GRE

APRIL 2019

PROJECT ID: 1430-18-72/1430-18-73

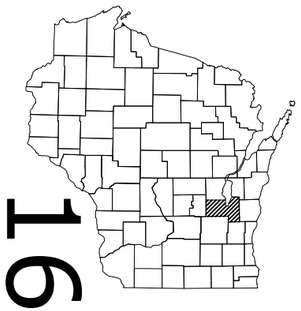
WITH: N/A

COUNTY: FOND DU LAC

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 = 286



16

N

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1430-18-72	WISC 2019166	1
1430-18-73	WISC 2019167	1

ROSENDALE - FOND DU LAC

TOWNLINE ROAD-CTH VVV

STH 23

FOND DU LAC COUNTY

STATE PROJECT NUMBER
1430-18-72

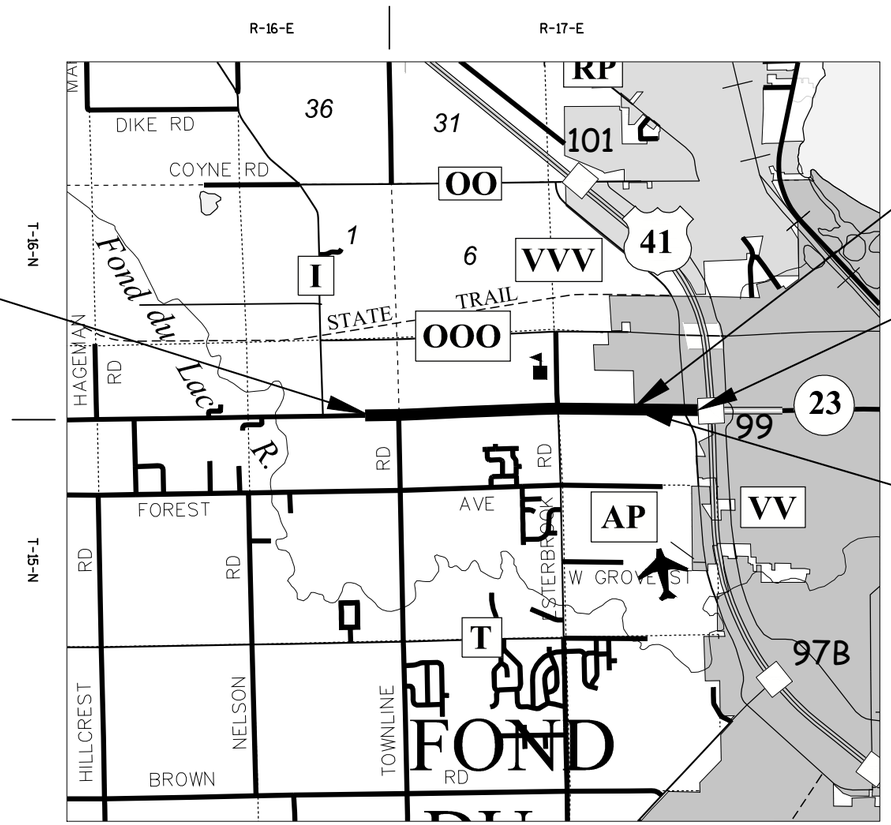
ROSENDALE - FOND DU LAC

N ROLLING MEADOWS DR/CTH VVV INTERS

STH 23

FOND DU LAC COUNTY

STATE PROJECT NUMBER
1430-18-73



BEGIN PROJECT 1430-18-72
STA 867+48
Y= 388,241.953
X= 795,726.529

LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 1.944 MI

DESIGN DESIGNATION 1430-18-72 1430-18-73

A.A.D.T.	2019	=	9000	13900
A.A.D.T.	2039	=	10200	15600
D.H.V.	2039	=	11.6%	11.6%
D.D.		=	60/40	60/40
T.		=	13.8%	13.8%
DESIGN SPEED		=	60 MPH	40 MPH
ESALS		=	2,400,000	2,400,000

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, FOND DU LAC COUNTY, NAD83 (2011), VERTICAL - NAVD88 (2012) IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NER
Designer	JENNIFER ZAVADA
Project Manager	BRYAN LEARST
Regional Examiner	
Regional Supervisor	ROBERT WAGNER

APPROVED FOR THE DEPARTMENT

DATE: 12/19/18 (Signature)

E

GENERAL NOTES

LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

TOPSOIL, FERTILIZER, SEED AND EROSION MAT AS SHOWN IN PLANS OR AS DIRECTED BY ENGINEER SHALL BE PLACED ON ALL DISTURBED AREAS, EXCLUSIVE OF THE AREA OCCUPIED BY THE NEW PAVEMENTS, SIDEWALKS, ENTRANCES, AND RELATED STRUCTURES.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

ALL CONCRETE BASE PATCHING LOCATIONS ARE APPROXIMATE. THE EXACT LOCATIONS OF CONCRETE BASE PATCHING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

REMOVAL OF ANY MESH OR REINFORCEMENT FOUND IN CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE PATCHING OR REMOVING PAVEMENT ITEMS.

DNR LIAISON

JAY SCHIEFELBEIN
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
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JEREMIAH.SCHLEFELBEIN@WISCONSIN.GOV

FOND DU LAC COUNTY COMMISSIONER

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HIGHWAY COMMISSIONER
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TOM.JANKE@FDLCO.WI.US

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS, PLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920)492-5638
CORMAC.MCINNIS@DOT.WI.GOV

UTILITY CONTACTS

ERIC BARTH
ANR PIPELINE CO - GAS/PETROLEUM
W8715 TOWER DRIVE
ADELL, WI 53001
(920)547-0316 & (262)626-3437
ERIC_BARTH@TRANSCANADA.COM

CHARLES BARTELT
AT&T WISCONSIN - COMMUNICATION LINE
70 E DIVISION ST
FOND DU LAC, WI 54935
(920)929-1013 & (920)410-5104
CB1461@ATT.COM

GERALD RHODE
ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
801 O'KEEFE ROAD
COTTAGE GROVE, WI 53527
(920)338-6523
GRHODE@ATCLLC.COM

JOSH COLLIEN
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883 W SCOTT ST
FOND DU LAC, WI 54937
(608)393-5695 & (920)322-6646
JOSHUACOLLIEN@ALLIANTENERGY.COM

TODD HILDEBRANDT
CHARTER COMMUNICATIONS - COMMUNICATION LINE
165 KNIGHTS WAY
FOND DU LAC, WI 54935
(920)794-4946 & (920)907-7724
TODD.HILDEBRANDT@CHARTER.COM

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160 S MACY ST
FOND DU LAC, WI 54936
(920)322-3605
DZITTLOW@FDL.WI.GOV

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160 S MACY ST
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PDEVRIES@FDL.WI.GOV

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ZMILLER@FDL.WI.GOV

MARY JO KRAUS
TOWN OF FOND DU LAC WATER UTILITY – WATER
PO BOX 1276
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(920)922-0470
MARYJO@LAWFDL.COM

MARY JO KRAUS
FOND DU LAC SANITARY DISTRICT #3 - SEWER
PO BOX 1276
FOND DU LAC, WI 54936-1276
(920)922-0470
MARYJO@LAWFDL.COM

DENNIS RUESS
WINDSTREAM KDL LLC – COMMUNICATION
1858 WRIGHT ST
MADISON, WI 53704
(608)512-5587
DENNIS.RUESS@WINDSTREAM.COM

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

EMERGENCY CONTACT NUMBERS FOR WISCONSIN POWER AND LIGHT COMPANY

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-862-6261
GAS 24 HOUR EMERGENCY SERVICE: 1-800-862-6263

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-450-7240
GAS 24 HOUR EMERGENCY SERVICE: 1-800-450-7280

EMERGENCY CONTACT NUMBERS FOR WE ENERGIES

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-662-4797
GAS 24 HOUR EMERGENCY SERVICE: 1-800-261-5325

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2

N

CTH I

850

860

870

880

890

900

910

920

930

940

950

960

970

980

STH 23

STREBLOW DR

ESTERBROOK RD

CTH T

WRIGHTWAY DR/FORD DR

RICKMEYER DR

CTH VVV

N ROLLING MEADOWS DR

I41

BEGIN PROJECT 1430-18-72
STA 867+48.00
Y=388,241.953
X=795,726.529

TOWNLINE RD

R/L STH 23

C-20-60

BEGIN PROJECT 1430-18-73
STA 972+50.00
Y=388,224.349
X=806,224.775

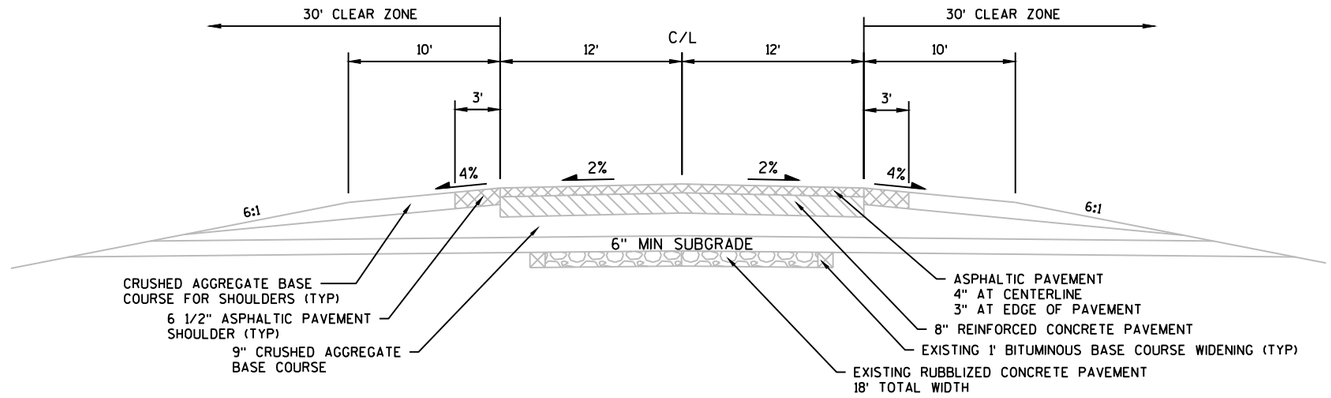
END PROJECT 1430-18-72
STA 972+50.00

END PROJECT 1430-18-73
STA 980+35.00

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PROJECT OVERVIEW	SHEET 3	E

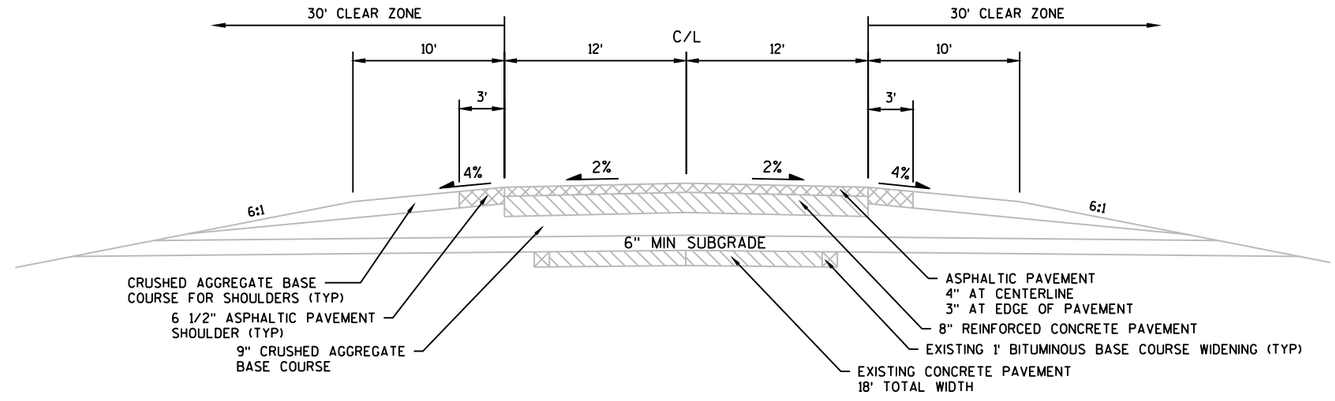
FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 3/8/2018 4:35 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1IN:1000 FT
WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 867+48 - STA 880+78
STA 885+78 - STA 961+42

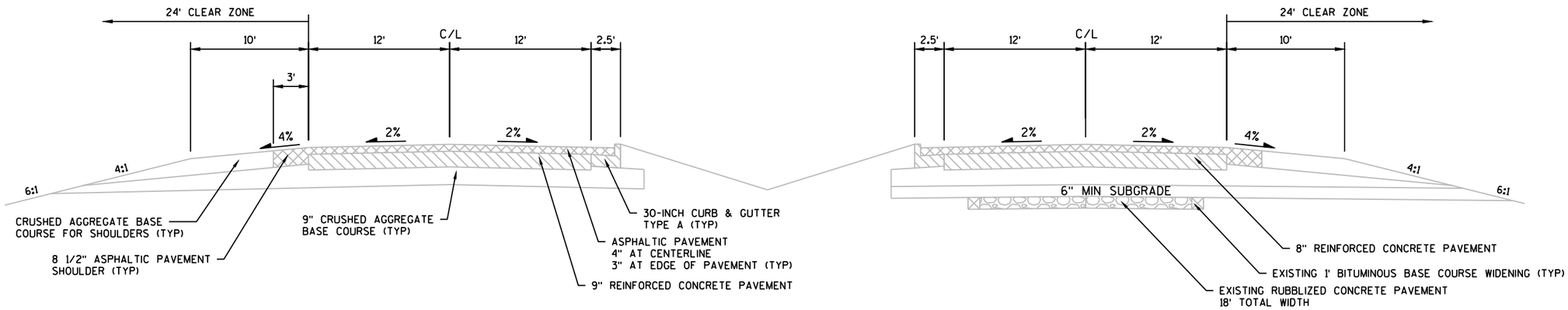


TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 880+78 - STA 885+78

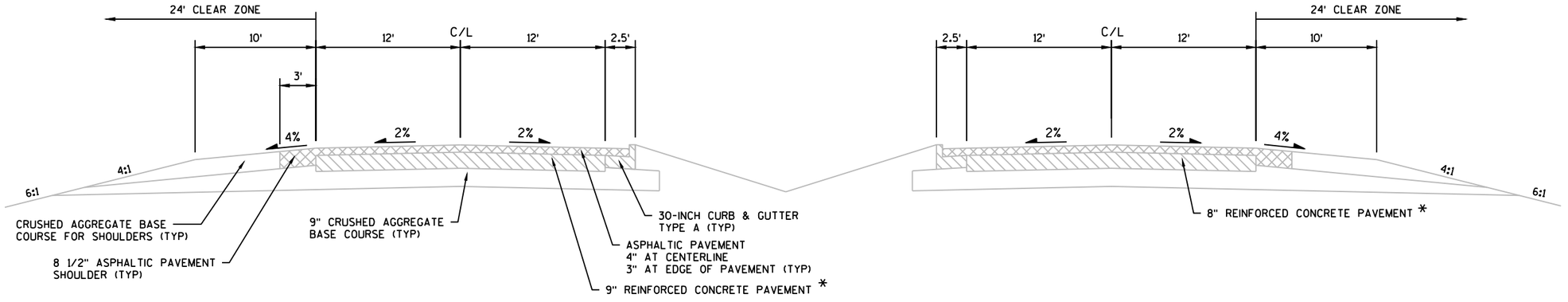
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 4	E

2



TYPICAL EXISTING CROSS SECTION FOR STH 23

STA 961+42 - STA 976+20



NOTE:

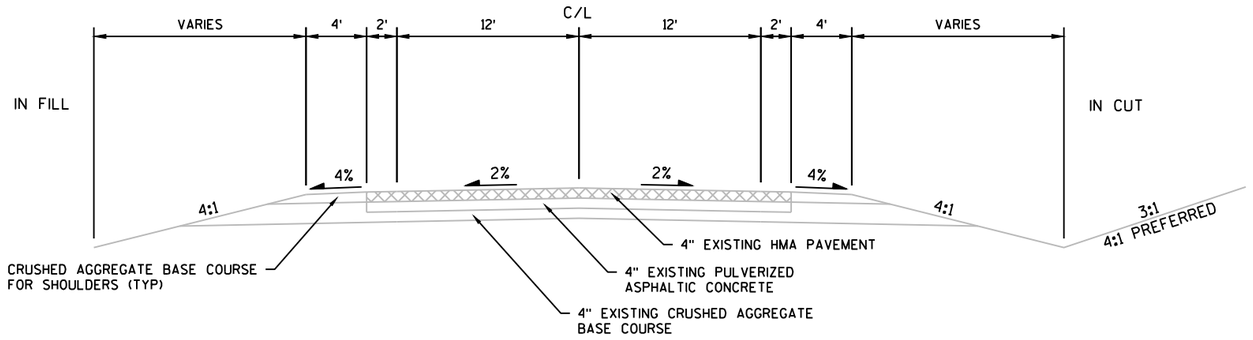
*STA 976+75 TO STA 978+00 8" HMA OVER CRUSHED AGGREGATE BASE COURSE @ CTH VVV INTERSECTION

TYPICAL EXISTING CROSS SECTION FOR STH 23

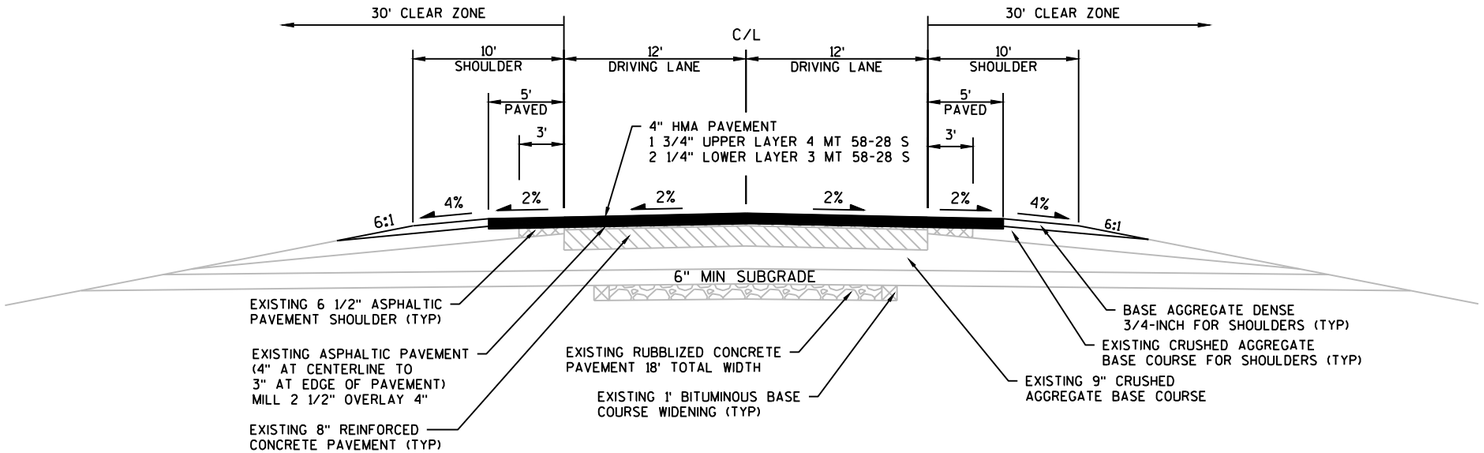
STA 976+20 - STA 980+35

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 5	E

2

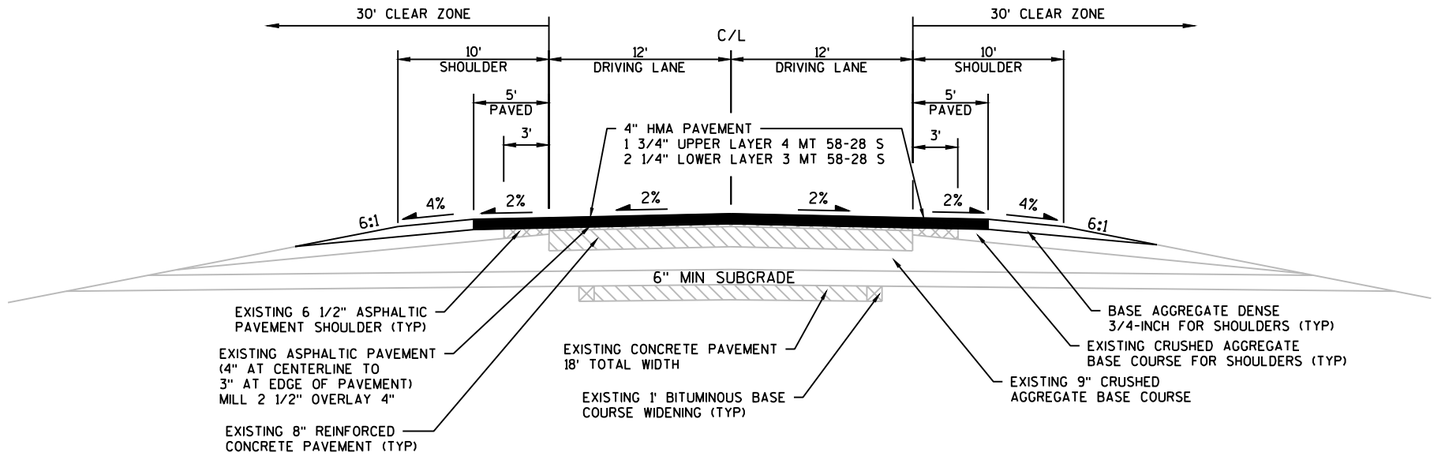


TYPICAL EXISTING CROSS SECTION FOR CTH T



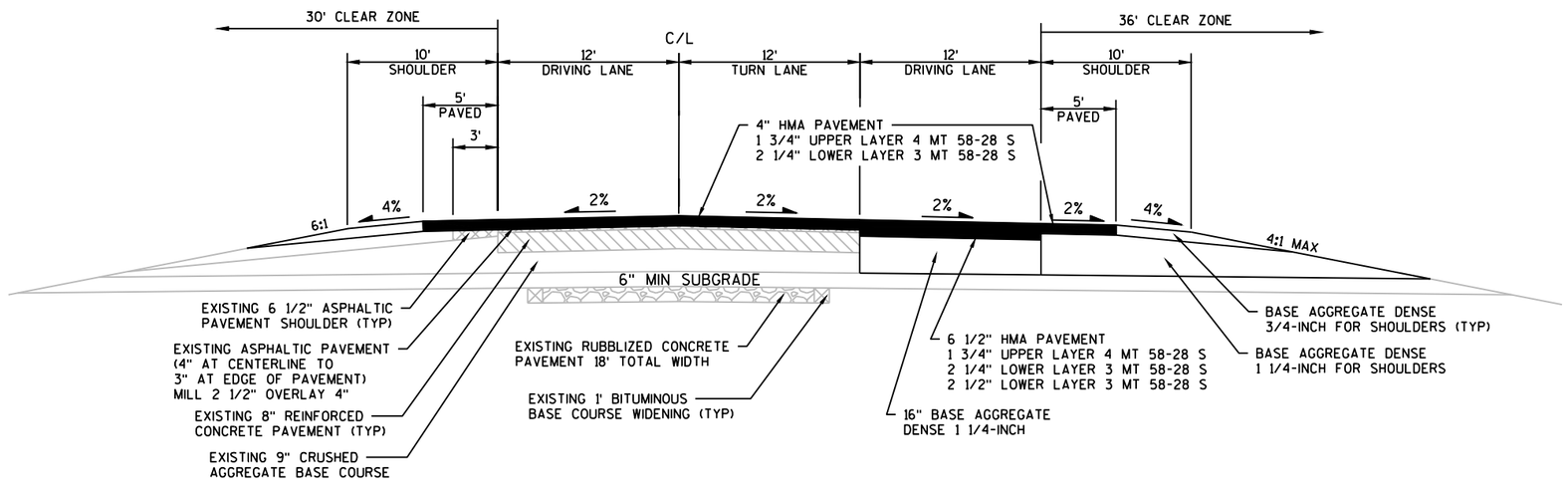
TYPICAL PROPOSED CROSS SECTION FOR STH 23

STA 867+48 - STA 880+78
STA 885+78 - STA 916+62
STA 947+00 - STA 961+42



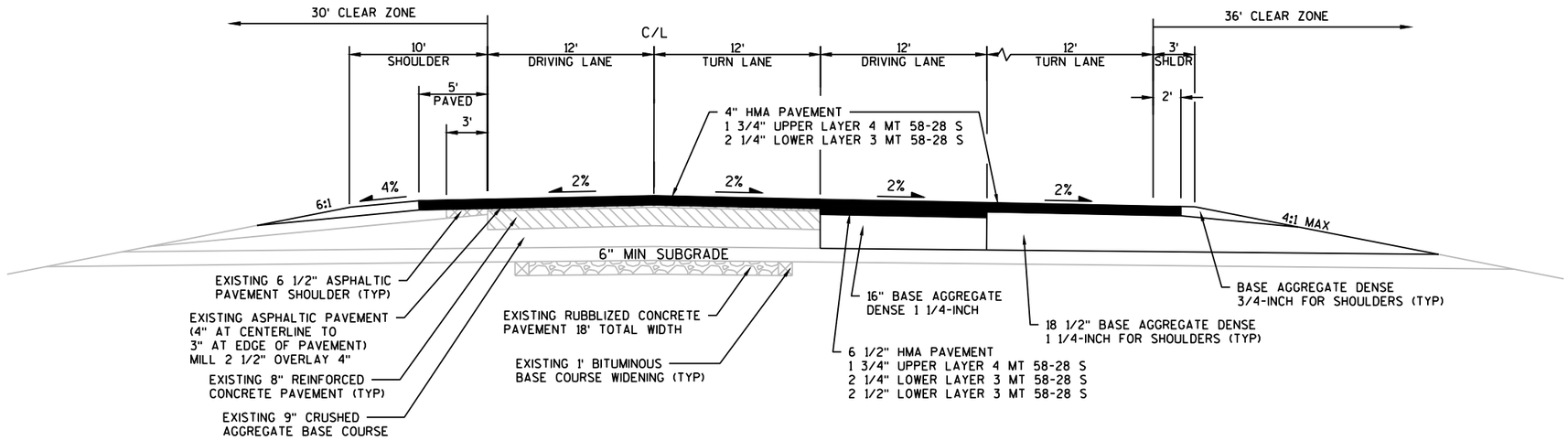
TYPICAL PROPOSED CROSS SECTION FOR STH 23

STA 880+78 - STA 885+78



TYPICAL PROPOSED CROSS SECTION FOR STH 23

STA 916+62 - STA 947+00



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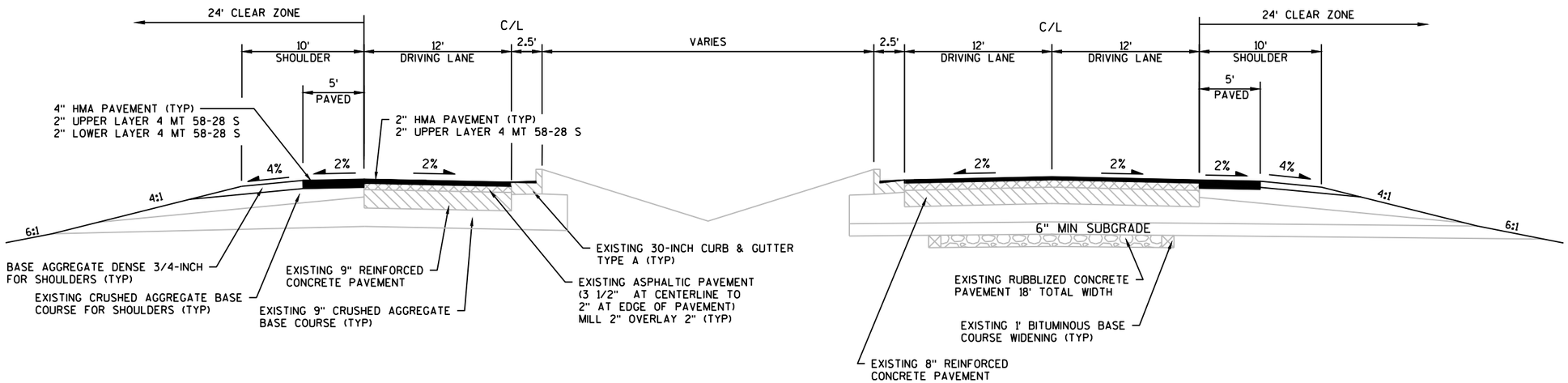
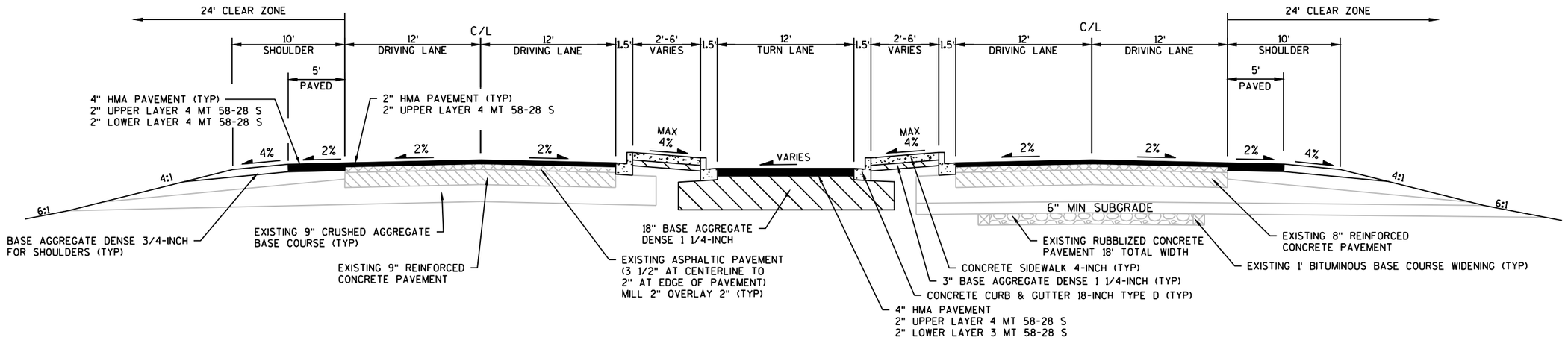
STA 925+25 - STA 930+25



TYPICAL PROPOSED CROSS SECTION FOR STH 23

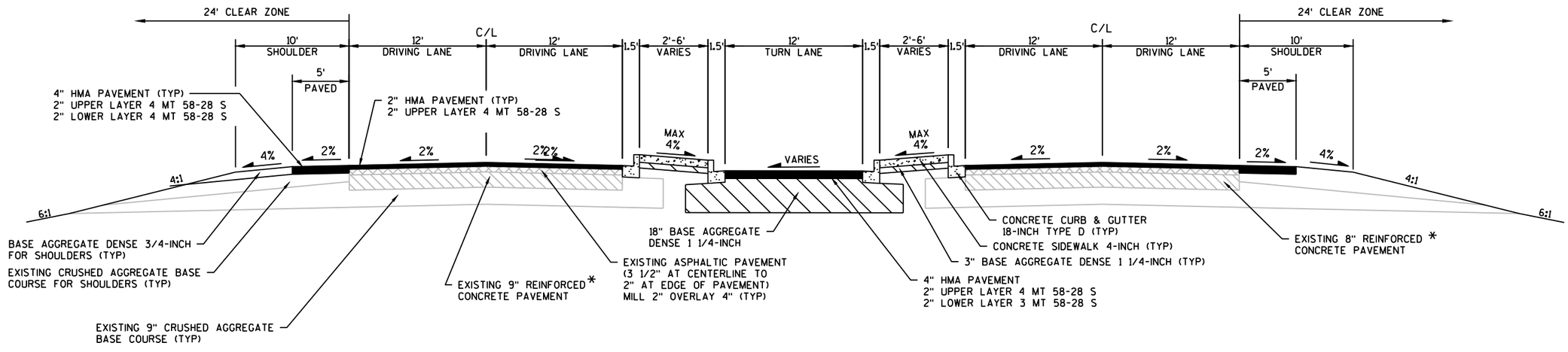
STA 961+42 - STA 972+50

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TYPICAL SECTIONS	SHEET 8	E



TYPICAL PROPOSED CROSS SECTION FOR STH 23

STA 972+50 - STA 976+20

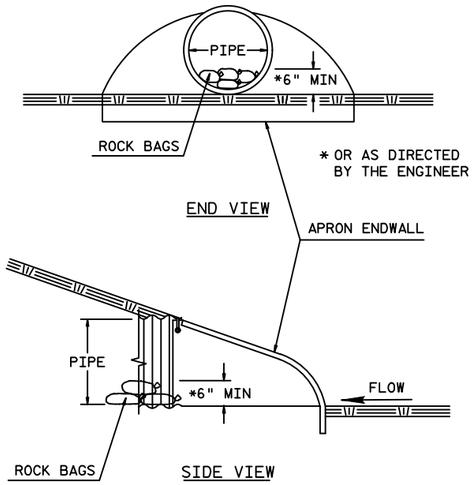


NOTE:

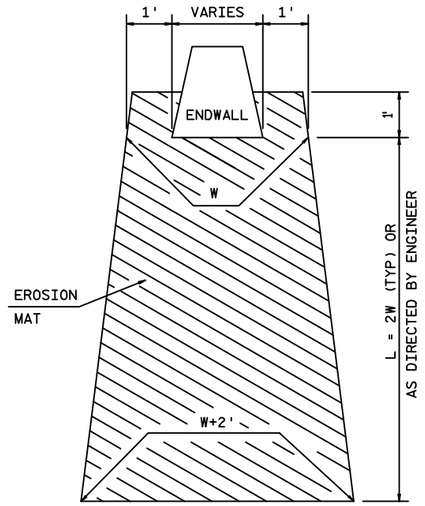
*STA 976+75 TO STA 978+00 8" HMA OVER CRUSHED AGGREGATE BASE COURSE @ CTH VVV INTERSECTION

TYPICAL PROPOSED CROSS SECTION FOR STH 23

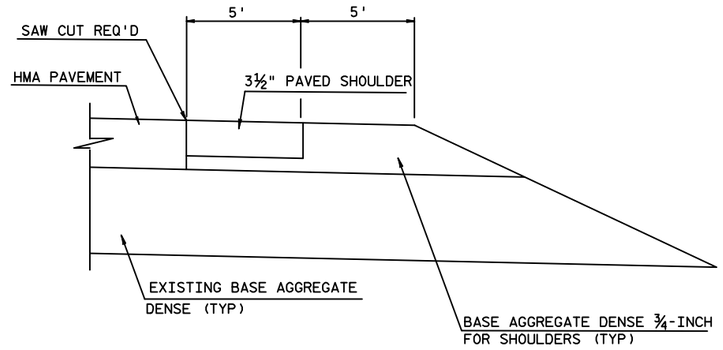
STA 976+20 - STA 980+35



CULVERT PIPE CHECKS

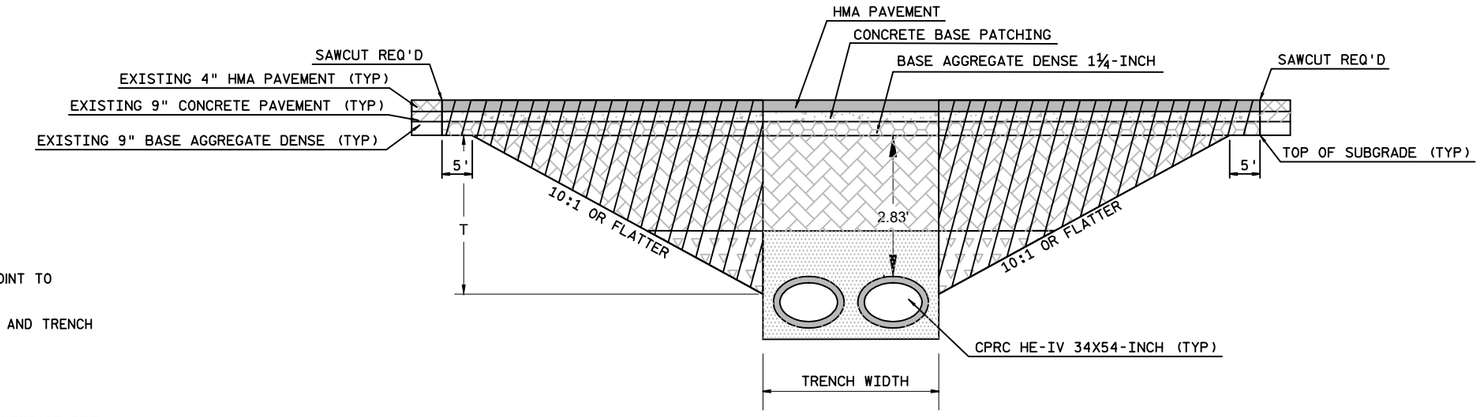


EROSION MAT TREATMENT AT CULVERTS



SHOULDER WIDENING

STA 961+42 - STA 980+35



LEGEND

- PROPOSED SURFACE
- PROPOSED CONCRETE BASE PATCHING
- PROPOSED BASE
- TRENCH BACKFILL
- TRENCH OR FOUNDATION BACKFILL
- FOUNDATION BACKFILL
- TRANSITION CUT

NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.

TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.

BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

BACKFILL IS INCIDENTAL TO BID ITEM "CULVERT PIPE".

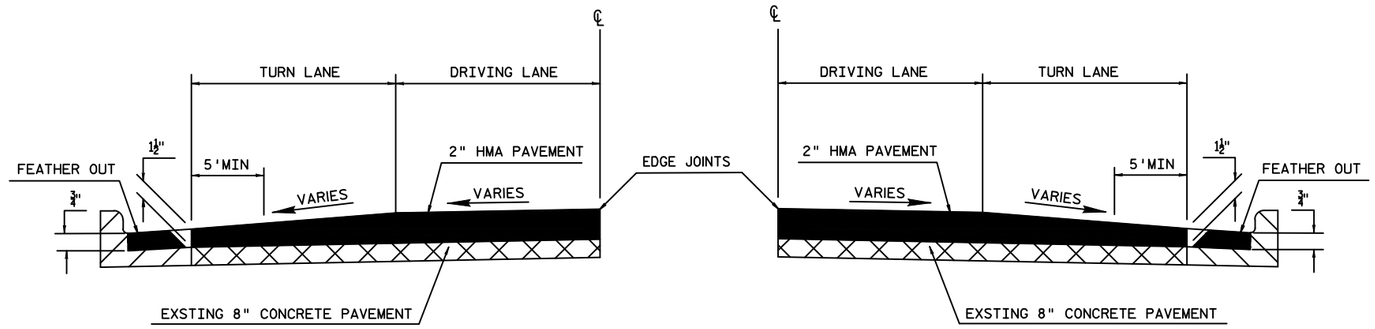
TRANSITION CUT DEPTH (T) = 4.28'.

DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

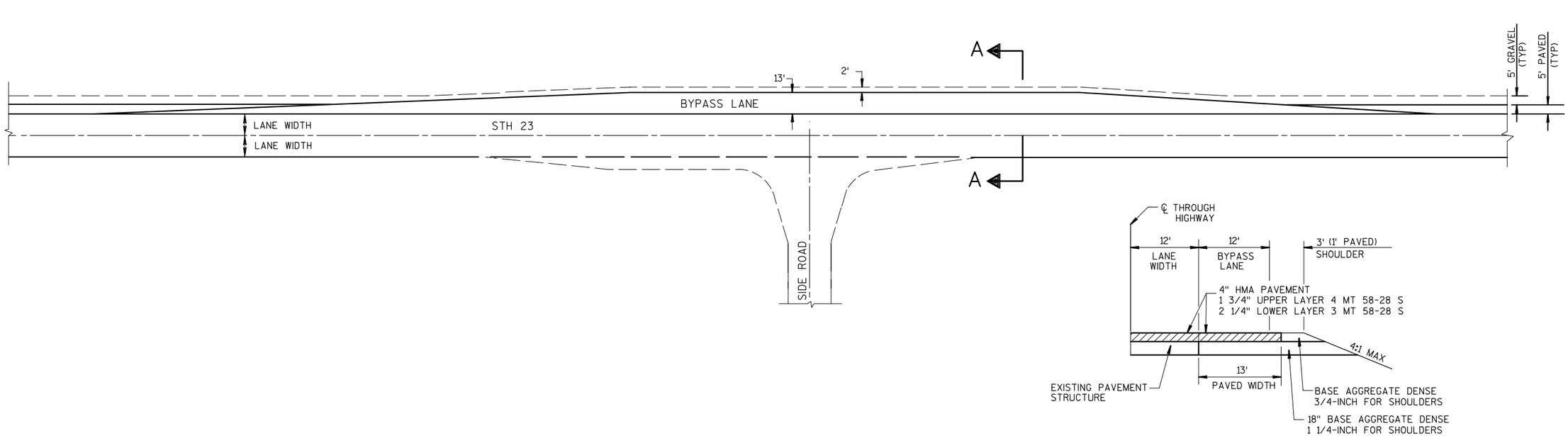
CULVERT REPLACEMENT DETAIL

STA 963+22

2

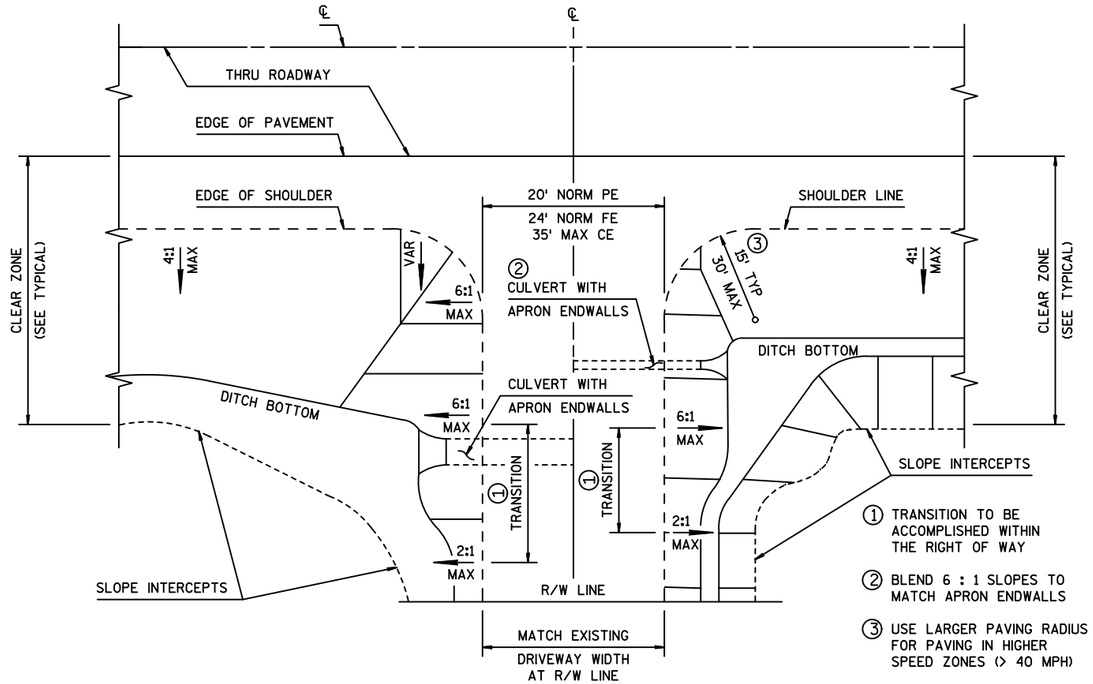


TYPICAL CROSS SECTION AT MAINLINE WITH CURB AND GUTTER



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)

TEE INTERSECTION BYPASS LANE DETAIL

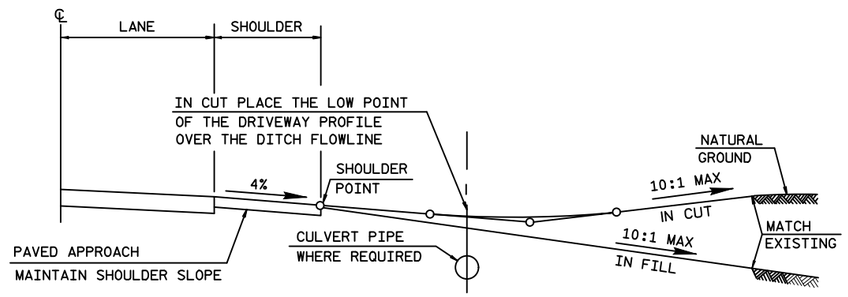


FOR CULVERTS OVER 24" DIAMETER

FOR CULVERTS 24" DIAMETER & LESS

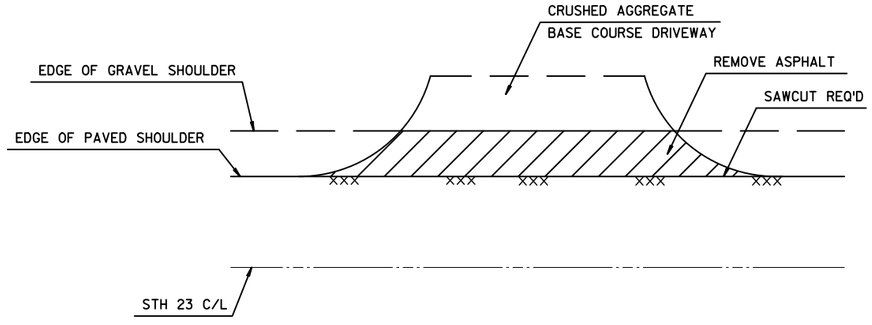
PLAN VIEW

RURAL DRIVEWAY GRADING AND/OR PAVING DETAIL

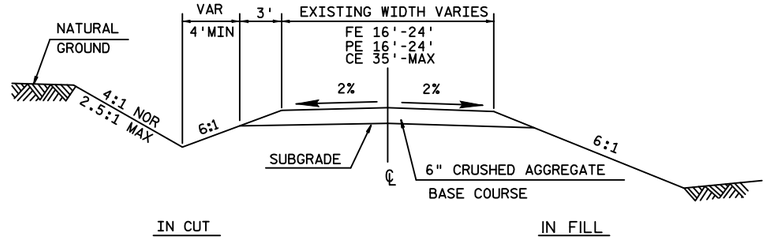


PLAN VIEW

TYPICAL DRIVEWAY PROFILES



APRON REMOVAL FOR UNPAVED DRIVEWAYS



TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE

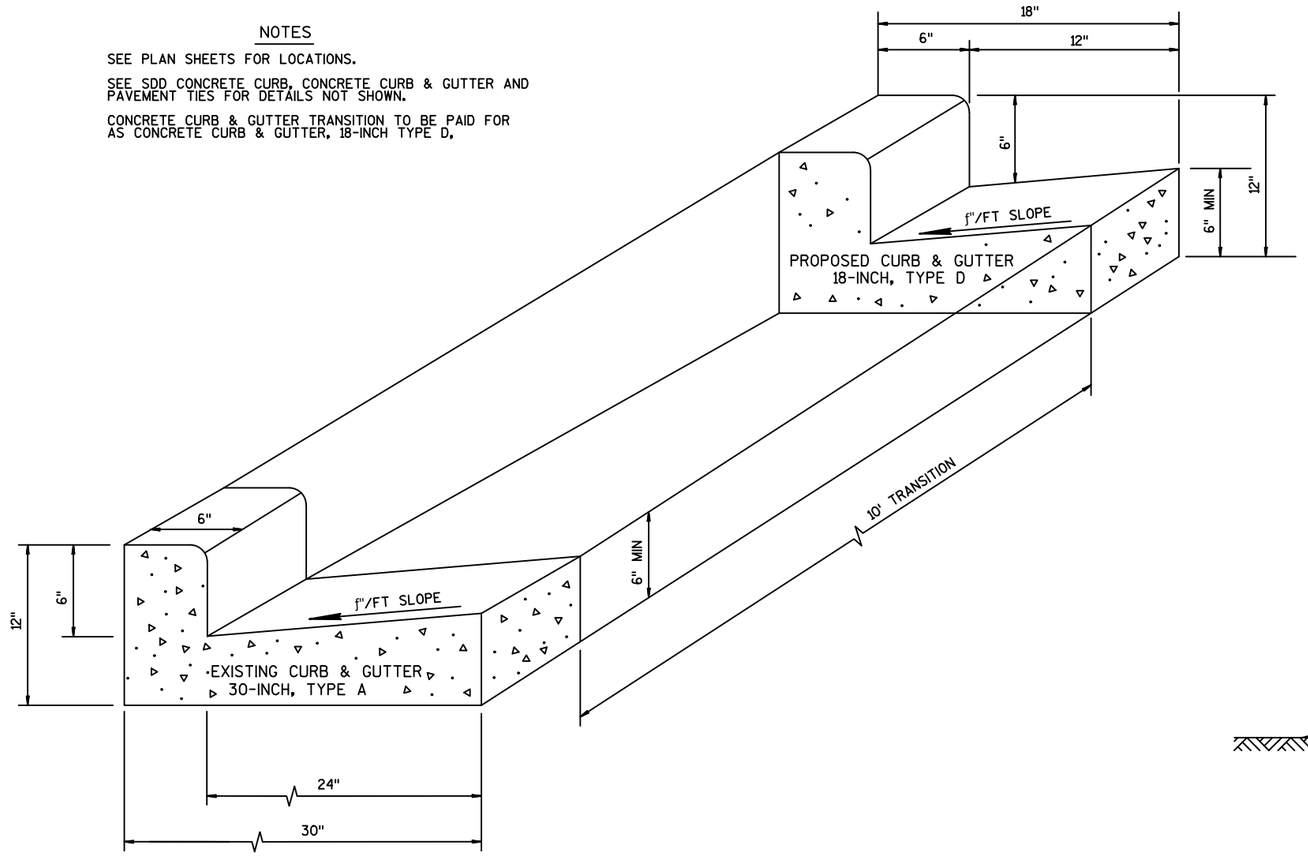
2

NOTES

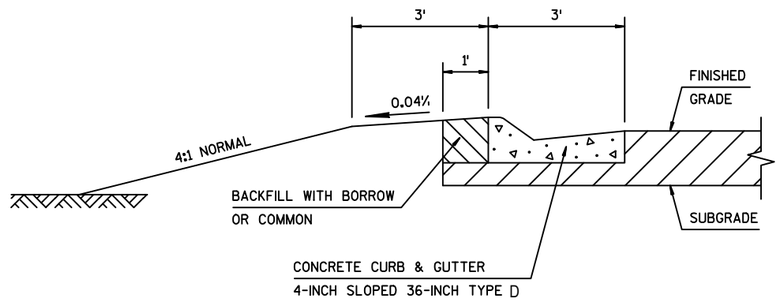
SEE PLAN SHEETS FOR LOCATIONS.

SEE SDD CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES FOR DETAILS NOT SHOWN.

CONCRETE CURB & GUTTER TRANSITION TO BE PAID FOR AS CONCRETE CURB & GUTTER, 18-INCH TYPE D,



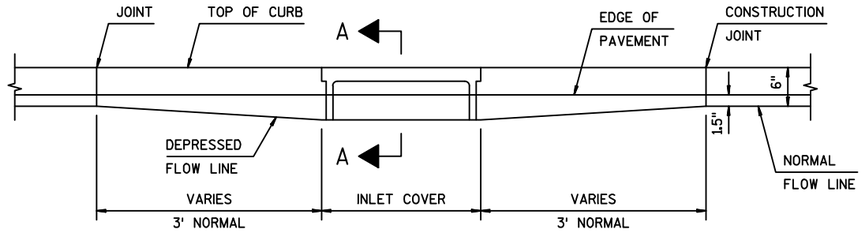
CONCRETE CURB & GUTTER TRANSITION DETAIL

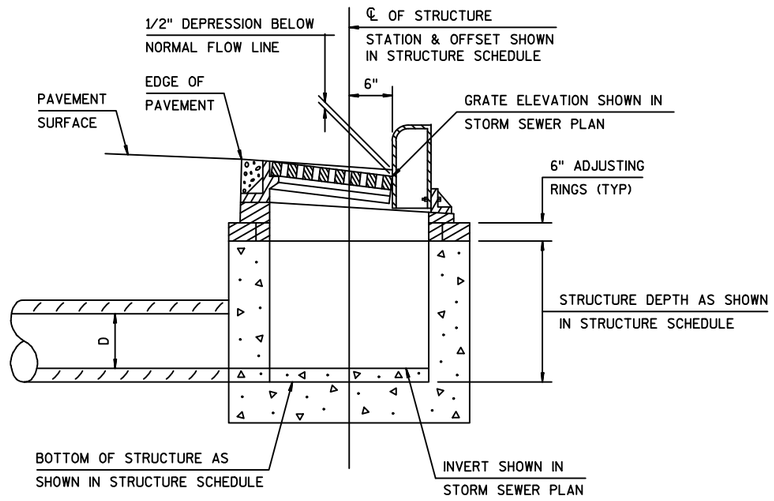


BERM DETAIL BEHIND 4-INCH SLOPED 36-INCH CURB & GUTTER

ESTERBROOK RD
WRIGHWAY DR

2

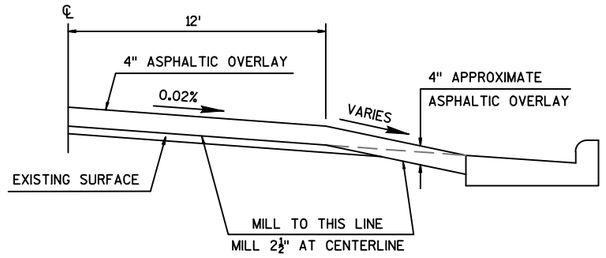




SECTION A-A

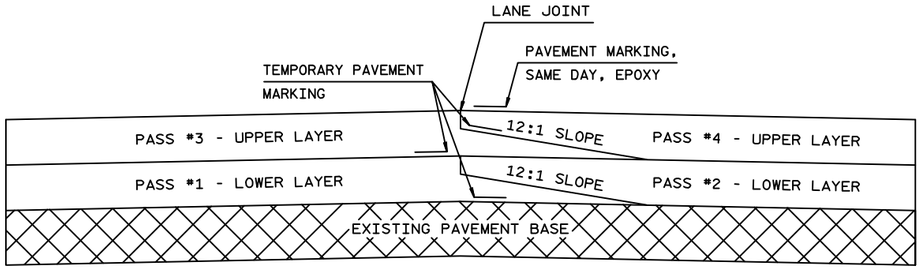
DETAIL OF CURB AND GUTTER AT INLETS

STREBLOW DR



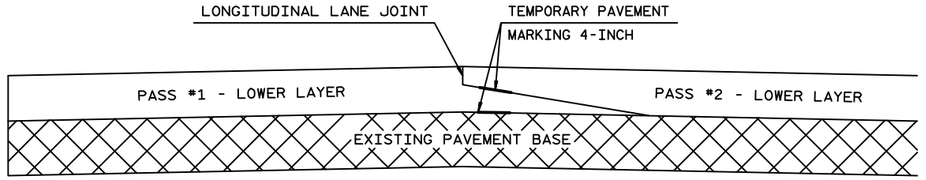
TYPICAL CROSS SECTION WITH CURB & GUTTER (MILLED)

STREBLOW DR



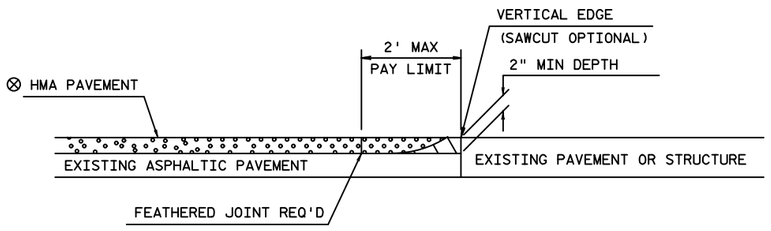
LOWER AND UPPER LAYERS

PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN ASPHALTIC PAVEMENTS



PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS

STA 965+35 - STA 980+35



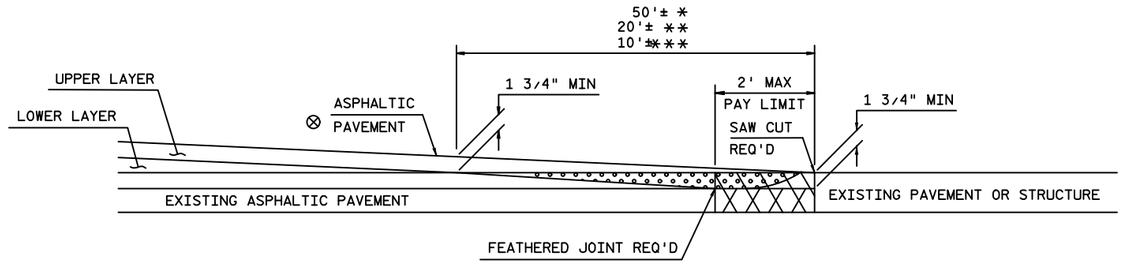
⊗ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS

STA 980+35



⊗ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

REMOVING ASPHALTIC SURFACE, MILLING

REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)

ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

2

N

ESTERBROOK RD

EP: 5+30.97

STA 5+8.35
SAWCUT REQ'D

CONCRETE CURB & GUTTER
36-INCH, TYPE D (TYP)

CAUTION

TYPE B1
INTERSECTION

STA 4+16 ESTERBROOK RD/CTH T
REMOVE 1-24" CMCP
CPRC HE-IV 19X30-INCH &
2 AEW HE 19X30-INCH REQ'D

EXISTING R/W

+76.73
77.55' LT
804.05

+06.85
74.64' LT
804.15

+73.07
54.84' LT
804.38

+11.08
57.38' LT
804.02

+63.52
39.93' LT
804.64

+24.27
38.61' LT
803.81

+27.02
24.00' LT
805.21

+41.71
26.22' LT
805.01

+40.76
28.08' LT
803.65

+61.50
24.00' LT
803.48

+37.45
26.00' LT

+86.60
16.94' LT

932 933 934 935 936 937 938 939

933+49.12 STH 23 =
3+73.97 CTH T

STH 23 R/L

+46.60
41.48' RT
804.64

+19.55
38.31' RT
804.74

+29.62
37.26' RT
804.48

+31.36
40.39' RT
804.44

+83.64
36.00' RT
802.98

+44.09
28.98' RT

+24.01
36.09' RT
804.97

+16.84
41.78' RT
804.91

+59.78
42.03' RT
803.39

SLOPE INTERCEPTS

+70.60
67.62' RT
804.12

+17.60
68.59' RT
804.81

+37.28
66.89' RT
803.87

+19.42
68.66' RT
804.75

+34.04
78.43' RT
804.04

+74.42
92.82' RT
804.21

EXISTING R/W

CAUTION

STA 3+08 ESTERBROOK RD/CTH T
REMOVE 1-42"X29" CMCP
2 CPRC CLASS IV 30-INCH &
2 CONCRETE MASONRY ENDWALLS REQ'D

PI: 2+39.94

TYPE A2
INTERSECTION

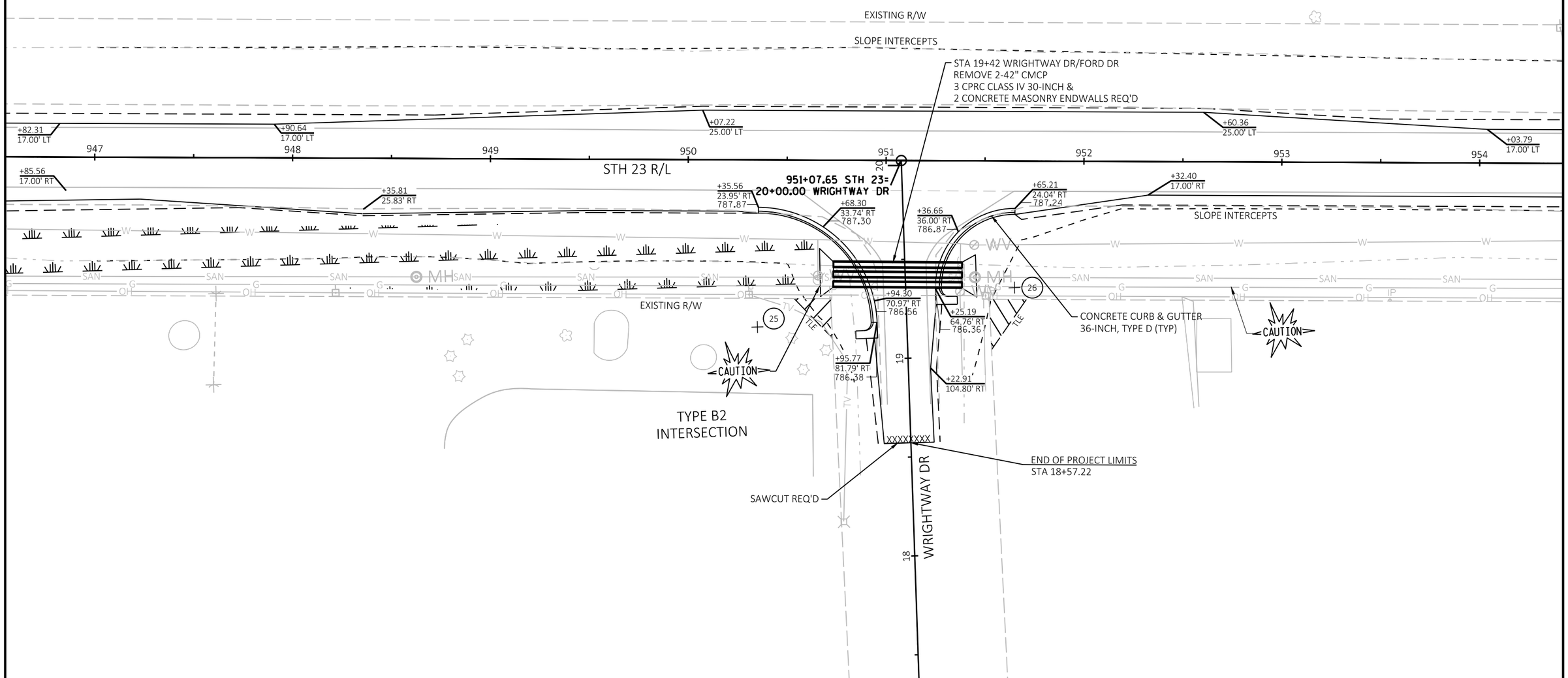
CTH T

STA 1+89.71
SAWCUT REQ'D

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
1	932+27.02	74.00' LT	50'
2	933+61.50	79.00' LT	55'
3	932+26.98	86.01' RT	50'
4	933+75.52	85.43' RT	50'

PROJECT NO: 1430-18-72/73/73	HWY: STH 23	COUNTY: FOND DU LAC	INTERSECTION DETAIL - ESTERBROOK RD	SHEET 16	E

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
25	950+35.30	84.40' RT	60'
26	951+65.18	64.04' RT	40'

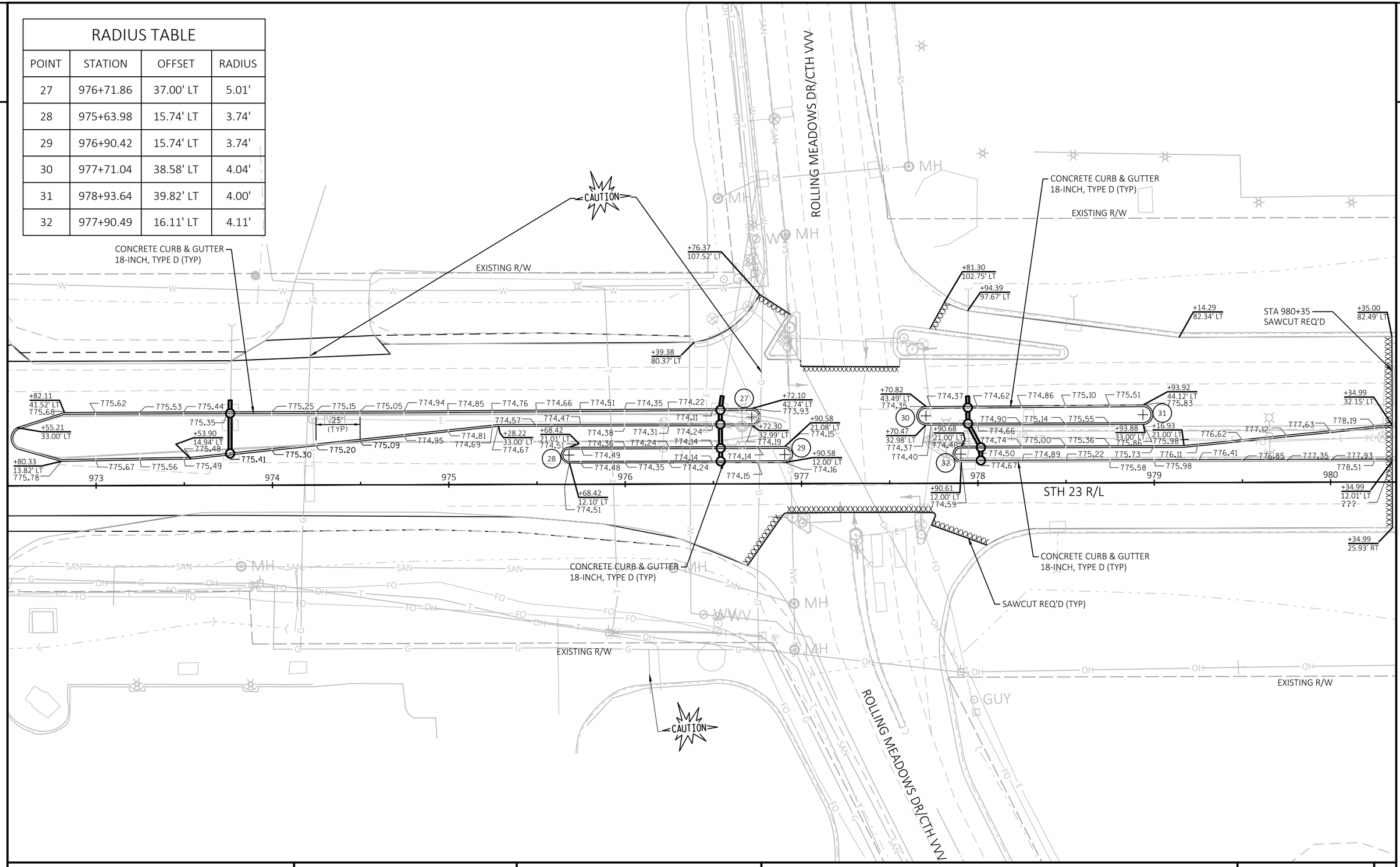


PROJECT NO: 1430-18-72/73/73	HWY: STH 23	COUNTY: FOND DU LAC	INTERSECTION DETAIL - WRIGHTWAY DR/FORD DR	SHEET 17	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\021101-ID.DWG
LAYOUT NAME - 021101-2

PLOT DATE : 5/14/2018 1:00 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
27	976+71.86	37.00' LT	5.01'
28	975+63.98	15.74' LT	3.74'
29	976+90.42	15.74' LT	3.74'
30	977+71.04	38.58' LT	4.04'
31	978+93.64	39.82' LT	4.00'
32	977+90.49	16.11' LT	4.11'



PROJECT NO: 1430-18-72/73/73	HWY: STH 23	COUNTY: FOND DU LAC	INTERSECTION DETAIL - CTH VVV/ROLLING MEADOWS DR	SHEET	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\021101-ID.DWG
LAYOUT NAME - 021101-3

PLOT DATE : 5/14/2018 1:00 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

923 924 925 926 927 928 929 930

STH 23

MH

MH

EXISTING R/W

LEGEND

EROSION MAT CLASS I, TYPE B

SLOPE INTERCEPT

INLET PROTECTION, TYPE C

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 19	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC1

PLOT DATE : 12/19/2018 11:19 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

ESTERBROOK RD

EXISTING R/W

STH 23

IP

MH

930 931 932 933 934 935 936 937

EXISTING R/W

CTH T

TLE

LEGEND

- EROSION MAT CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION, TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 20	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC2

PLOT DATE : 12/19/2018 11:19 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

MH

STH 23

937 938 939 940 941 942 943 944

EXISTING R/W

LEGEND

- EROSION MAT CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION, TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC3
PLOT DATE : 12/19/2018 11:19 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

STH 23

944 945 946 947 948 949 950 951

MH

EXISTING R/W

MH

MH

TLE

TLE

WRIGHTWAY DR/FORD DR

LEGEND

EROSION MAT CLASS I, TYPE B

SLOPE INTERCEPT

INLET PROTECTION, TYPE C

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 22	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC4

PLOT DATE : 12/19/2018 11:19 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

STH 23

951 952 953 954 955 956 957 958

MH

IP

EXISTING R/W

TLE

WRIGHTWAY DR/FORD DR

MH

LEGEND

EROSION MAT CLASS I, TYPE B

SLOPE INTERCEPT

INLET PROTECTION, TYPE C

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 23	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC5

PLOT DATE : 12/19/2018 11:20 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING R/W

STH 23

959 960 961 962 963 964 965 966

STH 23

MH

MH

IP

IP

IP

IP

IP

IP

EXISTING R/W

Chiseled Cross

LEGEND

- EROSION MAT CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION, TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 24	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC6

PLOT DATE : 12/19/2018 11:20 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

RICKMEYER DR

N

EXISTING R/W

STH 23

MH

IP

965 966 967 968 969 970 971 972

EXISTING R/W

LEGEND

EROSION MAT CLASS I, TYPE B

SLOPE INTERCEPT

INLET PROTECTION, TYPE C

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

SURFACE WATER FLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 25	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC7

PLOT DATE : 12/19/2018 11:20 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION, TYPE C
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW

N

ROLLING MEADOWS DR/CTH VVV

EXISTING R/W

STH 23

MH

SS

IP

972 973 974 975 976 977 978 979

EXISTING R/W

ROLLING MEADOWS DR/CTH VVV

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 26	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC8

PLOT DATE : 12/19/2018 11:20 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT CLASS I, TYPE B

SLOPE INTERCEPT

INLET PROTECTION, TYPE C

TEMPORARY DITCH CHECK

CULVERT PIPE DITCH CHECK

SURFACE WATER FLOW

N

EXISTING R/W

STH 23

IH 43 SB OFF RAMP

979 980 981 982 983 984 985 986

STH 23

IH 43 SB ON RAMP

EXISTING R/W

IP

Brass Plug In Co

2

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	EROSION CONTROL	SHEET 27	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022001-EC.DWG
LAYOUT NAME - 022001-EC9

PLOT DATE : 12/19/2018 11:20 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

914 915 916 917 STH 23 R/L 918 919 920 921

MATCH LINE 921+00

2

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 28	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022401-rm

PLOT DATE : 5/22/2018 10:36 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

2

MATCH LINE 921+00

MATCH LINE 928+50.00

EXISTING R/W

STH 23 R/L

921 922 923 924 925 926 927 928

EXISTING R/W

CAUTION

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 29	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022402-rm

PLOT DATE : 5/22/2018 10:32 AM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

ESTERBROOK RD

CAUTION

REMOVE CULVERT PIPE

EXISTING R/W

EXISTING R/W

MATCH LINE 928+50.00

MATCH LINE 936+00.00

929 930 931 932 933 934 935

STH 23 R/L

EXISTING R/W

EXISTING R/W

CTH T

TLE

REMOVE CULVERT PIPE

2

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 30	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022403-rm
PLOT DATE : 5/14/2018 1:10 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

MATCH LINE 936+00.00

MATCH LINE 943+50.00

EXISTING R/W

STH 23 R/L

936 937 938 939 940 941 942 943

EXISTING R/W

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 31	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022404-rm

PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

EXISTING R/W

MH

STH 23 R/L

944 945 946 947 948 949 950

MATCH LINE 943+50.00

MATCH LINE 951+00.00

EXISTING R/W

CAUTION

TV

TILE

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 32	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022405-rm

PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

2

MATCH LINE 951+00.00

951 952 953 954 955 956 957 958

MATCH LINE 958+50.00

STH 23 R/L

EXISTING R/W

CAUTION

XXXX

TILE

CAUTION

REMOVE CULVERT PIPES

EXISTING R/W

WRIGHTWAY DR.

