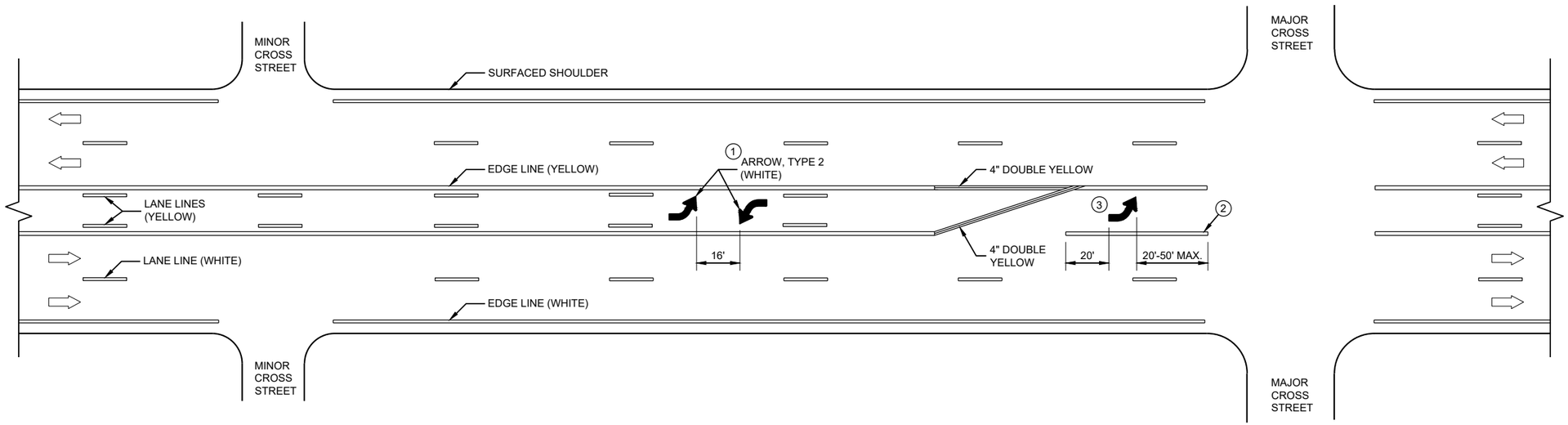
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

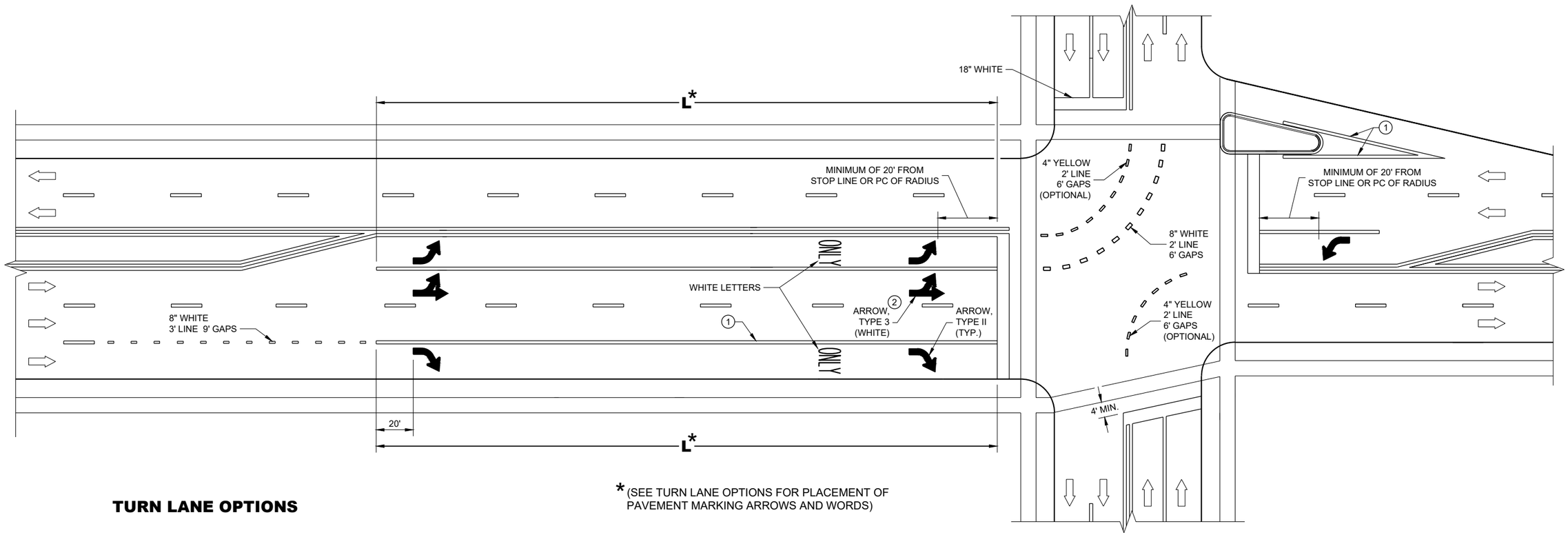
SDD 15C08 - 21c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

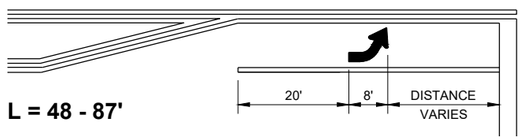
SDD 15C08 - 21c



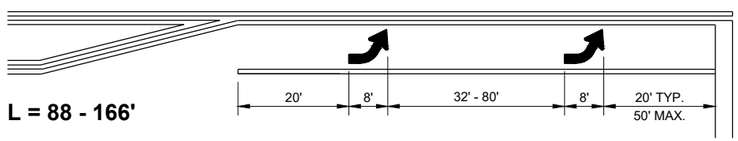
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

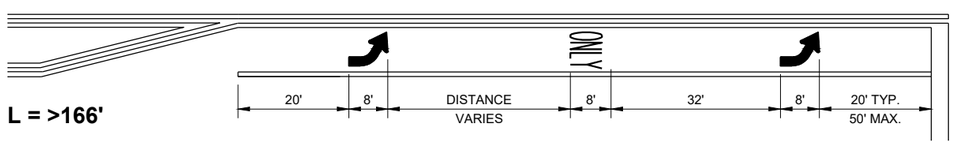
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

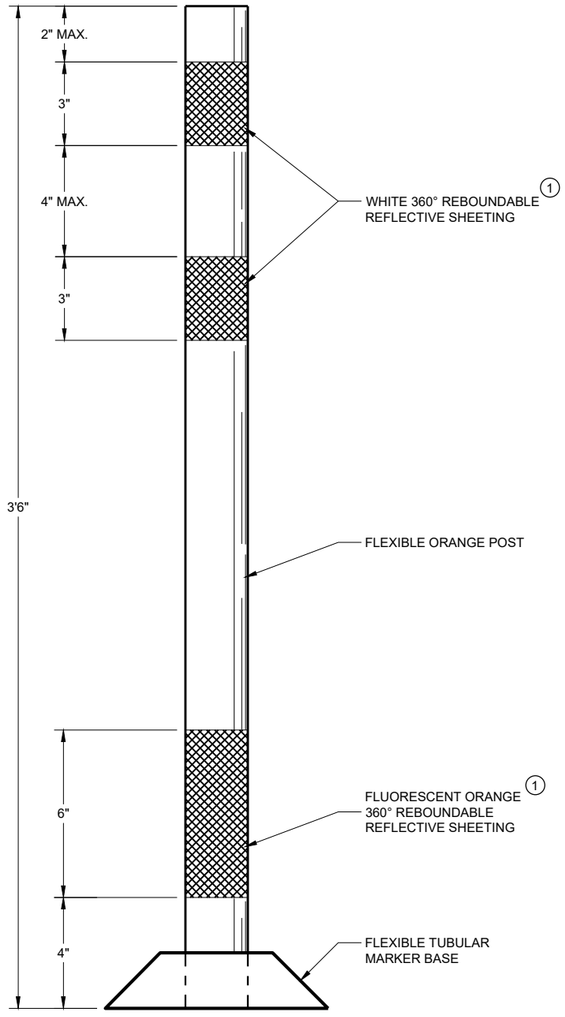
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 21d



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.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

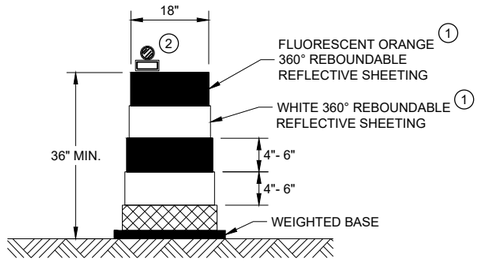
SDD 15C11 - 09a

SDD 15C11 - 09a

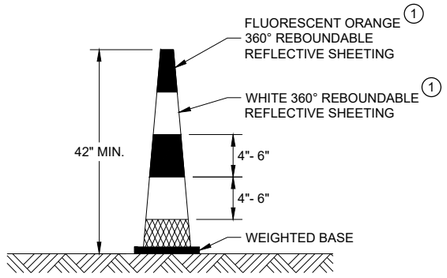
GENERAL NOTES

(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.

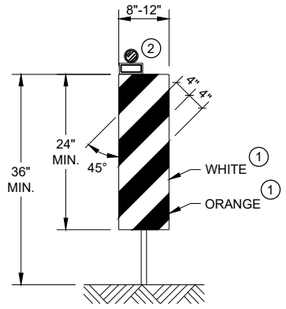


DRUM



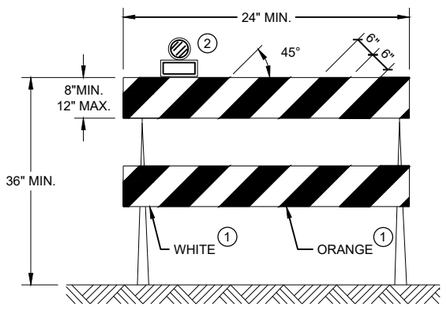
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



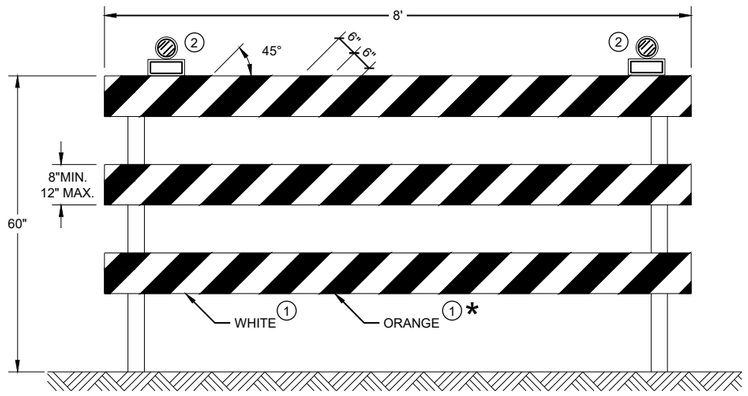
VERTICAL PANEL

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
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

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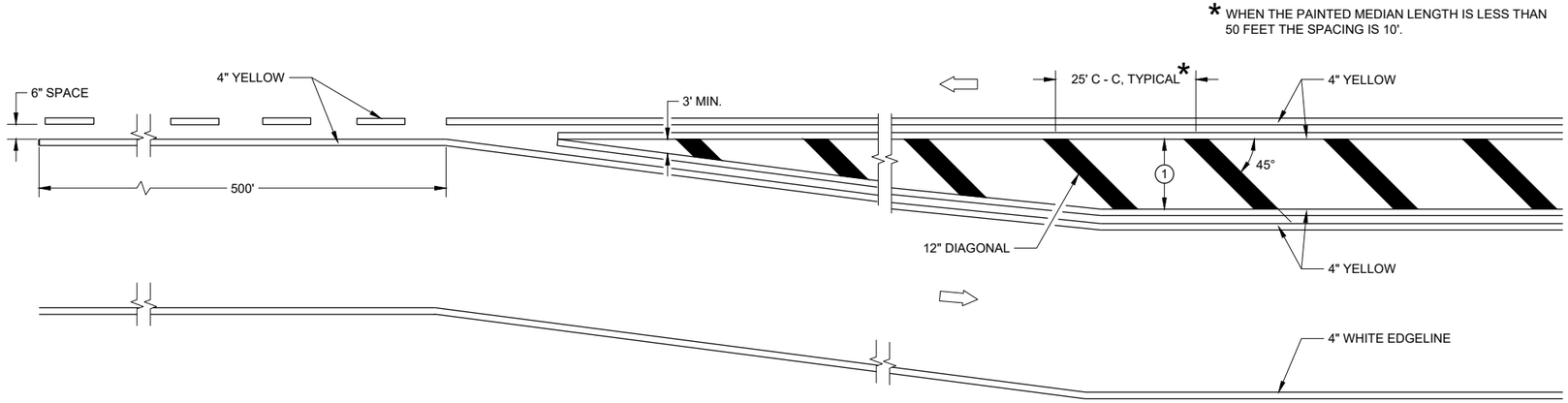
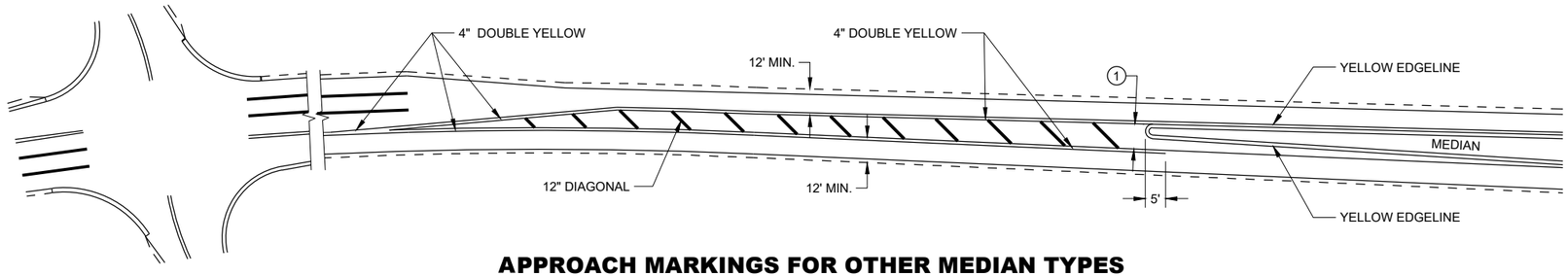
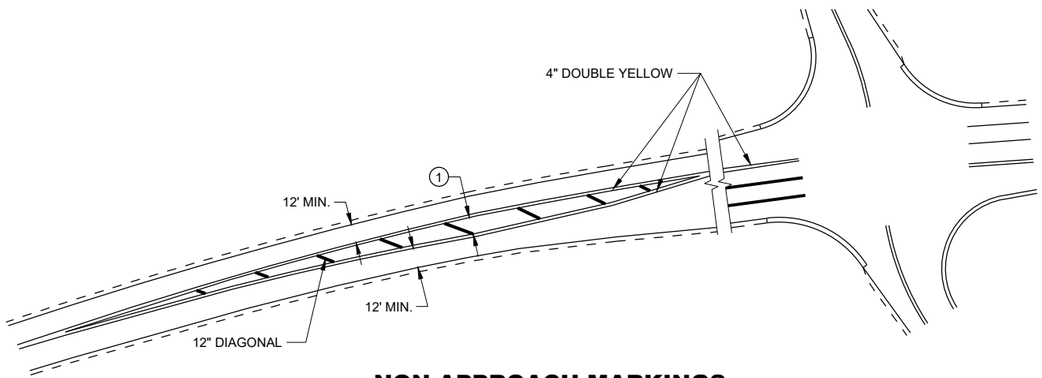
SDD 15C11 - 09b



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

⇨ DIRECTION OF TRAVEL

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

6

SDD 15C18 - 06a

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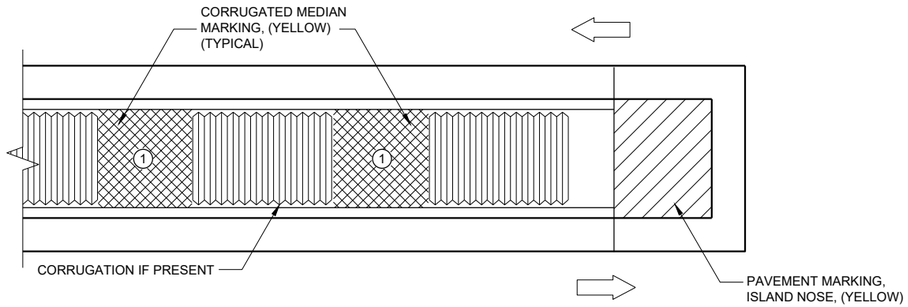
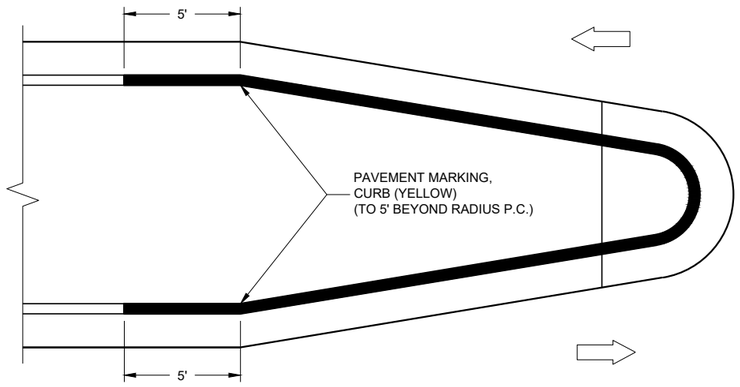
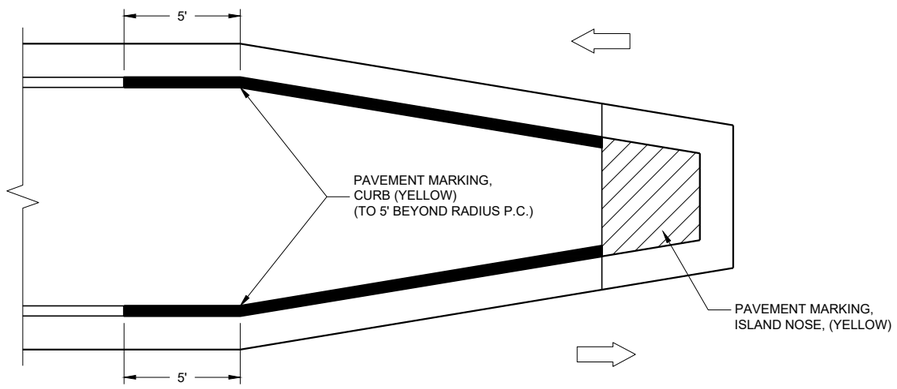
SDD 15C18 - 06a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

6

6

SDD 15C18 - 06b

SDD15C18 - 06b

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

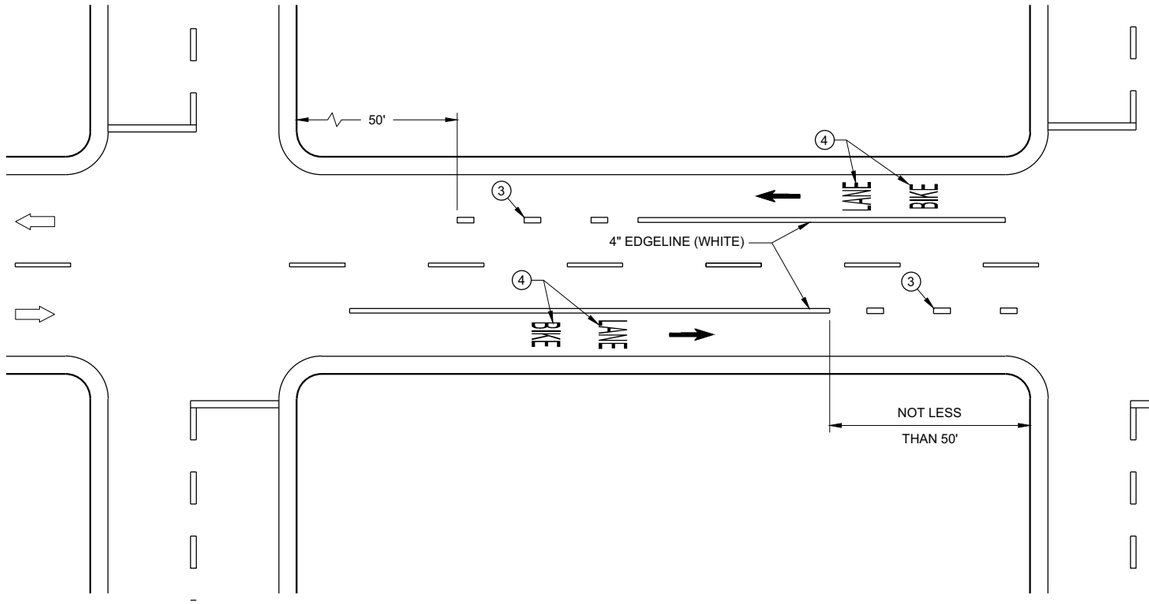
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

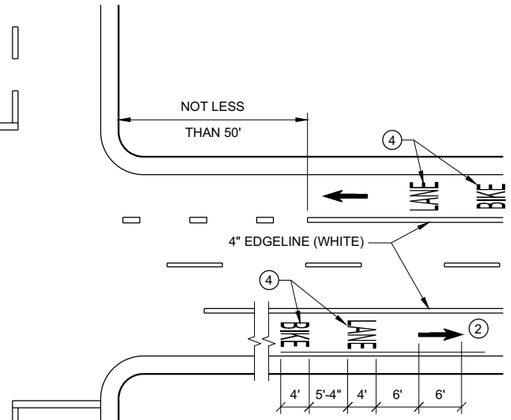
APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR ENGINEER

FHWA



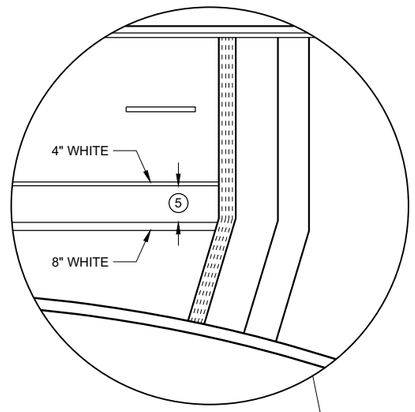


GENERAL NOTES

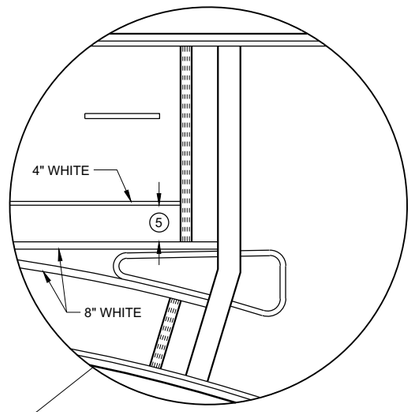
1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

DIRECTION OF TRAVEL

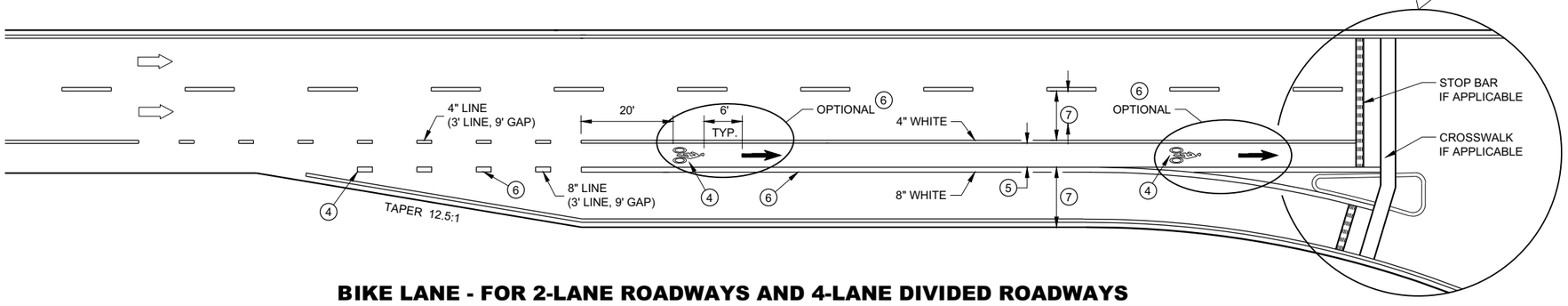
DESIGNATED BIKE LANE - NO PARKING



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

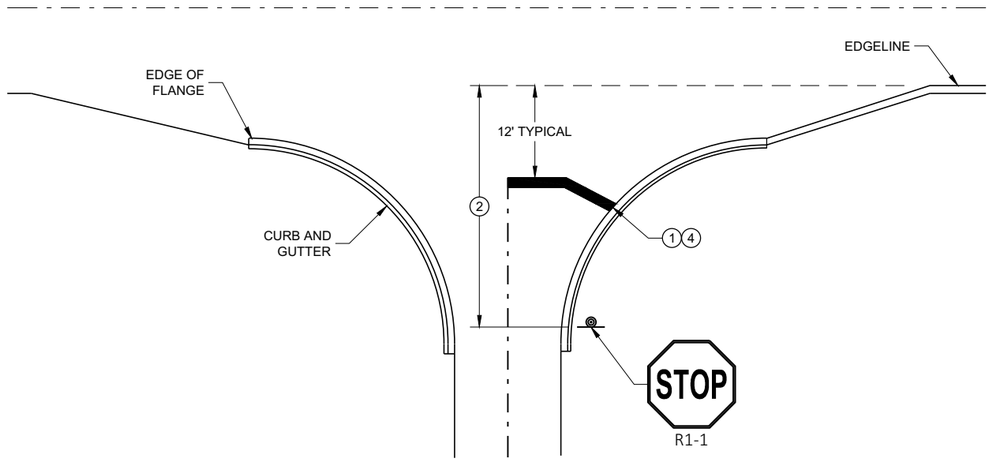
SDD 15C29 - 07a

SDD 15C29 - 07a

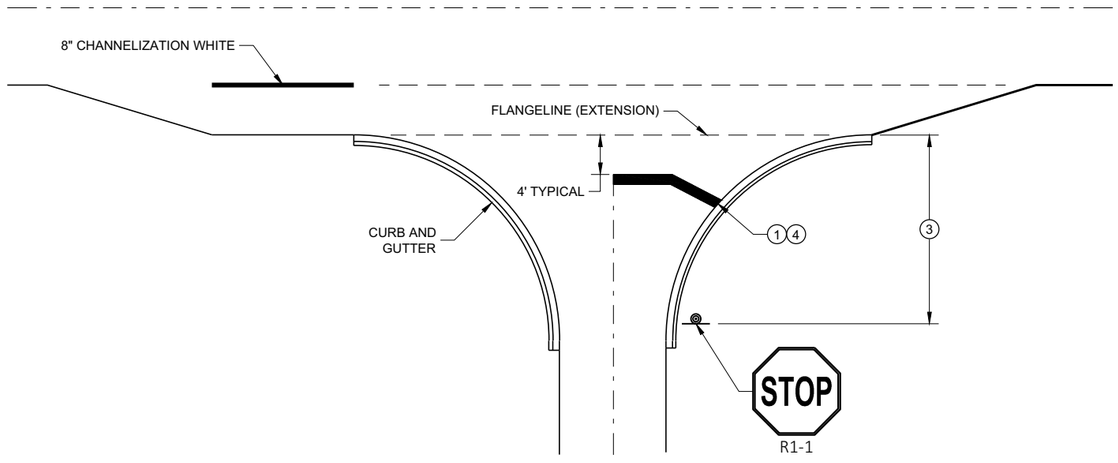
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

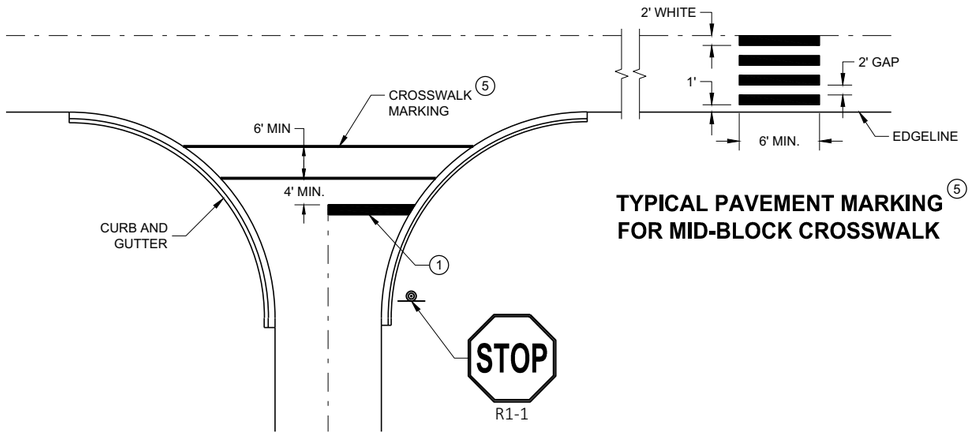
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

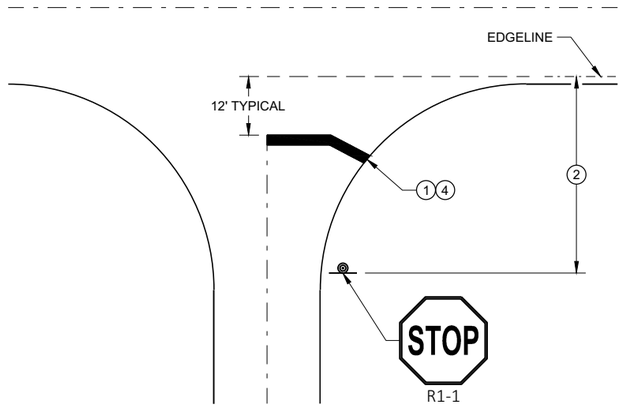


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

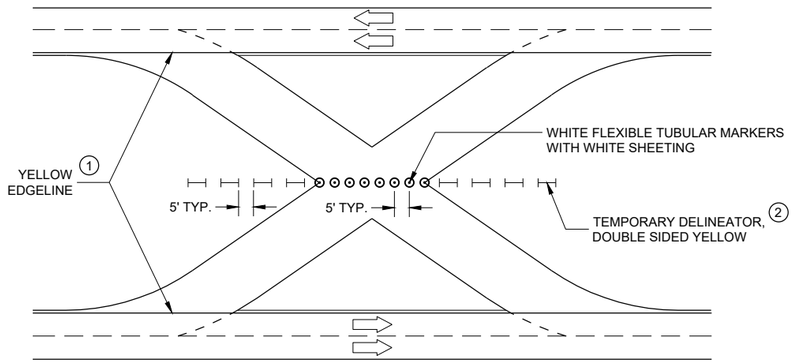
SDD 15C33 - 04

6

SDD 15C33 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

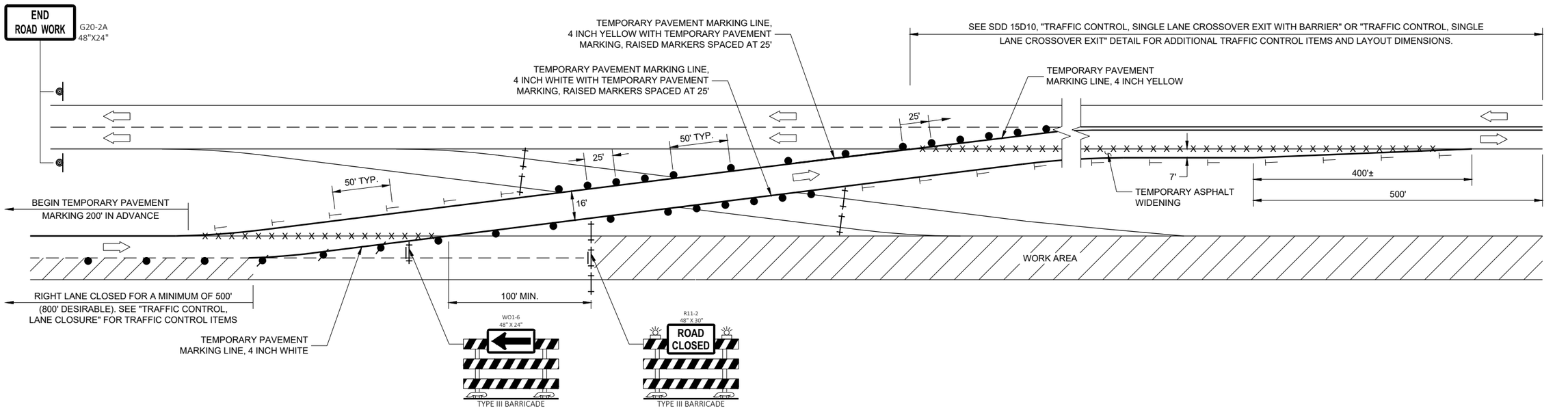
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

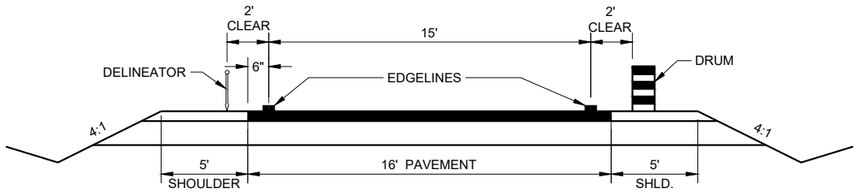
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

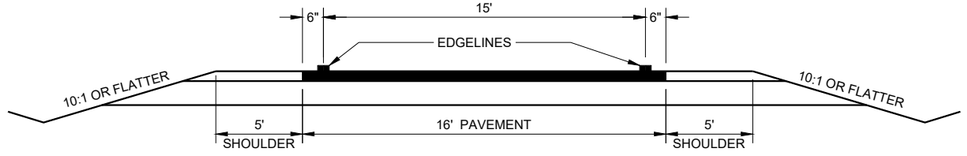
(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D11 - 08

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

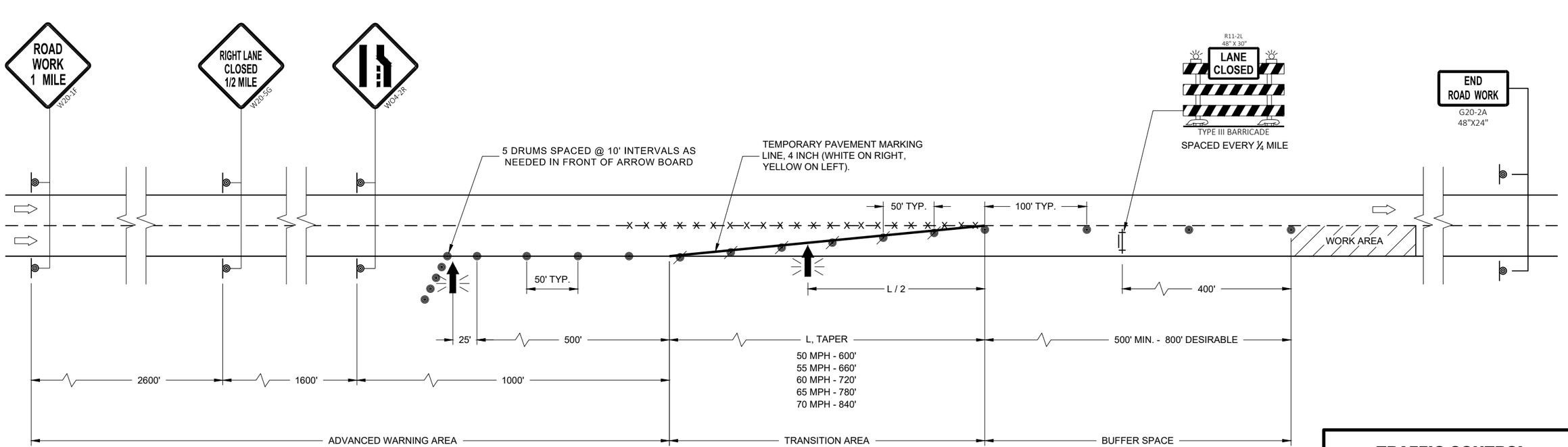
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 10a

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GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

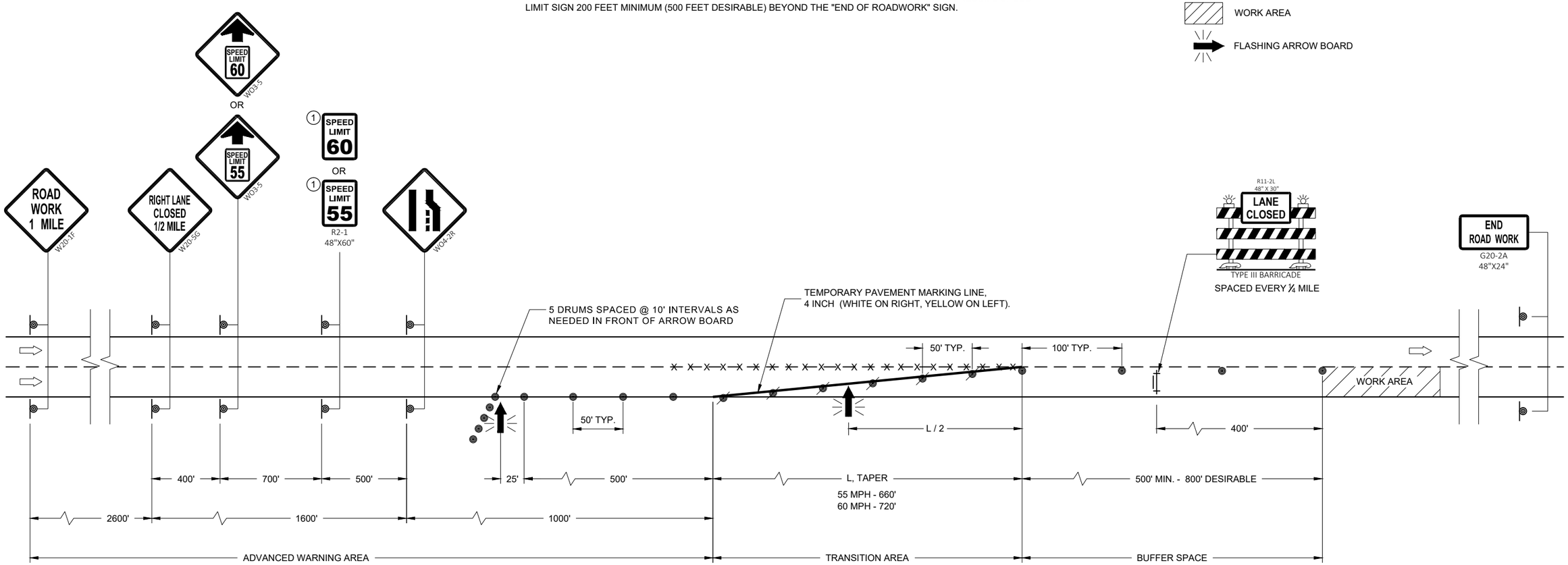
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 10b

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SDD 15D12 - 10b

GENERAL NOTES

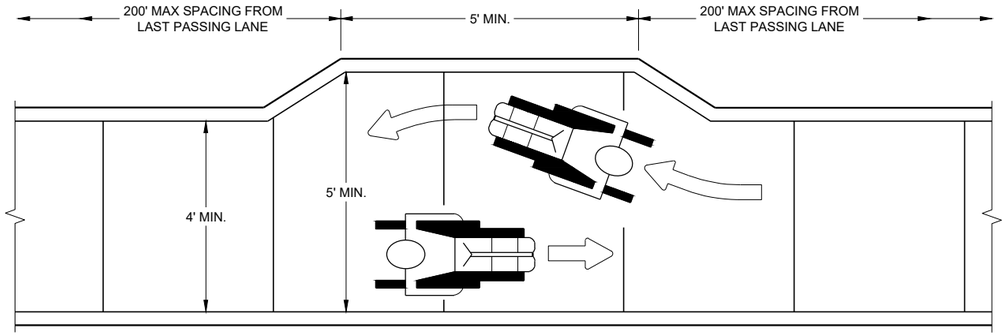
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

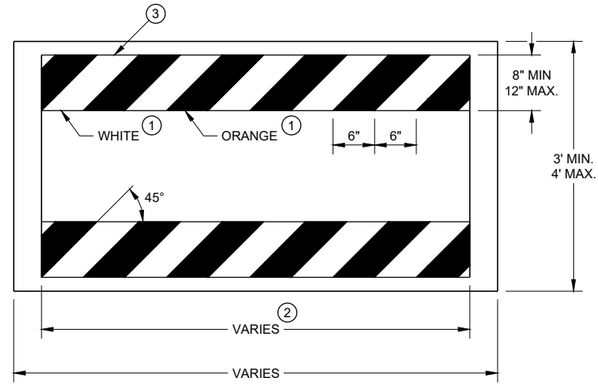
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

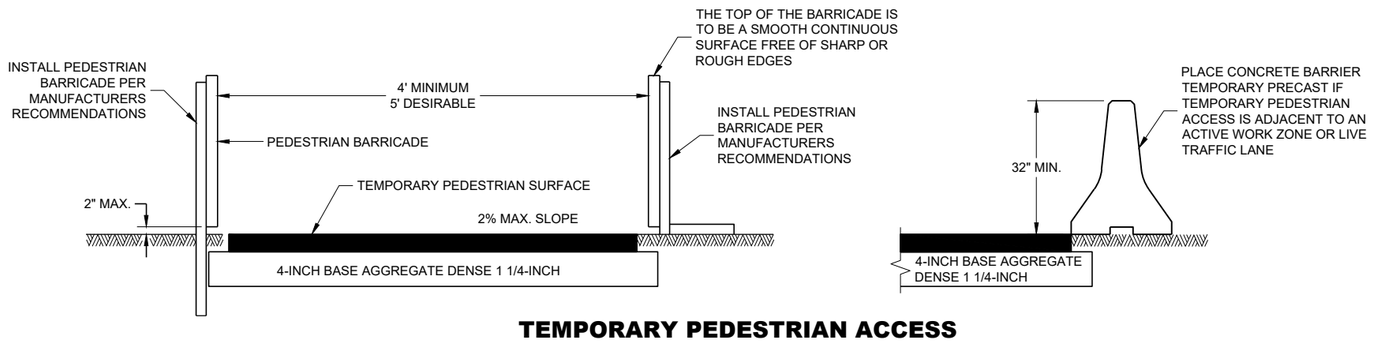
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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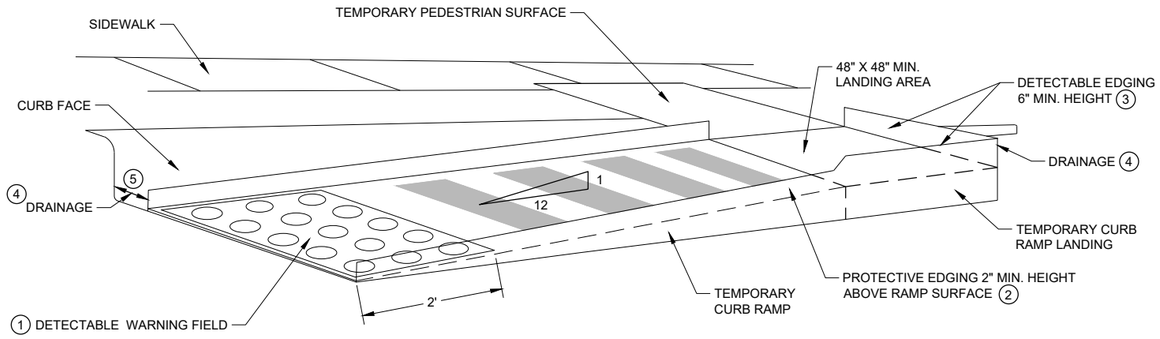
SDD 15D30 - 07a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

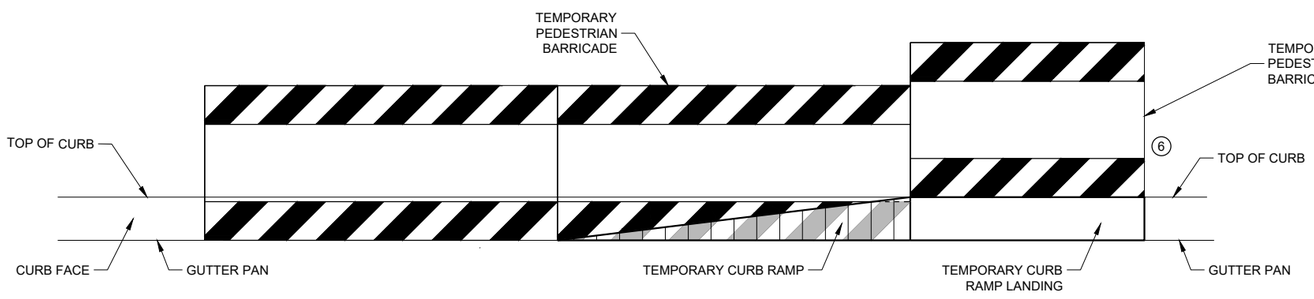
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

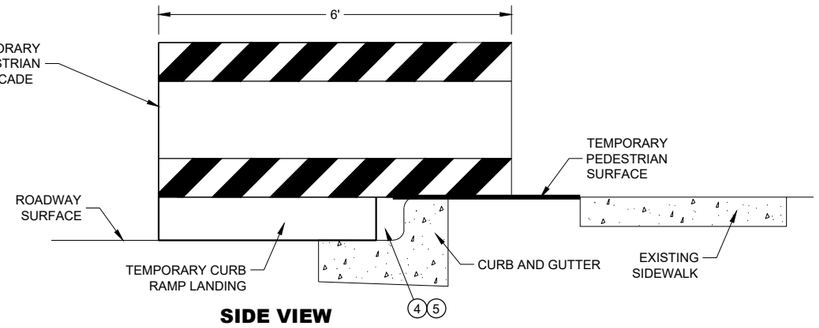
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) 6" MINIMUM BETWEEN CURB FACE AND EDGE OF RAMP

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30 - 07b

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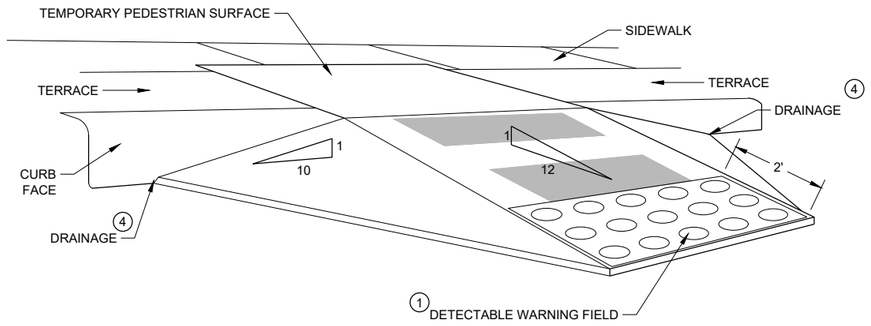
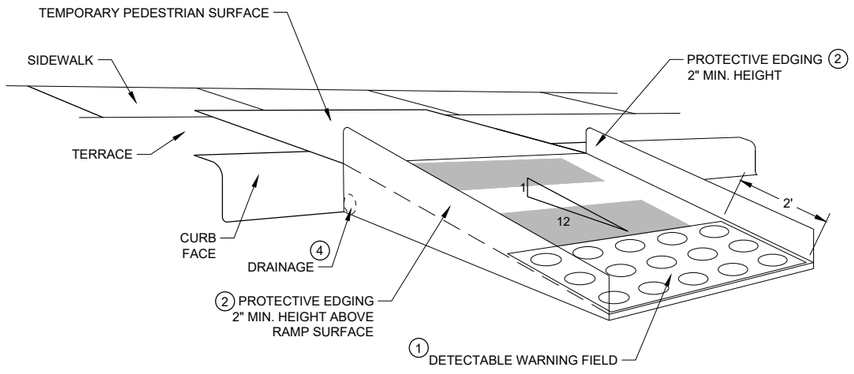


WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

6

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

GENERAL NOTES

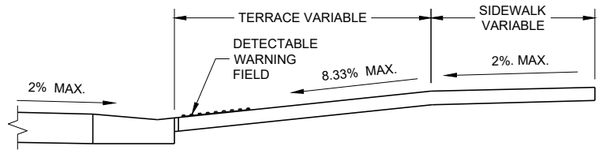
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

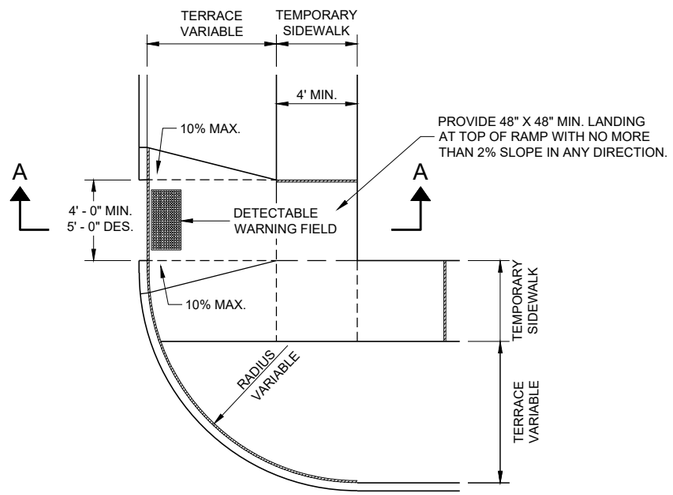
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

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SDD 15D30 - 07d

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TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

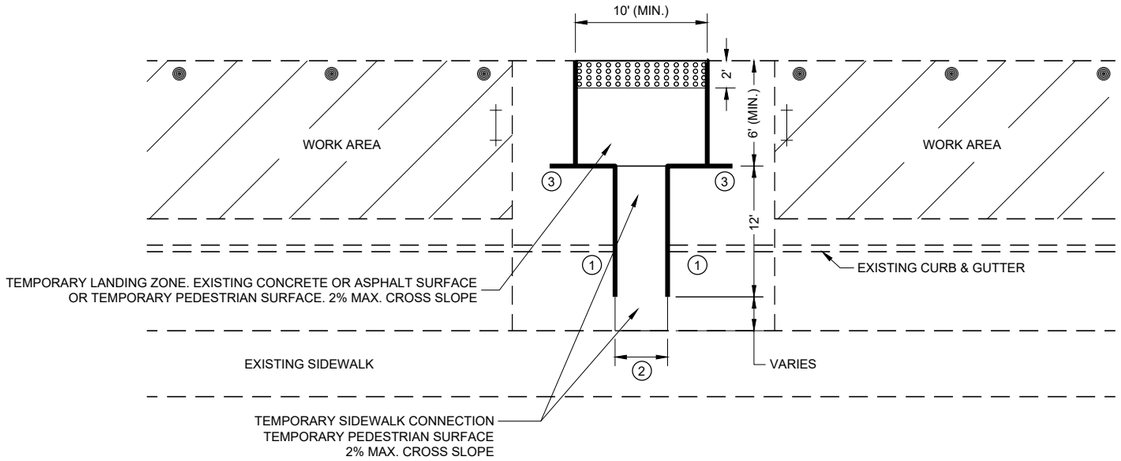
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

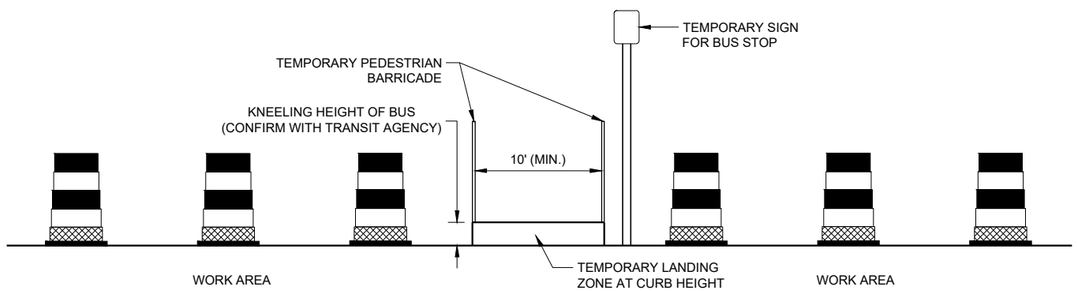
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

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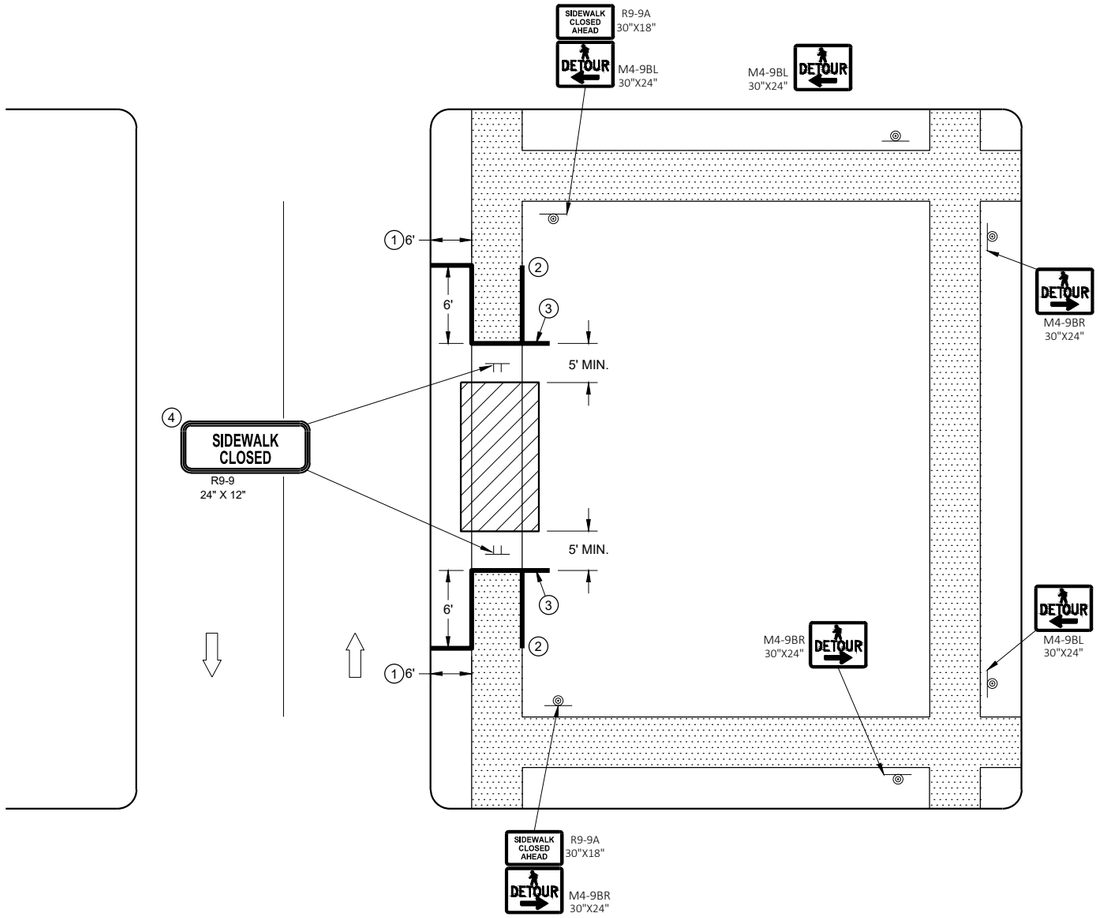
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

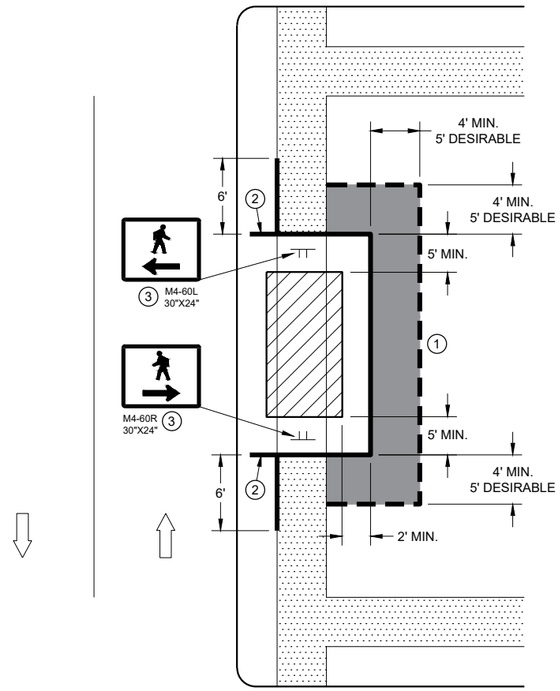
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 07g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD15D30 - 07g

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

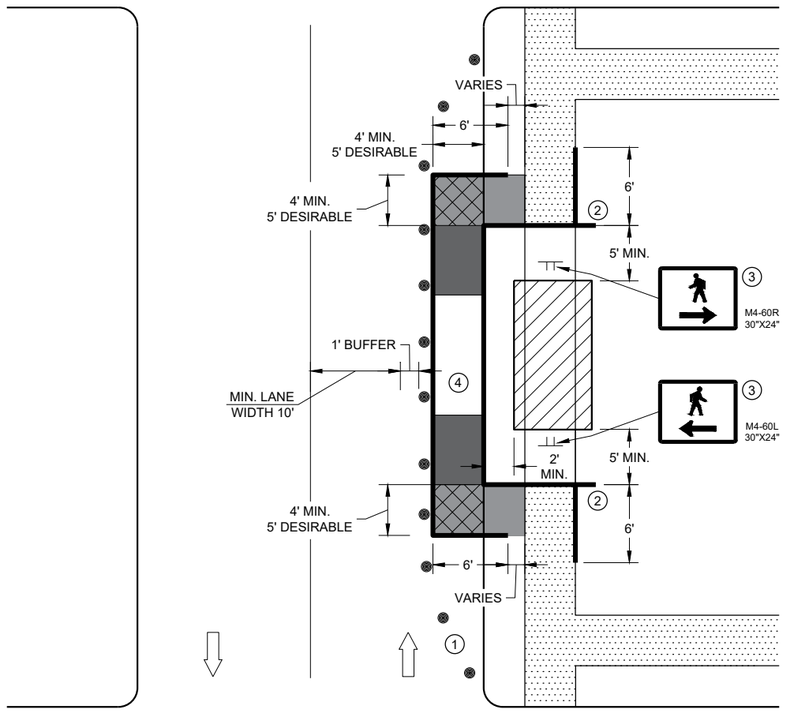
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

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SDD 15D30 - 07h

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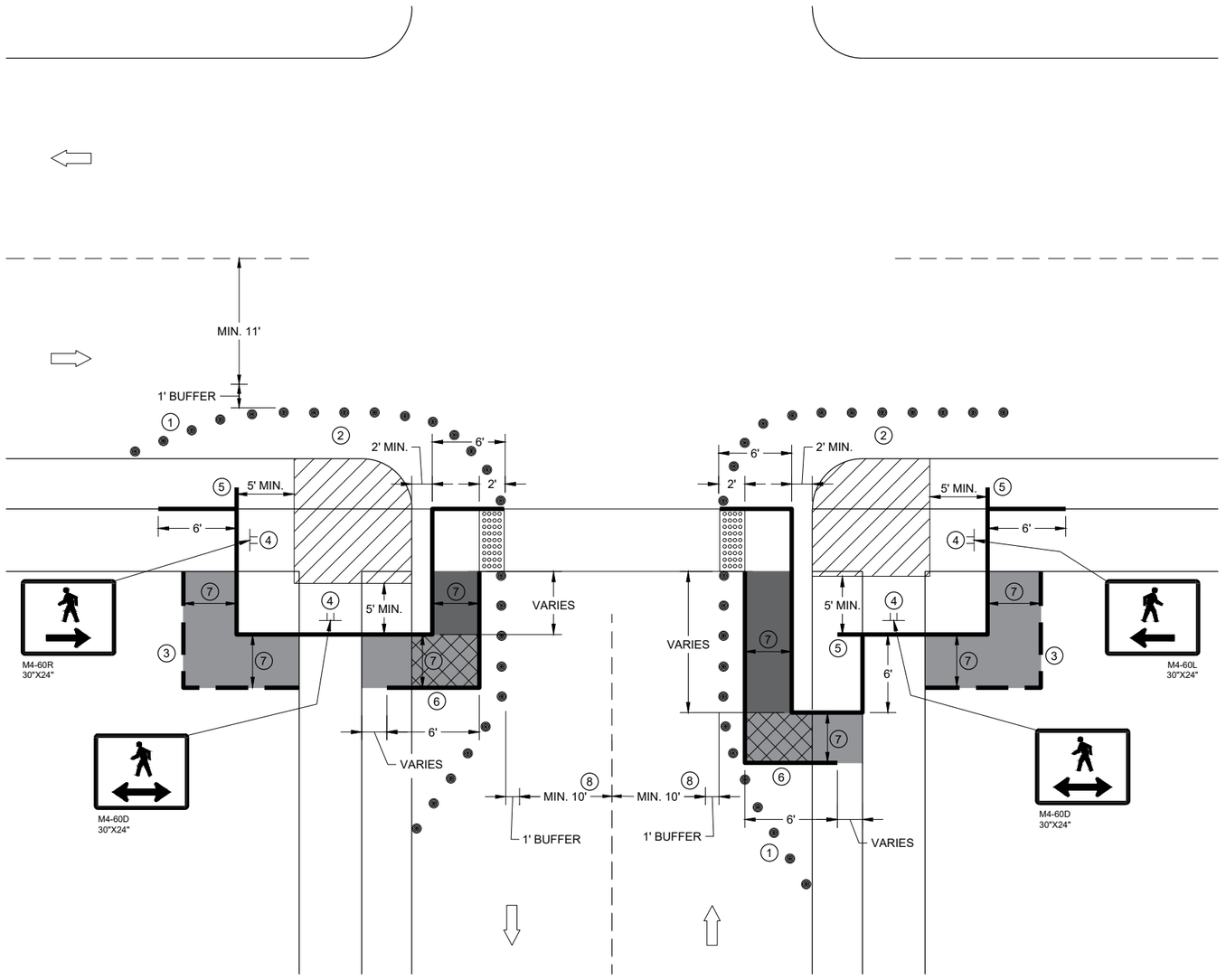
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

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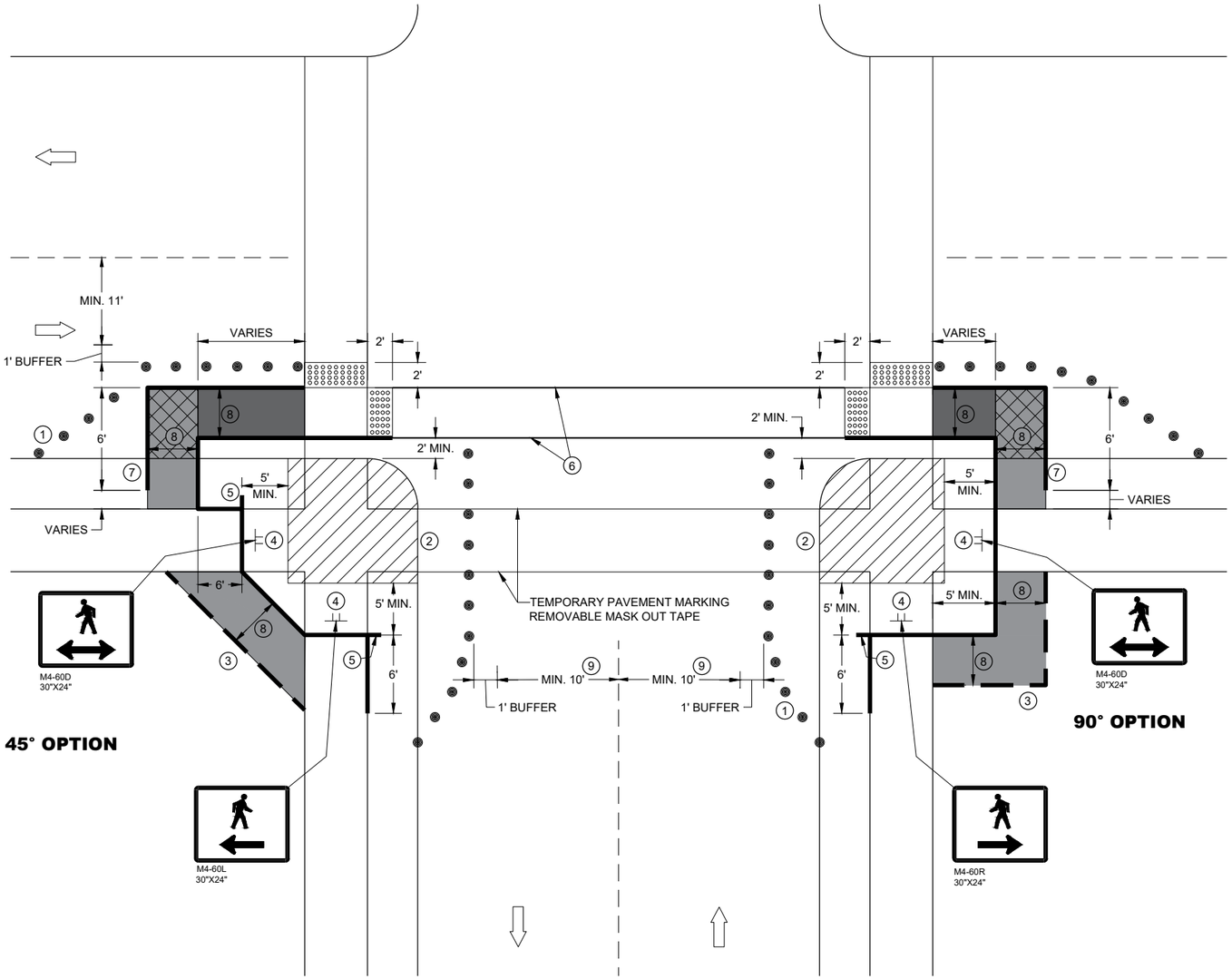


CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

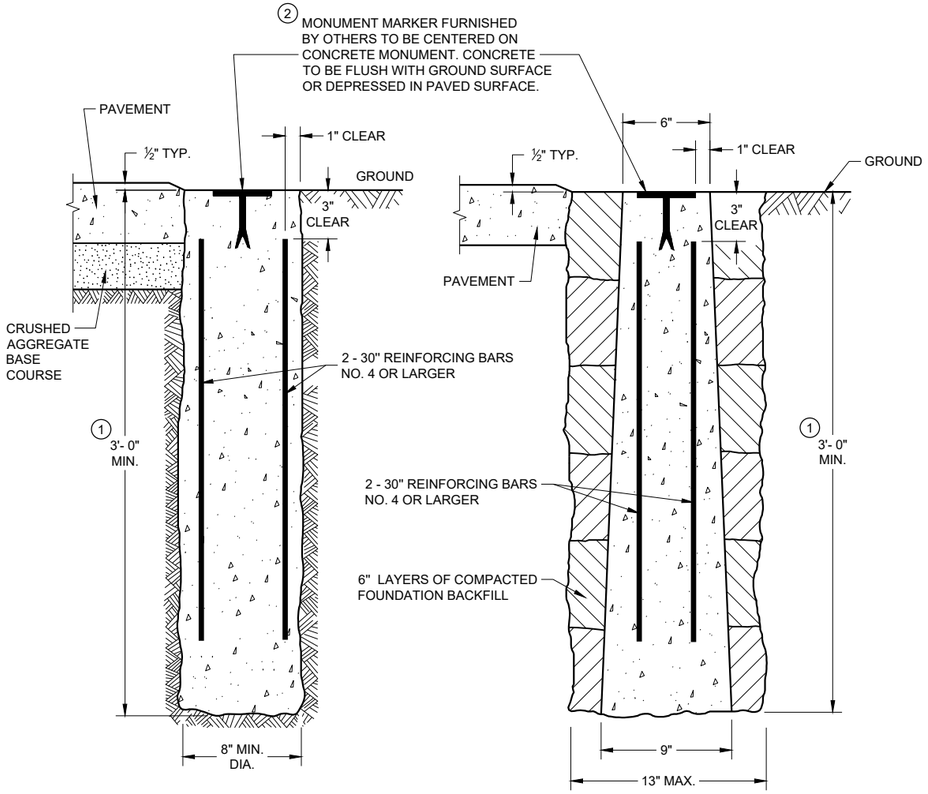
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