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 33	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022406-rm

PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

MATCH LINE 958+50.00

MATCH LINE 966+00.00

EXISTING R/W

CAUTION

CAUTION

959 960 961 962 963 964 965

STH 23 R/L

EXISTING R/W

REMOVE CULVERT PIPES

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 34	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022407-rm

PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

RICKMEYER DR

EXISTING R/W

EXISTING R/W

MH

MH

STH 23 R/L

966 967 968 969 970 971 972 973

MATCH LINE 966+00.00

MATCH LINE 973+50.00

EXISTING R/W

CAUTION

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 35	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022408-rm

PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- REMOVING CURB & GUTTER
- REMOVING CONCRETE MEDIAN ISLAND
- XXXX SAWING ASPHALT
- REMOVING ASPHALT/CONCRETE SURFACE
- SS REMOVING STORM SEWER

N

N ROLLING MEADOWS DR/CTH VVV

EXISTING R/W

REMOVE 18" STORM SEWER

CAUTION

MATCH LINE STA 973+50.00

974 975 976 977 978 979 980 981

STH 23 R/L

END PAVING LIMITS
STA 980+35

1480-18-72/73 PROJECT LIMITS
STA 980+35

REMOVE 18" STORM SEWER

EXISTING R/W

CAUTION

N ROLLING MEADOWS DR/CTH VVV

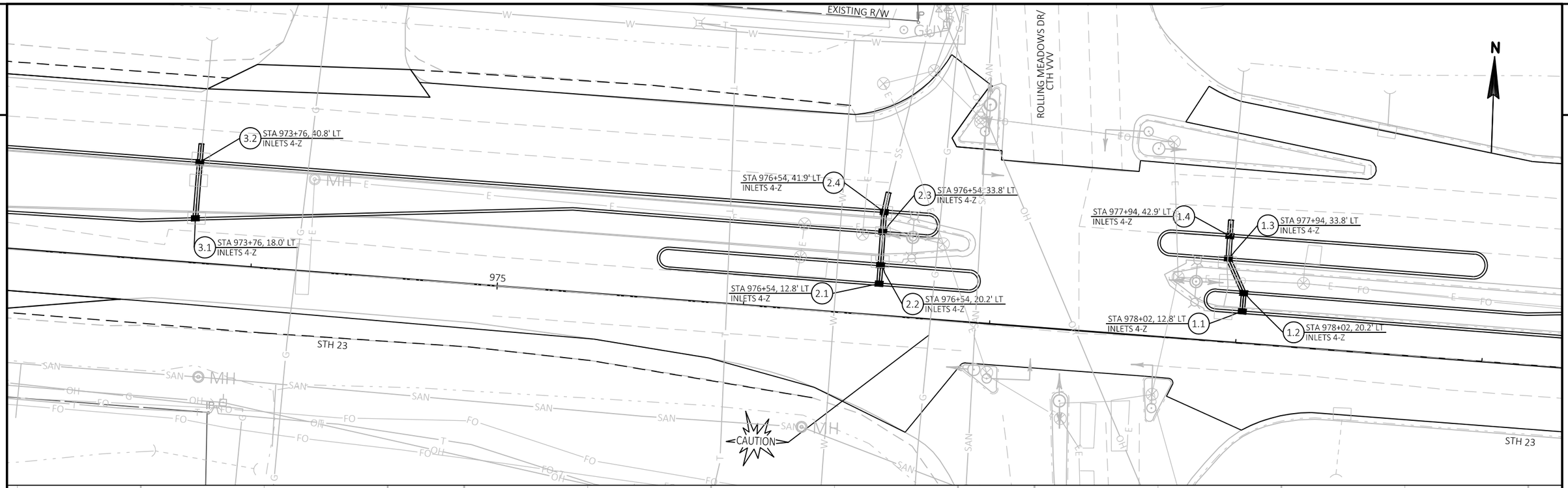
EXISTING R/W

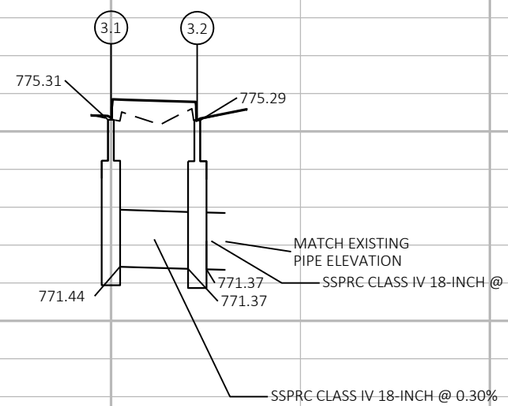
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	REMOVAL DETAIL	SHEET 36	E

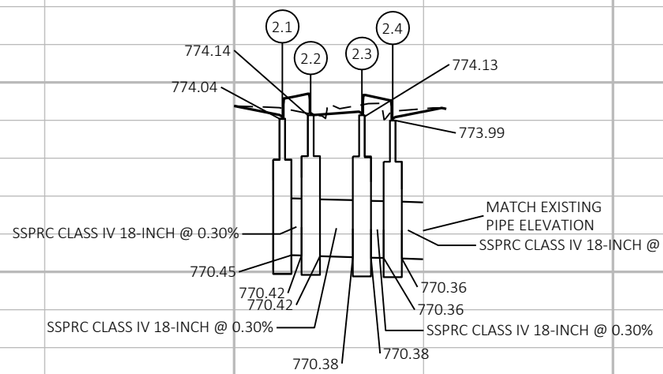
FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\022401-RM.DWG
LAYOUT NAME - 022409-rm

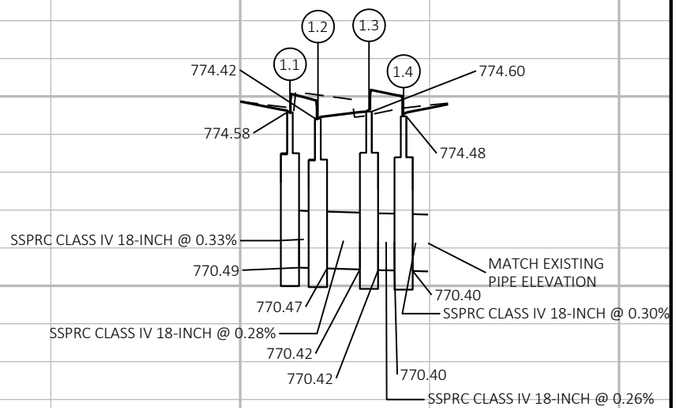
PLOT DATE : 5/14/2018 1:11 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

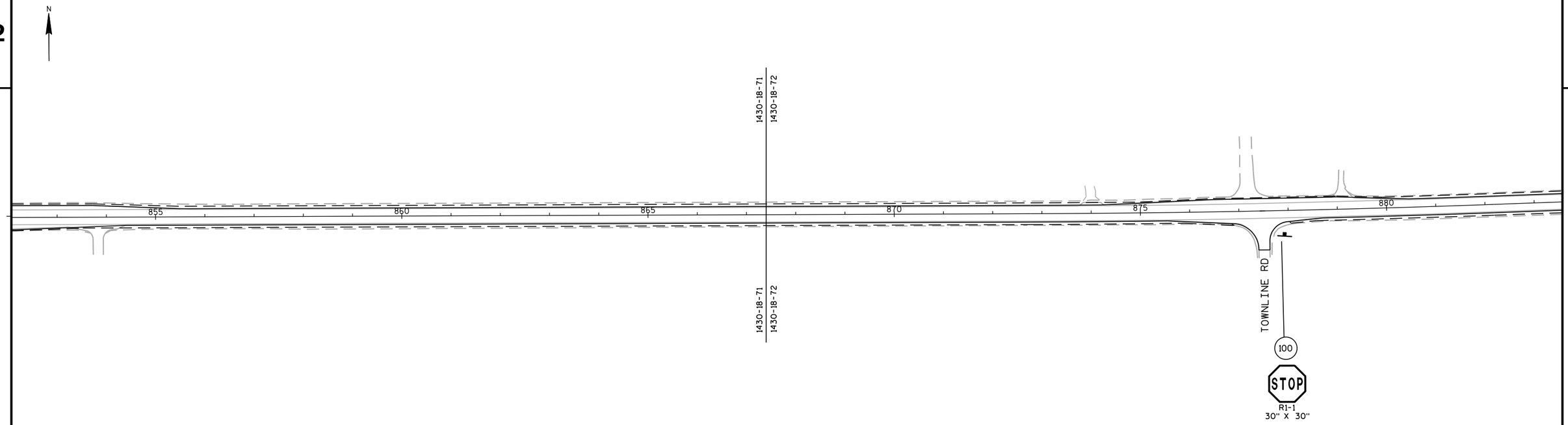








PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	STORM SEWER	SHEET 37	E



SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

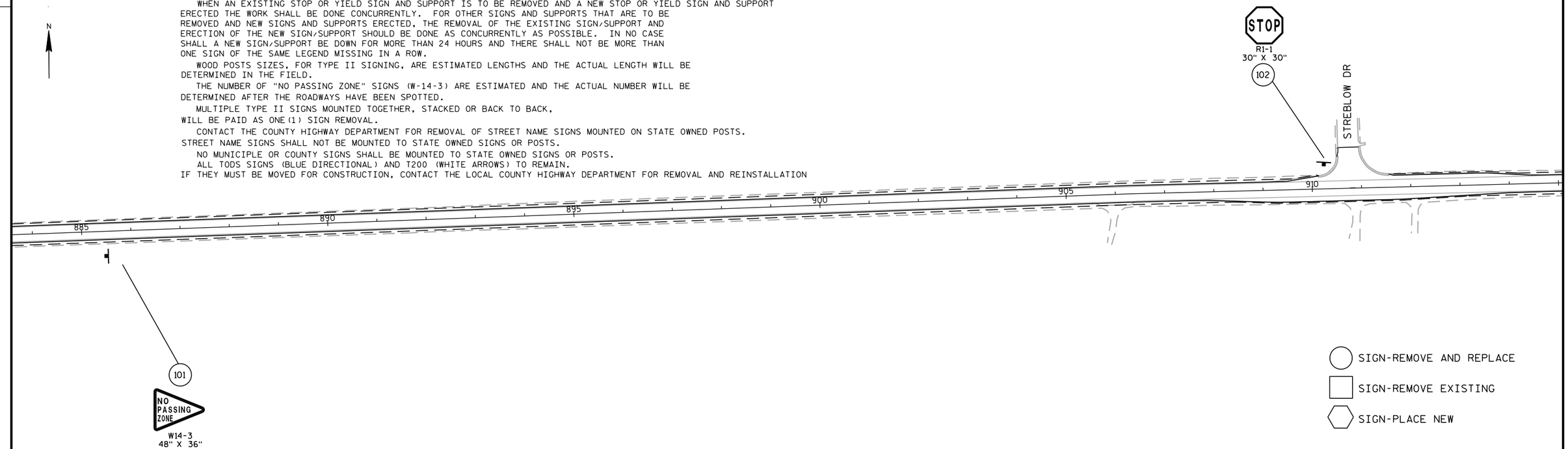
THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE (1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

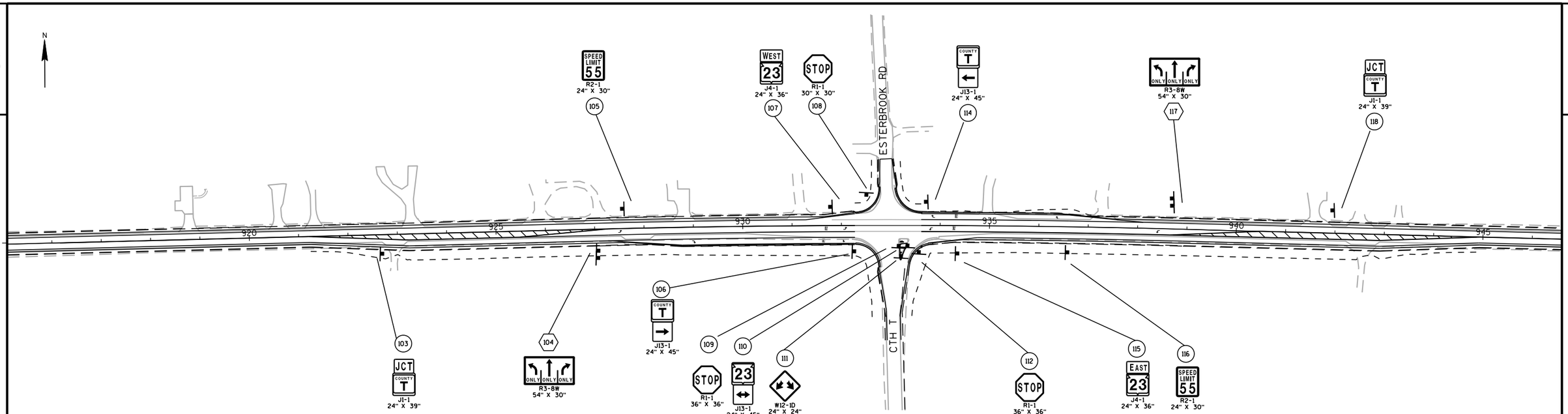
NO MUNICIPLE OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

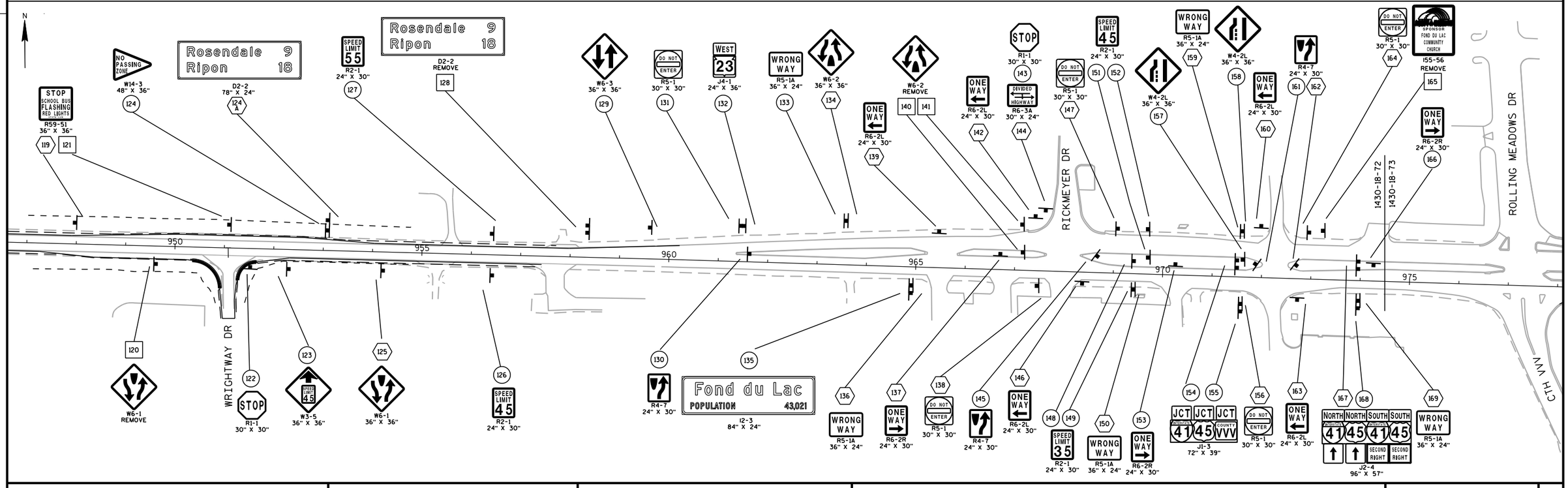
ALL TODS SIGNS (BLUE DIRECTIONAL) AND T200 (WHITE ARROWS) TO REMAIN. IF THEY MUST BE MOVED FOR CONSTRUCTION, CONTACT THE LOCAL COUNTY HIGHWAY DEPARTMENT FOR REMOVAL AND REINSTALLATION



PROJECT NO: 1430-18-72	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E

2





PROJECT NO: 1430-18-72	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

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WISDOT/CADDS SHEET 42

2

N

1430-18-72

1430-18-73

ROLLING MEADOWS DR

CTH VVV

975

980

985

200 — NORTH / SOUTH INTERSTATE 41 41 — SECOND RIGHT — J2-2 REMOVE

201 — State Patrol Hqrs → / Vehicle Registration Driver Licensing → — D1-3 REMOVE

202 — LEFT LANE ENDS — W9-1L REMOVE

203 — W9-1L REMOVE

204 — STOP — R1-1F REMOVE

205 — R4-7 REMOVE

206 — STOP — R1-1F REMOVE

207 — YIELD — R1-2 REMOVE

208 — I5-1 REMOVE

209 — COUNTY VVV — J13-1 REMOVE

210 — STOP — R1-1F REMOVE

211 — LEFT ON GREEN ARROW ONLY — R10-5 REMOVE

212 — R4-7 REMOVE

213 — 23 — J13-1 REMOVE

214 — STOP — R1-1F REMOVE

215 — LEFT ON GREEN ARROW ONLY — R10-5 REMOVE

216 — ONE WAY ← — R6-2L REMOVE

217 — YIELD — R1-2 REMOVE

218 — YIELD — R1-2 REMOVE

219 — ONE WAY ← — R6-2L REMOVE

220 — STOP — R1-1F REMOVE

221 — DO NOT ENTER — R5-1 REMOVE

222 — STOP — R1-1F REMOVE

223 — YIELD — R1-2 REMOVE

224 — W12-1D REMOVE

225 — ONE WAY ← — R6-2L REMOVE

226 — JCT INTERSTATE 41 JCT 45 — J1-2 REMOVE

227 — R4-7 REMOVE

228 — STOP — R1-1F REMOVE

229 — NORTH COUNTY VVV → — J2-1 REMOVE

230 — SPEED LIMIT 35 — R2-1 REMOVE

231 — ALTERNATE INTERSTATE 41 ← — J2-1 REMOVE

232 — SOUTH COUNTY VVV ↰ — J2-1 REMOVE

233 — State Patrol Hqrs ← / Vehicle Registration Driver Licensing ← — D1-3 REMOVE

234 — RIGHT LANE MUST TURN RIGHT — R3-7R 30" X 30" MOUNT TO CANTILEVER POLE

235 — SOUTH INTERSTATE 41 ↓ — J3-1 24" X 57" CENTER OVER RIGHT LANE

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET	E

2

N

ROLLING MEADOWS DR

1430-18-72

1430-18-73

CTH VVV

975

980

985

301 — J13-1, 24" X 45", COUNTY VVV

302 — W9-1L, 30" X 30", LEFT LANE ENDS

303 — W9-1L, 30" X 30", LEFT LANE ENDS

309 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

310 — R4-7, 24" X 30", MOUNT TO SIGNAL POLE

311 — R1-2, 36" X 31", YIELD

312 — R6-2L, 24" X 30", ONE WAY, MOUNT TO SIGNAL POLE

313 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

323 — R5-1, 30" X 30", DO NOT ENTER, MOUNT TO SIGNAL POLE

324 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

325 — R1-2, 36" X 31", YIELD

326 — R5-1, 30" X 30", DO NOT ENTER, MOUNT TO SIGNAL POLE

327 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

328 — W12-1D, 24" X 24"

329 — I5-1, J13-2, 48" X 45", COUNTY VVV

330 — W12-1D, 24" X 24"

331 — R2-1, 36" X 48", SPEED LIMIT 35

332 — D1-3, 108" X 36", State Patrol Hdqrs / Vehicle Registration Driver Licensing

333 — J3-2, 48" X 69", ALTERNATE SOUTH INTERSTATE 41 COUNTY VVV

300 — D1-3, 108" X 36", State Patrol Hdqrs / Vehicle Registration Driver Licensing

304 — W12-1D, 24" X 24"

305 — I5-1, J13-2, 48" X 45", COUNTY VVV

306 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

307 — R4-7, 24" X 30", MOUNT TO SIGNAL POLE

308 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

314 — R1-2, 36" X 31", YIELD

315 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

316 — R10-5, 30" X 36", LEFT ON GREEN ARROW ONLY

317 — R4-7, 24" X 30", MOUNT TO SIGNAL POLE

318 — J13-1, 24" X 45", 23

319 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

320 — R10-5, 30" X 36", LEFT ON GREEN ARROW ONLY

321 — R6-2L, 24" X 30", ONE WAY, MOUNT TO SIGNAL POLE

322 — R1-2, 36" X 31", YIELD

334 — R4-7, 24" X 30", MOUNT TO SIGNAL POLE

335 — R1-1F, 36" X 36", STOP, MOUNT TO SIGNAL POLE

336 — R3-7R, 30" X 30", RIGHT LANE MUST TURN RIGHT, MOUNT TO CANTILEVER POLE

337 — D16-1, 36" X 72", SOUTH INTERSTATE 41 ONLY, CENTER OVER RIGHT LANE

338 — J2-2, 48" X 57", NORTH 45 SOUTH 45

339 — J3-1, 24" X 57", SOUTH 45

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET E

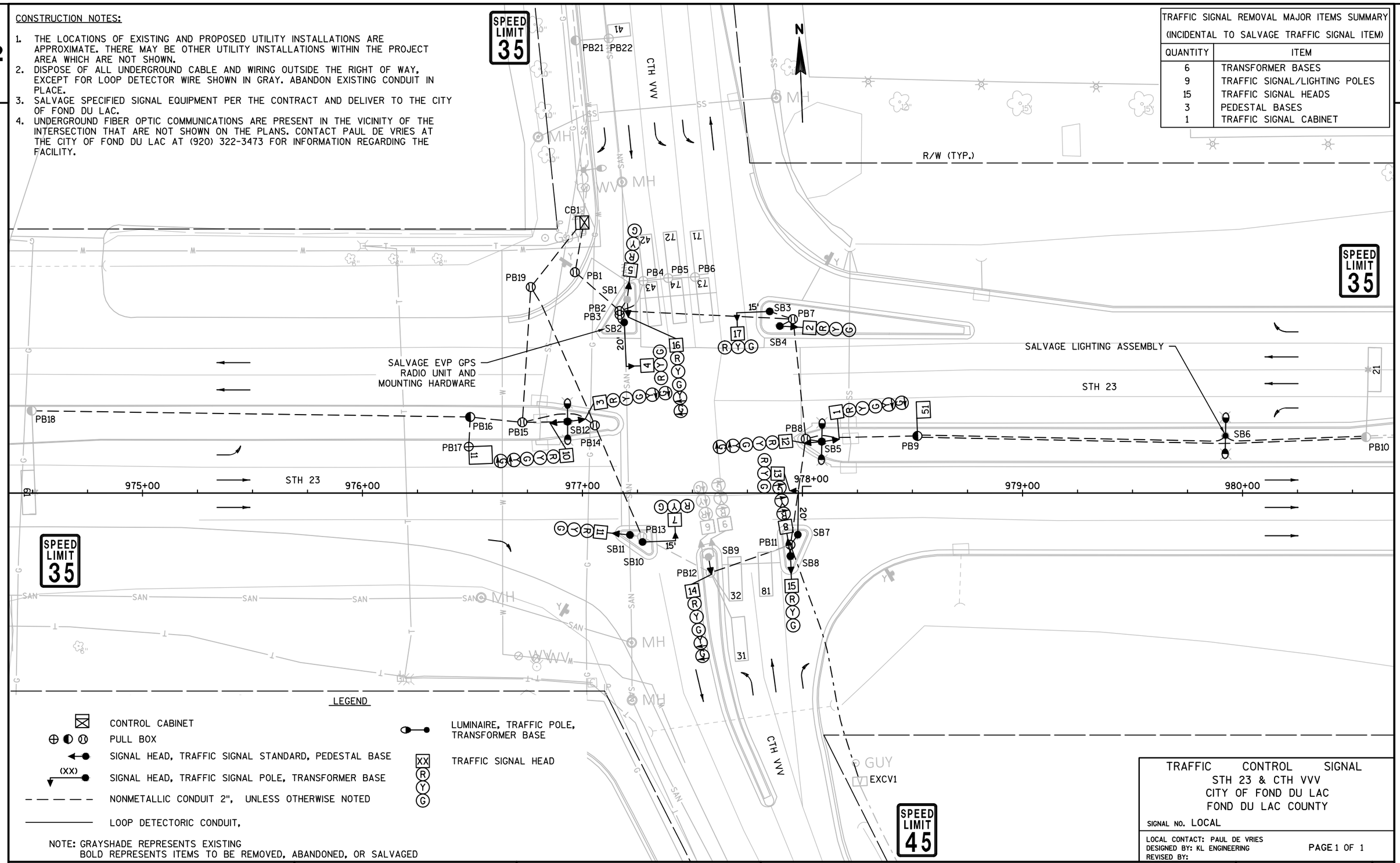
FILE NAME : N:\spo\traffic\SIGNING\Projects\1430-18-71.72.73\14301800_SIGNPLAN.dgn PLOT DATE : 18-DEC-2018 15:49 PLOT BY : dotets PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. DISPOSE OF ALL UNDERGROUND CABLE AND WIRING OUTSIDE THE RIGHT OF WAY, EXCEPT FOR LOOP DETECTOR WIRE SHOWN IN GRAY. ABANDON EXISTING CONDUIT IN PLACE.
3. SALVAGE SPECIFIED SIGNAL EQUIPMENT PER THE CONTRACT AND DELIVER TO THE CITY OF FOND DU LAC.
4. UNDERGROUND FIBER OPTIC COMMUNICATIONS ARE PRESENT IN THE VICINITY OF THE INTERSECTION THAT ARE NOT SHOWN ON THE PLANS. CONTACT PAUL DE VRIES AT THE CITY OF FOND DU LAC AT (920) 322-3473 FOR INFORMATION REGARDING THE FACILITY.

TRAFFIC SIGNAL REMOVAL MAJOR ITEMS SUMMARY (INCIDENTAL TO SALVAGE TRAFFIC SIGNAL ITEM)	
QUANTITY	ITEM
6	TRANSFORMER BASES
9	TRAFFIC SIGNAL/LIGHTING POLES
15	TRAFFIC SIGNAL HEADS
3	PEDESTAL BASES
1	TRAFFIC SIGNAL CABINET



LEGEND

- CONTROL CABINET
- PULL BOX
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTORIC CONDUIT,
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- TRAFFIC SIGNAL HEAD (XX, R, Y, G)

NOTE: GRAYSHADE REPRESENTS EXISTING
BOLD REPRESENTS ITEMS TO BE REMOVED, ABANDONED, OR SALVAGED

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL

LOCAL CONTACT: PAUL DE VRIES
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 42	E

2

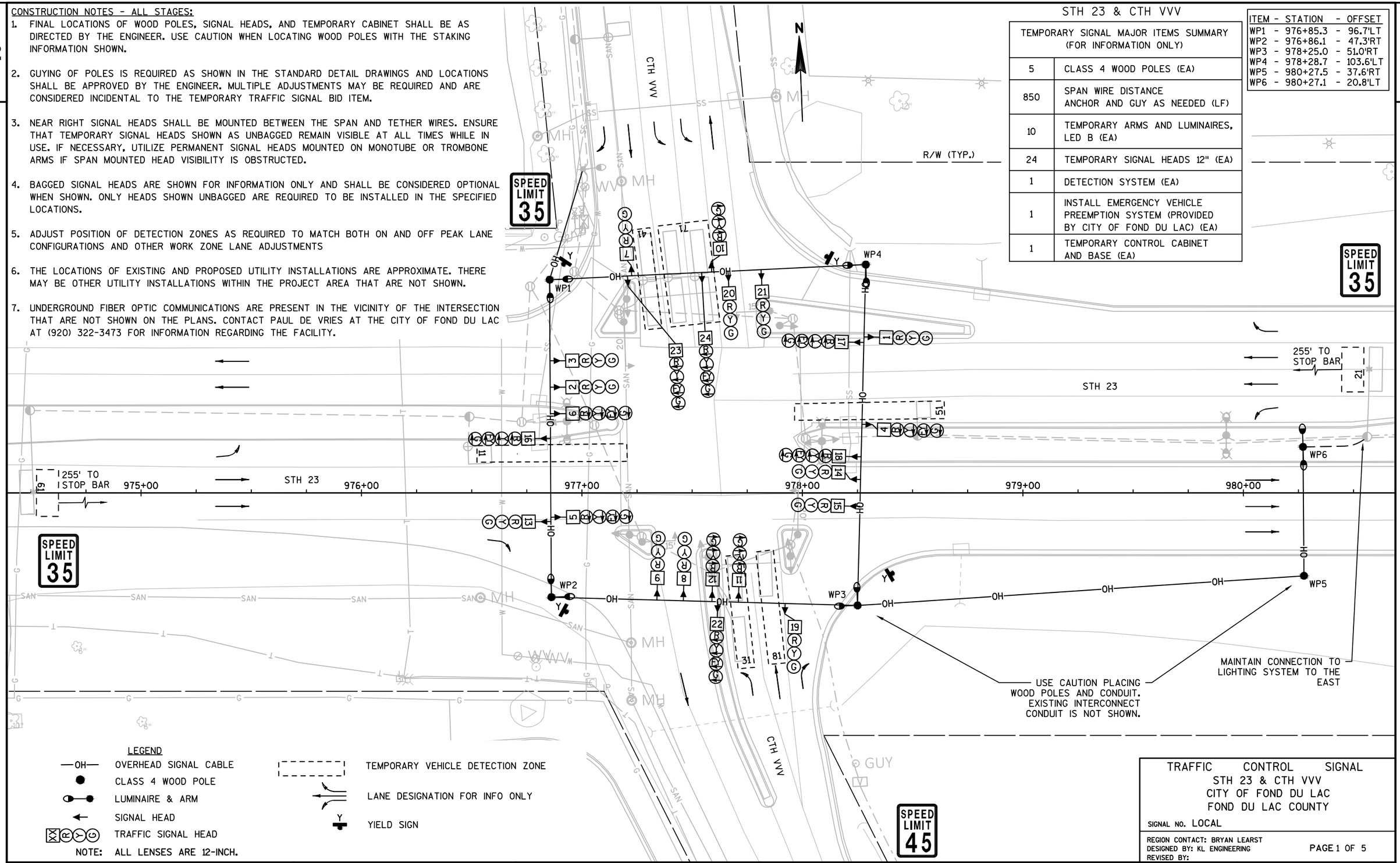
CONSTRUCTION NOTES - ALL STAGES:

1. FINAL LOCATIONS OF WOOD POLES, SIGNAL HEADS, AND TEMPORARY CABINET SHALL BE AS DIRECTED BY THE ENGINEER. USE CAUTION WHEN LOCATING WOOD POLES WITH THE STAKING INFORMATION SHOWN.
2. GUYING OF POLES IS REQUIRED AS SHOWN IN THE STANDARD DETAIL DRAWINGS 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. NEAR RIGHT SIGNAL HEADS SHALL BE MOUNTED BETWEEN THE SPAN AND TETHER WIRES. ENSURE THAT TEMPORARY SIGNAL HEADS SHOWN AS UNBAGGED REMAIN VISIBLE AT ALL TIMES WHILE IN USE. IF NECESSARY, UTILIZE PERMANENT SIGNAL HEADS MOUNTED ON MONOTUBE OR TROMBONE ARMS IF SPAN MOUNTED HEAD VISIBILITY IS OBSTRUCTED.
4. BAGGED SIGNAL HEADS ARE SHOWN FOR INFORMATION ONLY AND SHALL BE CONSIDERED OPTIONAL WHEN SHOWN. ONLY HEADS SHOWN UNBAGGED ARE REQUIRED TO BE INSTALLED IN THE SPECIFIED LOCATIONS.
5. ADJUST POSITION OF DETECTION ZONES AS REQUIRED TO MATCH BOTH ON AND OFF PEAK LANE CONFIGURATIONS AND OTHER WORK ZONE LANE ADJUSTMENTS
6. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
7. UNDERGROUND FIBER OPTIC COMMUNICATIONS ARE PRESENT IN THE VICINITY OF THE INTERSECTION THAT ARE NOT SHOWN ON THE PLANS. CONTACT PAUL DE VRIES AT THE CITY OF FOND DU LAC AT (920) 322-3473 FOR INFORMATION REGARDING THE FACILITY.

STH 23 & CTH VVV

TEMPORARY SIGNAL MAJOR ITEMS SUMMARY (FOR INFORMATION ONLY)	
5	CLASS 4 WOOD POLES (EA)
850	SPAN WIRE DISTANCE ANCHOR AND GUY AS NEEDED (LF)
10	TEMPORARY ARMS AND LUMINAIRES, LED B (EA)
24	TEMPORARY SIGNAL HEADS 12" (EA)
1	DETECTION SYSTEM (EA)
1	INSTALL EMERGENCY VEHICLE PREEMPTION SYSTEM (PROVIDED BY CITY OF FOND DU LAC) (EA)
1	TEMPORARY CONTROL CABINET AND BASE (EA)

ITEM - STATION - OFFSET
WP1 - 976+85.3 - 96.7'LT
WP2 - 976+86.1 - 47.3'RT
WP3 - 978+25.0 - 51.0'RT
WP4 - 978+28.7 - 103.6'LT
WP5 - 980+27.5 - 37.6'RT
WP6 - 980+27.1 - 20.8'LT



TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL

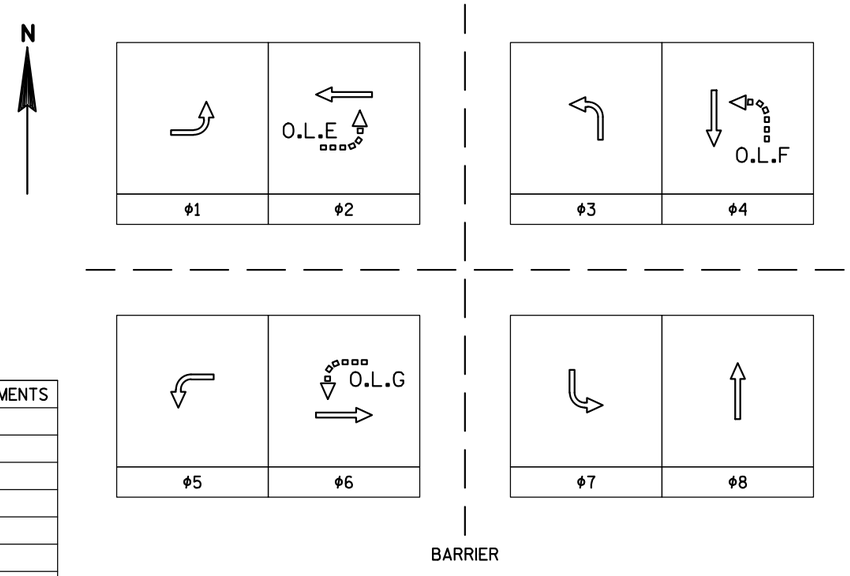
REGION CONTACT: BRYAN LEARST
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 1 OF 5

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	TEMPORARY TRAFFIC SIGNAL PLAN - PRE STAGE	SHEET 43	E

	HEAD NUMBERS	FLASH
ϕ1	16-18	-
ϕ2	1-3	R
ϕ3	22-24	-
ϕ4	7-9	R
ϕ5	4-6	-
ϕ6	13-15	R
ϕ7	10-12	R
ϕ8	19-21	R
ϕ2 PED		
ϕ4 PED		
ϕ6 PED		
ϕ8 PED		

O.L. ASSIGNMENTS			
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E	16-18	R	ϕ2
O.L.F	22-24	R	ϕ4
O.L.G	4-6	R	ϕ6
O.L.H			



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	EB	1+6
4	EVP	B	WB	2+5
5	EVP	C	SB	4+7
6	EVP	D	NB	3+8
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

1. AFTER PREEMPTION SEQUENCE A OR B, CONTROLLER SHALL RETURN TO PHASE 2+6.
2. AFTER PREEMPTION SEQUENCE C OR D, CONTROLLER SHALL RETURN TO PHASE 4+8.

CONTROLLER LOGIC

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT (GPS)	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM
LOCATION OF MASTER
CONTROLLER NO.: N/A
SIGNAL SYSTEM #:

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
DETECTOR #(S)	11	21	31	41	51	61	71	81									DETECTOR #(S)
PHASE CALLED	1	2	3	4	5	5	7	8									PHASE CALLED
PHASE EXTENDED	1	2	3	4	5	5	7	8									PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
DETECTOR #(S)																	DETECTOR #(S)
PHASE CALLED																	PHASE CALLED
PHASE EXTENDED																	PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

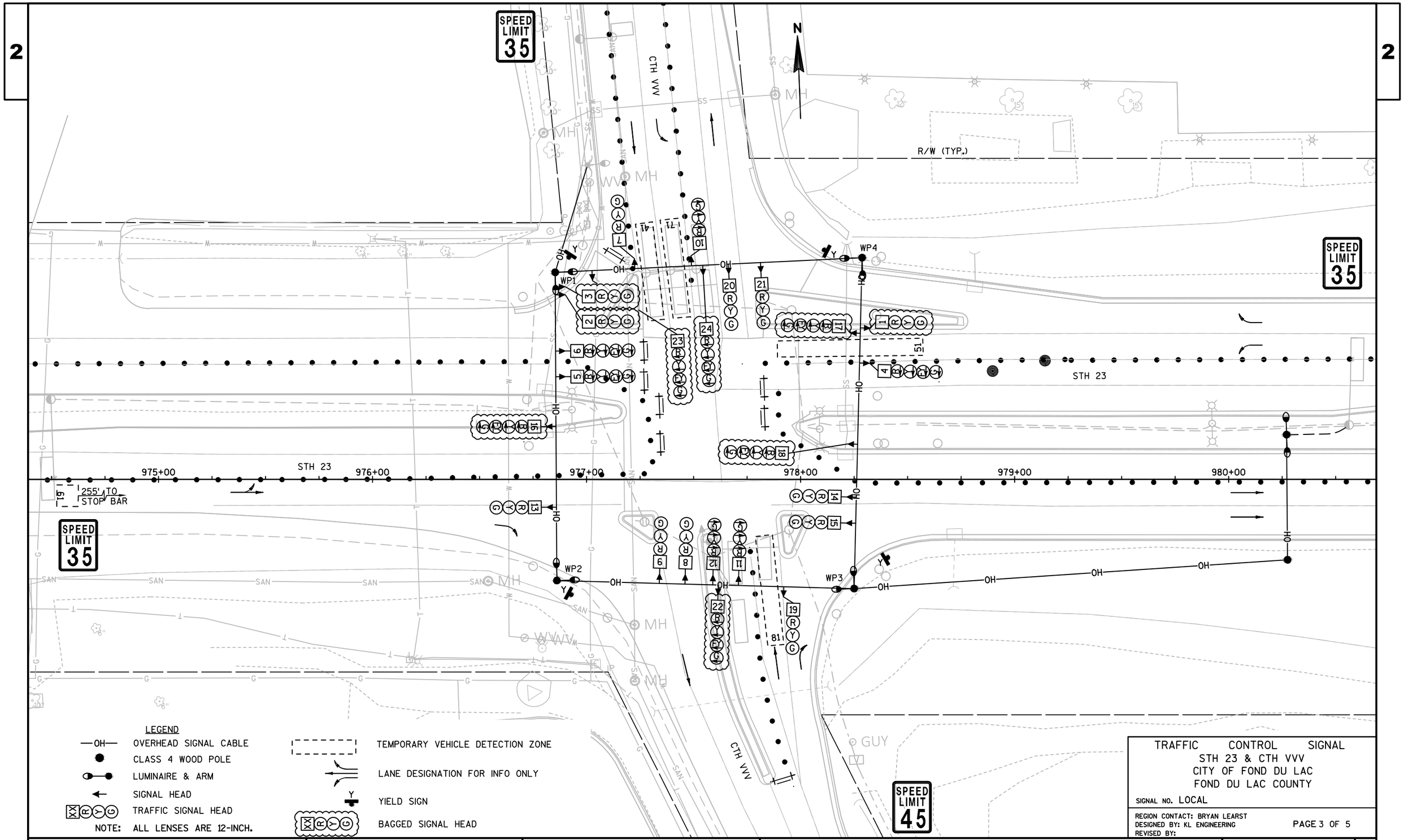
TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL
CABINET TYPE:
CONTROLLER TYPE:

REGION CONTACT: BRYAN LEARST
DESIGNED BY: KL ENGINEERING
REVISED BY:

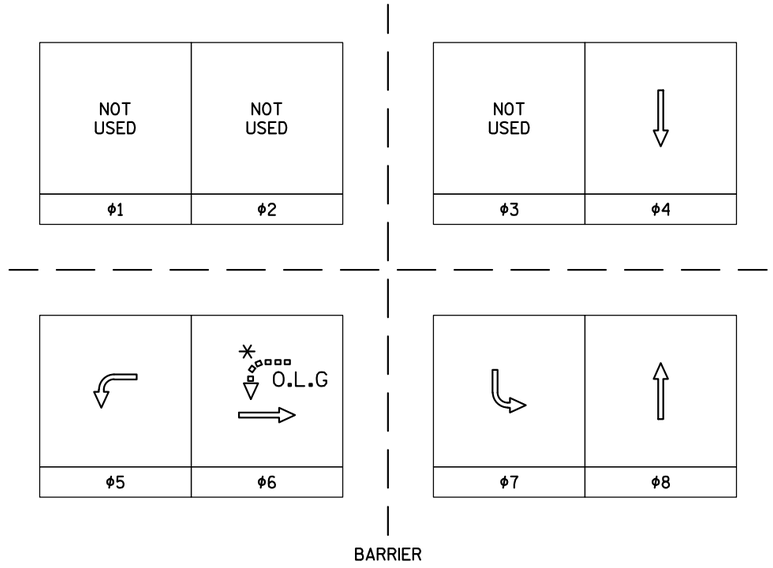
FILE NAME : G:\WDOTNE\14023-017\CIVIL 3D\SHEETSPLAN\024301-PH.DWG PLOT DATE : 10/25/2018 2:23 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42



PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1	SHEET 45	E

	HEAD NUMBERS	FLASH
ϕ1		
ϕ2		
ϕ3		
ϕ4	7-9	R
ϕ5	4-6	-
ϕ6	13-15	R
ϕ7	10-12	R
ϕ8	19-21	R
ϕ2 PED		
ϕ4 PED		
ϕ6 PED		
ϕ8 PED		

O.L. ASSIGNMENTS			
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E			
O.L.F			
O.L.G*	4-6	R	ϕ6
O.L.H			



GENERAL NOTES:

1. * O.L.G FLASHING YELLOW ARROW INTERVAL SHALL BE OMITTED DURING STAGE 1.

PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	EB	6
4	EVP	B	WB	5
5	EVP	C	SB	4+7
6	EVP	D	NB	8
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

1. AFTER PREEMPTION SEQUENCE A OR B, CONTROLLER SHALL RETURN TO PHASE 6.
2. AFTER PREEMPTION SEQUENCE C OR D, CONTROLLER SHALL RETURN TO PHASE 4+8.

CONTROLLER LOGIC

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT (GPS)	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM
LOCATION OF MASTER
CONTROLLER NO.: N/A
SIGNAL SYSTEM #:

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
DETECTOR #(S)	41	51	61	71	81												DETECTOR #(S)
PHASE CALLED	4	5	5	7	8												PHASE CALLED
PHASE EXTENDED	4	5	5	7	8												PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
DETECTOR #(S)																	DETECTOR #(S)
PHASE CALLED																	PHASE CALLED
PHASE EXTENDED																	PHASE EXTENDED
DISCONNECT TIME																	DISCONNECT TIME
CALLING DELAY																	CALLING DELAY
EXTENSION STRETCH																	EXTENSION STRETCH
LOOP FUNCTION																	LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	X
FIBER	
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY

SIGNAL NO. LOCAL
CABINET TYPE:
CONTROLLER TYPE:

REGION CONTACT: BRYAN LEARST
DESIGNED BY: KL ENGINEERING
REVISED BY:

PAGE 4 OF 5

PROJECT NO: 1430-18-73 | HWY: STH 23 | COUNTY: FOND DU LAC | TEMPORARY SEQUENCE OF OPERATIONS - STAGE 1 | SHEET 46 | E

2

SPEED LIMIT 35

CTH VVV

N

SPEED LIMIT 35

255' TO STOP BAR

STH 23

255' TO STOP BAR

975+00 976+00 977+00 978+00 979+00 980+00

SPEED LIMIT 35

SPEED LIMIT 45

CTH VVV

LEGEND

—OH—	OVERHEAD SIGNAL CABLE
●	CLASS 4 WOOD POLE
●—●	LUMINAIRE & ARM
←	SIGNAL HEAD
	TRAFFIC SIGNAL HEAD
NOTE:	ALL LENSES ARE 12-INCH.
	TEMPORARY VEHICLE DETECTION ZONE
	LANE DESIGNATION FOR INFO ONLY
Y	YIELD SIGN

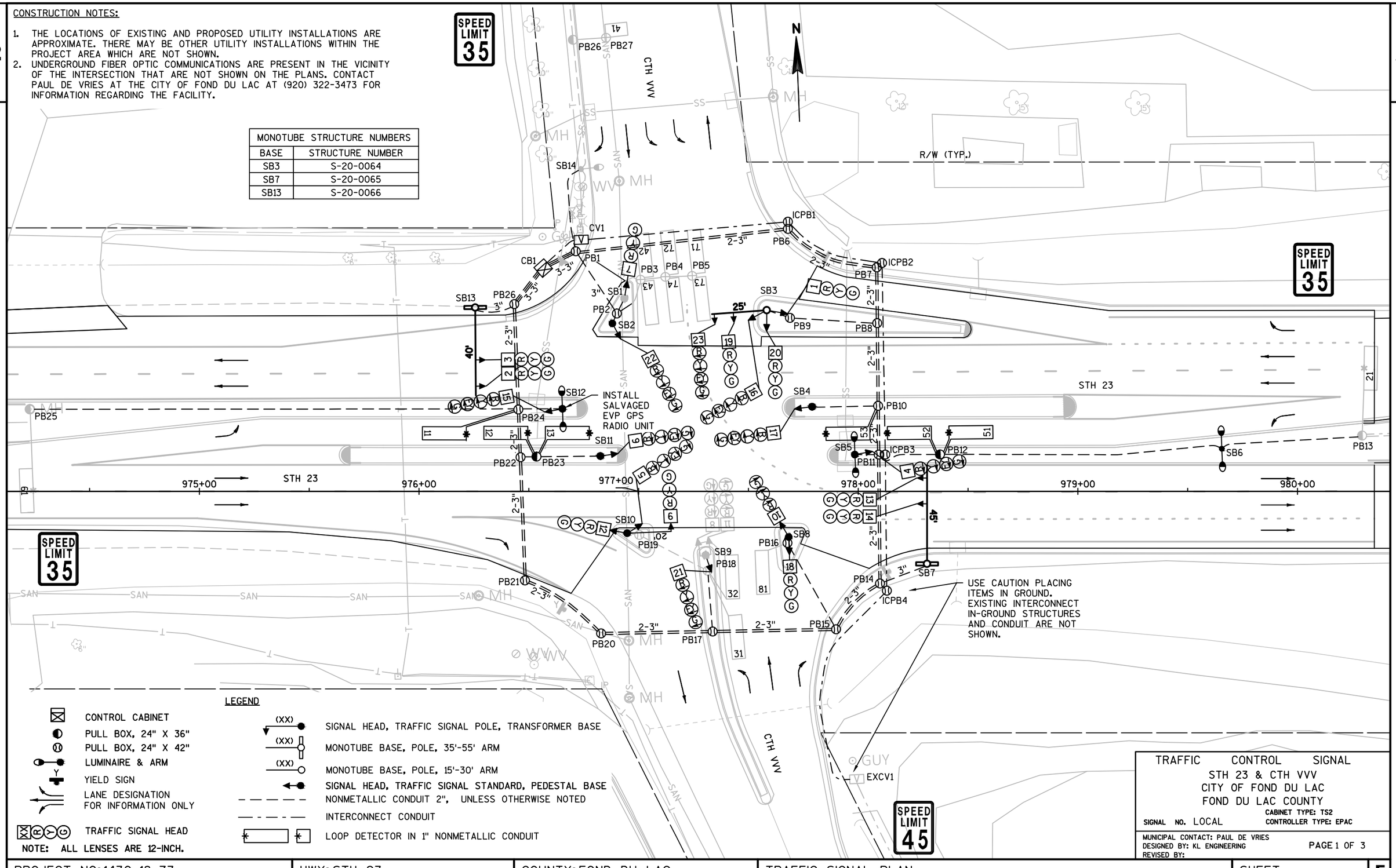
TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY
CABINET TYPE:
SIGNAL NO. LOCAL CONTROLLER TYPE:
MUNICIPAL CONTACT: BRYAN LEARST
DESIGNED BY: KL ENGINEERING
REVISED BY:
PAGE 5 OF 5

PROJECT NO:1430-18-73	HWY: STH 23	COUNTY:FOND DU LAC	TEMPORARY TRAFFIC SIGNAL PLAN - POST STAGE	SHEET 47	E

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. UNDERGROUND FIBER OPTIC COMMUNICATIONS ARE PRESENT IN THE VICINITY OF THE INTERSECTION THAT ARE NOT SHOWN ON THE PLANS. CONTACT PAUL DE VRIES AT THE CITY OF FOND DU LAC AT (920) 322-3473 FOR INFORMATION REGARDING THE FACILITY.

MONOTUBE STRUCTURE NUMBERS	
BASE	STRUCTURE NUMBER
SB3	S-20-0064
SB7	S-20-0065
SB13	S-20-0066



LEGEND

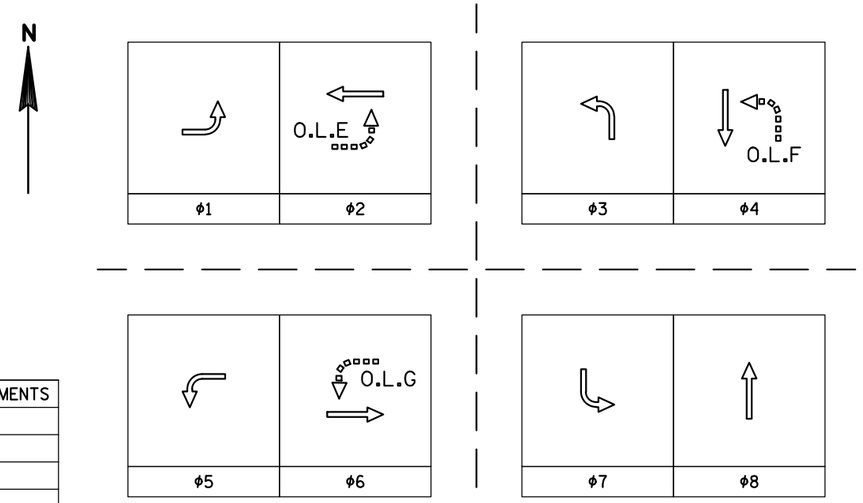
- CONTROL CABINET
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- LUMINAIRE & ARM
- YIELD SIGN
- LANE DESIGNATION FOR INFORMATION ONLY
- TRAFFIC SIGNAL HEAD
- NOTE: ALL LENSES ARE 12-INCH.
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- INTERCONNECT CONDUIT
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY
CABINET TYPE: TS2
SIGNAL NO. LOCAL
CONTROLLER TYPE: EPAC
MUNICIPAL CONTACT: PAUL DE VRIES
DESIGNED BY: KL ENGINEERING
REVISED BY:
PAGE 1 OF 3

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC SIGNAL PLAN	SHEET 48	E

	HEAD NUMBERS	FLASH
ϕ1	15-17	-
ϕ2	1-3	R
ϕ3	21-23	-
ϕ4	7-9	R
ϕ5	4-6	-
ϕ6	12-14	R
ϕ7	10,11	R
ϕ8	18-20	R
ϕ2 PED		
ϕ4 PED		
ϕ6 PED		
ϕ8 PED		

O.L. ASSIGNMENTS			
O.L.A			
O.L.B			
O.L.C			
O.L.D			
O.L.E	15-17	R	ϕ2
O.L.F	21-23	R	ϕ4
O.L.G	4-6	R	ϕ6
O.L.H			



PREEMPTION ASSIGNMENTS				
PREEMPTION DESIGNATION	PREEMPTION TYPE	EVP CHANNEL	DIRECTION OF TRAVEL	PHASE(S) CALLED
1	RESERVED	-	-	-
2	RESERVED	-	-	-
3	EVP	A	EB	1+6
4	EVP	B	WB	2+5
5	EVP	C	SB	4+7
6	EVP	D	NB	3+8
7	NOT USED	-	-	-
8	NOT USED	-	-	-
9	NOT USED	-	-	-
10	NOT USED	-	-	-

1. AFTER PREEMPTION SEQUENCE A OR B, CONTROLLER SHALL RETURN TO PHASE 2+6.
2. AFTER PREEMPTION SEQUENCE C OR D, CONTROLLER SHALL RETURN TO PHASE 4+8.

CONTROLLER LOGIC

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

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT (GPS)	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTOR	

CENTRAL SYSTEM
LOCATION OF MASTER
CONTROLLER NO.:
SIGNAL SYSTEM #:

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	12	13		32	42	43	52	53
PHASE CALLED	1	1		3	4	4	5	5
PHASE EXTENDED	1	1		3	4	4	5	5
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

19	17	23	21	27	25	31	29	DETECTOR INPUT
	73	74	81					DETECTOR #(S)
	7	7	8					PHASE CALLED
			8					PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	11		21	31	41		51	
PHASE CALLED	1		2	3	4		5	
PHASE EXTENDED	1		2	3	4		5	
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

20	18	24	22	28	26	32	30	DETECTOR INPUT
61	71	72						DETECTOR #(S)
6	7	7						PHASE CALLED
6	7	7						PHASE EXTENDED
								DISCONNECT TIME
								CALLING DELAY
								EXTENSION STRETCH
								LOOP FUNCTION

TYPE OF INTERCONNECT	
NONE	
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	X
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	X
CELL MODEM	
PHONE	

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY
CABINET TYPE: TS2
SIGNAL NO. LOCAL CONTROLLER TYPE: EPAC

MUNICIPAL CONTACT: PAUL DE VRIES
DESIGNED BY: KL ENGINEERING
REVISED BY:

PROJECT ID:	1430-18-73
INTERSECTION:	STH 23 & CTH VVV

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED - RED	GRN - GREEN
	WHT - WHITE	BLU - BLUE	ORG - ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	12	7	4	RED	ORG	GRN								
SB2	12	22	3, O.L.F				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB3	15	1	2	RED	ORG	GRN								
		16	1,O.L.E				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		19	8	RED/WHT	WHT/BLK	GRN/WHT								
		20	8	RED/WHT	WHT/BLK	GRN/WHT								
		23	3, O.L.F				BLK	BLU	BLU/WHT	BLU/BLK				
SB4	12	17	1,O.L.E				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB5	12	4	5,O.L.G				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB7	12	13	6	RED	ORG	GRN								
		14	6	RED	ORG	GRN								
SB8	12	10	7				RED/BLK	ORG/BLK	GRN/BLK					
		18	8	RED	ORG	GRN								
SB9	12	8	4	RED	ORG	GRN								
		11	7				RED/BLK	ORG/BLK	GRN/BLK					
		21	3, O.L.F				BLK	WHT/BLK	BLU	BLK/WHT				
SB10	12	5	5,O.L.G				BLK	WHT/BLK	BLU	BLK/WHT				
		9	4	RED	ORG	GRN								
		12	6	RED/BLK	ORG/BLK	GRN/BLK								
SB11	12	6	5,O.L.G				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB12	12	15	1,O.L.E				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB13	12	2	2	RED	ORG	GRN								
		3	2	RED	ORG	GRN								

NOTE: USE THE WHITE CONDUCTOR AS THE GROUND CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.

EQUIPMENT GROUNDING CONDUCTOR 12 AWG	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB14
SB14	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

EMERGENCY VEHICLE PREEMPTION CABLE	
FROM	TO
CB1	SB12

LIGHTING UF 2-12 AWG W/GROUND	
FROM	TO
CB1	SB5
SB5	SB6
CB1	SB12
CB1	SB14

TRAFFIC CONTROL SIGNAL
STH 23 & CTH VVV
CITY OF FOND DU LAC
FOND DU LAC COUNTY

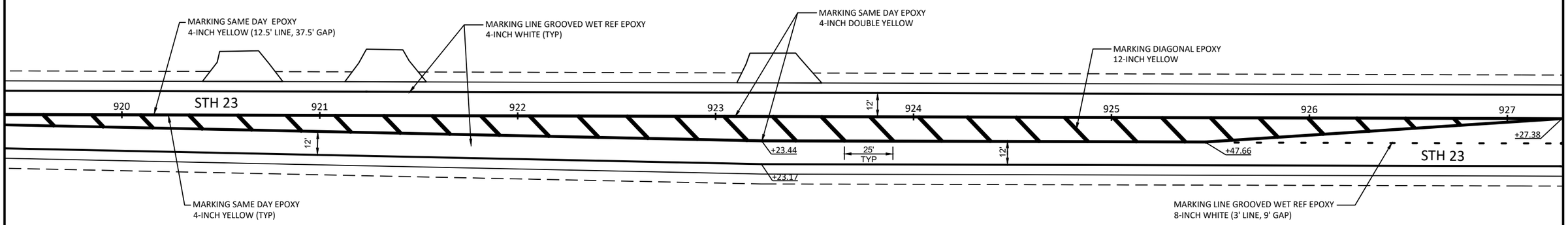
SIGNAL NO. LOCAL
CABINET TYPE: TS2
CONTROLLER TYPE: EPAC

MUNICIPAL CONTACT: PAUL DE VRIES
DESIGNED BY: KL ENGINEERING
REVISED BY:

FILE NAME : G:\WDOTNE\14023-017\CIVIL 3D\SHEETSPLAN\024401-CR.DWG
LAYOUT NAME - 024401-CR - PERMANENT
PLOT DATE : 10/29/2018 8:53 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42

2

N



PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 51	E

2

N

ESTERBROOK RD

5+00

4+00

3+00

2+00

CTH T

STH 23

928 929 930 931 932 933 934 935

12' 12' 12' 12' 12' 12' 12' 12'

ONLY ONLY

R/L STH 23

+76.87 +27.18 +27.02 +62.15 +24.01 +61.50 +91.64 +75.59 +17.25 +34.04 +72.83 +89.69 +91.23 +18.00 +19.36

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (TYP)

PAVEMENT MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

PAVEMENT MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING LINE GROOVED WET REF EPOXY
8-INCH WHITE

MARKING LINE GROOVED WET REF EPOXY
8-INCH WHITE (3' LINE, 9' GAP)

MARKING WORD EPOXY
WHITE (TYP)

MARKING ARROW EPOXY
TYPE 2 WHITE (TYP)

ISLAND NOSE
EPOXY ISLAND (TYP)

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING LINE EPOXY
8-INCH WHITE (TYP)

MARKING LINE EPOXY
4-INCH WHITE (TYP)

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 52	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\024501-PM.DWG
LAYOUT NAME - 024502-pm
PLOT DATE : 5/14/2018 1:24 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2

N

MARKING LINE GROOVED WET REF EPOXY
8-INCH WHITE

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (TYP)

MARKING LINE GROOVED WET REF EPOXY
8-INCH WHITE (3' LINE, 9' GAP)

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

+49.25

12'

12'

12'

12'

935

936

937

R/L STH 23

938

+10.88

STH 23

939

940

+49.35

941

942

12'

12'

25'
TYP

+64.82

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING ARROW EPOXY
TYPE 2 WHITE (TYP)

MARKING DIAGONAL EPOXY
12-INCH, YELLOW (TYP)

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 53	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\024501-PM.DWG
LAYOUT NAME - 024503-pm

PLOT DATE : 5/14/2018 1:24 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING DIAGONAL EPOXY
12-INCH YELLOW (TYP)

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (TYP)

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (12.5' LINE, 37.5' GAP)

944 945 946 947 948 949 950

12' 25' TYP

STH 23

R/L STH 23

+82.37 +85.65 +07.19 +51.12 +35.56 +35.74

12' 14' 12' 12'

MARKING LINE GROOVED WET REF EPOXY
8-INCH WHITE

WRIGHTWAY DR/FORD DR

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 54	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\024501-PM.DWG
LAYOUT NAME - 024504-pm

PLOT DATE : 5/14/2018 1:24 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (12.5' LINE, 37.5' GAP)

MARKING LINE GROOVED WET REF EPOXY
4-INCH WHITE (TYP)

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING LINE EPOXY
4-INCH WHITE (TYP)

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

+60.42

+75.48

+71.58

+66.48

+65.20

+65.21

+71.58

951

952

953

954

955

956

957

958

R/L STH 23

STH 23

12'

12'

12'

12'

12'

25'
TYP

WRIGHTWAY DR/FORD DR

MARKING DIAGONAL EPOXY
12-INCH YELLOW (TYP)

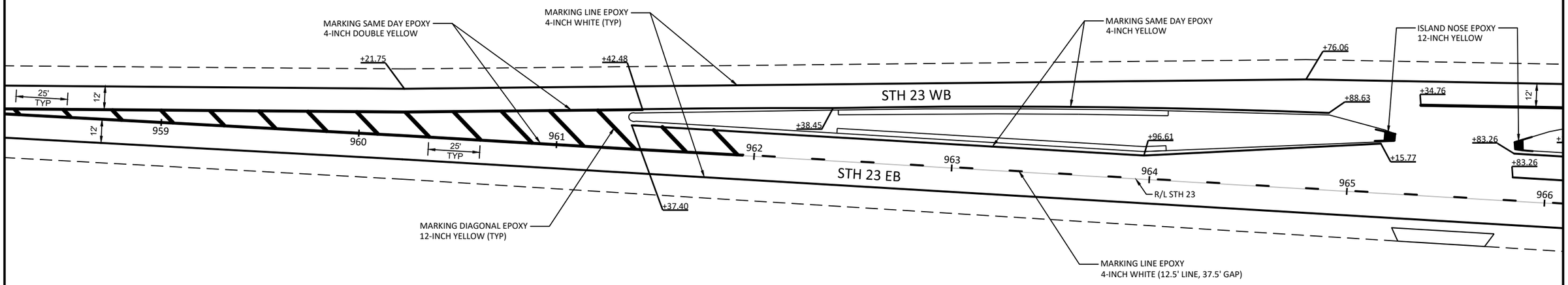
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 55	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\024501-PM.DWG
LAYOUT NAME - 024505-pm

PLOT DATE : 5/14/2018 1:24 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N



PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 56	E

2

2

N

RICKMEYER DR

2+00

1+00

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

MARKING STOP LINE
EPOXY 18-INCH

MARKING LINE EPOXY
4-INCH WHITE (3' LINE, 6' GAP)

MARKING LINE EPOXY
8-INCH WHITE

MARKING WORD EPOXY
WHITE (TYP)

+25.65

+32.15

+14.00

+36.84

12'

+83.26

+16.03

+83.26

+44.39

966

967

968

969

970

971

972

973

12'

12'

R/L STH 23

STH 23 WB

STH 23 EB

MARKING LINE EPOXY
4-INCH WHITE (12.5' LINE, 37.5' GAP)

+74.00

+63.31

+29.55

MARKING LINE EPOXY
8-INCH WHITE

+67.25

+68.12

+67.20

MARKING ARROW EPOXY
TYPE 5 WHITE (TYP)

MARKING LINE EPOXY
4-INCH WHITE (TYP)

ISLAND NOSE
EPOXY YELLOW (TYP)

CURB EPOXY YELLOW (TYP)

+10.62

+82.11

+60.54

MARKING LINE EPOXY
8-INCH WHITE

MARKING LINE EPOXY
4-INCH WHITE (12.5' LINE, 37.5' GAP)

MARKING ARROW EPOXY
TYPE 2 WHITE (TYP)

MARKING SAME DAY EPOXY
4-INCH DOUBLE YELLOW

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 57	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\024501-PM.DWG
LAYOUT NAME - 024507-pm
PLOT DATE : 5/14/2018 1:24 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2

2

N

ROLLING MEADOWS DR/CTH VVV

MARKING LINE EPOXY
4-INCH WHITE (12.5' LINE, 37.5' GAP)

MARKING LINEEPOXY
4-INCH WHITE (TYP)

MARKING SAME DAY EPOXY
4-INCH YELLOW

ISLAND NOSE
EPOXY YELLOW (TYP)

CURB EPOXY
YELLOW (TYP)

MARKING LINE EPOXY
8-INCH WHITE (2' LINE, 6' GAP)

12'

12'

+37.46

+39.50

+22.04

+49.39

+14.29

+82.11

STH 23 WB

+55.72

12'

12'

+13.05

12'

+35.00

+72.10

+42.04

+28.84

+19.44

973

974

975

976

977

978

979

980

12'

+68.42

+90.98

+70.87

+93.88

+90.61

STH 23 EB

R/L STH 23

+15.28

+89.65

+91.23

12'

11'

+69.27

+34.37

MARKING LINE EPOXY
8-INCH WHITE (TYP)

MARKING LINE EPOXY
4-INCH WHITE (3' LINE, 9' GAP)

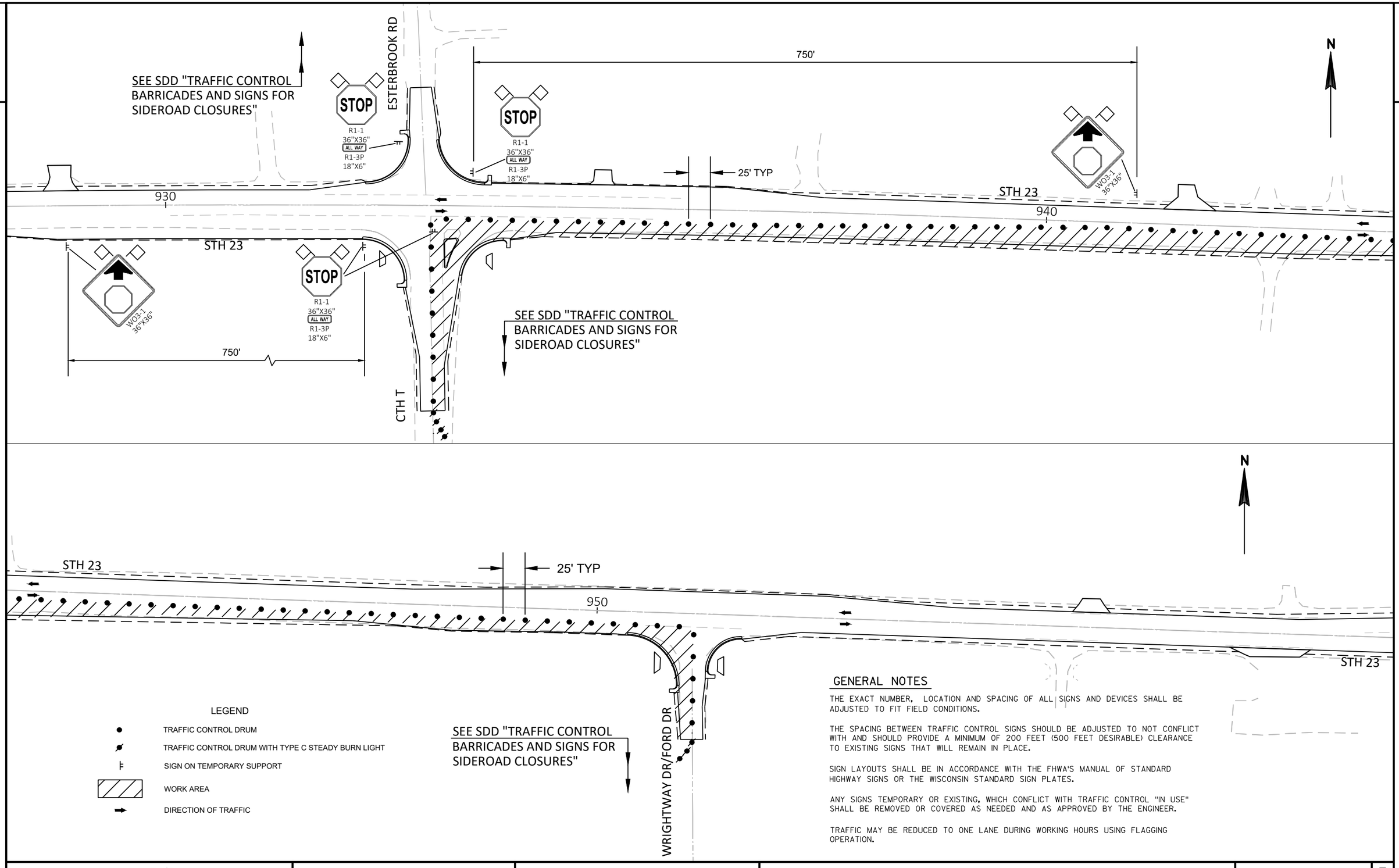
MARKING WORD EPOXY
WHITE (TYP)

MARKING ARROW EPOXY
TYPE 2 WHITE (TYP)

ROLLING MEADOWS DR/CTH VVV

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PAVEMENT MARKING DETAIL	SHEET 58	E

2



GENERAL NOTES

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

TRAFFIC MAY BE REDUCED TO ONE LANE DURING WORKING HOURS USING FLAGGING OPERATION.

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL DETAIL - STAGE 1	SHEET 59	E

GENERAL NOTES

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

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

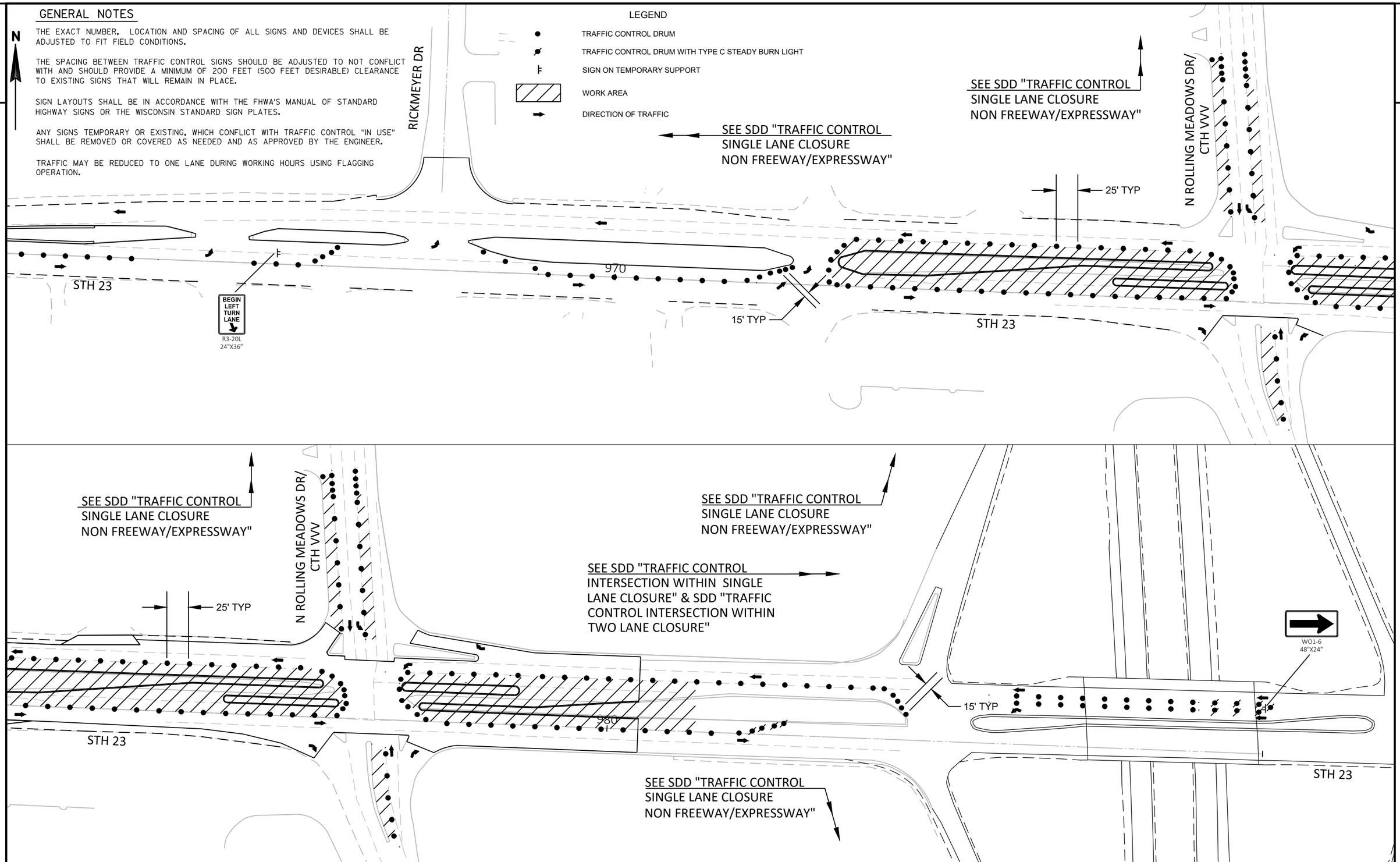
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

TRAFFIC MAY BE REDUCED TO ONE LANE DURING WORKING HOURS USING FLAGGING OPERATION.