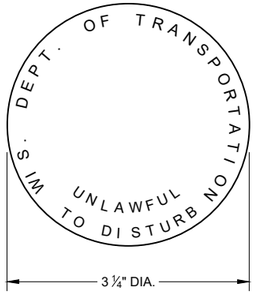
SDD 15D30 - 07j

6



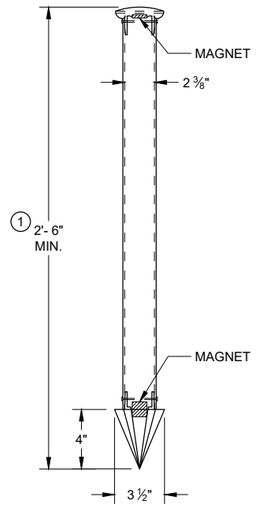
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

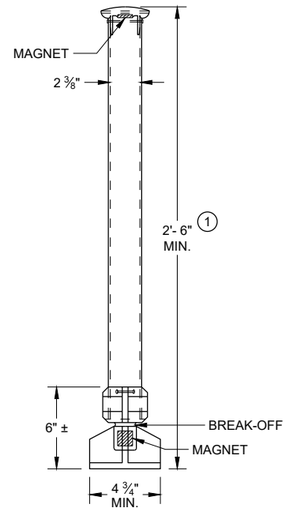


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

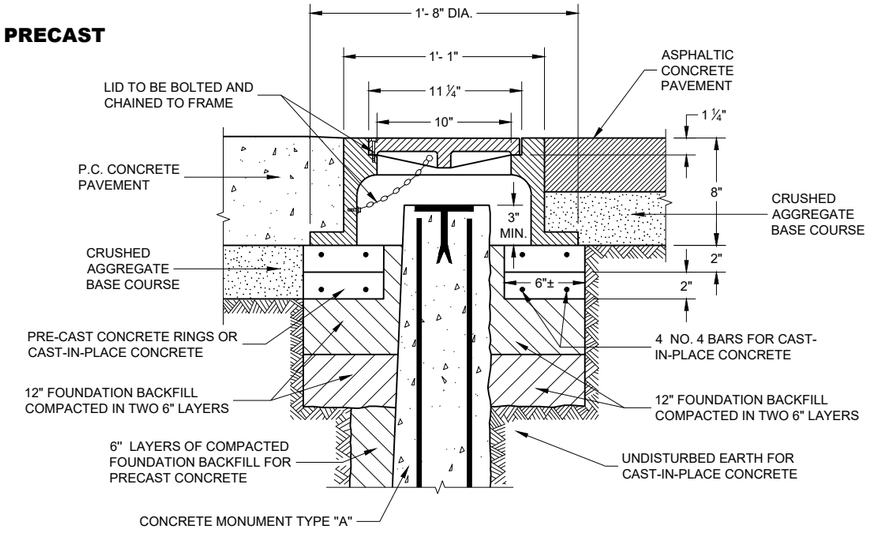


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

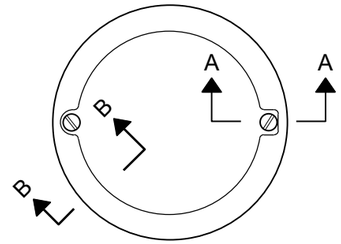
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

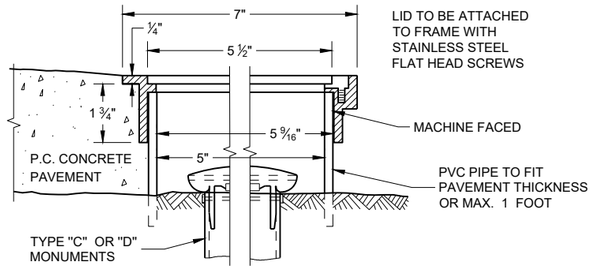
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

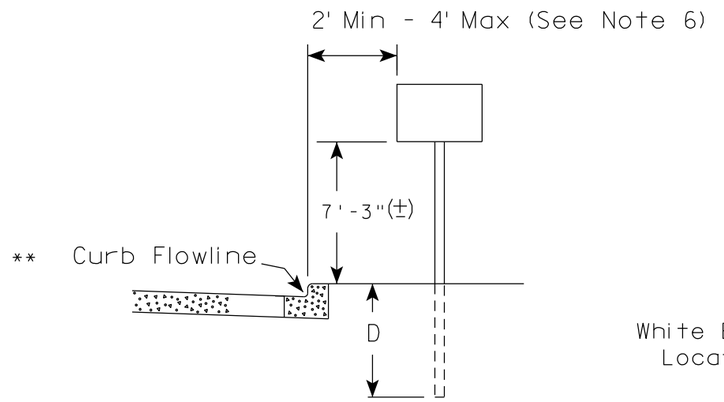
/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MA
ENGINEER

FHWA

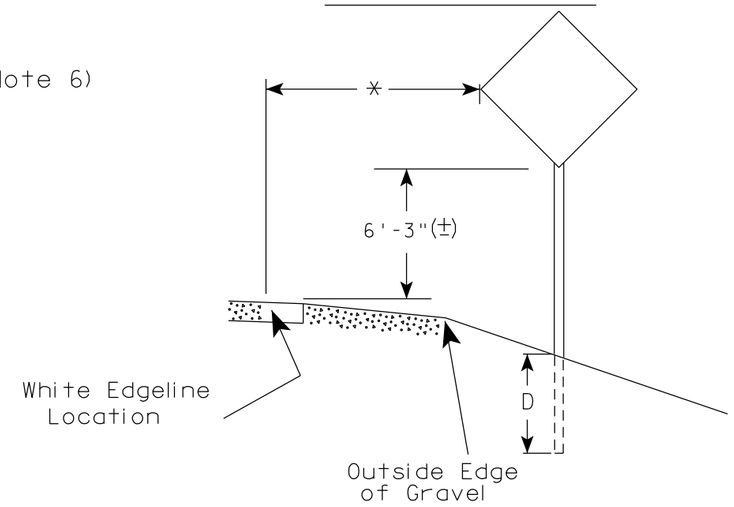
6

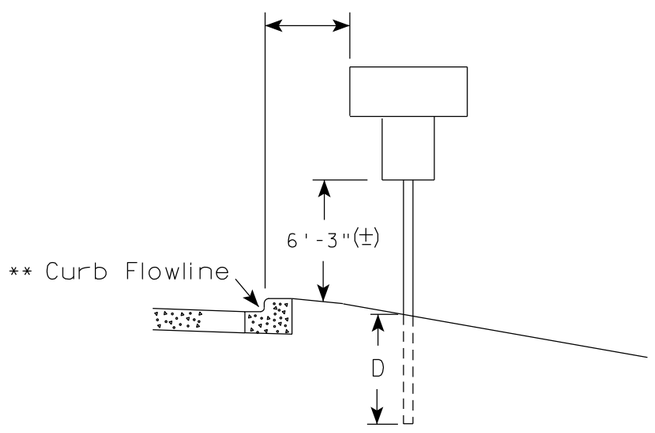
SDD 16A01 - 07

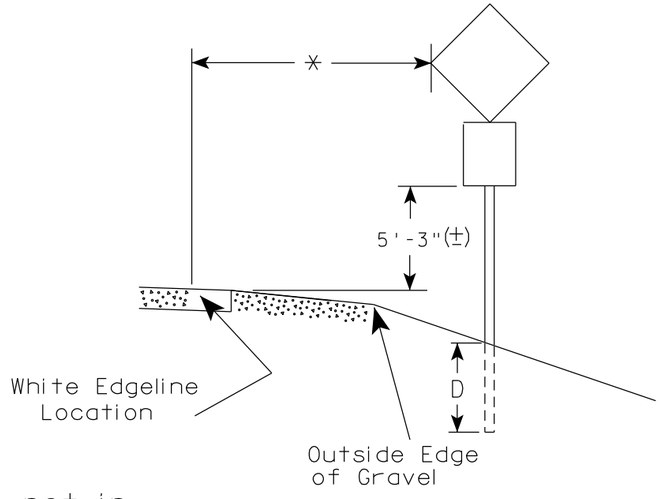
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

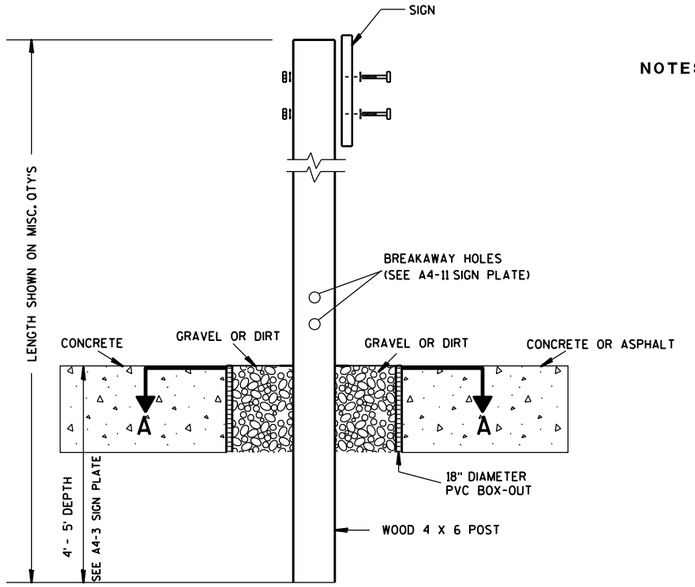
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

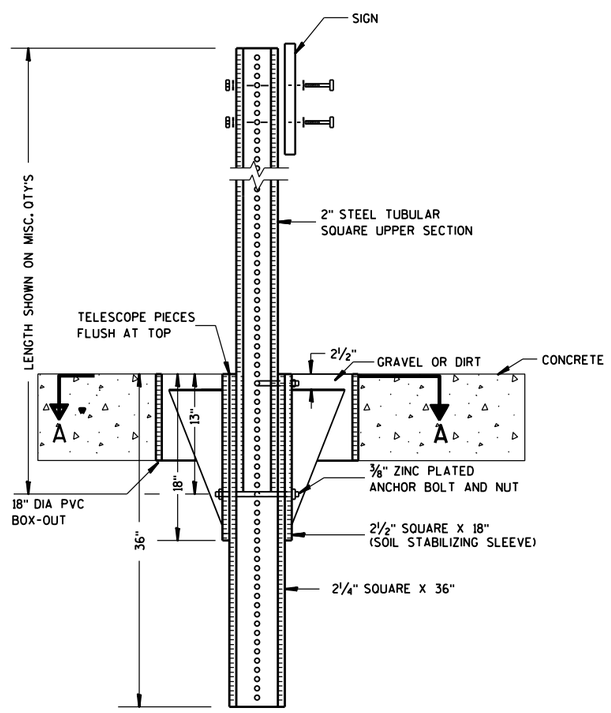
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 194	E



ELEVATION VIEW

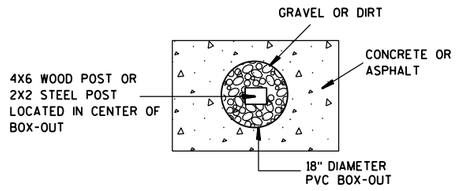
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

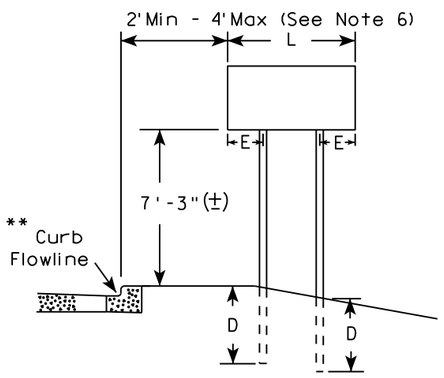
APPROVED Matthew R Rauch
for State Traffic Engineer

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

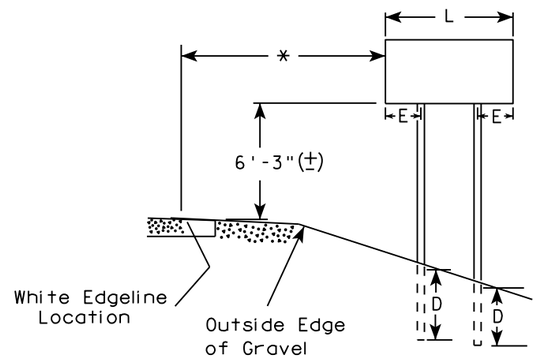
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

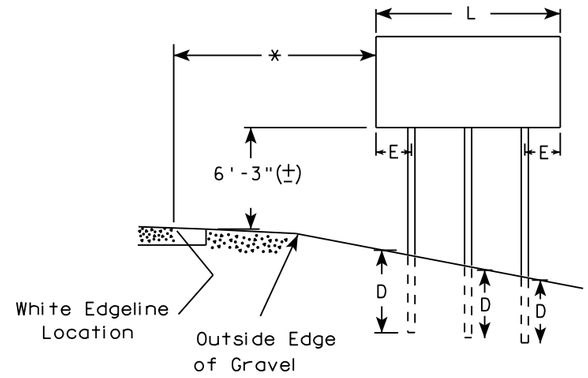
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

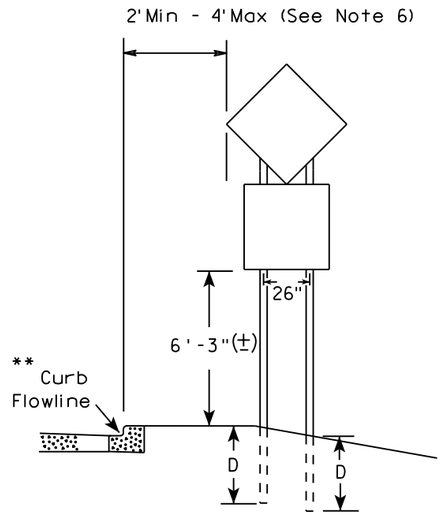
URBAN AREA



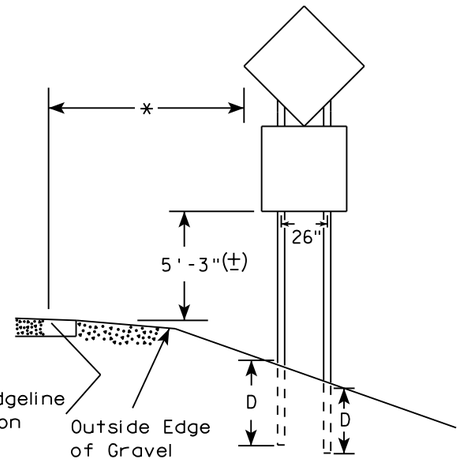
RURAL AREA (See Note 3)







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'

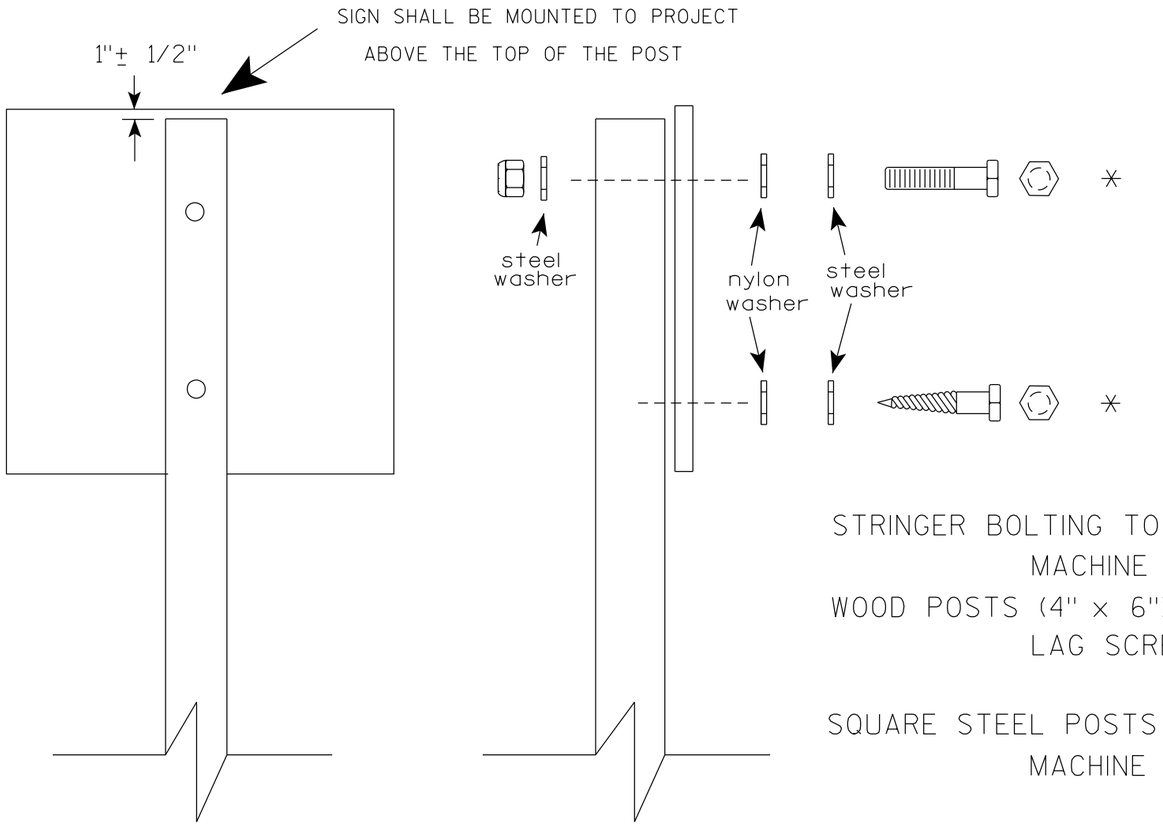
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 196	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 197 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

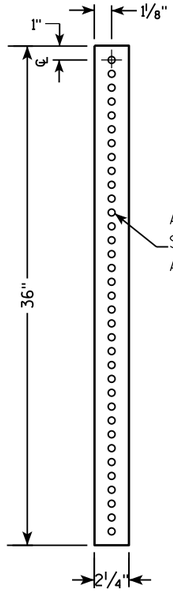
WISDOT/CADDS SHEET 42

7

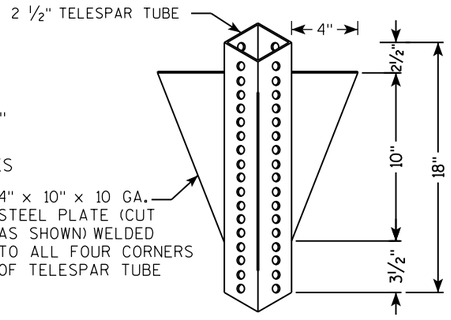
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

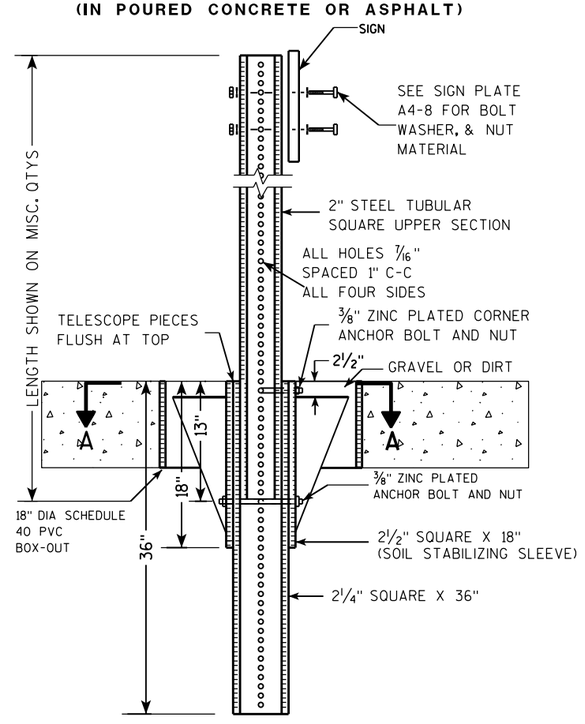
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



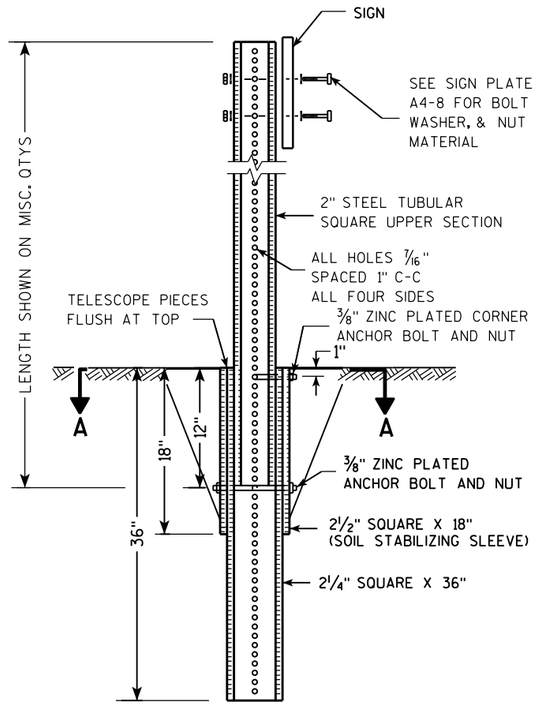
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

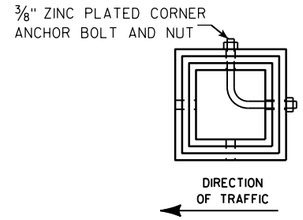


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

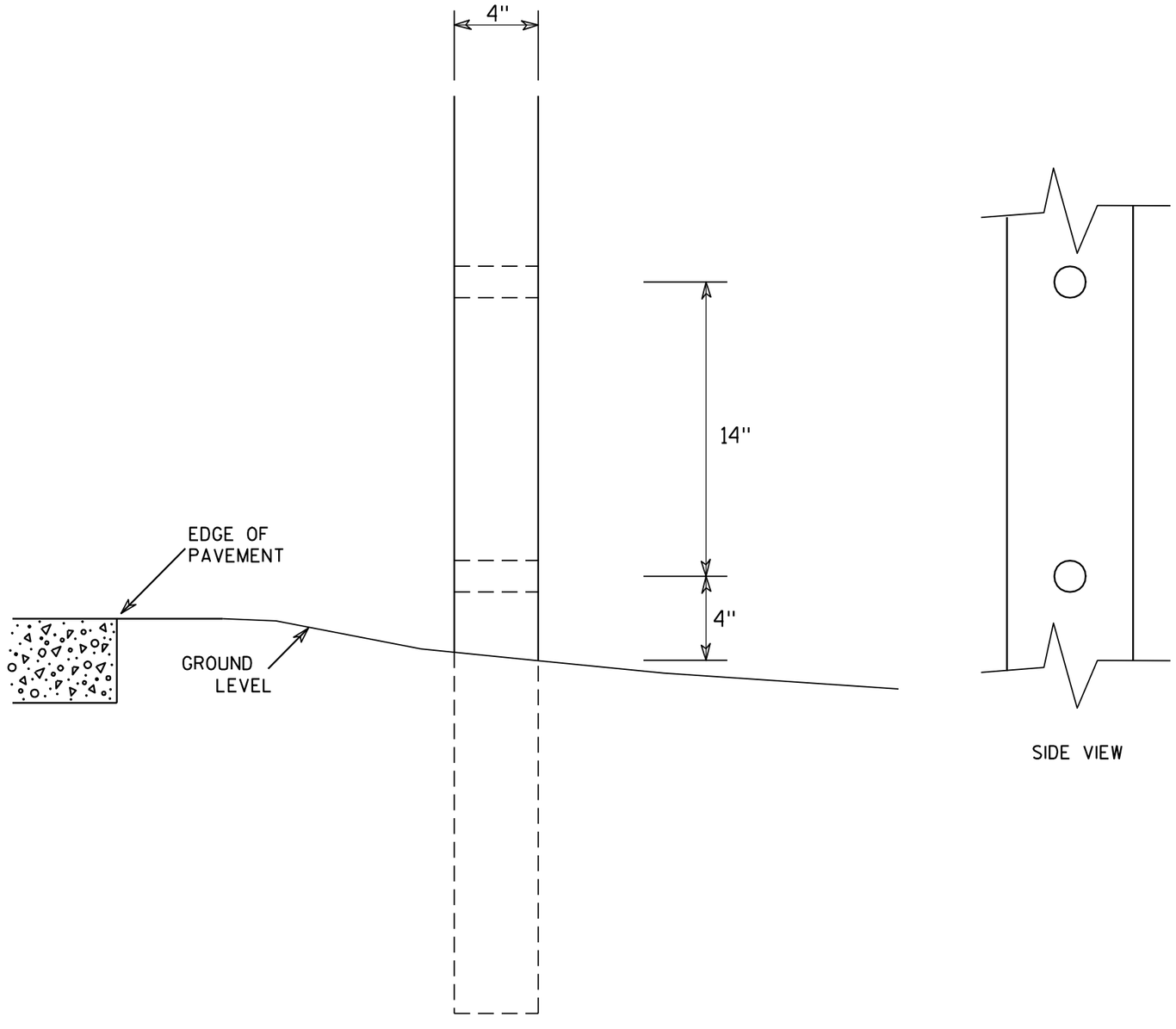
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

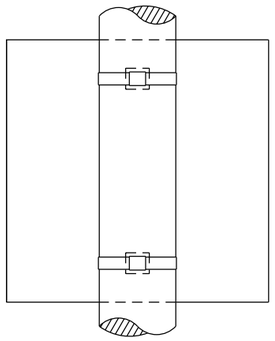
APPROVED Chester J Spang for State Traffic Engineer

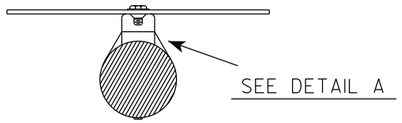
DATE 3/27/97 PLATE NO. A4-11.2

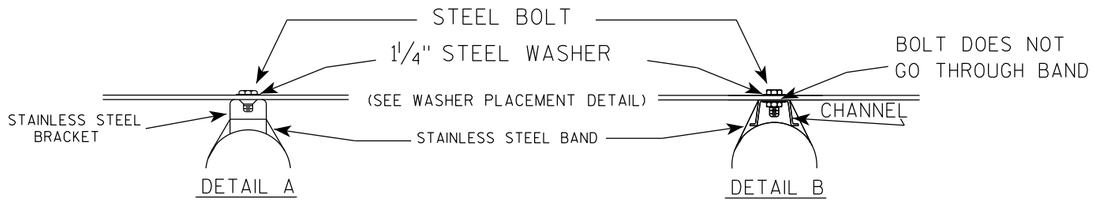
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E

BANDING

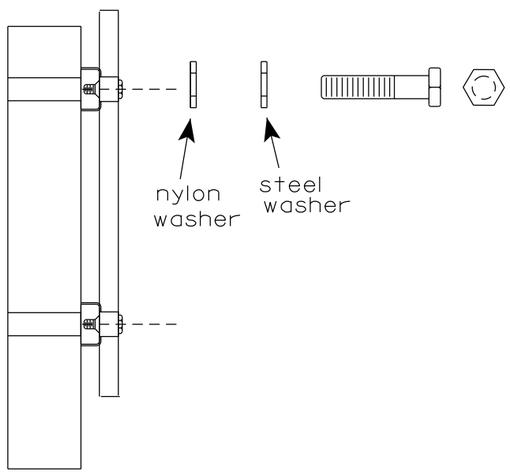
SINGLE SIGN







WASHER PLACEMENT

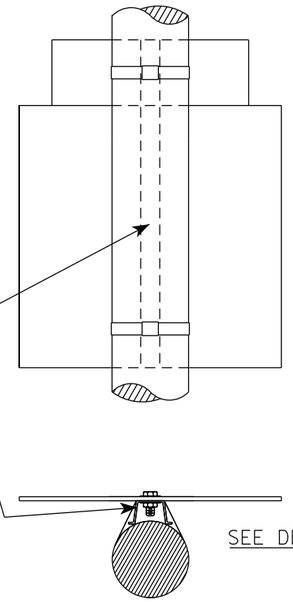


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

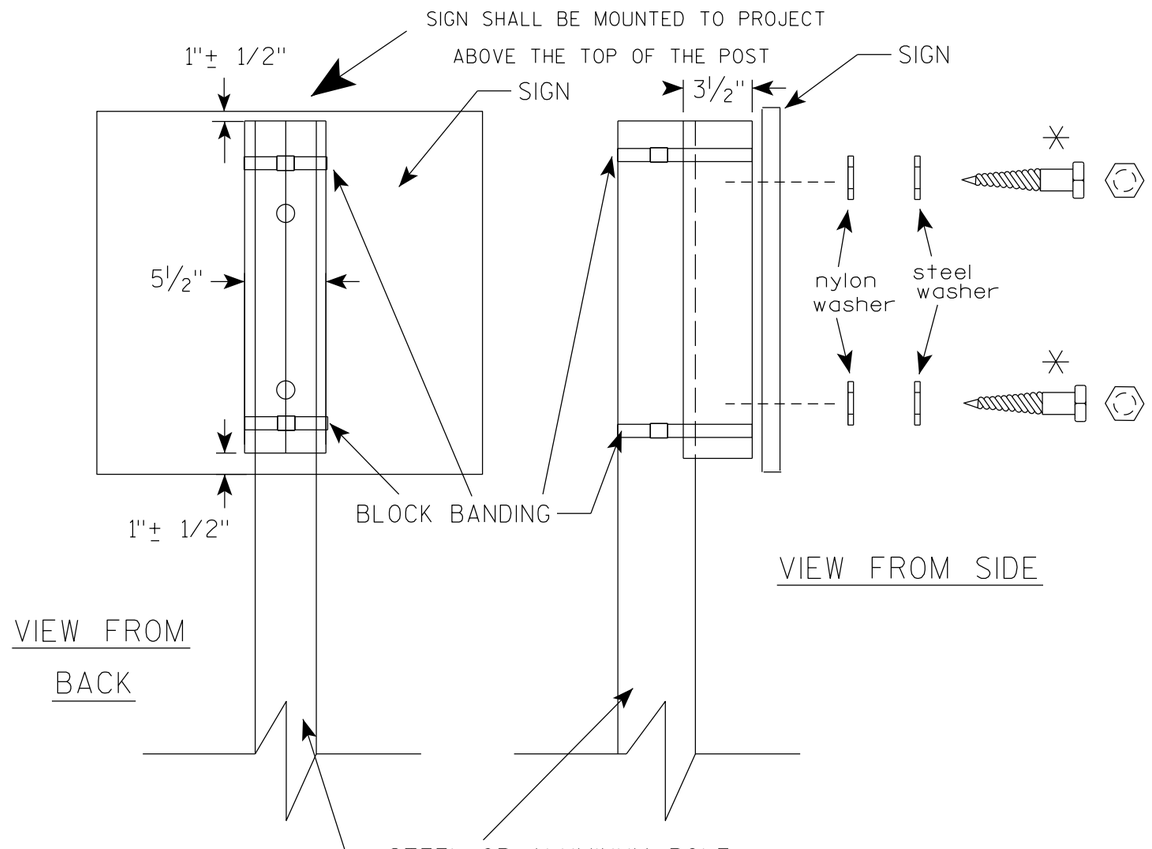
WISCONSIN DEPT OF TRANSPORTATION

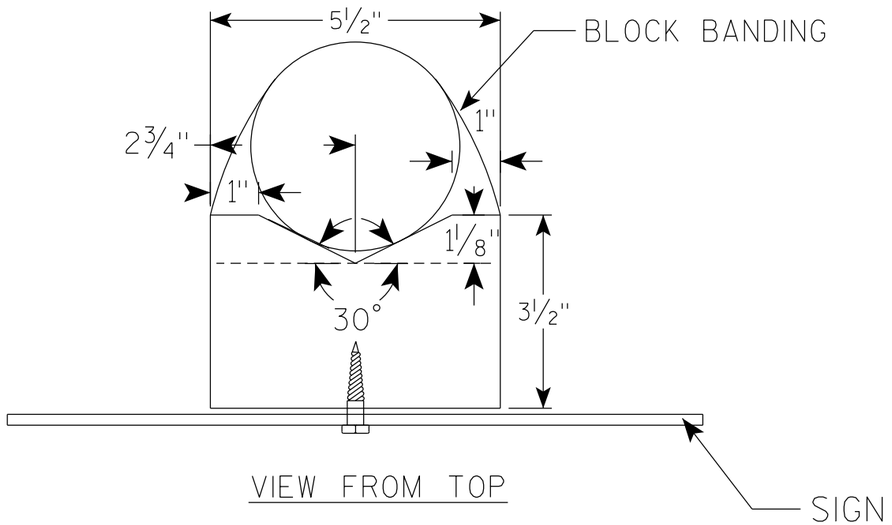
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 200	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)