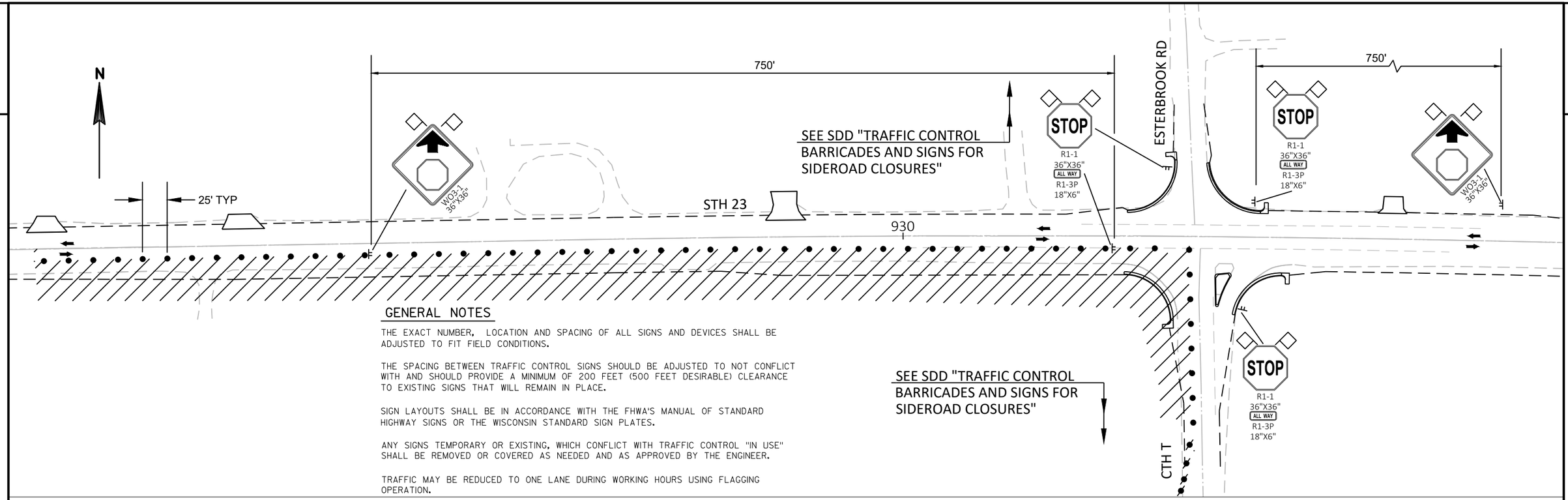
LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL DETAIL - STAGE 1	SHEET 60 E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\025002-TC.DWG
LAYOUT NAME - 025002-TC2
PLOT DATE : 10/18/2018 1:22 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1IN:100 FT
WISDOT/CADDS SHEET 42



GENERAL NOTES

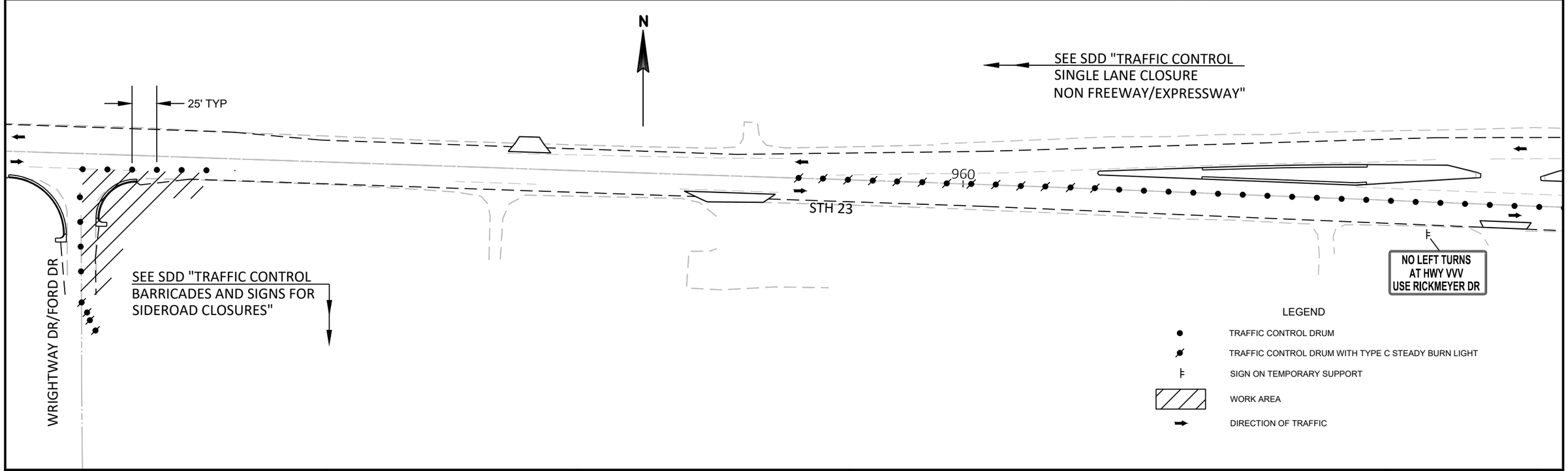
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

TRAFFIC MAY BE REDUCED TO ONE LANE DURING WORKING HOURS USING FLAGGING OPERATION.



PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL DETAIL - STAGE 2	SHEET 61	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\025003-TC.DWG
LAYOUT NAME - 025003-TC1
PLOT DATE : 10/17/2018 12:48 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1IN:100 FT
WISDOT/CADDS SHEET 42

2

N

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

SEE SDD "TRAFFIC CONTROL BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

ESTERBROOK RD

750'

STOP
R1-1
36"X36"
ALL WAY
R1-3P
18"X6"

25'
TYP

STH 23

930

940

W03-1
36"X36"

750'

SEE SDD "TRAFFIC CONTROL BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

SEE SDD "TRAFFIC CONTROL WORK ON SHOULDER OR PARKING LANE UNDIVIDED ROADWAY"

N

950

25' TYP

STH 23

WRIGHTWAY DR/FORD DR

SEE SDD "TRAFFIC CONTROL BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"

GENERAL NOTES

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

TRAFFIC MAY BE REDUCED TO ONE LANE DURING WORKING HOURS USING FLAGGING OPERATION.

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL DETAIL - STAGE 3	SHEET 62	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\025004-TC.DWG
LAYOUT NAME - 025004-TC1
PLOT DATE : 10/17/2018 1:51 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1IN:100 FT
WISDOT/CADDS SHEET 42

2

GENERAL NOTES

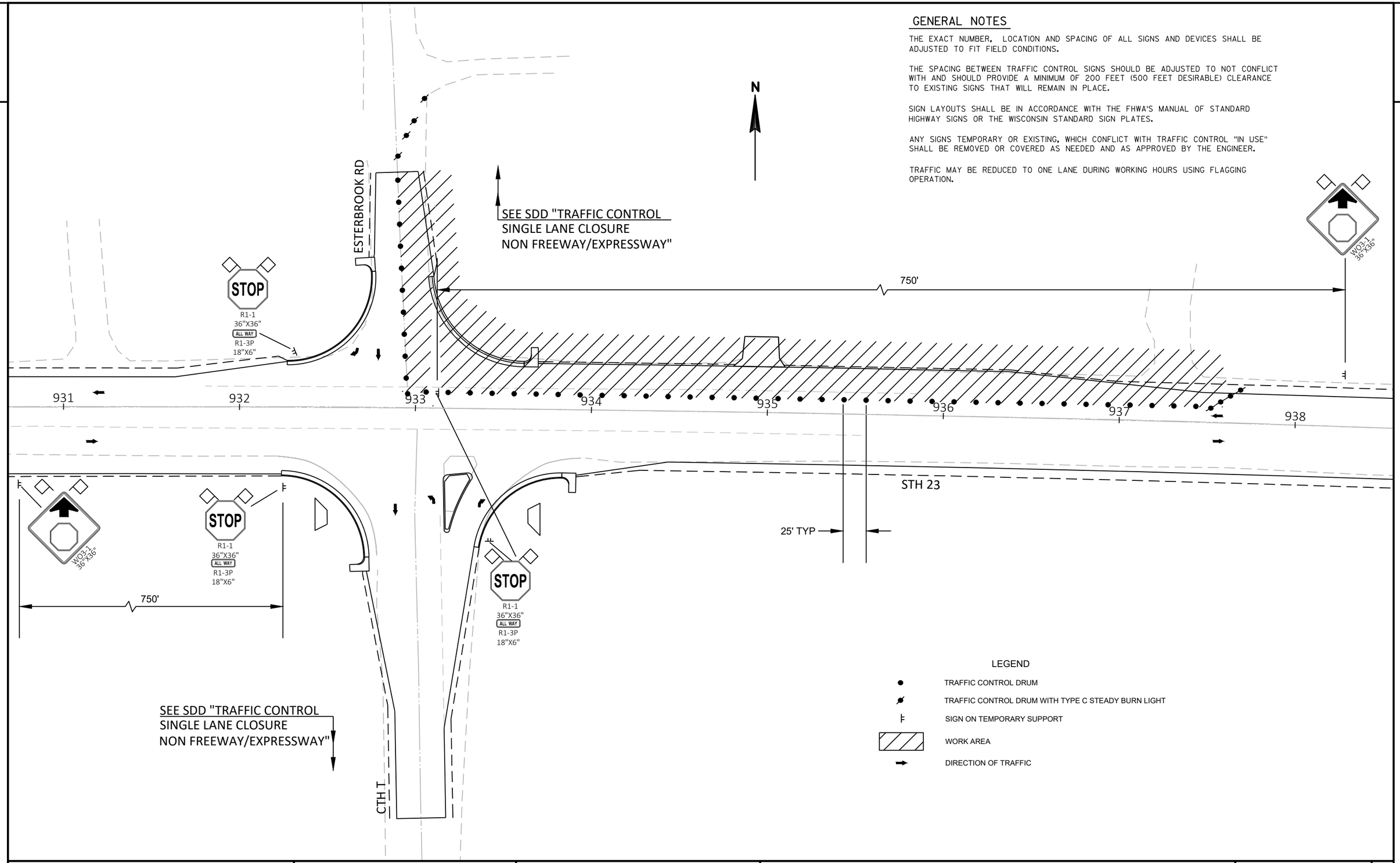
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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.

TRAFFIC MAY BE REDUCED TO ONE LANE DURING WORKING HOURS USING FLAGGING OPERATION.



PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	TRAFFIC CONTROL DETAIL - STAGE 4	SHEET 63	E

2

COVER
EAST WEST
23 23
J3-2
48

COVER
EAST WEST
23 23
J2-2
47

MODIFY
JCT
23
J1-1

TO
M04-8A
24" X 18"
END DETOUR
23

46

DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"
49

ROAD CLOSED
8 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"
DETOUR
M4-9L
30" X 24"
50

26

23

23

53
DETOUR AHEAD
W20-2A
48" X 48"

52
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"
M05-1L
21" X 21"

51
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"
M06-1
21" X 21"

56
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"
DETOUR AHEAD
W20-2A
48" X 48"

26

55
MODIFY
WEST EAST
23 23
J2-2

TO
M04-8
24" X 12"
DETOUR
WEST EAST
23 23
M06-1
21" X 21"

54
MODIFY
WEST EAST
23 23
J3-2

TO
M04-8
24" X 12"
DETOUR
WEST EAST
23 23
M06-1
21" X 21"

DETOUR
M04-8
24" X 12"
WEST
M3-4
24" X 12"
23
M1-6
24" X 24"
41

DETOUR
M04-8
24" X 12"
WEST
M3-4
24" X 12"
23
M1-6
24" X 24"
39

DETAIL 2
SEE SHEET 2 OF 2

41

91

FF

44

K

K

44

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M05-2R
30" X 30"
26

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M05-2R
30" X 30"
25

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M05-2R
30" X 30"
24

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M05-2R
30" X 30"
23

N

N

26

M

N

DETOUR
M04-8
24" X 12"
WEST
M3-4
24" X 12"
23
M1-6
24" X 24"
43

DETOUR
M04-8
24" X 12"
WEST
M3-4
24" X 12"
23
M1-6
24" X 24"
45

FF

COTTONWOOD AVE

Z

38
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"

40
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"

HICKORY RD

SEILER RD

ISLAND RD

CUSTER RD

44

E

49

23

OLDEN RD

HALL ST RD

FENTON ST

DOUGLAS ST

49

23

GRIFFITH RD

N

N

RP

42
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"

I

DETOUR
M04-8
36" X 18"
EAST
M3-2
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
21

DETOUR
M04-8
36" X 18"
EAST
M3-2
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
22

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
19

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
20

END DETOUR
M04-8A
30" X 24"
23
M1-6
36" X 36"
18

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
16

DETOUR
M04-8
36" X 18"
WEST
M3-4
36" X 18"
23
M1-6
36" X 36"
M06-1
30" X 30"
17

KK

23

M

26

60
PCMS

C

44
DETOUR
M04-8
24" X 12"
EAST
M3-2
24" X 12"
23
M1-6
24" X 24"

OO

PCMS

59

OOO

23

Y

DETAIL 1
SEE SHEET 2 OF 2

WORK ZONE

41

SHEET 1 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

N

LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

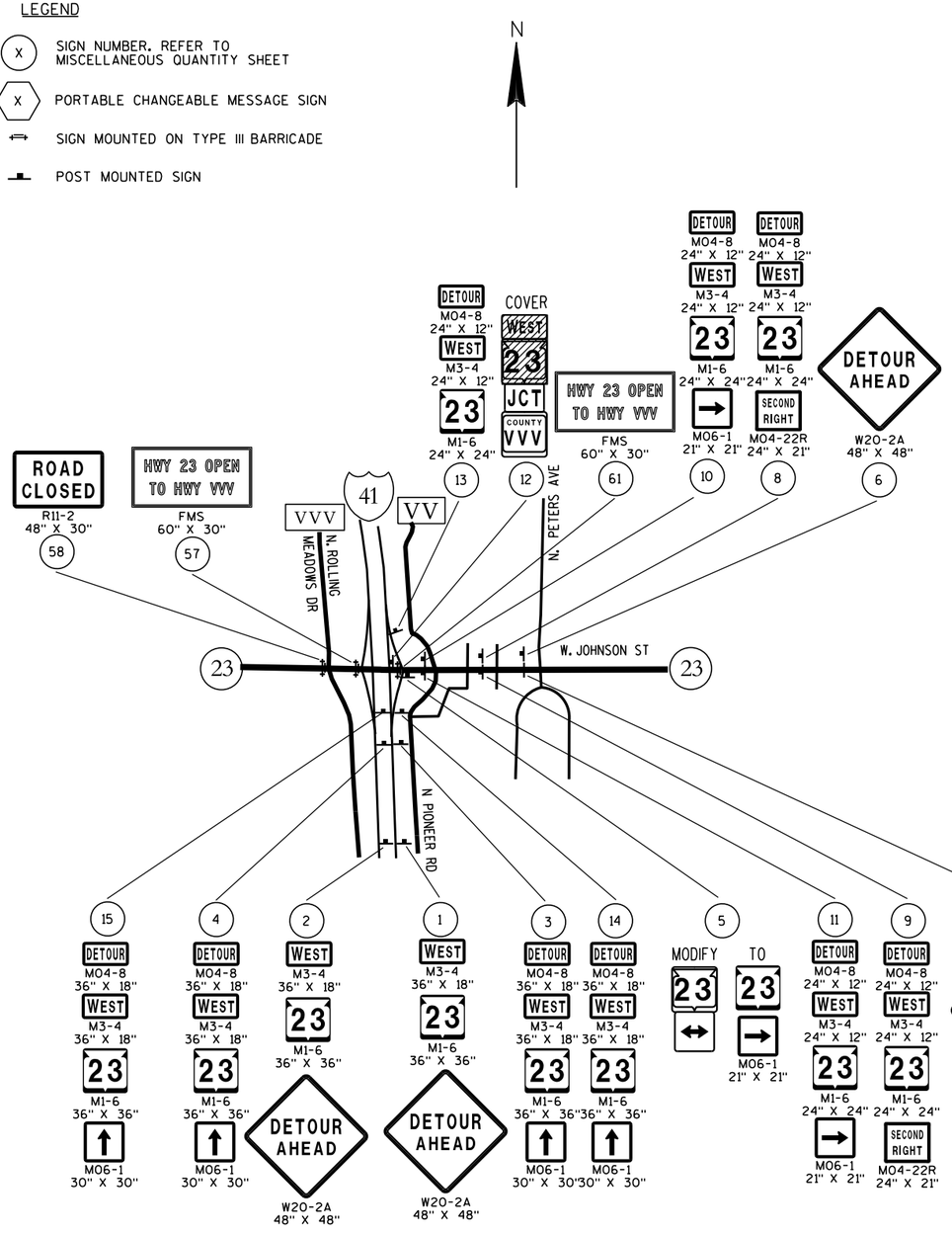
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	DETOUR SIGNING DETAIL	SHEET 64	E

FILE NAME : N:\spo\traffic\A Work Zone\Detours\Fond du Lac County\STH 23\CTH VVV Closure\027001_dt.dgn PLOT DATE : 05-APR-2018 15:06 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 10000:1

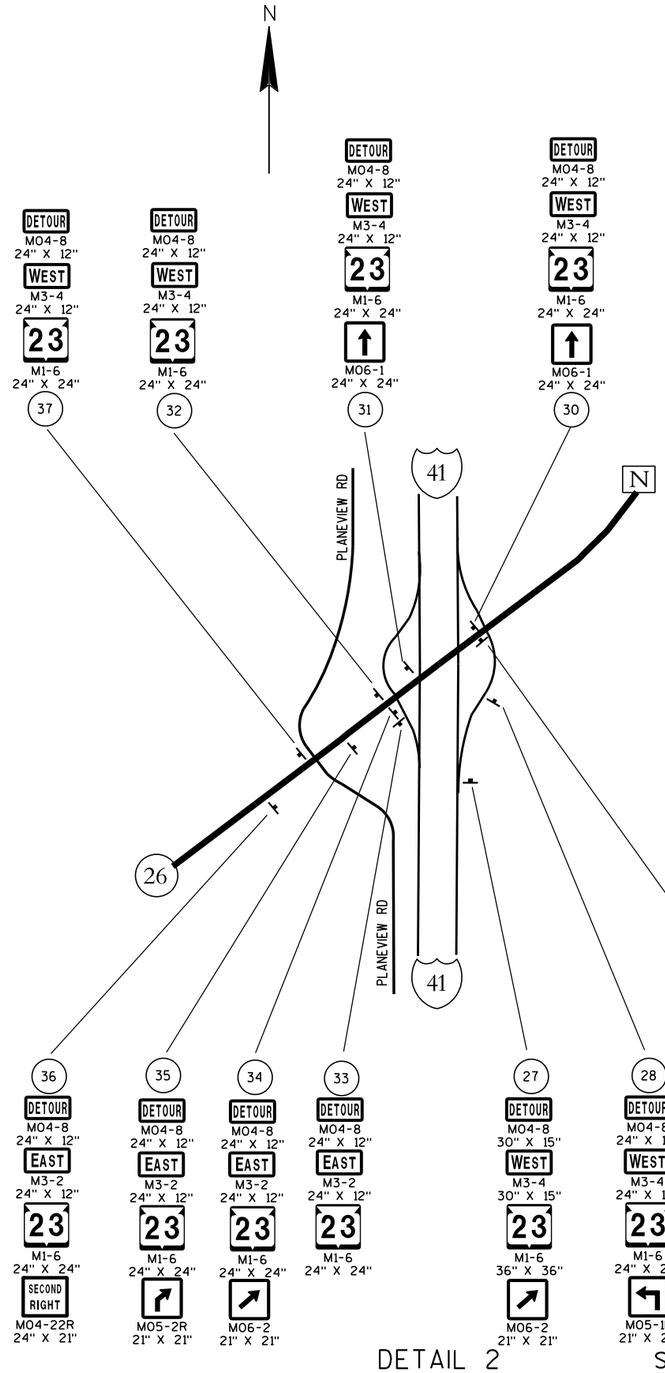
WISDOT/CADDS SHEET 42

LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN



DETAIL 1



DETAIL 2

SHEET 2 OF 2
PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	DETOUR PLAN DETAIL	SHEET 65	E

					1430-18-72	1430-18-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000	
0004	204.0100	Removing Pavement	SY	1,051.000		1,051.000
0006	204.0110	Removing Asphaltic Surface	SY	5,001.000	4,908.000	93.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	203.000	170.000	33.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	42,495.000	36,432.000	6,063.000
0012	204.0150	Removing Curb & Gutter	LF	1,508.000	593.000	915.000
0014	204.0185	Removing Masonry	CY	7.000	7.000	
0016	204.0195	Removing Concrete Bases	EACH	11.000		11.000
0018	204.0210	Removing Manholes	EACH	1.000		1.000
0020	204.0220	Removing Inlets	EACH	9.000		9.000
0022	204.0245	Removing Storm Sewer (size) 01. 18-Inch	LF	82.000		82.000
0024	205.0100	Excavation Common	CY	8,502.000	7,057.000	1,445.000
0026	208.0100	Borrow	CY	302.000	274.000	28.000
0028	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1430-18-72	LS	1.000	1.000	
0030	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 1430-18-73	LS	1.000		1.000
0032	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	218.000	210.000	8.000
0034	213.0100	Finishing Roadway (project) 01. 1430-18-72	EACH	1.000	1.000	
0036	213.0100	Finishing Roadway (project) 02. 1430-18-73	EACH	1.000		1.000
0038	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,500.000	2,411.000	89.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	14,084.000	12,333.000	1,751.000
0042	390.0403	Base Patching Concrete Shes	SY	1,706.000	1,706.000	
0044	416.0620	Drilled Dowel Bars	EACH	1,712.000	1,712.000	
0046	455.0605	Tack Coat	GAL	5,315.000	4,758.000	557.000
0048	460.2000	Incentive Density HMA Pavement	DOL	9,590.000	8,950.000	640.000
0050	460.6223	HMA Pavement 3 MT 58-28 S	TON	9,004.000	9,004.000	
0052	460.6224	HMA Pavement 4 MT 58-28 S	TON	7,831.000	6,756.000	1,075.000
0054	465.0110	Asphaltic Surface Patching	TON	315.000	315.000	
0056	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	148.000	136.000	12.000
0058	465.0315	Asphaltic Flumes	SY	24.000	24.000	
0060	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	11,863.000	11,863.000	
0062	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	8,202.000	8,202.000	
0064	504.0900	Concrete Masonry Endwalls	CY	30.000	30.000	
0066	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	423.000	423.000	
0068	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	80.000	80.000	
0070	522.2434	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 34x53-Inch	LF	272.000	272.000	
0072	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000	

					1430-18-72	1430-18-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0074	601.0120	Concrete Curb Type J	LF	86.000	86.000	
0076	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	1,913.000		1,913.000
0078	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	336.000	336.000	
0080	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	462.000	462.000	
0082	602.0405	Concrete Sidewalk 4-Inch	SF	10,828.000	236.000	10,592.000
0084	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	104.000		104.000
0086	611.0666	Inlet Covers Type Z	EACH	10.000		10.000
0088	611.3004	Inlets 4-FT Diameter	EACH	10.000		10.000
0090	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1430-18-72	EACH	1.000	1.000	
0092	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1430-18-73	EACH	1.000		1.000
0094	619.1000	Mobilization	EACH	1.000	0.700	0.300
0096	620.0300	Concrete Median Sloped Nose	SF	329.000	65.000	264.000
0098	624.0100	Water	MGAL	232.420	206.420	26.000
0100	625.0100	Topsoil	SY	16,096.000	15,688.000	408.000
0102	627.0200	Mulching	SY	4,259.000	4,259.000	
0104	628.1905	Mobilizations Erosion Control	EACH	5.000	4.000	1.000
0106	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	1.000	1.000
0108	628.2004	Erosion Mat Class I Type B	SY	11,836.000	11,428.000	408.000
0110	628.7015	Inlet Protection Type C	EACH	23.000	5.000	18.000
0112	628.7504	Temporary Ditch Checks	LF	336.000	336.000	
0114	628.7555	Culvert Pipe Checks	EACH	68.000	68.000	
0116	629.0210	Fertilizer Type B	CWT	10.140	9.880	0.260
0118	630.0140	Seeding Mixture No. 40	LB	289.710	282.370	7.340
0120	630.0200	Seeding Temporary	LB	434.570	423.560	11.010
0122	633.5200	Markers Culvert End	EACH	8.000	8.000	
0124	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	3.000		3.000
0126	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	32.000	28.000	4.000
0128	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	50.000	36.000	14.000
0130	637.1220	Signs Type I Reflective SH	SF	18.000		18.000
0132	637.2210	Signs Type II Reflective H	SF	671.070	436.820	234.250
0134	637.2215	Signs Type II Reflective H Folding	SF	67.140		67.140
0136	637.2230	Signs Type II Reflective F	SF	93.620	69.120	24.500
0138	638.2602	Removing Signs Type II	EACH	80.000	44.000	36.000
0140	638.3000	Removing Small Sign Supports	EACH	66.000	49.000	17.000
0142	642.5001	Field Office Type B	EACH	1.000		1.000
0144	643.0300	Traffic Control Drums	DAY	8,014.000	4,904.000	3,110.000
0146	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000	

					1430-18-72	1430-18-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0148	643.0420	Traffic Control Barricades Type III	DAY	5,220.000	4,792.000	428.000
0150	643.0705	Traffic Control Warning Lights Type A	DAY	1,416.000	880.000	536.000
0152	643.0715	Traffic Control Warning Lights Type C	DAY	1,144.000	544.000	600.000
0154	643.0800	Traffic Control Arrow Boards	DAY	20.000		20.000
0156	643.0900	Traffic Control Signs	DAY	9,142.000	6,524.000	2,618.000
0158	643.0920	Traffic Control Covering Signs Type II	EACH	3.000		3.000
0160	643.1000	Traffic Control Signs Fixed Message	SF	45.000		45.000
0162	643.1050	Traffic Control Signs PCMS	DAY	67.000	14.000	53.000
0164	643.5000	Traffic Control	EACH	1.000	0.700	0.300
0166	646.1020	Marking Line Epoxy 4-Inch	LF	8,799.000	6,907.000	1,892.000
0168	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	17,555.000	17,555.000	
0170	646.3020	Marking Line Epoxy 8-Inch	LF	1,464.000	554.000	910.000
0172	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	2,529.000	2,529.000	
0174	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	18,847.000	18,213.000	634.000
0176	646.5020	Marking Arrow Epoxy	EACH	14.000	12.000	2.000
0178	646.5120	Marking Word Epoxy	EACH	6.000	5.000	1.000
0180	646.6120	Marking Stop Line Epoxy 18-Inch	LF	43.000	43.000	
0182	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,017.000	1,017.000	
0184	646.8120	Marking Curb Epoxy	LF	150.000	70.000	80.000
0186	646.8220	Marking Island Nose Epoxy	EACH	15.000	7.000	8.000
0188	648.0100	Locating No-Passing Zones	MI	1.710	1.710	
0190	649.0105	Temporary Marking Line Paint 4-Inch	LF	15,270.000	15,144.000	126.000
0192	650.4000	Construction Staking Storm Sewer	EACH	10.000		10.000
0194	650.4500	Construction Staking Subgrade	LF	5,836.000	5,051.000	785.000
0196	650.5000	Construction Staking Base	LF	5,836.000	5,051.000	785.000
0198	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	2,797.000	884.000	1,913.000
0200	650.6000	Construction Staking Pipe Culverts	EACH	8.000	8.000	
0202	650.8000	Construction Staking Resurfacing Reference	LF	6,240.000	5,455.000	785.000
0204	650.8500	Construction Staking Electrical Installations (project) 01. 1430-18-73	LS	1.000		1.000
0206	650.9910	Construction Staking Supplemental Control (project) 01. 1430-18-72	LS	1.000	1.000	
0208	650.9910	Construction Staking Supplemental Control (project) 02. 1430-18-73	LS	1.000		1.000
0210	650.9920	Construction Staking Slope Stakes	LF	4,518.000	4,518.000	
0212	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,110.000		1,110.000
0214	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	475.000		475.000
0216	652.0605	Conduit Special 2-Inch	LF	245.000		245.000
0218	652.0615	Conduit Special 3-Inch	LF	945.000		945.000
0220	652.0700.S	Install Conduit into Existing Item	EACH	9.000		9.000

					1430-18-72	1430-18-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0222	652.0800	Conduit Loop Detector	LF	452.000		452.000
0224	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	2.000		2.000
0226	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	21.000		21.000
0228	653.0905	Removing Pull Boxes	EACH	12.000		12.000
0230	654.0101	Concrete Bases Type 1	EACH	4.000		4.000
0232	654.0102	Concrete Bases Type 2	EACH	4.000		4.000
0234	654.0110	Concrete Bases Type 10	EACH	1.000		1.000
0236	654.0113	Concrete Bases Type 13	EACH	2.000		2.000
0238	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000		1.000
0240	655.0230	Cable Traffic Signal 5-14 AWG	LF	724.000		724.000
0242	655.0260	Cable Traffic Signal 12-14 AWG	LF	3,559.000		3,559.000
0244	655.0270	Cable Traffic Signal 15-14 AWG	LF	323.000		323.000
0246	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,290.000		1,290.000
0248	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	2,540.000		2,540.000
0250	655.0610	Electrical Wire Lighting 12 AWG	LF	702.000		702.000
0252	655.0700	Loop Detector Lead In Cable	LF	4,497.000		4,497.000
0254	655.0800	Loop Detector Wire	LF	1,356.000		1,356.000
0256	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 23 & CTH VVV	LS	1.000		1.000
0258	657.0100	Pedestal Bases	EACH	4.000		4.000
0260	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000		4.000
0262	657.0305	Poles Type 2	EACH	1.000		1.000
0264	657.0315	Poles Type 4	EACH	2.000		2.000
0266	657.0345	Poles Type 9	EACH	1.000		1.000
0268	657.0356	Poles Type 12-Over Height	EACH	2.000		2.000
0270	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000		1.000
0272	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000		3.000
0274	657.0525	Monotube Arms 25-FT	EACH	1.000		1.000
0276	657.0540	Monotube Arms 40-FT	EACH	1.000		1.000
0278	657.0545	Monotube Arms 45-FT	EACH	1.000		1.000
0280	657.0590	Trombone Arms 20-FT	EACH	1.000		1.000
0282	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	4.000		4.000
0284	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000		12.000
0286	658.0174	Traffic Signal Face 4S 12-Inch	EACH	9.000		9.000
0288	658.5069	Signal Mounting Hardware (location) 01. STH 23 & CTH VVV	LS	1.000		1.000
0290	659.1120	Luminaires Utility LED B	EACH	4.000		4.000
0292	661.0200	Temporary Traffic Signals for Intersections (location) 01. STH 23 & CTH VVV	LS	1.000		1.000
0294	673.0105	Communication Vault Type 1	EACH	1.000		1.000

					1430-18-72	1430-18-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0296	678.0300	Fiber Optic Splice	EACH	4.000		4.000
0298	678.0500	Communication System Testing	LS	1.000		1.000
0300	678.0600	Install Ethernet Switches	EACH	1.000		1.000
0302	690.0150	Sawing Asphalt	LF	9,474.000	9,023.000	451.000
0304	690.0250	Sawing Concrete	LF	4,061.000	2,518.000	1,543.000
0306	740.0440	Incentive IRI Ride	DOL	15,110.000	15,110.000	
0308	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000	
0310	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,320.000	1,320.000	
0312	SPV.0060	Special 01. Salvage and Reinstall Lighting Assembly	EACH	1.000		1.000
0314	SPV.0105	Special 01. Salvage Traffic Signals (STH 23 & CTH VVV)	LS	1.000		1.000
0316	SPV.0105	Special 02. Furnish and Install Traffic Signal Cabinet and Equipment	LS	1.000		1.000
0318	SPV.0105	Special 03. Install Fiber Optic Communications in Cabinet (STH 23 & CTH VVV)	LS	1.000		1.000
0320	SPV.0105	Special 04. Traffic Signal Systems Integrator (1430-18-73)	LS	1.000		1.000

REMOVING STORM SEWER

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0185 REMOVING MASONRY CY	204.0210 REMOVING MANHOLES EACH	204.0220 REMOVING INLETS EACH	204.0245 REMOVING STORM SEWER (18-INCH) LF
1430-18-72, CAT 0010						
963+22	STH 23	2	7	-	-	-
3+14	ESTERBROOK/CTH T	1	-	-	-	-
4+18	ESTERBROOK/CTH T	1	-	-	-	-
19+47	WRIGHTWAY DR	2	-	-	-	-
SUBTOTAL		**6**	**7**	**0**	**0**	**0**
1430-18-73, CAT 0010						
973+77	STH 23	-	-	-	3	28
976+53	STH 23	-	-	-	3	26
977+96	STH 23	-	-	1	3	28
SUBTOTAL		**0**	**0**	**1**	**9**	**82**
TOTALS		**6**	**7**	**1**	**9**	**82**

REMOVING PAVEMENT

STATION TO	STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	690.0250* SAWING CONCRETE LF
1430-18-73, CAT 0010				
972+50 -	976+97	STH 23	630	945
977+65 -	980+35	STH 23	421	598
SUBTOTAL			**1051**	**1543**
TOTALS			**1051**	**1543**

*ADDITIONAL QUANTIIES ELSEWHERE IN THE PLAN

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	690.0150* SAWING ASPHALT LF	REMARKS
1430-18-72, CAT 0010				
867+48	STH 23	8	30	WEST LIMIT
4+64	TOWNLINE RD	6	29	
0+82	STREBLOW DR	8	36	
1+28	RICKMEYER	7	33	
879+00	STH 23 LT	5	24	DRIVEWAY
918+80	STH 23 LT	5	22	DRIVEWAY
920+60	STH 23 LT	4	19	DRIVEWAY
921+30	STH 23 LT	4	18	DRIVEWAY
923+25	STH 23 LT	5	23	DRIVEWAY
928+75	STH 23 LT	6	27	DRIVEWAY
935+00	STH 23 LT	4	19	DRIVEWAY
941+60	STH 23 LT	4	18	DRIVEWAY
955+60	STH 23 LT	4	20	DRIVEWAY
957+65	STH 23 RT	13	57	DRIVEWAY
965+50	STH 23 RT	10	44	DRIVEWAY
966+75	STH 23 RT	10	44	DRIVEWAY
968+00	STH 23 RT	12	56	DRIVEWAY
970+25	STH 23 RT	14	64	DRIVEWAY
972+25	STH 23 LT	10	46	DRIVEWAY
972+25	STH 23 RT	29	130	DRIVEWAY
SUBTOTAL		**170**	**759**	
1430-18-73, CAT 0010				
974+30	STH 23 LT	14	62	DRIVEWAY
980+35	STH 23	11	50	WB LANES
980+35	STH 23	8	38	EB LANES
SUBTOTAL		**33**	**150**	
TOTALS		**203**	**909**	

*ADDITIONAL QUANTITIES ELSEWHERE IN THE PLAN

3

REMOVING ASPHALTIC SURFACE

STATION TO		STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	690.0150* SAWING ASPHALT LF	REMARKS
1430-18-72, CAT 0010						
		868+25	STH 23	35	58	PE
		874+00	STH 23	34	52	
		882+00	STH 23 RT	39	74	PE
		882+50	STH 23 LT	36	60	PE
		889+15	STH 23 LT	36	78	
		889+00	STH 23 RT	70	95	
		899+90	STH 23 LT	34	55	FE
		906+00	STH 23 RT	53	81	
		926+00	STH 23 LT	38	69	PE
		927+00	STH 23 LT	35	59	PE
		931+15	STH 23 LT	34	53	PE
916+62	-	932+83	STH 23 RT	1053	1784	ESTERBROOK SW
932+28	-	933+61	STH 23 LT	423	246	ESTERBROOK NW
933+16	-	947+00	STH 23 RT	992	1560	ESTERBROOK SE
935+11	-	938+11	STH 23 LT	239	315	ESTERBROOK NE
		942+50	STH 23 LT	35	56	FE
		943+25	STH 23 LT	34	54	PE
947+00	-	954+75	STH 23 LT	260	780	WRIGHTWAY
947+00	-	952+63	STH 23 RT	725	700	WRIGHTWAY
		955+25	STH 23 RT	53	82	FE
		937+85	STH 23 LT	38	69	
958+18	-	966+59	STH 23 LT	280	853	SHOULDER
958+10	-	965+23	STH 23 RT	238	723	SHOULDER
965+74	-	966+51	STH 23 RT	26	86	SHOULDER
967+07	-	967+64	STH 23 RT	19	65	SHOULDER
968+36	-	969+82	STH 23 RT	49	157	SHOULDER
SUBTOTAL				**4908**	**8264**	
1430-18-73, CAT 0010						
973+50	-	975+17	STH 23 RT	56	177	SHOULDER
972+64	-	973+77	STH 23 LT	38	124	SHOULDER
SUBTOTAL				**93**	**301**	
TOTALS				**5002**	**8565**	

*ADDITIONAL QUANTITIES ELSEWHERE IN THE PLAN

REMOVING ASPHALTIC SURFACE MILLING

STATION TO		STATION	LOCATION	204.0120 SY	REMARKS
1430-18-72, CAT 0010					
872+77	-	972+90	STH 23	26701	ROADWAY
872+77	-	972+90	STH 23	5217	SHOULDERS
			TOWNLINE RD	481	
			STREBLOW DR	791	
			CTH T	741	
			RICKMEYER DR	1112	
			BYPASS LANES	1389	
SUBTOTAL				**36432**	
1430-18-73, CAT 0010					
972+50	-	980+35	STH 23 WB	3054	
972+50	-	980+35	STH 23 EB	3009	
SUBTOTAL				**6063**	
TOTAL				**42495**	

REMOVING CURB & GUTTER

STATION TO		STATION	LOCATION	204.0150* LF
1430-18-72, CAT 0010				
			ESTERBROOK SW	90
			ESTERBROOK SE	82
			ESTERBROOK ISLAND	85
962+40	-	964+08	STH 23 MEDIAN	336
SUBTOTAL				**593**
1430-18-73, CAT 0010				
972+50	-	974+50	STH 23 RT&LT	405
974+50	-	976+92	STH 23 LT	245
977+70	-	980+35	STH 23 RT	265
SUBTOTAL				**915**
TOTAL				**1508**

*ADDITIONAL CURB & GUTTER TO BE REMOVED UNDER REMOVING PAVEMENT BID ITEM

TRAFFIC SIGNAL REMOVALS

1430-18-73

LOCATION / ITEM NUMBER	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
CATEGORY 0010		
STH 23 & CTH VVV		
PB1	--	1
PB2	--	1
PB3	--	1
PB7	--	1
PB8	--	1
PB9	--	1
PB11	--	1
PB14	--	1
PB15	--	1
PB16	--	1
PB17	--	1
PB19	--	1
CB1	1	--
SB2	1	--
SB3	1	--
SB4	1	--
SB5	1	--
SB6	1	--
SB7	1	--
SB8	1	--
SB10	1	--
SB11	1	--
SB12	1	--
CATEGORY 0010 TOTAL	11	12

EXCAVATION SUMMARY

STATION		TO STATION	LOCATION	205.0100 COMMON CY	208.0100 BORROW CY
1430-18-72, CAT 0010					
1+90	-	5+08	ESTERBROOK/CTH T	815	2
916+62	-	947+00	STH 23	3118	246
18+89	-	20+00	WRIGHTWAY/FORD DR	227	12
947+00		954+76	STH 23	1433	14
963+22			CULVERT PIPE	1464	
SUBTOTALS				**7057**	**274**
1430-18-73, CAT 0010					
972+50	-	980+35	STH 23	1445	28
SUBTOTALS				**1445**	**28**
TOTALS				**8502**	**302**

PREPARE FOUNDATION FOR ASPHALT PAVING

LOCATION	211.0100 LS
1430-18-72, CAT 0010	
1430-18-72	1
SUBTOTALS	**1**
1430-18-73, CAT 0010	
1430-18-73	1
SUBTOTALS	**1**
TOTAL	**2**

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

STATION		TO STATION	LOCATION	211.0400 STA
1430-18-72 CAT 0010				
867+48	-	972+50	STH 23 LT	105
867+48	-	972+50	STH 23 RT	105
SUBTOTAL				**210**
1430-18-73 CAT 0010				
972+50	-	976+75	STH 23 RT	4
972+50	-	976+40	STH 23 LT	4
SUBTOTAL				**8**
TOTAL				**218**

FINISHING ROADWAY

LOCATION	213.0100 EACH
1430-18-72, CAT 0010	
1430-18-72	1
SUBTOTALS	**1**
1430-18-73, CAT 0010	
1430-18-73	1
SUBTOTALS	**1**
TOTAL	**2**

BASE AGGREGATE DENSE SUMMARY

STATION	TO	STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
1430-18-72, CAT 0010							
872+77	-	873+95	STH 23 LT	10	-	0.14	5' SHOULDERS
873+95	-	880+64	STH 23 LT	29	-	0.41	2' SHOULDERS
880+64	-	909+62	STH 23 LT	239	-	3.34	5' SHOULDERS
909+62	-	910+07	STH 23 LT	2	-	0.03	2' SHOULDERS
911+58	-	914+18	STH 23 LT	11	-	0.16	2' SHOULDERS
914+18	-	931+65	STH 23 LT	144	-	2.02	5' SHOULDERS
933+65	-	935+11	STH 23 LT	6	-	0.09	2' SHOULDERS
936+97	-	946+82	STH 23 LT	81	-	1.14	5' SHOULDERS
946+82	-	954+76	STH 23 LT	35	-	0.48	2' SHOULDERS
954+76	-	966+78	STH 23 LT	99	-	1.39	5' SHOULDERS
966+78	-	967+29	STH 23 LT	2	-	0.03	2' SHOULDERS
968+74	-	972+50	STH 23 LT	16	-	0.23	2' SHOULDERS
872+77	-	875+24	STH 23 RT	20	-	0.29	5' SHOULDERS
875+24	-	876+74	STH 23 RT	7	-	0.09	2' SHOULDERS
878+04	-	878+83	STH 23 RT	3	-	0.05	2' SHOULDERS
878+83	-	907+68	STH 23 RT	238	-	3.33	5' SHOULDERS
907+68	-	914+25	STH 23 RT	29	-	0.40	2' SHOULDERS
914+25	-	921+25	STH 23 RT	58	-	0.81	5' SHOULDERS
927+39	-	932+27	STH 23 RT	21	-	0.30	2' SHOULDERS
933+75	-	934+42	STH 23 RT	3	-	0.04	2' SHOULDERS
944+91	-	946+86	STH 23 RT	16	-	0.23	5' SHOULDERS
946+86	-	950+35	STH 23 RT	15	-	0.21	2' SHOULDERS
951+65	-	952+19	STH 23 RT	2	-	0.03	2' SHOULDERS
952+19	-	972+50	STH 23 RT	203	-	2.84	5' SHOULDERS
931+65	-	932+76	STH 23 LT	23	188	2.96	
933+00	-	933+65	STH 23 LT	13	146	2.23	
935+11	-	938+11	STH 23 LT	62	329	5.48	RIGHT TURN
916+62	-	932+84	STH 23 RT	336	4300	64.90	NEW LANE
933+16	-	947+23	STH 23 RT	291	3498	53.04	NEW LANE
18+89	-	20+00	WRIGHTWAY/FORD DR	20	127	2.06	
946+86	-	954+76	STH 23 LT	163	1377	21.56	BYPASS
946+86	-	951+00	STH 23 RT	86	952	14.53	RIGHT TURN
951+24	-	952+46	STH 23 RT	25	294	4.47	
			UNDISTRIBUTED	102	1121	17.12	
SUBTOTALS				**2411**	**12333**	**206.42**	
1430-18-73, CAT 0010							
972+50	-	976+91	STH 23 LT	-	783	10.97	NEW TURN LANE
977+71	-	980+35	STH 23 LT	-	612	8.57	NEW TURN LANE
972+50	-	976+76	STH 23 LT	-	114	1.59	MEDIAN
975+64	-	976+91	STH 23 LT	-	17	0.23	MEDIAN
977+71	-	979+00	STH 23 LT	-	21	0.30	MEDIAN
977+86	-	980+35	STH 23 LT	-	45	0.63	MEDIAN
972+50	-	976+39	STH 23 LT	39	-	0.54	SHOULDERS
972+50	-	976+72	STH 23 RT	42	-	0.59	SHOULDERS
			UNDISTRIBUTED	8	159	2	
SUBTOTALS				**89**	**1751**	**26**	
TOTALS				**2500**	**14084**	**232.18**	

BASE PATCHING CONCRETE SHES

STATION	TO	STATION	LOCATION	390.0403 BASE PATCHING CONCRETE SHES SY	690.0250* SAWING CONCRETE LF	416.062 DRILLED DOWEL BARS EACH	REMARKS
1430-18-72, CAT 0010							
962+40	-	964+08	STH 23 LT	351	44	-	CULVERT REPLACEMENT
962+40	-	964+08	STH 23 RT	539	26	-	CULVERT REPLACEMENT
867+48	-	TOWNLINE	STH 23	64	192	128	BASE PATCHING
TOWNLINE	-	STREBLOW	STH 23	448	1344	896	BASE PATCHING
STREBLOW	-	ESTERBROOK	STH 23	144	432	288	BASE PATCHING
ESTERBROOK	-	WRIGHTWAY	STH 23	96	288	192	BASE PATCHING
WRIGHTWAY	-	RICKMEYER	STH 23	64	192	208	BASE PATCHING
TOTALS				**1706**	**2518**	**1712**	

*ADDITIONAL QUANTITIES ELSEWHERE IN THE PLAN

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	465.0120 TON	REMARKS
1430-18-72, CAT 0010			
879+00	STH 23 LT	5	DRIVEWAY
918+80	STH 23 LT	7	DRIVEWAY
920+60	STH 23 LT	7	DRIVEWAY
921+30	STH 23 LT	7	DRIVEWAY
923+25	STH 23 LT	7	DRIVEWAY
928+75	STH 23 LT	12	DRIVEWAY
935+00	STH 23 LT	5	DRIVEWAY
941+60	STH 23 LT	13	DRIVEWAY
955+60	STH 23 LT	7	DRIVEWAY
957+65	STH 23 RT	10	DRIVEWAY
965+50	STH 23 RT	5	DRIVEWAY
966+75	STH 23 RT	5	DRIVEWAY
968+00	STH 23 RT	7	DRIVEWAY
970+25	STH 23 RT	9	DRIVEWAY
972+25	STH 23 LT	8	DRIVEWAY
972+25	STH 23 RT	21	DRIVEWAY
SUBTOTALS		**136**	
1430-18-73, CAT 0010			
974+30	STH 23 LT	12	DRIVEWAY
SUBTOTALS		**12**	
TOTAL		**149**	

ASPHALT SHOULDER RUMBLE STRIPS 2-LANE RURAL

STATION	TO	STATION	LOCATION	465.0425 LF
1430-18-72, CAT 0010				
867+48	-	867+93	STH 23 LT	45
868+54	-	874+62	STH 23 LT	608
880+11	-	882+34	STH 23 LT	223
883+02	-	888+82	STH 23 LT	580
889+44	-	908+85	STH 23 LT	1941
914+43	-	918+42	STH 23 LT	399
919+10	-	920+24	STH 23 LT	114
921+59	-	922+92	STH 23 LT	133
923+58	-	925+54	STH 23 LT	196
926+21	-	926+73	STH 23 LT	52
927+40	-	928+41	STH 23 LT	101
929+15	-	930+81	STH 23 LT	166
937+59	-	941+21	STH 23 LT	362
941+90	-	942+96	STH 23 LT	106
943+56	-	947+36	STH 23 LT	380
954+40	-	955+25	STH 23 LT	85
955+88	-	957+71	STH 23 LT	183
867+48	-	874+74	STH 23 RT	726
879+33	-	881+55	STH 23 RT	222
882+24	-	888+71	STH 23 RT	647
889+43	-	905+65	STH 23 RT	1622
906+30	-	907+68	STH 23 RT	138
914+25	-	927+39	STH 23 RT	1314
935+02	-	942+22	STH 23 RT	720
942+85	-	946+86	STH 23 RT	401
952+96	-	956+95	STH 23 RT	399
TOTAL				**11863**

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

STATION	TO	STATION	LOCATION	465.0475 LF
1430-18-72, CAT 0010				
867+48	-	876+47	STH 23	899
878+47	-	909+82	STH 23	3135
911+82	-	931+99	STH 23	2017
933+99	-	950+06	STH 23	1607
952+06	-	957+50	STH 23	544
TOTAL				**8202**

ASPHALT SUMMARY

STATION TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0315 ASPHALTIC FLUMES SY	REMARKS
1430-18-72, CAT 0010								
872+77 –	972+50	STH 23 EB	930.8	1779	1280	–	–	DRIVING LANE
916+62 –	932+84	STH 23 EB	209.2	811	288	–	–	NEW LANE
933+16 –	947+23	STH 23 EB	164.3	637	226	–	–	NEW LANE
872+77 –	972+50	STH 23 WB	930.8	1779	1280	–	–	DRIVING LANE
872+77 –	873+95	STH 23 LT	4.6	9	6	–	–	5' SHOULDERS
873+95 –	880+64	STH 23 LT	5.2	10	7	–	–	1' SHOULDERS
880+64 –	909+62	STH 23 LT	112.7	215	155	–	–	5' SHOULDERS
909+62 –	910+07	STH 23 LT	0.4	1	0	–	–	1' SHOULDERS
911+58 –	914+18	STH 23 LT	2.0	4	3	–	–	1' SHOULDERS
914+18 –	931+65	STH 23 LT	67.9	130	93	–	–	5' SHOULDERS
931+65 –	932+27	STH 23 LT	0.5	1	1	–	–	1' SHOULDERS
933+62 –	936+97	STH 23 LT	2.6	5	4	–	–	1' SHOULDERS
936+97 –	946+82	STH 23 LT	38.3	73	53	–	–	5' SHOULDERS
946+82 –	954+76	STH 23 LT	6.2	12	8	–	–	1' SHOULDERS
954+76 –	966+78	STH 23 LT	46.7	89	64	–	–	5' SHOULDERS
966+78 –	967+29	STH 23 LT	0.4	–	1	–	–	1' SHOULDERS
968+74 –	972+50	STH 23 LT	2.9	–	4	–	–	1' SHOULDERS
872+77 –	875+24	STH 23 RT	9.6	18	13	–	–	5' SHOULDERS
875+24 –	876+74	STH 23 RT	1.2	2	2	–	–	1' SHOULDERS
878+04 –	878+83	STH 23 RT	0.6	1	1	–	–	1' SHOULDERS
878+83 –	907+68	STH 23 RT	112.2	214	154	–	–	5' SHOULDERS
907+68 –	914+25	STH 23 RT	5.1	10	7	–	–	1' SHOULDERS
914+25 –	927+39	STH 23 RT	51.1	98	70	–	–	5' SHOULDERS
927+39 –	932+27	STH 23 RT	3.8	7	5	–	–	1' SHOULDERS
933+75 –	934+42	STH 23 RT	0.5	1	1	–	–	1' SHOULDERS
934+43 –	946+86	STH 23 RT	512.4	979	705	–	–	5' SHOULDERS
946+86 –	950+35	STH 23 RT	2.7	5	4	–	–	1' SHOULDERS
951+65 –	952+19	STH 23 RT	0.4	1	1	–	–	1' SHOULDERS
952+19 –	972+50	STH 23 RT	79.0	151	109	–	–	5' SHOULDERS
957+72 –	960+22	STH 23 WB	3.0	6	4	–	–	TRANSITION
960+22 –	965+35	STH 23 WB	47.9	–	82	–	–	
965+35	972+50	STH 23 WB	133.5	–	229	–	–	4 LANE AREA
960+22 –	972+50	STH 23 EB	229.2	–	393	–	–	4 LANE AREA
963+85 –	972+50	STH 23	124.6	–	214	–	–	MEDIAN/TURN LANES
		TOWNLINE	29.3	56	40	–	–	
		STREBLOW	51.5	98	71	–	–	
1+40 –	5+08	ESTERBROOK	110.1	210	151	–	16.0	
18+58 –	19+87	WRIGHTWAY	80.6	154	111	–	8.0	
		RICKMEYER	65.4	–	103	–	–	
		STH 23	145.9	279	201	–	–	BYPASS LANES
		BASE PATCHING	–	375	–	–	–	
		UNDISTRIBUTED	432.5	784	614	315	–	PATCHING/WEDGING
SUBTOTALS			**4758**	**9004**	**6756**	**315**	**24**	

ASPHALT SUMMARY (CONT.)

STATION TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0315 ASPHALTIC FLUMES SY	REMARKS
1430-18-73, CAT 0010								
972+50 -	976+91	STH 23 LT	37.5	-	123	-	-	NEW TURN LANE
977+71 -	980+35	STH 23 LT	32.2	-	106	-	-	NEW TURN LANE
972+50 -	980+35	STH 23 EB	146.5	-	251	-	-	DRIVING LANES
972+50 -	980+35	STH 23 WB	146.5	-	251	-	-	DRIVING LANES
972+50 -	976+39	STH 23 LT	15.1	-	26	-	-	SHOULDERS
972+50 -	976+72	STH 23 RT	16.4	-	28	-	-	SHOULDERS
973+78 -	980+35	STH 23 LT	71.5	-	122	-	-	TURN LANES
975+42 -	980+35	STH 23 RT	51.8	-	89	-	-	TURN LANES
		UNDISTRIBUTED	39	-	79	-	-	
SUBTOTALS			**557**	**0**	**1075**	**0**	**0**	
TOTALS			**5315**	**9004**	**7831**	**315**	**24**	

CULVERT PIPE SUMMARY

STATION	LOCATION	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT\FT	CENTERLINE ELEVATION	504.0900 CONCRETE MASONRY ENDWALLS CY	522.0430 CPRC CLASS IV 30-INCH LF	522.2419 HE-IV 19X30-INCH LF	522.2434 HE-IV 34X53-INCH LF	522.2619 AEW HE 19X30-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	REMARKS
1430-18-72, CAT 0010													
3+08	ESTERBROOK/CTH T	799.36	798.41	0.0091	-	10	228	-	-	-	2	2	2 PIPES
4+16	ESTERBROOK/CTH T	801.12	800.17	0.0130	-	-	-	80	-	2	2	1	
19+42	WRIGHTWAY/FORD DR	782.95	782.59	0.0055	-	10	195	-	-	-	2	3	3 PIPES
963+22	STH 23	772.92	772.45	0.0035	779.87	10	-	-	272	-	2	2	2 PIPES
TOTALS						**30**	**423**	**80**	**272**	**2**	**8**	**8**	

CONCRETE SIDEWALK 4-INCH

STATION TO	STATION	LOCATION	602.0405 SF
1430-18-72, CAT 0010			
		ESTERBROOK ISLAND	236
SUBTOTALS			236
1430-18-73, CAT 0010			
972+51 -	976+73	STH 23	6141
975+64 -	976+91	STH 23	894
977+71 -	978+94	STH 23	1145
977+90 -	980+35	STH 23	2412
SUBTOTALS			10592
TOTAL			**10828**

3

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	620.0300 SF
1430-18-72, CAT 0010		
	ESTERBROOK RD	65
SUBTOTAL		**65**
1430-18-73, CAT 0010		
972+50	STH 23 MEDIAN	120
975+66	STH 23 MEDIAN	20
976+75	STH 23 MEDIAN	20
976+92	STH 23 MEDIAN	22
977+65	STH 23 MEDIAN	31
977+88	STH 23 MEDIAN	20
978+97	STH 23 MEDIAN	31
SUBTOTAL		**264**
TOTAL		**329**

STORM SEWER STRUCTURES

STRUCTURE	STATION	LOCATION	* OFFSET	RIM ELEVATION	** INVERT ELEVATION	*** DEPTH FT	611.0666 INLET COVERS TYPE Z EACH	611.3004 INLETS 4-FT DIAMETER EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
1430-18-73, CAT 0010									
1.1	978+02	STH 23 LT	12.8	774.58	770.49	3.22	1	1	1
1.2	978+02	STH 23 LT	20.2	774.42	770.47	3.07	1	1	1
1.3	977+94	STH 23 LT	33.8	774.60	770.42	3.30	1	1	1
1.4	977+94	STH 23 LT	42.9	774.48	770.40	3.20	1	1	1
2.1	976+54	STH 23 LT	12.8	774.04	770.45	2.72	1	1	1
2.2	976+54	STH 23 LT	20.2	774.14	770.42	2.84	1	1	1
2.3	976+54	STH 23 LT	33.8	774.13	770.38	2.87	1	1	1
2.4	976+54	STH 23 LT	41.9	773.99	770.36	2.76	1	1	1
3.1	973+76	STH 23 LT	18.0	775.31	771.44	3.00	1	1	1
3.2	973+76	STH 23 LT	40.8	775.29	771.37	3.05	1	1	1
TOTALS							**10**	**10**	**10**

* STATION AND OFFSET ARE TO CENTER OF STRUCTURE
** THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

3

CONCRETE CURB & GUTTER

STATION TO STATION	LOCATION	601.0120 CONCRETE CURB TYPE J LF	601.0407 18-INCH TYPE D LF	601.0409 30-INCH TYPE A LF	601.0553 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
1430-18-72, CAT 0010						
	ESTERBROOK NE	-	-	-	80	80
	ESTERBROOK NW	-	-	-	82	82
	ESTERBROOK SE	-	-	-	76	76
	ESTERBROOK SW	-	-	-	75	75
	ESTERBROOK ISLAND	86	-	-	-	86
	WRIGHTWAY SW	-	-	-	89	89
	WRIGHTWAY SE	-	-	-	60	60
962+40 - 964+08	STH 23	-	-	336	-	336
SUBTOTALS		**86**	**0**	**336**	**462**	**884**
1430-18-73, CAT 0010						
972+50 - 976+75	STH 23	-	866	-	-	866
975+65 - 976+97	STH 23	-	267	-	-	267
977+65 - 978+92	STH 23	-	280	-	-	280
977+88 - 980+35	STH 23	-	500	-	-	500
SUBTOTALS		**0**	**1913**	**0**	**0**	**1913**
TOTALS		**86**	**1913**	**336**	**462**	**2797**

STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH

FROM	TO	LOCATION	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	608.0418 LF
1430-18-73, CAT 0010						
1.1	1.2	STH 23 LT	770.49	770.47	0.0029	7
1.2	1.3	STH 23 LT	770.47	770.42	0.0033	15
1.3	1.4	STH 23 LT	770.42	770.40	0.0022	9
1.4	EXIST	STH 23 LT	770.40	EXIST	0.0033	6
2.1	2.2	STH 23 LT	770.45	770.42	0.0043	7
2.2	2.3	STH 23 LT	770.42	770.38	0.0029	14
2.3	2.4	STH 23 LT	770.38	770.36	0.0025	8
2.4	EXIST	STH 23 LT	770.36	EXIST	0.0025	8
3.1	3.2	STH 23 LT	771.44	771.37	0.0030	23
3.2	EXIST	STH 23 LT	771.37	EXIST	0.0029	7
TOTAL						**104**

LANDSCAPING

LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB
1430-18-72, CAT 0010						
ESTERBROOK SW	3425	635	2790	2.16	61.66	92.49
ESTERBROOK SE	3410	772	2639	2.15	61.38	92.08
ESTERBROOK NE	337	-	337	0.21	6.06	9.09
ESTERBROOK NW	326	-	326	0.21	5.86	8.79
WRIGHTWAY NORTH	2153	882	1272	1.36	38.76	58.14
WRIGHTWAY SE	296	18	279	0.19	5.33	8.00
WRIGHTWAY SW	1208	269	939	0.76	21.74	32.61
963+22	1394	832	562	0.88	25.10	37.65
UNDISTRIBUTED	3138	852	2286	1.98	56.47	84.71
SUBTOTALS	**15688**	**4259**	**11428**	**9.88**	**282.37**	**423.56**
1430-18-73, CAT 0010						
CTH VVV	408	-	408	0.26	7.34	11.01
SUBTOTALS	**408**	**-**	**408**	**0.26**	**7.34**	**11.01**
TOTALS	**16096**	**4259**	**11836**	**10.14**	**289.71**	**434.57**

INLET PROTECTION

LOCATION	628.7015 TYPE C EACH
1430-18-72, CAT 0010	
1430-18-72	5
SUBTOTALS	**5**
1430-18-73, CAT 0010	
1430-18-73	18
SUBTOTALS	**18**
TOTAL	**23**

TEMPORARY DITCH CHECKS

STATION TO		STATION	LOCATION	628.7504 LF
1430-18-72, CAT 0010				
923+00	-	932+50	STH 23 RT	128
934+00	-	947+00	STH 23 RT	112
947+00	-	950+50	STH 23 RT	32
947+00	-	954+00	STH 23 LT	64
TOTAL				**336**

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 EACH
1430-18-72, CAT 0010	
1430-18-72	4
SUBTOTALS	**4**
1430-18-73, CAT 0010	
1430-18-73	1
SUBTOTALS	**1**
TOTAL	**5**

MOBILIZATIONS EMERGENCY EROSION CONTROL

LOCATION	628.1910 EACH
1430-18-72, CAT 0010	
1430-18-72	1
SUBTOTALS	**1**
1430-18-73, CAT 0010	
1430-18-73	1
SUBTOTALS	**1**
TOTAL	**2**

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 EACH
1430-18-72, CAT 0010		
3+14	ESTERBROOK/CTH T	5
4+16	ESTERBROOK/CTH T	10
19+44	WRIGHTWAY/FORD DR	15
922+75	STH 23 RT	3
934+82	STH 23 LT	3
942+34	STH 23 RT	3
955+10	STH 23 RT	6
955+40	STH 23 LT	3
963+22	STH 23	20
TOTAL		**68**

TRAFFIC CONTROL

LOCATION	SERVICE PERIOD DAYS	643.0300 DRUMS NO	643.0300 DRUMS DAYS	643.0420* BARRICADES TYPE III NO	643.0420* BARRICADES TYPE III DAYS	643.0705* WARNING LIGHTS TYPE A NO	643.0705* WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C NO	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS NO	643.0800 ARROW BOARDS DAYS	643.0900* SIGNS NO	643.0900* SIGNS DAYS	643.1050* SIGNS NO	643.1050* PCMS DAYS	REMARKS
1430-18-72 CAT 0010																
ADVANCED WARNING	7	-	-	-	-	-	-	-	-	-	-	-	-	2	14	MAINLINE
ADVANCED WARNING	68	-	-	64	4352	120	8160	-	-	-	-	80	5440	-	-	MAINLINE & SIDEROADS
STAGE 1	20	94	1874	6	120	12	240	8	160	-	-	19	380	-	-	
STAGE 2	16	93	1494	8	128	16	256	8	128	-	-	19	304	-	-	
STAGE 3	16	59	944	6	96	12	192	8	128	-	-	13	208	-	-	
STAGE 4	16	37	592	6	96	12	192	8	128	-	-	12	192	-	-	
SUBTOTALS			**4904**		**4792**		**880**		**544**		**0**		**6524**		**14**	
1430-18-73 CAT 0010																
ADVANCED WARNING	7	-	-	-	-	-	-	-	-	-	-	-	-	2	14	
STAGE 1	20	148	2960	15	300	22	440	25	500	1	20	24	480	-	-	
NIGHT CLOSURE	5	30	150	16	80	-	-	20	100	-	-	10	50	5	25	I 41 & CTH VVV & STH 23
SUBTOTALS			**3110**		**380**		**440**		**600**		**20**		**530**		**39**	
TOTALS		**8014**		**5172**		**1320**		**1144**		**20**		**7054**		**53**		

*ADDITIONAL QUANTITIES ELSEWHERE IN THE PLAN

TRAFFIC CONTROL

LOCATION	643.5000 EACH
1430-18-72, CAT 0010	
STH 23	0.7
SUBTOTAL	**0.7**
1430-18-73, CAT 0010	
STH 23	0.3
SUBTOTAL	**0.3**
TOTAL	**1**

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

1430-18-72

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
100	TOWNLINE RD	R1-1	30" X 30"	5.18	---	1	---	1	1	
101	STH 23, E. OF TOWNLINE RD	W14-3	48" X 36"	---	5.56	---	1	1	1	
102	STREBLOW DR	R1-1	30" X 30"	5.18	---	1	---	1	1	
103	STH 23, W. OF CTH T	J1-1	24" X 39"	6.50	---	---	1	1	1	SEE PLAN SHEET
104	"	R3-8W	54" X 30"	11.25	---	2	---	---	---	
105	"	R2-1	24" X 30"	5.00	---	1	---	1	1	55 MPH
106	"	J13-1	24" X 45"	7.50	---	---	1	1	1	SEE PLAN SHEET
107	"	J4-1	24" X 36"	6.00	---	---	1	1	1	SEE PLAN SHEET
108	ESTERBROOK RD	R1-1	30" X 30"	5.18	---	1	---	1	1	
109	CTH T	R1-1	36" X 36"	7.46	---	---	1	1	1	
110	"	J13-1	24" X 45"	7.50	---	---	1	1	1	
111	"	W12-1D	24" X 24"	---	4.00	1	---	1	1	
112	"	R1-1	36" X 36"	7.46	---	---	1	1	1	
113	VACANT	---	---	---	---	---	---	---	---	
114	STH 23, E. OF CTH T	J13-1	24" X 45"	7.50	---	---	1	1	1	SEE PLAN SHEET
115	"	J4-1	24" X 36"	6.00	---	---	1	1	1	SEE PLAN SHEET
116	"	R2-1	24" X 30"	5.00	---	1	---	1	1	55 MPH
117	"	R3-8W	54" X 30"	11.25	---	2	---	---	---	
118	"	J1-1	24" X 39"	6.50	---	---	1	1	1	SEE PLAN SHEET
119	"	R59-51	36" X 36"	9.00	---	---	1	---	---	
120	"	W6-1	---	---	---	---	---	1	1	
121	"	R59-51	---	---	---	---	---	1	1	
122	WRIGHTWAY DR	R1-1	30" X 30"	5.18	---	1	---	1	1	
123	STH 23, E. OF WRIGHTWAY DR	W3-5	36" X 36"	---	9.00	---	1	1	1	45 MPH
124	"	W14-3	48" X 36"	---	5.56	---	2	1	1	
124A	"	D2-2	78" X 24"	13.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 124
125	"	W6-1	36" X 36"	---	9.00	---	1	---	---	
126	"	R2-1	24" X 30"	5.00	---	1	---	1	1	45 MPH
127	"	R2-1	24" X 30"	5.00	---	1	---	1	1	55 MPH
128	"	D2-2	---	---	---	---	---	1	2	
129	"	W6-1	36" X 36"	---	9.00	---	1	1	1	
130	"	R4-7	24" X 30"	5.00	---	---	1	1	1	
131	"	R5-1	30" X 30"	6.25	---	---	1	1	1	
132	"	J4-1	24" X 36"	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 131
133	"	R5-1A	36" X 24"	6.00	---	---	1	1	1	
134	"	W6-1	36" X 36"	---	9.00	---	---	---	---	MOUNT TO BACK OF SIGN 133
	PAGE SUBTOTALS			170.89	51.12	13	19	28	29	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

1430-18-72

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
135	STH 23, W. OF RICKMEYER DR	I2-3	84" X 24"	14.00	---	2	---	1	2	SEE SIGN DETAILS
136	"	R5-1A	36" X 24"	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 135
137	"	R6-2R	24" X 30"	5.00	---	1	---	---	---	
138	"	R5-1	30" X 30"	6.25	---	---	1	---	---	
139	"	R6-2L	24" X 30"	5.00	---	1	---	---	---	
140	"	W6-2	---	---	---	---	---	1	1	
141	"	W6-2	---	---	---	---	---	1	1	
142	"	R6-2L	24" X 30"	5.00	---	1	---	---	---	
143	RICKMEYER DR	R1-1	30" X 30"	5.18	---	---	1	1	1	
144	"	R6-3A	30" X 24"	5.00	---	---	---	---	---	MOUNT BELOW SIGN 143
145	STH 23, E. OF RICKMEYER DR	R4-7	24" X 30"	5.00	---	1	---	1	1	
146	"	R6-2L	24" X 30"	5.00	---	1	---	---	---	
147	"	R5-1	36" X 36"	9.00	---	---	1	---	---	
148	"	R2-1	24" X 30"	5.00	---	---	1	1	1	35 MPH
149	"	R2-1	24" X 30"	5.00	---	---	1	1	1	35 MPH
150	"	R5-1A	36" X 24"	6.00	---	1	---	---	---	
151	"	R2-1	24" X 30"	5.00	---	---	1	1	1	45 MPH
152	"	R2-1	24" X 30"	5.00	---	---	1	1	1	45 MPH
153	"	R6-2R	24" X 30"	5.00	---	1	---	1	1	
154	"	J1-3	72" X 39"	19.50	---	---	2	1	2	SEE PLAN SHEET
155	"	J1-3	72" X 39"	19.50	---	---	2	1	2	SEE PLAN SHEET
156	"	R5-1	30" X 30"	6.25	---	---	---	---	---	MOUNT TO BACK OF SIGN 155
157	"	W4-2L	36" X 36"	---	9.00	---	1	---	---	
158	"	W4-2L	36" X 36"	---	9.00	---	1	---	---	
159	"	R5-1A	36" X 24"	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 158
160	"	R6-2L	24" X 30"	5.00	---	1	---	---	---	
161	"	R4-7	24" X 30"	5.00	---	1	---	1	1	
162	"	R4-7	24" X 30"	5.00	---	1	---	---	---	
163	"	R6-2L	24" X 30"	5.00	---	1	---	---	---	
164	"	R5-1	30" X 30"	6.25	---	1	---	---	---	
165	"	I55-56	---	---	---	---	---	1	1	
166	"	R6-2R	24" X 30"	5.00	---	1	---	1	1	
167	"	J2-4	96" X 57"	38.00	---	---	2	---	---	SEE PLAN SHEET
168	"	J2-4	96" X 57"	38.00	---	---	2	1	2	SEE PLAN SHEET
169	"	R5-1A	36" X 24"	6.00	---	---	---	---	---	MOUNT TO BACK OF SIGN 168
	PAGE SUBTOTALS			265.93	18.00	15	17	16	20	
	PROJECT TOTALS			**436.82**	**69.12**	**28**	**36**	**44**	**49**	

ERECTION OF PERMANENT SIGNING

SIGN NO.	LOCATION	SIGN CODE	W X H	637.1220 SIGNS TYPE I REFLECTIVE TYPE SH S.F.	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2215 SIGNS TYPE II REF. TYPE H FOLDING S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	REMARKS
300	STH 23, W. OF CTH VVV	D1-3	108" X 36"	---	27.00	---	---	---	---	2	SEE SIGN DETAILS
301	"	J13-1	24" X 45"	---	7.50	---	---	---	---	1	
302	"	W9-1L	30" X 30"	---	---	---	6.25	---	---	1	
303	"	W9-1L	30" X 30"	---	---	---	6.25	---	---	1	
304	"	W12-1D	24" X 24"	---	---	---	4.00	1	---	---	
305	"	J13-2	48" X 45"	---	15.00	---	---	---	---	1	SEE PLAN SHEET
306	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
307	"	R4-7	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
308	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
309	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
310	"	R4-7	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
311	"	R1-2	36" X 31"	---	3.88	---	---	---	1	---	
312	CTH VVV	R6-2L	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
313	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
314	"	R1-2	36" X 31"	---	3.88	---	---	---	1	---	
315	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
316	"	R10-5	30" X 36"	---	7.50	---	---	---	---	---	MOUNT TO SIGNAL POLE
317	"	R4-7	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
318	"	J13-1	24" X 45"	---	7.50	---	---	---	---	1	SEE PLAN SHEET
319	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
320	"	R10-5	30" X 36"	---	7.50	---	---	---	---	---	MOUNT TO SIGNAL POLE
321	"	R6-2L	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
322	"	R1-2	36" X 31"	---	3.88	---	---	---	1	---	
323	STH 23, E. OF CTH VVV	R5-1	30" X 30"	---	6.25	---	---	---	---	---	MOUNT TO SIGNAL POLE
324	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
325	"	R1-2	36" X 31"	---	3.88	---	---	---	1	---	
326	"	R5-1	30" X 30"	---	6.25	---	---	---	---	---	MOUNT TO SIGNAL POLE
327	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
328	"	W12-1D	24" X 24"	---	---	---	4.00	1	---	---	
329	"	J13-2	48" X 45"	---	15.00	---	---	---	---	1	SEE PLAN SHEET
330	"	W12-1D	24" X 24"	---	---	---	4.00	1	---	---	
331	"	R2-1	36" X 48"	---	12.00	---	---	---	---	1	35 MPH
332	"	D1-3	108" X 36"	---	27.00	---	---	---	---	2	SEE SIGN DETAILS
333	"	J3-2	48" X 69"	---	23.00	---	---	---	---	1	SEE PLAN SHEET
334	"	R4-7	24" X 30"	---	5.00	---	---	---	---	---	MOUNT TO SIGNAL POLE
335	"	R1-1F	36" X 36"	---	---	7.46	---	---	---	---	MOUNT TO SIGNAL POLE
336	"	R3-7R	30" X 30"	---	6.25	---	---	---	---	---	MOUNT TO CANTILEVER POLE
337	"	D16-1	36" X 72"	18.00	---	---	---	---	---	---	CENTER OVER RIGHT LANE
338	"	J2-2	48" X 57"	---	19.00	---	---	---	---	1	SEE PLAN SHEET
339	"	J3-1	24" X 57"	---	9.50	---	---	---	---	1	SEE PLAN SHEET
340	VACANT	---	---	---	---	---	---	---	---	---	
	TOTALS			**18.00**	**241.75**	**67.14**	**24.50**	**3**	**4**	**14**	