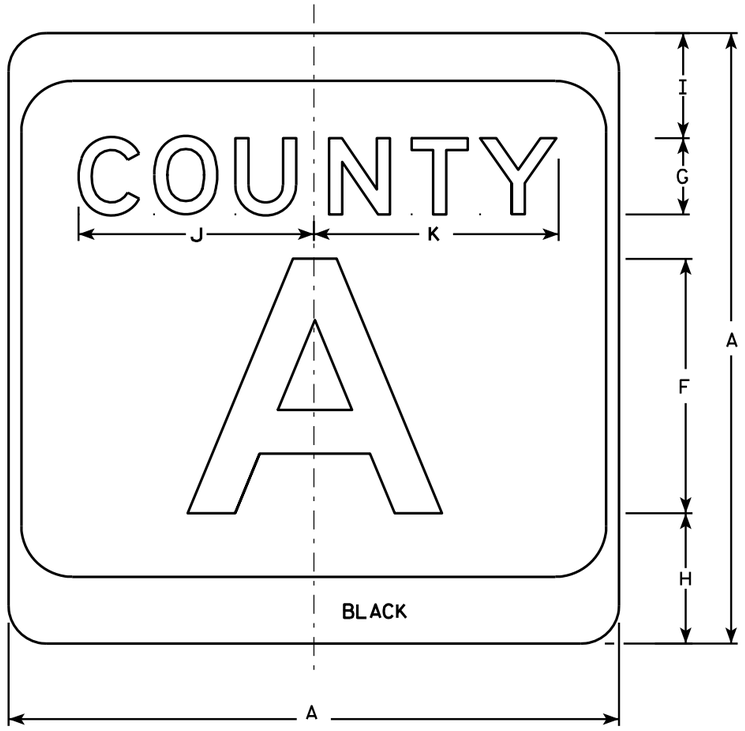
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

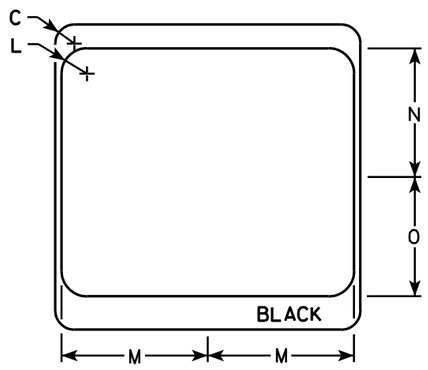
DATE 4/19/2022 PLATE NO. A5-10.3

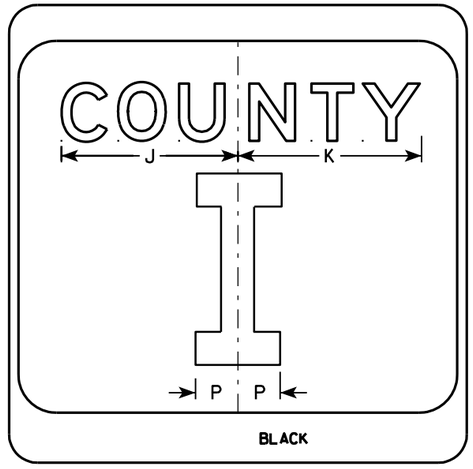
PROJECT NO:

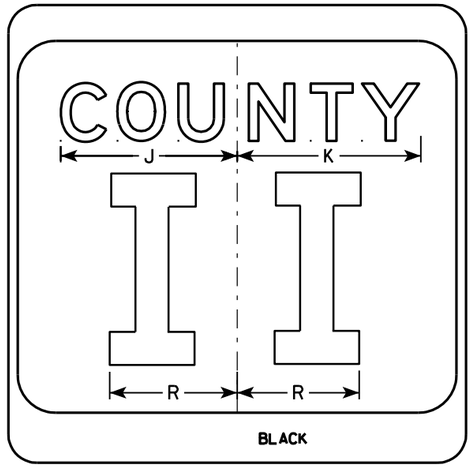
SHEET NO: 201 E



M1-5A







NOTES

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

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

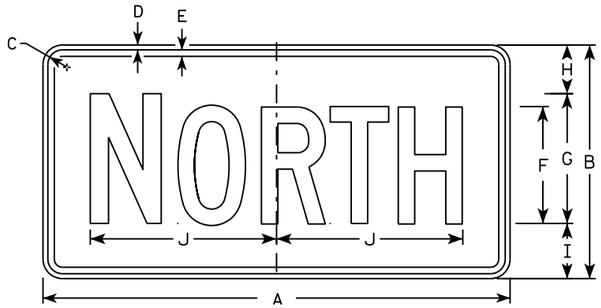
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

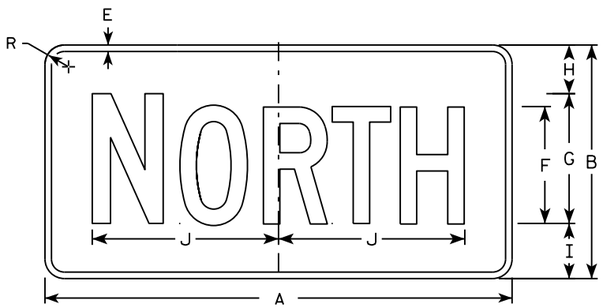
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 202	E



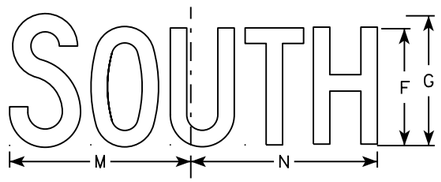
M3-1
MM3-1
MP3-1



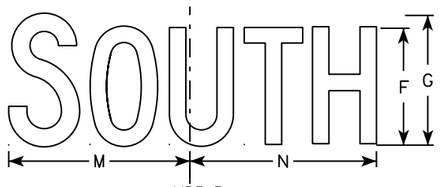
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

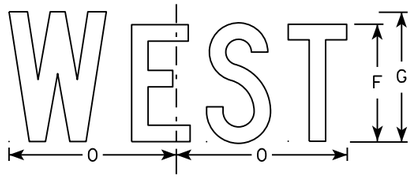
MB3-2
MK3-2
MN3-2



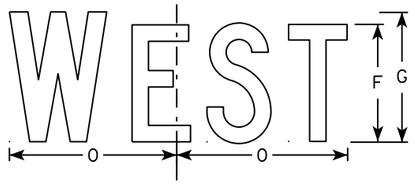
M3-3
MM3-3
MP3-3



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

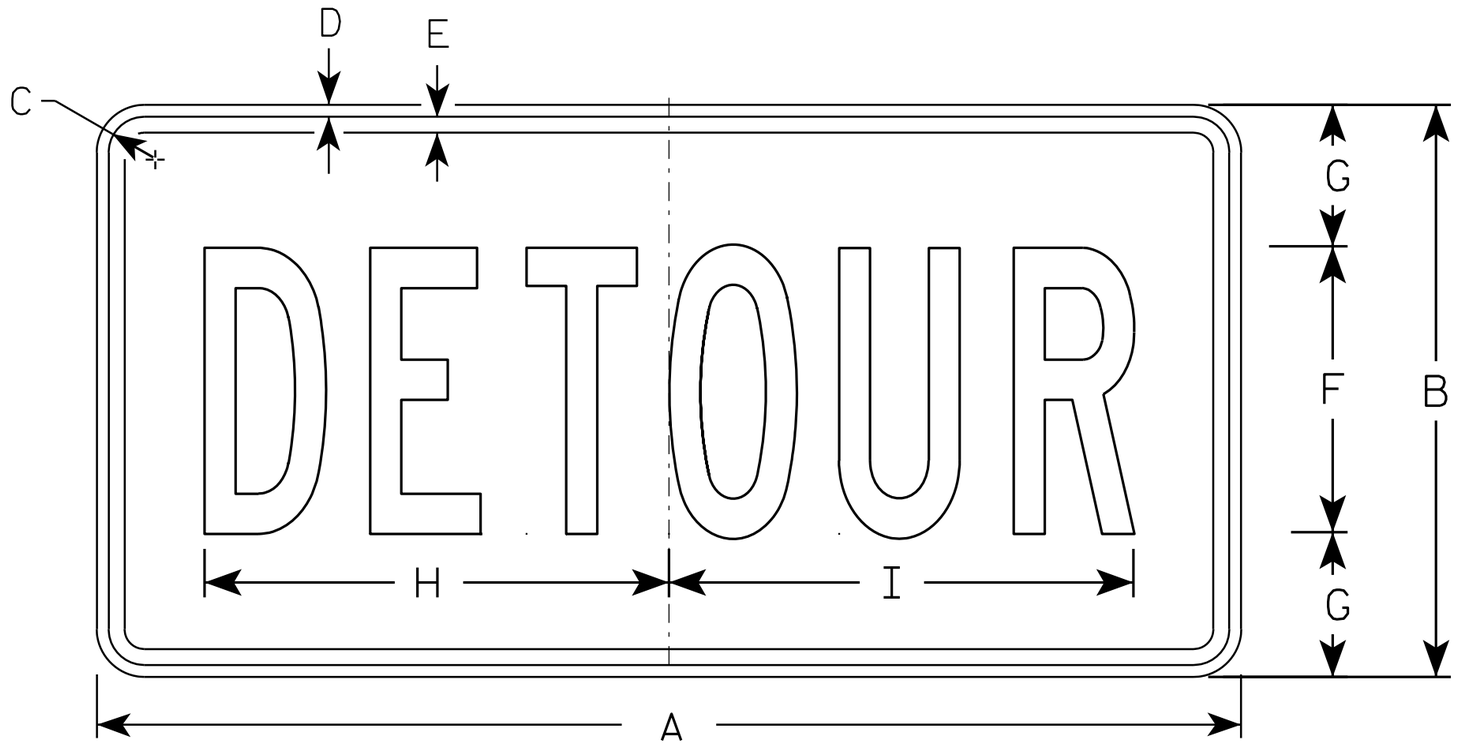
WISCONSIN DEPT OF TRANSPORTATION

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



M4-8

NOTES

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

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

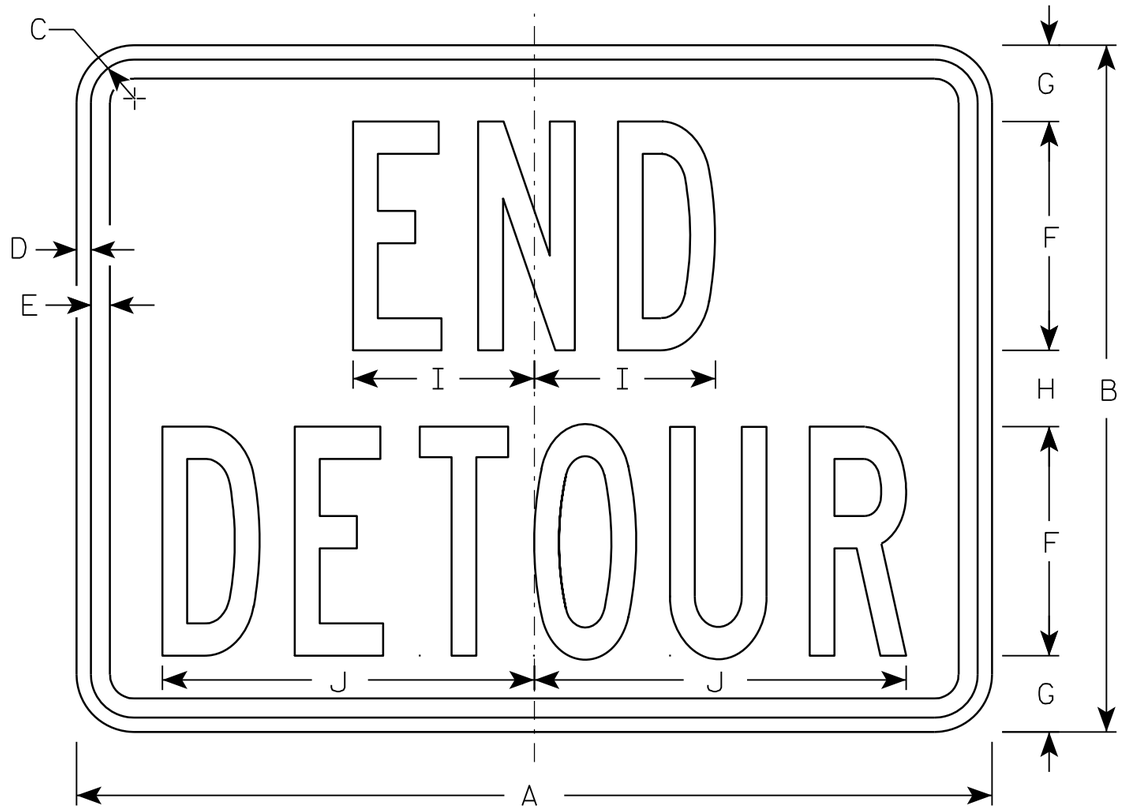
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 204	E



M4-8A

NOTES

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

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

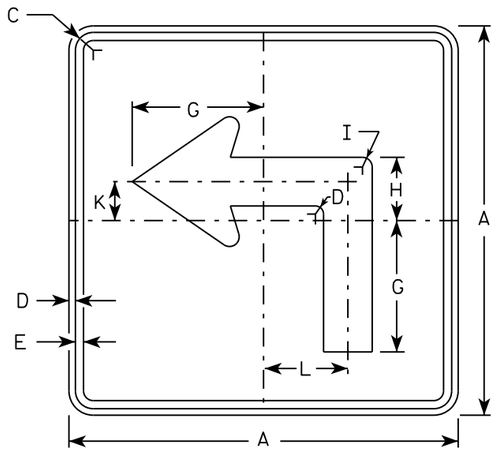
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

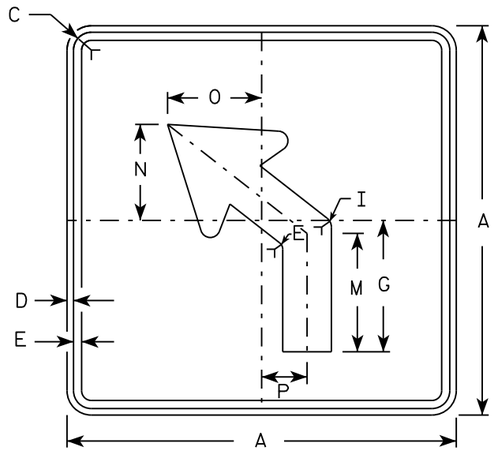
APPROVED Matthew R Rauch
for State Traffic Engineer

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

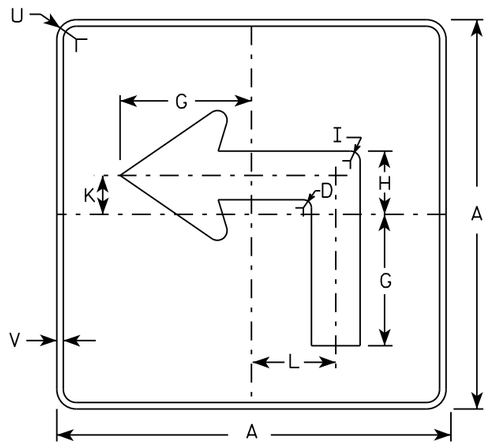
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 205	E



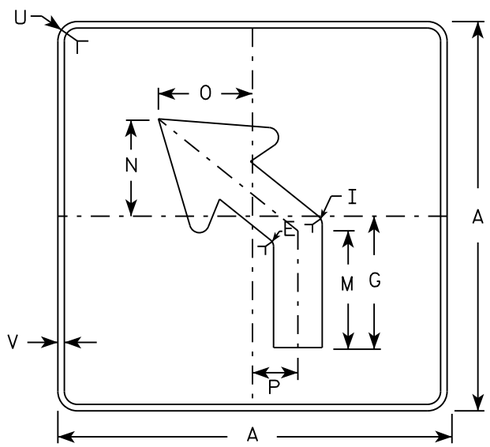
M5-1L
MM5-1L
MO5-1L
MP5-1L



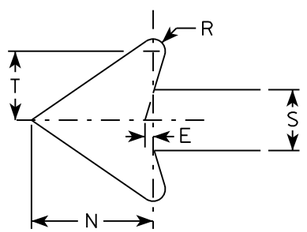
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

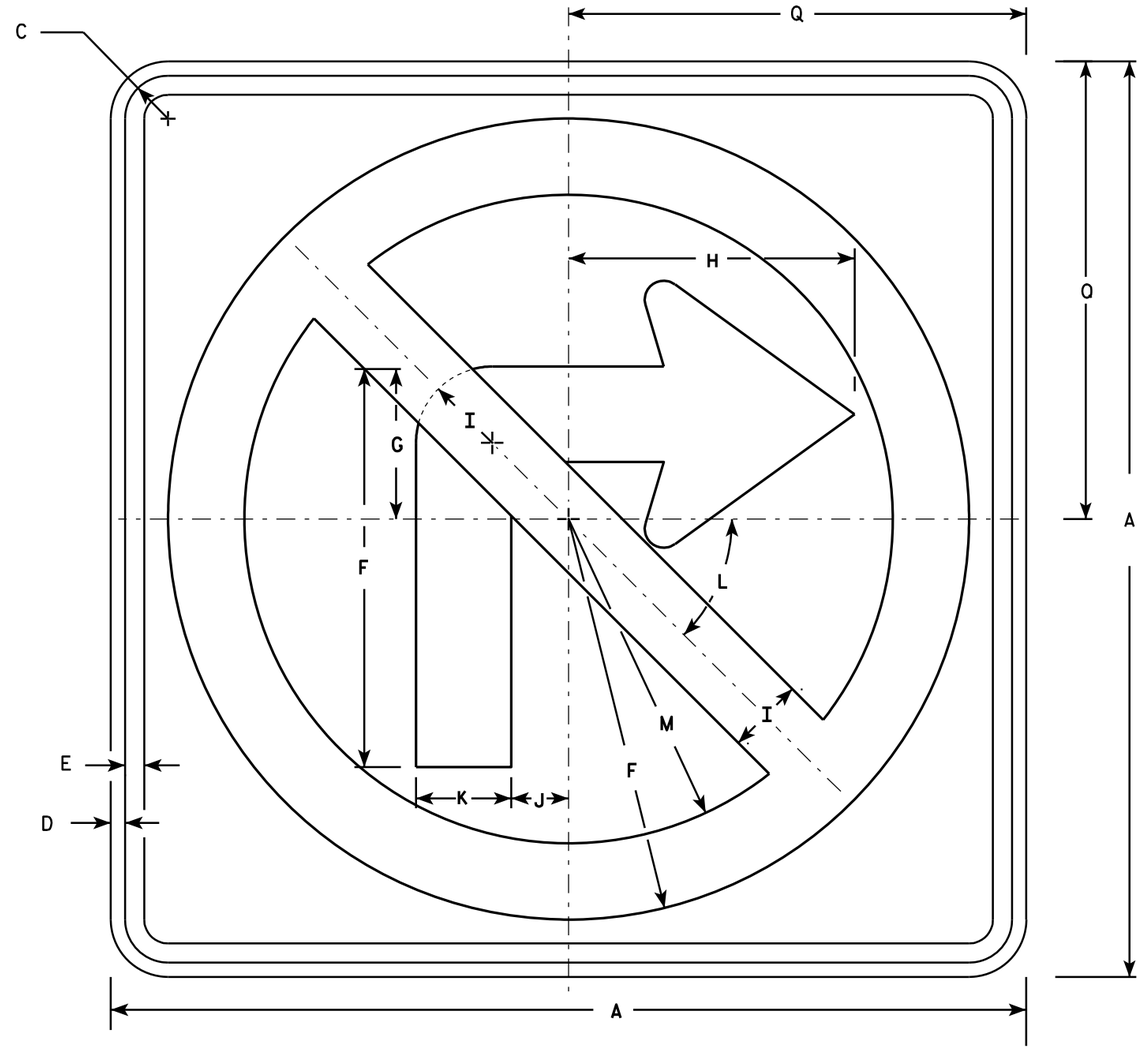
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

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

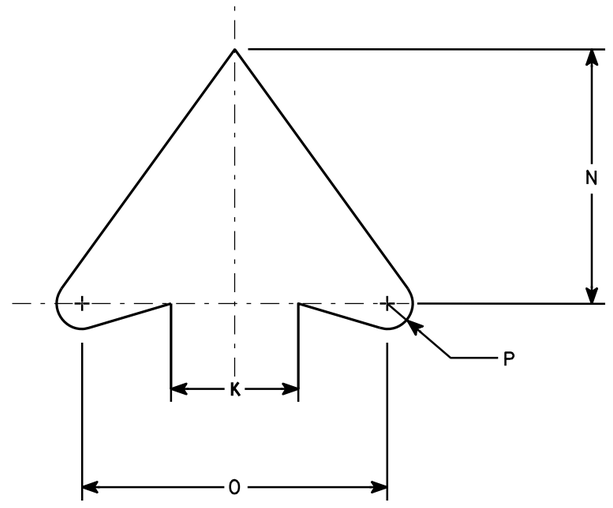
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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

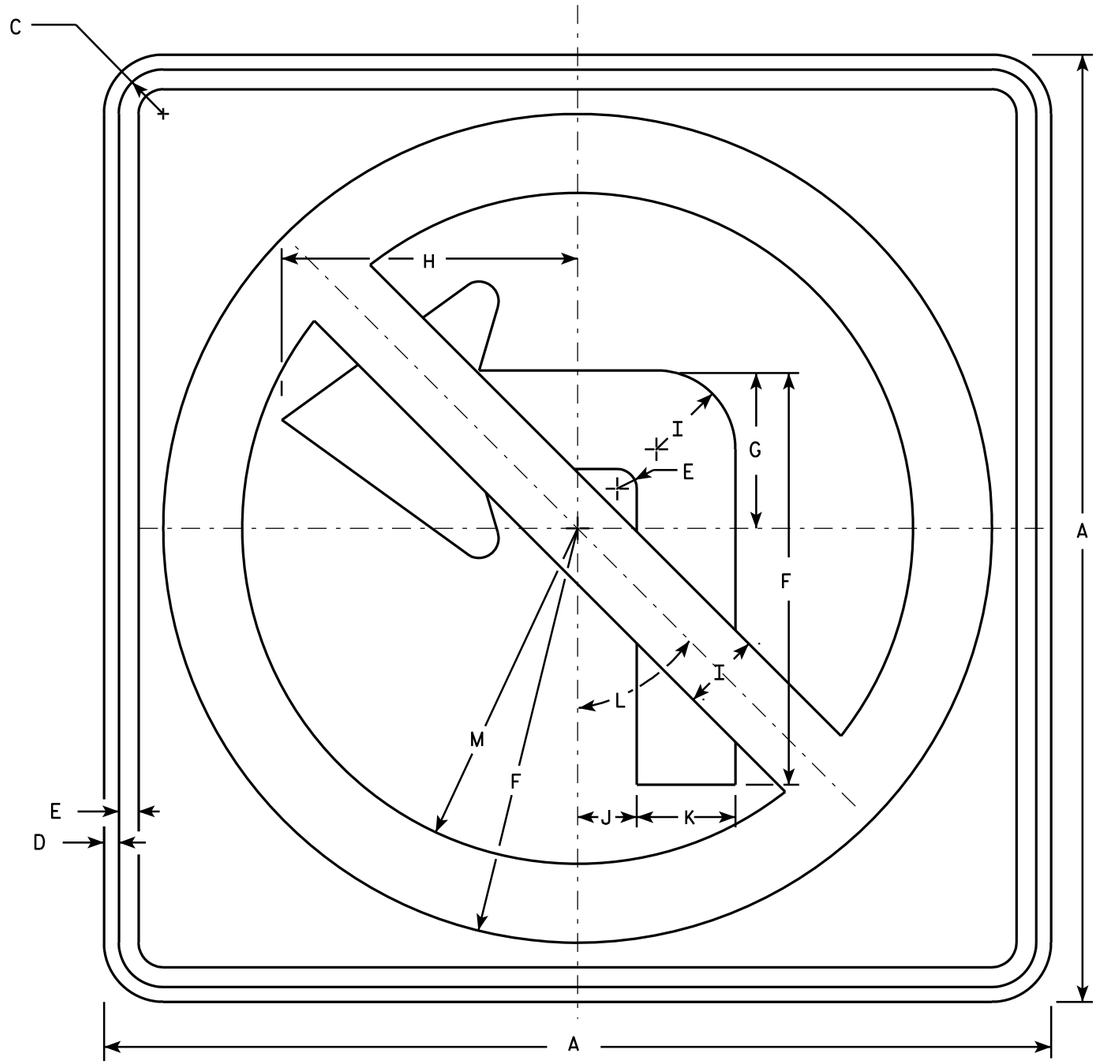
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

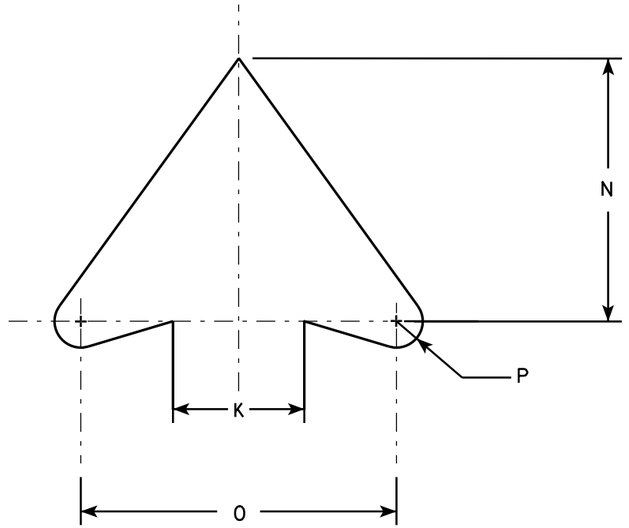
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 207	E



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

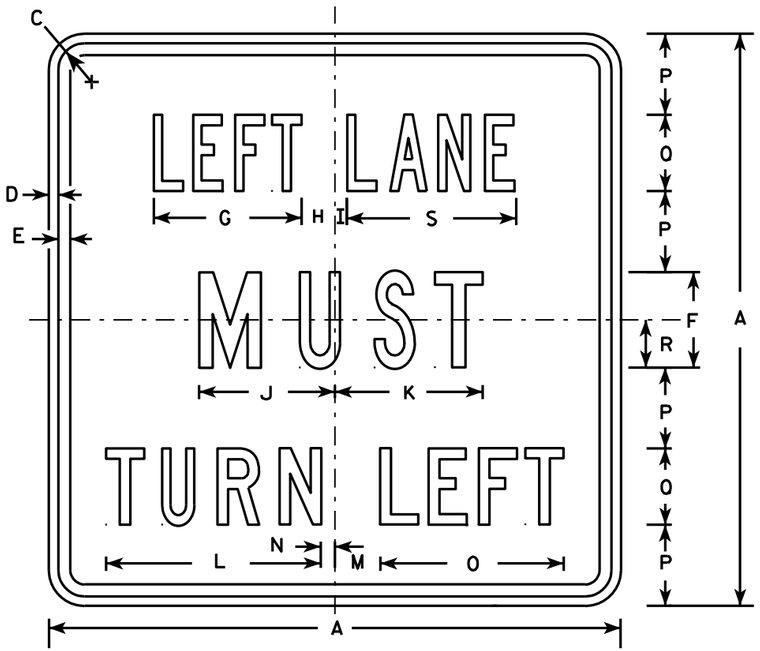
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

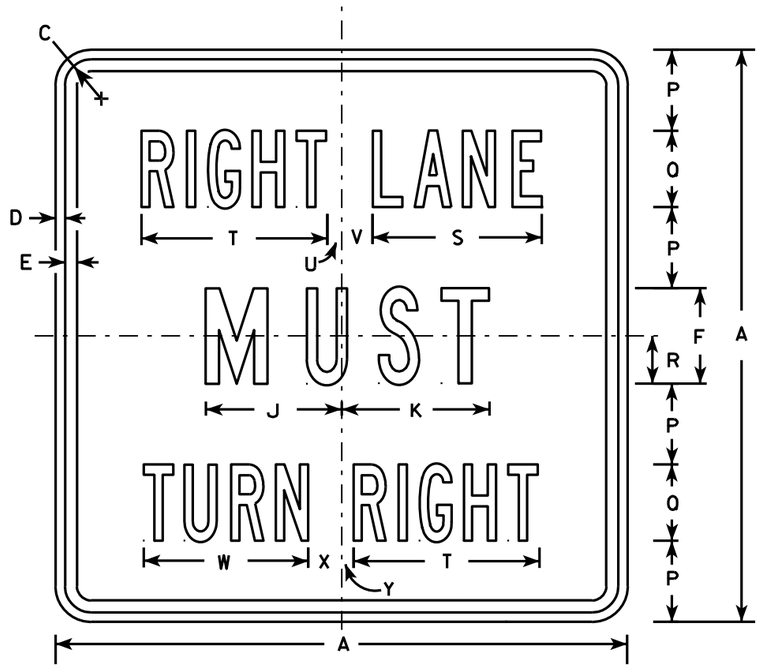
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 208	E



R3-7L



R3-7R

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 - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

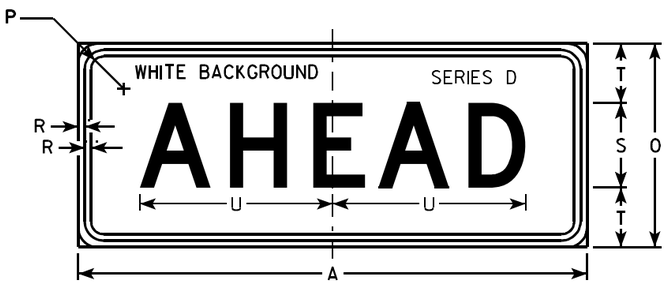
DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E

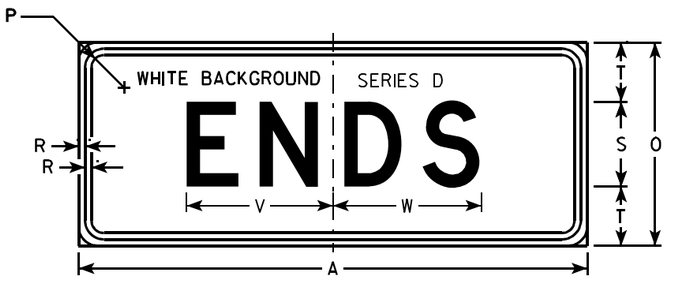
R3-17

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - AS SHOWN
   Message - BLACK
3. Message Series - C or as noted on the Signs.
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.



R3-17ap



R3-17bp

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	R3-17 Area sq. ft.	R3-17ap Area sq. ft.	R3-17bp Area sq. ft.
1																													
2S	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
2M	30	24	1 1/8	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/8	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5
3																													
4																													
5																													

STANDARD SIGN
R3-17 & R3-17a&bp

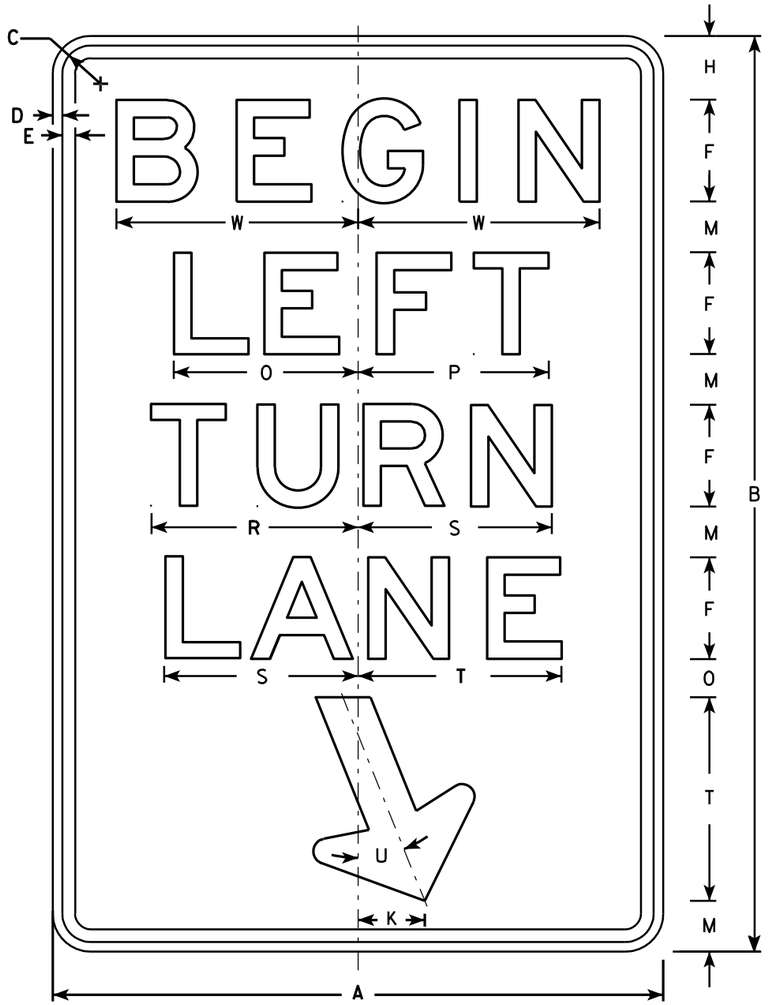
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/12/2011 PLATE NO. R3-17.2

PROJECT NO:

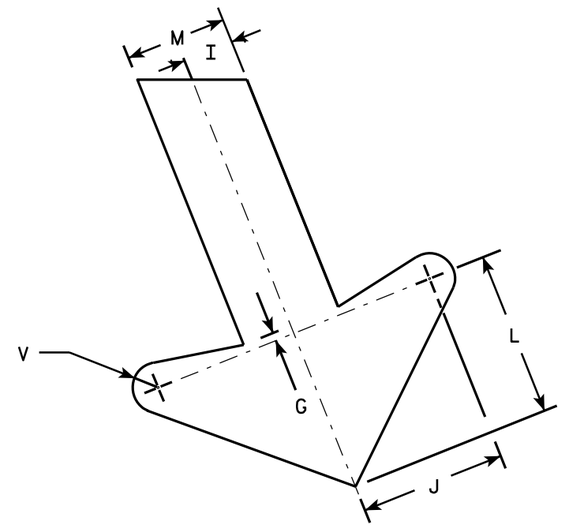
SHEET NO: 210 E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

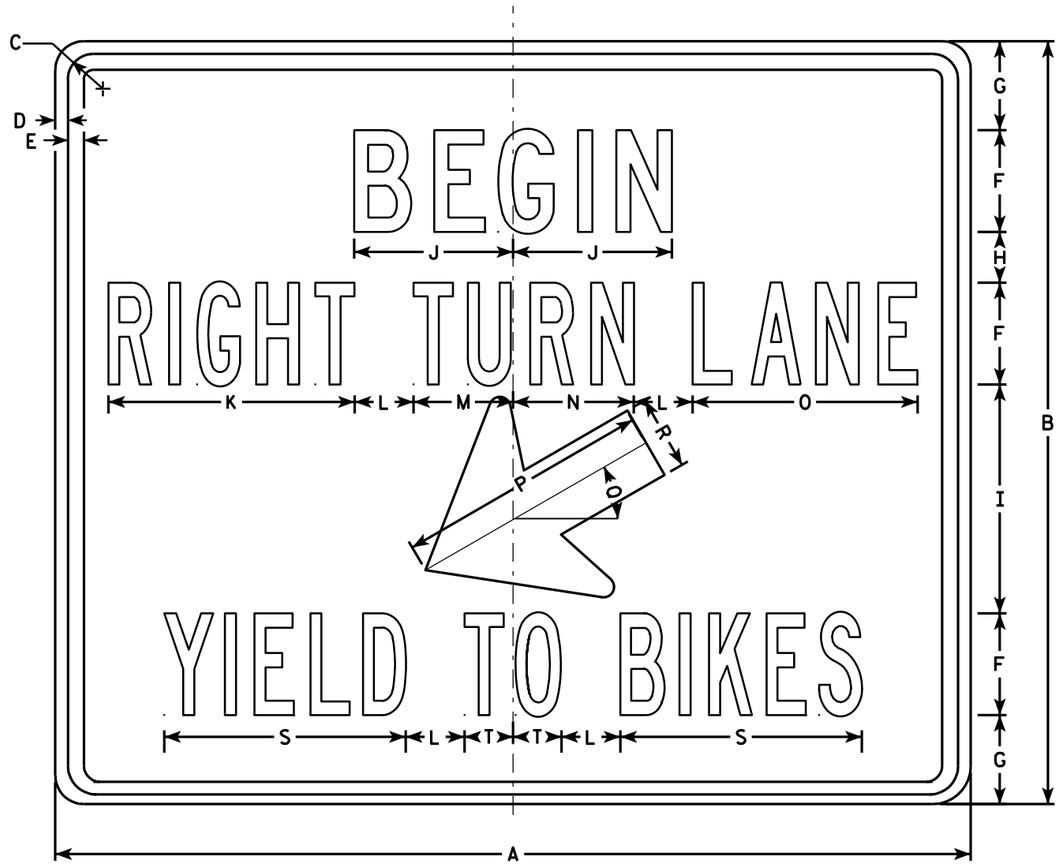
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 211 | E



R4-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
   Lines 2 & 3 are Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
2M	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
3																											
4																											
5																											

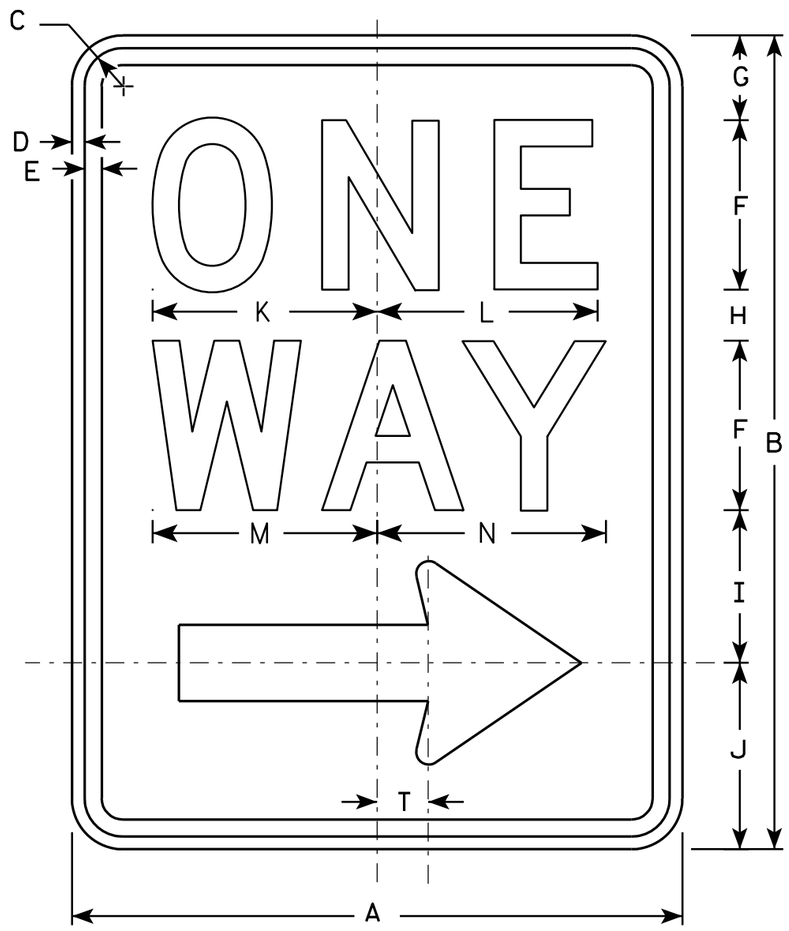
STANDARD SIGN
R4-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-4.2

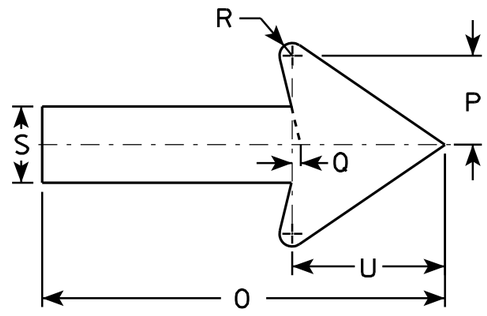
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 212 | E



R6-2R

NOTES

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



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

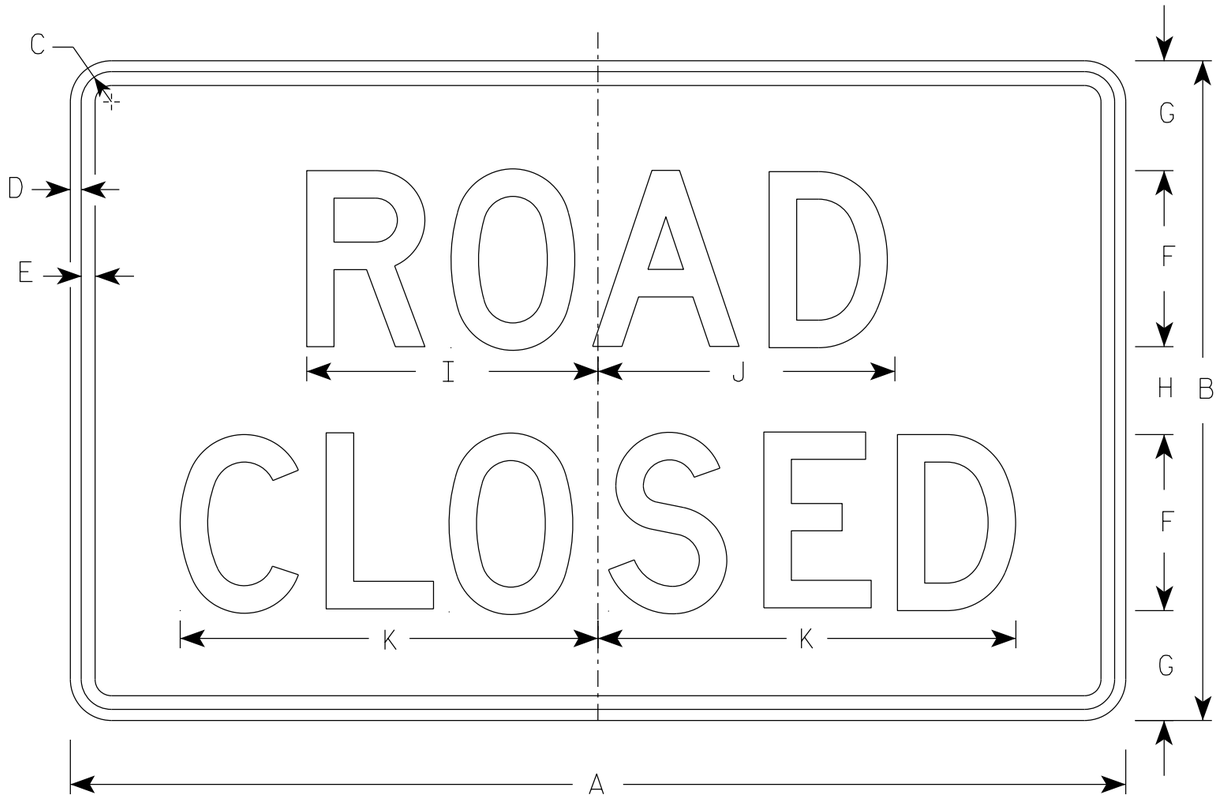
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

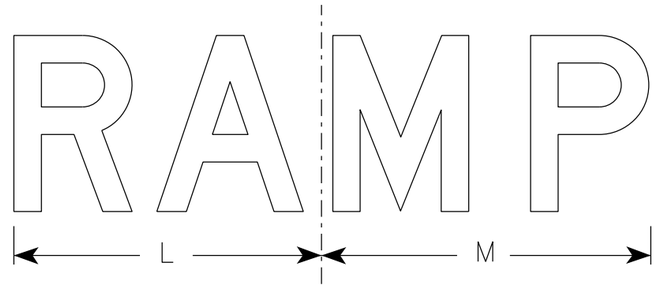
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 213	E



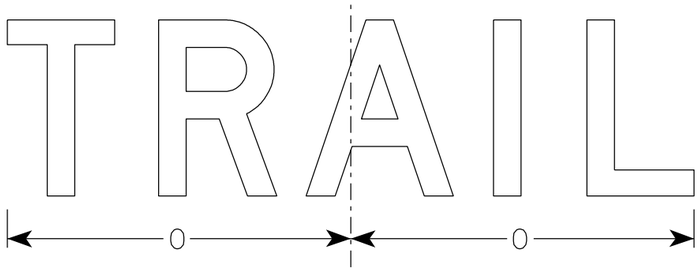
R11-2

NOTES

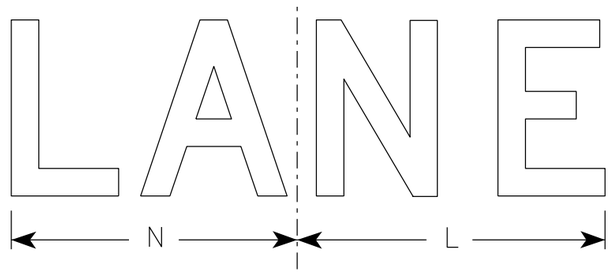
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												10.0

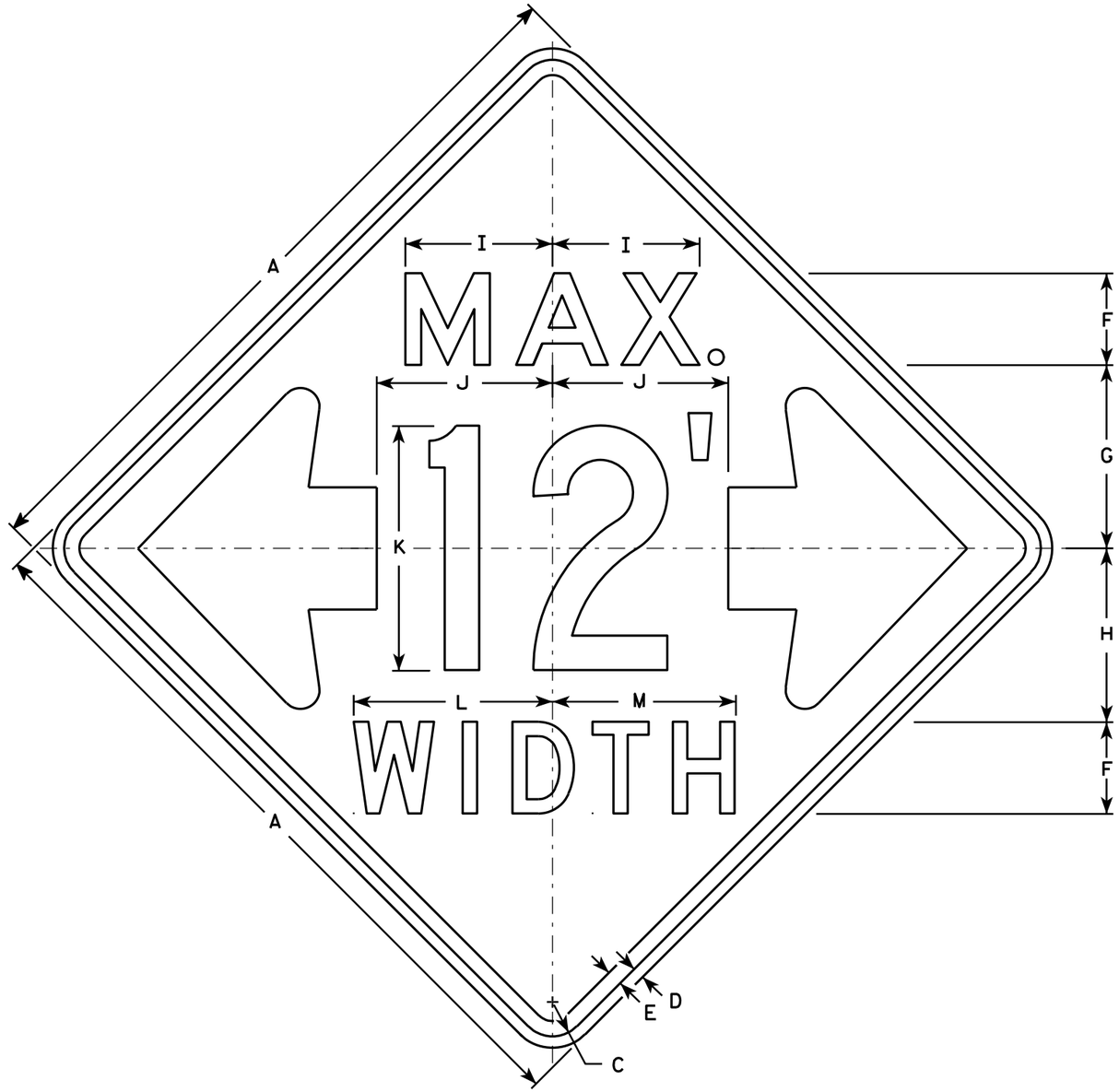
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

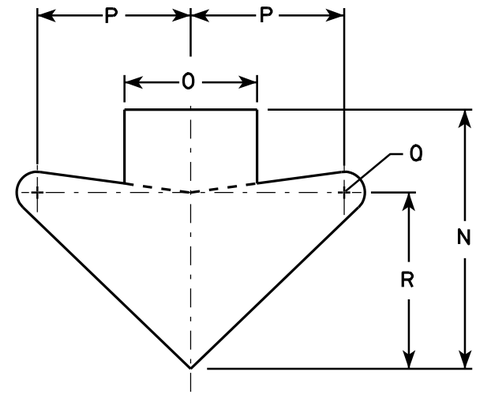
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 214	E



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

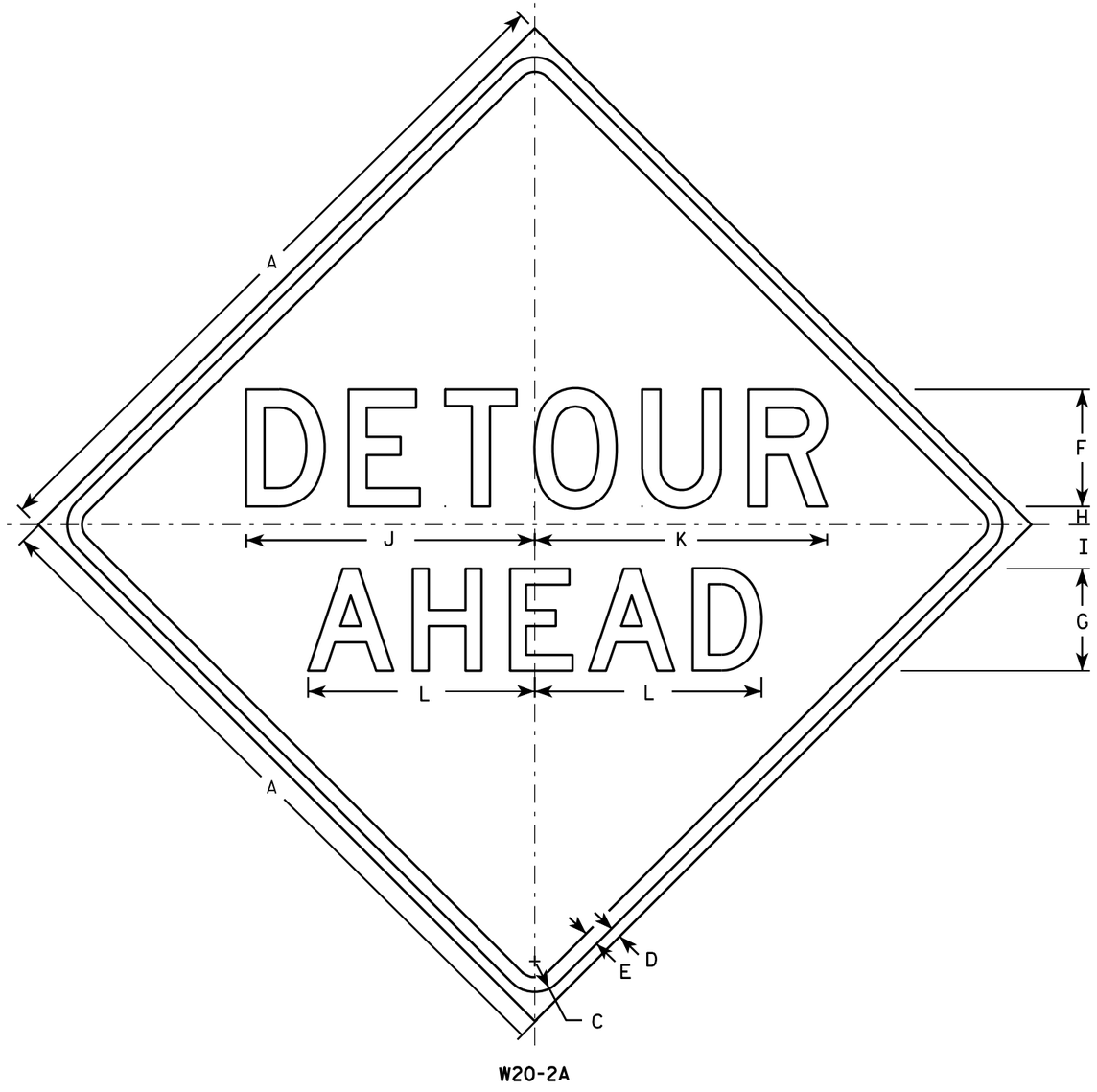
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

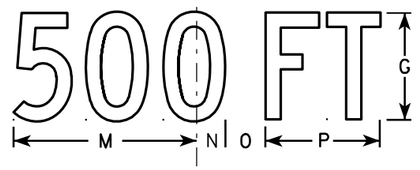
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E

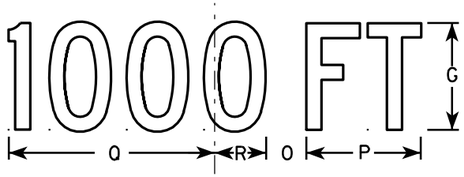
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



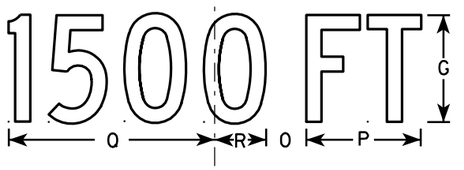
W20-2A



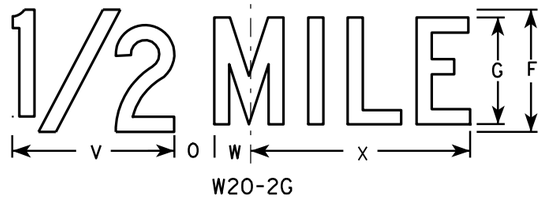
W20-2D



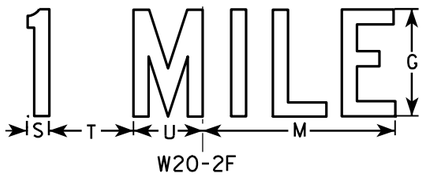
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

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

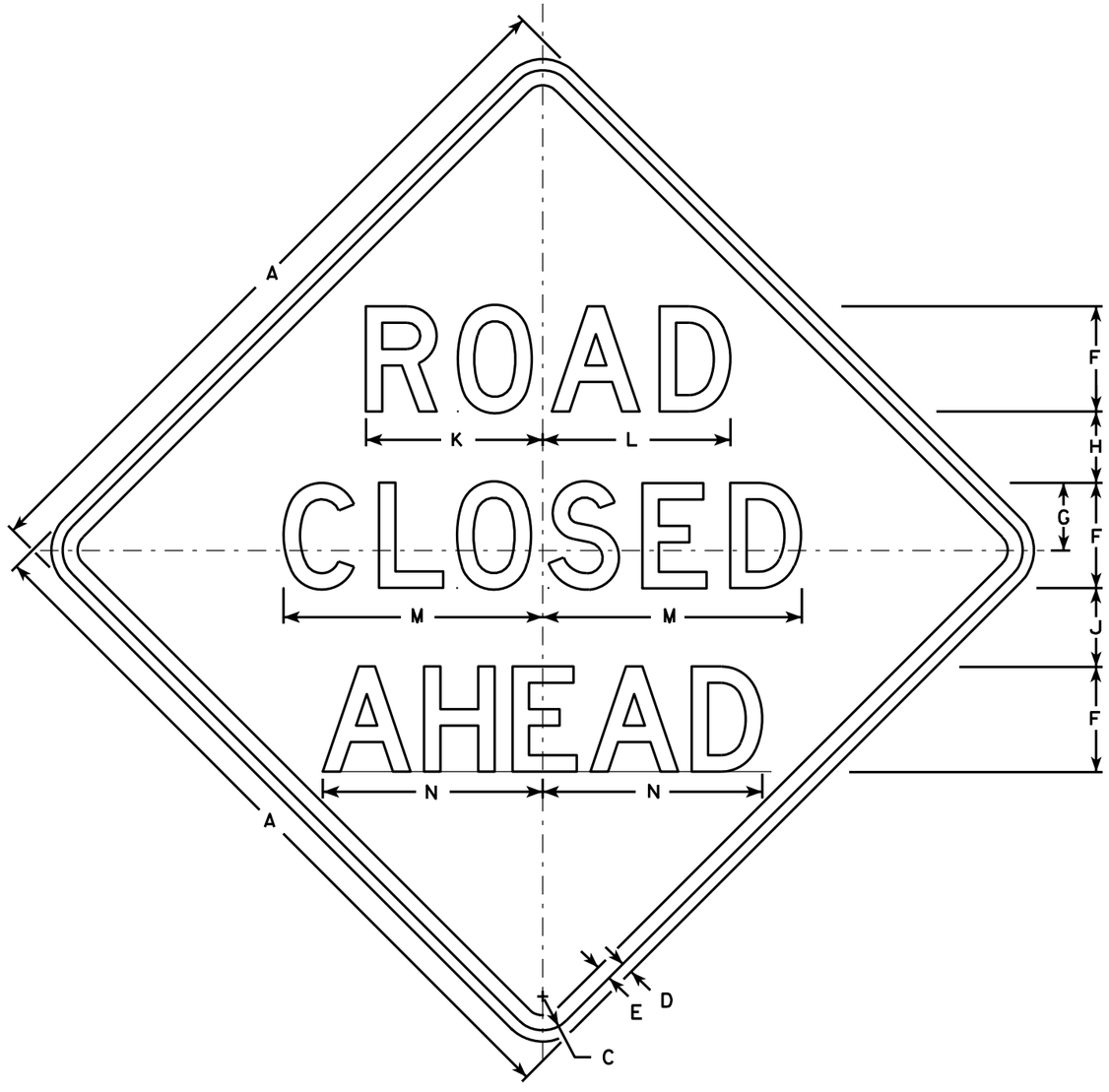
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

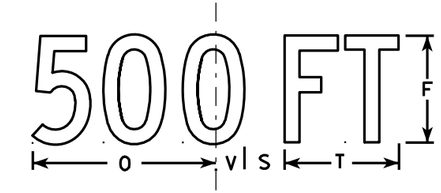
APPROVED Matthew R Rauch
for State Traffic Engineer

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

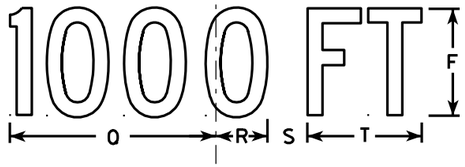
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 216	E



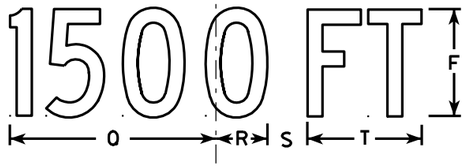
W20-3A



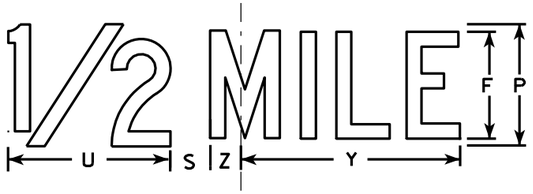
W20-3D



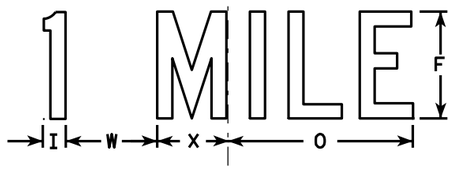
W20-3C



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

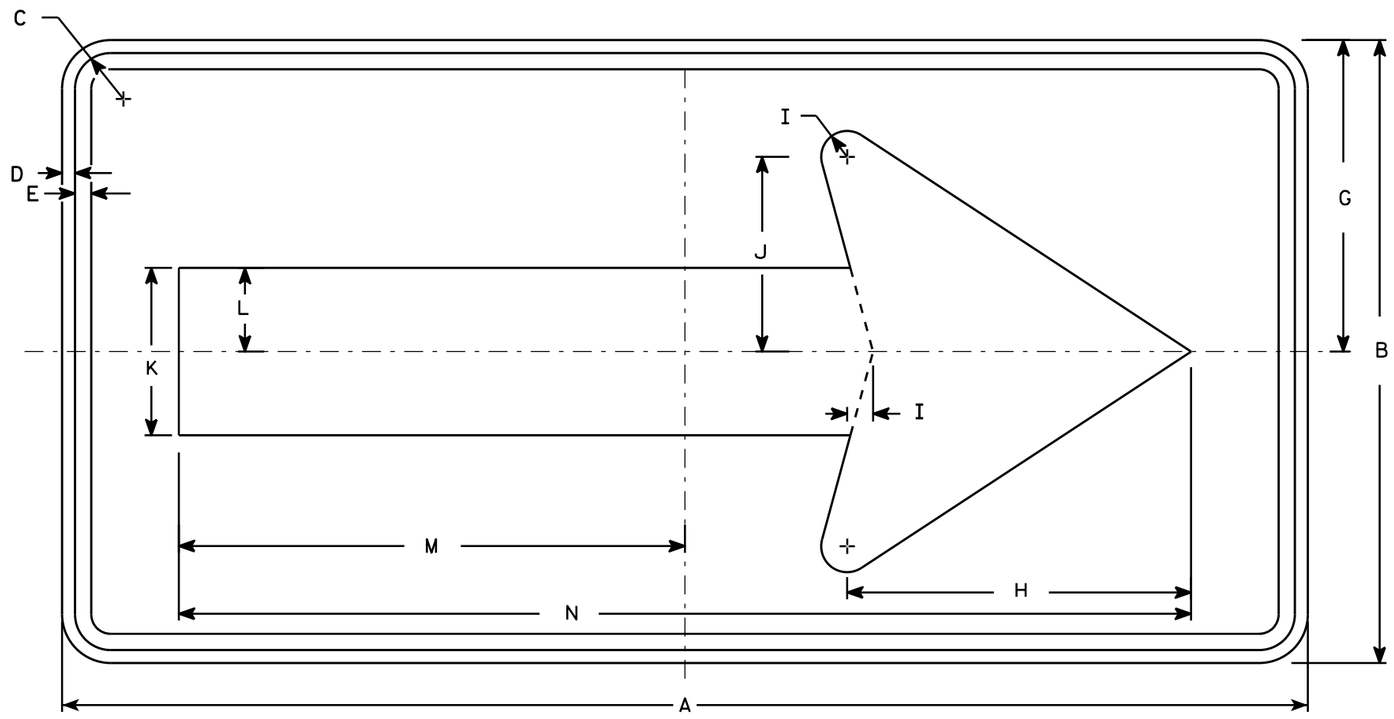
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 217 | E

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

WISDOT/CADDS SHEET 42

7

7



W01-6

NOTES

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

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

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION		AVAILABLE MATERIAL (3)	UNEXPANDED FILL	EXPANDED FILL FACTOR 1.25	MASS ORDINATE +/- (4)	WASTE (5)
		CUT (2)	EBS EXCAVATION					
DIVISION 1								
USH 12	100+97.9 / 111+68.3	5,339	0	5,339	79	99	5,240	5,240
DIVISION 1 SUBTOTAL		5,339	0	5,339	79	99	5,240	5,240
DIVISION 2								
CTH ET	10+45 / 18+90	2,649	0	2,649	89	111	2,538	2,538
DIVISION 2 SUBTOTAL		2,649	0	2,649	89	111	2,538	2,538
GRAND TOTAL		7,988	0	7,988	168	210	7,778	7,778
TOTAL COMMON EXC		7,988						

NOTES:

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

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

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

(4) 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.