REMOVAL OF PERMANENT SIGNING

SIGN NO.	LOCATION	SIGN CODE	638.2601 REMOVING SIGNS TYPE I EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
200	STH 23, W. OF CTH VVV	J2-2	---	1	1
201	"	D1-3	---	1	2
202	"	W9-1L	---	1	1
203	"	W9-1L	---	1	1
204	"	R1-1F	---	1	---
205	"	R4-7	---	1	---
206	"	R1-1F	---	1	---
207	"	R1-2	---	1	1
208	"	I5-1	---	1	---
209	"	J13-1	---	1	---
210	CTH VVV	R1-1F	---	1	---
211	"	R10-5	---	1	---
212	"	R4-7	---	1	---
213	"	J13-1	---	1	---
214	"	R1-1F	---	1	---
215	STH 23, E. OF CTH VVV	R10-5	---	1	---
216	"	R6-2L	---	1	---
217	"	R1-2	---	1	1
218	CTH VVV	R1-2	---	1	1
219	"	R6-2L	---	1	---
220	"	R1-1F	---	1	---
221	STH 23, E. OF CTH VVV	R5-1	---	1	---
222	"	R1-1F	---	1	---
223	"	R1-2	---	1	1
224	"	W12-1D	---	1	1
225	"	R6-2L	---	1	1
226	"	J1-2	---	1	1
227	"	R4-7	---	1	---
228	"	R1-1F	---	1	---
229	"	J2-1	---	1	1
230	"	R2-1	---	1	---
231	"	J2-1	---	1	1
232	"	J2-1	---	1	1
233	"	D1-3	---	1	2
234	"	R3-7R	---	1	---
235	"	J3-1	1	---	---
	TOTALS		**1**	**35**	**17**

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

1430-18-73

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.0900 SIGNS* DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
1	LT OF TYPE 1 D1-2 (23-JOHNSON ST-1-MILE; OO-WINNEBAGO DR - 2 3/4 MILES)	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	W 20-2A	48"x48"	1	12	12							
2	ACROSS FROM SIGN # 1 (MEDIAN SIDE)	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	W 20-2A	48"x48"	1	12	12							
3	LT OF TYPE 1 (23-JOHNSON ST-TILT RIGHT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
4	ACROSS FROM SIGN # 3 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
5	MODIFY J13-1 (23-DOUBLE ARROW)	M 1-6	EXISTING										
	"	MO 6-1	36"x36"	1	12	12							RIGHT
6	500' W OF PETERS AVE. INTERSECTION ON STH 23	W 20-2A	48"x48"	1	12	12							
7	ACROSS FROM SIGN # 6 (MEDIAN SIDE)	W 20-2A	48"x48"	1	12	12							
8	500' W OF SIGN # 6	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 4-22R	24"x21"	1	12	12							
9	ACROSS FROM SIGN # 8 (MEDIAN SIDE)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 4-22R	24"x21"	1	12	12							
10	LT OF J3-1 (N-41-RIGHT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							RIGHT
11	RT OF J2-2 (S-41-AH; N-41-AH RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							RIGHT
12	JV2-2 (W-23; JCT VVV)										1	1	WEST 23
13	300' N OF STH 23 & NE RAMP INTERSECTION	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
14	200' N OF STH 23 NB EXIT RAMP GORE	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
	PAGE SUBTOTALS			40		480	0	0	0	0		1	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

1430-18-73

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.0900 SIGNS* DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
15	ACROSS FROM SIGN # 14 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
16	LT OF TYPE 1 (OO-WINNEBAGO ST-TILT RT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
17	ACROSS FROM SIGN # 16 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
18	LT OF TYPE 1 D1-2 (OO-WINNEBAGO DR - 1 3/4; 23-JOHNSON ST-3 3/4 MILES)	MO 4-8A	30"x24"	1	12	12							
	"	M 6-1	36"x36"	1	12	12							"23"
19	LT OF TYPE 1 NB (N-EAST WEST-TILT RT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
20	ACROSS FROM SIGN # 19 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
21	LT OF TYPE 1 SB (N-EAST WEST-TILT RT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-2	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
22	ACROSS FROM SIGN # 21 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-2	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-1	30"x30"	1	12	12							AHEAD
23	1000' S OF SIGN # 25	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 5-2R	30"x30"	1	12	12							
24	ACROSS FROM SIGN # 23 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 5-2R	30"x30"	1	12	12							
25	LT OF BLUE SIS (GAS NEXT RT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 5-2R	30"x30"	1	12	12							
PAGE SUBTOTALS				42		504	0	0	0	0		0	

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TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

1430-18-73

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.0900 SIGNS* DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
26	ACROSS FROM SIGN # 25 (MEDIAN SIDE)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 5-2R	30"x30"	1	12	12							
27	LT OF TYPE 1 (26/N; WAUPUN; TILT RT)	MO 4-8	36"x18"	1	12	12							
	"	M 3-4	36"x18"	1	12	12							
	"	M 1-6	36"x36"	1	12	12							"23"
	"	MO 6-2	30"x30"	1	12	12							RIGHT
28	ACROSS FROM W 3-3 (SIGNAL AHEAD) SIGN (LEFT SIDE)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 5-1L	21"x21"	1	12	12							
29	ACROSS FROM J3-2 (S-26-LT; N-DBL ARROW) (LEFT SIDE)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							LEFT
30	ABOVE J3-3 (S-41-AH LT; S-26-AH; W-N-AH RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							AHEAD
31	LT OF J2-2 (J-26-AH; N-N-AH)	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							AHEAD
32	LT OF J2-1 (W-N-AH RT)	M0 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
33	200' S OF NB STH 26 INTERSECTION TO USH 41 SB ON-ON RAMP	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
34	RT OF J3-2 (N-41-AH; S-41-TILT RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-2	21"x21"	1	12	12							RIGHT
35	LT OF J2-3 (N-41-AH; E-N-AH; S-41-AH RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 5-1R	21"x21"	1	12	12							
36	ABOVE D1-1 (PLANEVIEW RD)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 4-22R	24"x21"	1	12	12							
	PAGE SUBTOTALS			42		504	0	0	0	0		0	

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TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

1430-18-73

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.0900 SIGNS* DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
37	LT OF J4-2 (S-26; ALT-S-41) @ CTH N WB	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
38	LT OF J4-2 (N-26; ALT-N-41) @ COTTONWOOD RD	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
39	LT OF J4-2 (S-26; ALT-S-41) @ COTTONWOOD RD	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
40	LT OF J4-1 (NORTH 26) @ CTH FF	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
41	LT OF J4-1 (SOUTH 26) @ CTH FF	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
42	200' N OF HICKORY RD INTERSECTION ON STH 26	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
43	200' S OF HICKORY RD INTERSECTION ON STH 26	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
44	200' N OF GRIFFITH RD INTERSECTION ON STH 26	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
45	200' S OF GRIFFITH RD INTERSECTION ON STH 26	MO 4-8	24"x12"	1	12	12							
	"	M 3-4	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
46	MODIFY J1-1 (JCT-23)	MO 4-8A	24"x18"	1	12	12							
	"	M 1-6	EXISTING										"23"
47	J2-2 (E-23-AH LT; W-23-AH RT)										1	1	EAST-23-AH RT
48	J3-2 (E-23-LT; W-23-RT)										1	1	EAST-23-RT
49	100' N OF STH 23 INTERSECTION ON STH 26	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
50	SW QUAD OF STH 23 & STH 26 INTERSECTION	R 11-3	60"x30"	1	12	12	12	24					8 MILES
	"	M 4-9L	30"x24"	1		12							
51	50' W OF STH 26 INTERSECTION ON STH 23	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	MO 6-1	21"x21"	1	12	12							LEFT
52	ABOVE J2-2 (N-26-AH LT; S-26-AH RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x12"	1	12	12							"23"
	"	MO 5-1L	21"x21"	1	12	12							
	PAGE SUBTOTALS			41		492	12	24	0	0		2	

3

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

1430-18-73

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 12 DAYS	643.0900 SIGNS* DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
53	500' W OF SIGN # 52	W 20-2A	48"x48"	1	12	12							
54	MODIFY J3-2 (W-23-LT; E-23-RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	EXISTING										
	"	M 1-6	EXISTING										
	"	MO 6-1	21"x21"	1	12	12							AHEAD
55	MODIFY J2-2 (W-23-AH LT; E-23-AH RT)	MO 4-8	24"x12"	1	12	12							
	"	M 3-2	EXISTING										
	"	M 1-6	EXISTING										
	"	MO 6-1	21"x21"	1	12	12							AHEAD
56	100' S OF J1-1 (JCT 23) ON STH 26	M 3-2	24"x12"	1	12	12							
	"	M 1-6	24"x24"	1	12	12							"23"
	"	W 20-2A	48"x48"	1	12	12							
57	NW QUAD OF STH 23 & USH 41 NB ON-RAMP INTERSECTION	FMS	60"x30"	1			12	24	12.5				SEE SIGN DETAIL
58	NW QUAD OF STH 23 & USH 41 SB OFF-RAMP INTERSECTION	R 11-2	48"x30"	1	12	12	12	24					
59	STH 23 WB WEST OF RICKMEYER DR - FOND DU LAC (FIELD DETERMINED)	PCMS		1	7					7			
60	STH 23 EB EAST OF HILL BVLD - ROSENDALE (FIELD DETERMINED)	PCMS		1	7					7			
61	STH 23 WB EAST I-41, PLACE IN MEDIAN	FMS	60"x30"	1			12	24	12.5				SEE SIGN DETAIL
62	STH 23 EB WEST OF RICKMEYER DR, RT	FMS	96"x36"	1					20				SEE SIGN DETAIL
	PAGE SUBTOTALS			14		108	36	72	45	14		0	
	PROJECT TOTALS			**179**		**2,088**	**48**	**96**	**45**	**14**		**3**	

PAVEMENT MARKINGS

STATION	TO	STATION	LOCATION	646.1020 EPOXY 4-INCH WHITE LF	646.1020 EPOXY 4-INCH YELLOW LF	646.4520 SAME DAY EPOXY 4-INCH YELLOW LF	646.1040 GROOVED WET REF EPOXY 4-INCH WHITE LF	646.3020 EPOXY 8-INCH WHITE LF	646.3040 GROOVED WET REF EPOXY 8-INCH WHITE LF	646.5020 ARROW EPOXY EACH	646.5120 WORDS EPOXY EACH	646.7120 DIAGONAL EPOXY 12-INCH YELLOW LF	646.6120 STOP LINE EPOXY 18-INCH WHITE LF	646.8120 CURB EPOXY YELLOW LF	646.8220 ISLAND NOSE EPOXY YELLOW EACH	REMARKS
1430-18-72, CAT 0010																
872+24	-	885+69	STH 23	-	1345	1345	-	-	-	-	-	-	-	-	-	SOLID
872+24	-	921+19	STH 23	-	1224	1224	-	-	-	-	-	-	-	-	-	DASHED
904+98	-	910+54	STH 23	-	556	556	-	-	-	-	-	-	-	-	-	SOLID
916+16	-	916+62	STH 23	-	46	46	-	-	-	-	-	-	-	-	-	SOLID
916+62	-	927+20	STH 23	-	-	4232	-	-	-	-	-	418	-	-	-	SOLID
927+20	-	932+28	STH 23	-	-	1016	-	-	-	-	-	-	-	-	-	DOUBLE SOLID
933+61	-	938+73	STH 23	-	-	1024	-	-	-	-	-	-	-	-	-	DOUBLE SOLID
938+73	-	947+23	STH 23	-	-	3400	-	-	-	-	-	435	-	-	-	SOLID
947+23	-	957+77	STH 23	-	-	2108	-	-	-	-	-	-	-	-	-	DOUBLE SOLID
957+77	-	961+42	STH 23	-	-	1460	-	-	-	-	-	132	-	-	-	DOUBLE SOLID
961+42	-	961+94	STH 23 EB	-	-	104	-	-	-	-	-	32	-	-	-	DOUBLE SOLID
961+42	-	965+20	STH 23 EB	-	-	378	-	-	-	-	-	-	-	10	1	SOLID
961+42	-	965+20	STH 23 WB	-	-	378	-	-	-	-	-	-	-	-	-	SOLID
966+16	-	967+37	STH 23 WB	-	-	121	-	-	-	-	-	-	-	-	-	SOLID
969+30	-	971+67	STH 23 EB	-	-	237	-	-	-	-	-	-	-	-	-	SOLID
872+24	-	876+74	STH 23 EB	-	-	-	450	-	-	-	-	-	-	-	-	EDGE LINE
872+24	-	910+14	STH 23 WB	-	-	-	3790	-	-	-	-	-	-	-	-	EDGE LINE
873+74	-	876+74	STH 23 EB	-	-	-	-	-	300	-	-	-	-	-	-	TURN LANE
876+78	-	879+28	STH 23 WB	-	-	-	63	-	-	-	-	-	-	-	-	BYPASS LINE
878+03	-	932+27	STH 23 EB	-	-	-	5424	-	-	-	-	-	-	-	-	EDGE LINE
909+31	-	911+81	STH 23 EB	-	-	-	63	-	-	-	-	-	-	-	-	BYPASS LANE
911+56	-	913+56	STH 23 WB	-	-	-	-	-	200	-	-	-	-	-	-	TURN LANE
911+56	-	932+27	STH 23 WB	-	-	-	2071	-	-	-	-	-	-	-	-	EDGE LINE
925+48	-	927+27	STH 23 EB	-	-	-	-	-	45	-	-	-	-	-	-	DASHES
927+27	-	928+77	STH 23 EB	-	-	-	-	-	38	-	-	-	-	-	-	DASHES
927+27	-	932+27	STH 23 EB	-	-	-	-	-	500	2	1	-	-	-	-	LEFT TURN LANE
928+77	-	932+27	STH 23 EB	-	-	-	-	-	350	2	1	-	-	-	-	TURN LANE
933+62	-	967+26	STH 23 WB	-	-	-	3364	-	-	-	-	-	-	-	-	EDGE LINE
933+62	-	936+62	STH 23 WB	-	-	-	-	-	300	2	1	-	-	-	-	TURN LANE
933+62	-	938+62	STH 23 WB	-	-	-	-	-	500	2	1	-	-	-	-	LEFT TURN LANE
933+75	-	950+36	STH 23 EB	-	-	-	1661	-	-	-	-	-	-	-	-	EDGE LINE
936+61	-	938+11	STH 23 WB	-	-	-	-	-	38	-	-	-	-	-	-	DASHES
938+11	-	940+49	STH 23 WB	-	-	-	-	-	60	-	-	-	-	-	-	DASHES
948+36	-	950+36	STH 23 EB	-	-	-	-	-	200	-	-	-	-	-	-	TURN LANE
950+08	-	952+58	STH 23 WB	-	-	-	63	-	-	-	-	-	-	-	-	BYPASS LANE
951+65	-	957+71	STH 23 EB	-	-	-	606	-	-	-	-	-	-	-	-	EDGE LINE
957+71	-	972+50	STH 23 EB	1479	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
961+94	-	972+50	STH 23 EB	1056	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
965+34	-	967+14	STH 23 WB	-	-	-	-	180	-	-	-	-	-	-	-	LEFT TURN LANE
965+83	-	967+44	STH 23 EB	-	-	-	-	161	-	2	1	-	-	20	2	LEFT TURN LANE
967+14	-	967+85	STH 23 WB	18	-	-	-	-	-	1	-	-	-	-	-	DASHES
967+85	-	972+50	STH 23 WB	116	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
968+74	-	972+50	STH 23 EB	376	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
968+74	-	970+67	STH 23 EB	-	-	-	-	193	-	-	-	-	-	-	-	TURN LANE
968+63	-	971+68	STH 23 EB	305	-	-	-	-	-	1	-	-	-	10	1	LEFT TURN LANE
0+91		3+34	ESTERBROOK RD	386	-	486	-	20	-		-	-	-	30	3	
0+80		1+29	RICKMEYER	-	-	98	-	-	-	-	-	-	43	-	-	
SUBTOTALS				**3736**	**3171**	**18213**	**17555**	**554**	**2529**	**12**	**5**	**1017**	**43**	**70**	**7**	

PAVEMENT MARKINGS (CONT)

STATION	TO	STATION	LOCATION	646.1020 EPOXY 4-INCH WHITE LF	646.1020 EPOXY 4-INCH YELLOW LF	646.4520 SAME DAY EPOXY 4-INCH YELLOW LF	646.1040 GROOVED WET REF EPOXY 4-INCH WHITE LF	646.3020 EPOXY 8-INCH WHITE LF	646.3040 GROOVED WET REF EPOXY 8-INCH WHITE LF	646.5020 ARROW EPOXY EACH	646.5120 WORDS EPOXY EACH	646.7120 DIAGONAL EPOXY 12-INCH YELLOW LF	646.6120 STOP LINE EPOXY 18-INCH WHITE LF	646.8120 CURB EPOXY YELLOW LF	646.8220 ISLAND NOSE EPOXY YELLOW EACH	REMARKS
1430-18-73, CAT 0010																
972+50	-	976+69	STH 23 EB	419	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
972+50	-	976+91	STH 23 EB	441	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
972+50	-	976+40	STH 23 WB	390	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
972+50	-	976+40	STH 23 WB	98	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
972+82	-	976+72	STH 23 WB	-	-	390	-	-	-	-	-	-	-	40	4	EDGE LINE
974+42	-	975+68	STH 23 EB	-	-	-	-	252	-	-	-	-	-	-	-	LEFT TURN LANE
976+15	-	976+90	STH 23 EB	-	-	-	-	150	-	-	-	-	-	-	-	RIGHT TURN LANE
977+22	-	977+91	STH 23	-	-	-	-	30	-	-	-	-	-	-	-	INTERSECTION SKIPS
977+56	-	979+13	STH 23 WB	-	-	-	-	228	-	-	-	-	-	10	1	RIGHT TURN LANE
977+56	-	980+35	STH 23 WB	70	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
979+14	-	980+35	STH 23 WB	121	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
979+13	-	980+35	STH 23 WB	31	-	-	-	-	-	-	-	-	-	-	-	RIGHT TURN SKIPS
978+94	-	980+19	STH 23 WB	-	-	-	-	250	-	-	-	-	-	20	2	LEFT TURN LANE
977+91	-	980+35	STH 23 EB	-	-	244	-	-	-	-	-	-	-	10	1	EDGE LINE
977+91	-	980+35	STH 23 EB	61	-	-	-	-	-	-	-	-	-	-	-	DASHED EDGE LINE
977+91	-	980+35	STH 23 EB	61	-	-	-	-	-	2	1	-	-	-	-	RIGHT TURN SKIPS
978+34	-	980+35	STH 23 EB	201	-	-	-	-	-	-	-	-	-	-	-	EDGE LINE
SUBTOTALS				**1892**	**0**	**634**	**0**	**910**	**0**	**2**	**1**	**0**	**0**	**80**	**8**	
TOTAL				**5628**	**3171**	**18847**	**17555**	**1464**	**2529**	**14**	**6**	**1017**	**43**	**150**	**15**	

LOCATING NO-PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 MI
1430-18-72, CAT 0010				
867+48	-	957+71	STH 23	1.71
TOTAL				**1.71**

TEMPORARY PAVEMENT MARKINGS

STATION TO	STATION	LOCATION	649.0105 PAINT YELLOW LF	REMARKS
1430-18-72, CAT 0010				
872+24 -	885+69	STH 23	1345	SOLID
872+24 -	921+19	STH 23	392	DASHED
904+98 -	910+54	STH 23	556	SOLID
916+16 -	921+19	STH 23	503	SOLID
921+19 -	927+20	STH 23	2404	SOLID
927+20 -	932+28	STH 23	1016	DOUBLE SOLID
933+61 -	938+73	STH 23	1024	DOUBLE SOLID
938+73 -	944+87	STH 23	2456	SOLID
944+87 -	957+77	STH 23	2580	DOUBLE SOLID
957+77 -	961+42	STH 23	1460	DOUBLE SOLID
961+42 -	961+94	STH 23 EB	104	DOUBLE SOLID
961+42 -	965+30	STH 23 EB	388	SOLID
961+42 -	965+30	STH 23 WB	388	SOLID
966+14 -	967+85	STH 23 WB	171	SOLID
968+15 -	971+72	STH 23 EB	357	SOLID
SUBTOTALS			**15144**	
1430-18-73, CAT 0010				
972+50 -	980+35	STH 23	126	DASHED
SUBTOTALS			**126**	
TOTAL			**15269**	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

LOCATION	650.9910 LS
1430-18-72, CAT 0010	
1430-18-72	1
SUBTOTALS	**1**
1430-18-73, CAT 0010	
143-18-73	1
SUBTOTALS	**1**
TOTAL	**2**

CONSTRUCTION STAKING SLOPE STAKES

STATION TO	STATION	LOCATION	650.9920 LF
1430-18-72, CAT 0010			
916+62 -	932+62	STH 23 RT	1600
932+27 -	932+61	STH 23 LT	34
933+19 -	933+62	STH 23 LT	43
933+43 -	950+84	STH 23 RT	1741
951+51 -	954+76	STH 23 RT	325
947+01 -	954+76	STH 23 LT	775
TOTAL			**4518**

CONSTRUCTION STAKING RESURFACING REFERENCE

STATION TO	STATION	LOCATION	650.8000 LF
1430-18-72, CAT 0010			
872+77 -	972+50	STH 23	5455
SUBTOTALS			**5455**
1430-18-73, CAT 0010			
972+50 -	980+35	STH 23	785
SUBTOTALS			**785**
TOTAL			**6240**

CONSTRUCTION STAKING

STATION TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF
1430-18-72, CAT 0010				
916+63 -	932+84	STH 23 RT	1621	1621
947+01 -	954+76	STH 23 LT	775	775
935+12 -	938+12	STH 23 LT	300	300
933+16 -	952+65	STH 23 RT	1949	1949
1+88 -	3+60	ESTERBROOK	172	172
4+04 -	5+08	ESTERBROOK	104	104
18+57 -	19+87	WRIGHTWAY	130	130
SUBTOTALS			**5051**	**5051**
1430-18-73, CAT 0010				
972+50 -	980+35	STH 23	785	785
SUBTOTALS			**785**	**785**
TOTALS			**5836**	**5836**

TRAFFIC SIGNAL PULL BOXES

LOCATION / PULL BOX NUMBER	STATION	OFFSET	L/R	653.0154 PULL BOX NON-CONDUCTIVE 24X36-INCH EACH	653.0164 * PULL BOX NON-CONDUCTIVE 24X42-INCH EACH
CATEGORY 0010					
STH 23 & CTH VVV					
PB1	976+71.4'	109.3'	LT	--	1
PB2	976+90.2'	81'	LT	--	1
PB6	977+68'	119.6'	LT	--	1
PB7	978+8.4'	102'	LT	--	1
PB8	978+8.7'	76.6'	LT	--	1
PB9	977+69.0'	79.0'	LT	--	1
PB10	978+9.1'	39'	LT	--	1
PB11	978+9.3'	16.8'	LT	--	1
PB12	978+37.2'	16.8'	LT	1	--
PB14	978+9.9'	42'	RT	--	1
PB15	977+90.0'	62.8'	RT	--	1
PB16	977+67.8'	23.5'	RT	--	1
PB17	977+33.7'	63.8'	RT	--	1
PB20	976+83.0'	64.7'	RT	--	1
PB21	976+48.2'	40.6'	RT	--	1
PB22	976+46.3'	15.6'	LT	--	1
PB23	976+53.5'	15.8'	LT	1	--
PB24	976+45.3'	37.3'	LT	--	1
PB26	976+43.4'	85.3'	LT	--	1
CATEGORY 0010 TOTAL				2	17

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL CONDUIT

LOCATION	FROM	-	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF	652.0700.S * INSTALL CONDUIT INTO EXISTING ITEM EACH
CATEGORY 0010							
STH 23 & CTH VVV							
	CB1		PB1	--	45	--	--
	PB1		SB14	20	--	--	1
	PB1		PB2	--	--	35	--
	PB1		SB16	40	--	--	1
	PB2		SB1	10	--	--	1
	PB2		SB2	5	--	--	--
	PB2		PB3	10	--	--	1
	PB1		PB6	--	--	195	--
	PB6		PB7	--	90	--	--
	PB7		PB8	--	--	50	--
	PB8		PB9	40	--	--	--
	PB9		SB3	10	--	--	--
	PB8		PB10	--	--	75	--
	PB10		SB4	30	--	--	--
	PB10		PB11	--	45	--	--
	PB11		SB5	15	--	--	--
	PB11		PB12	30	--	--	--
	PB12		SB6	130	--	--	--
	SB6		PB13	65	--	--	1
	PB11		PB14	--	--	120	--
	PB14		SB7	--	25	--	--
	PB14		PB15	--	60	--	--
	PB15		PB16	--	--	45	--
	PB16		SB8	5	--	--	--
	PB15		PB17	--	--	115	--
	PB17		PB18	30	--	--	1
	PB19		SB10	5	--	--	1
	PB17		PB20	--	--	100	--
	PB20		PB21	--	85	--	--
	PB21		PB22	--	--	110	--
	PB22		PB23	10	--	--	--
	PB23		SB11	30	--	--	--
	PB22		PB24	--	45	--	--
	PB24		PB25	225	--	--	1
	PB24		SB12	20	--	--	--
	PB24		PB26	--	--	100	--
	PB26		SB13	--	20	--	--
	PB26		CB1	--	60	--	--
CATEGORY 0010 TOTAL				730	475	945	8

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

3

TRAFFIC SIGNAL STRUCTURES

LOCATION	STATION	OFFSET	L/R	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0315 POLES TYPE 4 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.059 TROMBONE ARMS 20-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	659.1120 LUMINAIRES UTILITY LED B EACH	SPV.0060.01 SALVAGE AND REINSTALL LIGHTING ASSEMBLY EACH
1430-18-73 CAT 0010															
SB2	976+88.1'	76.5'	LT	1	--	1	--	--	--	--	1	--	--	--	--
SB4	977+79.0'	38.6'	LT	1	--	1	--	--	--	--	1	--	--	--	--
SB5	977+98.5'	16.8'	LT	--	1	--	1	--	1	--	--	--	2	2	--
SB6	979+65.5'	19.5'	LT	--	1	--	1	--	--	--	--	--	--	--	1
SB8	977+68.3'	20.7'	RT	1	--	1	--	--	--	1	--	--	--	--	--
SB10	976+94.8'	19.0'	RT	--	1	--	1	1	--	--	--	1	--	--	--
SB11	976+82.6'	16.1'	LT	1	--	1	--	--	--	--	1	--	--	--	--
SB12	976+65.3'	37.6'	LT	--	1	--	1	--	1	--	--	--	2	2	--
TOTALS				**4**	**4**	**4**	**4**	**1**	**2**	**1**	**3**	**1**	**4**	**4**	**1**

TRAFFIC SIGNAL LOOP DETECTORS

LOCATION / LOOP NO.	STATION **	OFFSET	L/R	SIZE FT X FT	NO. OF TURNS	INSTALLATION METHOD	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010									
STH 23 & CTH VVV									
11	976+21.5	26.1'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	306	110
12	976+49.6	26.6'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	69	207	165
13	976+77.6	26.6'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	69	207	165
21	-	-	-	- X -	-	EXISTING	--	--	538
31	-	-	-	- X -	-	EXISTING	--	--	381
32	-	-	-	- X -	-	EXISTING	--	--	381
41	-	-	-	- X -	-	EXISTING	--	--	168
42	-	-	-	- X -	-	EXISTING	--	--	109
43	-	-	-	- X -	-	EXISTING	--	--	109
51	978+41.2	26.8'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	216	387
52	978+13.2	26.6'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	216	387
53	977+85.2	26.1'	LT	6 X 20	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	68	204	305
61	-	-	-	- X -	-	EXISTING	--	--	315
71	-	-	-	- X -	-	EXISTING	--	--	133
72	-	-	-	- X -	-	EXISTING	--	--	120
73	-	-	-	- X -	-	EXISTING	--	--	133
74	-	-	-	- X -	-	EXISTING	--	--	120
81	-	-	-	- X -	-	EXISTING	--	--	471
CATEGORY 0010 TOTAL							452	1,356	4,497

* ADDITIONAL QUANTITY FOUND ELSEWHERE

** LOCATION IS TO THE FRONT CENTER OF DETECTOR LOOP & FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

MONOTUBE STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	657.0356 POLES TYPE 12 OVER HEIGHT BLACK EACH	657.0345 POLES TYPE 9 BLACK EACH	657.0525 MONOTUBE ARMS 25-FT BLACK EACH	657.0540 MONOTUBE ARMS 40-FT BLACK EACH	657.0545 MONOTUBE ARMS 45-FT BLACK EACH
1430-18-73 CAT 0010										
SB3	977+58.3'	82.6'	LT	1	--	--	1	1	--	--
SB7	978+31.3	33.0'	RT	--	1	1	--	--	--	1
SB13	976+25.6	83.8'	LT	--	1	1	--	--	1	--
TOTALS				**1**	**2**	**2**	**1**	**1**	**1**	**1**

TRAFFIC SIGNAL HEADS

LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH
CATEGORY 0010 STH 23 & CTH VVV				
	SB1	7	1	--
	SB2	22	--	1
	SB3	1	1	--
		16	--	1
		19	1	--
		20	1	--
		23	--	1
	SB4	17	--	1
	SB5	4	--	1
	SB7	13	1	--
		14	1	--
	SB8	10	1	--
		18	1	--
	SB9	21	--	1
	SB10	5	--	1
		9	1	--
		12	1	--
	SB11	6	--	1
	SB12	15	--	1
	SB13	2	1	--
		3	1	--
CATEGORY 0010 TOTAL			12	9

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

LOCATION	FROM	-	TO	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF
CATEGORY 0010 STH 23 & CTH VVV							
	CB1	-	SB6	--	--	505	--
	CB1	-	SB1	101	--	--	101
	CB1	-	SB2	98	--	--	--
	CB1	-	SB3	--	323	--	--
	CB1	-	SB4	340	--	--	--
	CB1	-	SB5	359	--	359	--
	CB1	-	SB6	503	--	--	--
	CB1	-	SB7	444	--	--	--
	CB1	-	SB8	478	--	--	--
	CB1	-	SB9	393	--	--	--
	CB1	-	SB10	441	--	--	--
	CB1	-	SB11	201	--	--	--
	CB1	-	SB12	132	--	132	--
	CB1	-	SB13	69	--	--	69
	CB1	-	SB14	--	--	86	--
	SB1	-	SB2	--	--	--	40
	SB2	-	SB14	--	--	--	120
	SB14	-	SB3	--	--	--	347
	SB3	-	SB4	--	--	--	174
	SB4	-	SB5	--	--	--	103
	SB5	-	SB6	--	--	208	208
	SB6	-	SB7	--	--	--	296
	SB7	-	SB8	--	--	--	155
	SB8	-	SB9	--	--	--	209
	SB9	-	SB10	--	--	--	89
	SB10	-	SB11	--	--	--	369
	SB11	-	SB12	--	--	--	133
	SB12	-	SB13	--	--	--	127
CATEGORY 0010 TOTAL				3559	323	1290	2540

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

LOCATION	FROM SIGNAL BASE	- TO SIGNAL HEAD	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
CATEGORY 0010				
STH 23 & CTH VVV				
	SB1	7	19	--
	SB2	22	22	--
	SB3	1	21	--
		16	22	--
		19	40	--
		20	21	--
		23	51	--
	SB4	17	22	--
	SB5	4	22	--
		LUMINAIRE	--	234
	SB6	LUMINAIRE	--	234
	SB7	13	70	--
		14	60	--
	SB8	10	19	--
		18	19	--
	SB9	8	21	--
		11	21	--
		21	22	--
	SB10	5	22	--
		9	45	--
		12	21	--
	SB11	6	22	
	SB12	15	22	
		LUMINAIRE	--	234
	SB13	2	65	--
		3	55	--
CATEGORY 0010 TOTAL			724	702

TRAFFIC SIGNAL CONTROL

LOCATION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STH 23 & CTH VVV) LS	SPV.0105.02 FURNISH AND INSTALL TRAFFIC SIGNAL CABINET AND EQUIPMENT LS
CATEGORY 0010			
STH 23 & CTH VVV			
CB1	1	1	1
CATEGORY 0010 TOTAL	1	1	1

CONSTRUCTION STAKING

LOCATION	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (1430-18-73) LS
CATEGORY 0010	
PROJECT	1
CATEGORY 0010 TOTAL	1

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE (STH 23 & CTH VVV) LS
CATEGORY 0010	
STH 23 & CTH VVV	1
CATEGORY 0010 TOTAL	1

REMOVE TRAFFIC SIGNALS

LOCATION	SPV.0105.01 SALVAGE TRAFFIC SIGNALS (STH 23 & CTH VVV) LS
CATEGORY 0010	
STH 23 & CTH VVV	1
CATEGORY 0010 TOTAL	1

TEMPORARY TRAFFIC SIGNALS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS (STH 23 & CTH VVV) LS
CATEGORY 0010	
STH 23 & CTH VVV	1
CATEGORY 0010 TOTAL	1

3

INTERCONNECT FIBER OPTIC COMMUNICATIONS EQUIPMENT (1 OF 2)

LOCATION	SPV.0105.03 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET (STH 23 & CTH VVV) LS
CATEGORY 0010	
STH 23 & CTH VVV	1
CATEGORY 0010 TOTAL	1

INTERCONNECT FIBER OPTIC COMMUNICATIONS EQUIPMENT (2 OF 2)

LOCATION	*** ST-ST SINGLE MODE FIBER JUMBER (CONTRACTOR FURNISHED) EACH	*** CAT-5E CABLE JUMPER (CONTRACTOR FURNISHED) LS	*** INSTALL 12-COUNT FIBER OPTIC TERMINATION PANEL (STATE FURNISHED) LF	678.0600 INSTALL ETHERNET SWITCHES LS
CATEGORY 0010				
STH 23 & CTH VVV	1	1	1	1
CATEGORY 0010 TOTAL	1	1	1	1

*** INCIDENTAL TO THE INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET (LOCATION) BID ITEM

3

INTERCONNECT FIBER OPTIC SYSTEM TESTING AND DOCUMENTATION

LOCATION	SPV.0105.04 TRAFFIC SIGNAL SYSTEMS INTEGRATOR (1430-18-73) LS	678.0500 COMMUNICATION SYSTEM TESTING LS
CATEGORY 0010		
PROJECT	1	1
CATEGORY 0010 TOTAL	1	1

INTERCONNECT PULLBOXES AND VAULTS

PULL BOX NUMBER	STATION	OFFSET	L/R	653.0164 * PULL BOX NON-CONDUCTIVE 24X42-INCH EACH	673.0105 COMMUNICATION VAULT TYPE 1 EACH
CATEGORY 0010					
CV1	976+74.0	114.8	LT	--	1
ICPB1	977+68.0	122.8'	LT	1	--
ICPB2	978+10.8	104.0'	LT	1	--
ICPB3	978+12.3	16.8'	LT	1	--
ICPB4	978+13.0	45.3'	RT	1	--
CATEGORY 0010 TOTAL				4	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

3

INTERCONNECT FIBER OPTIC TERMINATION

LOCATION	678.0300 FIBER OPTIC SPLICE EACH
CATEGORY 0010	
EXCV1	4
CATEGORY 0010 TOTAL	4

INTERCONNECT CONDUIT

FROM	-	TO	652.0225 * CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0605 CONDUIT SPECIAL 2-INCH LF	652.0700.S * INSTALL CONDUIT INTO EXISTING ITEM EACH
CATEGORY 0010					
CB1	-	CV1	25	--	--
CV1	-	ICPB1	--	95	--
ICPB1	-	ICPB2	50	--	--
ICPB2	-	ICPB3	--	85	--
ICPB3	-	ICPB4	--	65	--
ICPB4	-	EXCV1	305	--	1
CATEGORY 0010 TOTAL			380	245	1

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

3

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1430-18-21		
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT OF WAY REQUIRED FOR

ROSENDALE - FOND DU LAC

STH 26 - N. ROLLING MEADOWS DR/CTH VVV

STH 23 FOND DU LAC COUNTY

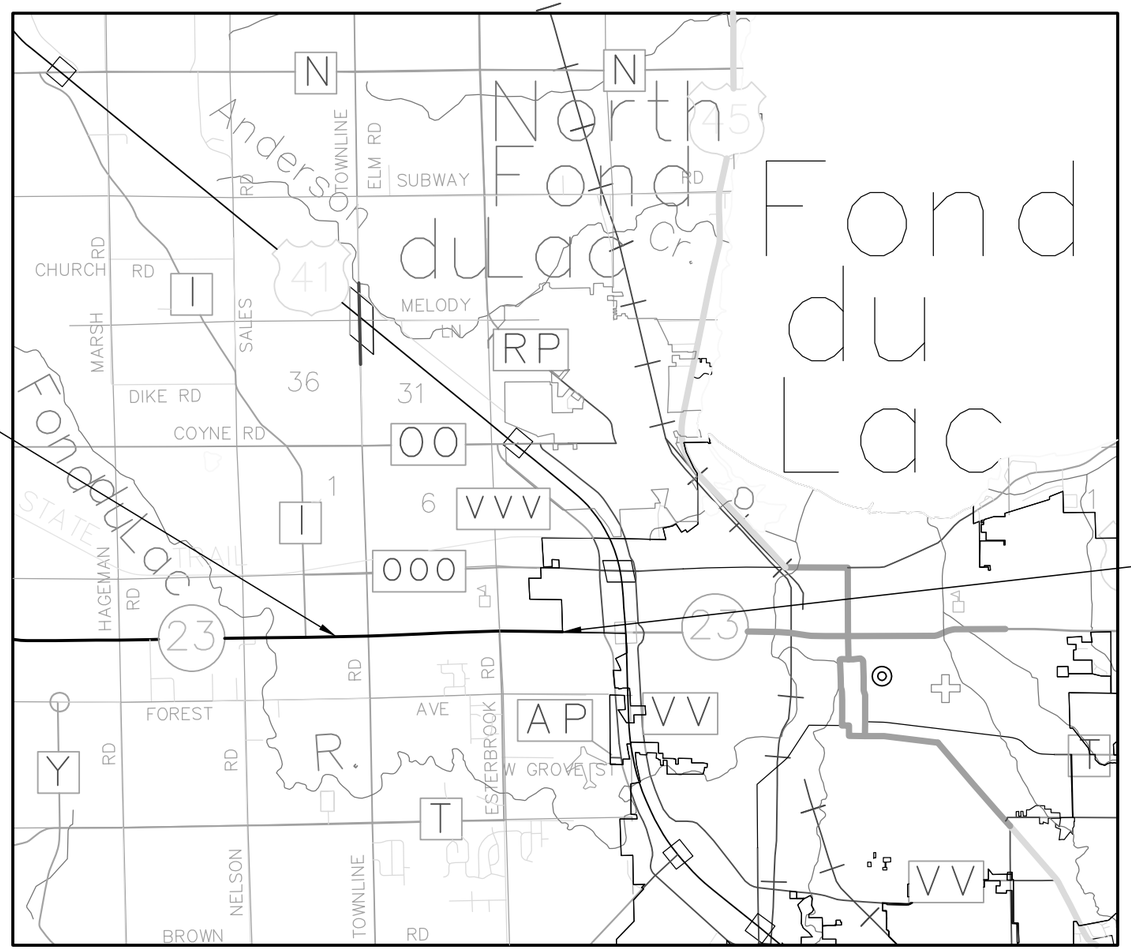
4

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR		
ACRES	AC		
CHORD BEARING	CH BRG	SET R/W MONUMENT W/CAP (1-¼" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	
CHORD DISTANCE	CH DIS		
DEED	(D)		
DOCUMENT	DOC	FOUND TYPE 2 MON.	
EAST BOUND	EB	FOUND 3/4" REBAR	
GAS VALVE	GV		
INLET	IL	SET P.K. NAIL	
LENGTH OF CURVE	L		
MANHOLE	MH	PROPOSED R/W	
MONUMENT	MON	BOUNDARY POINT	PRW000
NORTH BOUND	NB		
PAGE	PG	CORPORATE LIMITS	
PERMANENT	PERM	EXISTING R/W	
PERMANENT LIMITED EASEMENT	PLE	SECTION LINE	
PRIVATE DRIVEWAY	PD	QUARTER LINE	
PROPERTY LINE	PL	SIXTEENTH LINE	
RADIUS	RAD	PROPOSED OR NEW R/W LINE	
REFERENCE LINE	℄	PROPOSED EASEMENT LINE	
REMAINING	REM		
RIGHT OF WAY	R/W	PARCEL NUMBER	00
SECTION	SEC		
SECTION LINE	℄	UTILITY NUMBER	000
FOUND IRON PIPE	IP		
STATION	STA	SIGN NUMBER	0-0
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	DBI	PROPERTY LINE	PL
VOLUME	VOL	LOT, TIE AND OTHER MINOR DASHED LINES	
ADJOINING LANDS WITH SAME OWNER	00'	ACCESS RESTRICTED (By Previous Project Control)	
PARALLEL TO LINE		ACCESS RESTRICTED (By Acquisition)	
BUILDING TO BE RAZED		NO ACCESS (By Statutory Authority)	
FEE ACQUISITION	VARIOUS HATCHING	LIMITED EASEMENT (Temporary)	
BEGIN POINT	BP	LIMITED EASEMENT (Permanent)	
END POINT	EP		

CONVENTIONAL UTILITY SYMBOLS

WATER	W		
GAS	G		
TELEPHONE	T		
OVERHEAD TRANSMISSION LINES	OH		
ELECTRIC	E		
CABLE TELEVISION	TV		
FIBER OPTIC	FO		
SANITARY SEWER	SAN		
STORM SEWER	SS		
	NON-COMPENSABLE	COMPENSABLE	
POWER POLE			
TELEPHONE POLE			
TELEPHONE PEDESTAL			
ELECTRIC TOWER			



BEGIN RELOCATION ORDER
PROJECT 1401-18-21
STATION 867+48.00

END RELOCATION ORDER
PROJECT 1430-18-21
STATION 980+35.00

NOTES:

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO COMPLETION OF PROJECT.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATES REFERENCE SYSTEM COORDINATES (WISCRS), FOND DU LAC COUNTY, NAD 83 (2007) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S); T026-K25)

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S)/DOC.#; T026-K25)

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

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

FEE SIMPLE TO ALL THOSE EXISTING LANDS OF THE GRANTOR CURRENTLY USED FOR HIGHWAY PURPOSES, DESIGNATED AS EXISTING RIGHT OF WAY, WHETHER ACQUIRED BY SEPARATE CONVEYANCE OR OTHERWISE, BOUND BY THE TRAVERSE OF THE COURSE TABLE OF NEW RIGHT OF WAY AS SHOWN ON THE SAID TRANSPORTATION PROJECT PLAT.

LAYOUT

0 1.0 MI.

SCALE

TOTAL NET LENGTH OF CENTERLINE = 1.00 MI.

GN

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:

DATE: _____

CURT VA...

GN

0 50 100

GRAPHIC SCALE, FEET

SE 1/4 - NE 1/4

TOWN

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	*ALLIANT ENERGIES*	*RELEASE OF RIGHTS*

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE R/W ACRE(S) OR (S.F.) REQUIRED			T.L.E. AREA
			NEW	EXISTING	TOTAL	
1	*THOMAS G. FORD, MICHAEL D. FORD, ETAL*	*TLE*	-	-	-	*0.015*
			-	-	-	-
			-	-	-	-

POINT	STATION	OFFSET	COORDINATES
SEC3	00+00.00	0.00'	Y=388319.072 X=799604.792
SEC1	26+71.91	0.00'	Y=388365.503 X=802276.296
204	27+27.61	107.23'	Y=388256.430 X=802328.287
TLE6	27+30.68	165.84'	Y=388197.748 X=802329.354
DB15	27+49.59	0.00'	Y=388362.841 X=802353.937
TLE7	27+49.59	104.68'	Y=388258.220 X=802350.350
SEC2	53+95.59	0.00'	Y=388272.184 X=804998.379

R/W REFERENCE LINE
COURSE TABLE

STATION	Y	X	DIRECTION	DISTANCE
00+00.00	388319.072	799604.792		
			N89°00'15"E	2671.91'
26+71.91	388365.503	802276.296		
			S88°02'12"E	2723.68'
53+95.59	388272.184	804998.379		

SW 1/4 - NW 1/4

ESTERBROOK ROAD

SE-NE SW-NW

PI: 26+71.91

OF

OH

G

DB15

204

TLE7

W

SAN

100

1

TLE "A" FOR SLOPING

TLE6

LOT 1
CSM#7545
VOL.55 PGS.51-51C
DOC.#958902

TAX ID#T09-15-17-08-10-004-00

TRANS 233 RESTRICTIONS APPLY
20-0023-0112-99

EASEMENT
FOR WATER MAIN
VOL. 1335 PG. 844
DOC.#624583

EASEMENT
FOR SIGN
DOC.#959487

DRAINAGE EASEMENT
AGREEMENT
DOC.#959488

20 NW-SW 25 NE-SE 30

STH 23

NE-SE N89° 00' 15"E 2671.91' S/L

NW-SW S88° 02' 12"E 2723.68' S/L

SEC3
FOND DU LAC CO.
CHRISNIK SPIKE
Y=388319.072
X=799604.792

T15N R17E 7

SEC1
FOND DU LAC CO.
CHRISNIK SPIKE
Y=388365.503
X=802276.296

T15N R17E 7 8

SEC2
FOND DU LAC CO.
CHRISNIK SPIKE
Y=388272.184
X=804998.379

T15N R17E 8

NE 1/4 - SE 1/4

NW 1/4 - SW 1/4

RIVERVIEW

	DATE	1" = 100'	HWY:	STATE R/W PROJECT NUMBER: 1430-18-21	PLAT SHEET NO: 4.02	
			COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 100	E

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE R/W ACRE(S) OR (S.F.) REQUIRED			T.L.E. AREA
			NEW	EXISTING	TOTAL	
2	N6688 WRIGHTWAY DRIVE, LLC.	TLE	-	-	-	0.004
3	MARK W. FEUCHT AND BEVERLY J. FEUCHT	TLE	-	-	-	0.005
			-	-	-	-

R/W REFERENCE LINE COURSE TABLE				
STATION	Y	X	DIRECTION	DISTANCE
00+00.00	388319.072	799604.792		
			N89°00'15"E	2671.91'
26+71.91	388365.503	802276.296		
			S88°02'12"E	2723.68'
53+95.59	388272.184	804998.379		

POINT	STATION	OFFSET	COORDINATES
SEC3	00+00.00	0.00'	Y=388319.072 X=799604.792
SEC1	26+71.91	0.00'	Y=388365.503 X=802276.296
TLE9	44+26.64	70.00'	Y=388235.423 X=804027.599
DB16	44+45.17	0.00'	Y=388304.747 X=804048.515
202	44+45.17	70.00'	Y=388234.789 X=804046.116
TLE11	44+46.23	89.98'	Y=388214.788 X=804046.489
DB17	45+25.28	0.00'	Y=388302.003 X=804128.580
201	45+25.28	70.00'	Y=388232.044 X=804126.181
TLE12	45+26.62	95.41'	Y=388206.606 X=804126.656
TLE14	45+44.10	70.00'	Y=388231.399 X=804144.992
SEC2	53+95.59	0.00'	Y=388272.184 X=804998.379

SE 1/4 - NW 1/4

GN

0 50 100

GRAPHIC SCALE, FEET

TOWN

SW-NW

SE-NW

SEC2
FOND DU LAC CO.
CHRISNIK SPIKE
Y=388272.100
X=804998.450

T 15 N
R 17 E
8

OF

SW-NW

NW-SW

40

45

SE-NW

50

NE-SW S88° 02' 12"E 2723.68' S/L

53

EP: 53+95.59

DB16

DB17

TLE9

202

201

TLE14

STH 23

W

SAN

G

OH

2

3

TLE "B" FOR SLOPING

TLE "C" FOR SLOPING

TLE11

TLE12

SEC1
FOND DU LAC CO.
CHRISNIK SPIKE
Y=388365.250
X=802276.330

T 15 N
R 17 E
7 8

LOT 1
CSM#4782
VOL.28 PGS.72-72B
DOC.#570051

LOT 2
CSM#4782
VOL.28 PGS.72-72B
DOC.#570051

LOT 3
CSM#4782
VOL.28 PGS.72-72B
DOC.#570051

WRIGHTWAY DRIVE

NW-SW

NE-SW

TAX ID#T09-15-17-08-09-005-00

TAX ID#T09-15-17-08-09-006-00

FORD DRIVE

RIVERVIEW

NE 1/4 - SW 1/4

	DATE	1" = 100'	HWY:	STATE R/W PROJECT NUMBER: 1430-18-21	PLAT SHEET NO: 4.03	
			COUNTY: FOND DU LAC	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: 101	E

CURVE 1
PI STA = 877+47.76
Y = 388237.458
X = 796726.279
DELTA = 1°52'54"
D = 0°12'00"
T = 470.46'
L = 940.83'
R = 28647.90'
PC STA = 872+77.30
PT STA = 882+18.13

LEGEND

- XXXX — SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

5

5

PC: 872+77.30

S89°44'33"E

870

875

880

CURVE 1

STH 23 R/L

MATCH LINE 882+00.00

BEGIN PROJECT
1430-18-72
STA 867+48.00
Y=388,241.953
X=795,726.529

TOWNLINE RD

T 15 N
12 7
T 16 E R 17 E

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 102	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- XXXX SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

5

5

MATCH LINE 882+00.00

MATCH LINE 897+00.00

PT: 882+18.13

885

890

N88°22'33"E

895

STH 23 R/L

G

OH

OH

OH

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 103	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT

WISDOT/CADDS SHEET 44

LEGEND

- XXXX SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

5

5

MATCH LINE 897+00.00

MATCH LINE 912+00.00

EXISTING R/W

PI: 906+27.35

T 15 N
7
R 17 E

N88°22'33"E

N89°00'15"E

900

905

910

STH 23 R/L

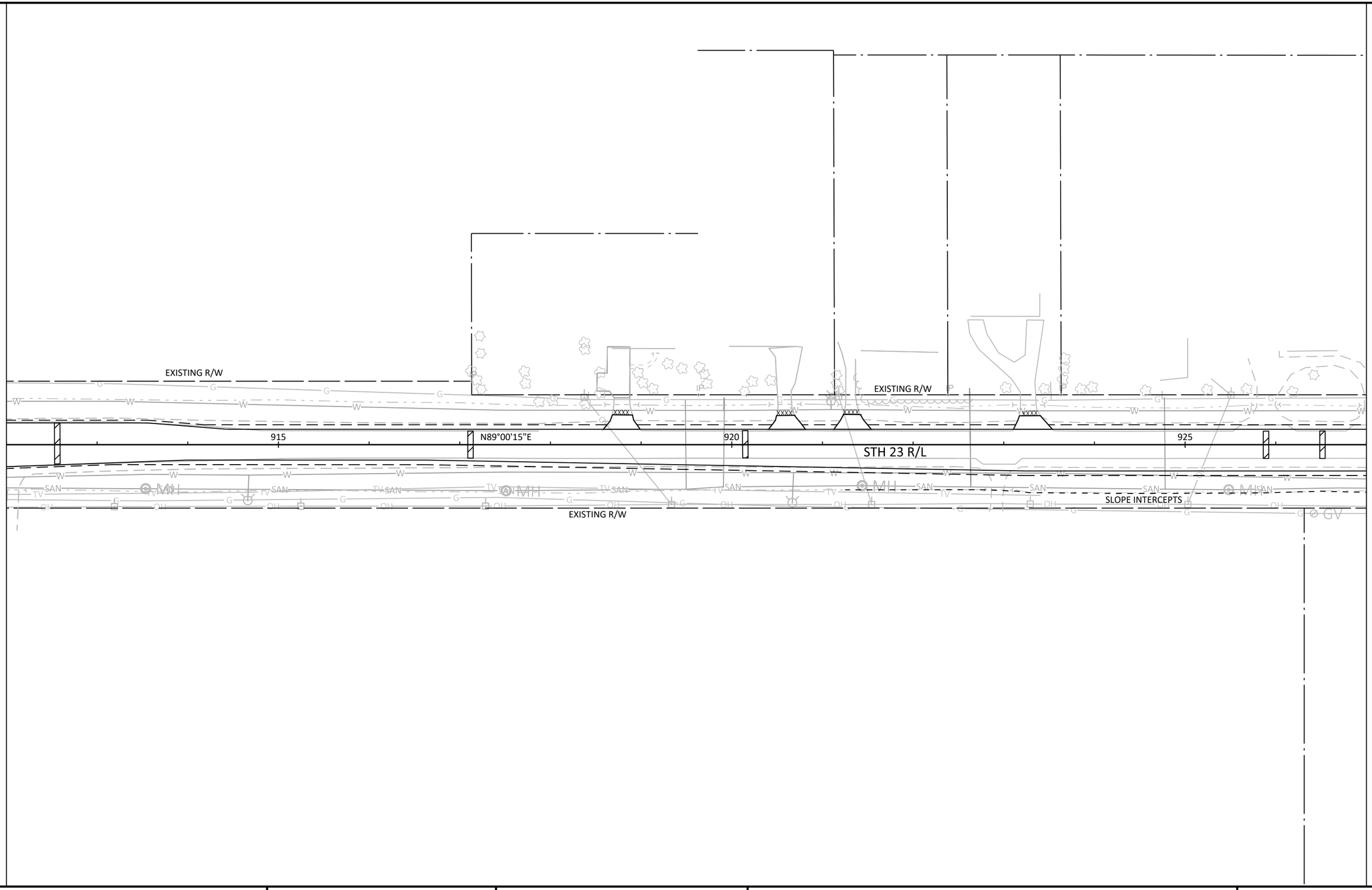
STREBLOW DR

EXISTING R/W

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 104	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT



5

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT

CURVE 2
PI STA = 932+99.25
Y = 388365.503
X = 802276.296
DELTA = 2°57'33"
D = 0°15'00"
T = 591.96'
L = 1183.67'
R = 22918.32'
PC STA = 927+07.29
PT STA = 938+90.95

LEGEND

- XXXX — SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

ESTERBROOK RD

STA 4+16 ESTERBROOK RD/CTH T
REMOVE 1-24" CMCP
CPRC HE-IV 19X30-INCH &
2 AEW HE 19X30-INCH REQ'D

EXISTING R/W

EXISTING R/W

PT: 938+90.95

930

935

940

S88°02'12"E

CURVE 2

STH 23 R/L

MATCH LINE 927+00.00

PC: 927+07.29

SLOPE INTERCEPTS

SLOPE INTERCEPTS

EXISTING R/W

EXISTING R/W

MATCH LINE 942+00.00

STA 3+08 ESTERBROOK RD/CTH T
REMOVE 1-42"X29" CMCP
2 CPRC CLASS IV 30-INCH &
2 CONCRETE MASONRY ENDWALLS REQ'D

TILE

CTH T

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050205-pn
PLOT DATE : 5/10/2018 4:39 PM
PLOT BY : SMITH, JENNIFER B
PLOT NAME :
PLOT SCALE : 1 IN: 100FT
WISDOT/CADDS SHEET 44

LEGEND

- XXXX — SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

5

5

MATCH LINE 942+00.00

MATCH LINE 957+00.00

EXISTING R/W

SLOPE INTERCEPTS

945

S88°02'12"E

950

STH 23 R/L

955

SLOPE INTERCEPTS

EXISTING R/W

MH

TLE

TLE

XXXX

STA 19+42 WRIGHTWAY DR/FORD DR
REMOVE 2-42" CMCP
3 CPRC CLASS IV 30-INCH &
2 CONCRETE MASONRY ENDWALLS REQ'D

WRIGHTWAY DR/FORD DR

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 107 E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050206-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT

WISDOT/CADDS SHEET 44

LEGEND

- XXXX SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

RICKMEYER DR

STA 962+40-964+08
CONCRETE CURB & GUTTER
30-INCH TYPE A

EXISTING R/W

S88°02'12"E

960

PI: 960+22.67

965

STH 23 R/L

S87°45'59"E

970

EXISTING R/W

T 15 N
8
R 17 E

STA 963+22
REMOVE 2-42" CMCP
2 CPRC HE-IV 34X53-INCH &
2 CONCRETE MASONRY ENDWALLS REQ'D
SKEW 21° RHF

MATCH LINE 957+00.00

MATCH LINE 972+00.00

5

5

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 108	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050207-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT

WISDOT/CADDS SHEET 44

LEGEND

- XXXX — SAWING ASPHALT
- REMOVING CONCRETE SURFACE
- REMOVING ASPHALT SURFACE

N

BEGIN PROJECT
1430-18-73
STA 972+50.00
Y=388,224.349
X=806,224.775

EXISTING R/W

N ROLLING MEADOWS DR/CTH VVV

EXISTING R/W

MATCH LINE 972+00.00

S87°45'59"E

975

980

985

STH 23 R/L

END PROJECT
1430-18-73
STA 980+35.00

EXISTING R/W

EXISTING R/W

END PROJECT
1430-18-72
STA 972+50.00

ROLLING MEADOWS DR/CTH VVV

5

5

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	PLAN SHEETS	SHEET 109 E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\050201-PN.DWG
LAYOUT NAME - 050208-pn

PLOT DATE : 5/10/2018 4:39 PM PLOT BY : SMITH, JENNIFER B PLOT NAME : PLOT SCALE : 1 IN: 100FT

WISDOT/CADDS SHEET 44

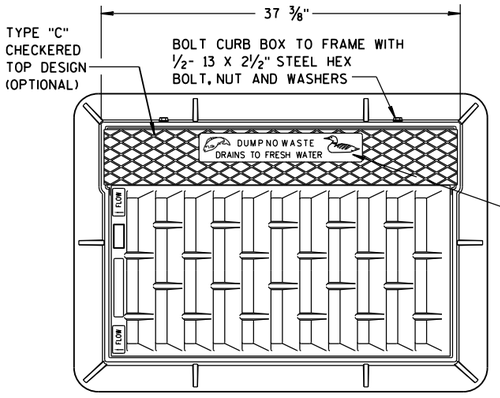
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-14A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-14C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09E12-01E	GENERAL NOTES AND HARDWARE DETAILS FOR OVER HEIGHT TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
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
09H09-02	COMMUNICATION VAULT TYPE 1
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

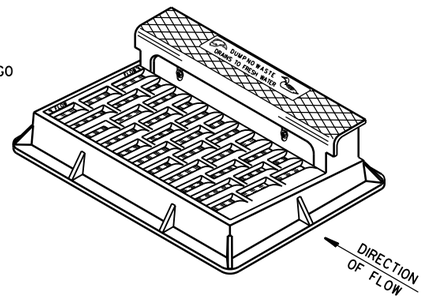
6

Standard Detail Drawing List

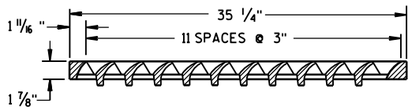
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C21-08	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C27-03A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15C35-03B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-03C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-03	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-06	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

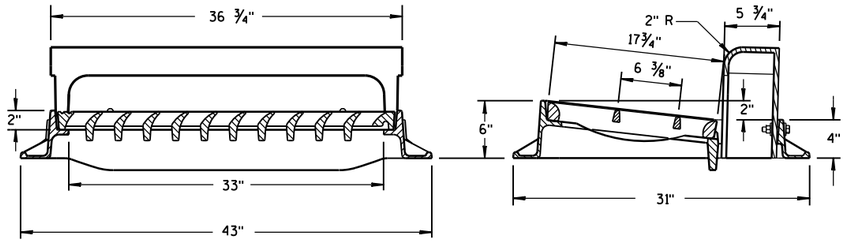


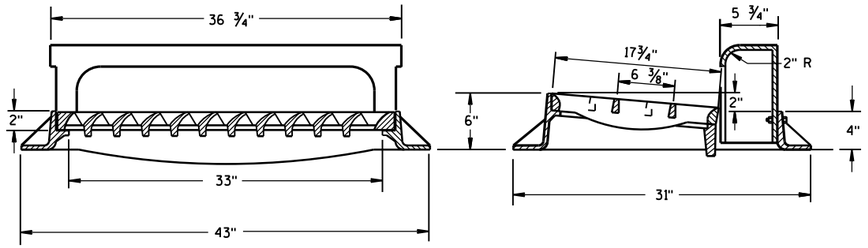
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

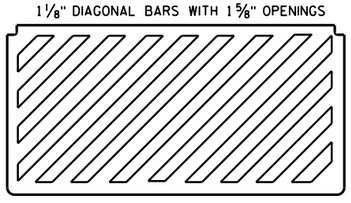






TYPE "H"

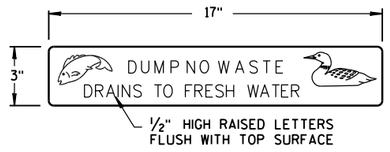
NOTE: EITHER CASTING IS ACCEPTABLE



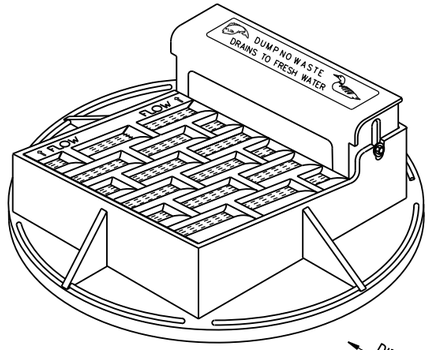
SPECIAL GRATE FOR TYPE "H" COVER

(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"

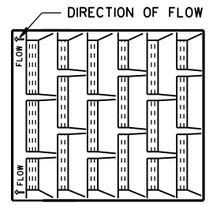
NOTE:
GRATE IS REVERSIBLE.

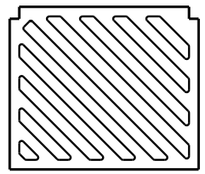
GENERAL NOTES

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.

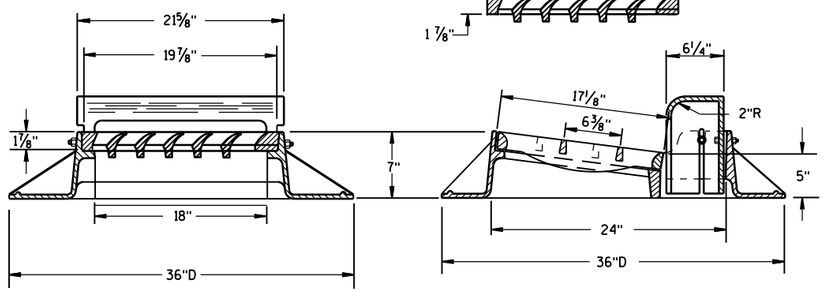




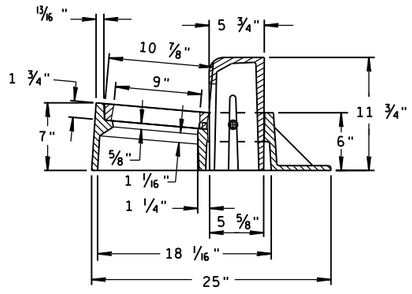
SPECIAL GRATE FOR TYPE "A" COVER

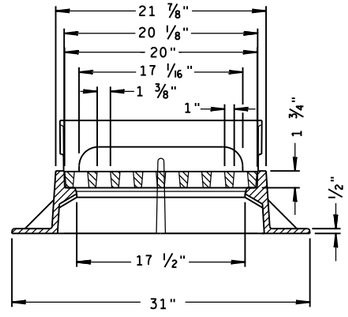
(MEASURES 19 3/4" X 17" X 1 7/8")

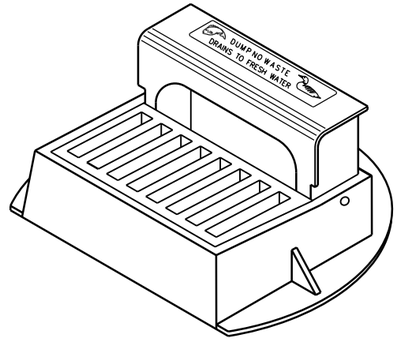
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

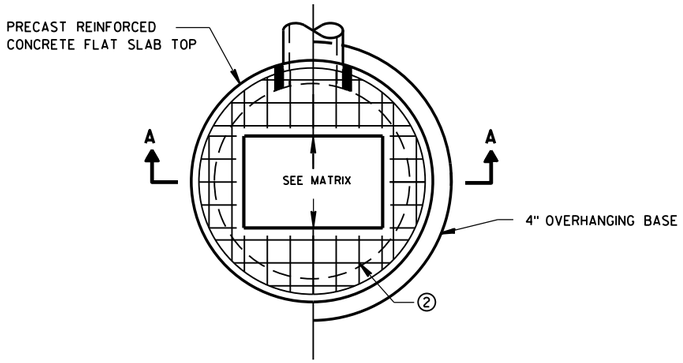
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

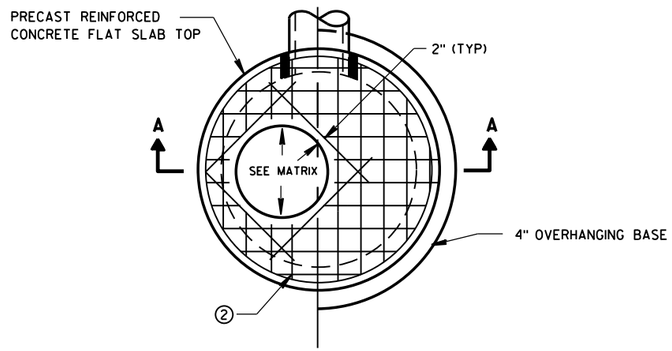
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

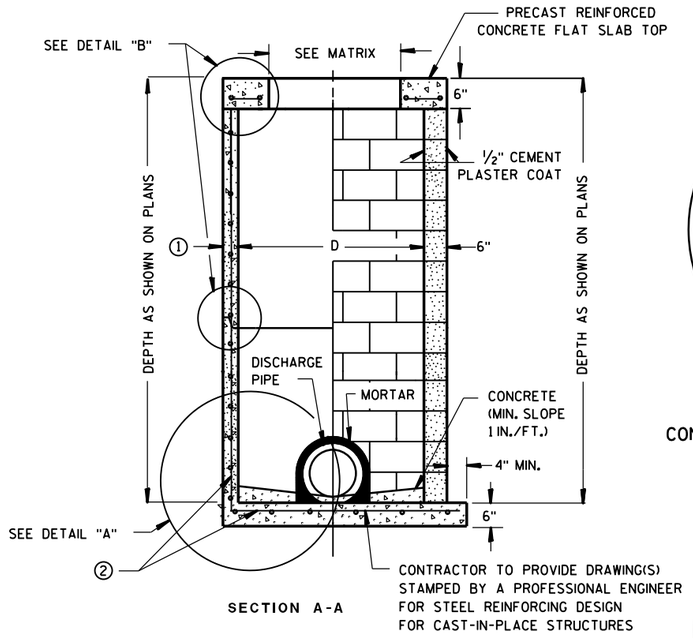
S.D.D. 8 A 5-19a



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

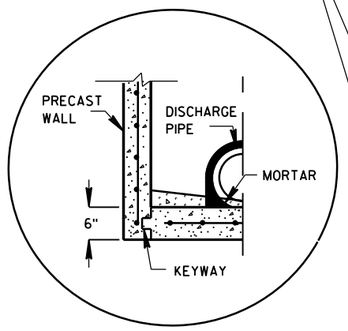


SECTION A-A

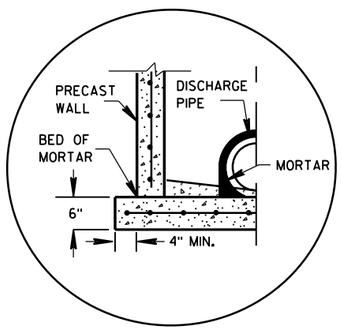
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

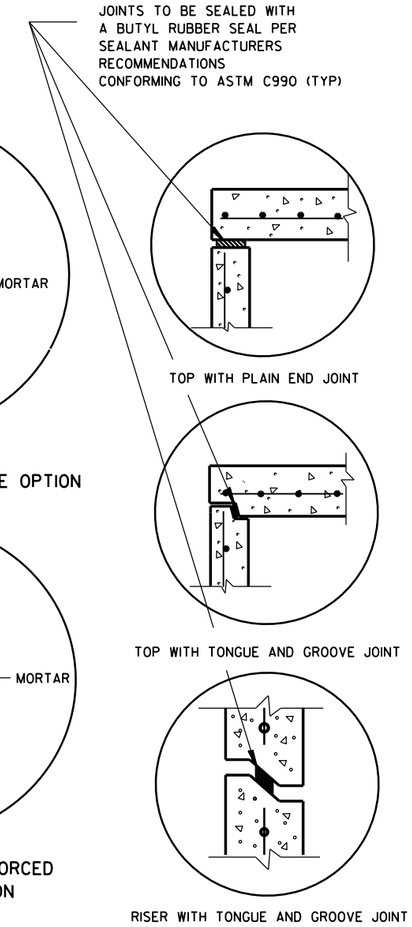


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

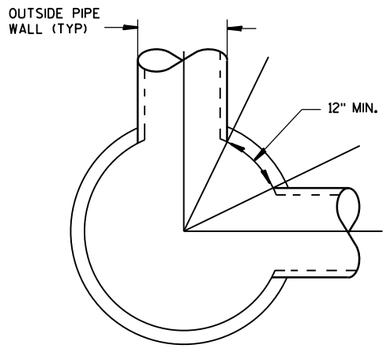
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

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

INLETS 3-FT AND 4-FT DIAMETER

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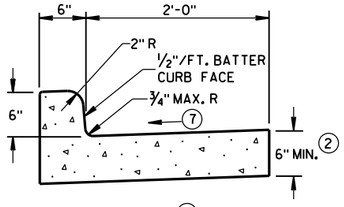
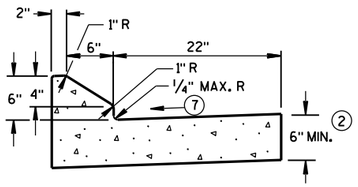
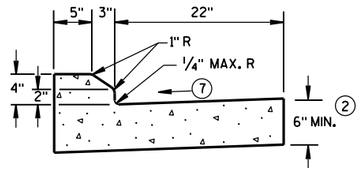
S.D.D. 8 C 6-2



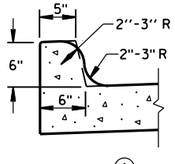
TYPES A (1) & D



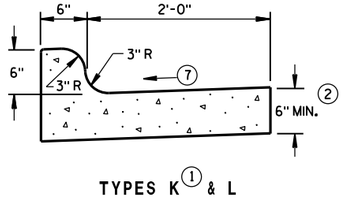
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

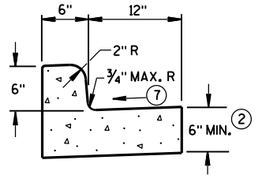


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



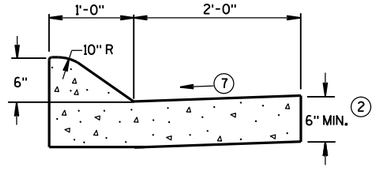
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

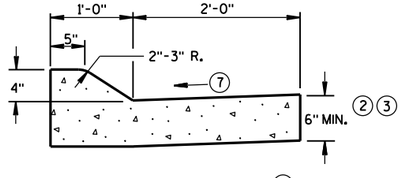


TYPES A (1) & D

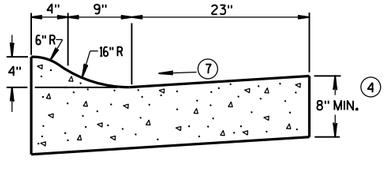
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

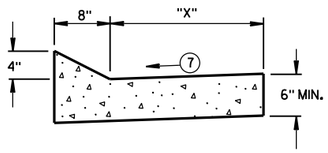


4" SLOPED CURB TYPES A (1) & D



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

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

(5) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

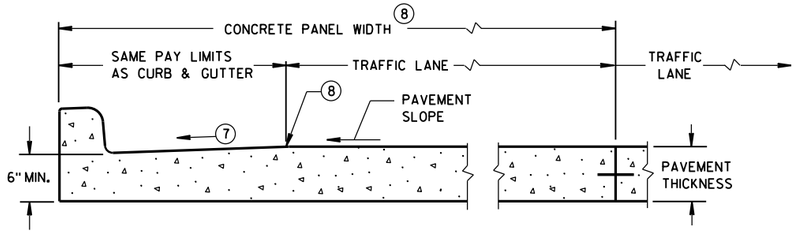
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

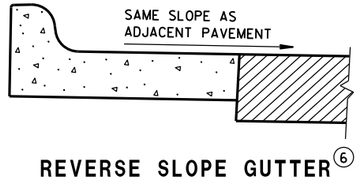
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.