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

DIVISION 1 - USH 12

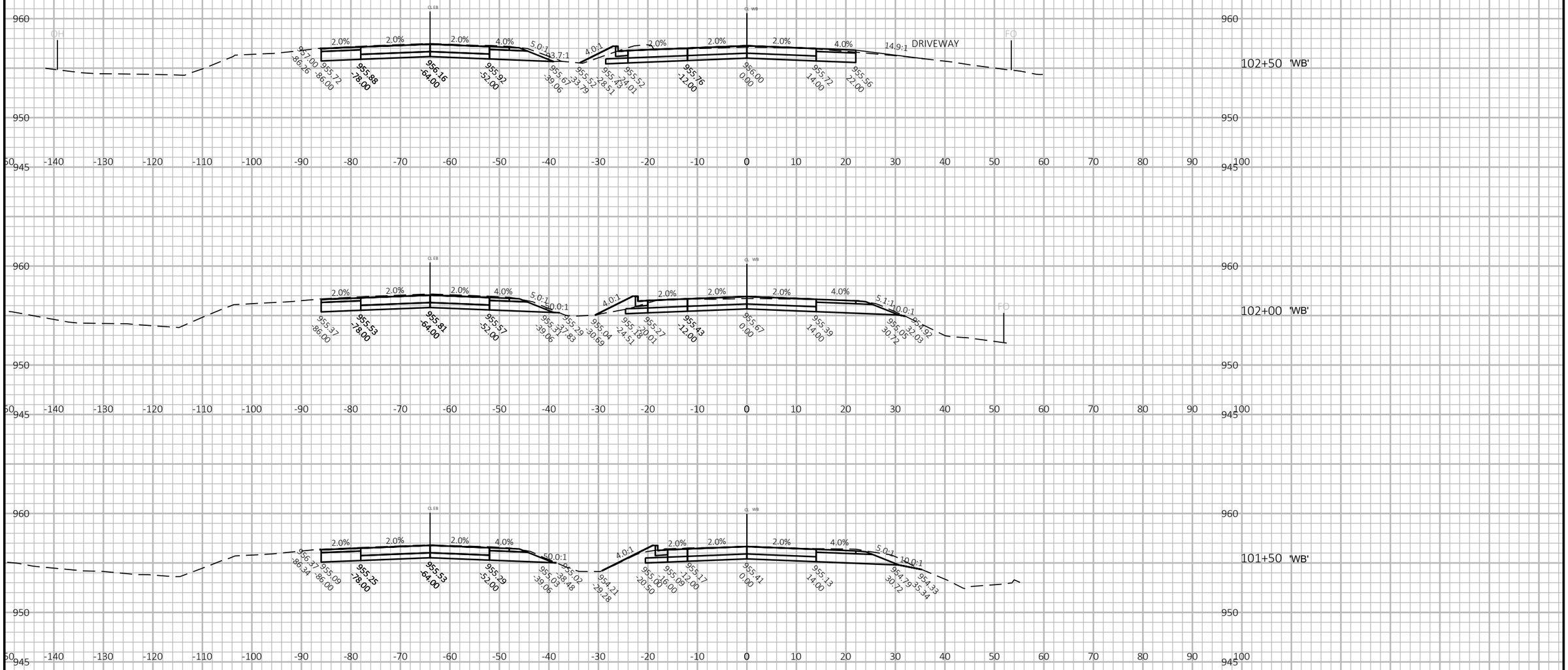
STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT NOTE 1	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE
100+97.8	10097.85	0.00	55.70	0.00	0	0	0	0	0
101+00	10100.00	2.15	109.58	14.53	7	1	7	1	6
101+50	10150.00	50.00	127.24	2.49	219	16	226	21	205
102+00	10200.00	50.00	121.02	0.52	230	3	456	25	431
102+50	10250.00	50.00	137.42	0.06	239	1	695	26	669
103+00	10300.00	50.00	128.91	3.90	247	4	942	31	911
103+50	10350.00	50.00	135.85	0.15	245	4	1,187	36	1,151
104+00	10400.00	50.00	143.70	0.00	259	0	1,446	36	1,410
104+50	10450.00	50.00	164.45	0.00	285	0	1,731	36	1,695
105+00	10500.00	50.00	155.26	0.00	296	0	2,027	36	1,991
105+50	10550.00	50.00	142.57	0.03	276	0	2,303	36	2,267
105+78.1	10578.06	28.06	127.08	1.56	140	1	2,443	38	2,406
105+80	10580.00	1.94	125.12	2.87	9	0	2,452	38	2,415
105+90	10590.00	10.00	123.40	16.14	46	4	2,498	43	2,456
106+00	10600.00	10.00	123.07	22.24	46	7	2,544	51	2,493
106+10	10610.00	10.00	125.42	5.64	46	5	2,590	58	2,533
106+20	10620.00	10.00	146.05	0.00	50	1	2,640	59	2,581
106+30	10630.00	10.00	129.09	0.00	51	0	2,691	59	2,632
106+40	10640.00	10.00	124.30	0.00	47	0	2,738	59	2,679
106+50	10650.00	10.00	115.36	0.00	44	0	2,782	59	2,723
106+60	10660.00	10.00	109.03	0.00	42	0	2,824	59	2,765
106+70	10670.00	10.00	118.76	0.00	42	0	2,866	59	2,807
106+80	10680.00	10.00	128.42	0.00	46	0	2,912	59	2,853
106+90	10690.00	10.00	139.40	0.00	50	0	2,962	59	2,903
107+00	10700.00	10.00	156.45	0.00	55	0	3,017	59	2,958
107+10	10710.00	10.00	130.55	11.48	53	2	3,070	61	3,009
107+20	10720.00	10.00	131.90	0.05	49	2	3,119	64	3,055
107+30	10730.00	10.00	110.46	0.00	45	0	3,164	64	3,100
107+39.2	10739.19	9.19	117.01	12.09	39	2	3,203	66	3,137
107+50	10750.00	10.81	132.10	2.71	50	3	3,253	70	3,183
108+00	10800.00	50.00	140.49	0.62	252	3	3,505	74	3,431
108+50	10850.00	50.00	147.88	0.02	267	1	3,772	75	3,697
109+00	10900.00	50.00	139.62	0.00	266	0	4,038	75	3,963
109+50	10950.00	50.00	131.37	1.19	251	1	4,289	76	4,213
110+00	11000.00	50.00	127.19	1.29	239	2	4,528	79	4,449
110+50	11050.00	50.00	127.23	2.17	236	3	4,764	83	4,682
111+00	11100.00	50.00	126.07	3.67	235	5	4,999	89	4,910
111+50	11150.00	50.00	139.23	2.43	246	6	5,245	96	5,149
111+68.3	11168.35	18.35	136.70	3.57	94	2	5,339	99	5,240

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME

DIVISION 2 - CTH ET

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT NOTE 1	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE
10+45	1045.00	0.00	87.45	0.00	0	0	0	0	0
10+63.2	1063.18	18.18	129.19	0.00	73	0	73	0	73
11+02.1	1102.10	38.92	94.38	0.79	161	1	234	1	233
11+68.1	1168.12	66.02	68.88	1.93	200	3	434	5	429
11+95.6	1195.61	27.49	78.36	1.37	75	2	509	8	502
12+38.5	1238.46	42.85	92.25	0.93	135	2	644	10	634
12+75	1275.00	36.54	86.43	0.36	121	1	765	11	754
13+00	1300.00	25.00	63.84	3.73	70	2	835	14	821
13+25	1325.00	25.00	61.91	14.43	58	8	893	24	869
13+50	1350.00	25.00	67.46	25.20	60	18	953	46	907
13+65.4	1365.43	15.43	87.24	48.90	44	21	997	73	925
13+70	1370.00	4.57	91.94	65.31	15	10	1,012	85	927
13+75	1375.00	5.00	102.38	25.96	18	8	1,030	95	935
13+80	1380.00	5.00	90.09	0.00	18	2	1,048	98	951
13+85	1385.00	5.00	58.04	0.00	14	0	1,062	98	965
13+90	1390.00	5.00	27.25	0.00	8	0	1,070	98	973
15+10	1510.00	120.00	20.47	0.00	106	0	1,176	98	1,079
15+15	1515.00	5.00	49.17	0.00	6	0	1,182	98	1,085
15+20	1520.00	5.00	79.59	0.00	12	0	1,194	98	1,097
15+25	1525.00	5.00	107.19	0.07	17	0	1,211	98	1,114
15+30	1530.00	5.00	116.96	9.57	21	1	1,232	99	1,133
15+35	1535.00	5.00	113.28	20.42	21	3	1,253	103	1,151
15+40	1540.00	5.00	106.43	13.67	20	3	1,273	106	1,167
15+45	1545.00	5.00	120.19	0.54	21	1	1,294	108	1,187
15+48.9	1548.98	3.98	121.48	0.03	18	0	1,312	108	1,205
15+50	1550.00	1.02	121.73	0.00	5	0	1,317	108	1,210
16+00	1600.00	50.00	119.19	0.63	223	1	1,540	109	1,431
16+26.9	1627.00	27.00	120.13	0.25	120	0	1,660	109	1,551
16+56.5	1656.48	29.48	125.46	0.00	134	0	1,794	109	1,685
17+00	1700.00	43.52	101.05	0.00	183	0	1,977	109	1,868
17+38.4	1738.41	38.41	91.58	1.81	137	1	2,114	110	2,004
17+60	1760.00	21.59	99.19	0.00	76	1	2,190	111	2,079
17+85.2	1785.21	25.21	95.93	0.00	91	0	2,281	111	2,170
18+25.3	1825.28	40.07	90.07	0.00	138	0	2,419	111	2,308
18+63.3	1863.31	38.03	99.39	0.00	133	0	2,552	111	2,441
18+90	1890.00	26.69	97.77	0.00	97	0	2,649	111	2,538

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME



PROJECT NO: 7998-00-07	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 222	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090201

PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 223	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090202

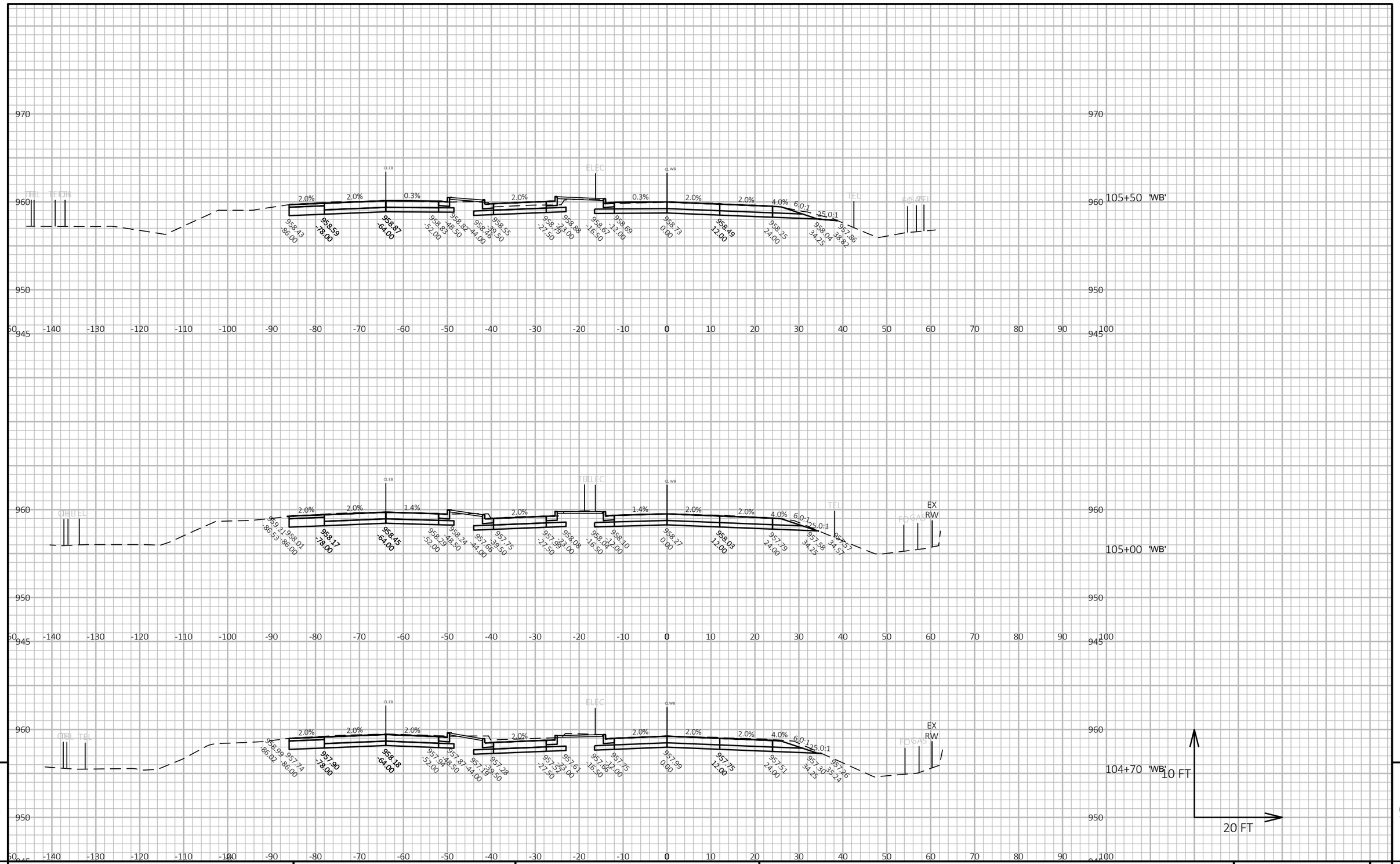
PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 224	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090203

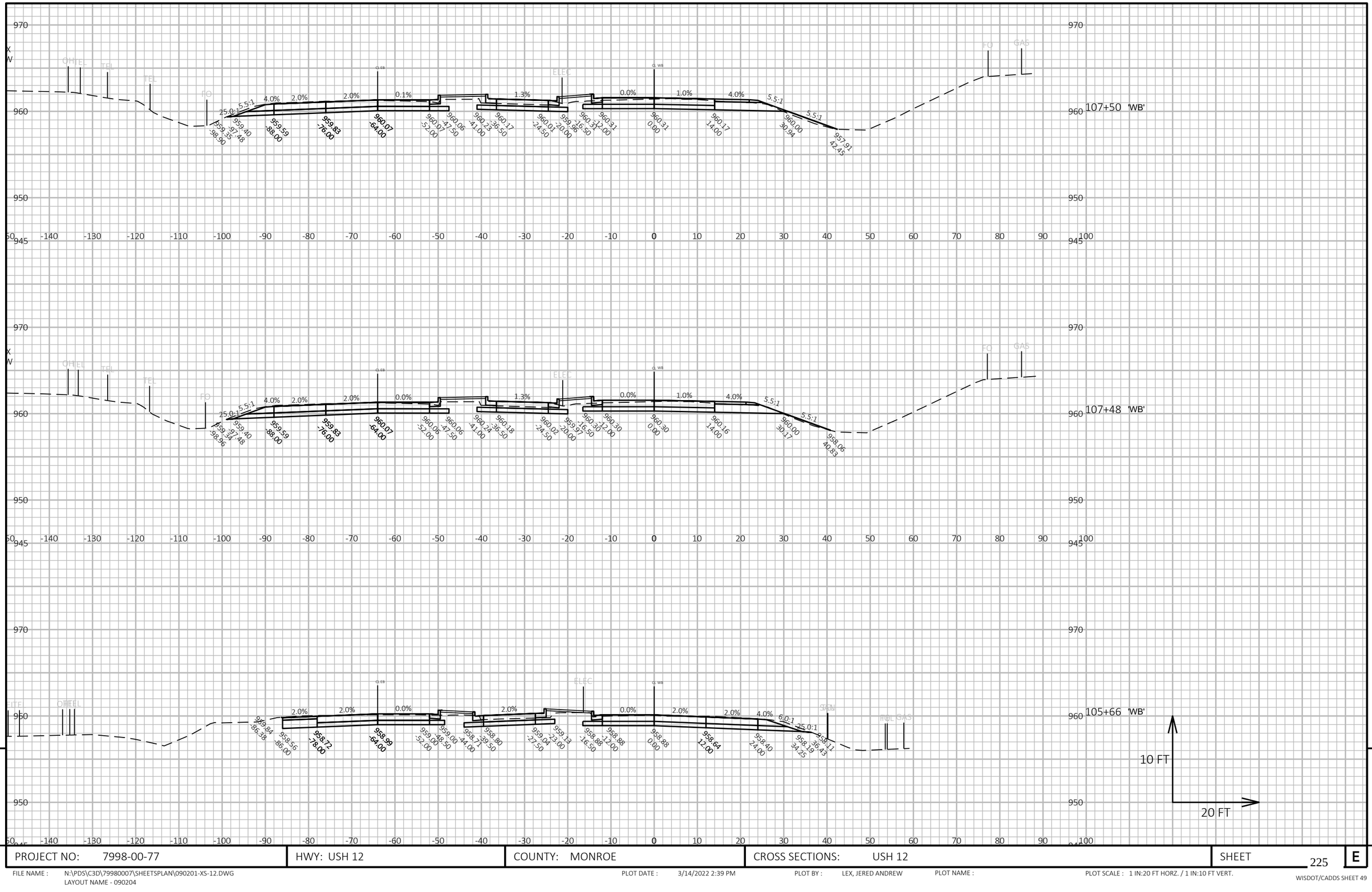
PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 225 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090204

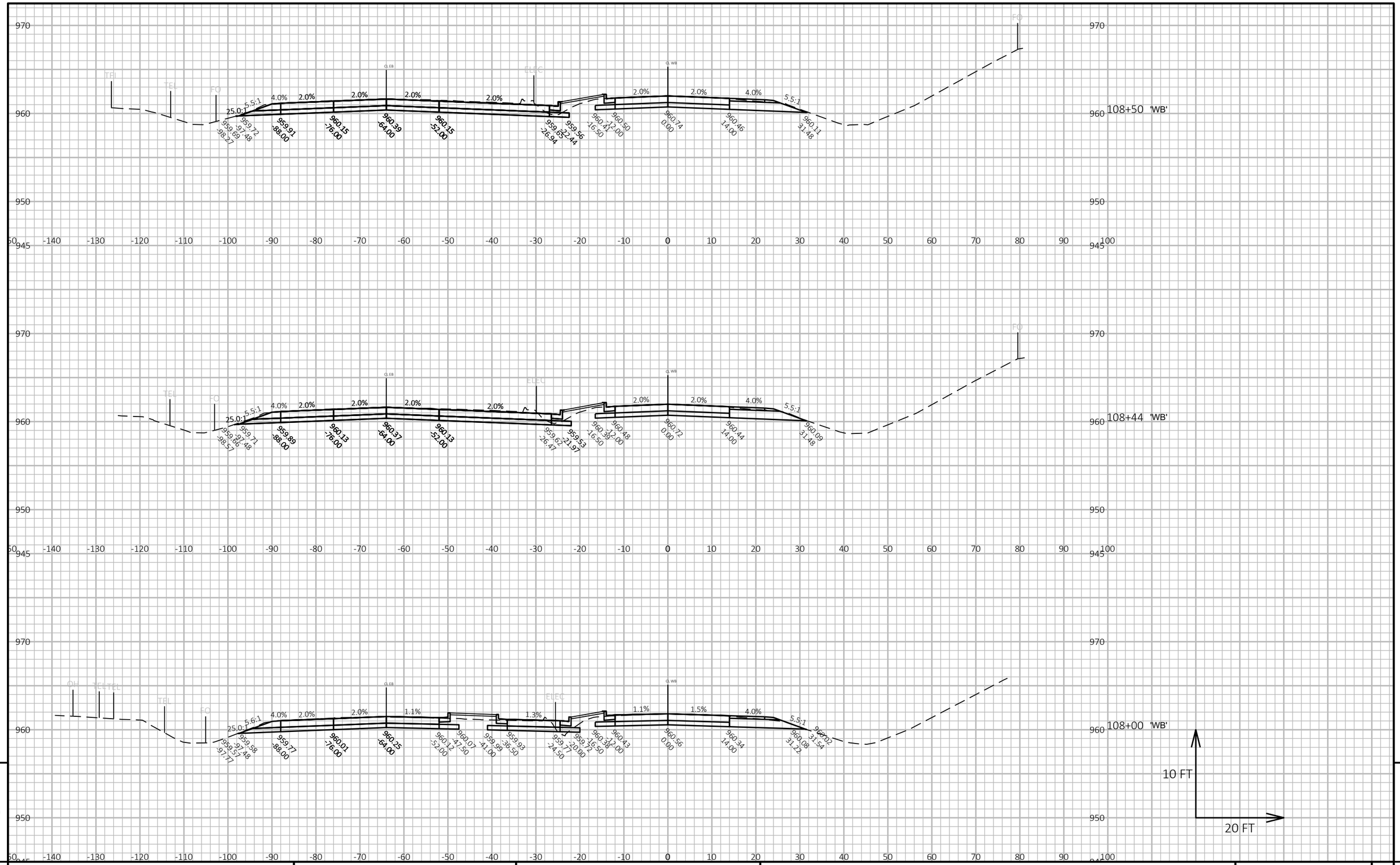
PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

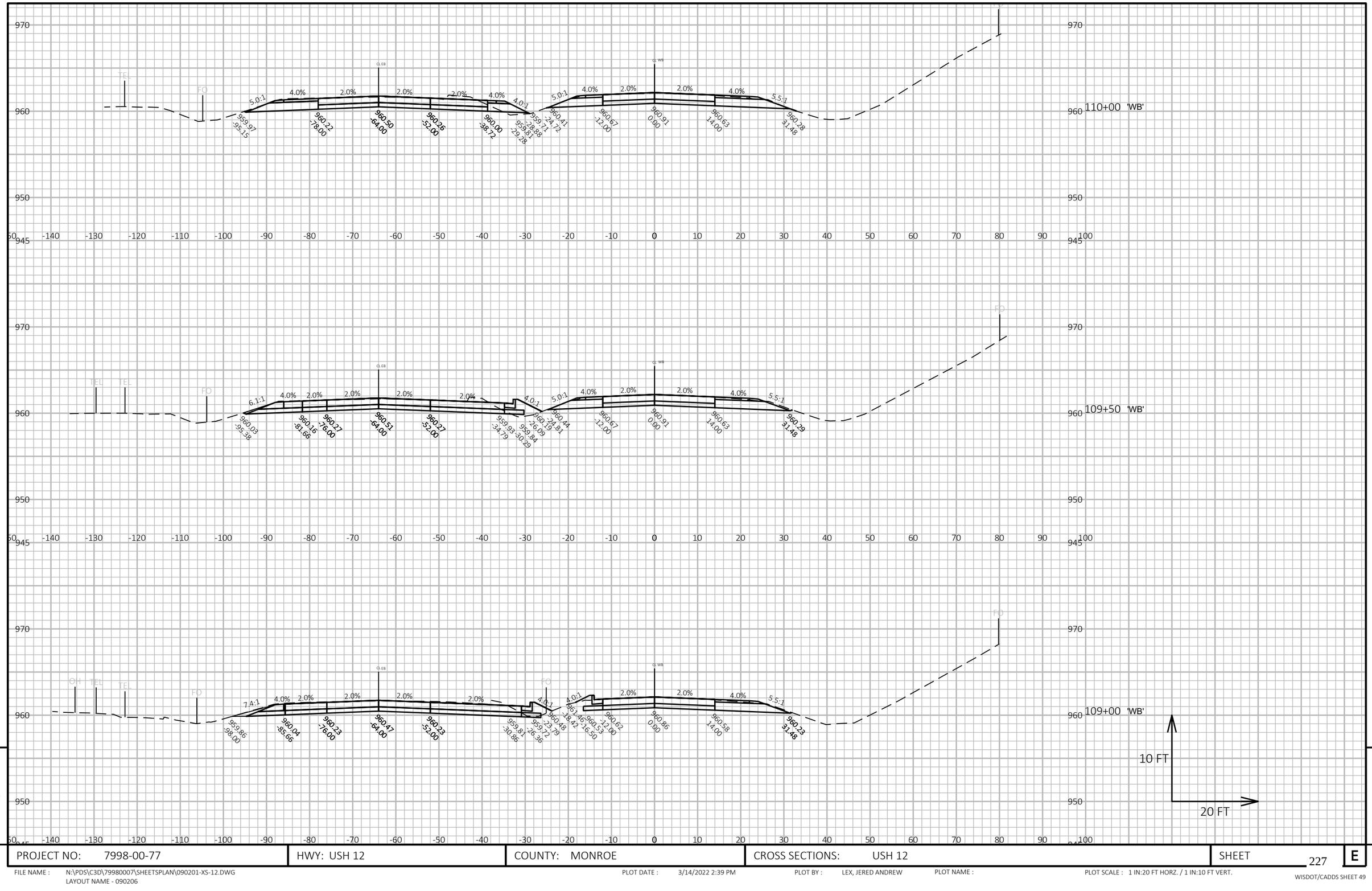


PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 226	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090205

PLOT DATE : 3/14/2022 2:39 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 227	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090206

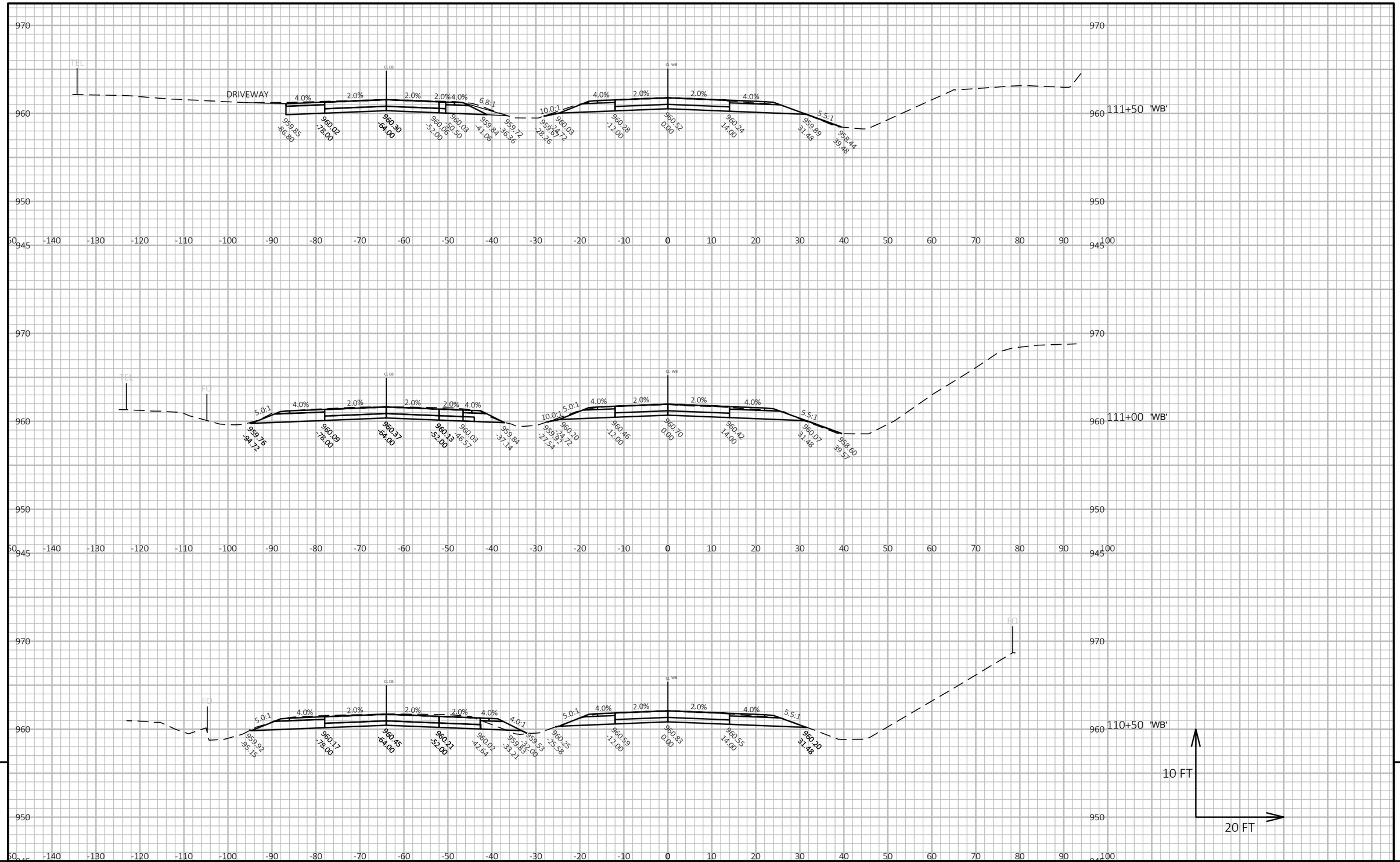
PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 228	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090207

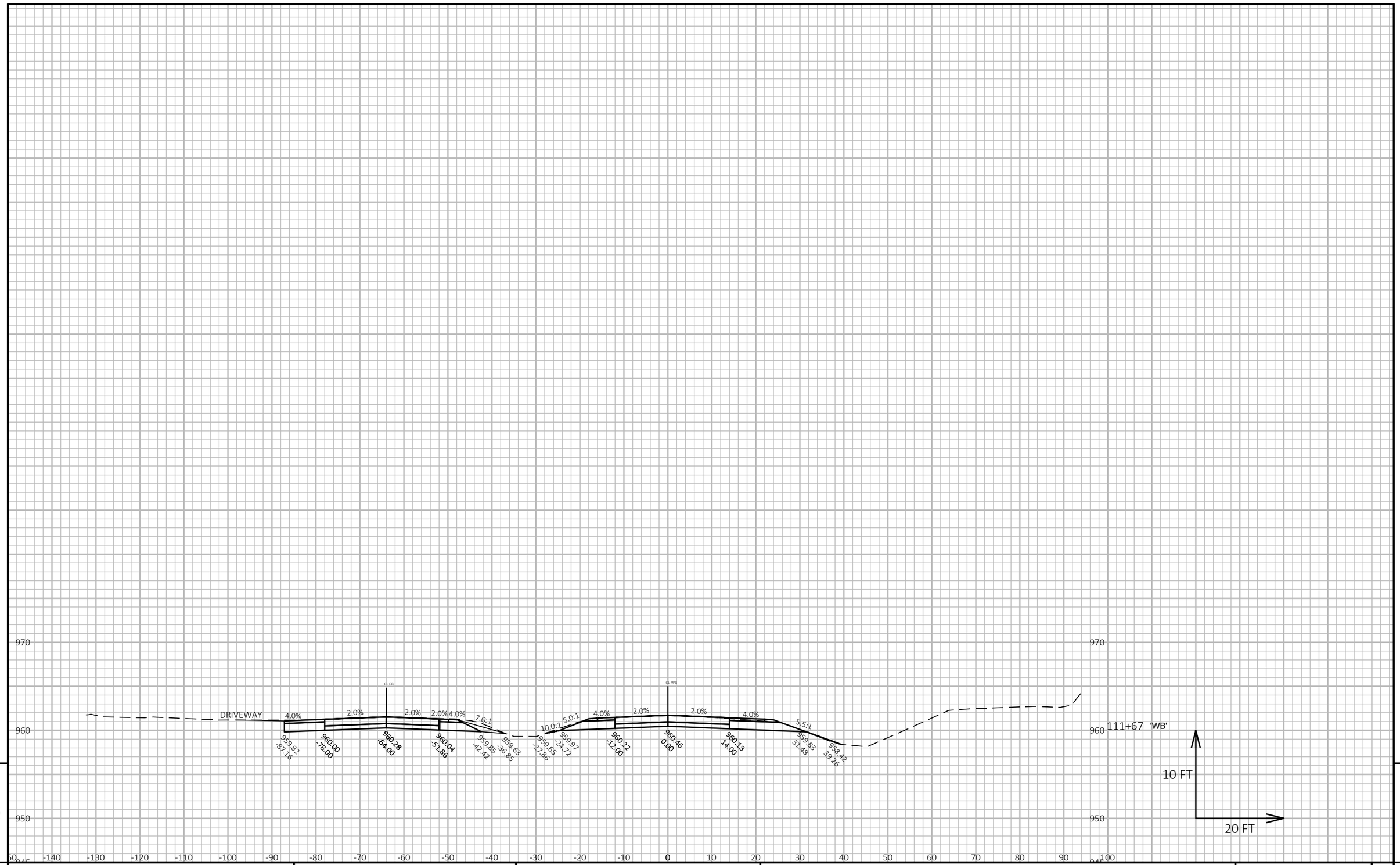
PLOT DATE : 3/14/2022 2:39 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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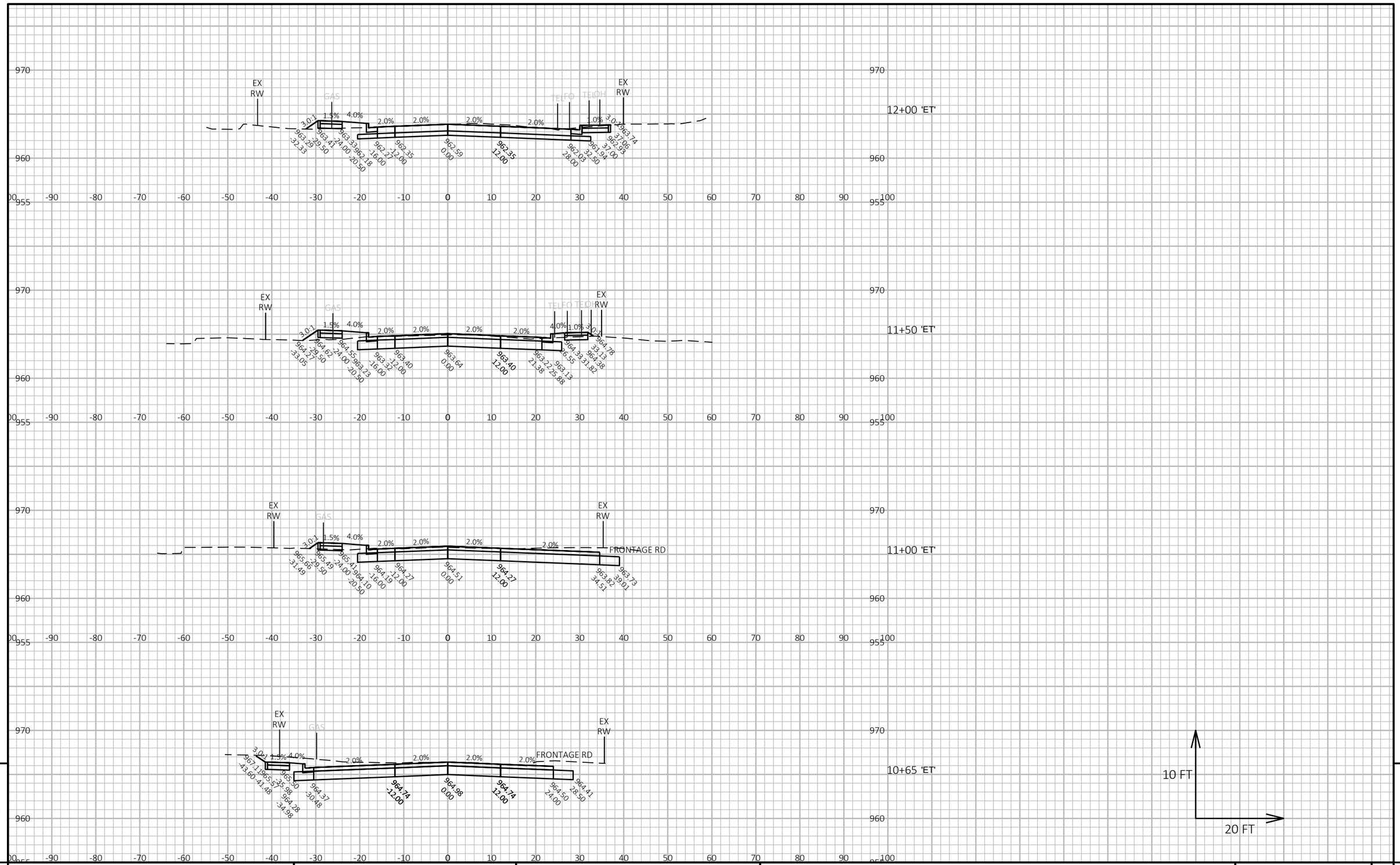
9

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: USH 12	SHEET 229	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-12.DWG
LAYOUT NAME - 090208

PLOT DATE : 3/14/2022 2:39 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CTH ET	SHEET 230	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CTHET-STATIC-LABEL-ONLY.DWG
LAYOUT NAME - 090209

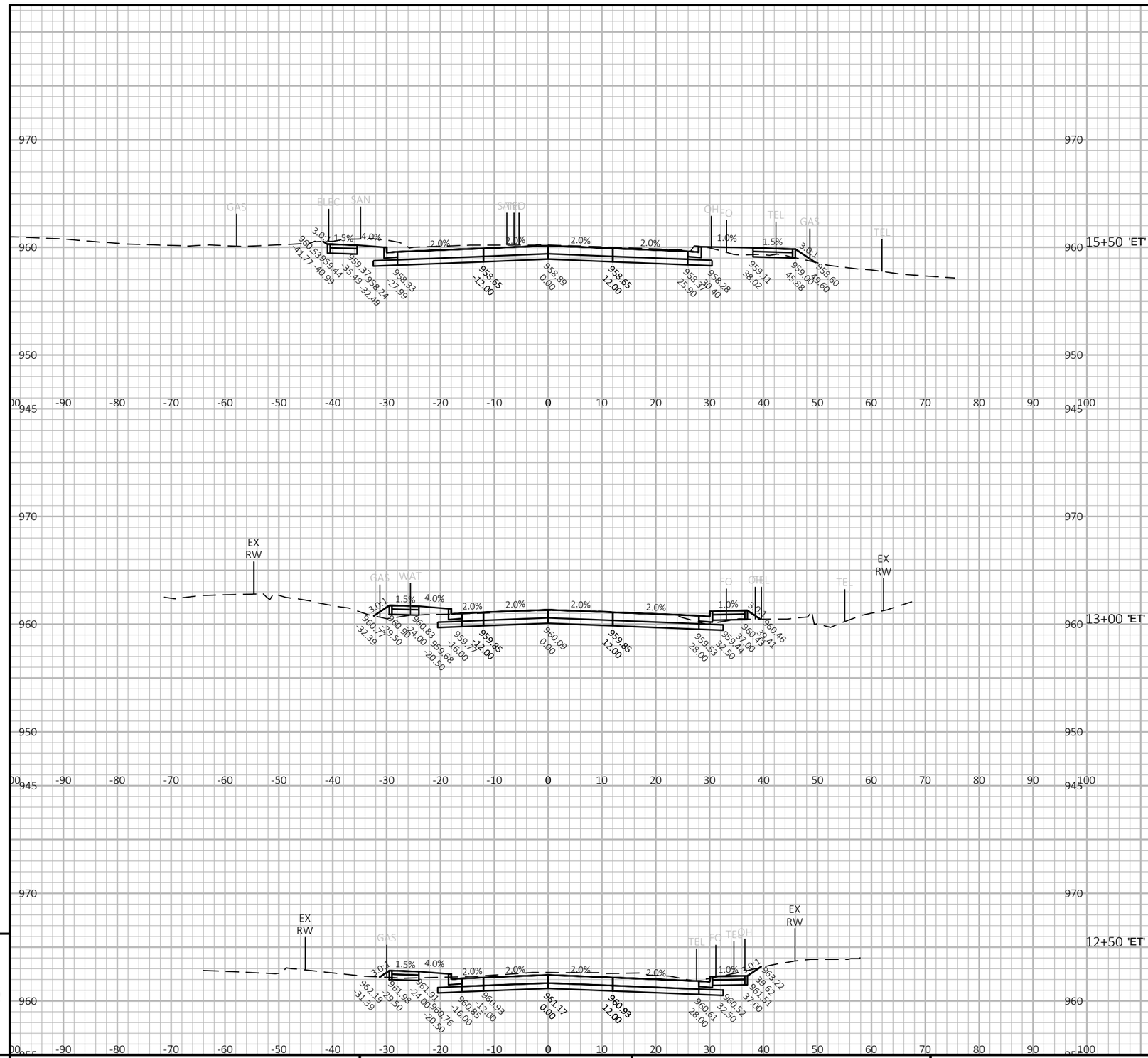
PLOT DATE : 3/16/2022 10:03 AM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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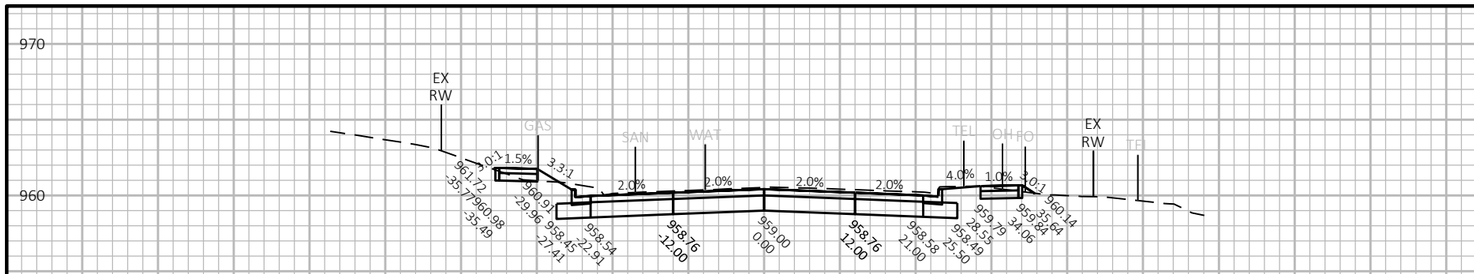
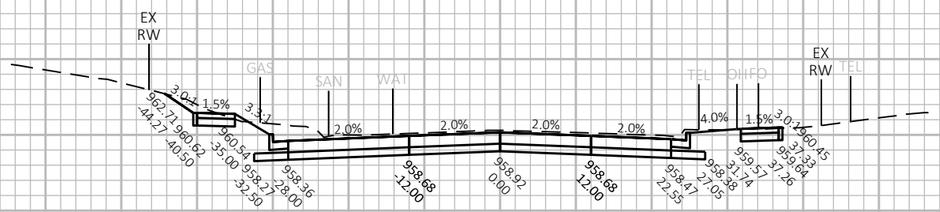
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CTH ET	SHEET 231	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CTHET-STATIC-LABEL-ONLY.DWG
LAYOUT NAME - 090210

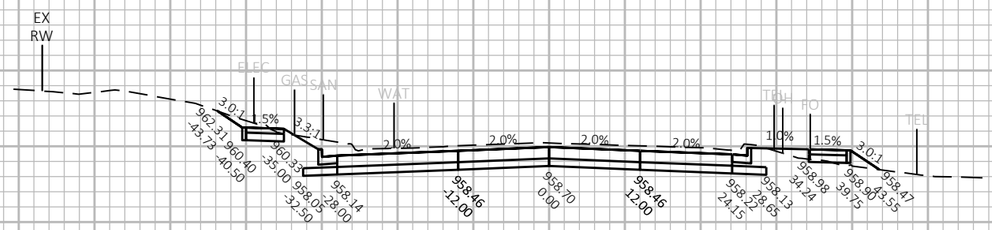
PLOT DATE : 3/16/2022 10:03 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



17+00 'ET'



16+50 'ET'



16+00 'ET'

10 FT

20 FT

9

9

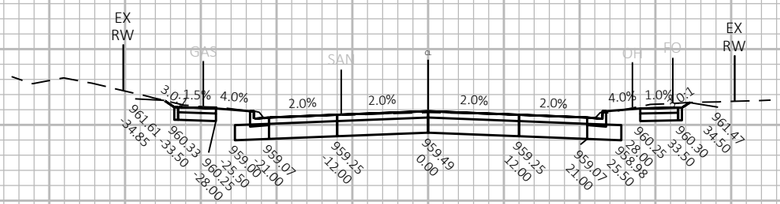
PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CTH ET	SHEET 232	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CTHET-STATIC-LABEL-ONLY.DWG
LAYOUT NAME - 090211

PLOT DATE : 3/16/2022 10:03 AM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

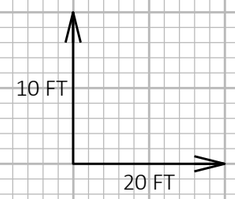
WISDOT/CADDS SHEET 49

18+50 'ET'



18+00 'ET'

17+50 'ET'



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PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CTH ET	SHEET 233	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-ET.DWG
LAYOUT NAME - 090212

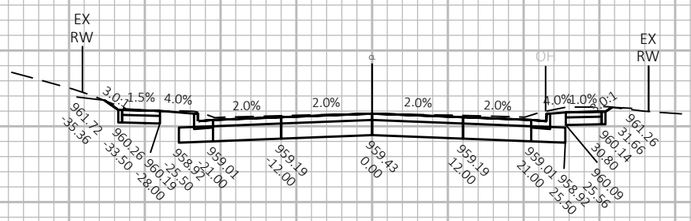
PLOT DATE : 1/28/2022 2:02 PM

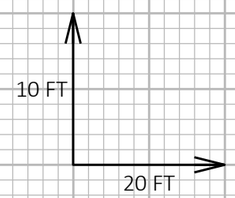
PLOT BY : LEX, JERED ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





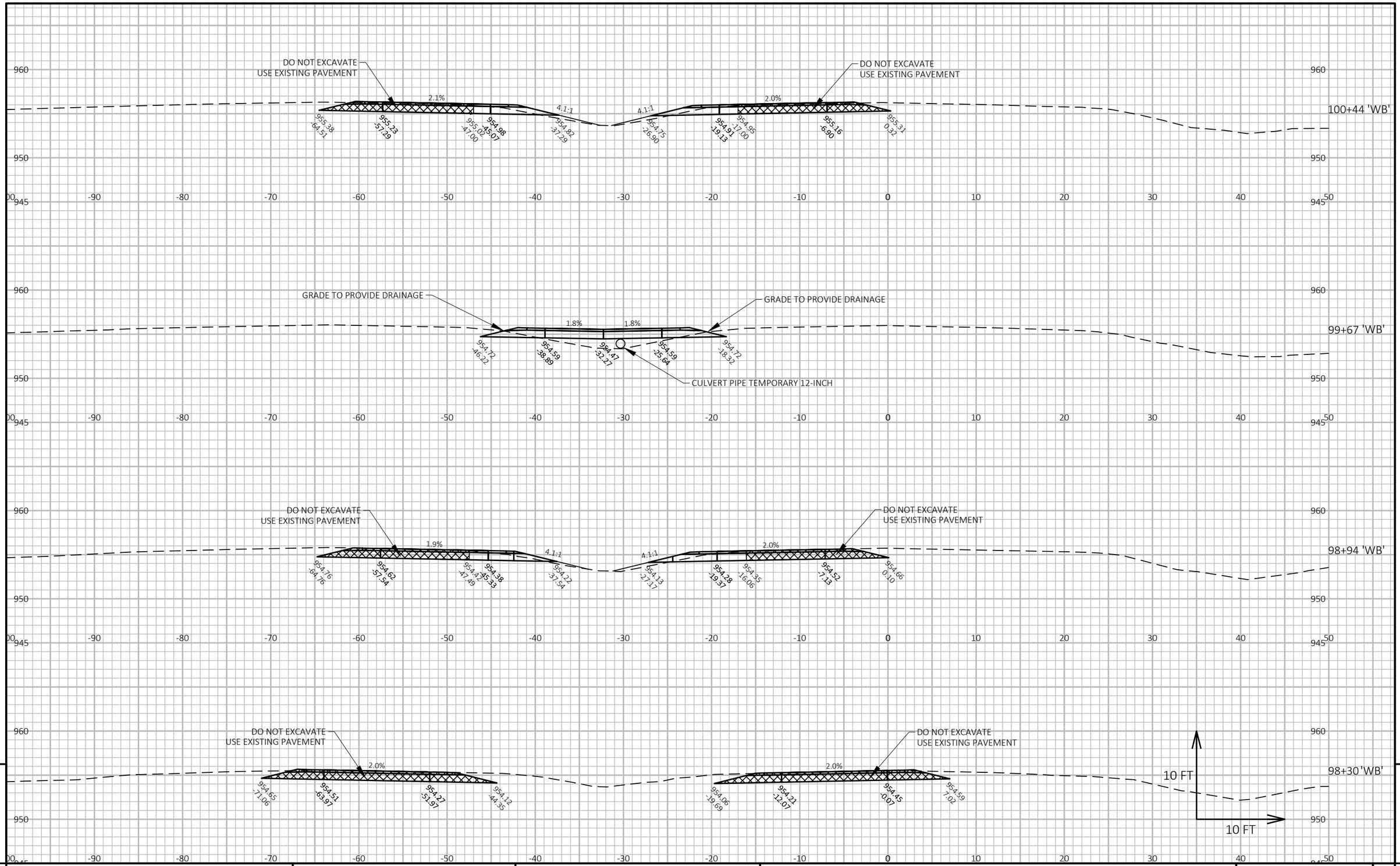
970
960
950
18+90 'ET'
-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100

9 9

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CTH ET	SHEET 234 E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-ET.DWG
LAYOUT NAME - 090213

PLOT DATE : 1/28/2022 2:03 PM PLOT BY : LEX, JERED ANDREW PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

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PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY CROSSOVERS	SHEET 235	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CROSSOVERS.DWG
LAYOUT NAME - 01

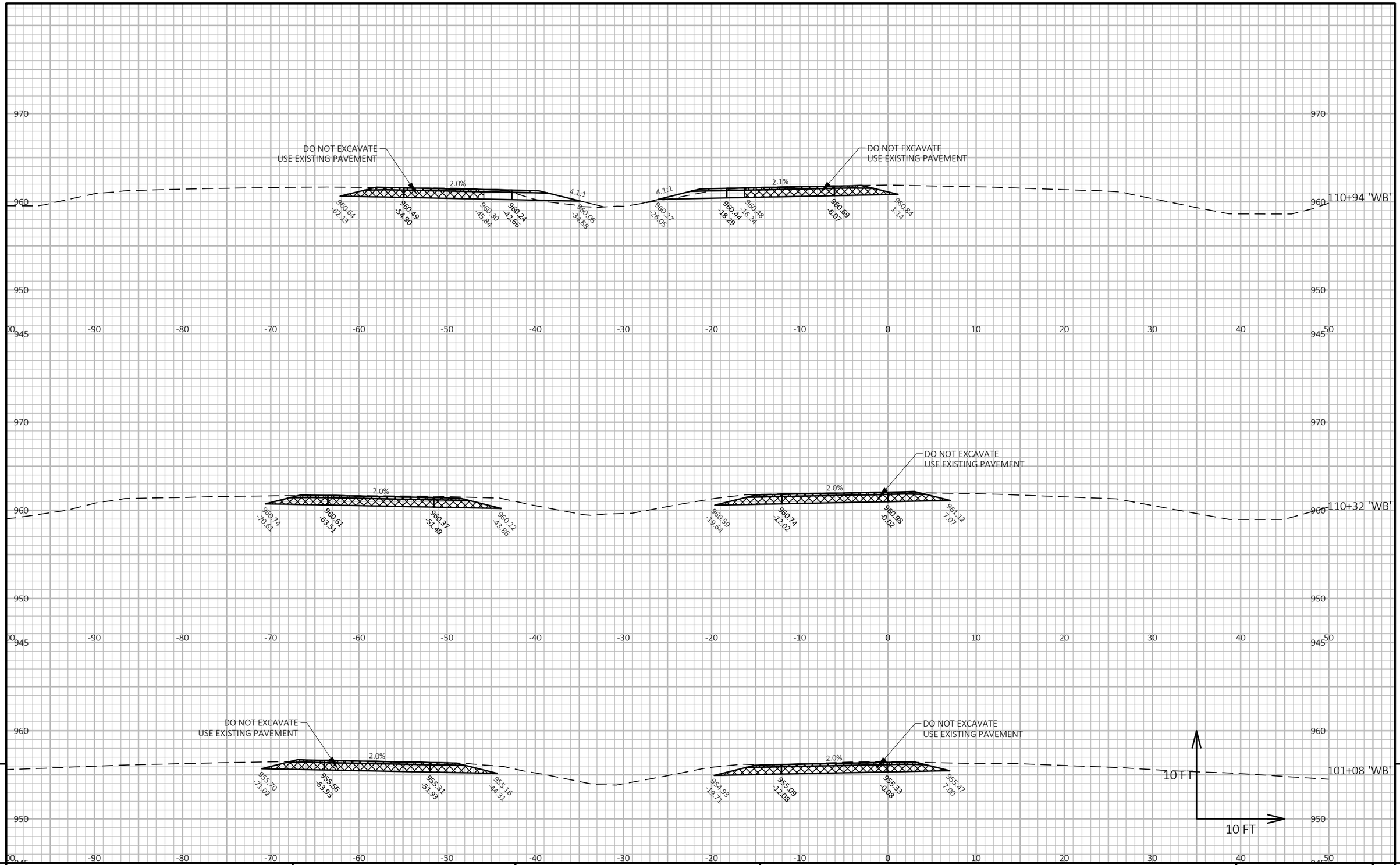
PLOT DATE : 8/25/2021 1:37 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY CROSSOVERS	SHEET 236	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CROSSOVERS.DWG
LAYOUT NAME - 02

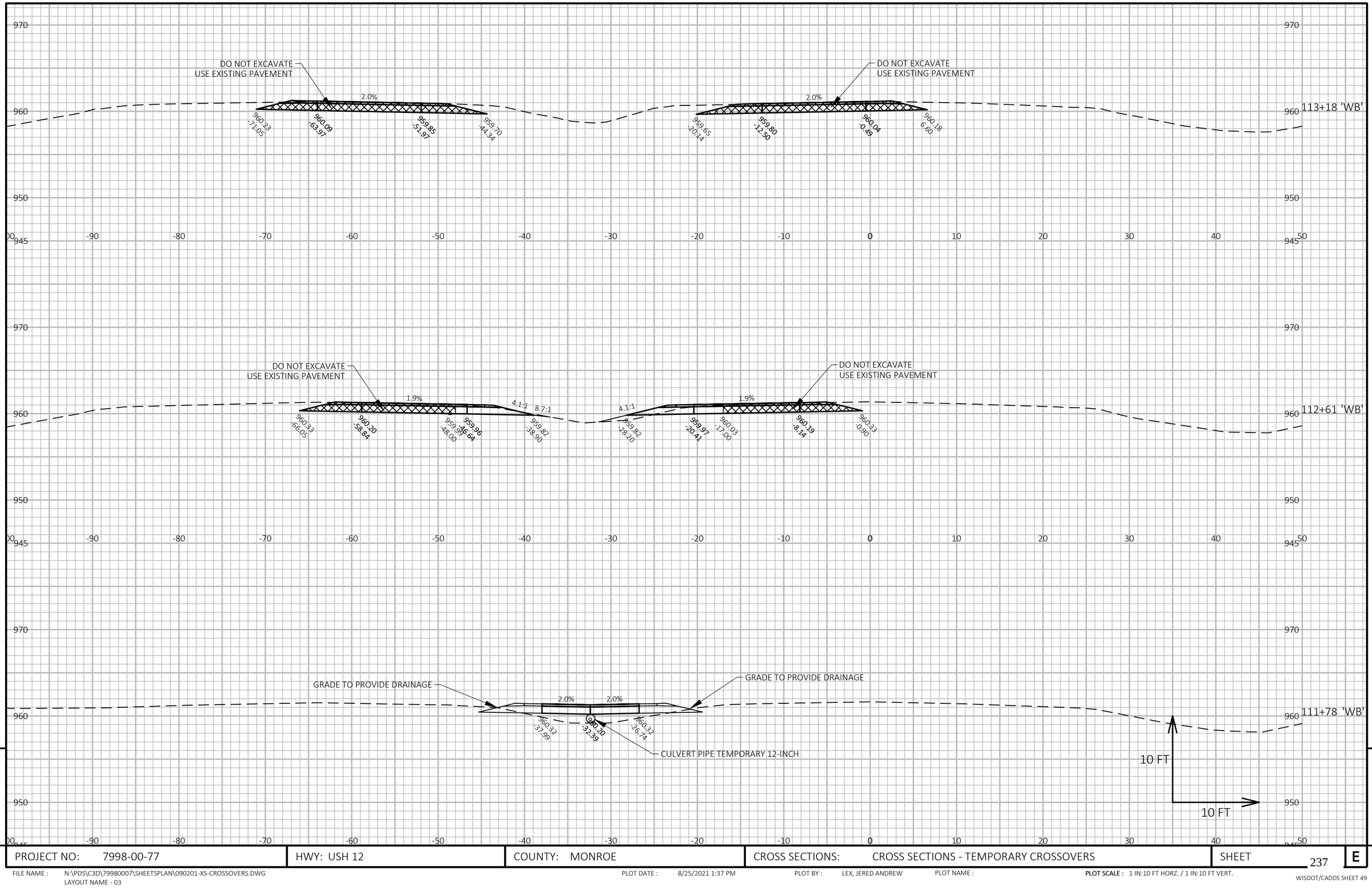
PLOT DATE : 8/25/2021 1:37 PM

PLOT BY : LEX, JERED ANDREW

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 7998-00-77	HWY: USH 12	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS - TEMPORARY CROSSOVERS	SHEET 237	E

FILE NAME : N:\PDS\C3D\79980007\SHEETSPLAN\090201-XS-CROSSOVERS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/25/2021 1:37 PM PLOT BY : LEX, JERED ANDREW 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.

http://www.dot.wisconsin.gov

LAX Dec 13, 2022

PROJECT ID: 7998-00-78

COUNTY: MONROE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right of Way Plat~~
Section No.	5	Plan and Profile
~~Section No.~~	~~6~~	~~Standard Detail Drawings~~
~~Section No.~~	~~7~~	~~Sign Plates~~
~~Section No.~~	~~8~~	~~Structure Plans~~
~~Section No.~~	~~9~~	~~Computer Earthwork Data~~
~~Section No.~~	~~0~~	~~Cross Sections~~

TOTAL SHEETS = 10

15

N

DESIGN DESIGNATION

A.A.D.T.	2023	=	15,500
A.A.D.T.	2043	=	15,500
D.H.V.		=	2,000
D.D.		=	51/49
T.		=	14.1%
DESIGN SPEED		=	50 MPH
ESALS		=	3,700,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'TR')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TOMAH - MAUSTON

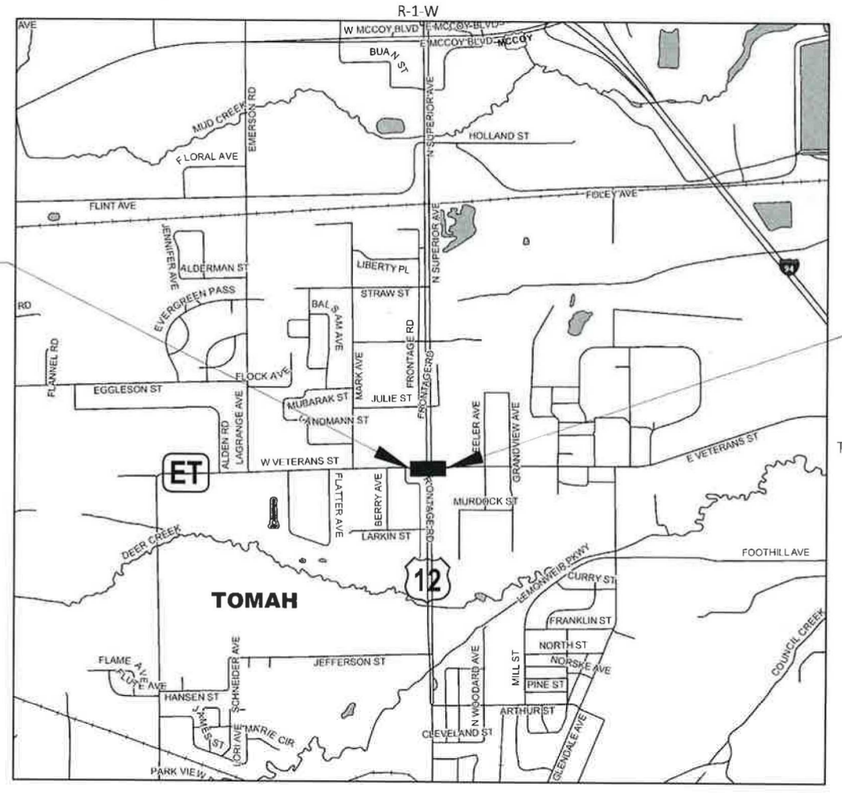
VETERANS STREET INSTERSECTION AREA

USH 12

MONROE COUNTY

STATE PROJECT NUMBER
7998-00-78

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7998-00-78		



T-18-N

BEGIN CONSTRUCTION
STA 10+45.00 'ET'
X=706589.964
Y=400378.690

END CONSTRUCTION
STA 18+90.00 'ET'
X=707434.177
Y=400397.328

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.203 MI

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

ACCEPTED FOR

CITY OF TOMAH

Date 5/2/22 (Signature and title of official)

ORIGINAL PLANS PREPARED BY

WISCONSIN
BRIAN R. BERQUIST
37471
MADISON, WI
PROFESSIONAL ENGINEER

DATE: 4/29/2022 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	Town & Country Engineering
Designer	Town & Country Engineering
Project Manager	Jered Lex
Regional Examiner	SW Region
Regional Supervisor	Dan Kleinertz

APPROVED FOR THE DEPARTMENT

DATE: 5/4/2022 (Signature)

E

FILE NAME : J:\JOB#S\TOMAH\TO-119-M1 USH 12-VETERANS INTERSECTION UTILITY IMPROVEMENTS\DRAWINGS\010101-TI.DWG

PLOT DATE : 4/19/2022 7:33 AM PLOT BY : NIKOLAS DORAVA PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE	LC.	LONG CHORD
AGG	AGGREGATE	LS	LUMP SUM
<	ANGLE	M.P.	MARKER POST
AE, AEW	APRON ENDWALL	MGAL	1000 GALLONS
ASPH.	ASPHALTIC	N.C.	NORMAL CROWN
A.D.T.	AVERAGE DAILY TRAFFIC	N	NORTH
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
B.F.	BACK FACE	NOR	NORMAL
BM	BENCHMARK	NO.	NUMBER
BTWN	BETWEEN	PAV'T	PAVEMENT
CTR.	CENTER	P.L.E.	PERMANENT LIMITED EASEMENT
C/L	CENTER LINE	P.C.	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	P.I.	POINT OF INTERSECTION
C.E.	COMMERCIAL ENTRANCE	P.T.	POINT OF TANGENCY
CONST.	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	P.E.	PRIVATE ENTRANCE
CMP	CORRUGATED METAL PIPE	PGL	PROFILE GRADE LINE
CO.	COUNTY	P.L.	PROPERTY LINE
CTH	COUNTY TRUNK HIGHWAY	R	RADIUS OR RANGE
CR.	CREEK	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DISCH.	DISCHARGE	S	SOUTH
DMS	DYNAMIC MESSAGE SIGN	SB	SOUTHBOUND
EA	EACH	S.F.	SQUARE FOOT (FEET)
E	EAST	SDD	STANDARD DETAIL DRAWING(S)
EB	EASTBOUND	STH	STATE TRUNK HIGHWAY
ELEC.	ELECTRIC(AL), ELEC. CABLE	STA.	STATION
EL., ELEV.	ELEVATION	S.E.	SUPERELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S/L	SURVEY LINE
EXC.	EXCAVATION	SYM	SYMMETRICAL
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E.	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
GALV.	GALVANIZE	TYP	TYPICAL
H.S.	HIGH STRENGTH	UNCL.	UNCLASSIFIED
CWT	HUNDRED WEIGHT	U.G.	UNDERGROUND (CABLE)
INL	INLET	VAR	VARIABLE
INTER.	INTERSECTION	V.C.	VERTICAL CURVE
IH	INTERSTATE HIGHWAY	V.P.C.	VERTICAL POINT OF CURVATURE
JT.	JOINT	V.P.I.	VERTICAL POINT OF INTERSECTION
LT	LEFT	V.P.T.	VERTICAL POINT OF TANGENCY
L.H.F.	LEFT HAND FORWARD	Wt.	WEIGHT
L.	LENGTH OF CURVE	W	WEST
L.F.	LINEAR FOOT(FEET)	WB	WESTBOUND

GENERAL NOTES

- SHALLOW SANDSTONE BEDROCK HAS BEEN FOUND IN THE AREA DURING SOILS AND PAVEMENT INVESTIGATION.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT AREAS WITH THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND EROSION MAT.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITIES INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRICITY
PATRICK MCINTYRE
528 INDUSTRIAL AVE
TOMAH, WI 54660
PHONE: 608-372-0340
EMAIL: PATRICKMCINTYRE@ALLIANTENERGY.COM

WE ENERGIES - GAS
TRAVIS KAHL
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
PHONE: 715-421-7256
EMAIL: TRAVIS.KAHL@WE-ENERGIES.COM

ATC MANAGEMENT, INC - ELECTRICITY TRANSMISSION
ANTHONY MARCINIAK
W 234 N 2000 RIDGEVIEW PARKWAY CT
P.O. BOX 47
WAUKESHA, WI 53187
PHONE: 262-506-6814
EMAIL: AMARCINIAK@ATCLLC.COM

CENTURYLINK - COMMUNICATION LINE
TOM MURRAY
333 N FRONT STREET
LA CROSSE, WI 54601
PHONE: 608-780-0895
EMAIL: TOM.L.MURRAY@LUMEN.COM

CITY OF TOMAH PUBLIC WORKS - WATER & SEWER
KIRK ARITY
819 SUPERIOR AVENUE
TOMAH, WI 54660
PHONE: 608-374-7453
EMAIL: KARITY@TOMAHONLINE.COM

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

DESIGN CONTACT

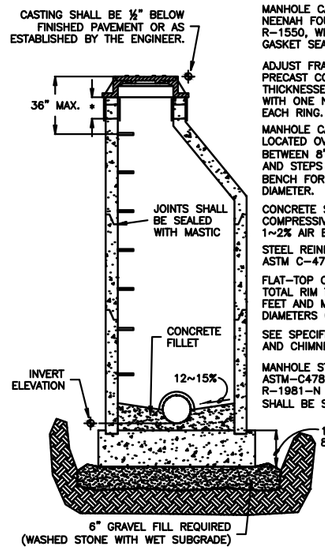
JERED LEX, P.E.
PROJECT MANAGER
WISDOT SW REGION
3550 MORMON COULEE RD
LA CROSSE, WI 54601
608-785-9956
JERED.LEX@DOT.WI.GOV

DNR LIAISON

KAREN KALVELAGE
ENVIRONMENTAL ANAYLYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
WEST CENTRAL REGION
3550 MORMON COULEE RD
LA CROSSE, WI 54601
608-785-9115
KAREN.KALVELAGE@WISCONSIN.GOV

MONROE COUNTY HIGHWAY DEPARTMENT

DAVID OHNSTAD
HIGHWAY COMMISSIONER
803 WASHINGTON ST
SPARTA, WI 54656
PHONE: 608-269-8831
EMAIL: DAVID.OHNSTAD@CO.MONROE.WI.US



NOTES:

MANHOLE CASTING SHALL BE HEAVY DUTY, NEENAH FOUNDRY CO. CATALOG LISTING NO. R-1550, WITH TYPE 'B' NON-ROCKING LID, GASKET SEAL AND CONCEALED PICKHOLES.

ADJUST FRAME TO GRADE WITH AT LEAST TWO PRECAST CONCRETE RINGS OF DIFFERENT THICKNESSES. RINGS SHALL BE REINFORCED WITH ONE NO. 3 STEEL BAR CENTERED WITHIN EACH RING.

MANHOLE CASTINGS AND STEPS SHALL BE LOCATED OVER THE EFFLUENT PIPE FOR PIPES BETWEEN 8" AND 18" IN DIAMETER. CASTINGS AND STEPS SHALL BE LOCATED OVER THE BENCH FOR PIPES GREATER THAN 18" IN DIAMETER.

CONCRETE SHALL BE 4000 PSI, 28 DAY COMPRESSIVE STRENGTH, 6.5 BAG MIX WITH 1~2% AIR ENTRAINMENT.

STEEL REINFORCEMENT SHALL CONFORM TO ASTM C-478 STANDARDS.

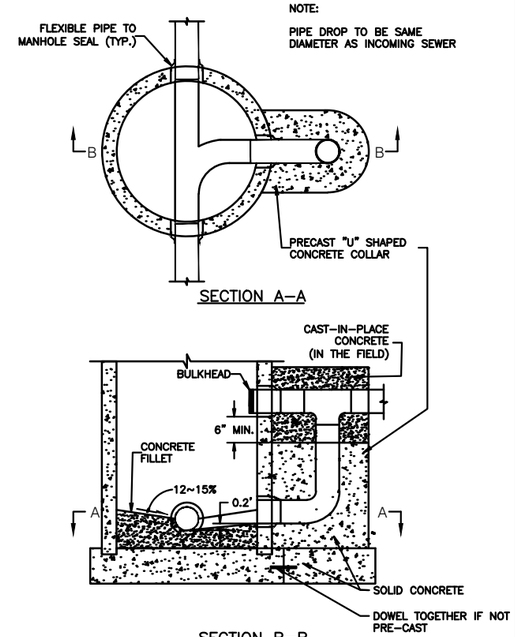
FLAT-TOP COVERS SHALL BE USED WHERE THE TOTAL RIM TO INVERT DEPTH IS LESS THAN 6 FEET AND MAY BE USED FOR MANHOLE DIAMETERS GREATER THAN 5 FEET.

SEE SPECIFICATION NARRATIVE FOR PIPE SEAL AND CHIMNEY SEAL REQUIREMENTS.

MANHOLE STEPS SHALL CONFORM TO ASTM-C478 & SHALL BE NEENAH FOUNDRY CO. R-1981-N OR APPROVED EQUAL. STEPS SHALL BE SPACED 16" ON CENTER.

* A MINIMUM OF 3" TO A MAXIMUM OF 9" OF ADJUSTING RINGS SHALL BE USED TO ADJUST THE MANHOLE CASTING TO THE FINISHED GRADE. ALL RINGS SHALL BE SEALED TOGETHER USING MASTIC AND ALL JOINTS SHALL BE BACK PLASTERED INSIDE AND OUT WITH CEMENT MORTAR.

DETAIL
MANHOLE



NOTE:

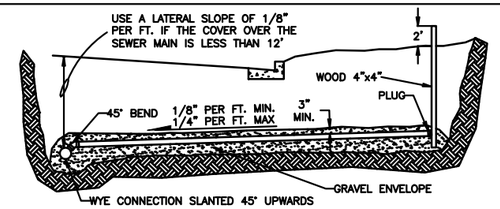
PIPE DROP TO BE SAME DIAMETER AS INCOMING SEWER

SECTION A-A

SECTION B-B

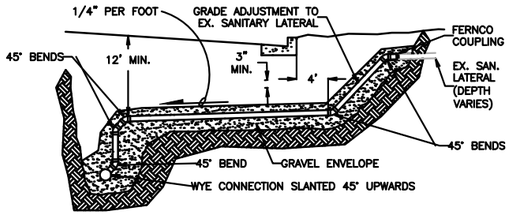
DOWEL BARS, IF NEEDED, ARE INCIDENTAL TO THE CONCRACT

DETAIL
DROP MANHOLE ENTRANCE



STANDARD INSTALLATION WITHOUT A RISER

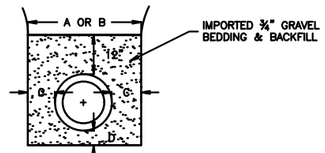
NOTES:
1. CONSTRUCT LATERALS IN CONFORMANCE WITH CHAPTER SPS 382 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. LATERAL SLOPE SHALL BE ¼" PER FOOT WHERE SUFFICIENT COVER EXISTS.
3. NEW LATERALS AND LATERAL CONNECTIONS SHALL BE MINIMUM SIZE OF 6" DIA.
4. WHERE LATERALS ARE NOT IMMEDIATELY CONNECTED TO BUILDING SEWERS THE ENDS OF THE LATERALS SHALL BE MARKED BY POSITIONING 4"x4" BOARDS VERTICALLY FROM THE ENDS OF LATERALS TO AT LEAST 2' ABOVE THE GROUND SURFACE.
5. NEW LATERALS SHALL BE REPLACED 12" BELOW EXISTING LATERAL WHERE POSSIBLE.
6. CONNECTION TO EXISTING LATERAL MAY BE 4" OR 6" DIAMETER. CONTRACTOR SHALL VERIFY SIZE, DEPTH, AND LOCATION AND PROVIDE APPROPRIATE ADAPTOR.
7. GRAVEL ENVELOPE IS ¾" CRUSHED AGGREGATE OR 1" CLEAR STONE WHEN DEWATERING IS NECESSARY.