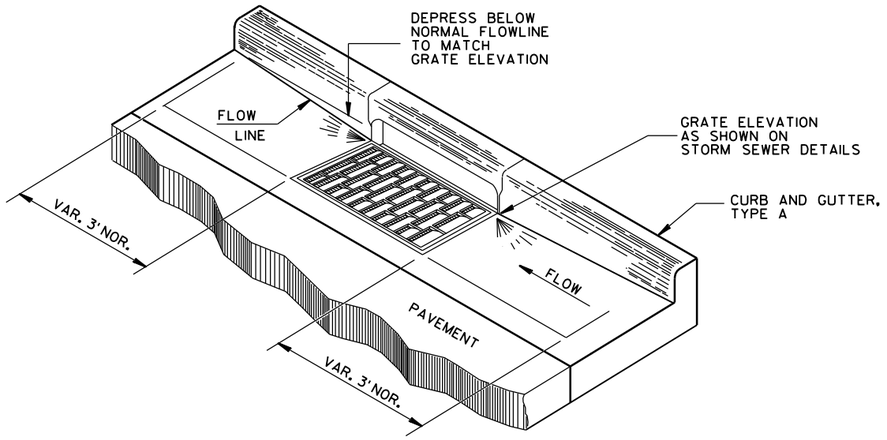


REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

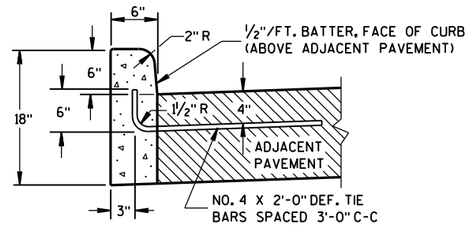
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

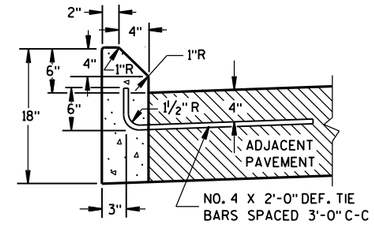
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

(9) REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

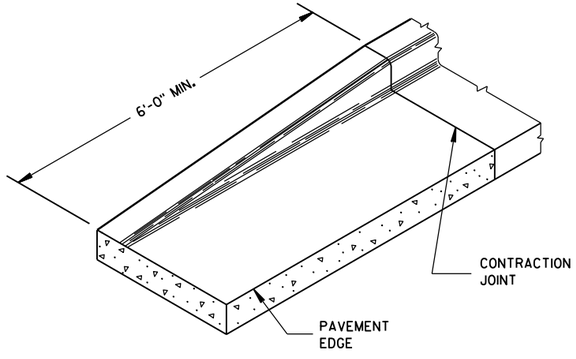


TYPES A(1) & D

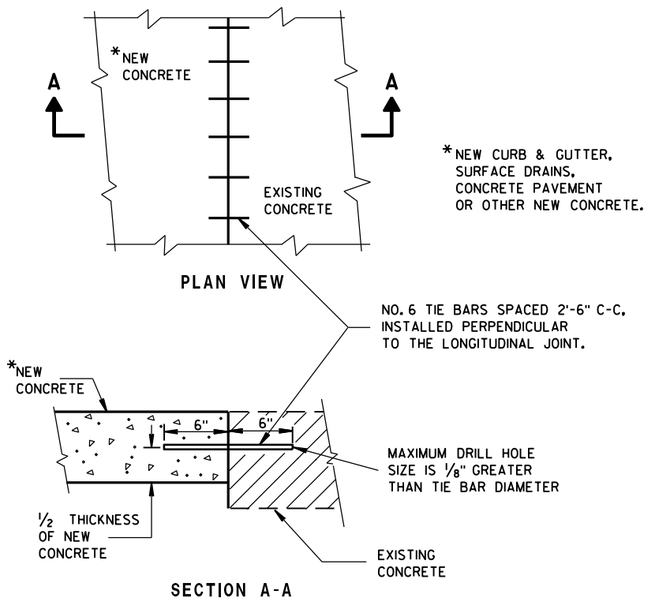


TYPES G(1) & J

CONCRETE CURB

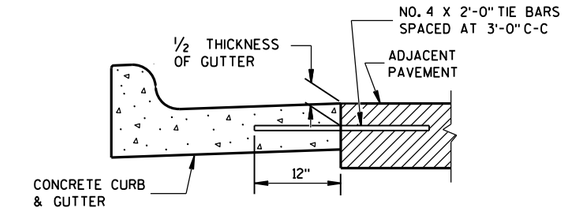


END SECTION CURB & GUTTER

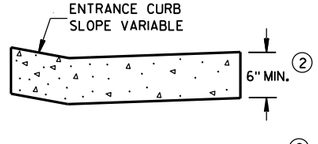


SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
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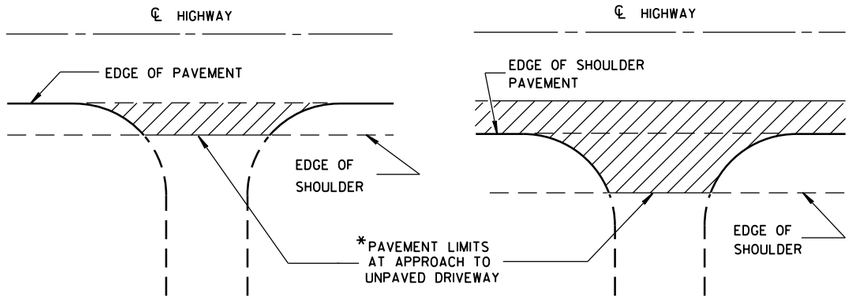
S.D.D. 8 D 1-20b

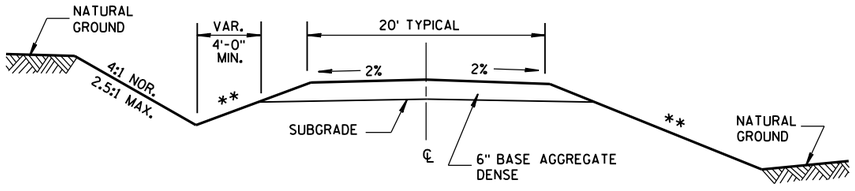


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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

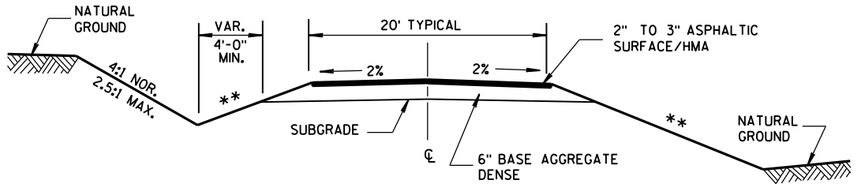


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

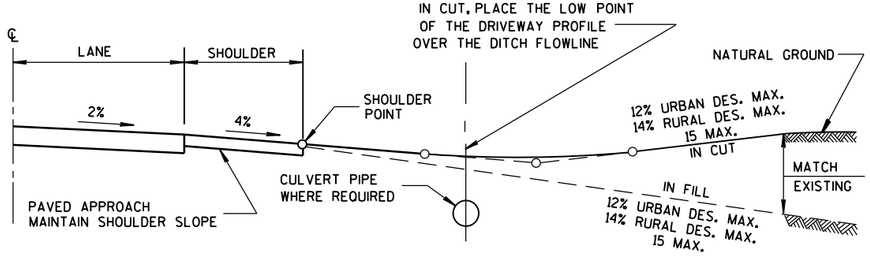
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

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



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
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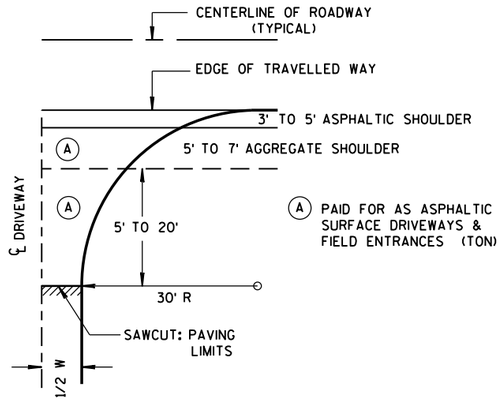
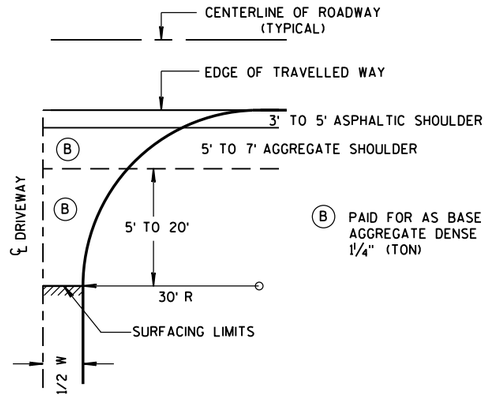


PLAN VIEW
HALF SECTION

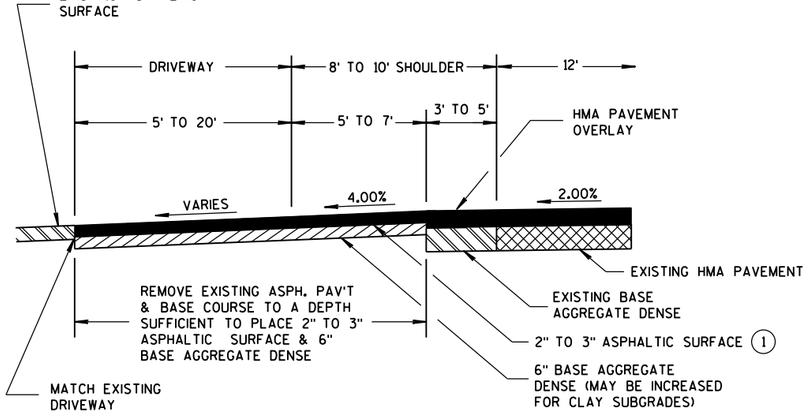
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

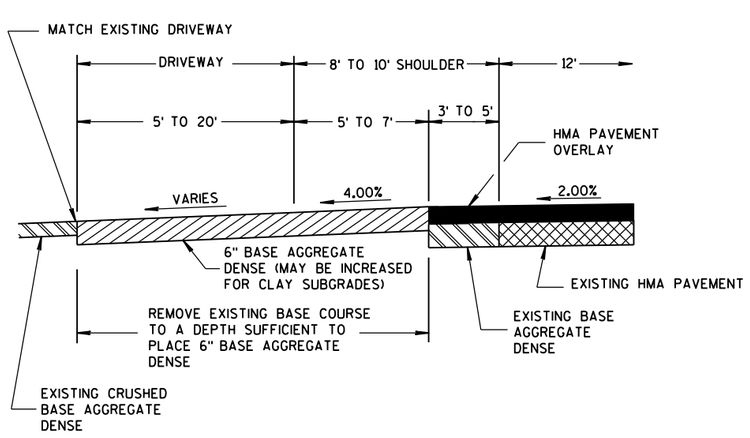
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS UNIT SUPERV — ENT
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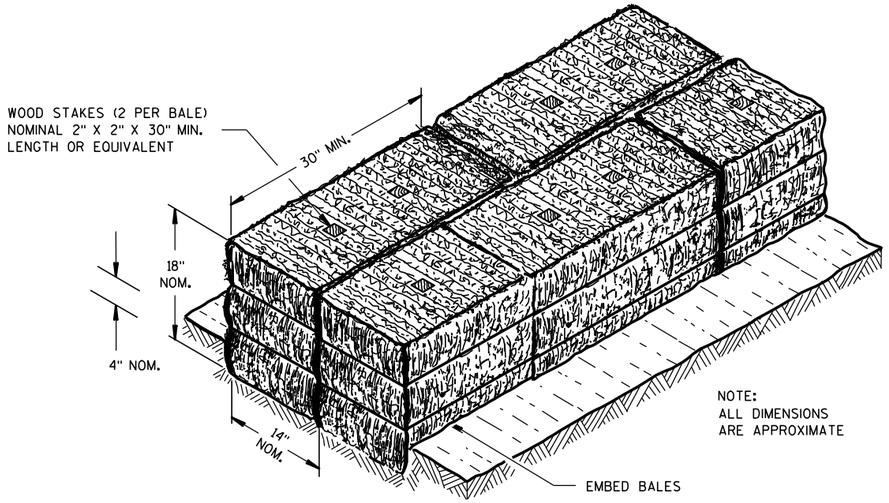
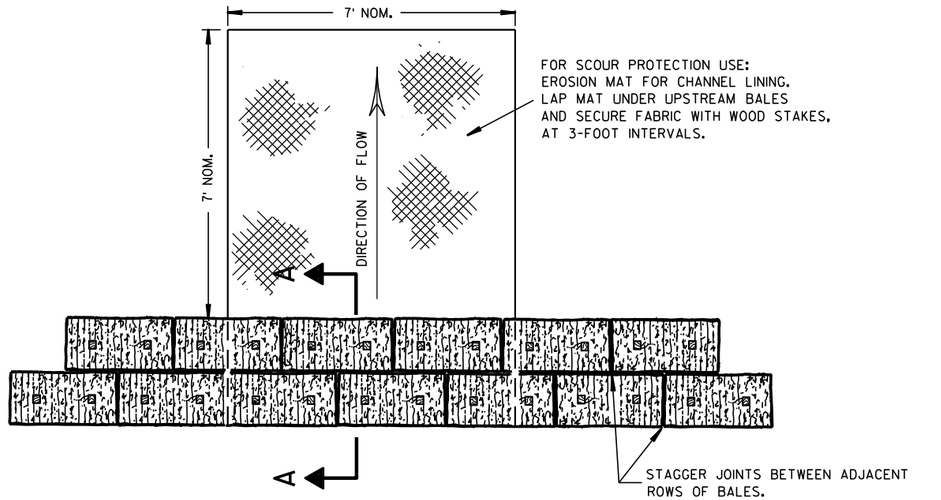
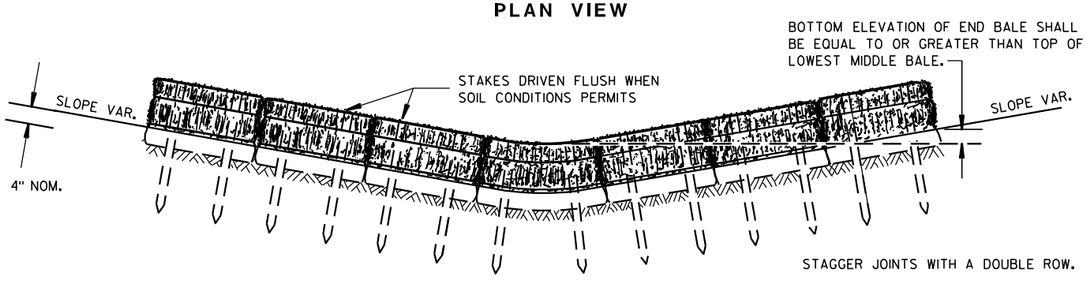
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



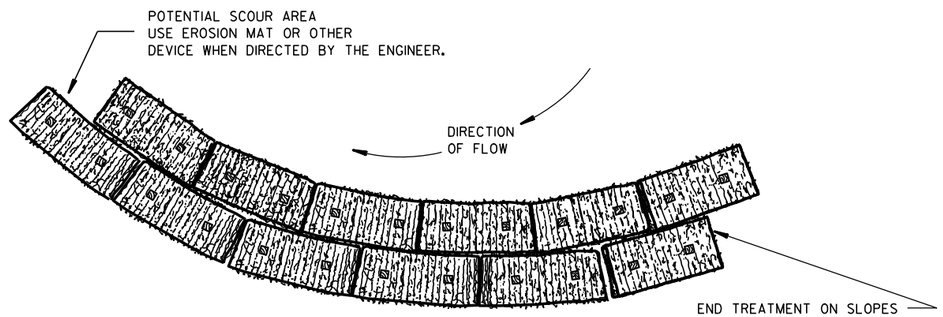
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

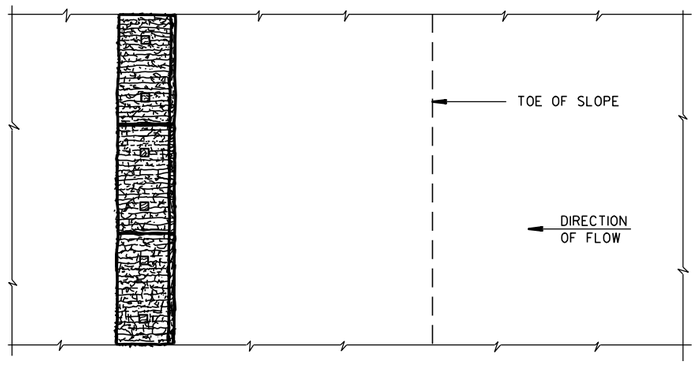
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

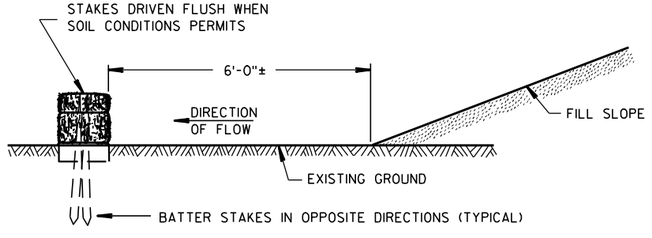


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

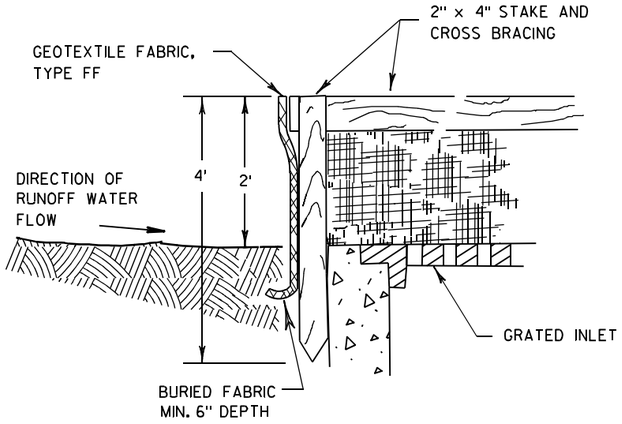
EROSION BALES FOR SHEET FLOW

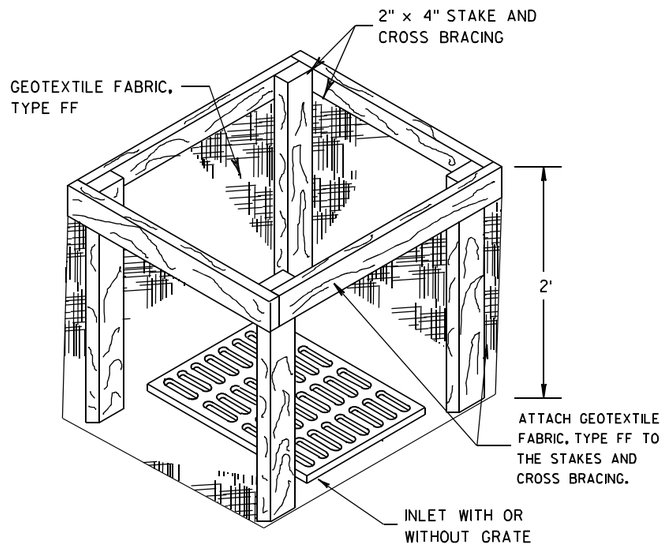
TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

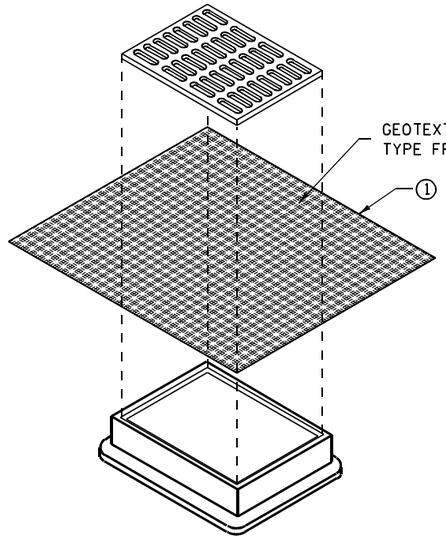
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



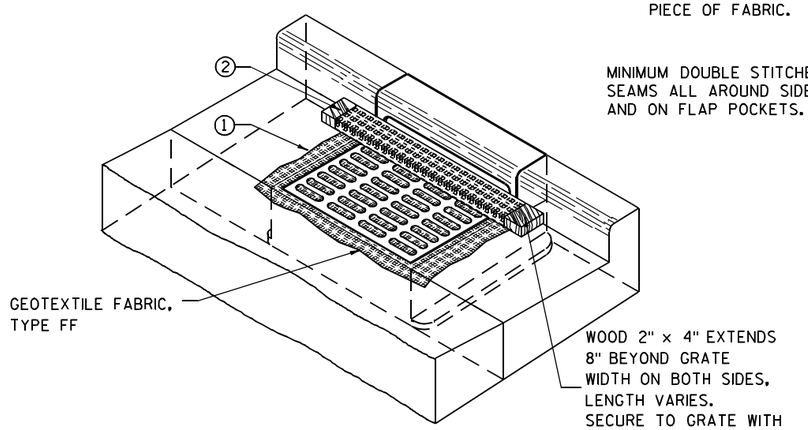


INLET PROTECTION, TYPE A

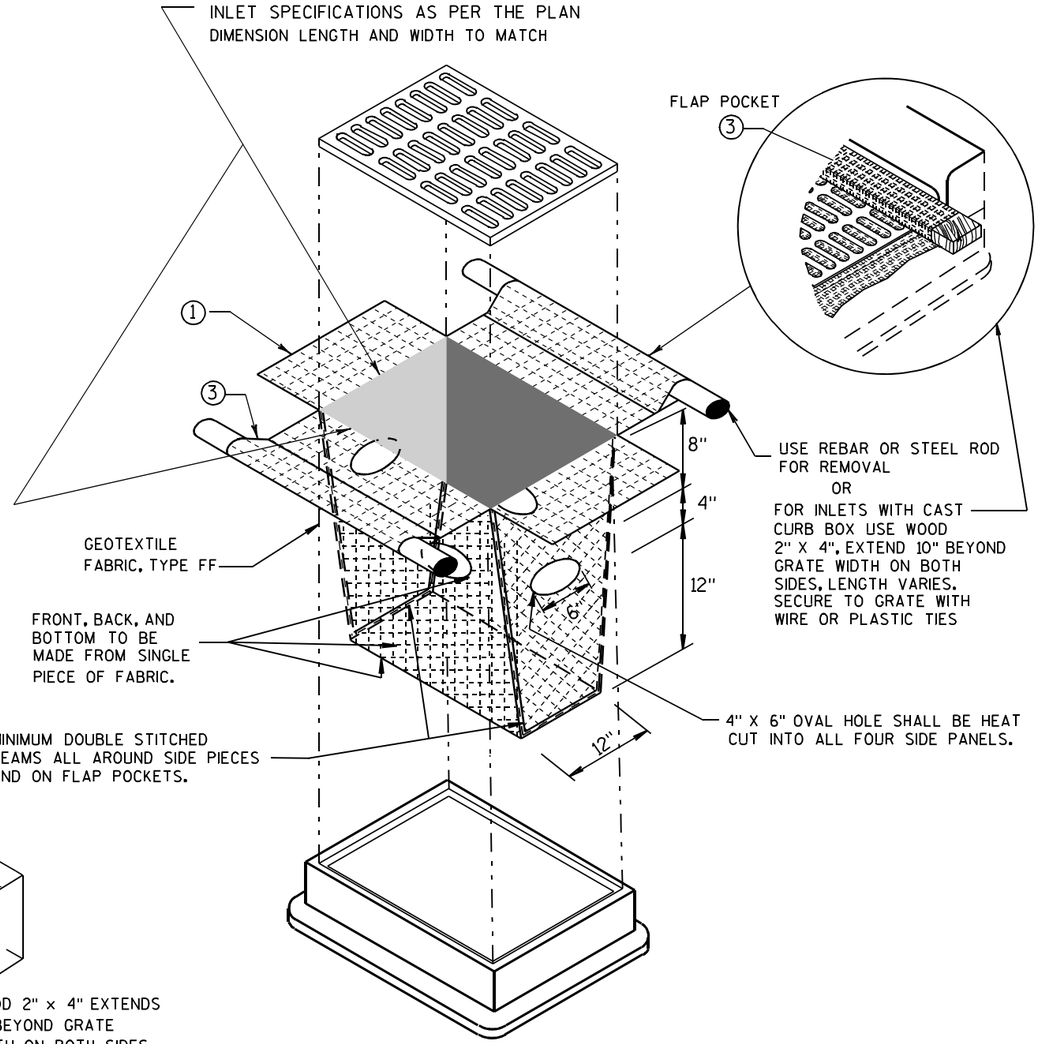


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

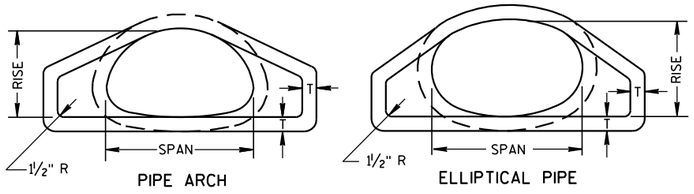
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

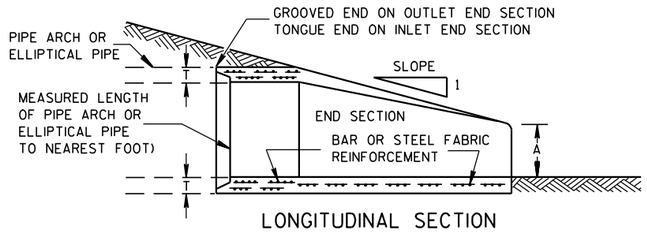
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

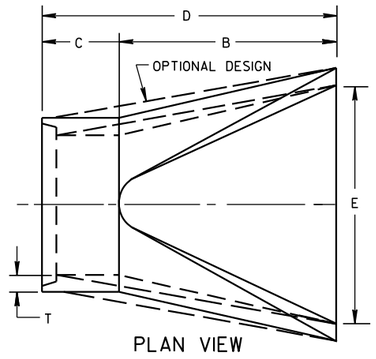
6
S.D.D. 8 E 10-2



END VIEW

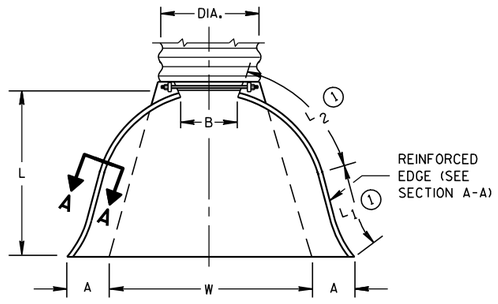


LONGITUDINAL SECTION

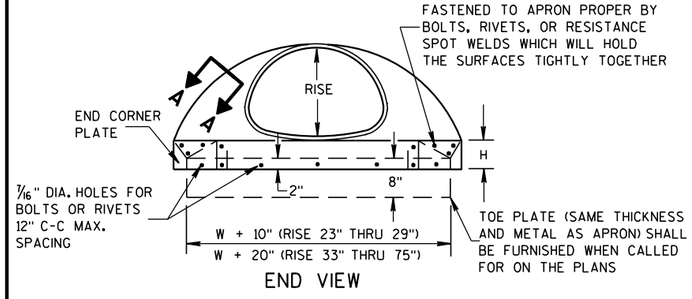


PLAN VIEW

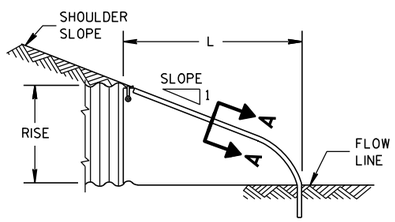
CONCRETE ENDWALLS



PLAN VIEW

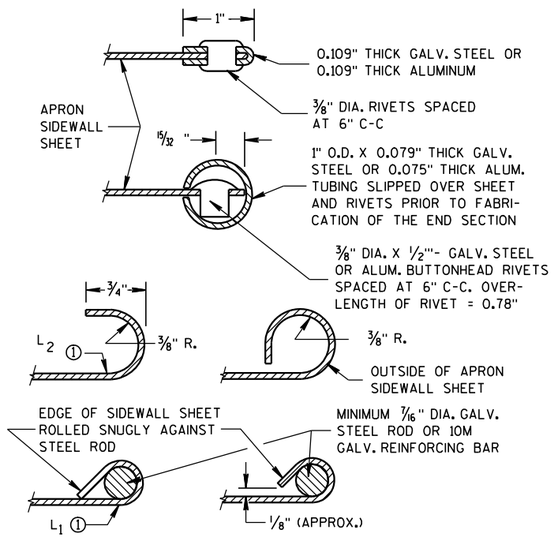


END VIEW



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	19⅜	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	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	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

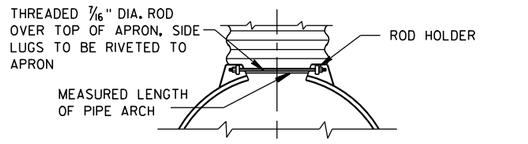
REINFORCED CONCRETE PIPE ARCH

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

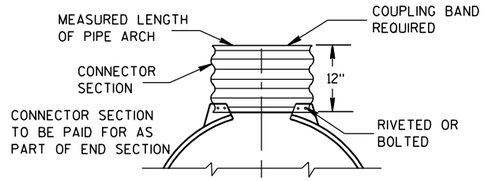
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



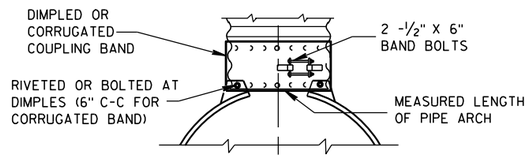
TYPE 2

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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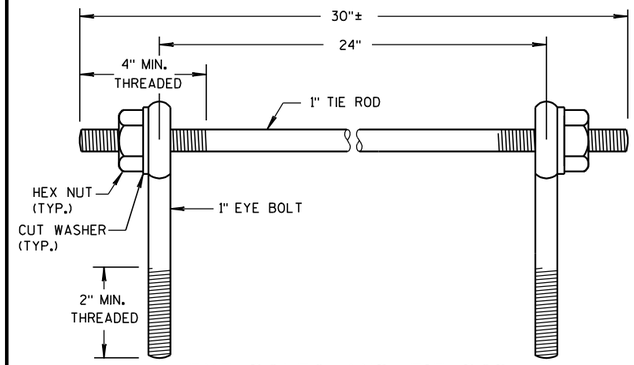
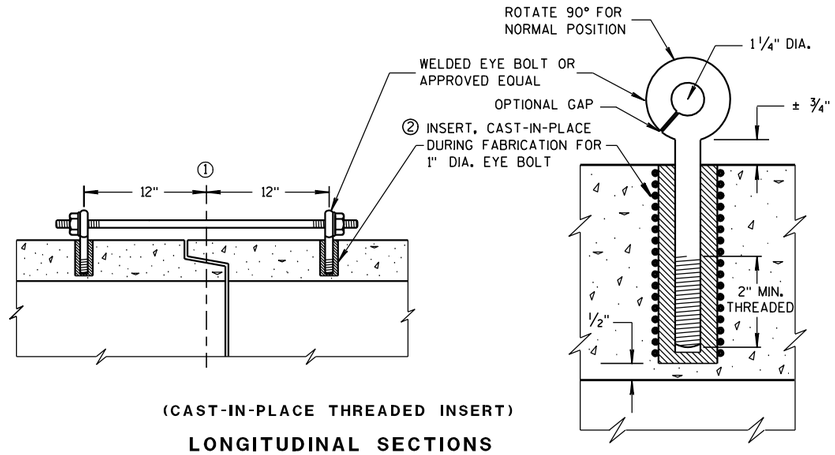
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

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

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

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

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

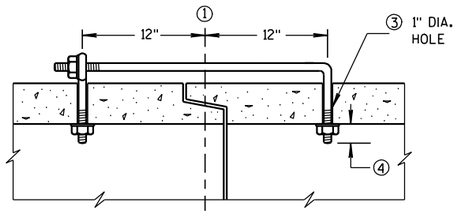
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

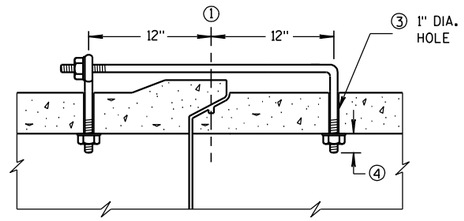
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

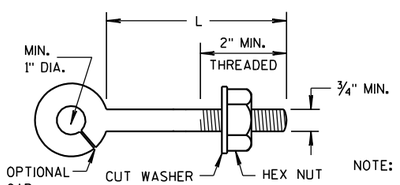


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

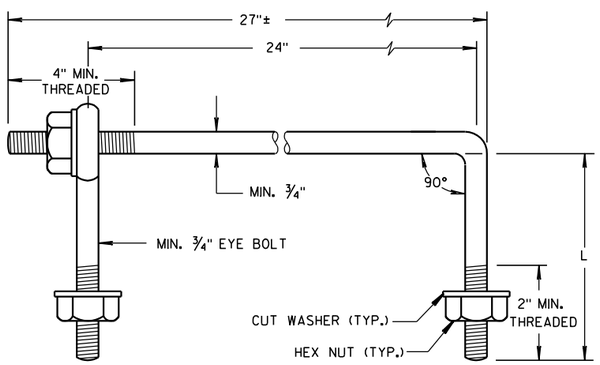
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

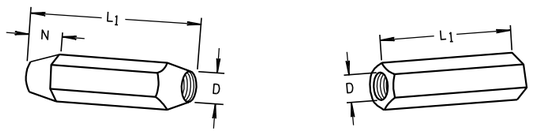
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

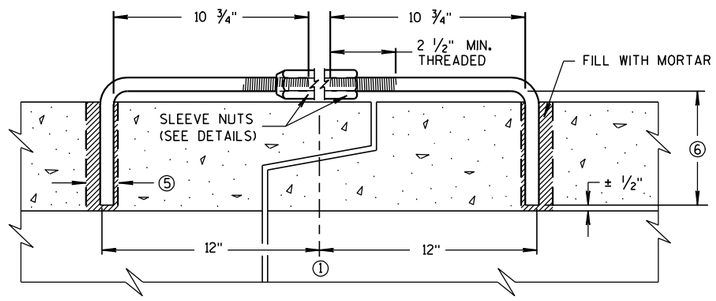
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

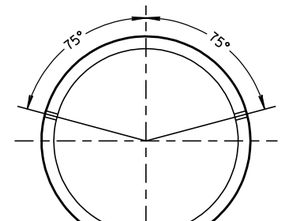
SLEEVE NUTS



LONGITUDINAL SECTION

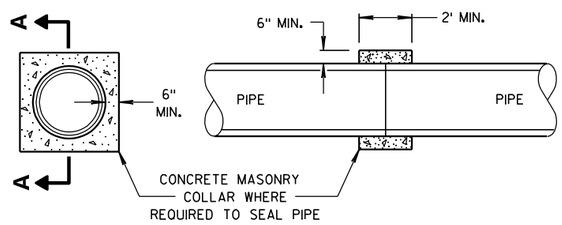
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

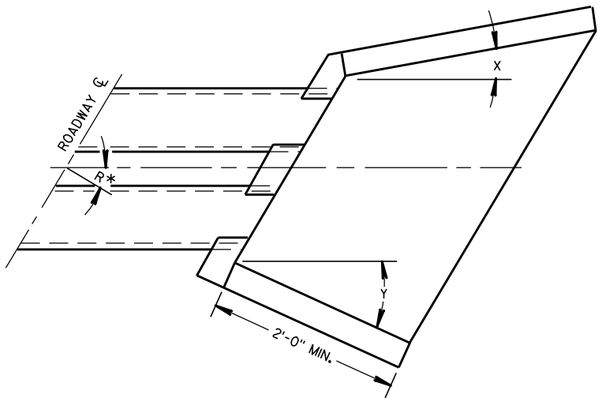
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
121
FHWA

6

S.D.D. 8 F 4-7



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

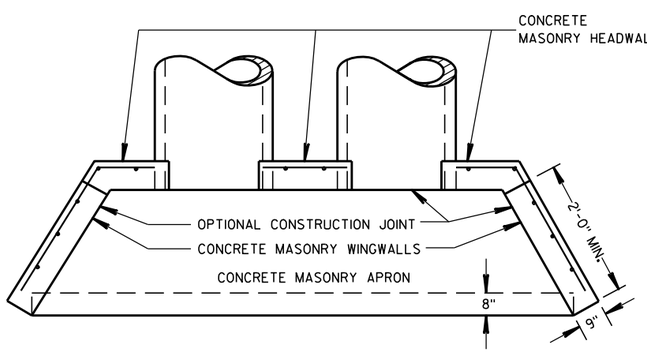
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

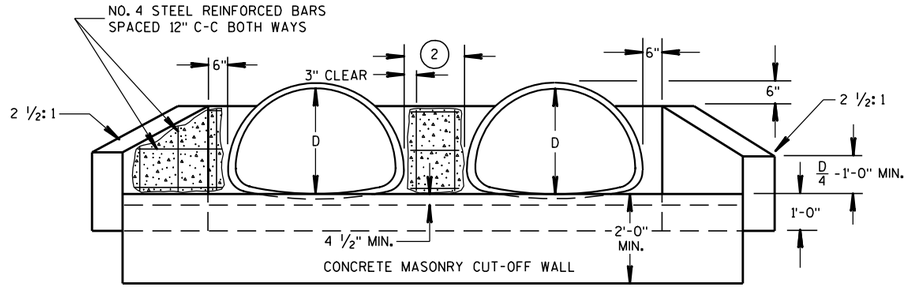
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



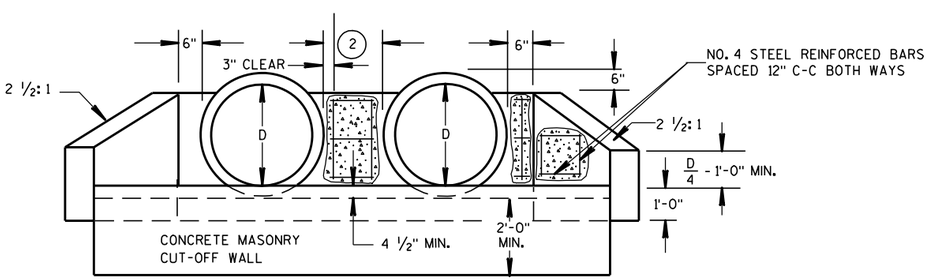
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



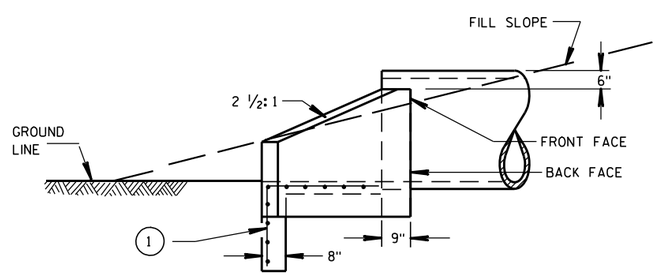
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/14/98 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 8 F 10-1

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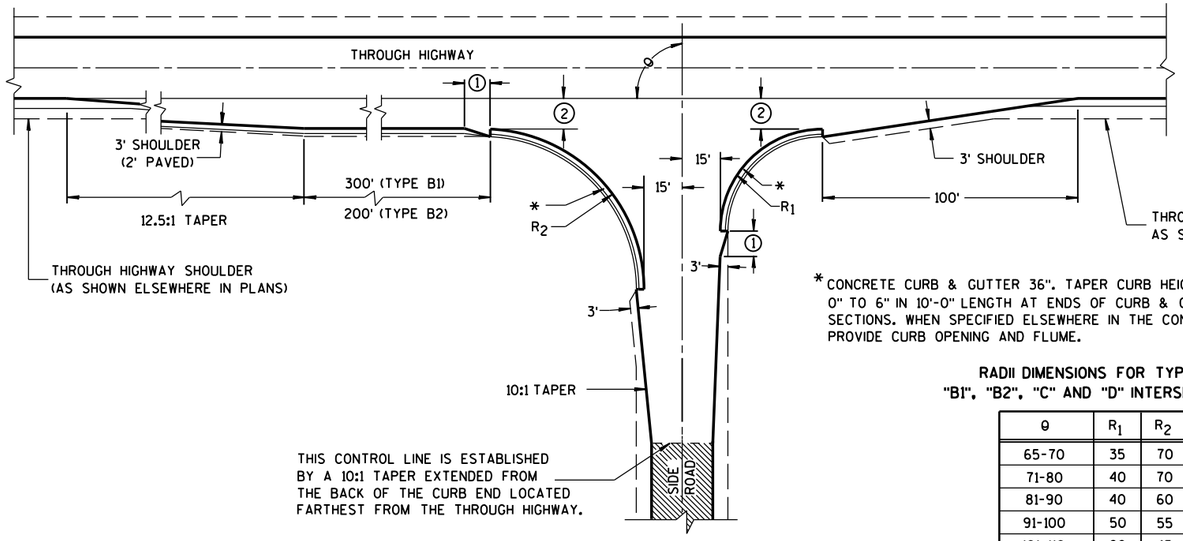
S.D.D. 8 F 10-1

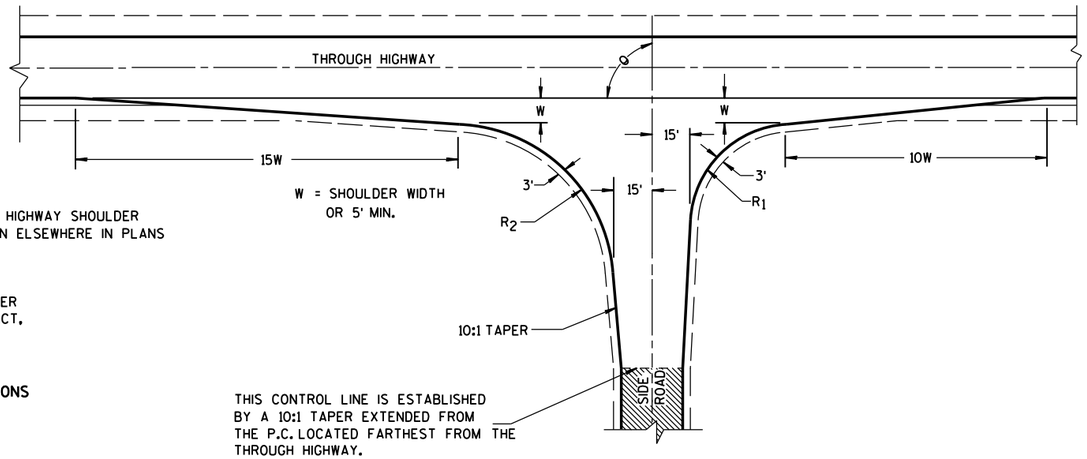


TYPE "B1" AND "B2"

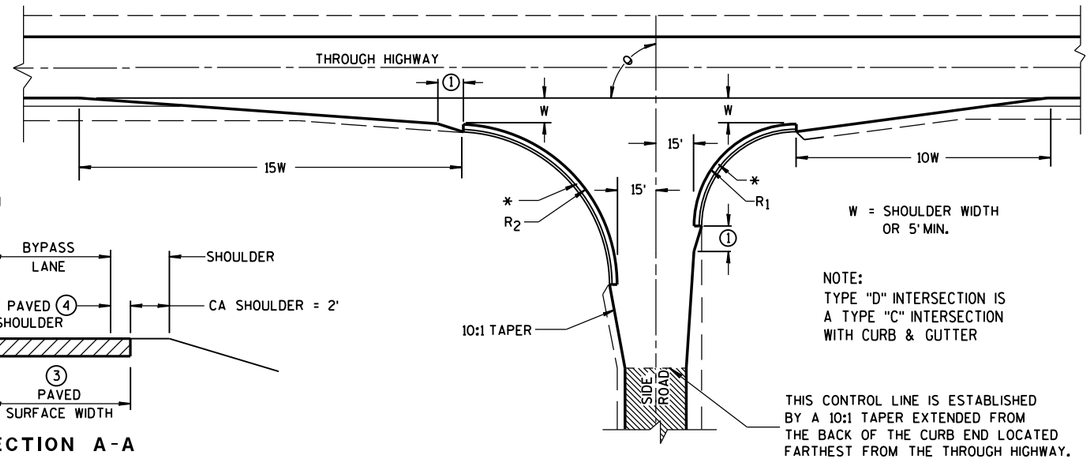
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

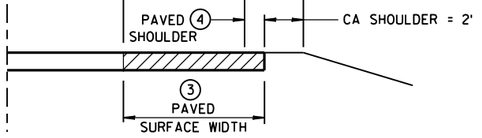
(1) 10-FT TYPICAL.

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

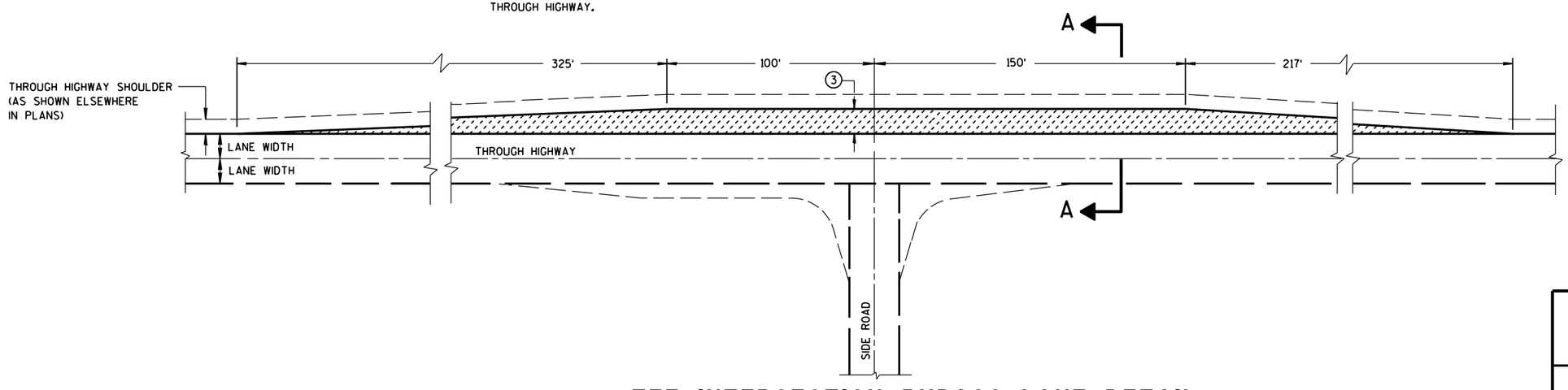
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

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



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



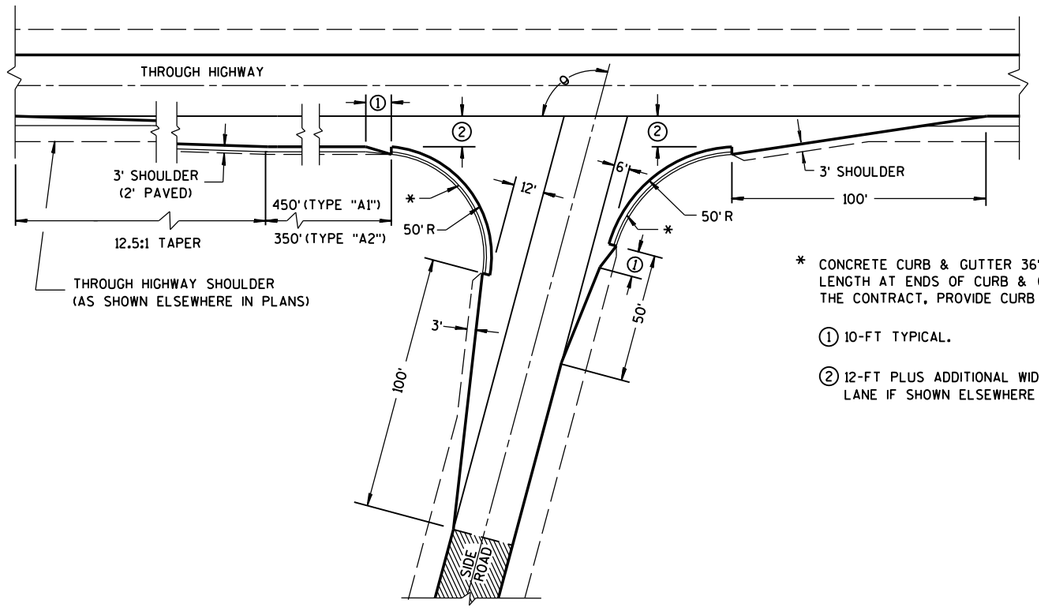
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



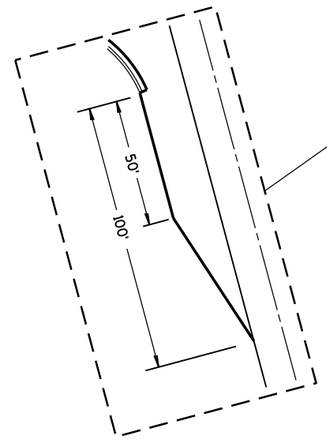
θ = MORE THAN 80°

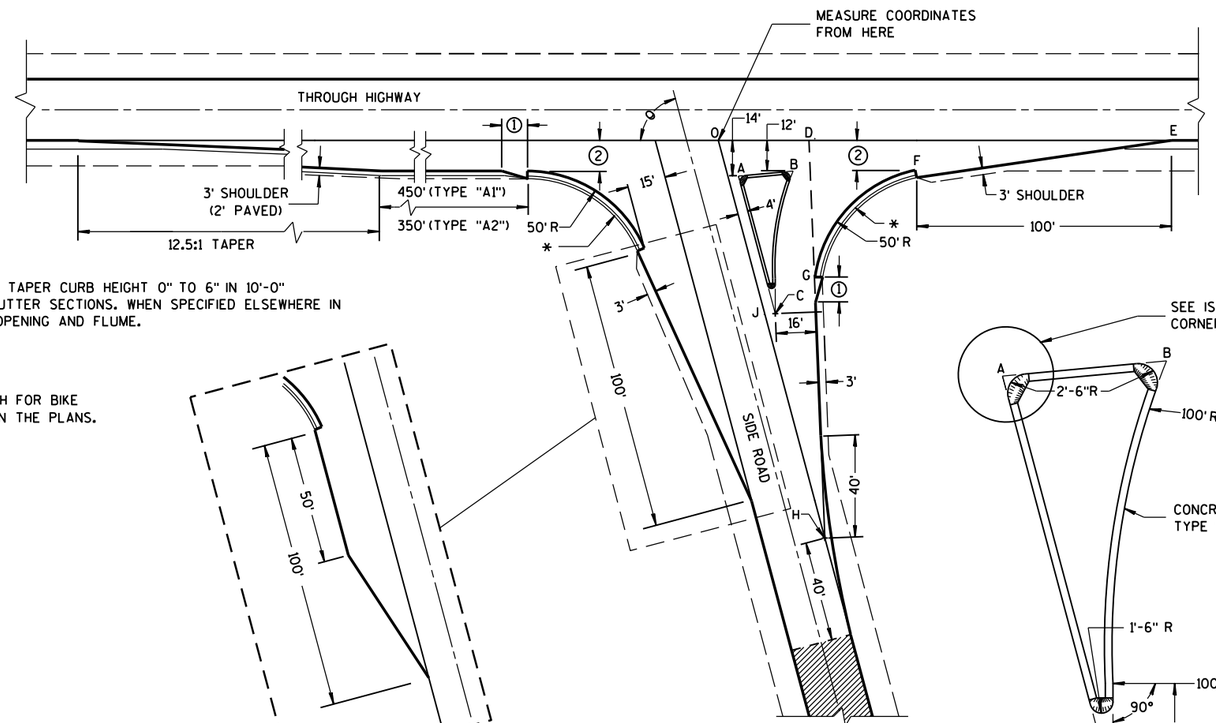
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

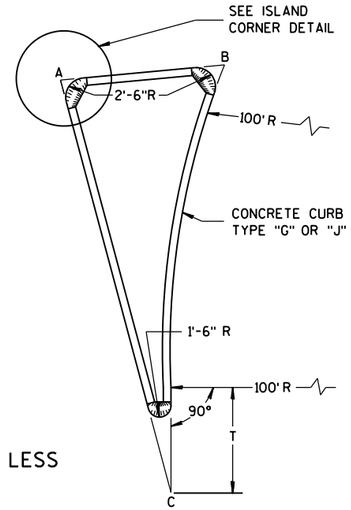
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

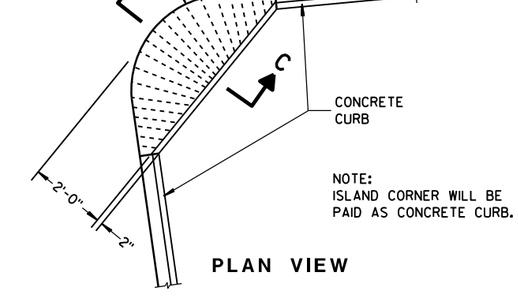




θ = ACUTE ANGLES 80° OR LESS

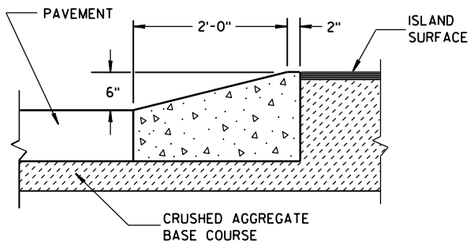


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

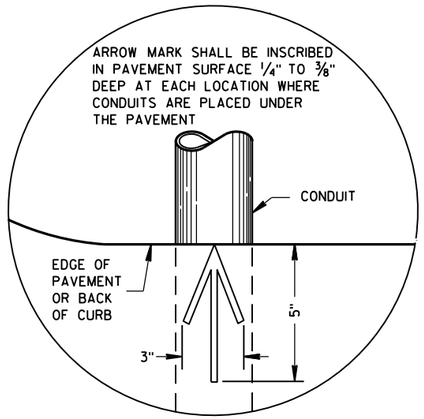
TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

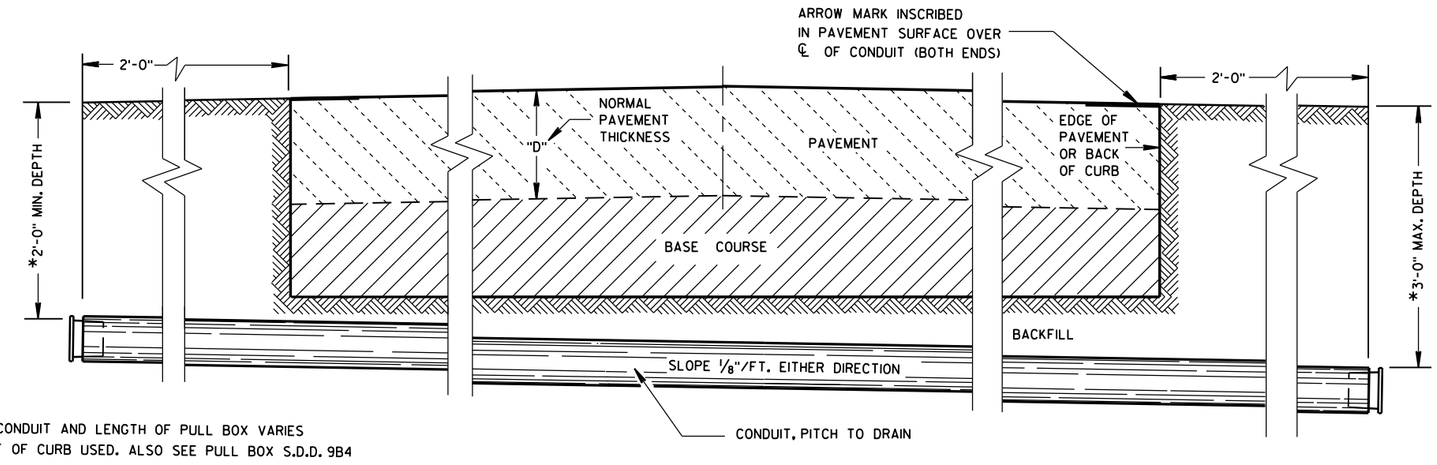
APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

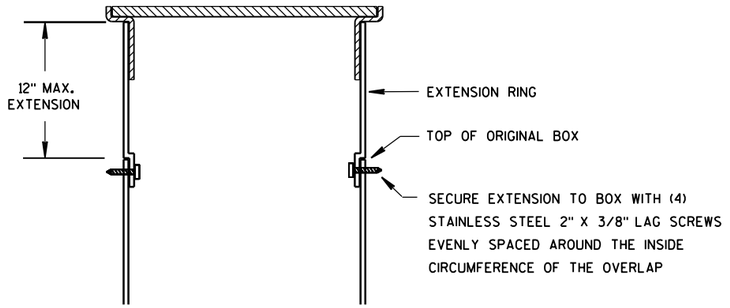
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

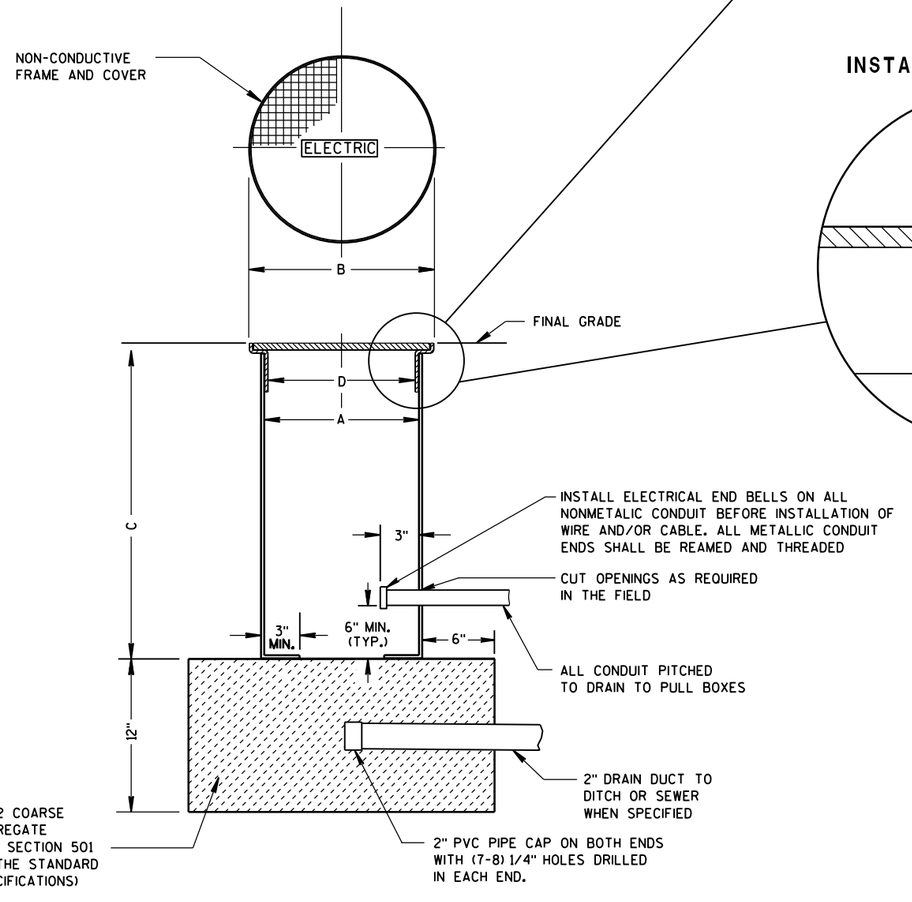
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

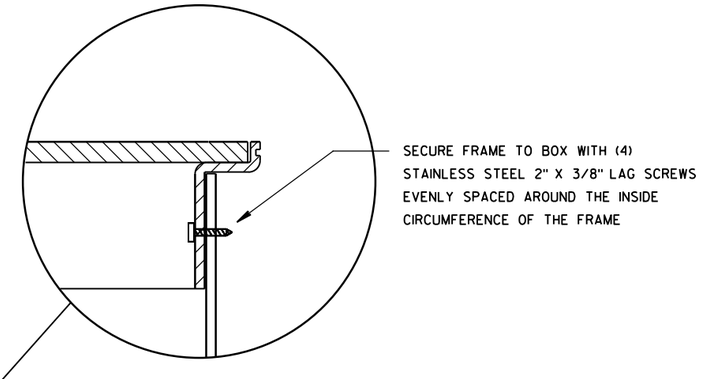


BOX EXTENSION

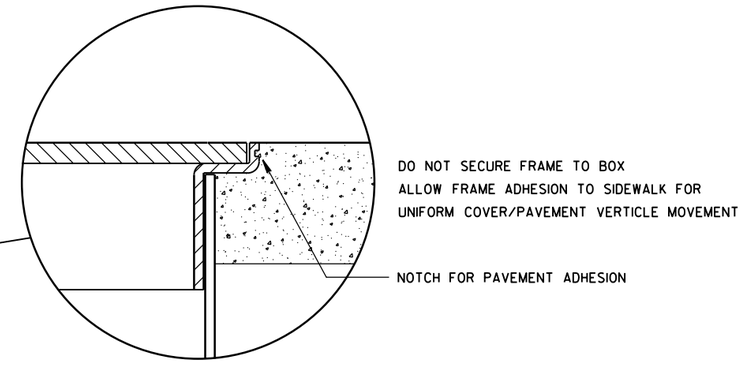


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



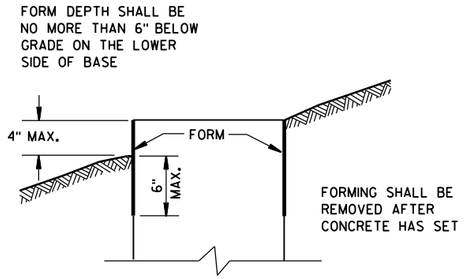
PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 16-1



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 DRAWING SHALL 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 AS 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 AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC 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 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES 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" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END 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 BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

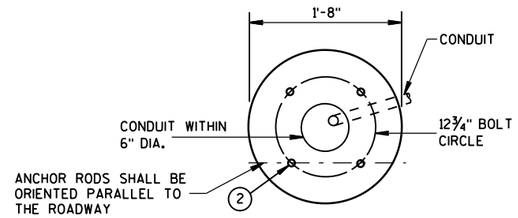
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

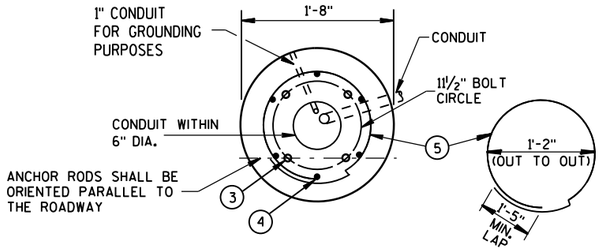
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

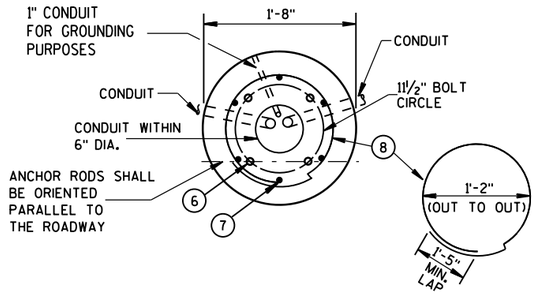
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

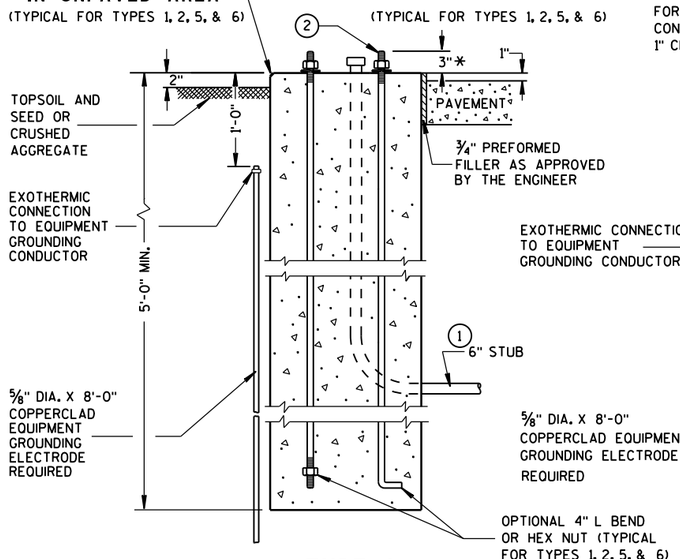




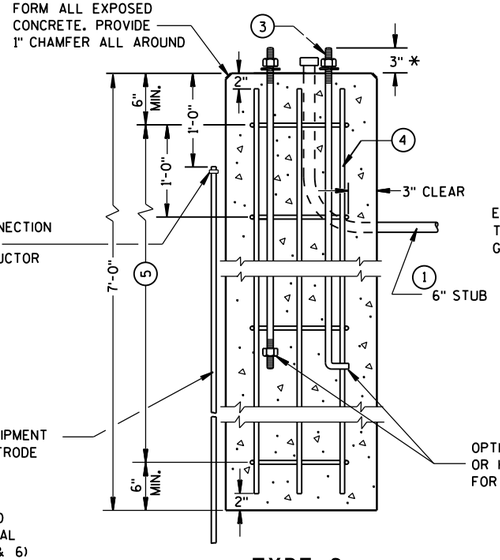


HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5, & 6)

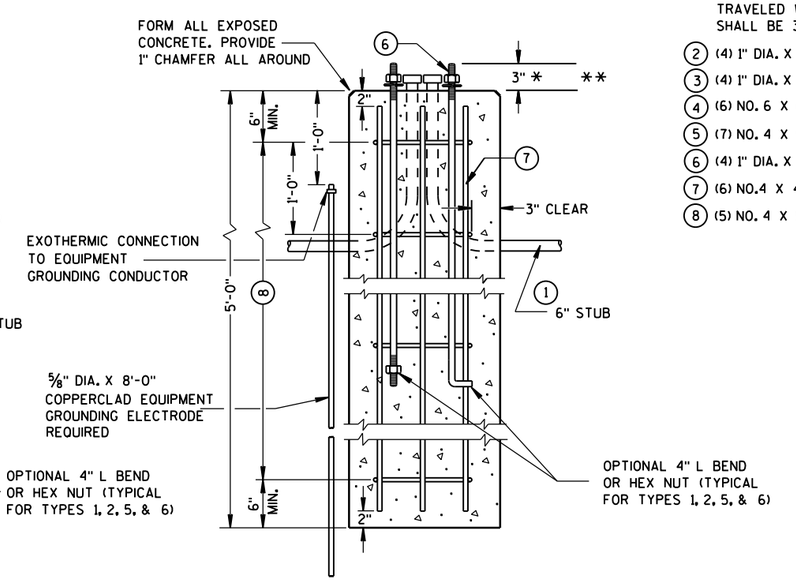
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

6

S.D.D. 9 C 2-7

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 641.2.2 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.

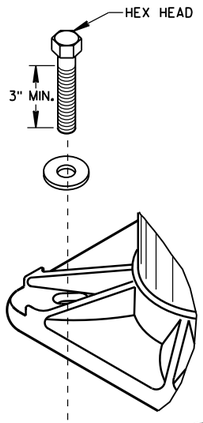
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

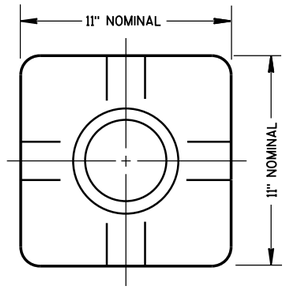
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

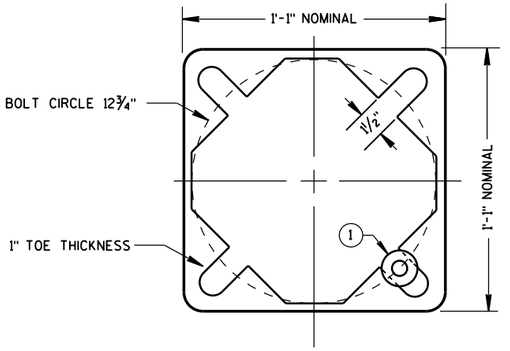
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

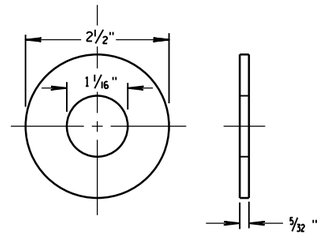




TOP VIEW
(PEDESTAL BASE)

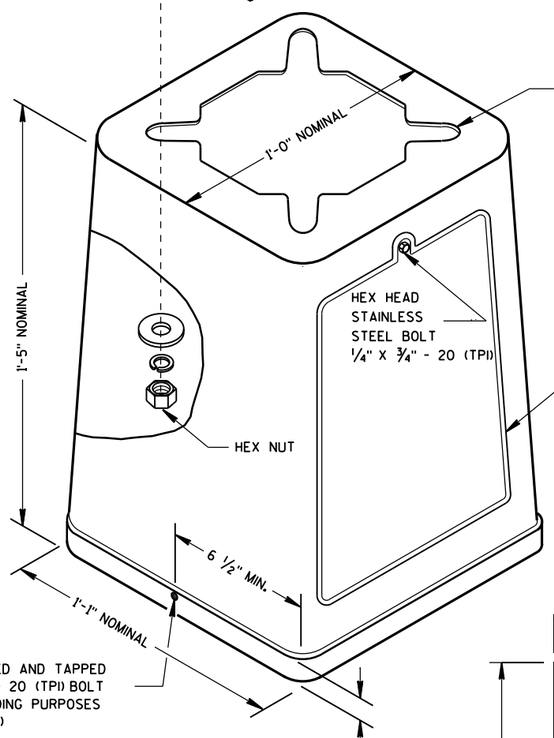


BOTTOM VIEW
(PEDESTAL BASE)

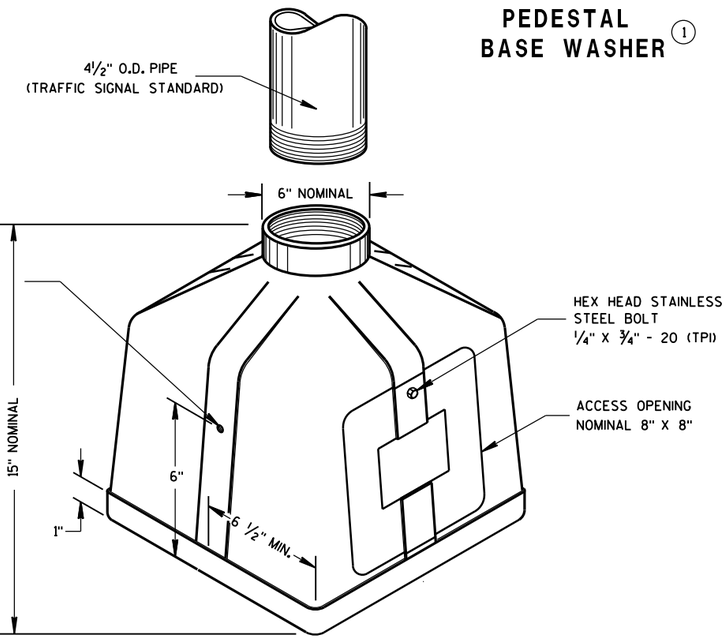


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

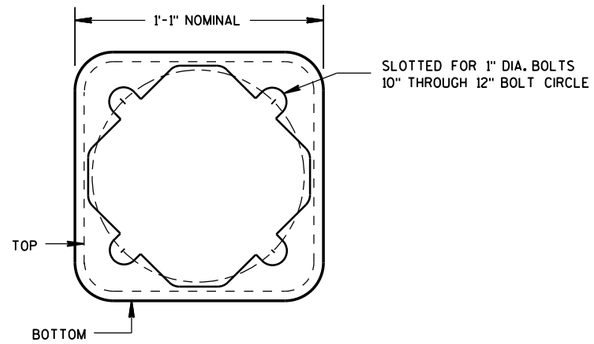


ISOMETRIC VIEW

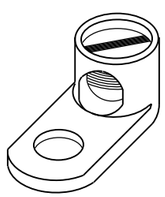


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

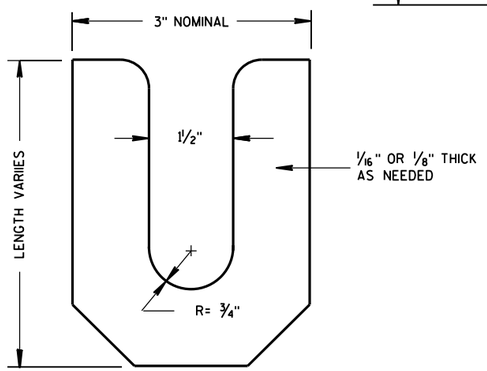


TYPICAL MECHANICAL CONNECTOR LUG

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
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S.D.D. 9 C 3-4

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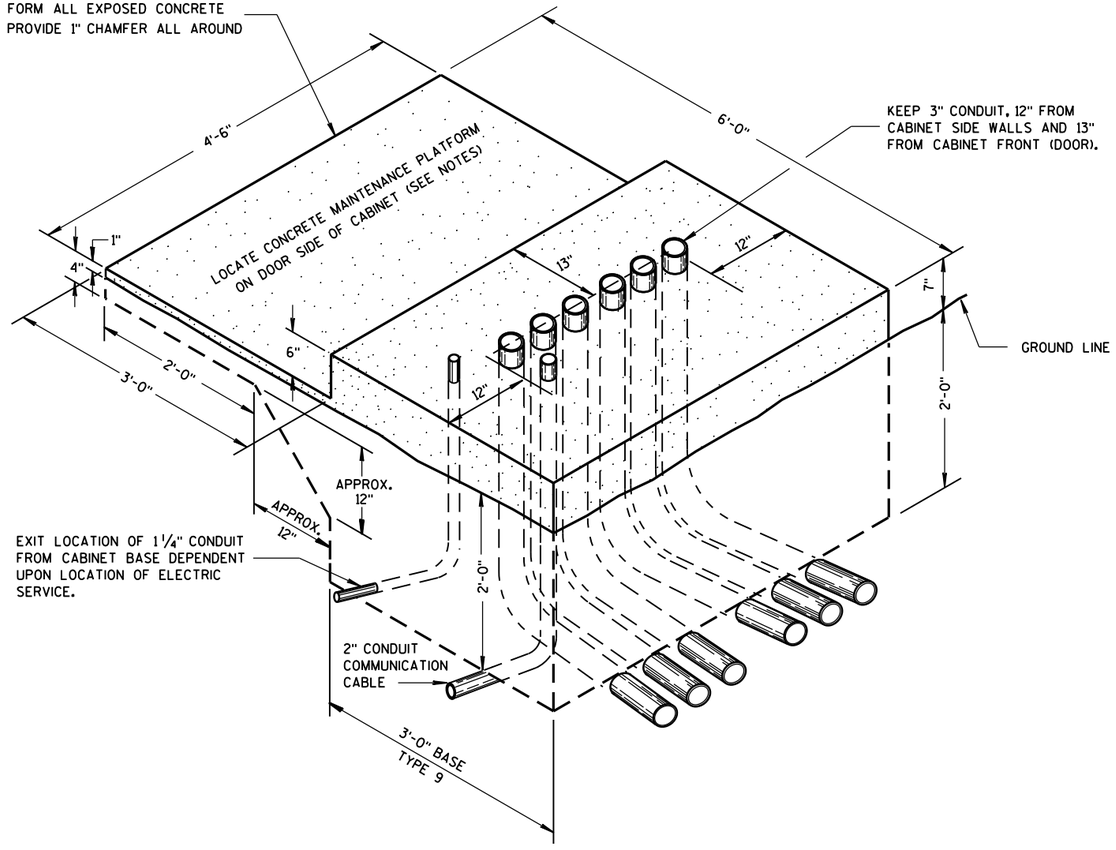
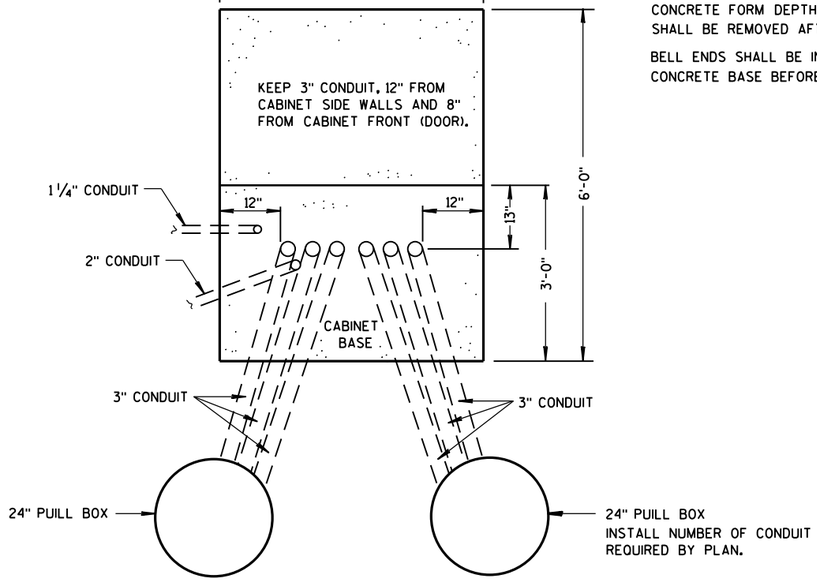
S.D.D. 9 C 3-4



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 ½ 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 NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

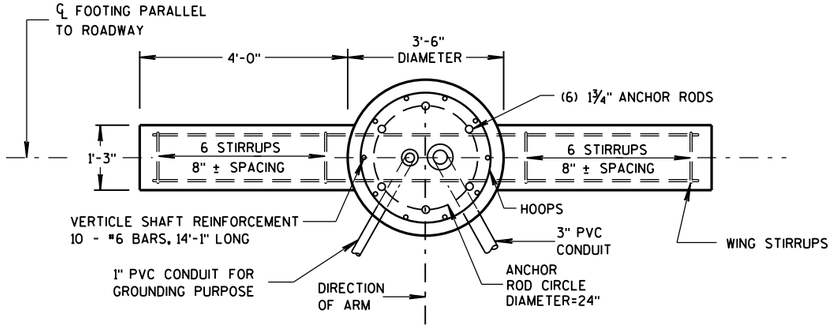
CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

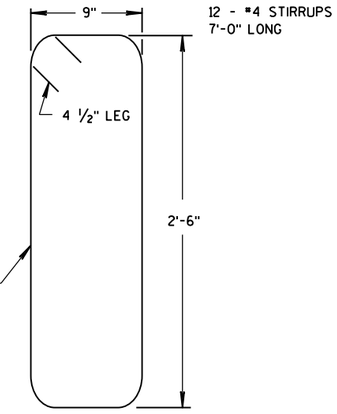
CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

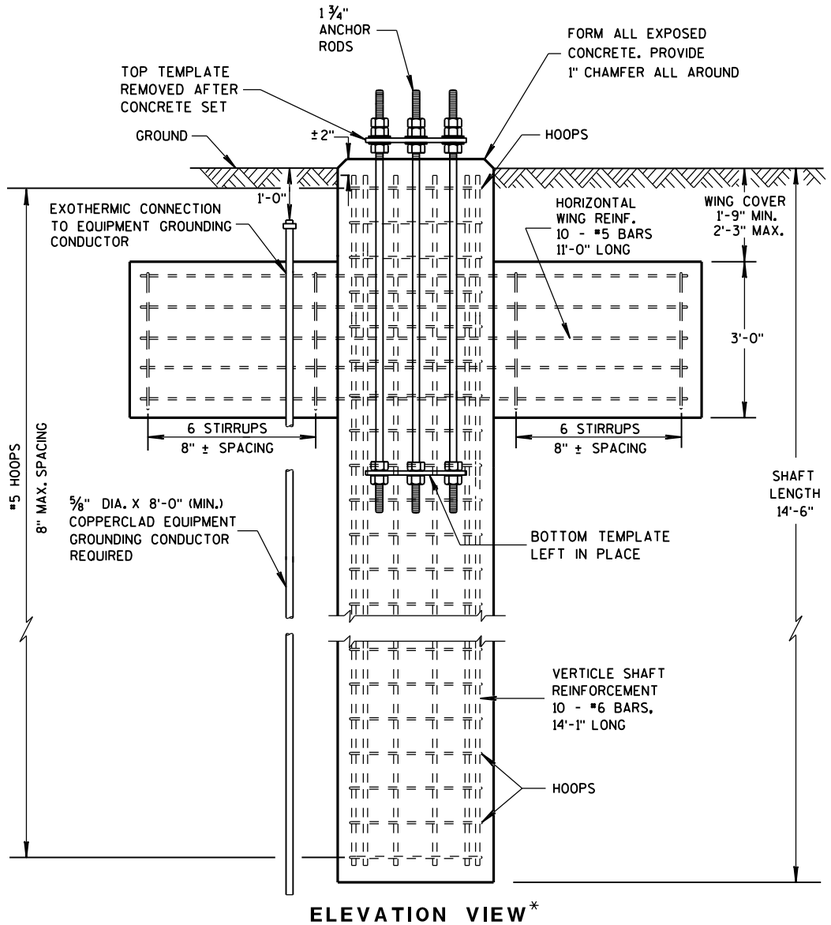
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA



PLAN VIEW

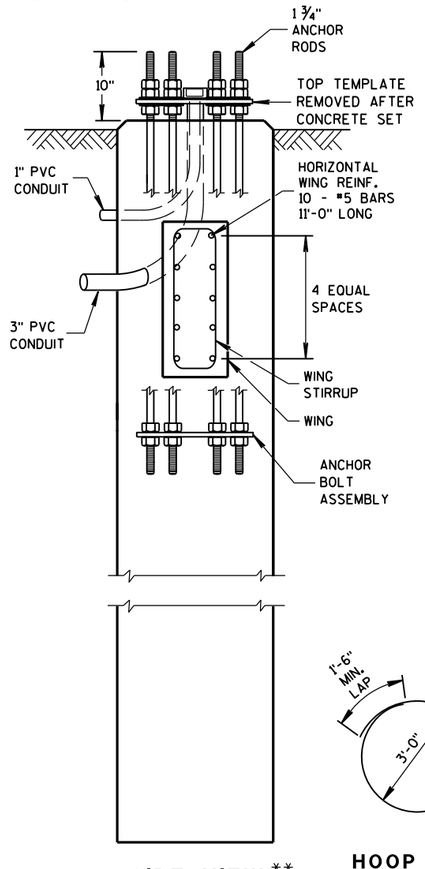


WING STIRRUP



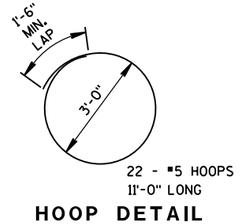
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT 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 NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

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.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL 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 THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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 WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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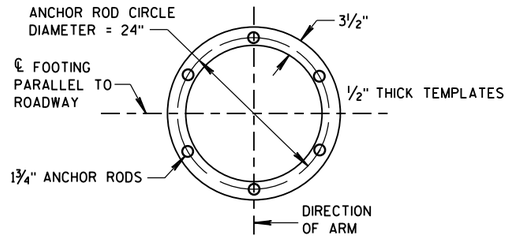
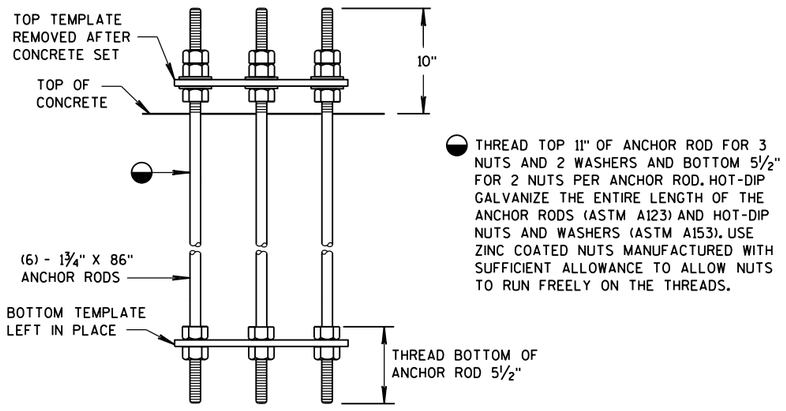
S.D.D. 9 C 12-9a

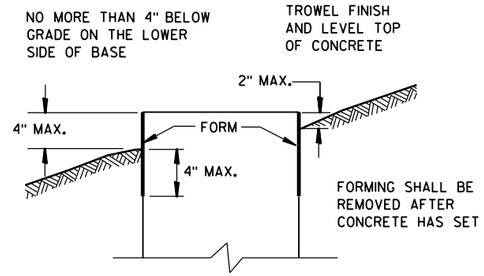


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

6

S.D.D. 9 C 12-9b

CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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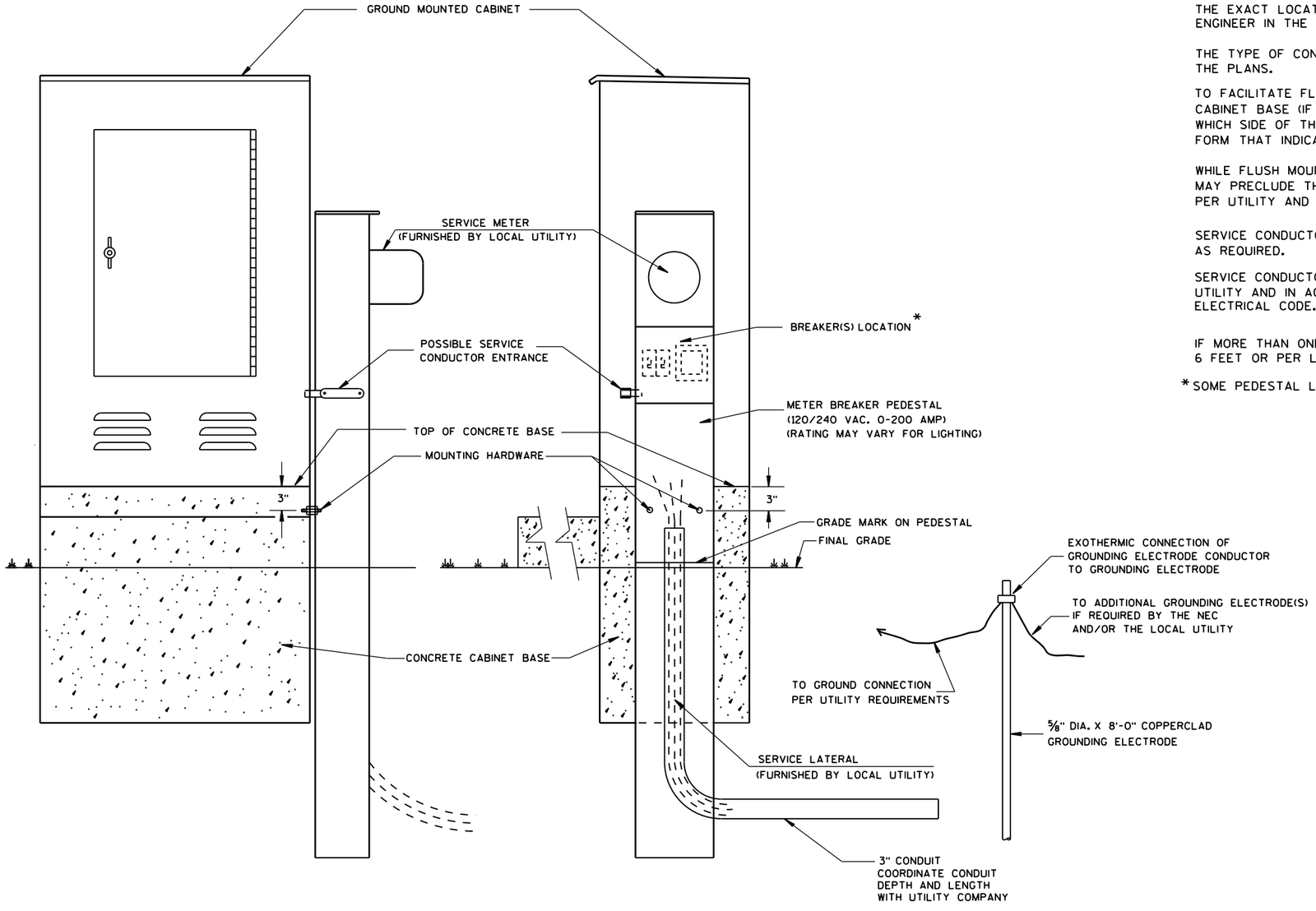
S.D.D. 9 C 12-9b



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.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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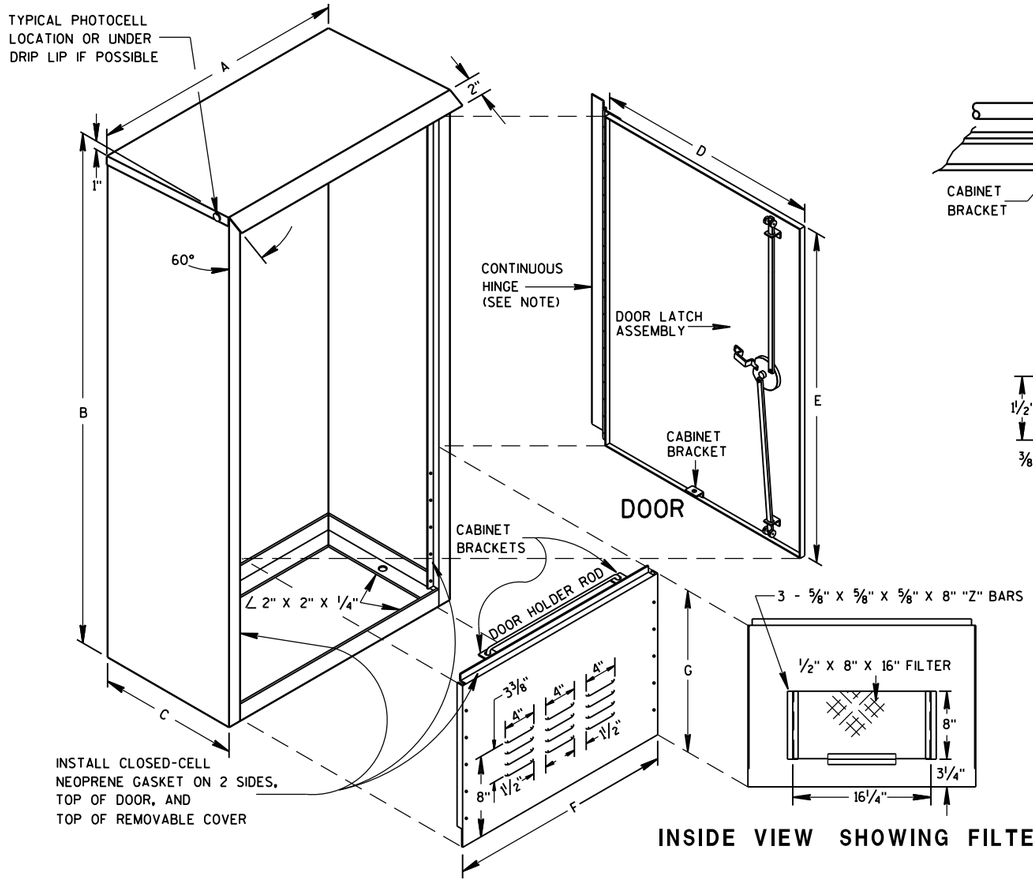
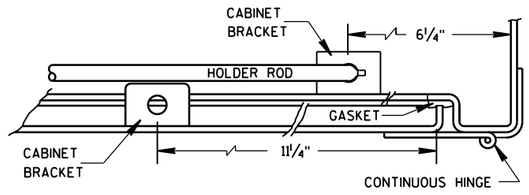
S.D.D. 9 D 1-5

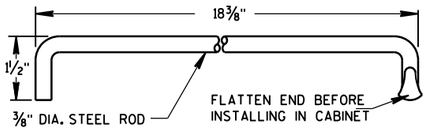


REMOVABLE COVER

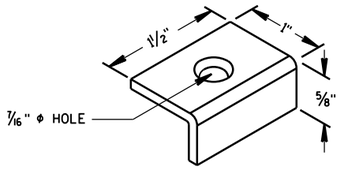
INSIDE VIEW SHOWING FILTER



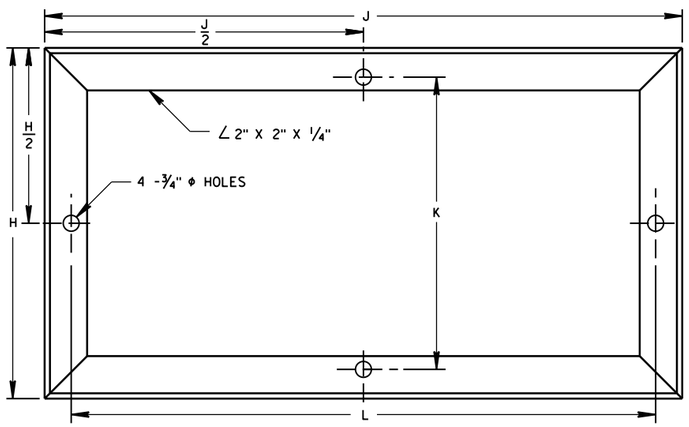
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

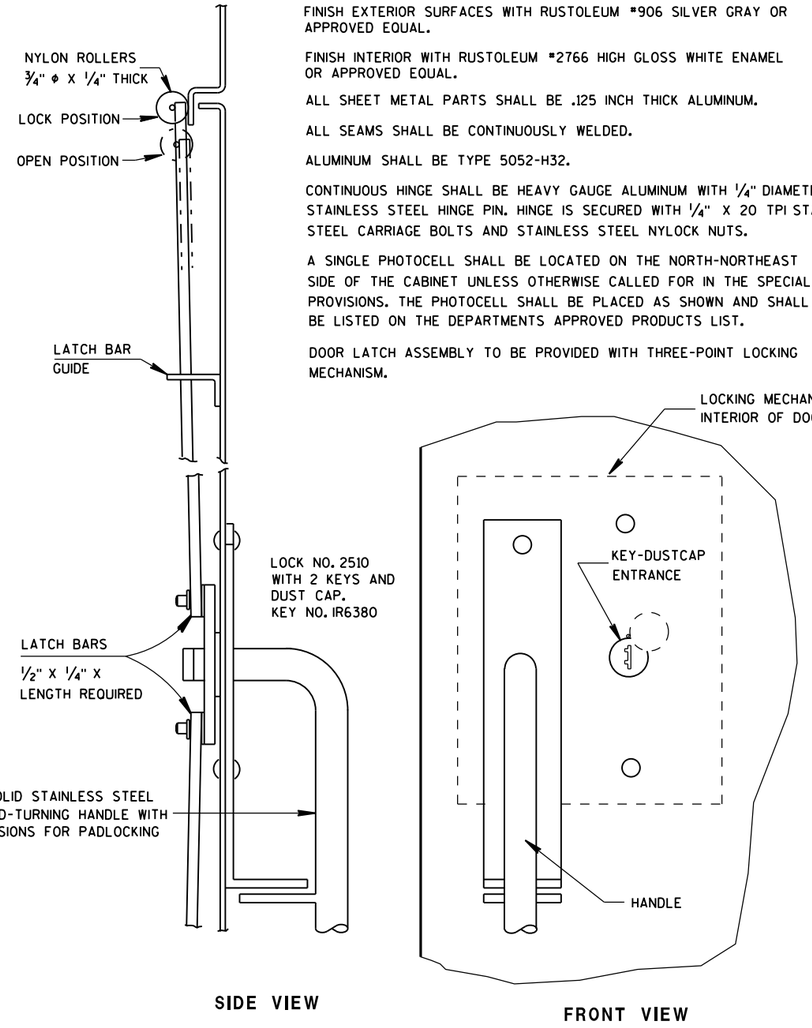
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

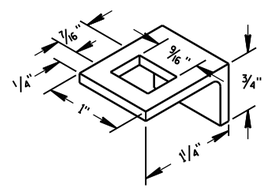
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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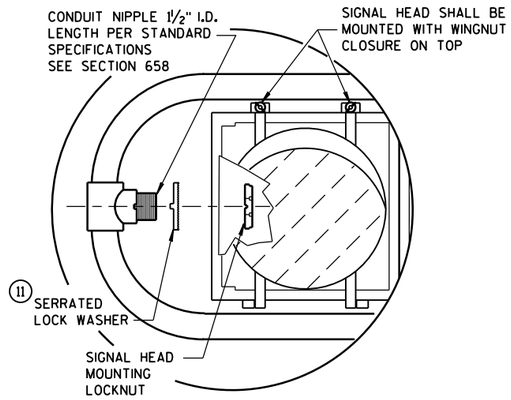
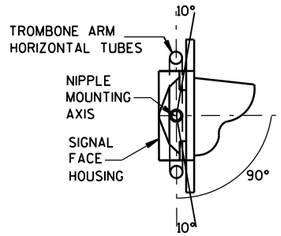


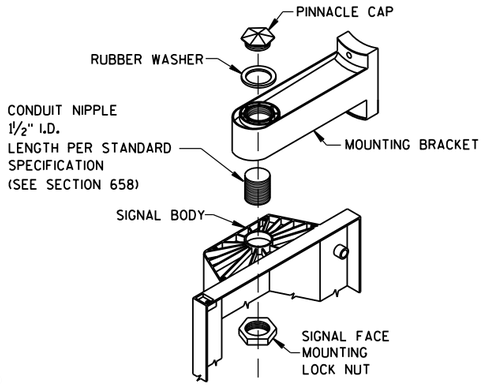
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT 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 IN ACCORDANCE WITH STANDARD SPECIFICATION 652 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 & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" 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 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG- 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS 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.

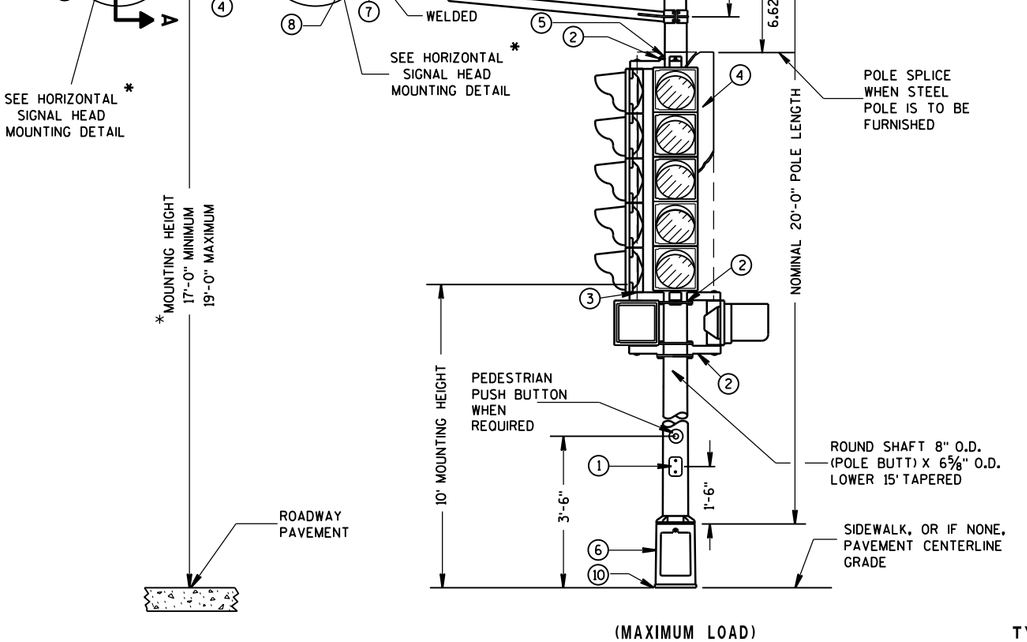
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

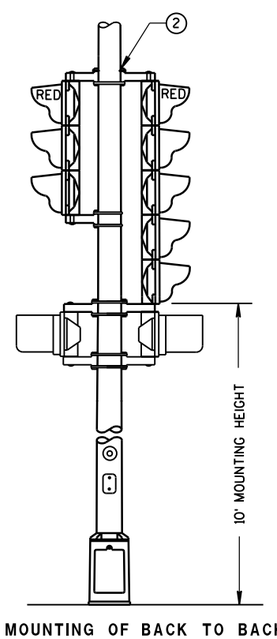
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

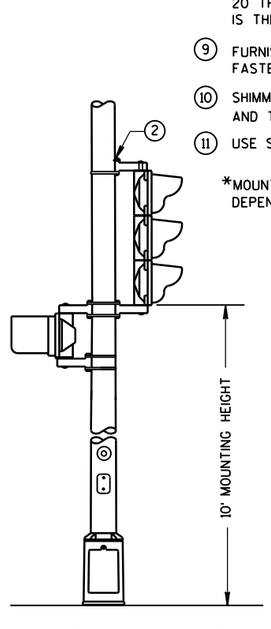
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



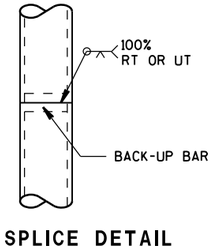
(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



POLE SPLICE DETAIL

TYPE 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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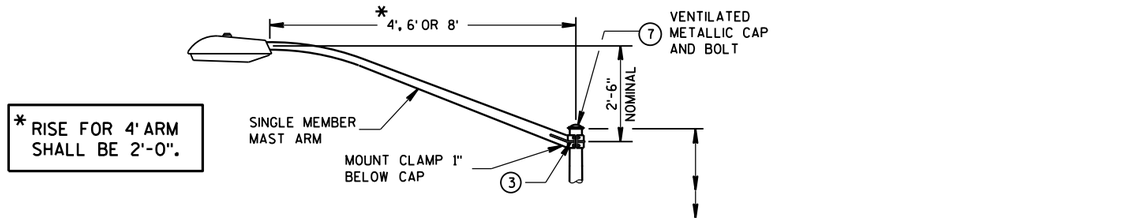
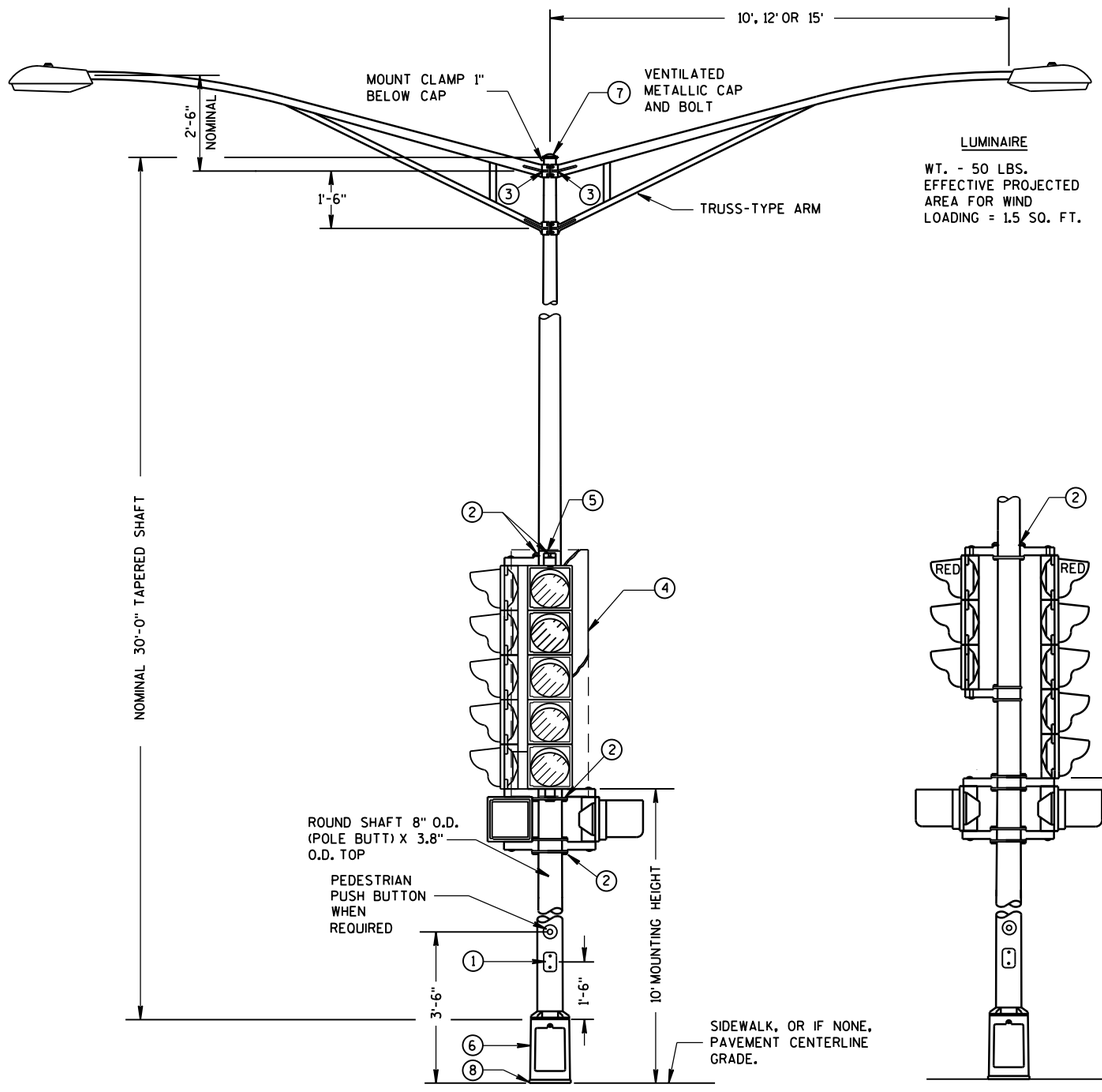
S.D.D. 9 E 1-14a

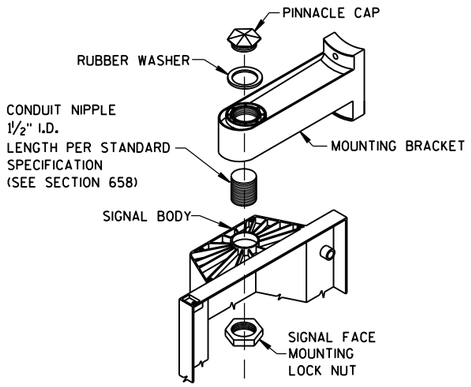




LUMINAIRE

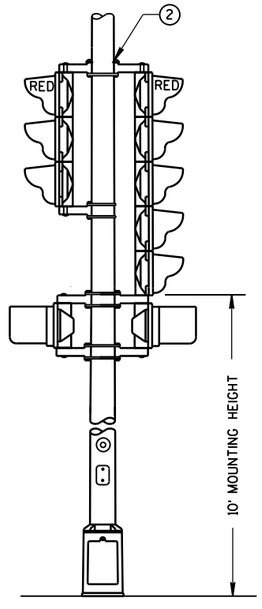
WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

(MAXIMUM LOAD)

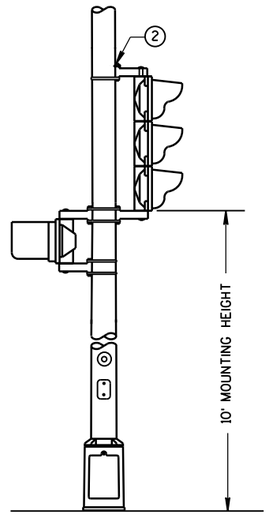


SIGNAL FACE MOUNTING DETAIL

(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION

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.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ 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, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

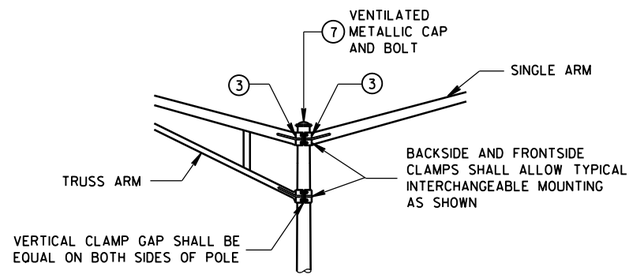
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 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 THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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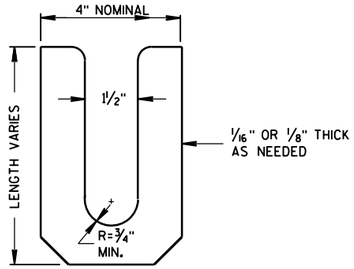
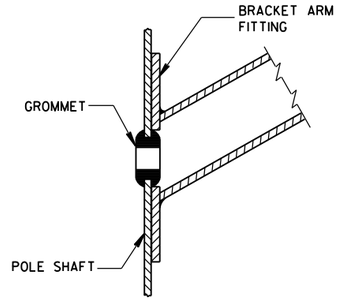
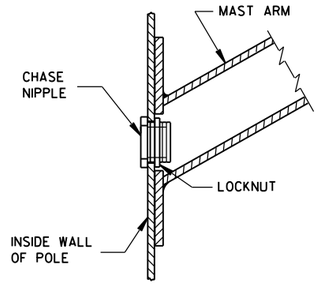


LEVELING SHIM (13)

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.

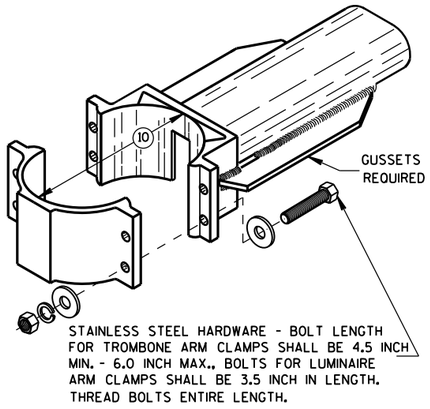
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

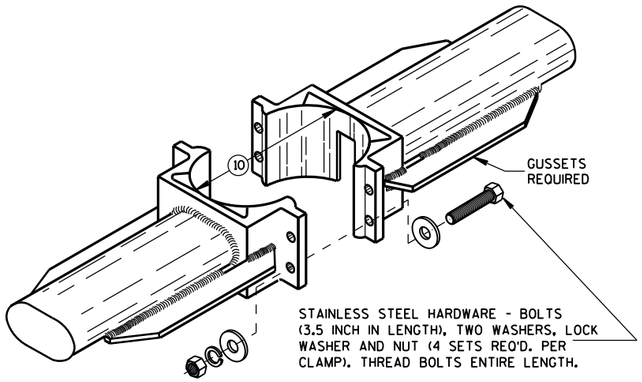
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) 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.

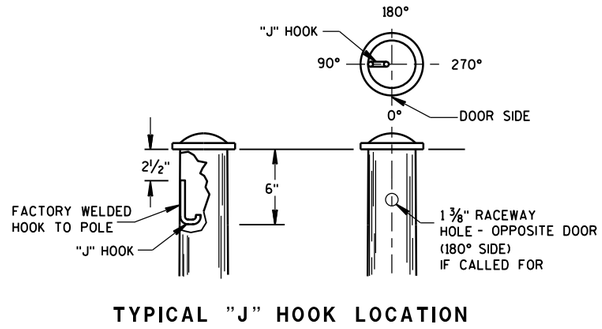
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



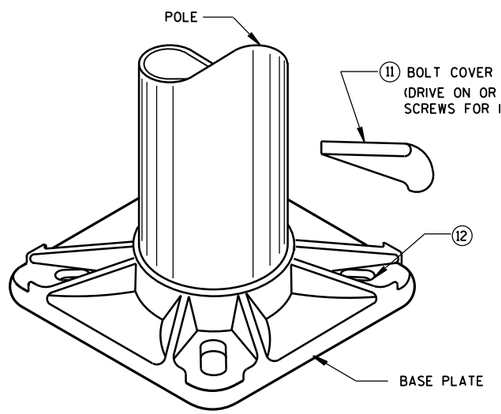
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



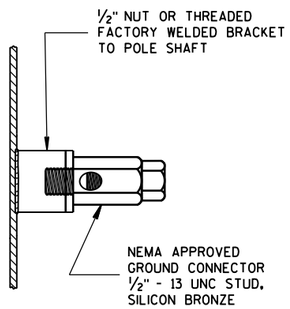
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

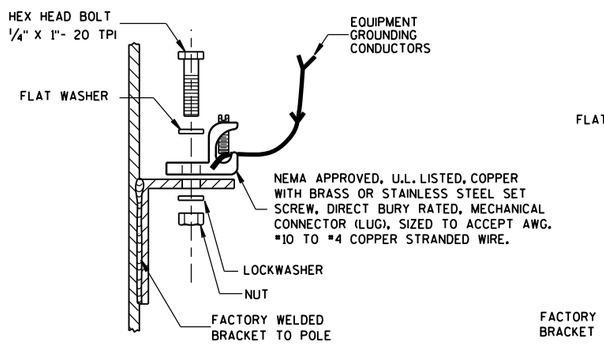


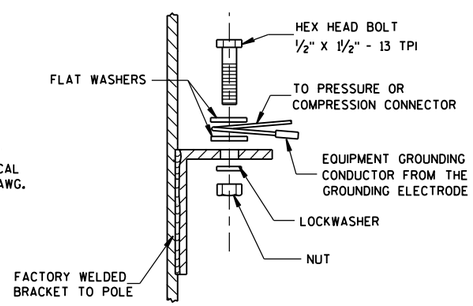
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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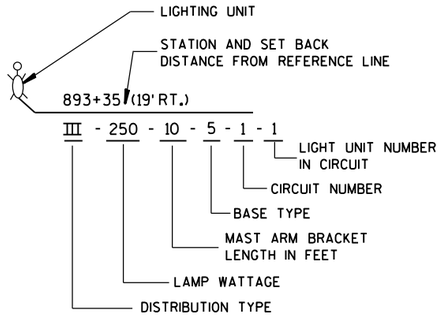
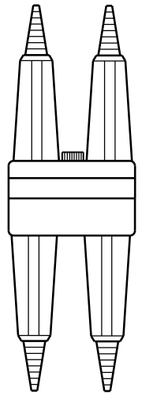
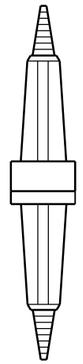
S.D.D. 9 E 1-14g



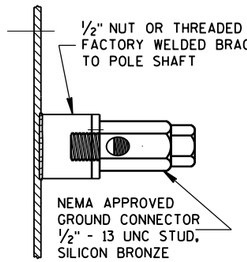
LIGHTING UNIT CODE
(TYPICAL)

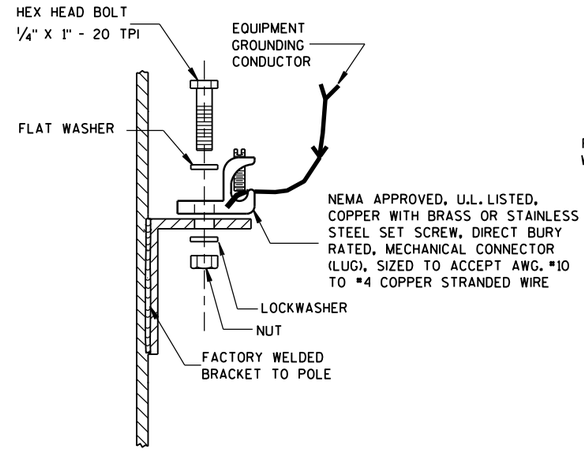


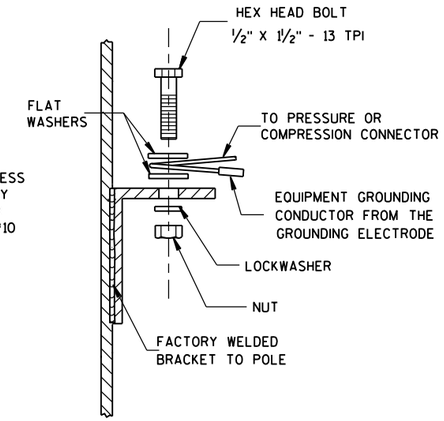
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



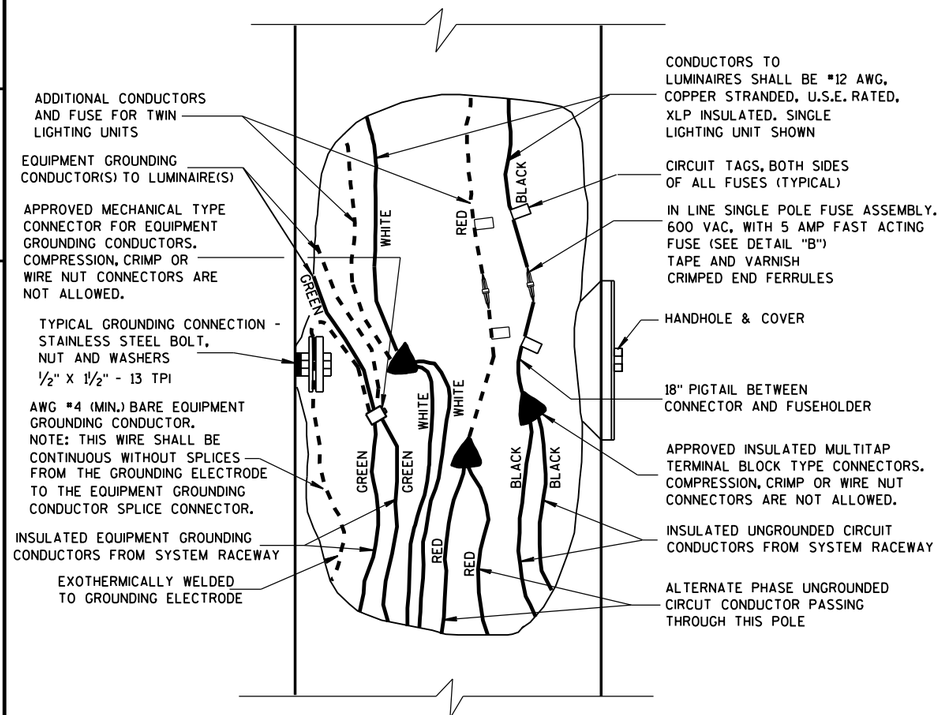
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



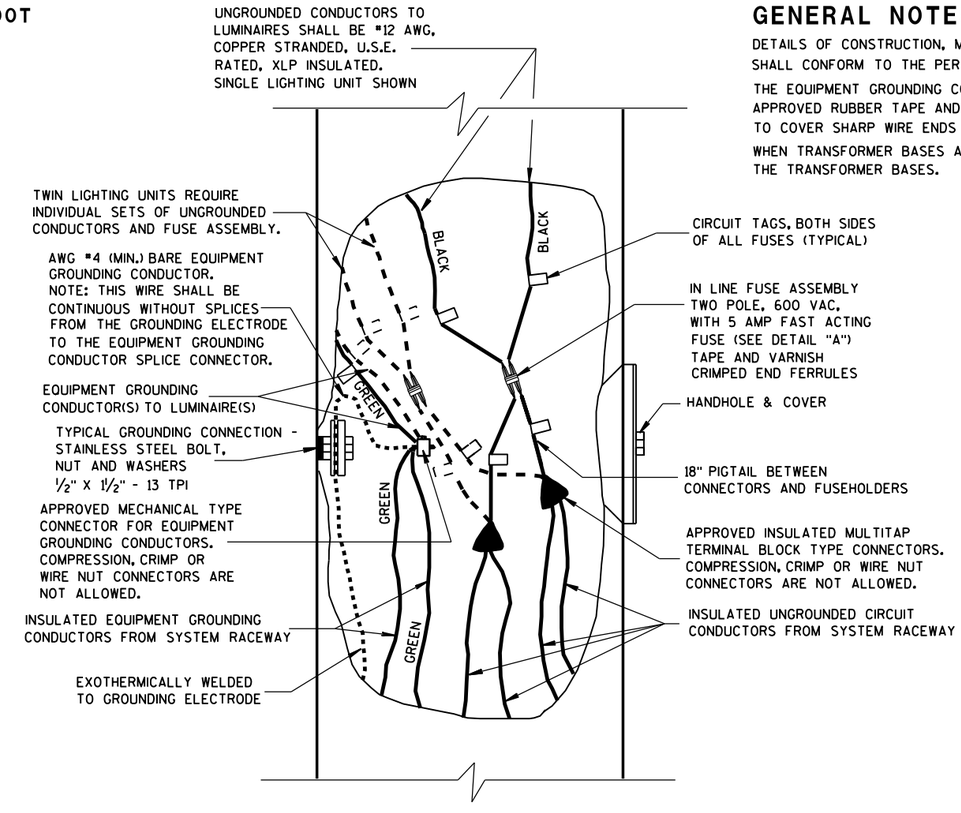




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

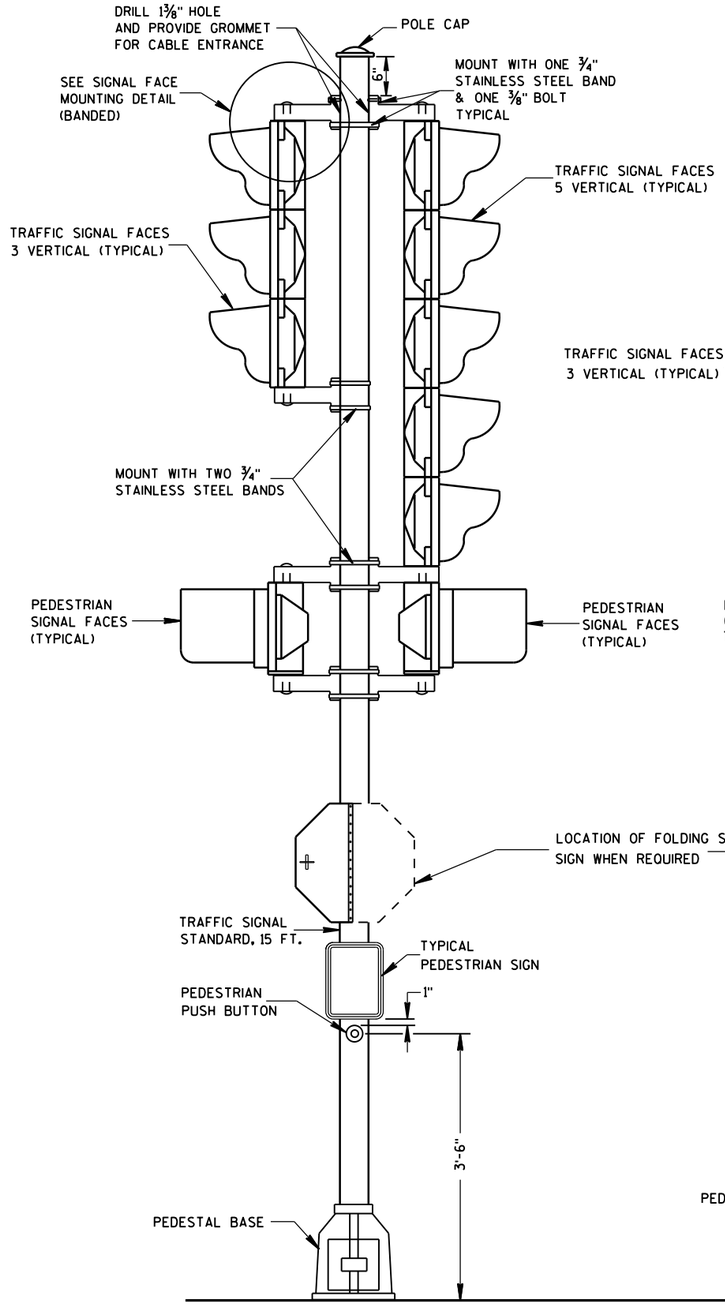
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

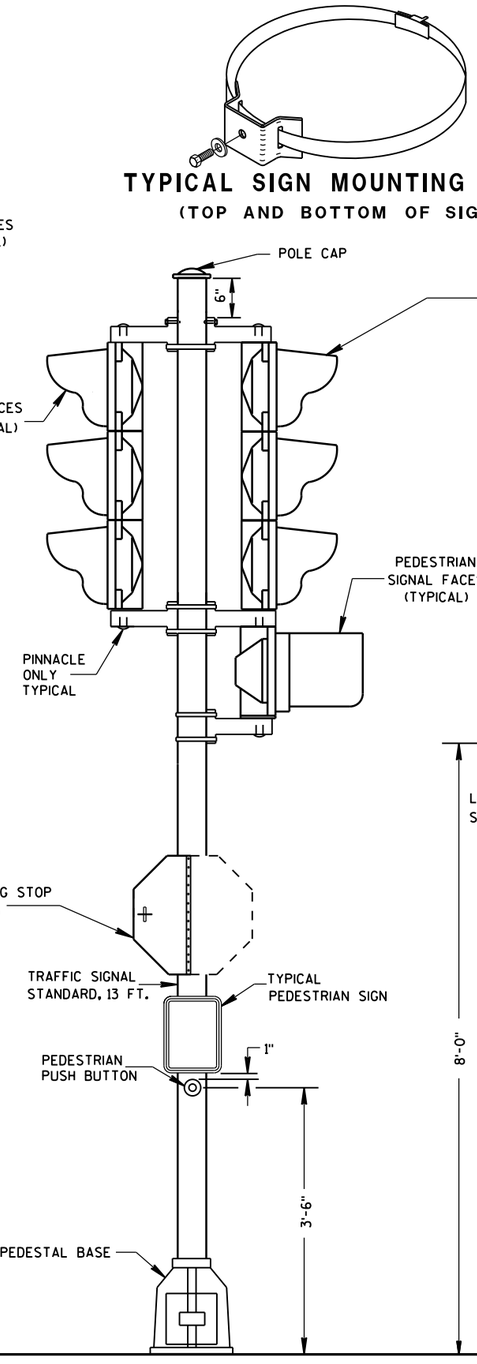
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 E 3-5

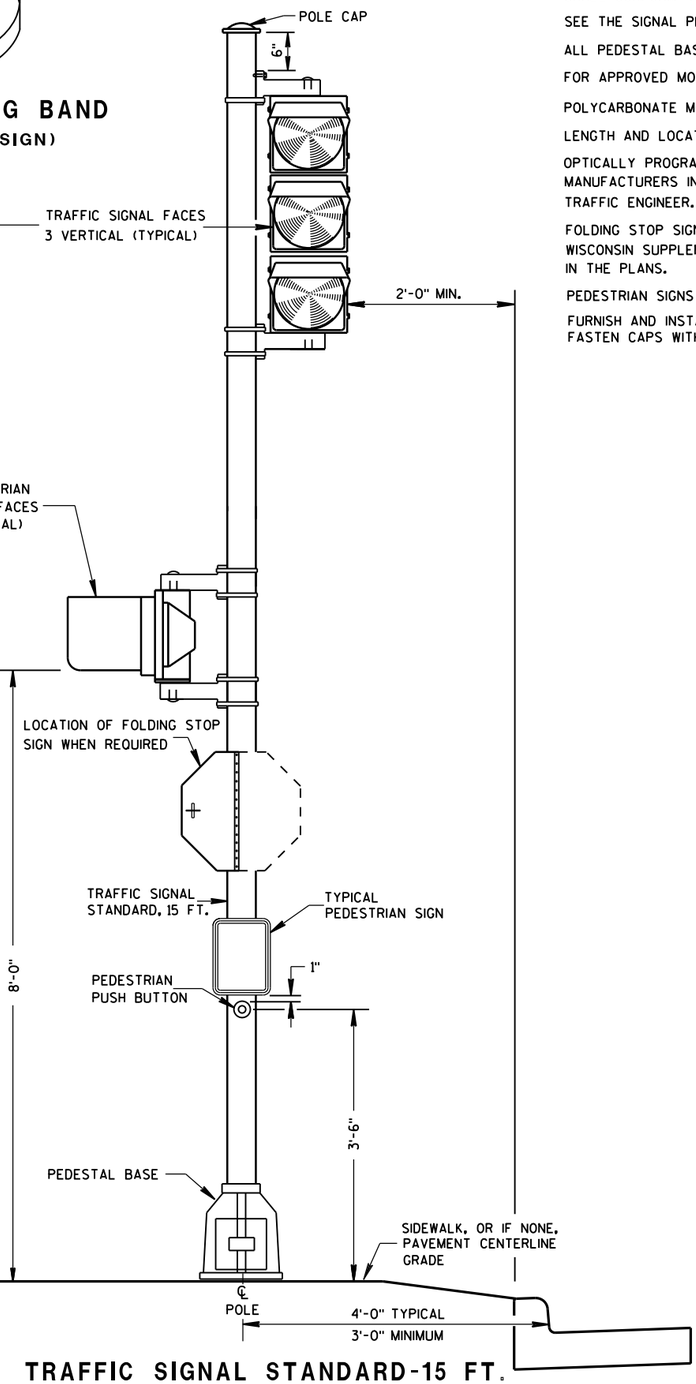


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-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.

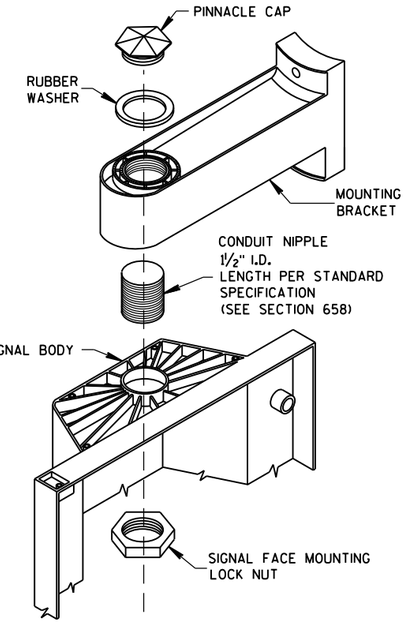
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



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
FHWA

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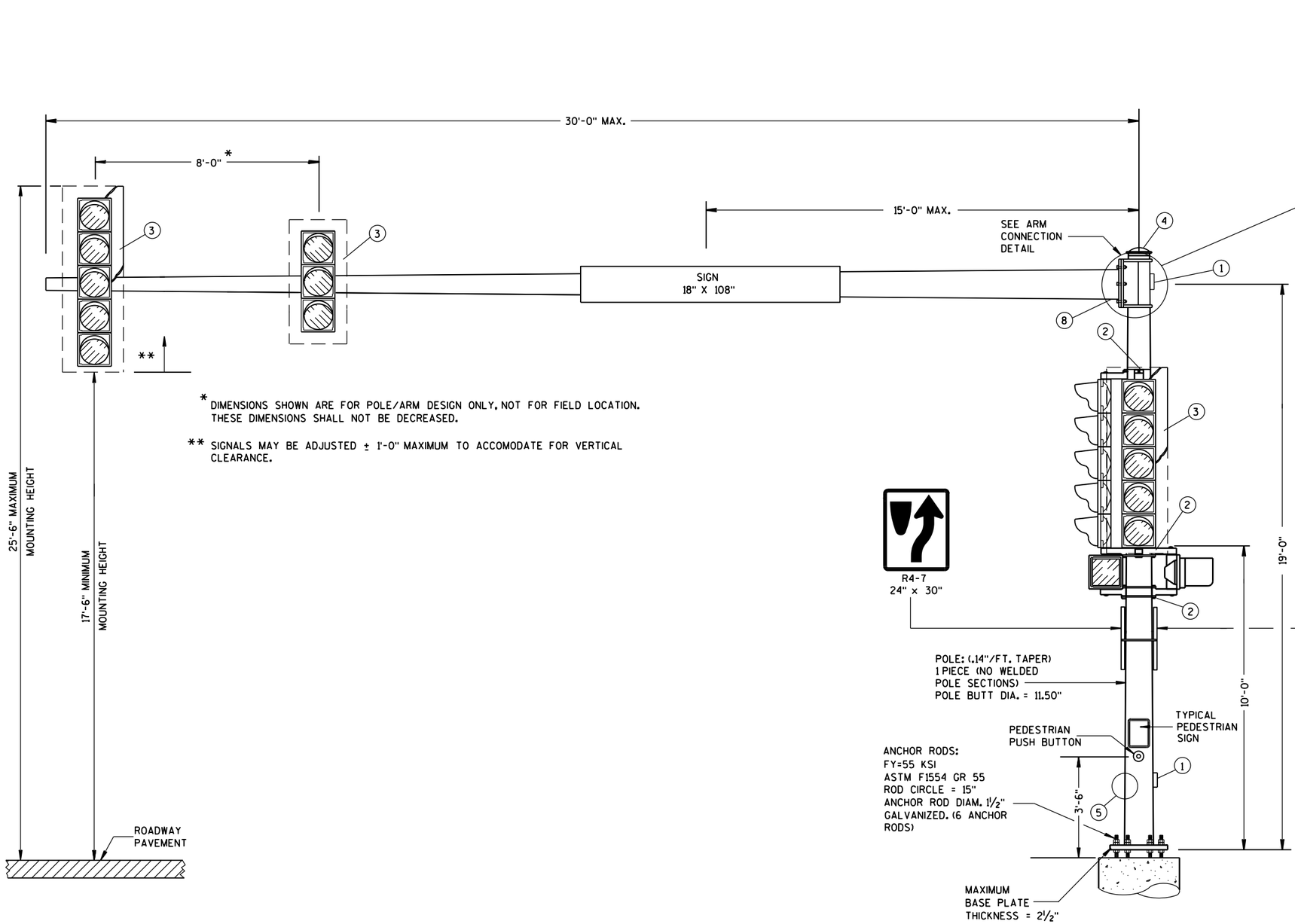
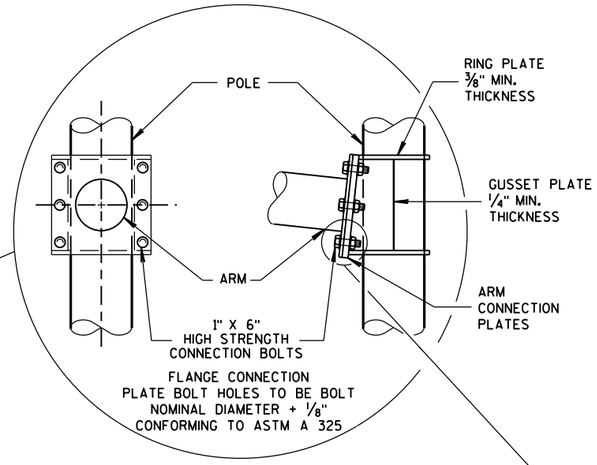
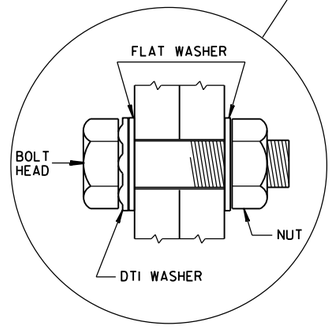


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

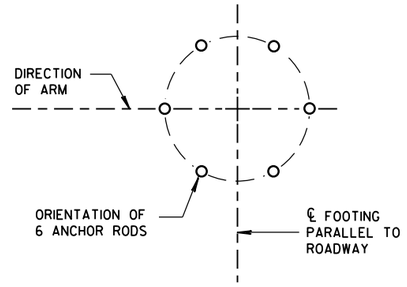
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

TYPE 9 POLE 15' - 30' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May, 2016 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

S.D.D. 9 E 8-8a

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP 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 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 2013 6TH EDITION 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.

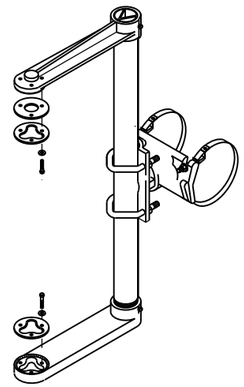
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

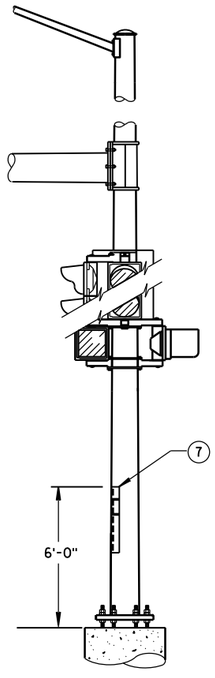
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

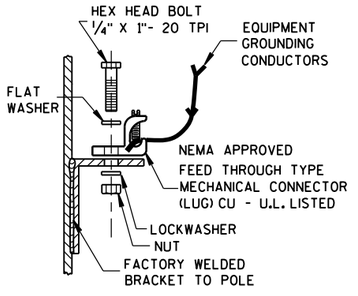


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANUFACTURER'S RECOMMENDATION)

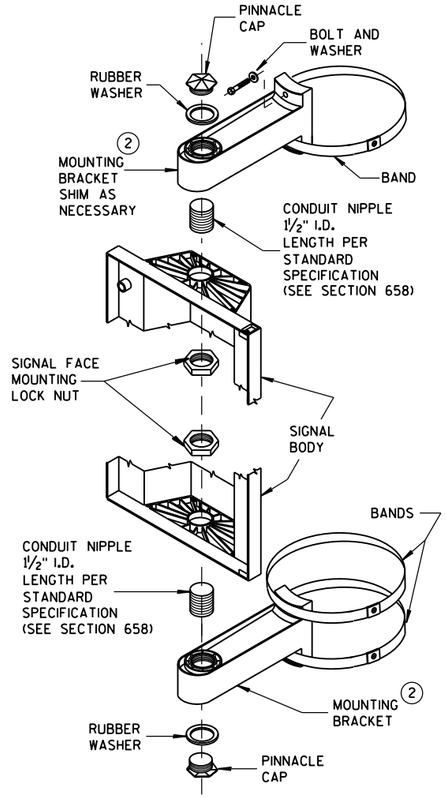


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT

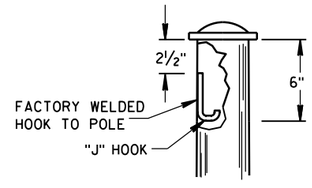


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



"J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 E 8-8e

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.

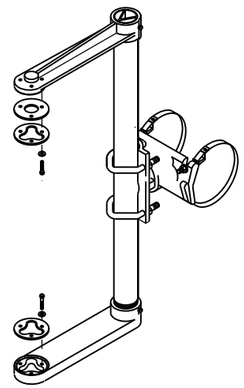
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

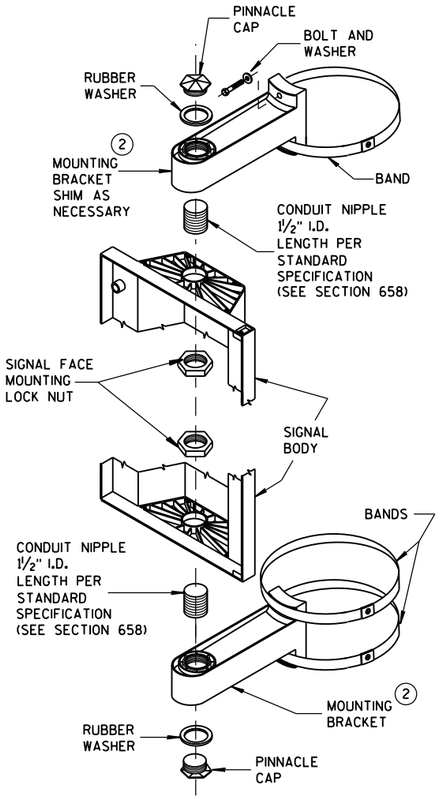
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

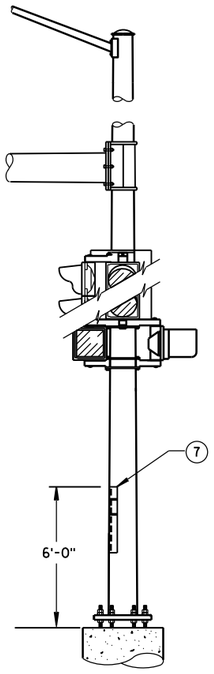


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

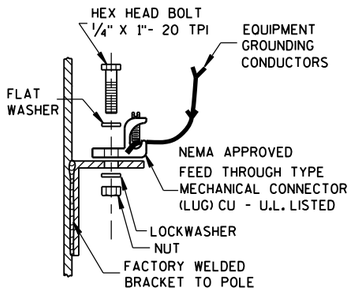
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

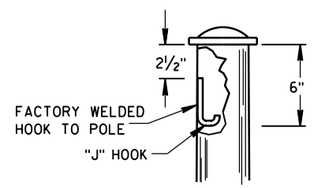


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



"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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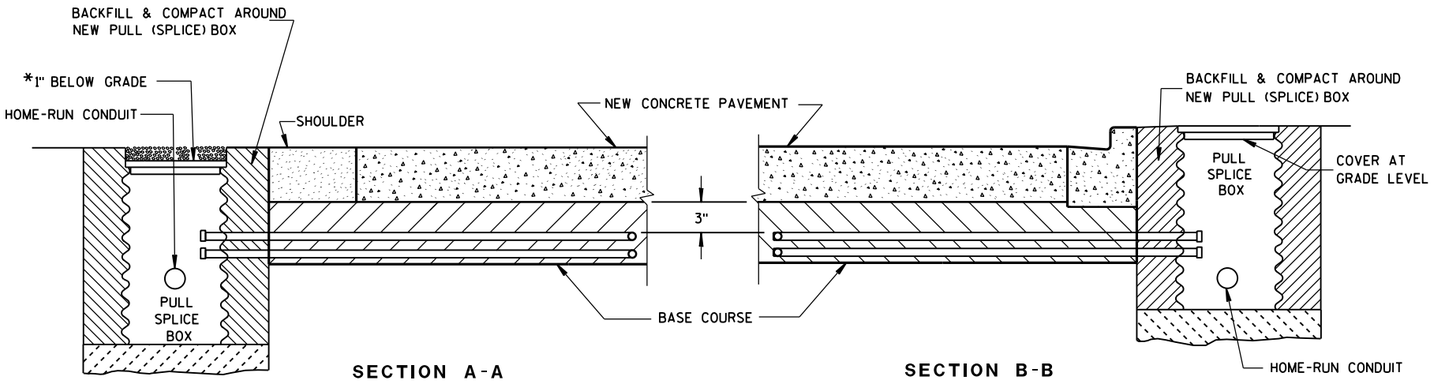
S.D.D. 9 E 12-1e



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & 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.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

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 READINGS 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.