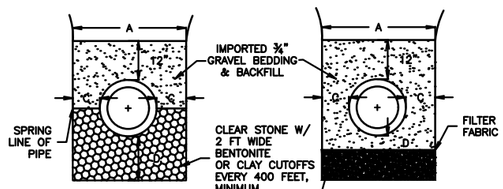
INSTALLATION WITH VERTICAL RISER

DETAIL
SANITARY SEWER LATERAL

DIMENSIONS:
- A: OUTSIDE DIAMETER OF PIPE PLUS 24" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36". TRENCH SHIELDS NARROWER THAN 4 FEET INSIDE WIDTH WILL NOT BE REQUIRED UNLESS SPECIFICALLY REQUIRED IN THE PROJECT SPECIFICATIONS.
- B: FOR ROCK, OUTSIDE DIAMETER OF PIPE PLUS 18" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36".
- C: MINIMUM – 6"
- D: MINIMUM 4" BELOW BARREL AND 3" BELOW BELL.



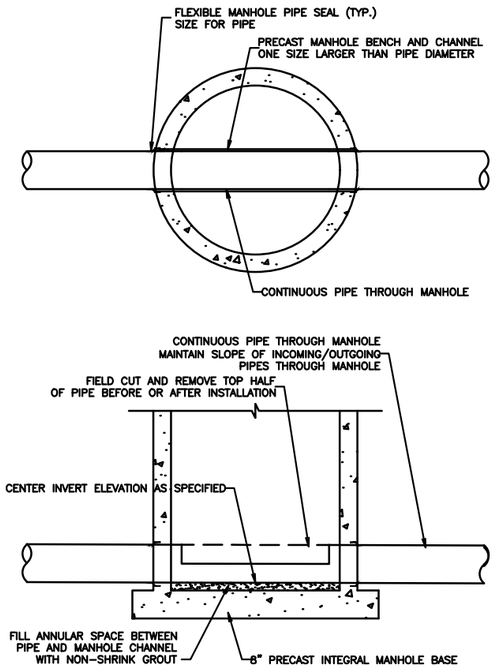
NORMAL PIPE TRENCH



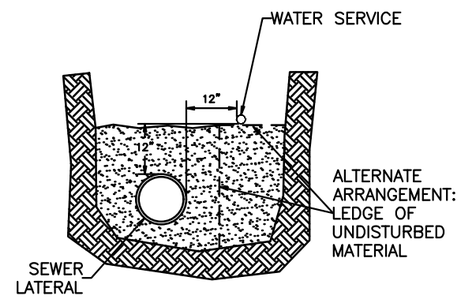
WET TRENCH
WITH SUMP DEWATERING

UNSTABLE TRENCH

DETAIL
TRENCH WIDTH AND BEDDING



DETAIL
MANHOLE - TYPE S



DETAIL
JOINT TRENCH INSTALLATION

PROJECT NO: 7998-00-78	HWY: W. VETERANS/CTH ET	COUNTY: MONROE	SANITARY DETAILS	SHEET 3	E

FILE NAME : J:\JOB#S\TOMAH\TO-119-M1 USH 12-VETERANS INTERSECTION UTILITY IMPROVEMENTS\DRAWINGS\TO 119 DETAILS.DWG
LAYOUT NAME - SANITARY
PLOT DATE : 4/13/2022 11:00 AM PLOT BY : NIKOLAS DORAVA PLOT NAME : PLOT SCALE : N.T.S.

2

DIMENSIONS:
- A: OUTSIDE DIAMETER OF PIPE PLUS 24" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36". TRENCH SHIELDS NARROWER THAN 4 FEET INSIDE WIDTH WILL NOT BE REQUIRED UNLESS SPECIFICALLY REQUIRED IN THE PROJECT SPECIFICATIONS.
- B: FOR ROCK, OUTSIDE DIAMETER OF PIPE PLUS 18" MAXIMUM, EXCEPT NEED NOT BE LESS THAN 36".
- C: MINIMUM – 6"
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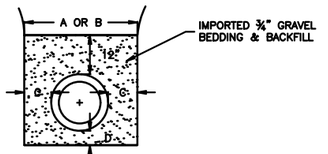
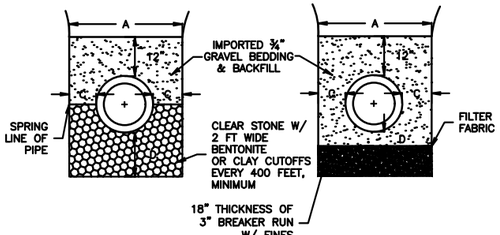


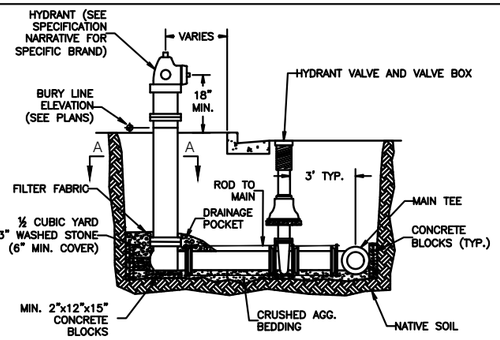
NORMAL PIPE TRENCH

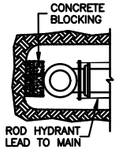


WET TRENCH WITH SUMP DEWATERING

UNSTABLE TRENCH

DETAIL
TRENCH WIDTH AND BEDDING





SECTION A–A

NOTES:

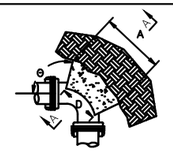
– WOOD BLOCKING MAY NOT BE USED. ONLY SOLID CONCRETE BLOCKS ARE ALLOWED.

– THE HYDRANT AND HYDRANT VALVE SHALL BE CONNECTED TO THE MAIN TEE BY RODDING IN ACCORDANCE WITH DETAIL "OFFSET AND RODDING", OR BY MEGALUGS.

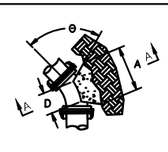
– THE DISTANCE BETWEEN THE HYDRANT AND THE MAIN WILL VARY. OFFSET DISTANCES ARE MARKED ON THE PLANS.

–WHERE THE HYDRANT IS INSTALLED AT THE HIGH POINT OF THE WATER MAIN ON MAINS 10 INCHES IN DIAMETER AND LARGER, THE CONTRACTOR SHALL TIP THE MAIN TEE UPWARDS 45 DEGREES AND USE A 45 DEGREE FITTING TO ALLOW AIR TO ESCAPE FROM THE MAIN.

DETAIL
HYDRANT SETTING



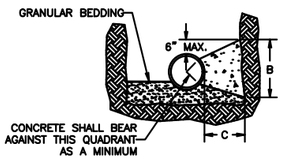
90° BEND



45° BEND

22½° BEND

TEE



SECTION A–A

WOOD BLOCKING MAY NOT BE USED. ONLY SOLID CONCRETE BLOCKS ARE ALLOWED.

DIMENSION "D" SHALL BE AS LARGE AS POSSIBLE, BUT THE CONCRETE SHALL NOT INTERFERE WITH THE MECHANICAL JOINTS.

DIMENSION "C" SHALL BE AT LEAST 6 INCHES, AND LARGE ENOUGH TO MAKE THE "Θ" ANGLE EQUAL TO OR GREATER THAN 45 DEGREES WITH THE DIMENSION "A" AS SHOWN ON THE TABLE, OR GREATER, AND WITH DIMENSION "D" AS LARGE AS POSSIBLE.

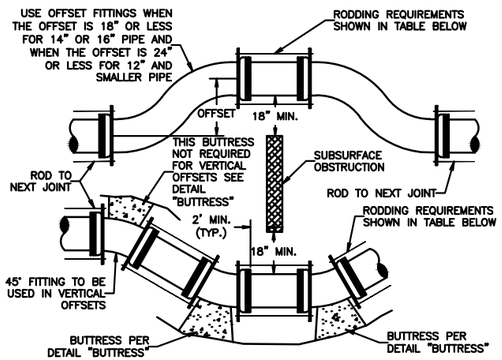
CONCRETE SHALL BE CLASS "CC". SEE SECTION 03301.

BUTTRESS DIMENSIONS									
PIPE SIZE*	TEES A	TEES B	22.5° BEND A	22.5° BEND B	45° BEND A	45° BEND B	90° BEND A	90° BEND B
6	1'–3"	1'–0"	1'–0"	1'–0"	1'–0"	1'–0"	1'–4"	1'–2"
8	1'–6"	1'–4"	1'–0"	1'–0"	1'–4"	1'–2"	1'–10"	1'–6"
10/12	2'–3"	2'–0"	1'–4"	1'–4"	1'–10"	1'–10"	2'–8"	2'–3"
14/16	3'–2"	2'–6"	1'–10"	1'–8"	2'–6"	2'–4"	3'–10"	2'–10"
18/20	4'–0"	3'–0"	2'–4"	2'–0"	3'–3"	2'–10"	5'–0"	3'–4"
22/24	5'–3"	3'–4"	2'–10"	2'–4"	4'–0"	3'–3"	6'–4"	3'–10"
30	6'–3"	4'–3"	3'–6"	3'–0"	5'–4"	3'–10"	8'–0"	4'–8"

* = FOR TEE THIS WILL BE THE BRANCH PIPE

DIMENSIONS IN THE TABLE ARE BASED ON A WATER PRESSURE OF 150 PSI AND SOIL RESISTANCE OF 2000 LBS./SQ.FT.

DETAIL
BUTTRESS



NOMINAL PIPE SIZE	RODS NO.	RODS DIA.	STRAP SIZE	BOLT DIA.	WASHER SIZE
6	3	⅝	½ x 2	⅝	½ x 3 x 5
8	4	⅝	½ x 2	⅝	½ x 3 x 5
10	4	⅝	½ x 2½	1	½ x 3 x 5
12	4	⅝	½ x 2½	1	½ x 3 x 5
14	4	⅝	½ x 2½	1	½ x 3 x 5

ALL DIMENSIONS IN THIS TABLE ARE IN INCHES

NOTES:
– RODS AND WASHERS TO BE ASTM A–575 MERCHANT QUALITY 0.17–0.24 CARBON. NUTS TO BE AMERICAN STANDARD HEAVY, NOT PRESSED.

– TIE RODS, BOLTS, NUTS, BANDS AND WASHERS TO BE FURNISHED AND ASSEMBLED BY THE CONTRACTOR.

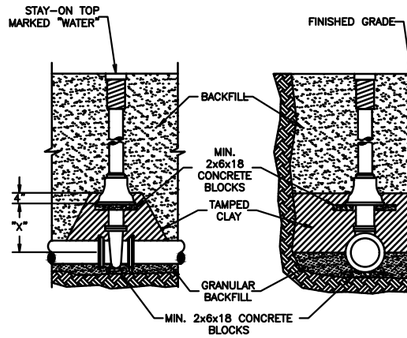
– ALL STEEL MATERIAL TO BE GALVANIZED OR THOROUGHLY COATED WITH ENGINEER APPROVED COATING.

– OFFSET FITTINGS REQUIRE CONTINUOUS RODDING IN ALL POSITIONS.

– VERTICAL OFFSETS SHALL NOT CREATE A HIGH POINT IN THE WATER MAIN. VERTICAL OFFSETS REQUIRE THE SAME RODDING AND BUTTRESSING AS SHOWN ABOVE.

– MEGALUG RESTRAINTS MAY BE USED IN LIEU OF RODDING.

DETAIL
OFFSET AND RODDING



VIEW ALONG PIPELINE

SECTION VIEW

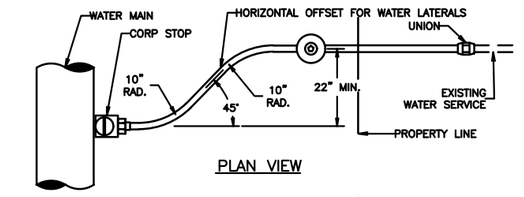
PIPE DIA., INCHES	6	8	10	12	14	16
"X" DIMENSION, INCHES	12	13	17	21	25	30

NOTES:

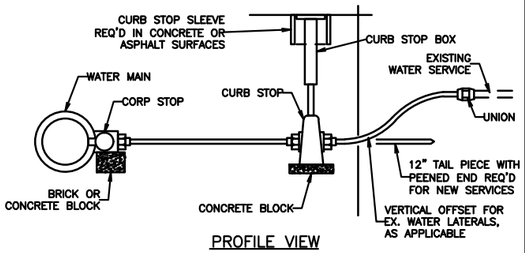
– SOLID CONCRETE BLOCKS MUST BE USED.

– VALVES SHALL BE SECURED WITH RODDING OR MEGALUGS TO THE NEAREST "TEE" FITTING OR TO THE FIRST JOINT CONNECTING A FULL SECTION OF WATER MAIN PIPE. SEE RODDING DETAIL "OFFSET AND RODDING".

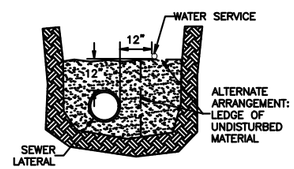
DETAIL
VALVE BOX SETTING



PLAN VIEW



PROFILE VIEW



JOINT TRENCH INSTALLATION

NOTES:

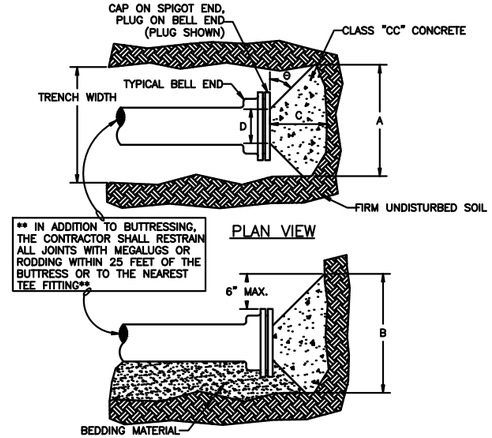
– SOLID CONCRETE BLOCKS MUST BE USED.

– HORIZONTAL AND VERTICAL OFFSETS SHALL BE MADE WITH AN APPROVED PIPE BENDING TOOL. SHARP BENDS OR KINKS IN THE WATER SERVICE ARE NOT ALLOWED.

– VERTICAL OFFSETS SHALL BE MADE ON THE PROPERTY LINE SIDE OF THE CURB STOP.

– PLASTIC OR CAST IRON CURB BOX SLEEVES SHALL BE INSTALLED WHERE CURB BOXES ARE INSTALLED IN CONCRETE OR ASPHALT SURFACES.

DETAIL
WATER SERVICE INSTALLATION



PLAN VIEW

ELEVATION VIEW

BUTTRESS DIMENSIONS				
DIA.	A	B	C	D
6"	1'–3"	1'–0"	SEE NOTES ABOVE	SEE NOTES ABOVE
8"	1'–8"	1'–6"		
10"	2'–0"	1'–8"		
12"	2'–5"	1'–10"		
16"	3'–4"	2'–4"		
20"	4'–3"	2'–10"		
24"	5'–2"	3'–4"		
30"	6'–9"	4'–0"		

NOTES:
– DIMENSION "C" SHALL BE LARGE ENOUGH TO MAKE ANGLE Θ EQUAL TO OR GREATER THAN 45°.

– DIMENSION "D" EQUALS APPROX. I.D. OF PIPE, LESS 2 INCHES. CONTRACTOR SHALL PROTECT THE MECH. JOINT BOLTS FROM THE CONCRETE BUTTRESS.

– BUTTRESS DIMENSIONS ARE BASED UPON A SOIL RESISTANCE OF 2 TONS PER SQ. FT. AND A WATER PRESSURE OF 150 P.S.I.

DETAIL
BUTTRESS FOR DEAD ENDS

7998-00-78

Line	Item	Item Description	Unit	Total	Qty
0032	213.0100	Finishing Roadway (project) 02. 7998-00-78	EACH	1.000	1.000
0124	618.0100	Maintenance And Repair of Haul Roads (project) 02. 7998-00-78	EACH	1.000	1.000
0126	619.1000	Mobilization	EACH	0.020	0.020
0206	643.5000	Traffic Control	EACH	0.020	0.020
0364	SPV.0035	Special 01. Select Backfill	CY	250.000	250.000
0378	SPV.0060	Special 08. Set Up (Sections)	EACH	3.000	3.000
0380	SPV.0060	Special 09. Sanitary Sewer Joint Testing	EACH	15.000	15.000
0382	SPV.0060	Special 10. Sanitary Sewer Joint Grouting	EACH	15.000	15.000
0384	SPV.0060	Special 11. Sanitary Manhole Removal	EACH	1.000	1.000
0386	SPV.0060	Special 12. 10" Valves and Boxes	EACH	8.000	8.000
0388	SPV.0060	Special 13. 8" Valves and Boxes	EACH	2.000	2.000
0390	SPV.0060	Special 14. 6" Valves and Boxes	EACH	1.000	1.000
0392	SPV.0060	Special 15. Abandon Gate Valves and Boxes	EACH	4.000	4.000
0394	SPV.0060	Special 16. New Hydrants	EACH	1.000	1.000
0396	SPV.0060	Special 17. Existing Hydrant Removals	EACH	1.000	1.000
0398	SPV.0060	Special 18. 1" Curb Stops	EACH	3.000	3.000
0400	SPV.0060	Special 19. 1" Corporation Stops	EACH	3.000	3.000
0402	SPV.0060	Special 20. Water Service Lateral Reconnections	EACH	3.000	3.000
0404	SPV.0060	Special 21. Existing Main Reconnections	EACH	6.000	6.000
0406	SPV.0060	Special 22. Existing Sanitary Sewer Connection	EACH	3.000	3.000
0408	SPV.0060	Special 23. Sanitary Manhole Casting	EACH	5.000	5.000
0410	SPV.0060	Special 24. Temporary Sewer Bypassing and Connections	EACH	1.000	1.000
0412	SPV.0060	Special 25. Temporary Water System	EACH	1.000	1.000
0414	SPV.0060	Special 26. Dewatering	EACH	1.000	1.000
0418	SPV.0090	Special 02. 10" Water Main Constructed Using Directional Drilling, Ductile Iron	LF	175.000	175.000
0420	SPV.0090	Special 03. 10" Water Main, Ductile Iron	LF	725.000	725.000
0422	SPV.0090	Special 04. 8" Water Main, Ductile Iron	LF	122.000	122.000
0424	SPV.0090	Special 05. 6" Water Main, Ductile Iron	LF	13.000	13.000
0426	SPV.0090	Special 06. 1" Copper Water Service Laterals	LF	121.000	121.000
0428	SPV.0090	Special 07. 8" Sanitary Sewer PVC	LF	5.000	5.000
0430	SPV.0090	Special 08. 10" Sanitary Sewer PVC	LF	206.000	206.000
0432	SPV.0090	Special 09. 15" Sanitary Sewer PVC	LF	5.000	5.000
0434	SPV.0090	Special 10. Preparatory Sewer Cleaning and Pre-Lining Televising - 10-Inch	LF	330.000	330.000
0436	SPV.0090	Special 11. Preparatory Sewer Cleaning and Pre-Lining Televising - 15-Inch	LF	322.000	322.000
0438	SPV.0090	Special 12. Lining & Post-Lining Televising - 10-Inch	LF	330.000	330.000
0440	SPV.0090	Special 13. Lining & Post-Lining Televising - 15-Inch	LF	322.000	322.000
0442	SPV.0200	Special 01. Standard Sanitary Manhole Masonry 48-Inch Diameter	VF	36.000	36.000

HYDRANTS	SPV.0060.17 EXISTING HYDRANT REMOVALS	SPV.0060.16 NEW HYDRANTS
STATION	EACH	EACH
10+50 - 15+80	1	---
10+50 - 15+80	---	1
TOTAL	1	1

CATEGORY	LOCATION	SPV.00060.25 SPECIAL (25. TEMPORARY WATER SYSTEM) EA	SPV.0060.26 SPECIAL (26. DEWATERING) EA
0020	PROJECT	1	1
	TOTAL 0020	1	1

WATER MAIN	SPV.0060.12 10" VALVES AND BOXES	SPV.0060.13 8" VALVES AND BOXES	SPV.0060.14 6" VALVES AND BOXES	SPV.0060.15 ABANDON GATE VALVES AND BOXES	SPV.0060.18 1" CURB STOPS
STATION	EACH	EACH	EACH	EACH	EACH
10+50 - 15+80	5	2	1	3	1
15+80 - 18+88	3	---	---	1	2
TOTAL	8	2	1	4	3

WATER MAIN - CONTINUED	SPV.0060.19 1" CORPORATION STOPS	SPV.0060.20 WATER SERVICE LATERAL RECONNECTIONS	SPV.0060.21 EXISTING MAIN RECONNECTIONS	SPV.0090.02 10" WATER MAIN CONSTRUCTED USING DIRECTIONAL DRILLING, DUCTILE IRON	SPV.0090.03 10" WATER MAIN, DUCTILE IRON
STATION	EACH	EACH	EACH	EACH	EACH
10+50 - 15+80	1	1	4	175	397
15+80 - 18+88	2	2	2	---	328
TOTAL	3	3	6	175	725

WATER MAIN - CONTINUED	SPV.0090.04 8" WATER MAIN, DUCTILE IRON	SPV.0090.05 6" WATER MAIN, DUCTILE IRON	SPV.0090.06 1" COPPER WATER SERVICE LATERALS
STATION	EACH	EACH	EACH
10+50 - 15+80	122	13	41
15+80 - 18+88	---	---	80
TOTAL	122	13	121

**ALL BID ITEMS ON THIS SHEET ARE CATEGORY 0020.

SANITARY SEWER PIPE ITEMS

STATION	SPV.0060.08 SET UP (SECTIONS) CAT 0020 EACH	SPV.0060.09 SANITARY SEWER JOINT TESTING EACH	SPV.0060.10 SANITARY SEWER JOINT GROUTING EACH	SPV.0060.22 EXISTING SANITARY SEWER CONNECTION EACH	SPV.0090.07 8" SANITARY SEWER, PVC LF	SPV.0090.08 10" SANITARY SEWER,PVC LF	SPV.0090.09 15" SANITARY SEWER,PVC LF
10+50 - 18+88	3	15	15	---	---	---	---
10+50 - 15+80	---	---	---	1	---	170	---
15+80 - 18+88	---	---	---	2	5	36	5
TOTAL	3	15	15	3	5	206	5

SANITARY SEWER PIPE ITEMS - CONTINUED

STATION	SPV.0090.10 PREPARATORY SEWER CLEANING AND PRE-LINING TELEVISING - 10-INCH LF	SPV.0090.11 PREPARATORY SEWER CLEANING AND PRE-LINING TELEVISING - 15-INCH LF	SPV.0090.12 LINING & POST-LINING TELEVISING - 10-INCH LF	SPV.0090.13 LINING & POST-LINING TELEVISING - 15-INCH LF
10+50 - 18+88	330	322	330	322
TOTAL	330	322	330	322

SELECT BACKFILL

CATEGORY	LOCATION	SPV.0035.01 SELECT BACKFILL (CY)
	UNDISTRIBUTED	250
TOTAL		CAT 0020

CATEGORY	LOCATION	SPV.0060.24 SPECIAL (24. TEMPORARY SEWER BYPASSING AND CONNECTIONS) EA
0010	PROJECT	1
	TOTAL 0010	1

SANITARY SEWER MANHOLES

STATION	SPV.0060.11 SANITARY MANHOLE REMOVAL EACH	SPV.0060.23 SANITARY MANHOLE CASTING EACH	SPV.0200.01 STANDARD SANITARY MANHOLE MASONRY 48-INCH VERTICAL FEET
10+50 - 15+80	---	4	19
15+80 - 18+88	1	1	17
TOTAL	1	5	36

**ALL BID ITEMS ON THIS SHEET ARE CATEGORY 0010 EXCEPT AS NOTED.

N

MATCH LINE SHEETS A1 & A2

USH 12

W. VETERANS STREET/CTH ET

SOIL BORING B-2

#110 W. VETERANS ST.

#201 W. VETERANS ST.

#106 W. VETERANS ST.

EX. PROPERTY BOUNDARY (TYP.)

EX. TREE (TYP.)

EX. PINE TREE (TYP.)

322 L.F. NEW 10" D.I. WM (CONN. TO DRILL LIMITS), 45° BENDS (2), 22.5° BENDS (2), CONNECT TO EXISTING

STA. 13+66.71/50.71'L
STA. 13+63.71/50.68'L
NEW HYDRANT, TEE, & VALVE W/13 L.F. NEW 6" D.I. HYDRANT LEAD

47 L.F. NEW 8" D.I. WM, CONNECT TO EXISTING

STA. 13+53.19/50.52'L

EX. STM ENDWALL 2 RIM = 958.39 E. INV. = 957.62 (21")

EX. SAN MH B-121

EX. 8" HDPE

EX. 4" PVC

EX. 10" WM

EX. SAN MH B-122

(TO BE LINED)

NEW SAN MH 41
STA. 10+57.20/3.63L

165 L.F. NEW 10" PVC SAN @ 0.39%

5 L.F. NEW 10" PVC SAN

STA. 10+90.39/9.98'R

CURB BY OTHERS (TYP.)

STA. 12+41.56/6.84'R

STA. 12+56.54/42.27'R

41 L.F. NEW 1" COPPER WATER SERVICE W/CURB STOP

SIDEWALK BY OTHERS (TYP.)

EX. FIBER PED.

EX. MAILBOX (TYP.)

STA. 13+53.73/12.87'L

STA. 12+75.30/7.69'L

STA. 13+49.74/8.73'L
STA. 13+53.74/8.79'L

NEW 10"X8" TEE, NEW 10" VALVE (2), NEW 8" VALVE

STA. 13+57.96/8.84'L

DIRECTIONAL DRILL LIMITS

175 L.F. NEW 10" D.I. WM (DIRECTIONAL DRILLED)

EX. STM INLET 1 RIM = 961.09 NE. INV. = 957.21 (12")

EX. STM ENDWALL 1 RIM = 958.64 S. INV. = 957.87 (21")

EX. STM MH 1 RIM = 960.66 SE. INV. = 957.12 (21") W. INV. = 957.14 (21") N. INV. = 957.13 (21")

EX. SIGNAL (TYP.)

EX. SIGNAL PULL BOX (TYP.)

EX. STM ENDWALL 4 RIM = 957.93 W. INV. = 956.68 (12")

EX. STM MH 2 RIM = 961.31 SW. INV. = 956.98 (12") N. INV. = 956.98 (12") E. INV. = 956.93 (12")

EX. 12" RCP

EX. 12" RCP STM

EX. 10" CAST (TO BE LINED)

33 L.F. NEW 10" D.I. WM, CONNECT TO EXISTING

EX. HYDRANT (TYP.)

EX. SAN MH B-12

NEW 10" VALVE
NEW 10" TEE

STA. 15+67.10/13.65'L
STA. 15+56.89/14.47'L

STA. 15+60.57/14.18'L

STA. 15+59.91/6.00'L

STA. 15+62.51/17.63'L

STA. 15+71.09/13.33'L

NEW 10" VALVE
10"X8" TEE, 22.5° BEND

STORM SEWER BY OTHERS (TYP.)

EX. STM MH M-1037 RIM = 959.75 IN. INV. = 956.76 (24") NE. INV. = 956.10 (24") S. INV. = 955.66 (21")

EX. TRAFFIC SIGNAL (TYP.)

EX. POWER POLE (TYP.)

EX. STM ENDWALL 3 RIM = 957.29 N. INV. = 956.52 (21")

75 L.F. NEW 8" D.I. WM, NEW 8" VALVE, NEW 8"X6" REDUCER, CONNECT TO EXISTING
STA. 15+41.18/52.89'R

EX. 8" PVC SAN

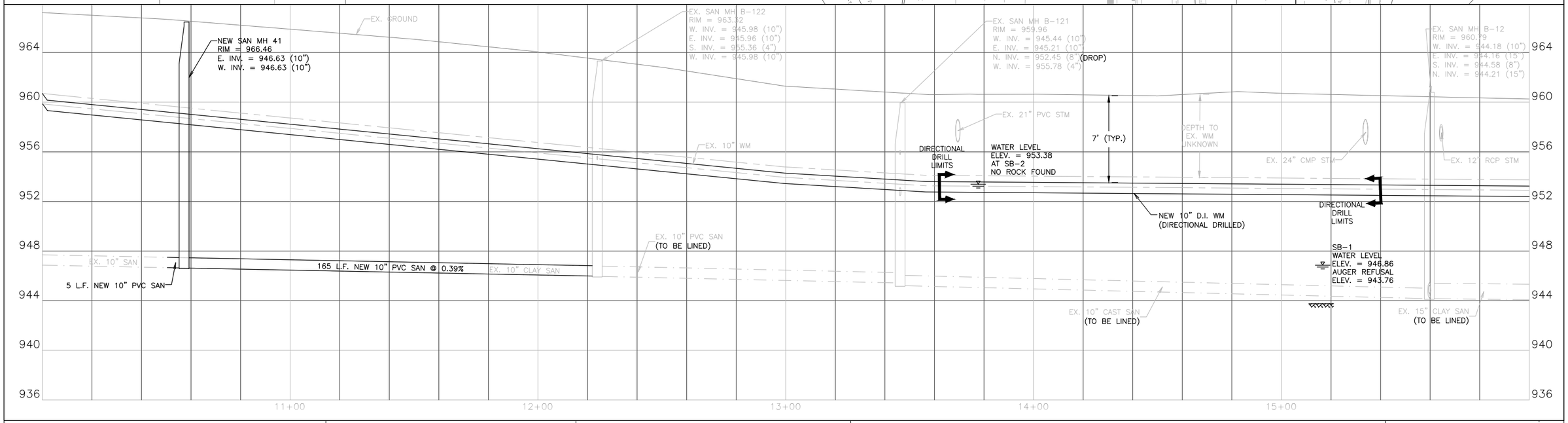
INV. = 955.57

SOIL BORING B-1 (37' SOUTH)

EX. 24" CMP

EX. 12" PVC

5



PROJECT NO: 7998-00-78	HWY: W. VETERANS/CTH ET	COUNTY: MONROE	PLAN AND PROFILE: W. VETERANS STREET	SHEET 8 E

FILE NAME : J:\JOB#S\TOMAH\TO-119-M1 USH 12-VETERANS INTERSECTION UTILITY IMPROVEMENTS\DRAWINGS\TO 119 SHEETS.DWG PLOT DATE : 4/19/2022 8:02 AM PLOT BY : NIKOLAS DORAVA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

MATCH LINE
SHEETS A1 & A2

N

#102
E. VETERANS ST.

#124
E. VETERANS ST.

#1101
HEELER AVE.

EX. PROPERTY
BOUNDARY (TYP.)

EX. SAN MH B-11

40 L.F. NEW 1" COPPER
WATER SERVICE W/CURB STOP
STA. 18+54.43/36.24'L

NEW SAN MH 42
STA. 18+83.09/6.64L

3 L.F. NEW 15" PVC SAN

EX. 15" CONC. SAN
(TO BE LINED)

3 L.F. NEW 8" PVC SAN

EX. 10" WM

EX. B CLAY

16+00
17+00
18+00
19+00
20+00
20+49

338 L.F. NEW 10" D.I. WM (DRILL LIMITS TO CONNECTION)

STA. 18+69.92/1.78'R
STA. 18+72.91/1.96'R
NEW 10" VALVE (3),
NEW 10" TEE
STA. 18+72.88/4.96'R

STA. 18+77.42/2.23'R

E. VETERANS STREET/CTH ET

36 L.F. NEW 15" PVC SAN

STORM SEWER BY OTHERS
(TYP.)

CURB BY OTHERS
(TYP.)

31 L.F. NEW 10" D.I., WM
CONNECT TO EXISTING

STA. 16+82.24/37.52'R

SIDEWALK BY OTHERS
(TYP.)

40 L.F. NEW 1" COPPER
WATER SERVICE W/CURB STOP

#125
E. VETERANS ST.

#205
E. VETERANS ST.

#1022
HEELER AVE.

#105
E. VETERANS ST.

EX. 10" WM

EX. 15" DUCTILE

NEW SAN MH 42
RIM = 960.80
S. INV. = 943.43 (15")
W. INV. = 943.48 (15")
E. INV. = 943.48 (8")

EX. GROUND

EX. SAN MH B-11
RIM = 960.80
E. INV. = 943.48 (8")
W. INV. = 943.48 (15")
S. INV. = 943.43 (15")

DEPTH TO
EX. WM
UNKNOWN

7' (TYP.)

EX. 10" WM

NEW 10" D.I. WM

EX. 15" CONC. SAN
(TO BE LINED)

EX. 8" CLAY SAN

964
960
956
952
948
944
940
936

16+00
17+00
18+00
19+00
20+00
21+00

5

PROJECT NO:	7998-00-78	HWY:	W. VETERANS/CTH ET	COUNTY:	MONROE	PLAN AND PROFILE:	W. VETERANS STREET	SHEET	9	E

FILE NAME : J:\JOB#S\TOMAH\TO-119-M1 USH 12-VETERANS INTERSECTION UTILITY IMPROVEMENTS\DRAWINGS\TO 119 SHEETS.DWG
PLOT DATE : 4/19/2022 8:03 AM
PLOT BY : NIKOLAS DORAVA
PLOT NAME :
PLOT SCALE :

WISDOT/CADDS SHEET 44

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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