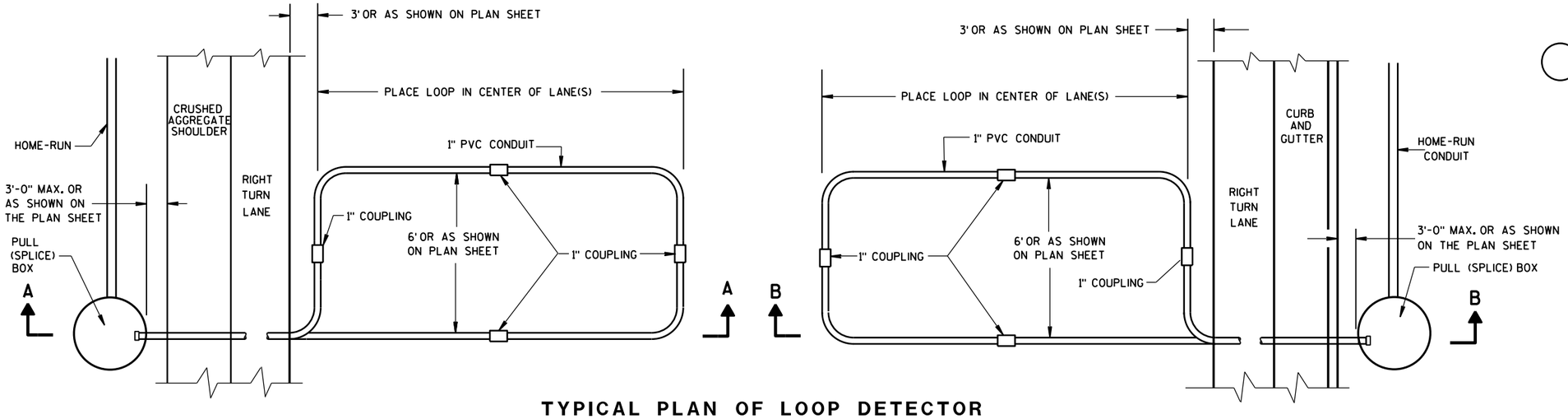
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

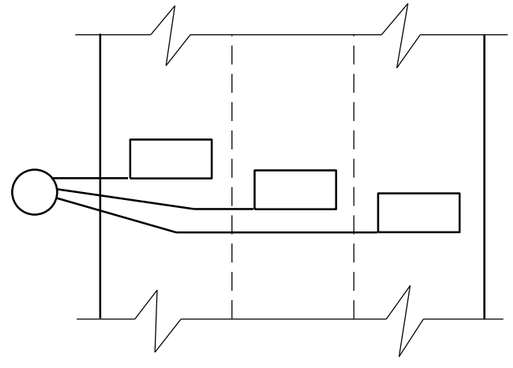
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS 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 OF 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 DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

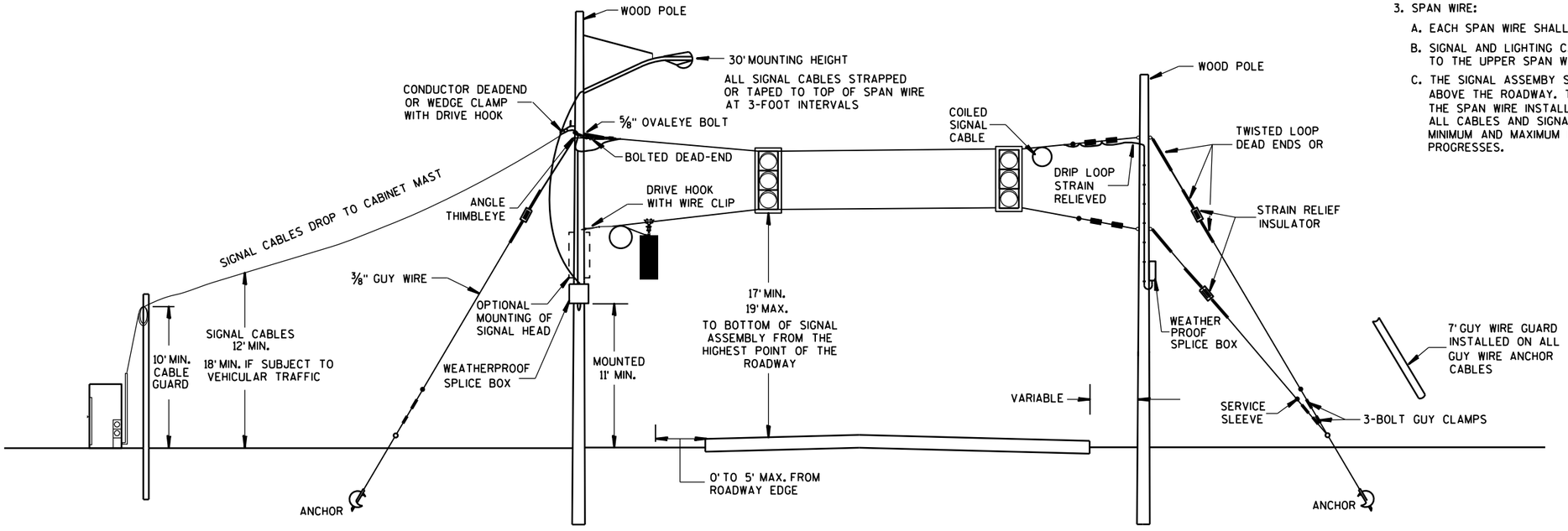
GENERAL NOTES

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 ASSEMBY 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

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June, 2015 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL
FHWA	

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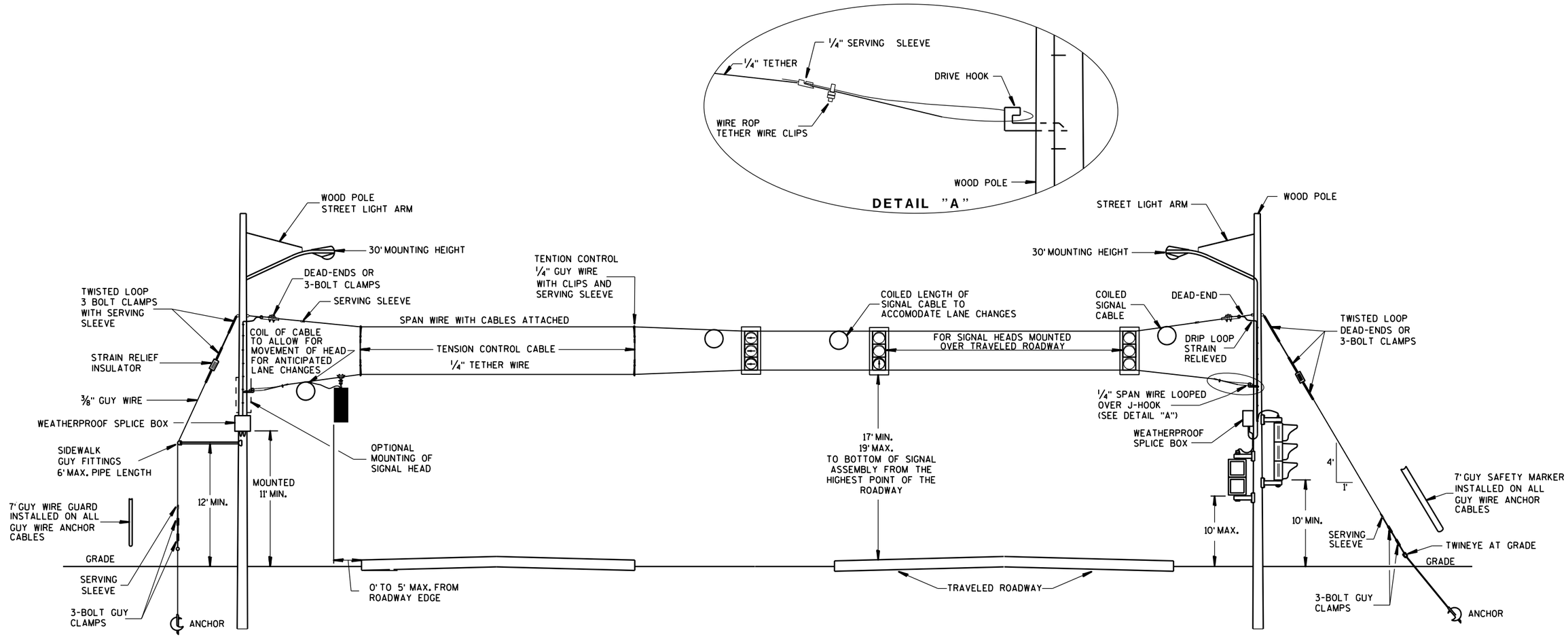
S.D.D. 9 G 1-4a



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.
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   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.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
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 ASSEMBY 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
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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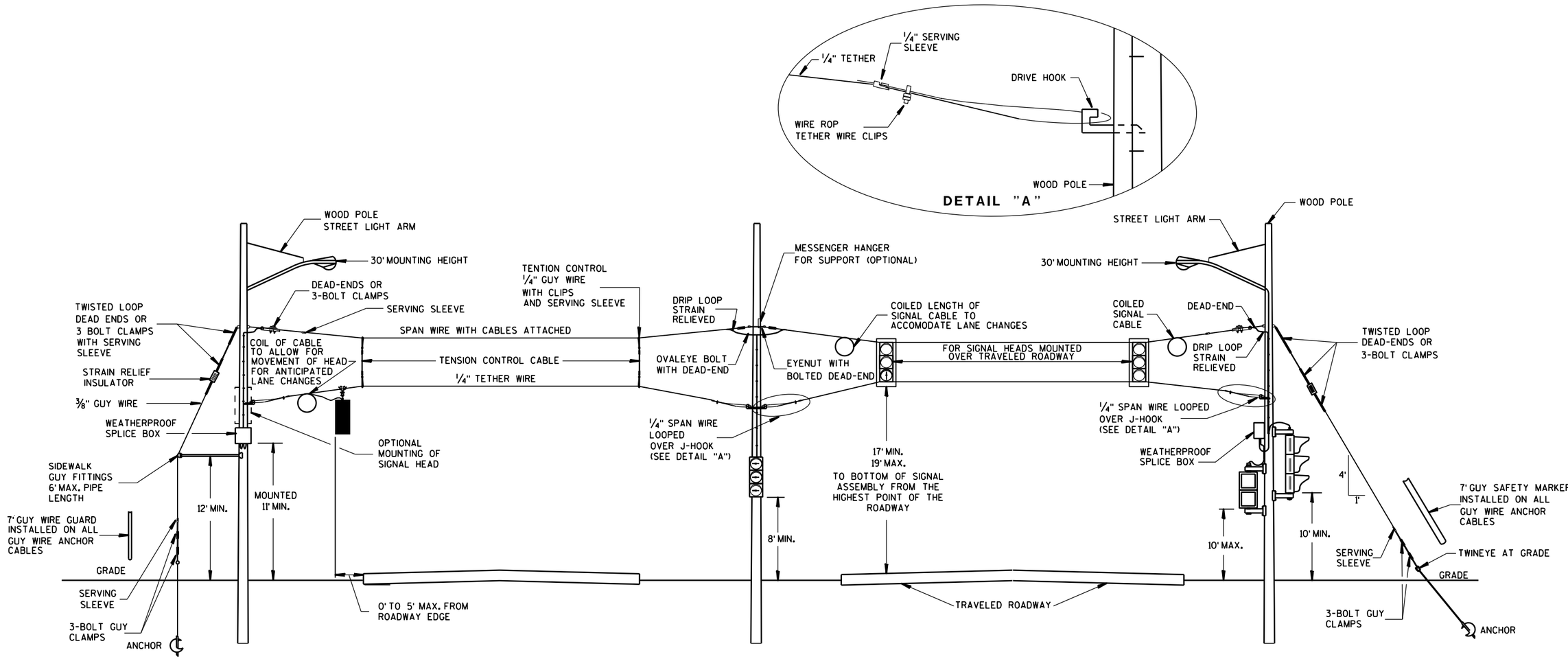
S.D.D. 9 G 1-4b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

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.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

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 ASSEMBY 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.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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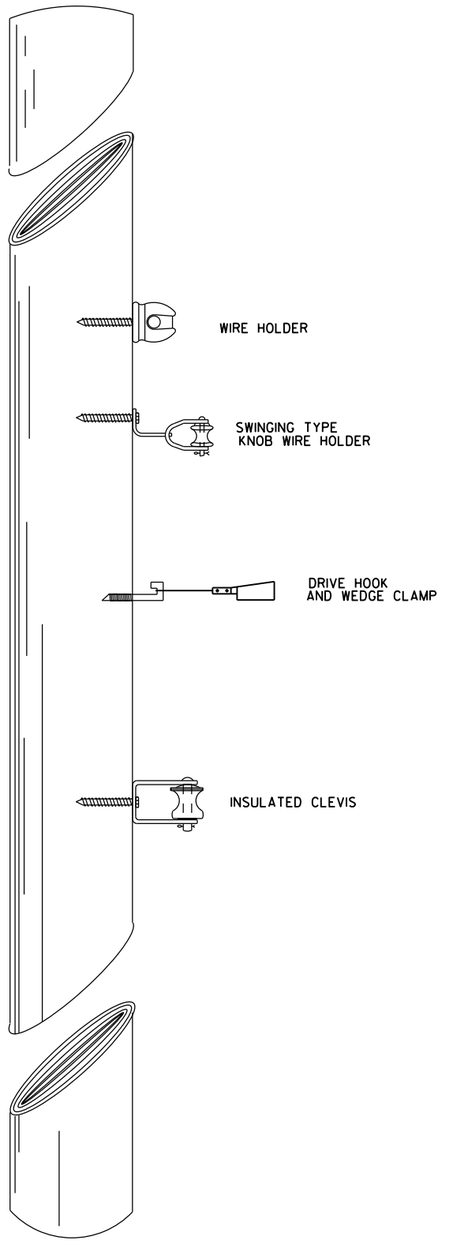
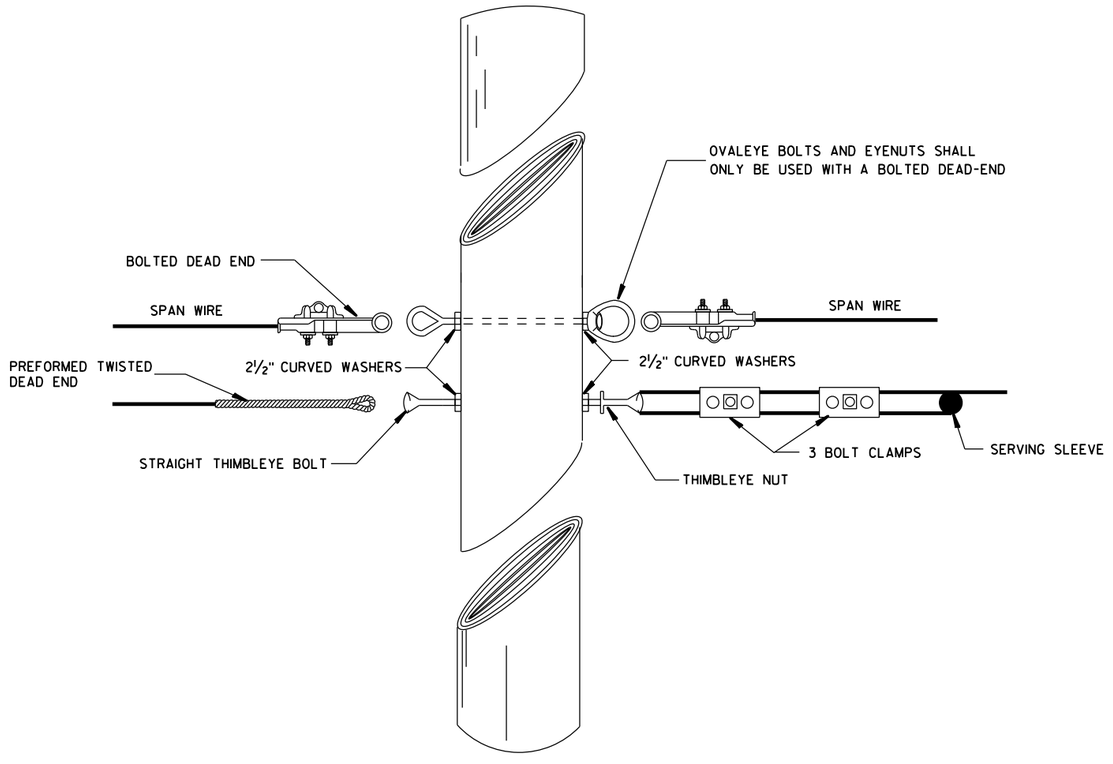
S.D.D. 9 G 1-4c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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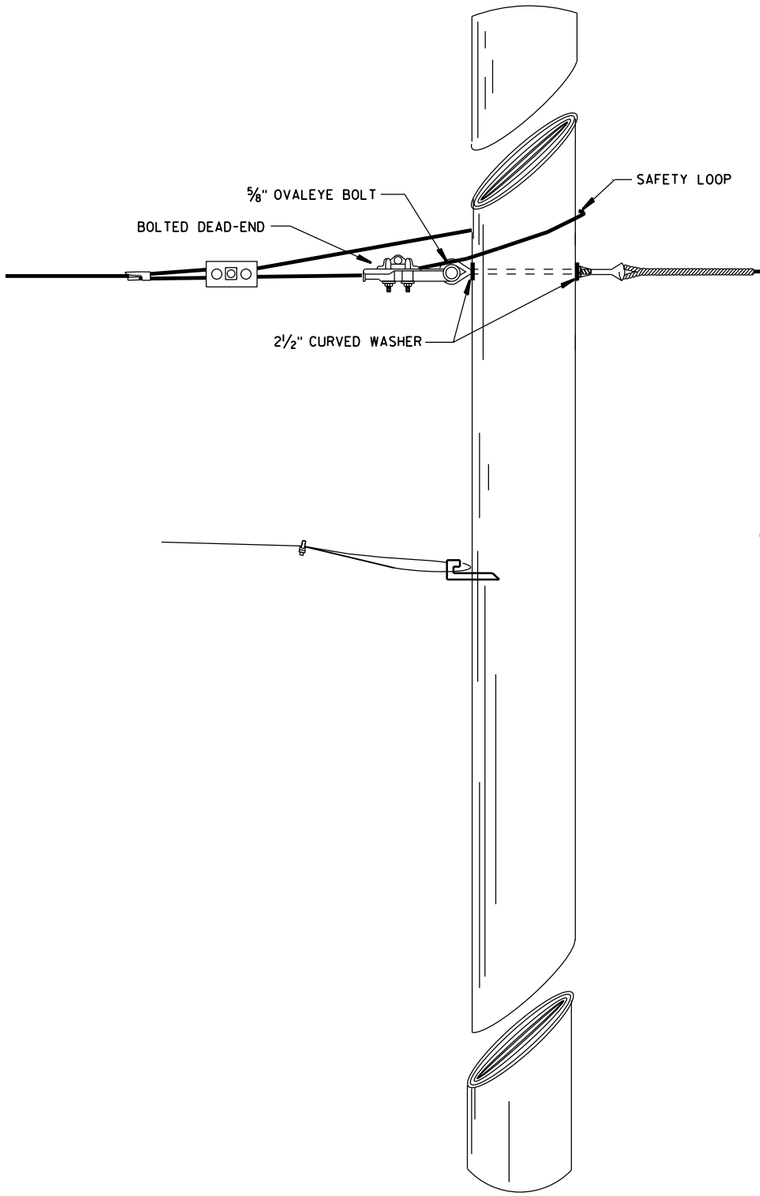
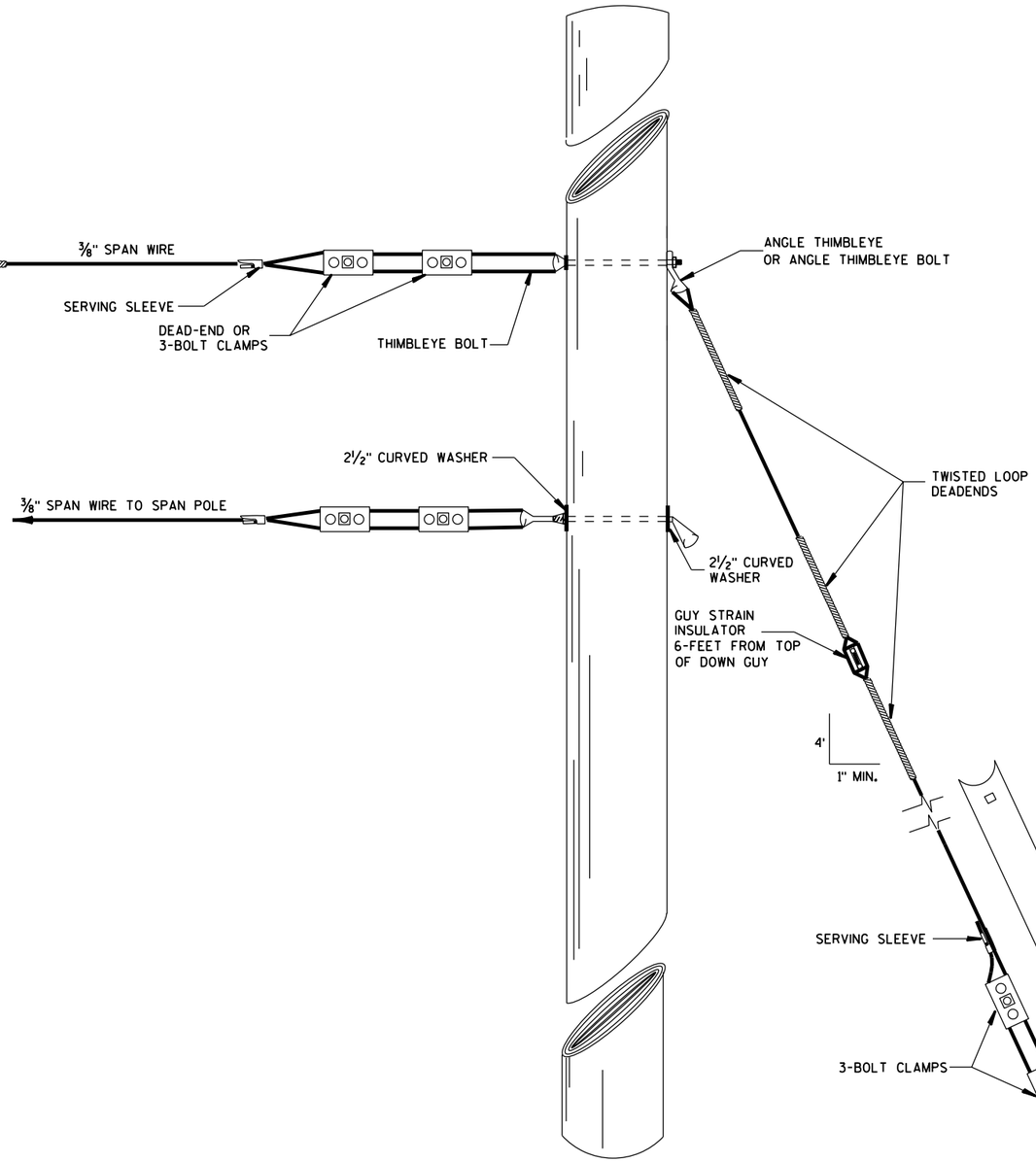
S.D.D. 9 G 1-4d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



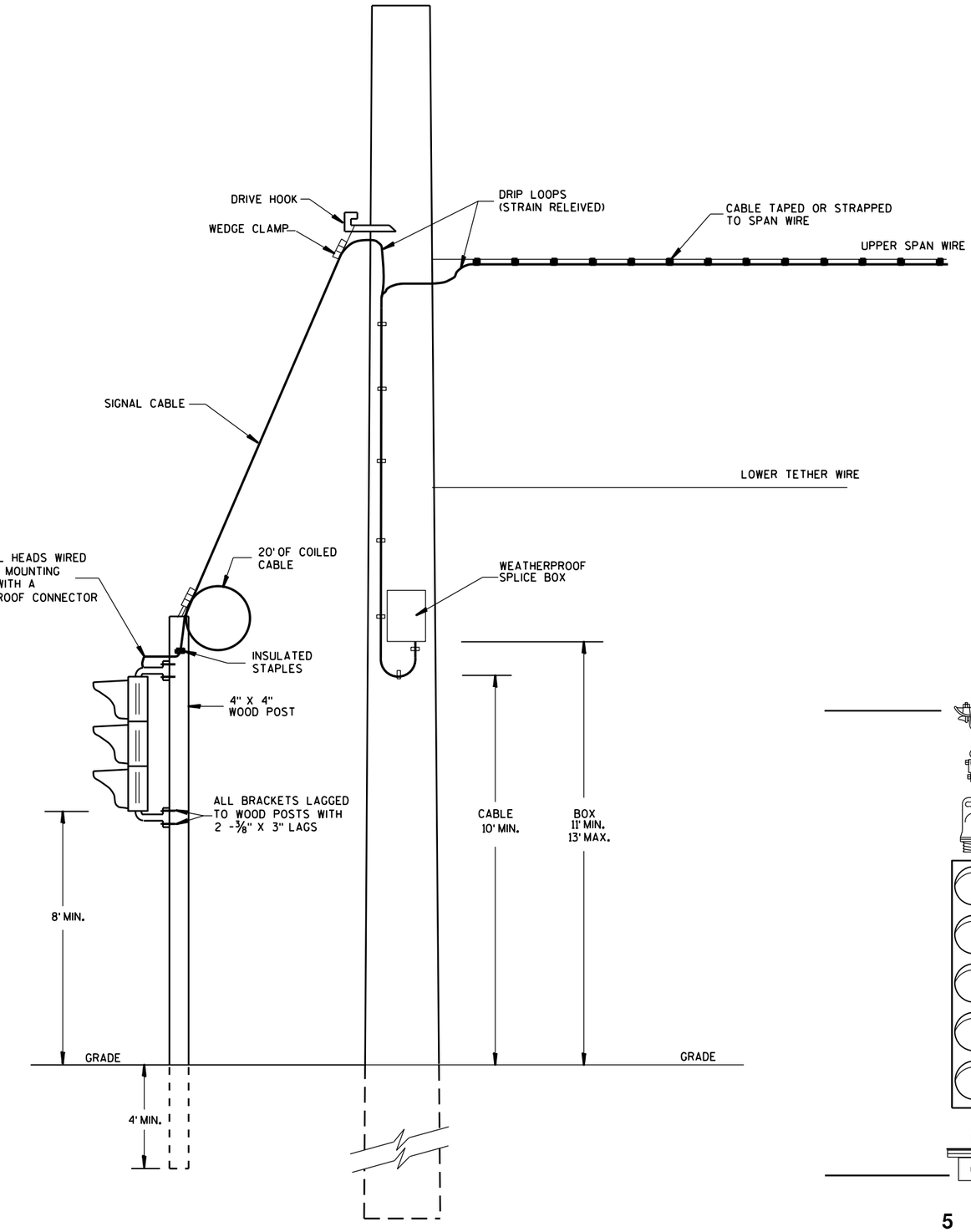
SPAN WIRE POLE



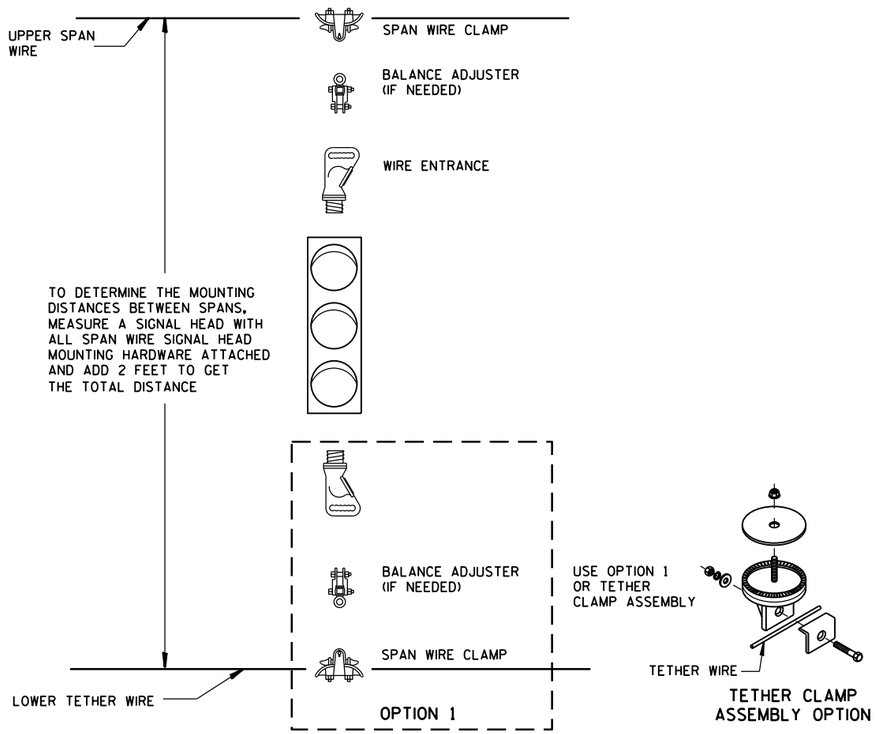
GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED June. 2015 DATE /S/ Ahmet Demirbilek STATE ELECTRICAL FHWA

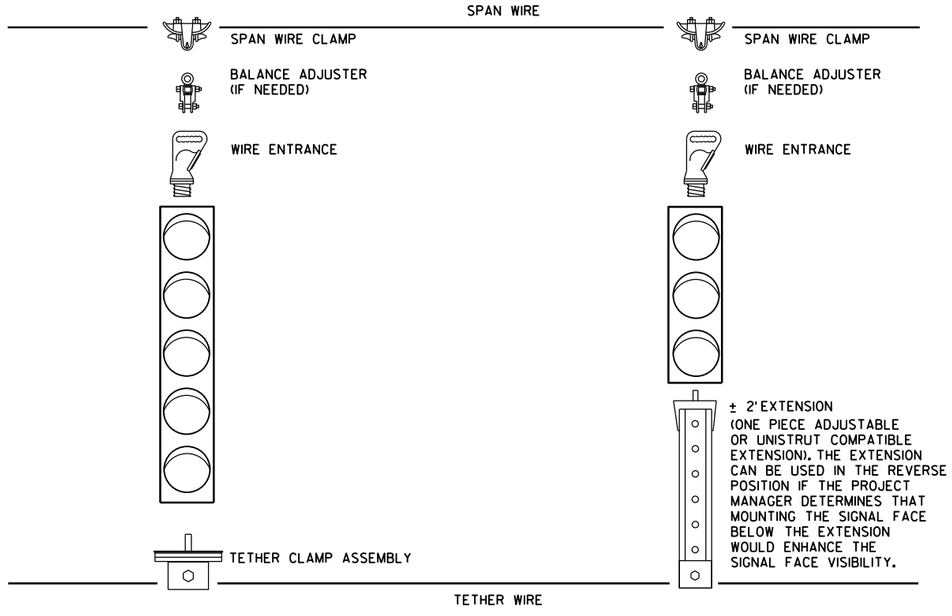


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June. 2015 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

FHWA

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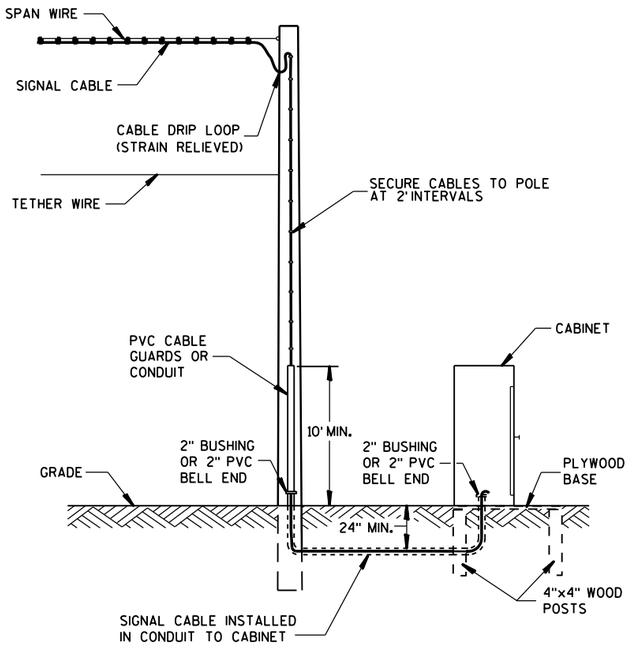
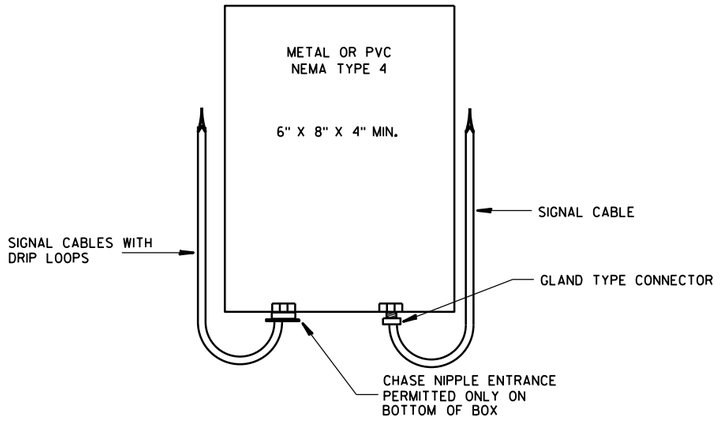
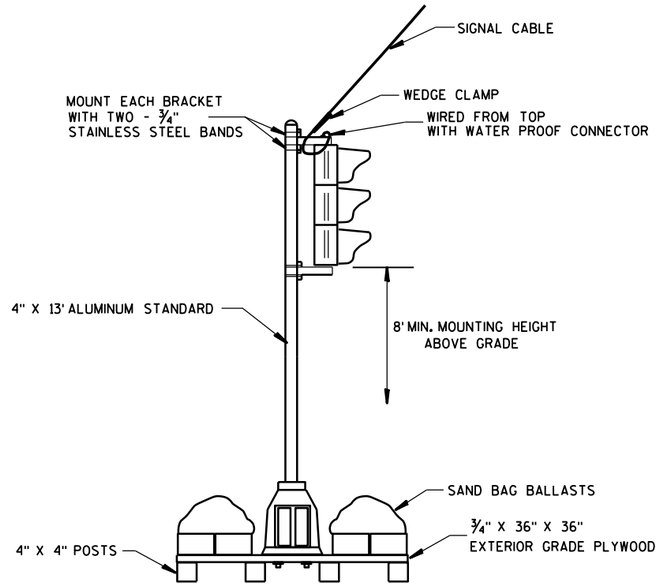
S.D.D. 9 G 1-4f

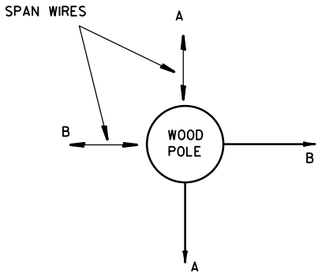




SPLICE BOX

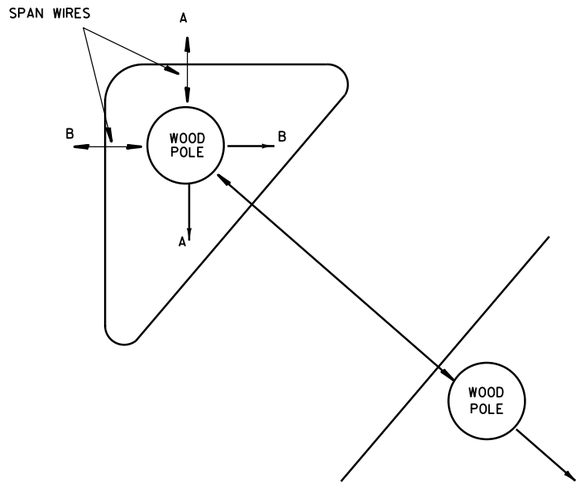


TYPICAL SKID TYPE TEMPORARY

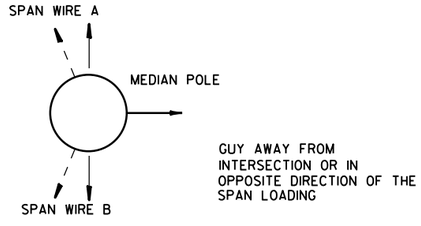


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 G 1-4g

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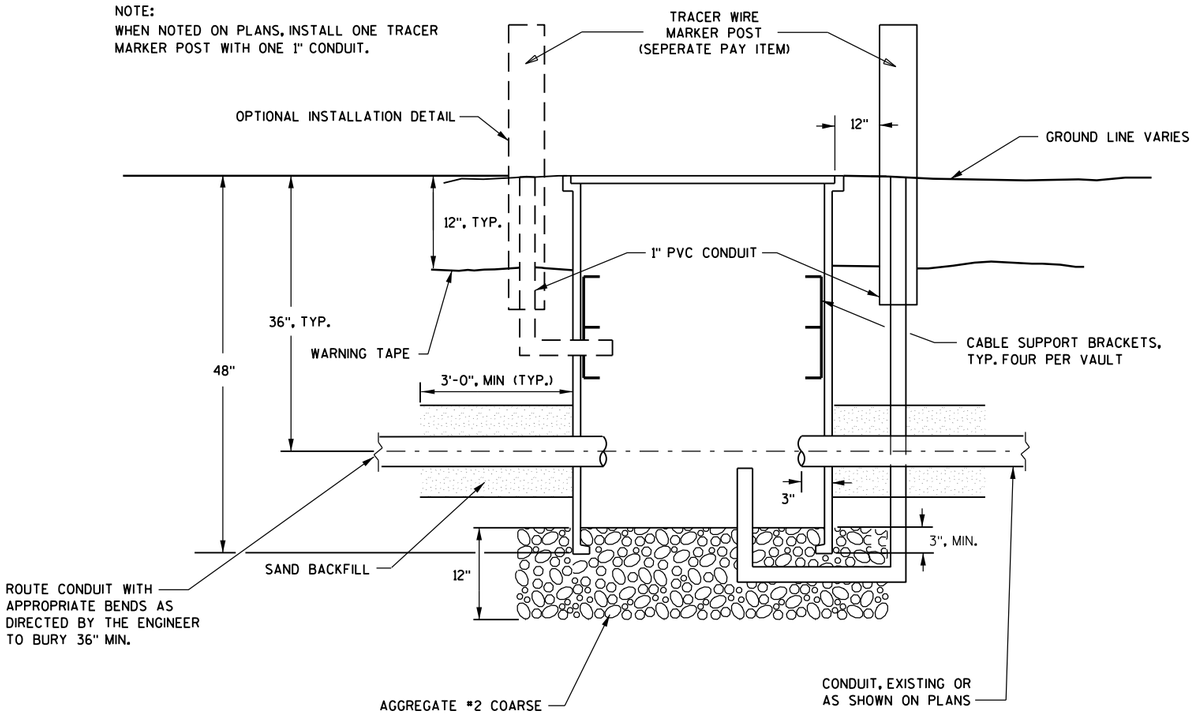
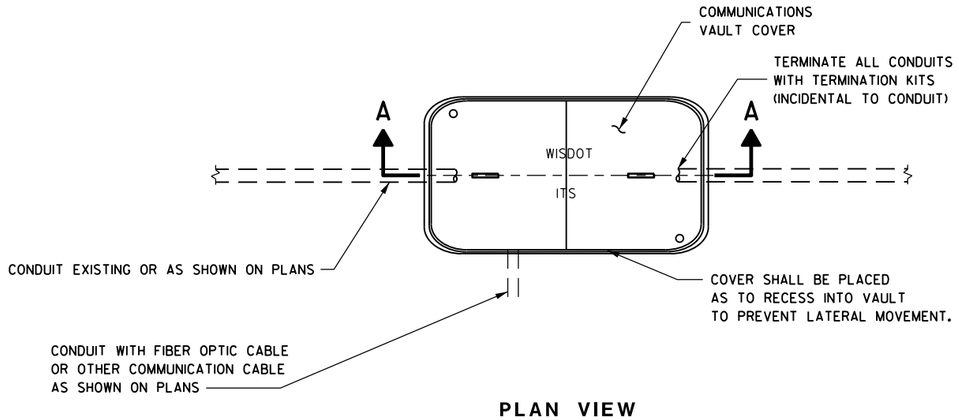
S.D.D. 9 G 1-4g



SECTION A-A



PLAN VIEW

GENERAL NOTES

PROVIDE VAULT WITH OPEN BASE.

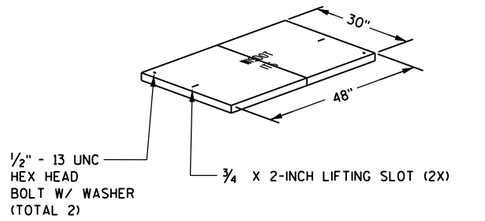
COVER SHALL HAVE A MINIMUM DESIGN LOAD OF 15,000 LBS AND SHALL LOCK.

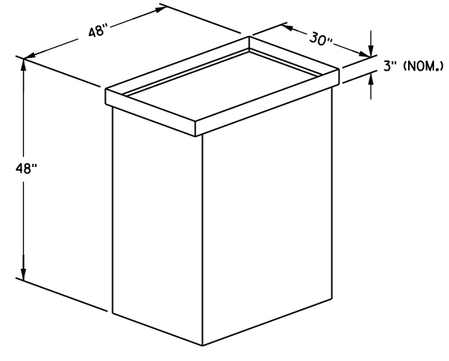
ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION, OR PUNCH DRIVEN AT TIME OF PLACEMENT.

VAULTS SHALL BE OF ONE-PIECE CONSTRUCTION. TWO-PIECE/STACKABLE VAULTS WILL NOT BE PERMITTED.

FIELD PLACEMENT OF COMMUNICATIONS VAULTS SHALL BE AS DIRECTED BY THE ENGINEER.

FIBER TRACER MARKER POSTS SHALL BE CONSTRUCTED WITH HIGH-IMPACT PLASTIC MATERIAL WHICH IS FADE RESISTANT AND UV STABLE. ALL HARDWARE SHALL BE STAINLESS STEEL AND CONTAIN A MINIMUM OF FIVE STANDARD TERMINALS.





ISOMETRIC VIEW

COMMUNICATIONS VAULT TYPE 1

COMMUNICATION VAULT
TYPE 1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2017 — DATE
/S/Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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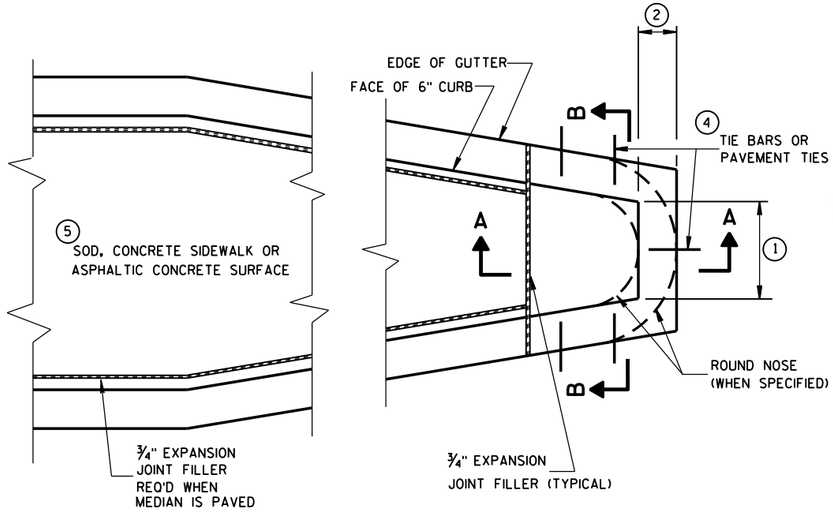
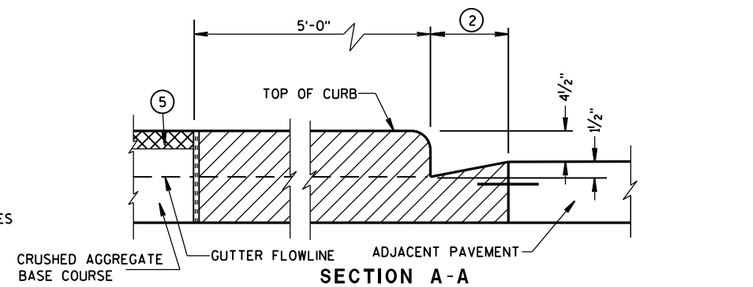
S.D.D. 9 H 9-2





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

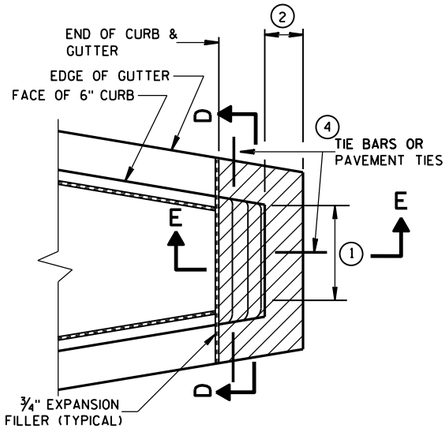
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

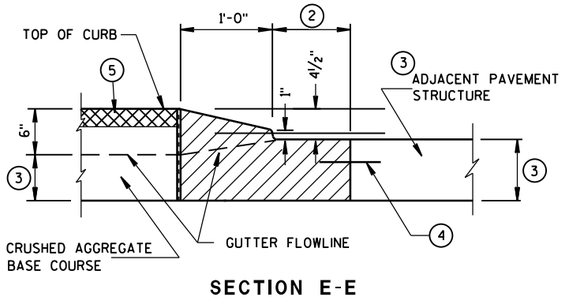
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

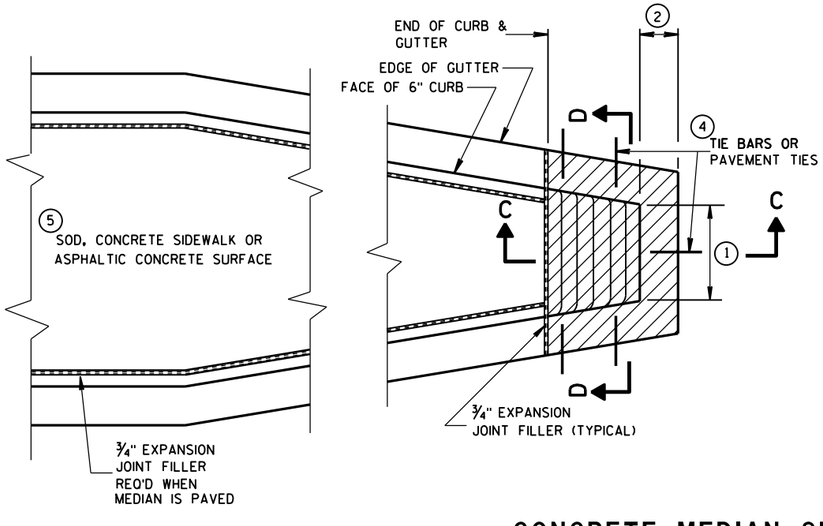
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

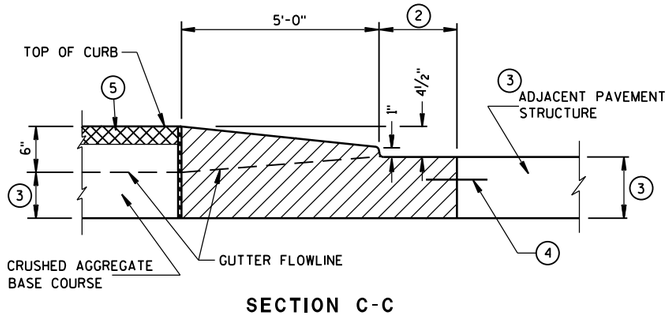




SECTION E-E

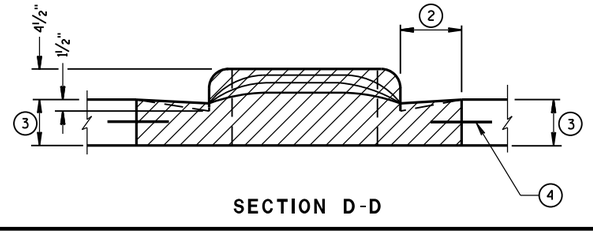
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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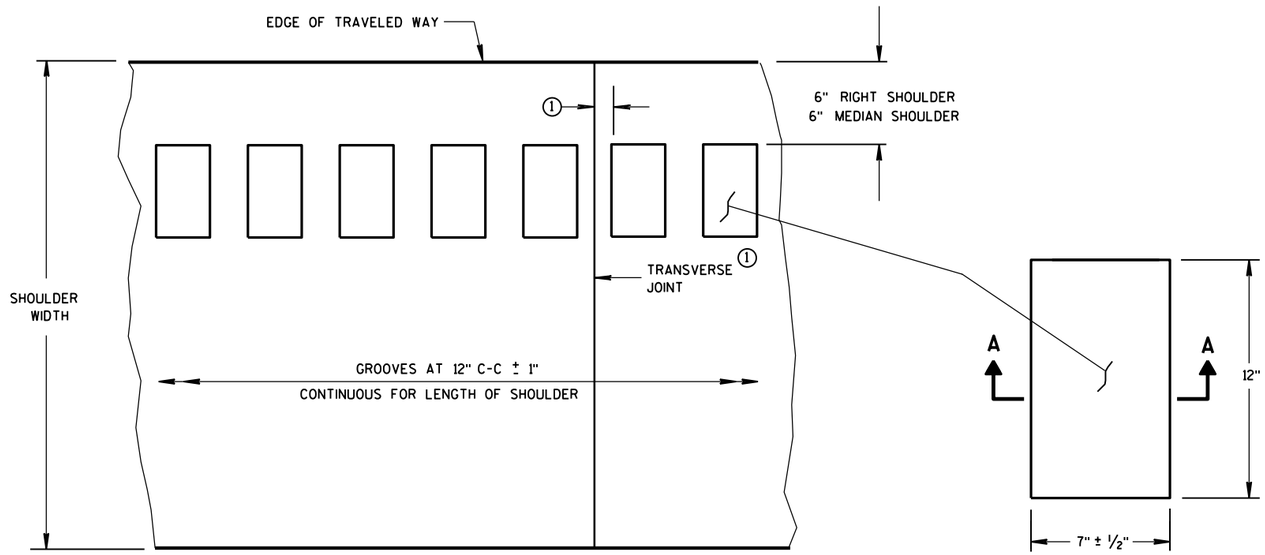
S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

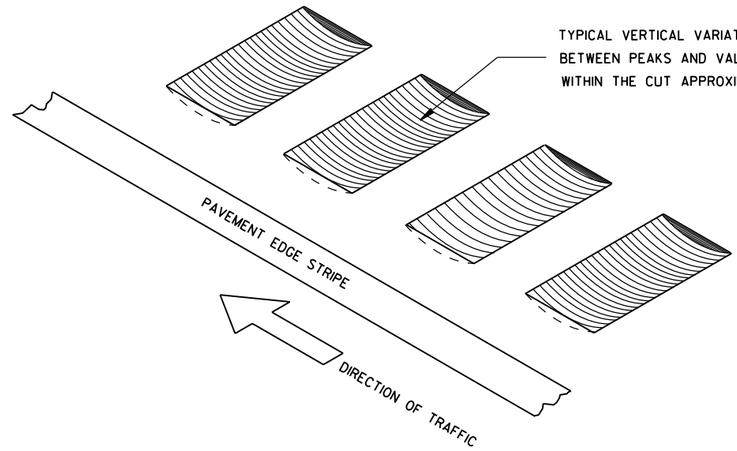
GENERAL NOTES

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.



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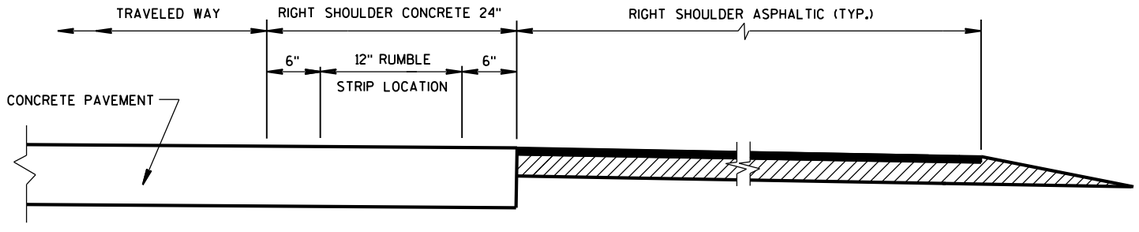
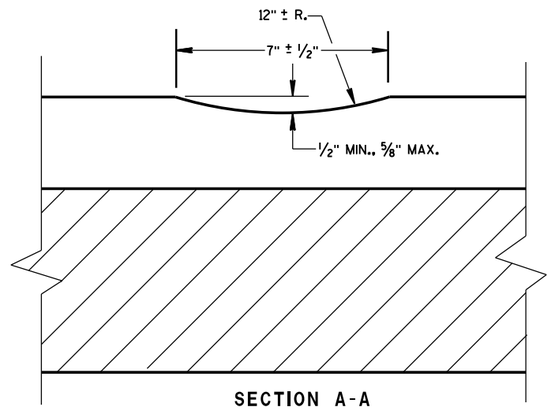
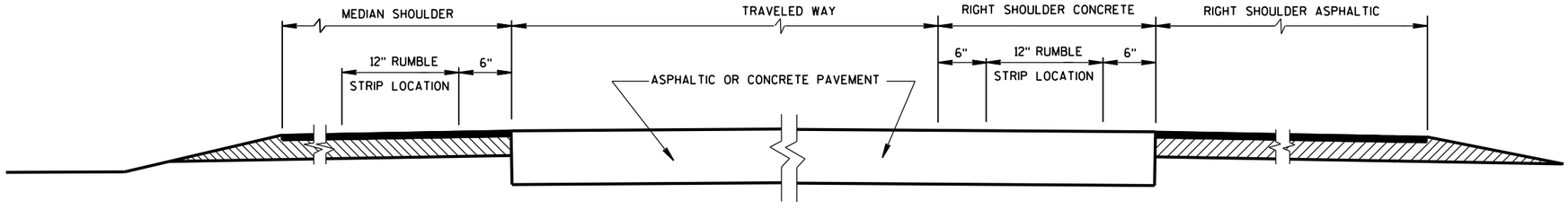


SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

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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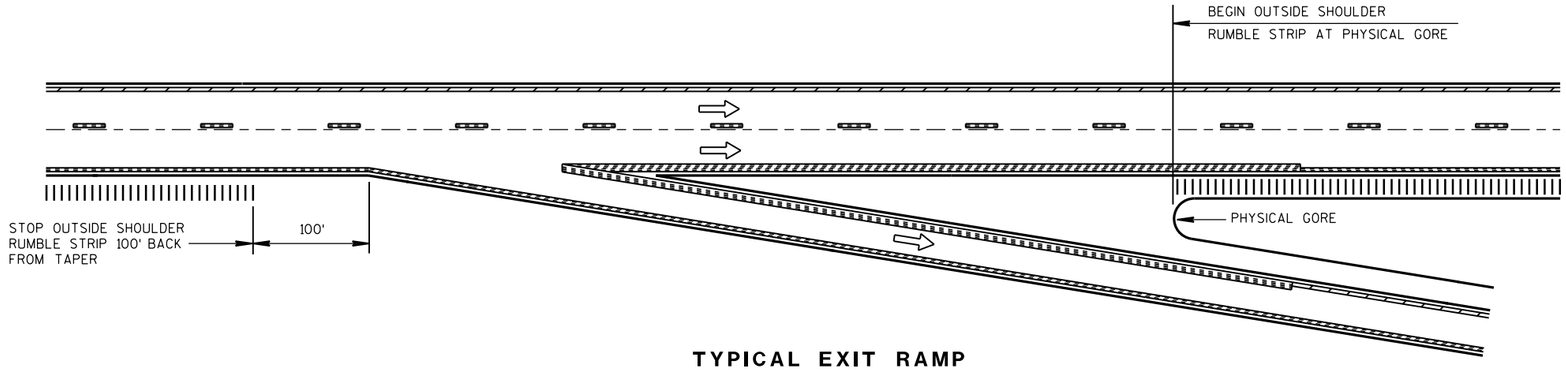
S.D.D. 13 A 5-5a



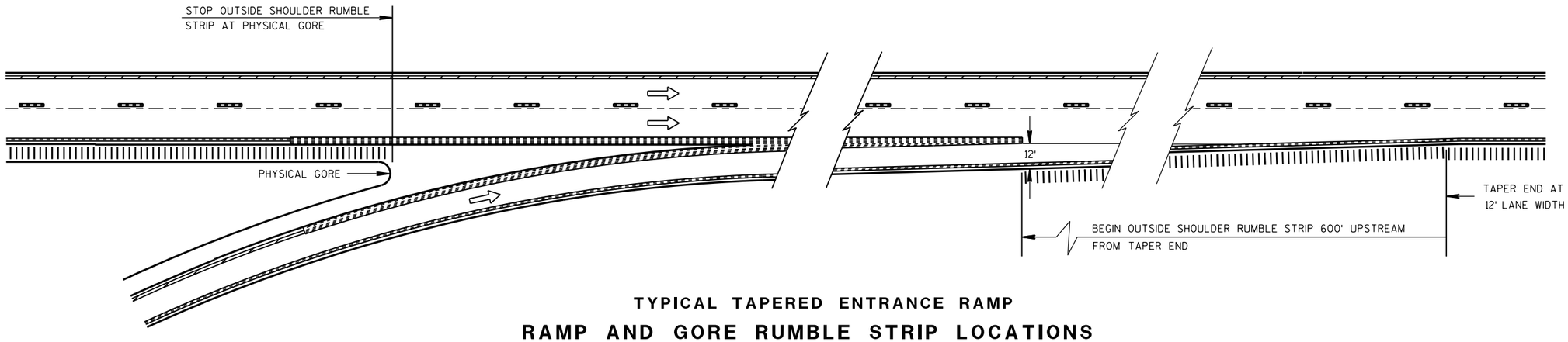
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

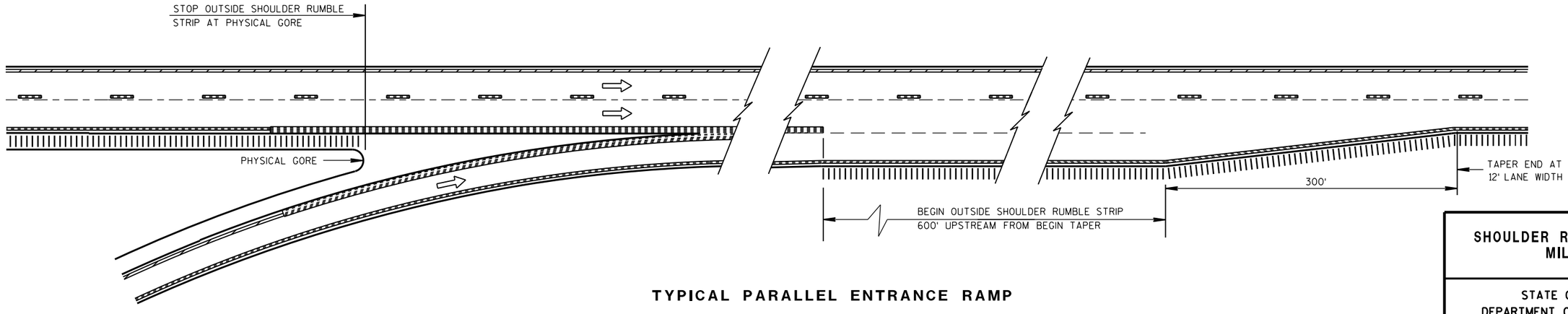
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

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

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S.D.D. 13 A 5-5b

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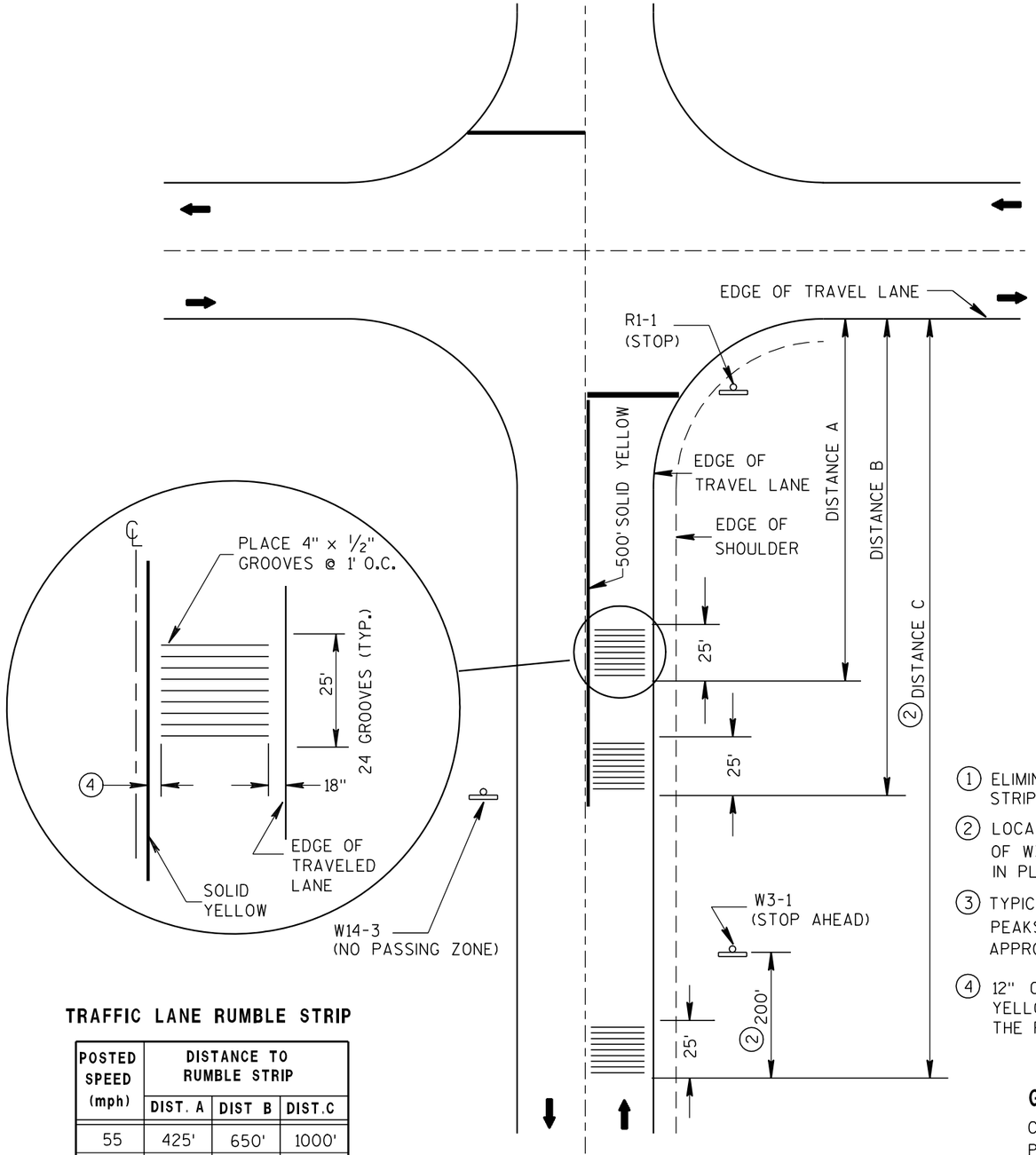
S.D.D. 13 A 5-5b



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

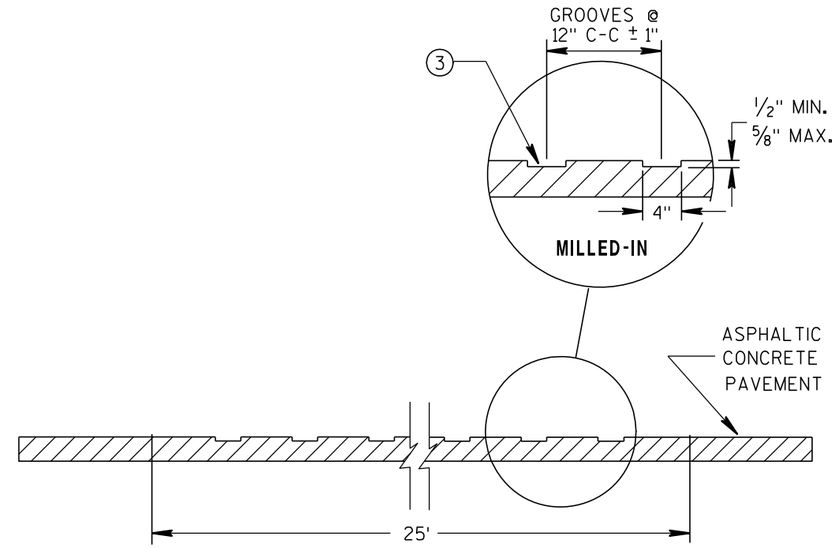
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

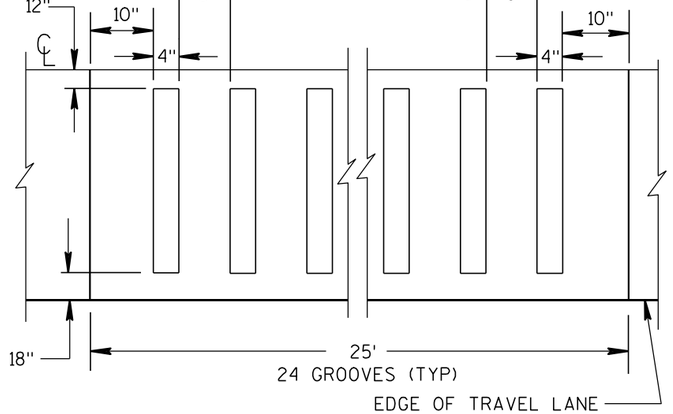
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS | 154
ENGINEER

FHWA

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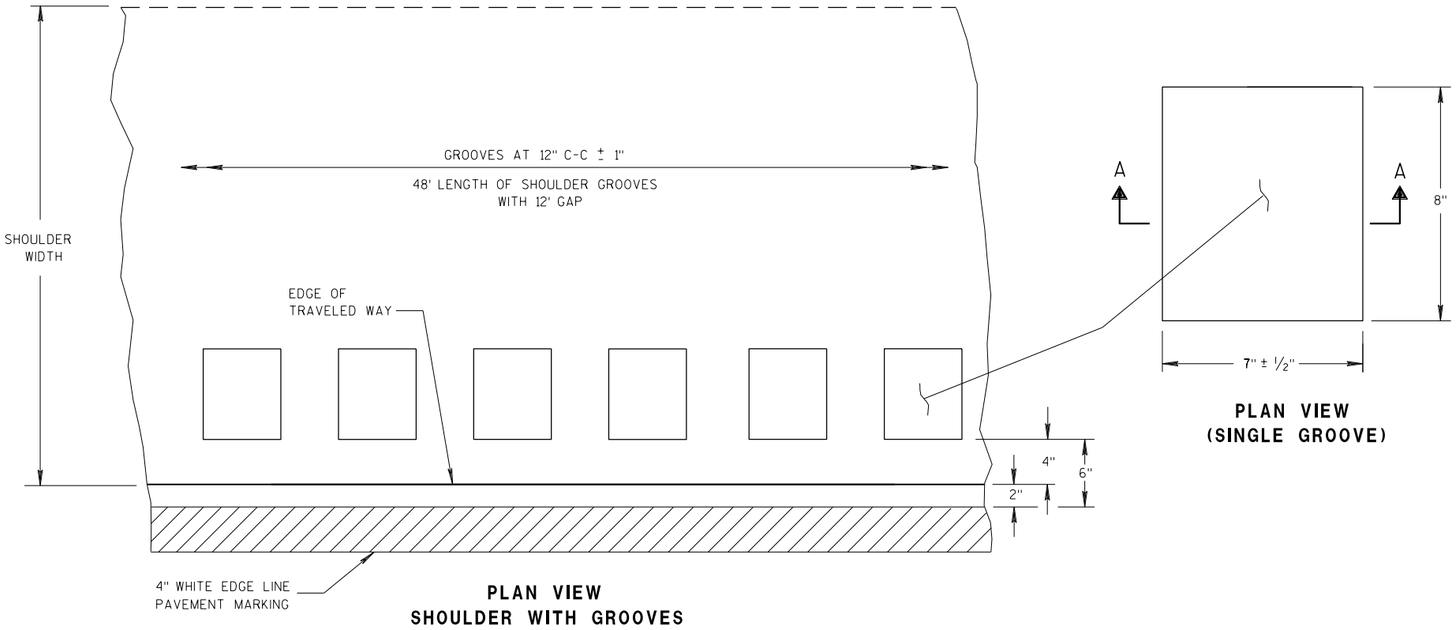
S.D.D. 13 A 8-1



PLAN VIEW
SHOULDER WITH GROOVES

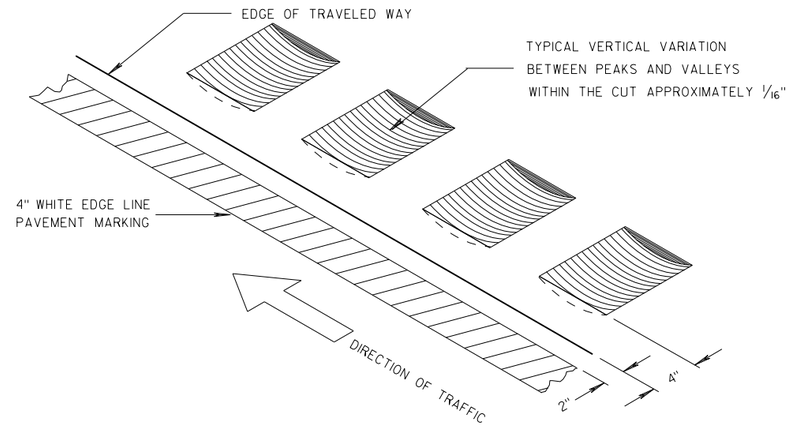
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

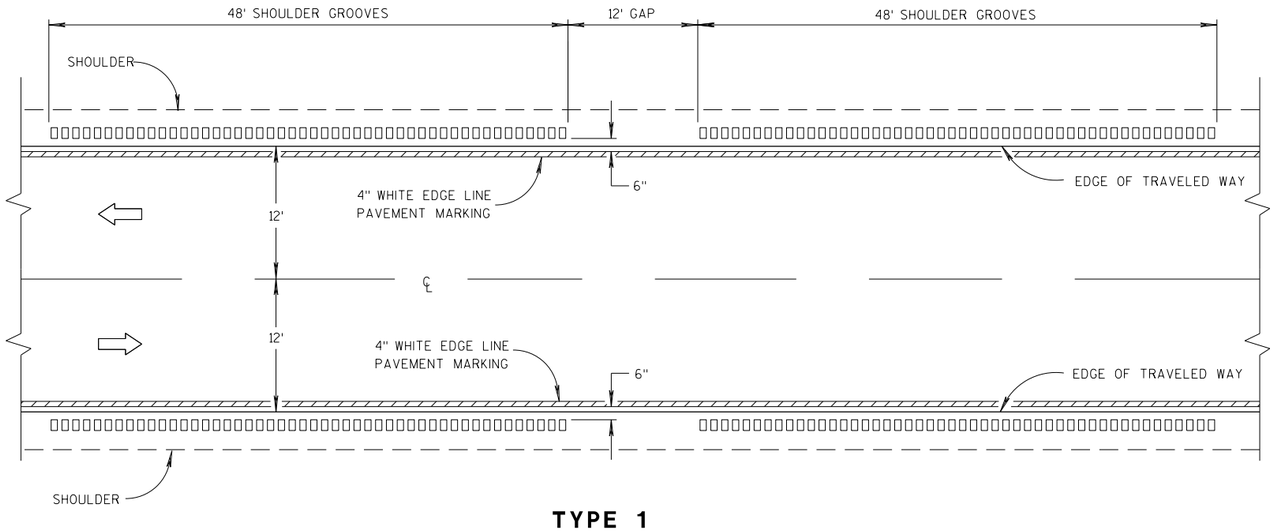
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

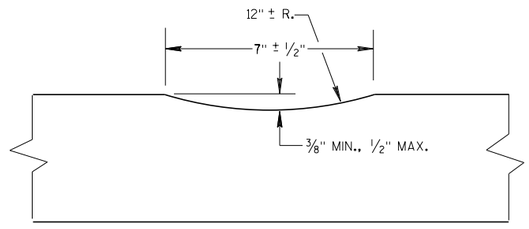


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

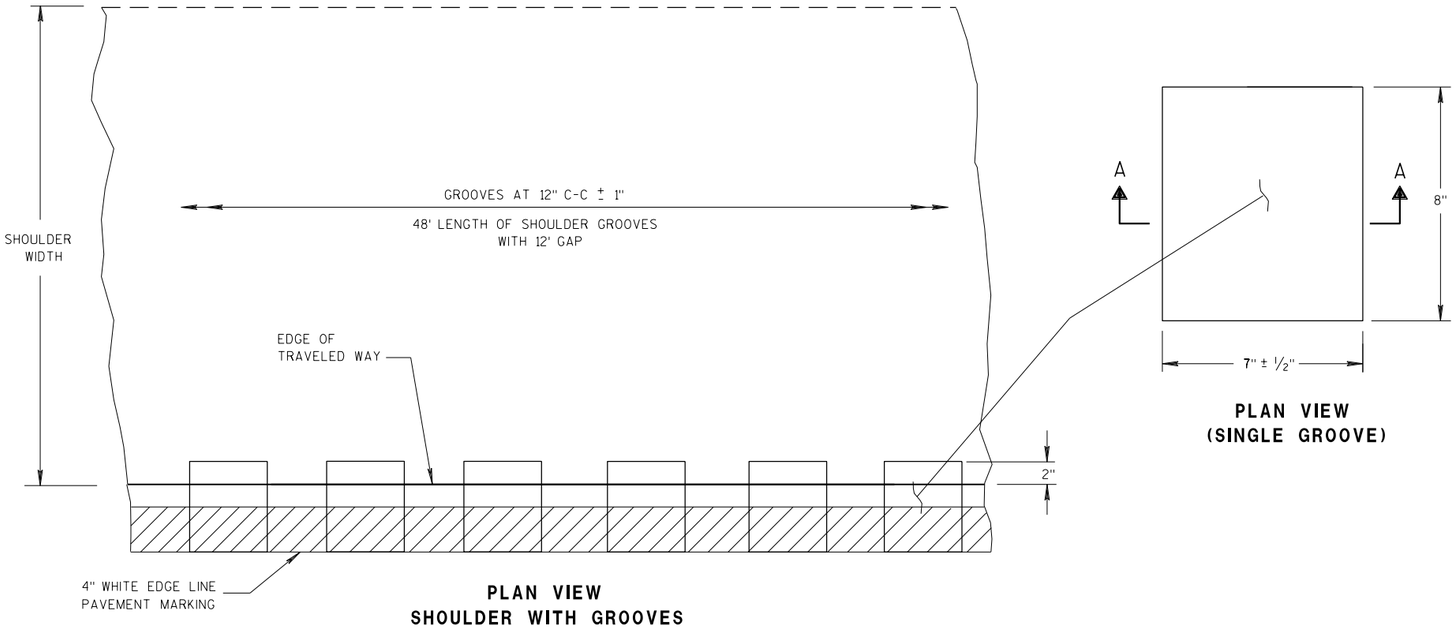
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT, 155

6

S.D.D. 13 A 10-2a

6

S.D.D. 13 A 10-2a



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

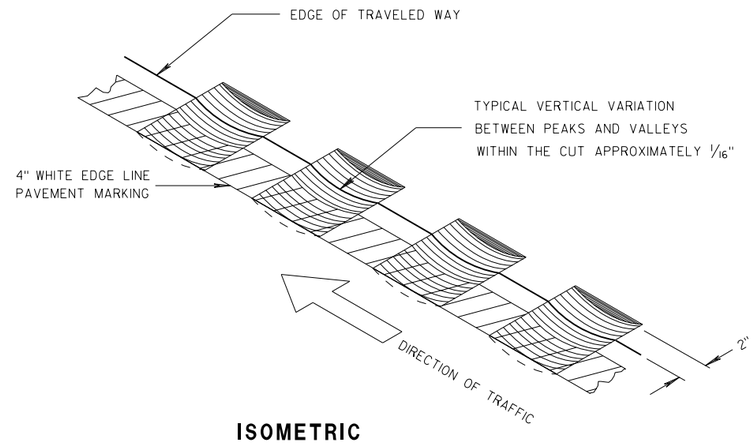
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

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

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

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



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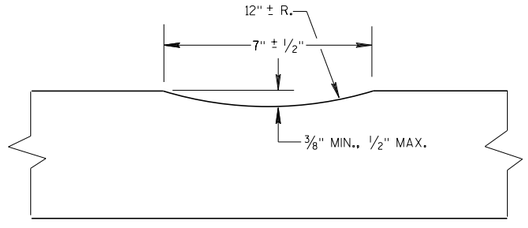
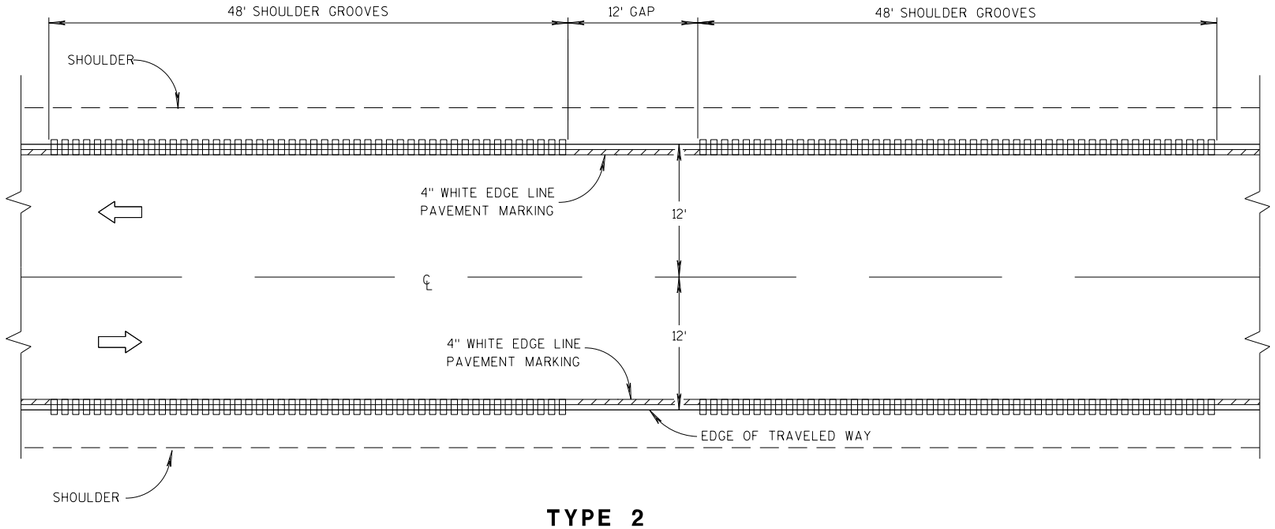


SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

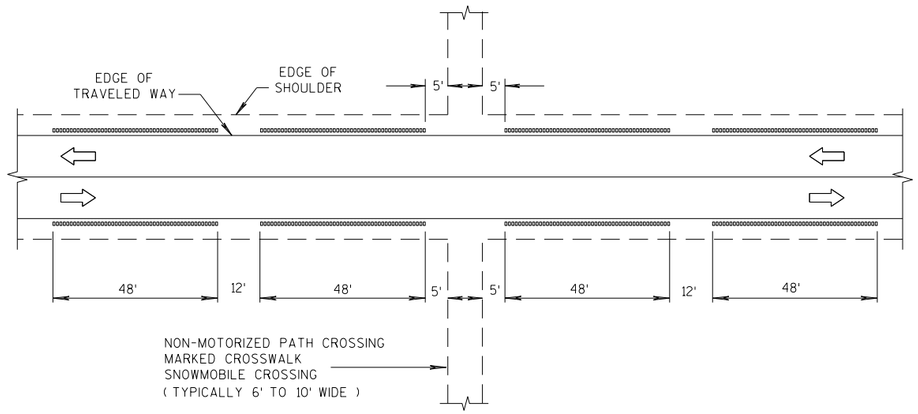
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT, 156

6

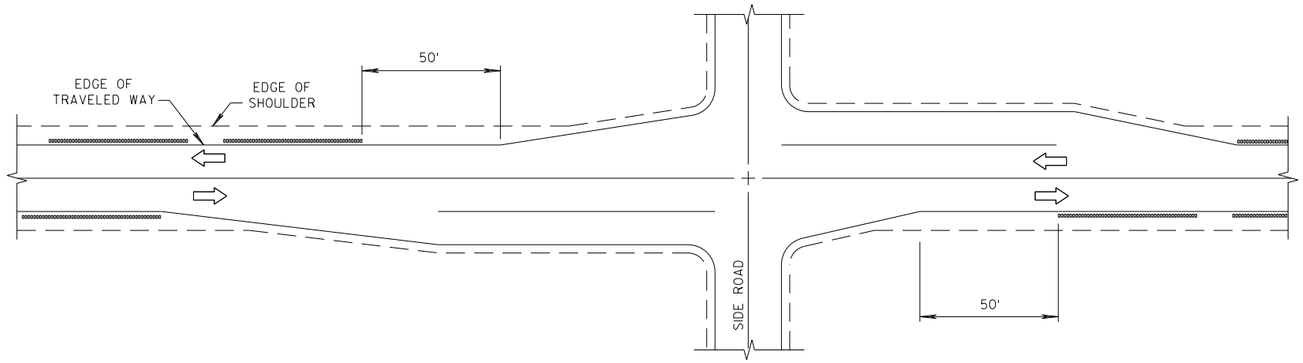
S.D.D. 13 A 10-2b

6

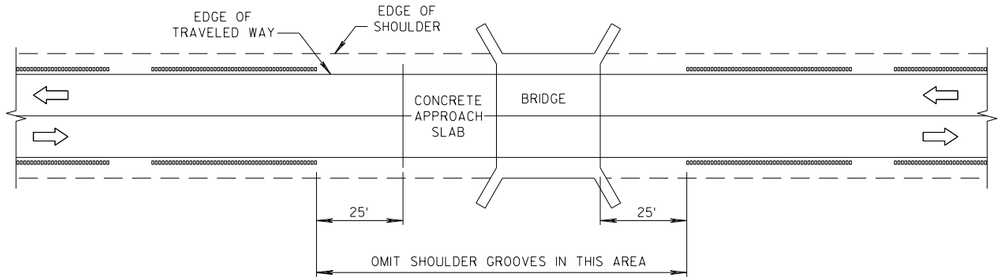
S.D.D. 13 A 10-2b



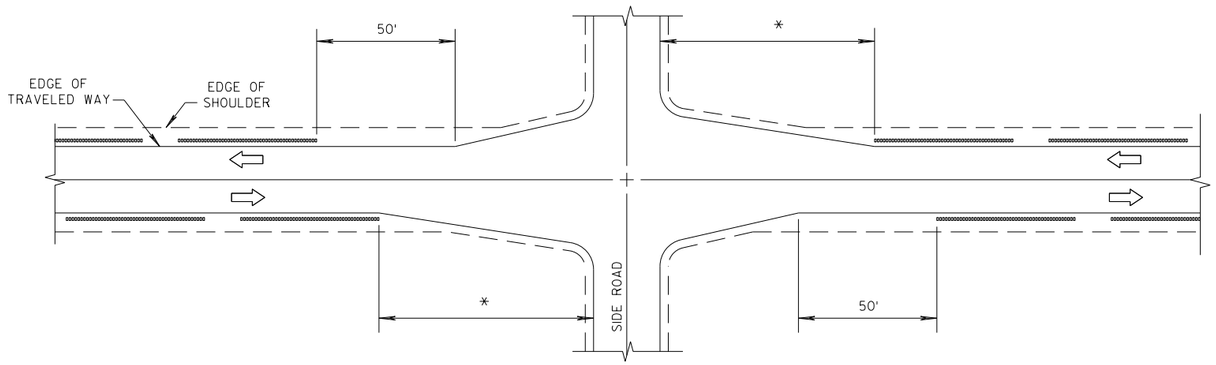
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT WITH RIGHT TURN LANE

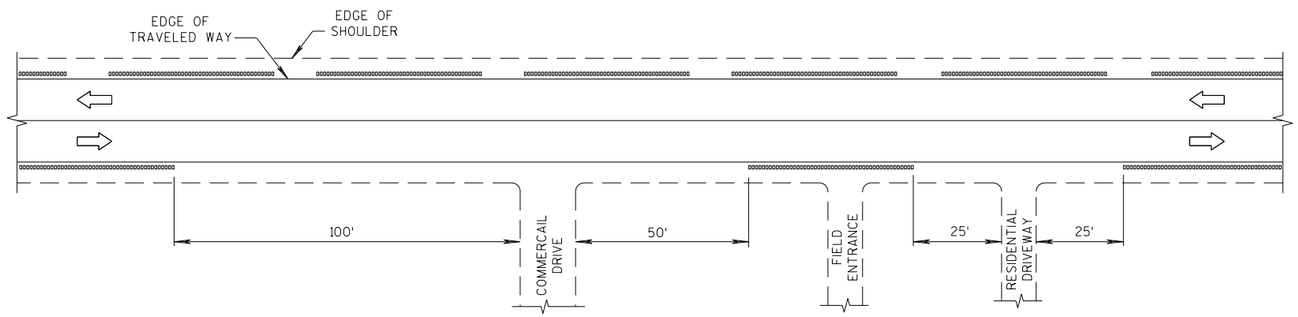


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

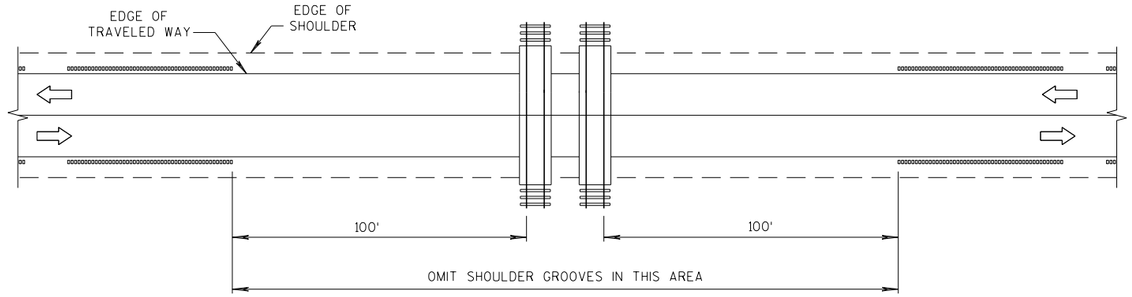
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT, 157

6

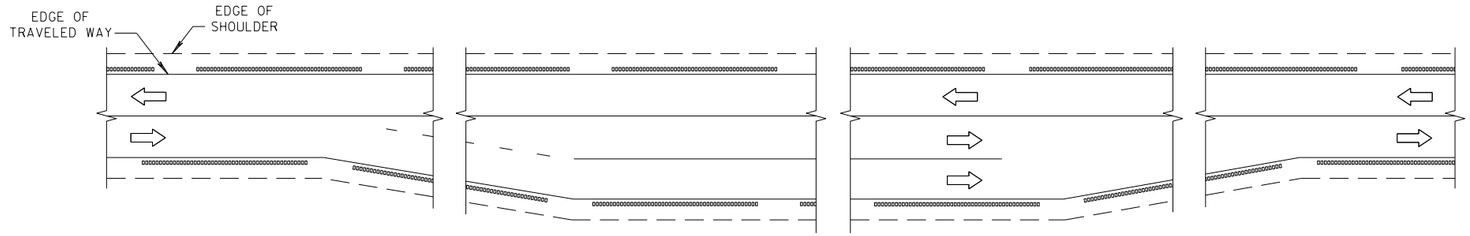
S.D.D. 13 A 10-2c

6

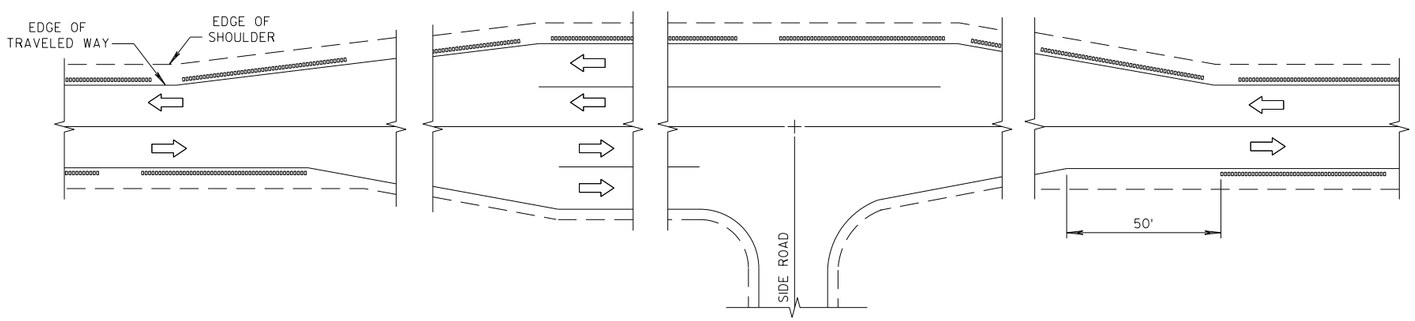
S.D.D. 13 A 10-2c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

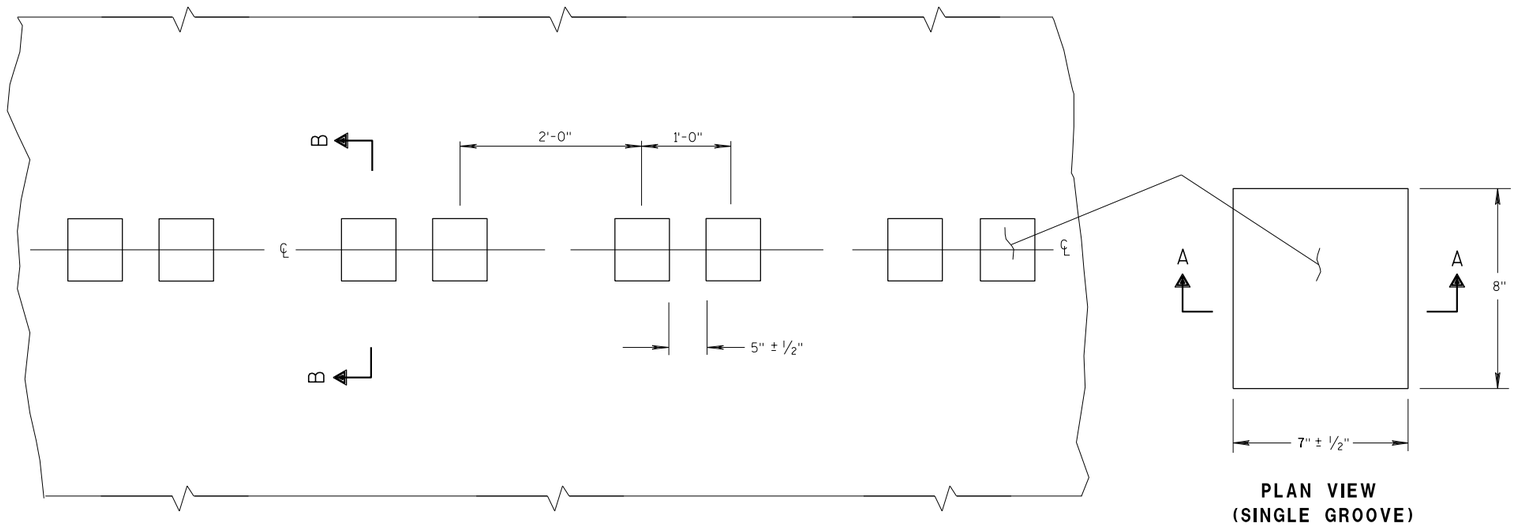
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEV
UNIT SUPERVISOR

6
S.D.D. 13 A 10-2d



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

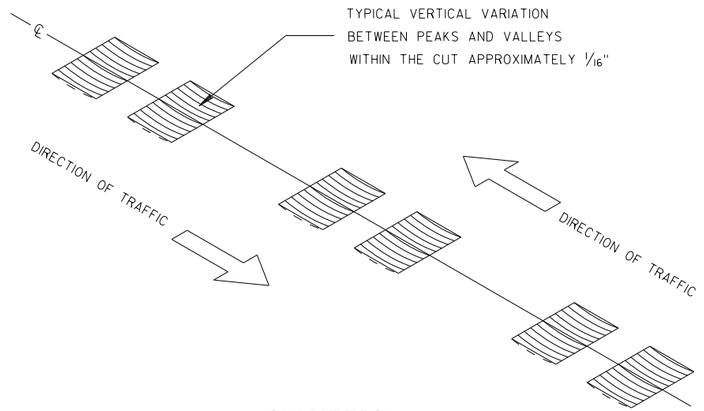
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

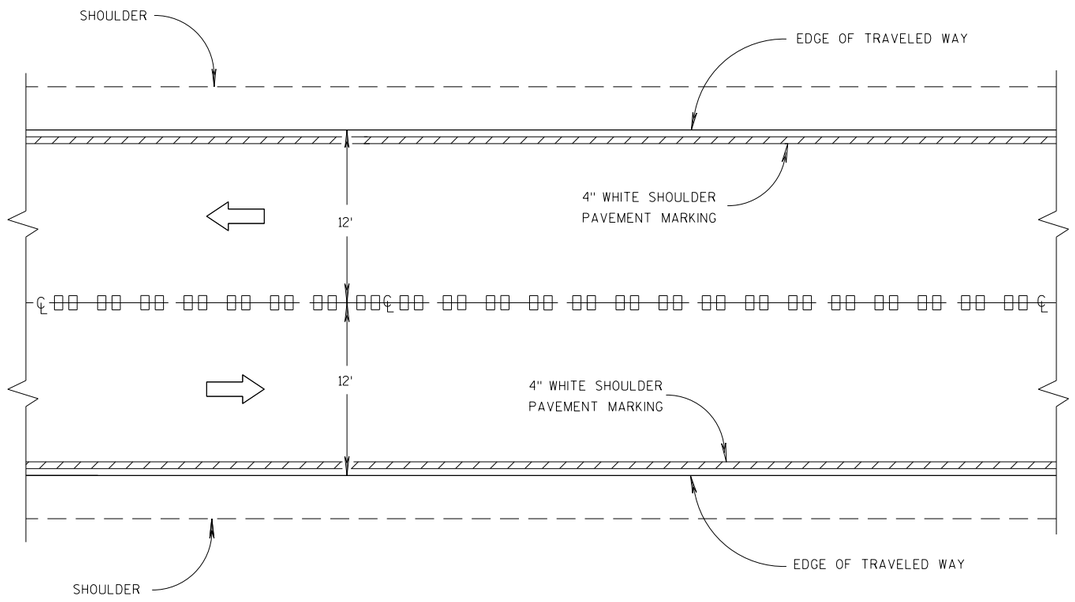
INSTALL PERMANENT MARKING EPOXY 4-INCH AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

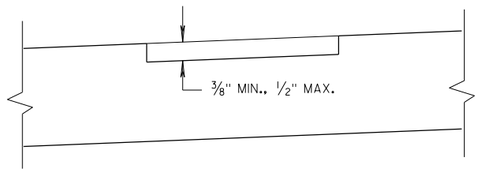
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



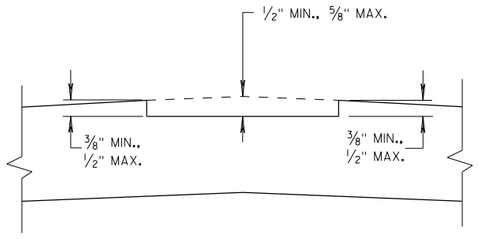
ISOMETRIC



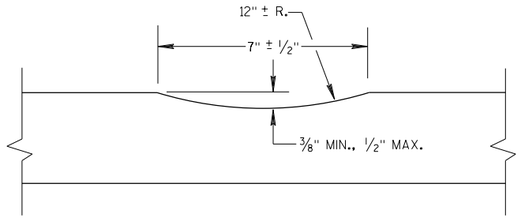
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY

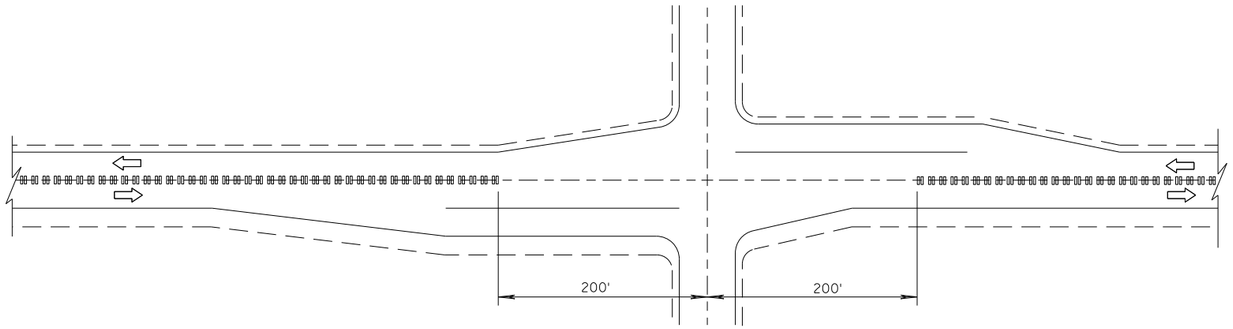


SECTION A-A

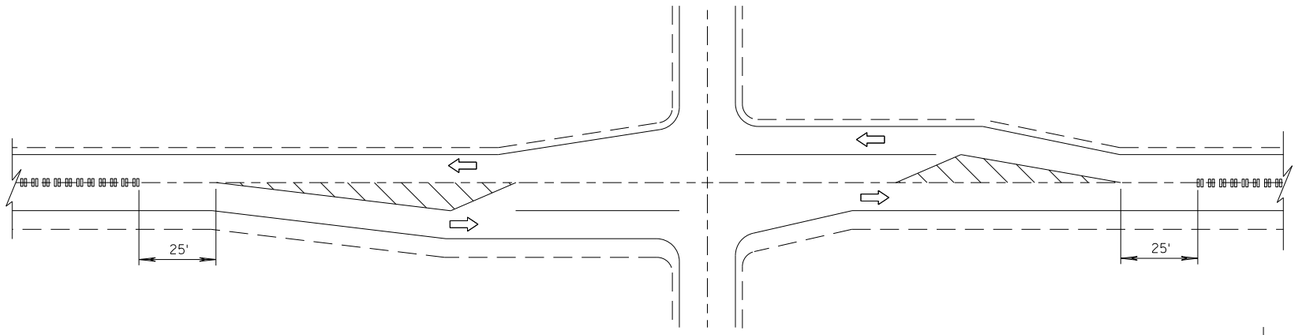
2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

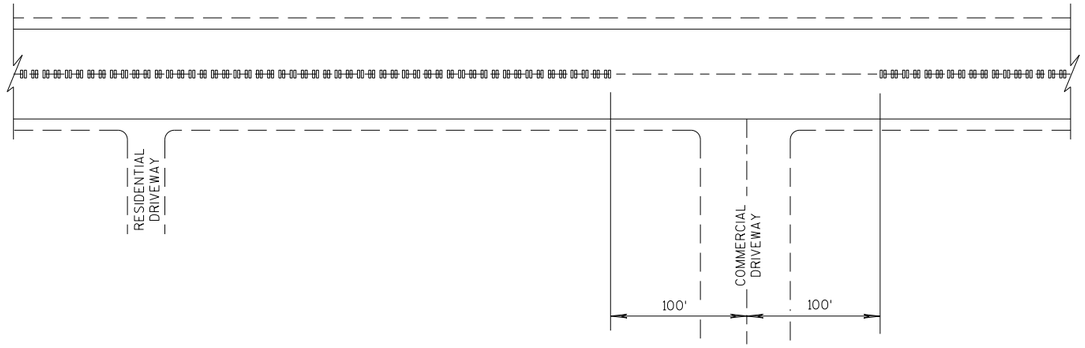
6
S.D.D. 13 A 11-3a



CENTER LINE GROOVES AT INTERSECTIONS

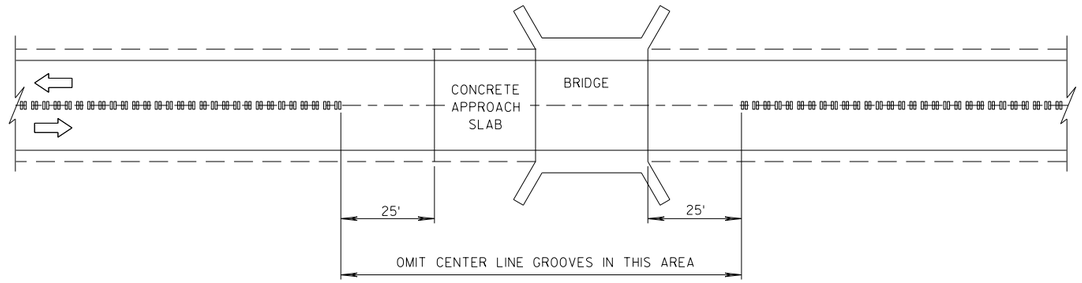


CENTER LINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)

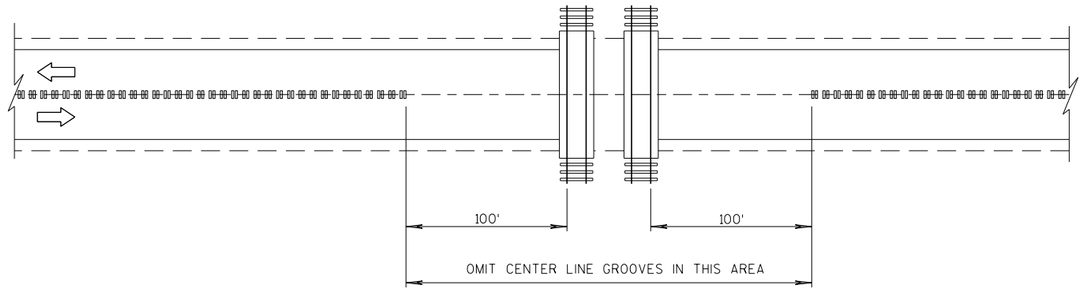


CENTER LINE GROOVES AT DRIVEWAYS (1)

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



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney T
ROADWAY STANDARDS DE IT
UNIT SUPERVISOR

FHWA

6

S.D.D. 13 A 11-3b

6

S.D.D. 13 A 11-3b

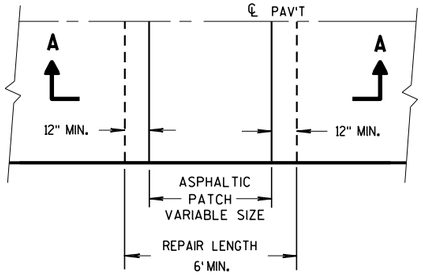
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

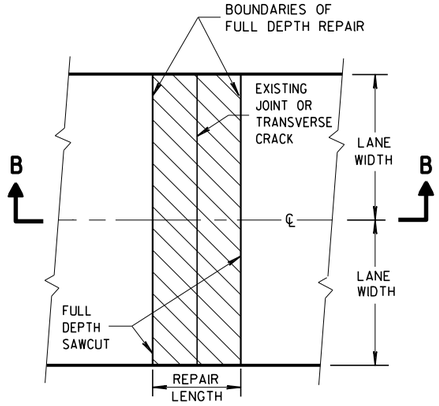
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

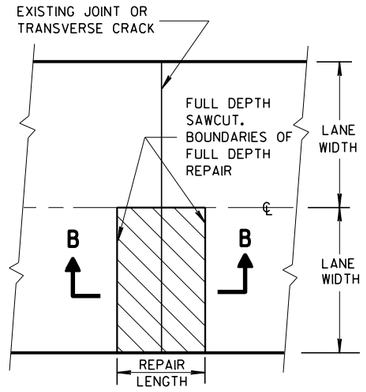
(1) DOWEL BARS MIGHT NOT EXIST.



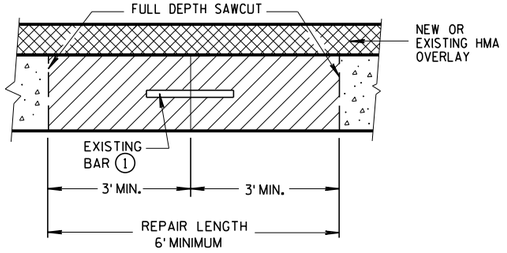
PLAN VIEW



PLAN VIEW
(DOUBLE LANE REPAIR)



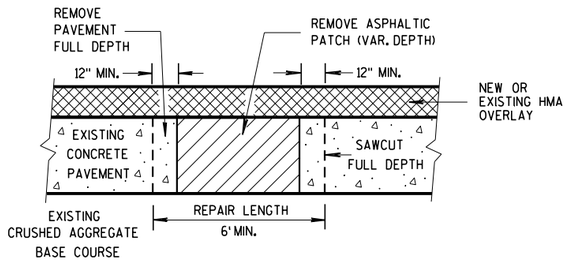
PLAN VIEW
(SINGLE LANE REPAIR)



SECTION B-B

CONCRETE REMOVAL

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL

BASE PATCHING CONCRETE

STATE OF WISCONSI
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 14-7a

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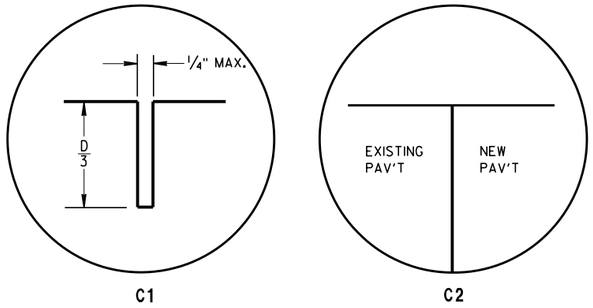
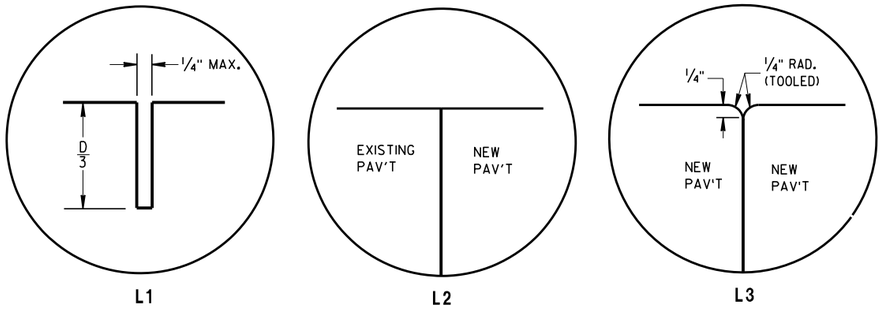
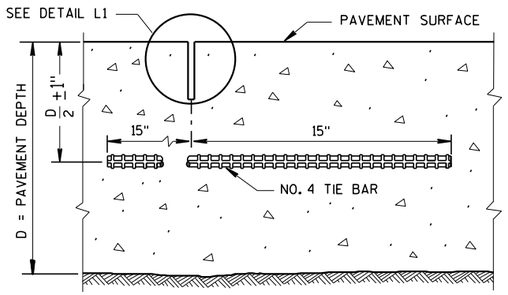


TRANSVERSE JOINTS

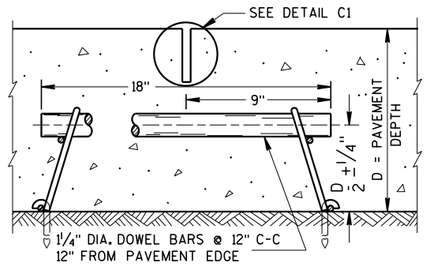


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

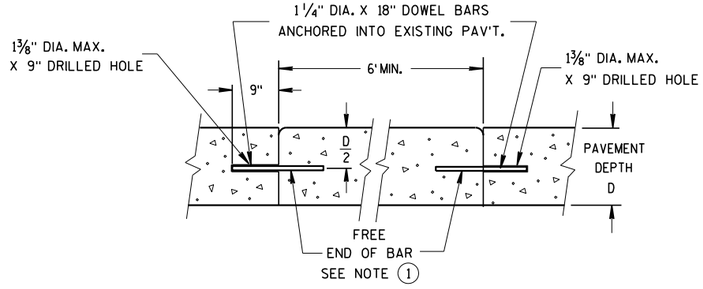
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

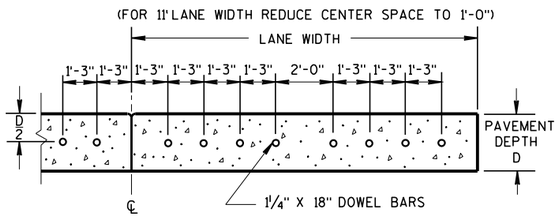
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

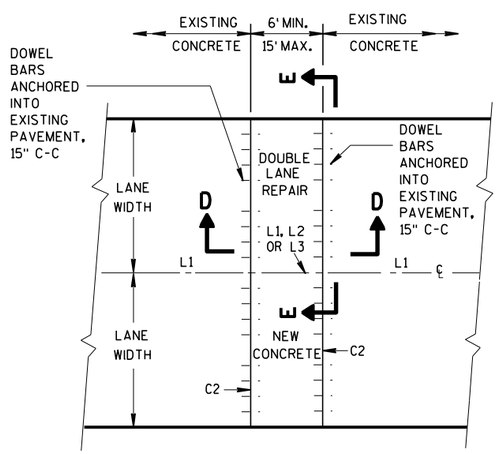


SECTION D-D



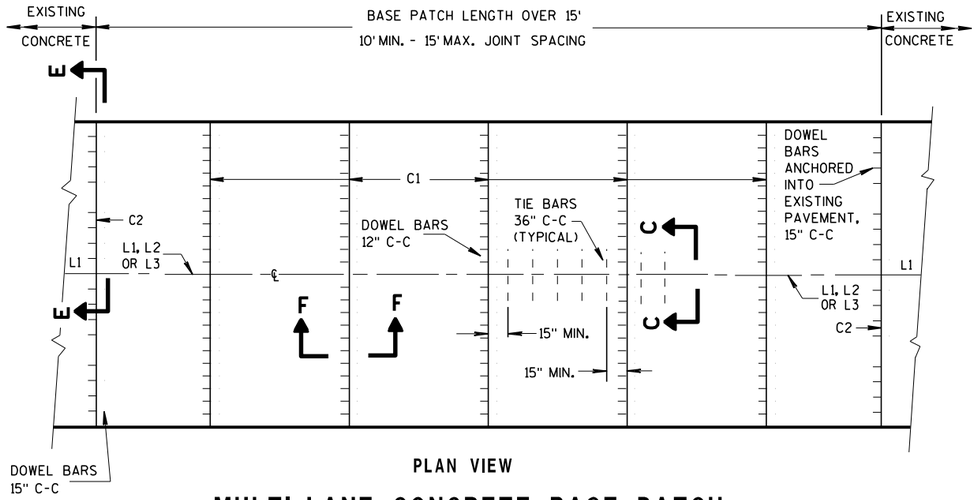
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 14-7b

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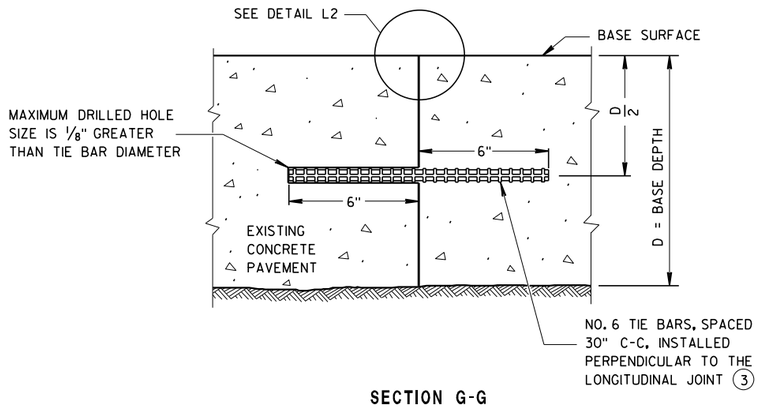
S.D.D. 13 C 14-7b



SECTION G-G

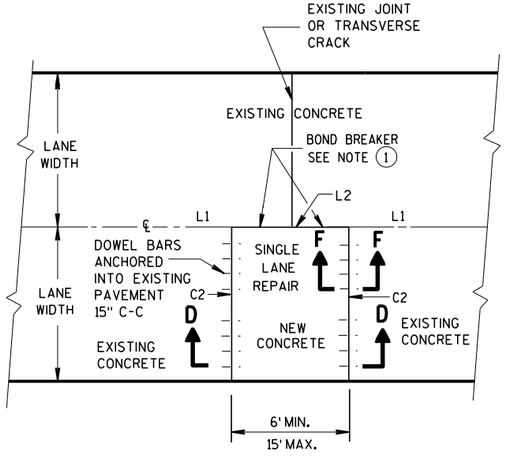
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

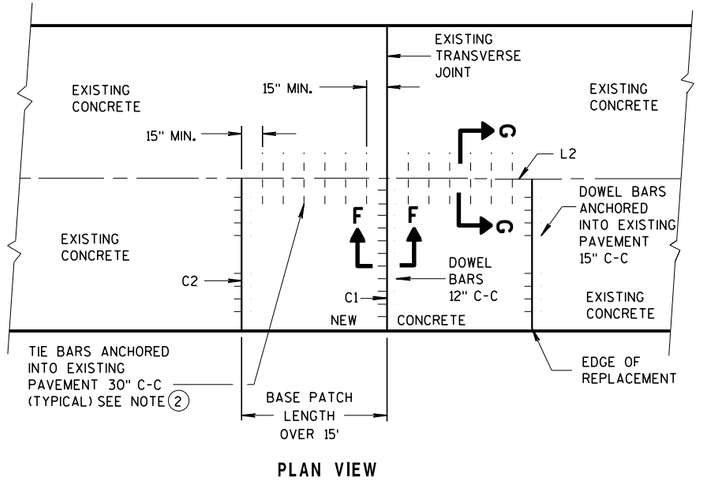
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

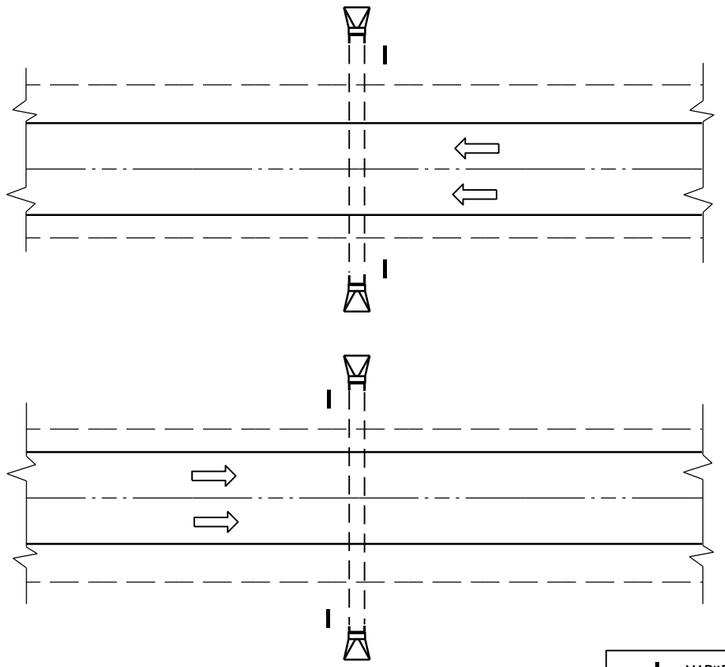
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

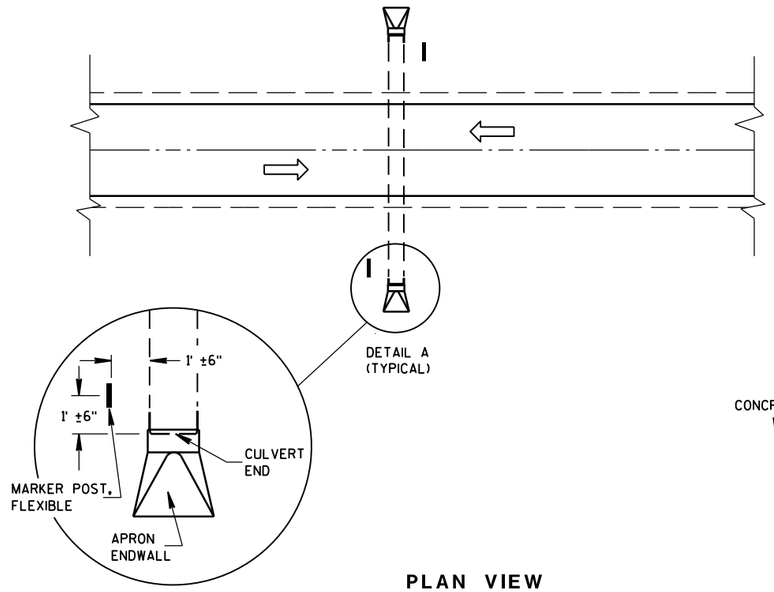
6

S.D.D. 13 C 14-7c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

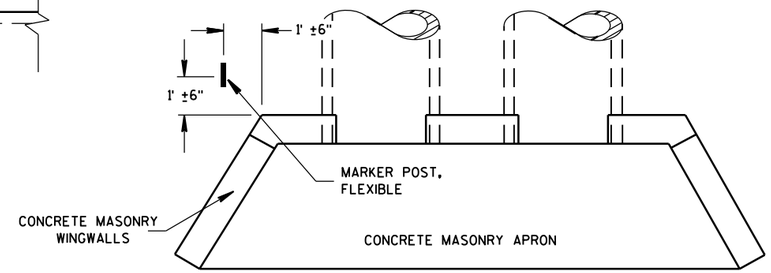
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

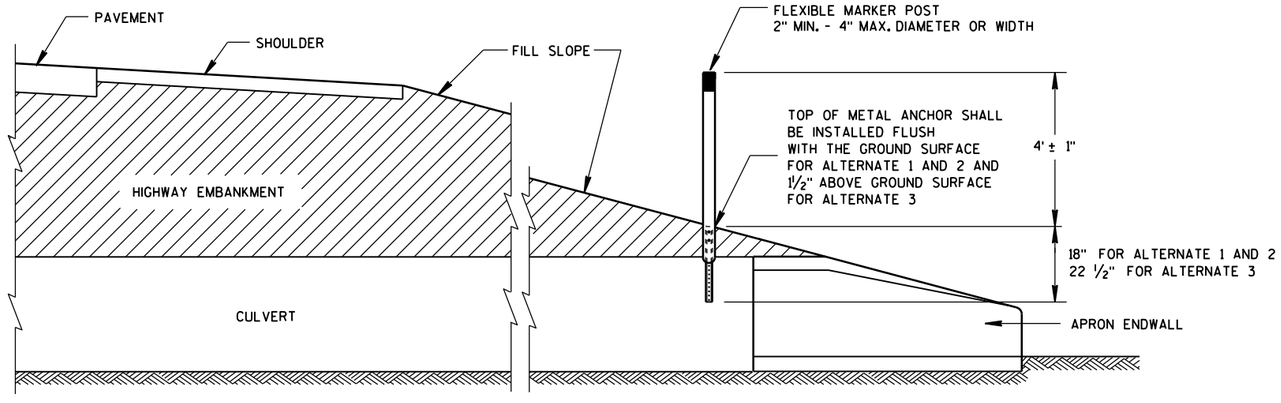
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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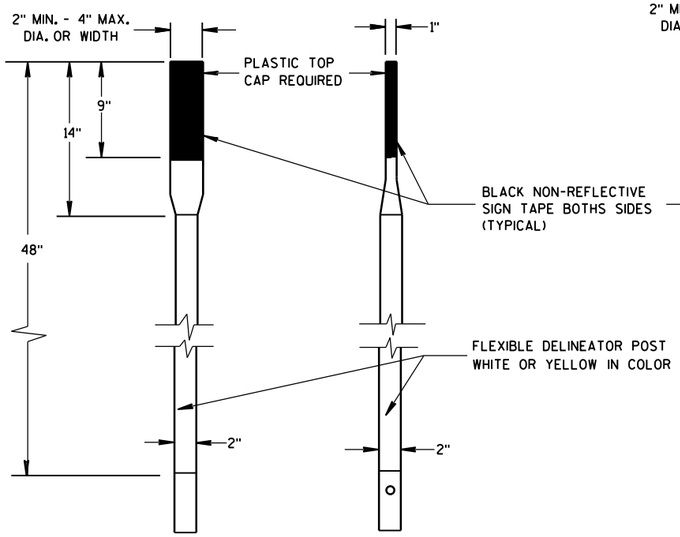
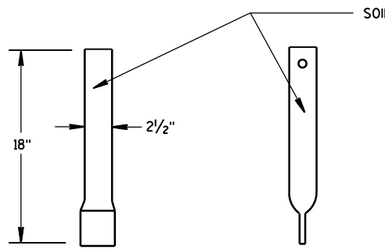
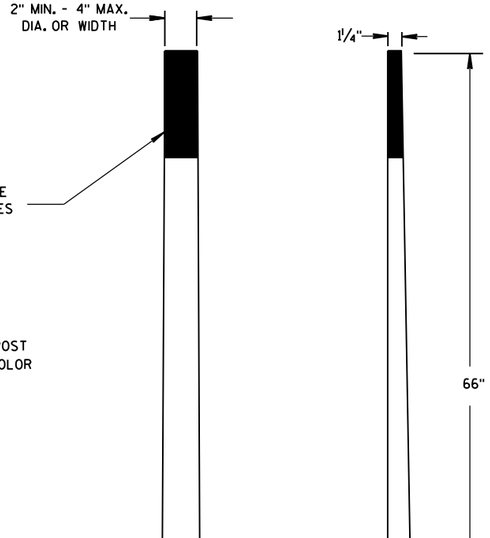
S.D.D. 15 A 3-2a





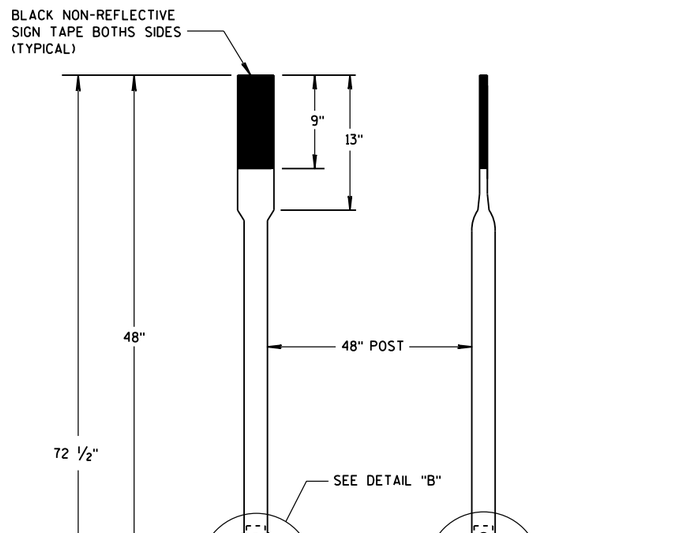
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

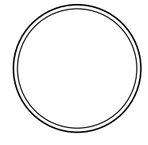
ALTERNATE 2



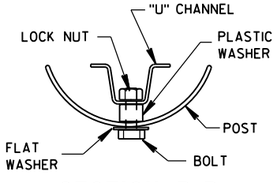
FRONT VIEW SIDE VIEW

ALTERNATE 3

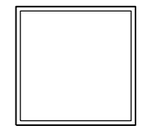
FLEXIBLE MARKER POSTS



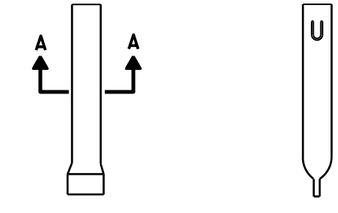
SECTION A-A



SECTION B-B

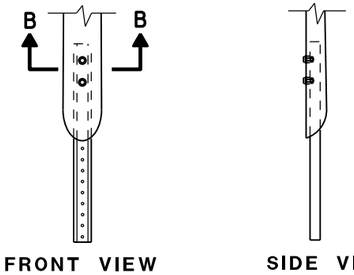


SECTION C-C



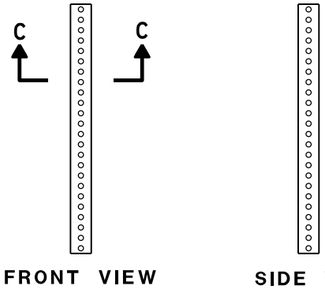
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

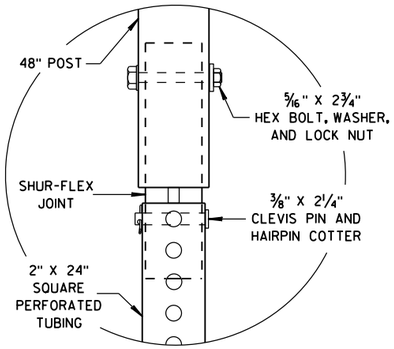
ALTERNATE 2



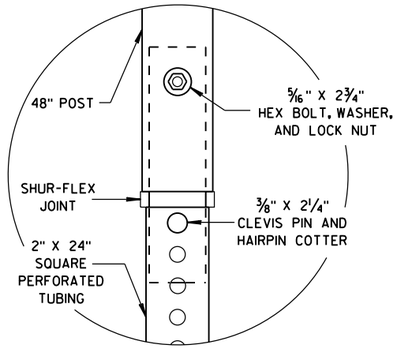
FRONT VIEW SIDE VIEW

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

6

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

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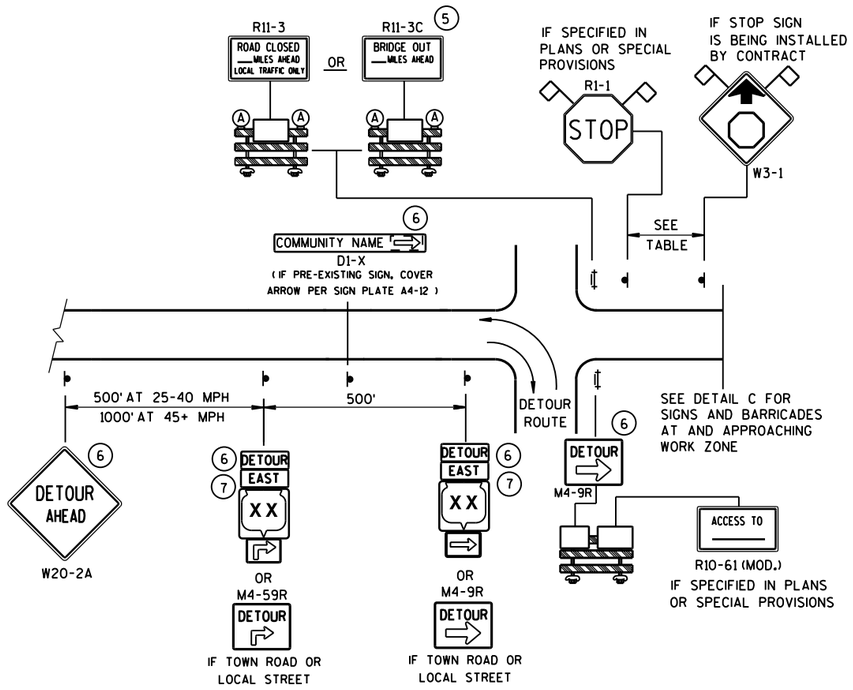
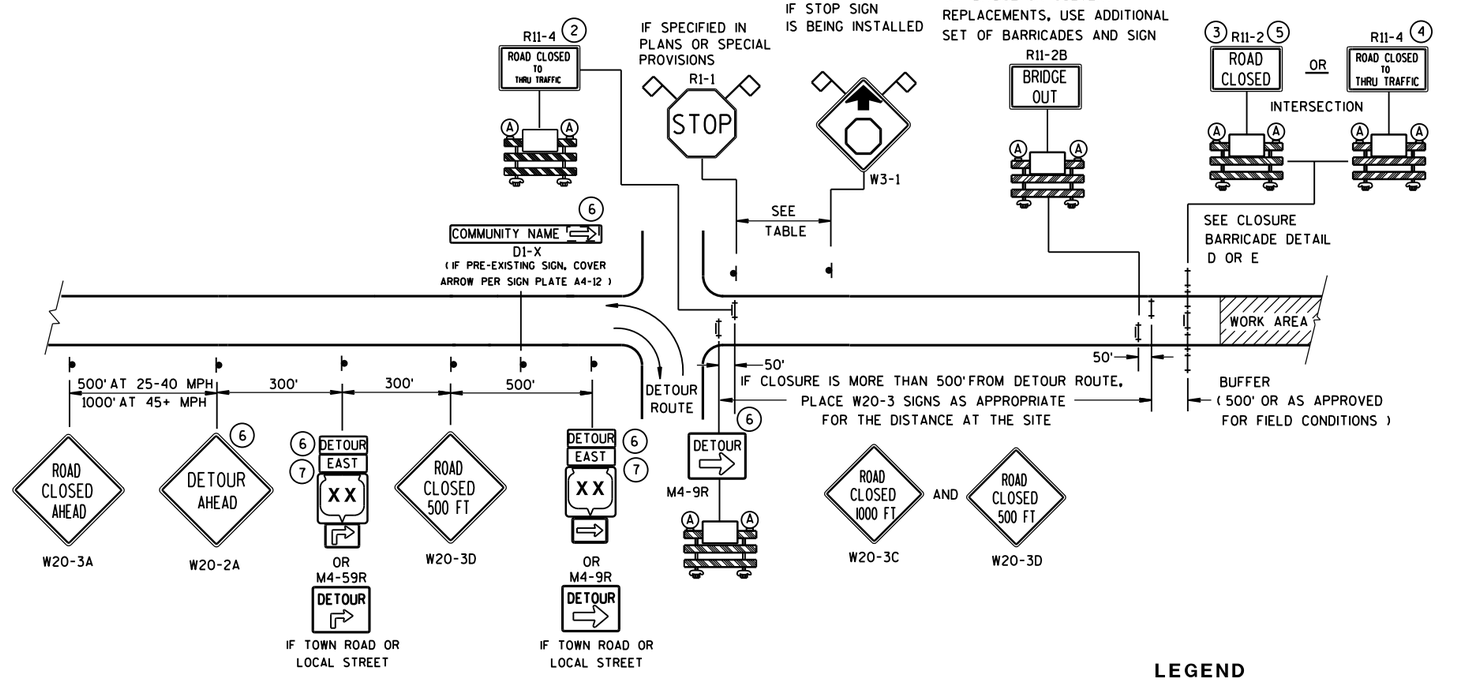
S.D.D. 15 A 3-2b



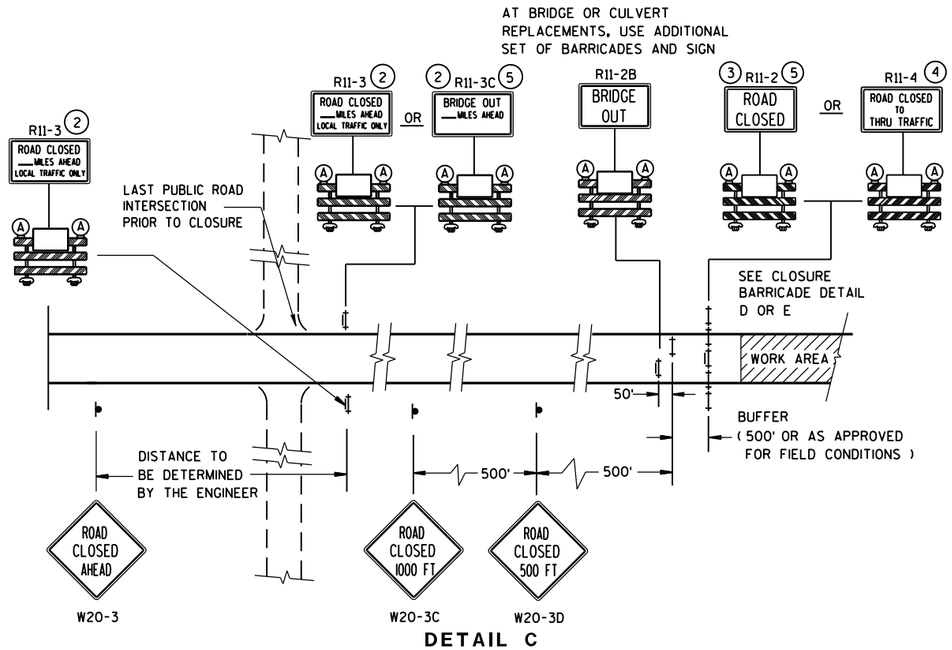
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

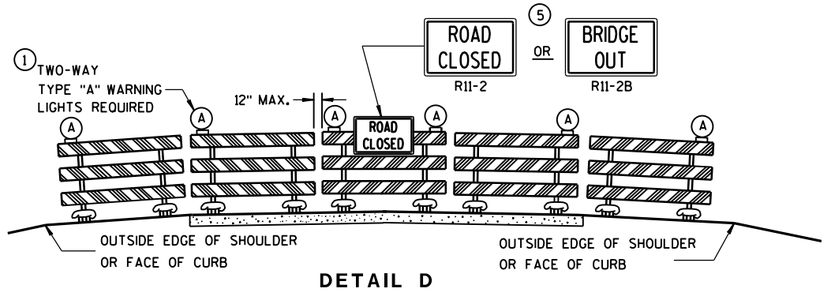
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

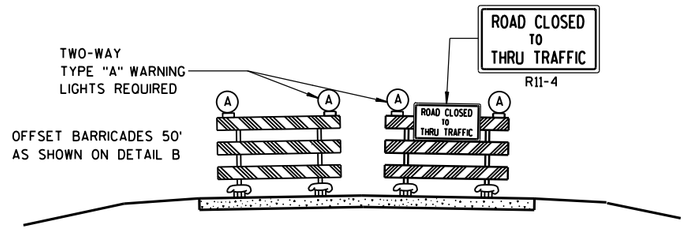
S.D.D. 15 C 2-6a



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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

6

S.D.D. 15 C 2-6b

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

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

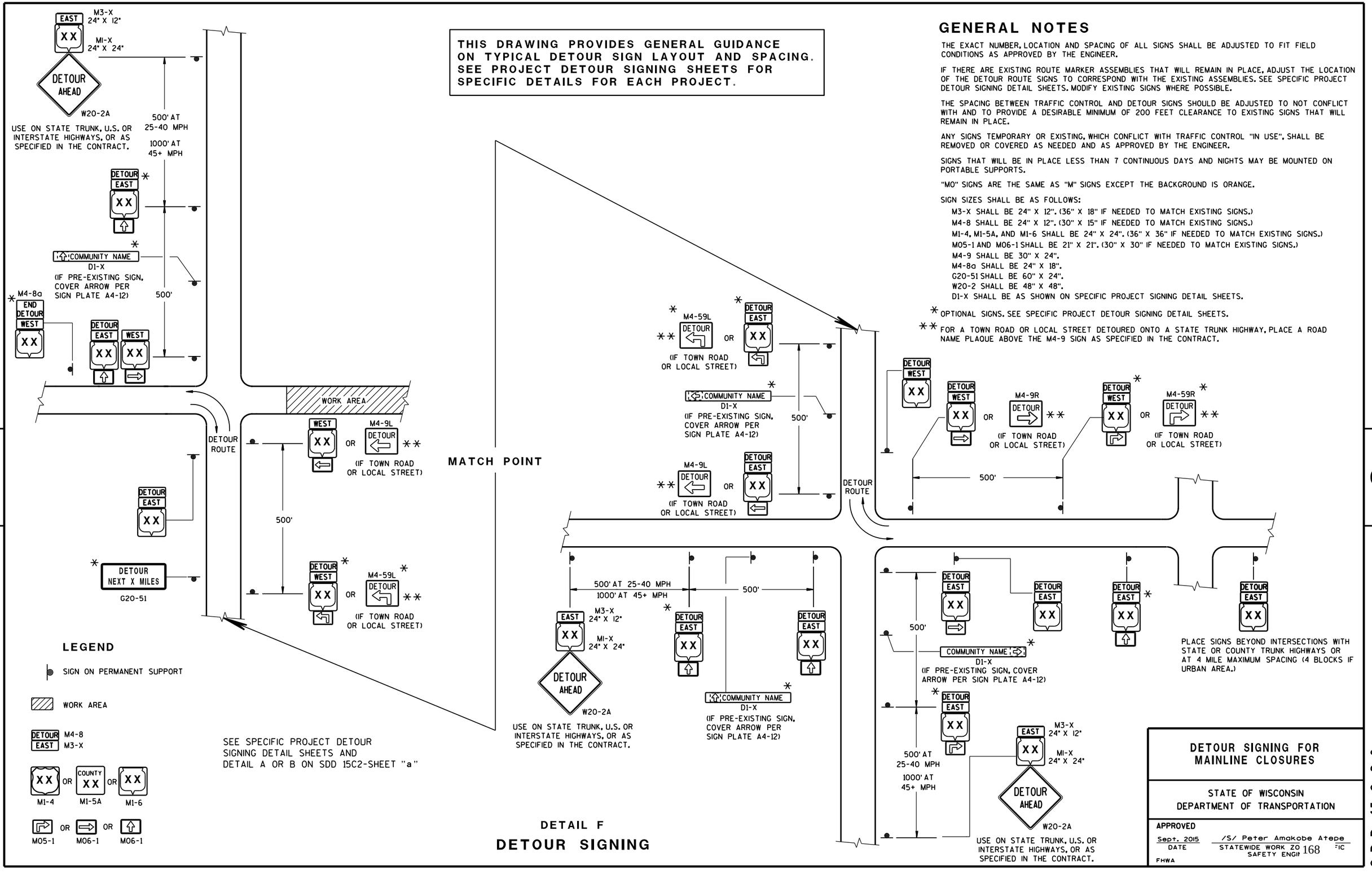
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- MO5-1 OR MO6-1 OR MO6-1

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

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

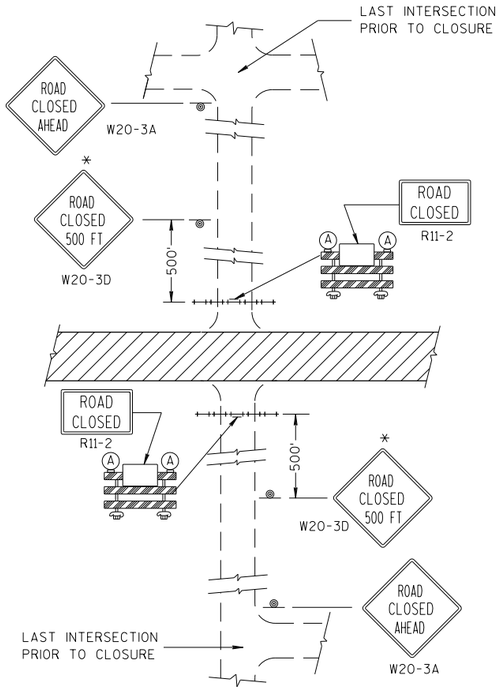
Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO... SAFETY ENGI... FIC

FHWA

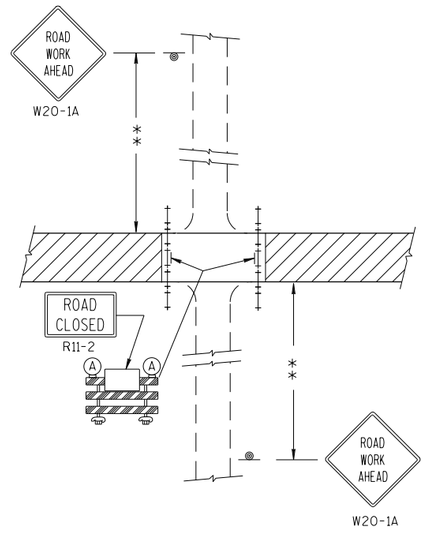
S.D.D. 15 C 2-6c

S.D.D. 15 C 2-6c



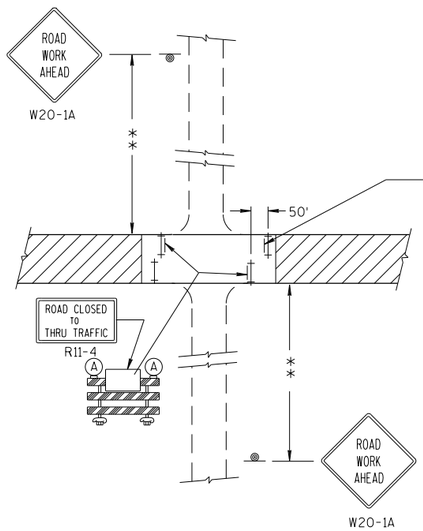
DETAIL 1

(NO ACCESS TO PROJECT)



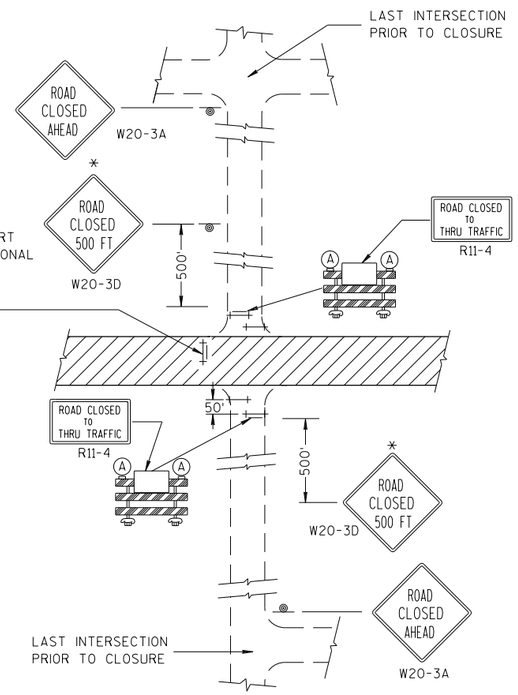
DETAIL 2

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



DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

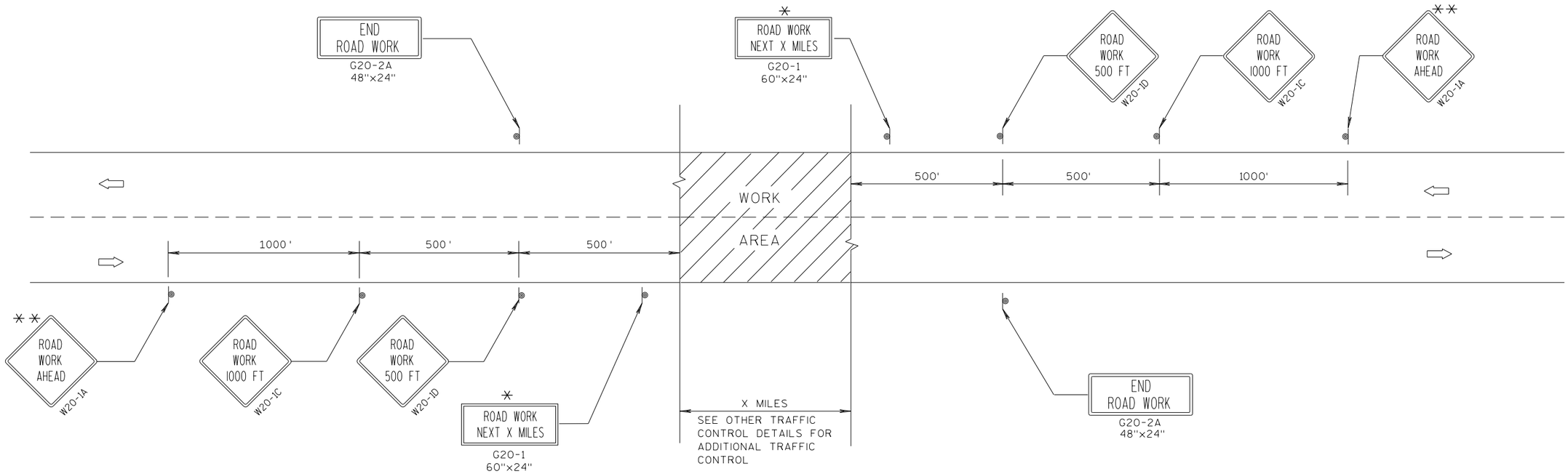
/S/ Andrew Heidtke
WORK ZONE ENGI

FHWA

6

S.D.D. 15 C 3-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

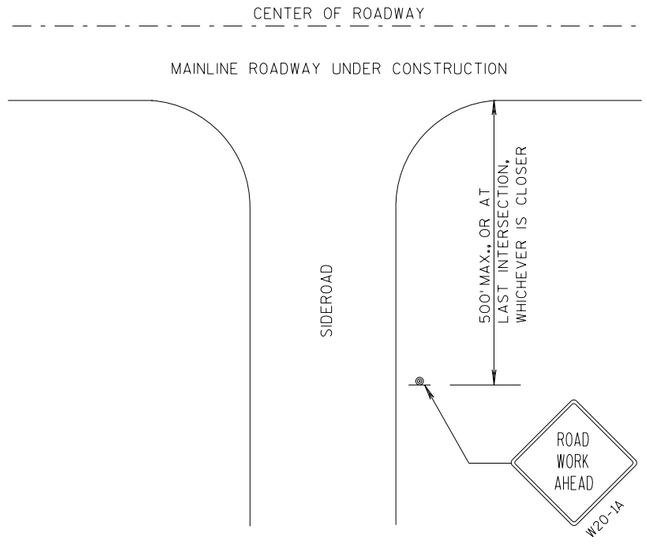
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE
/S/ Andrew Heldtke WORK ZONE ENGI
FHWA

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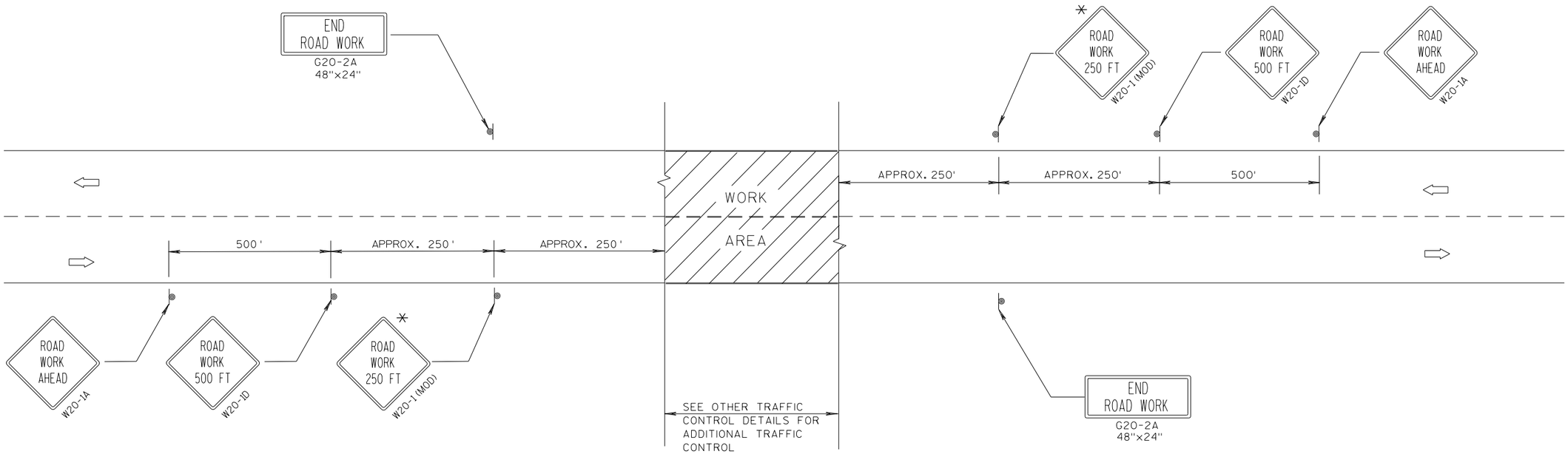
S.D.D. 15 C 4-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

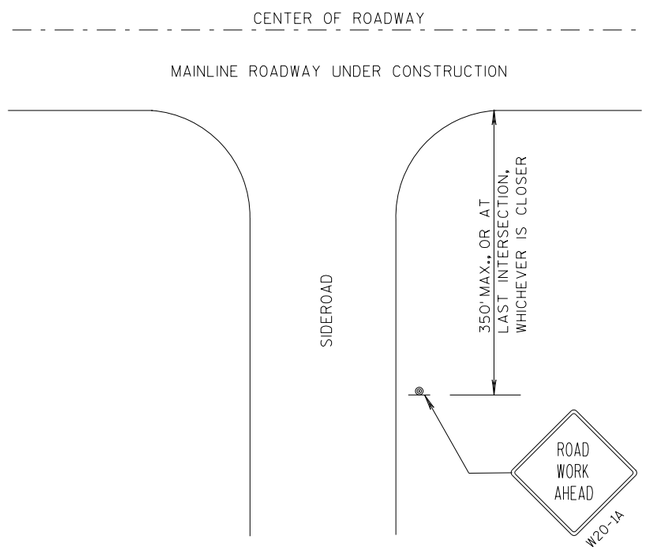
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENGI

FHWA

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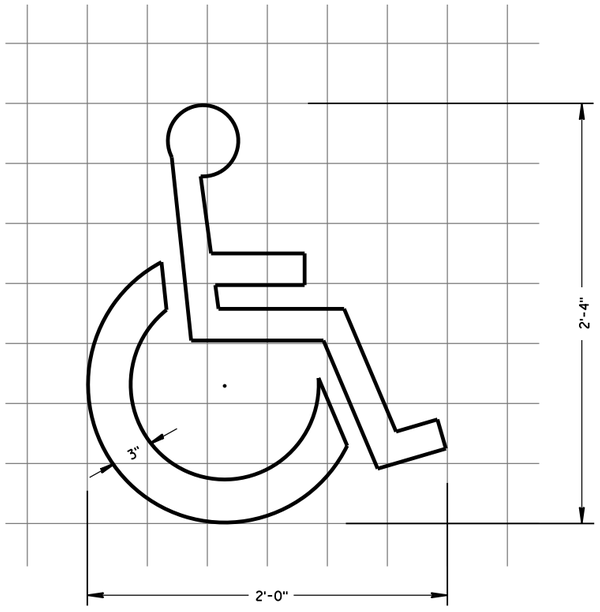
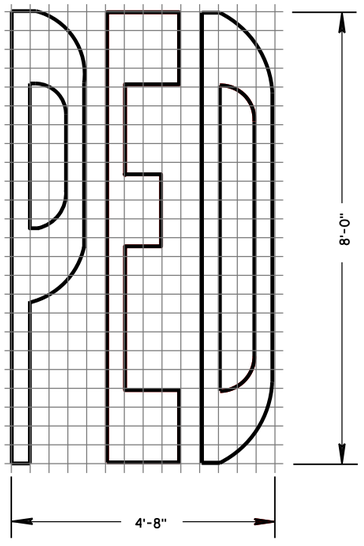
S.D.D. 15 C 5-5

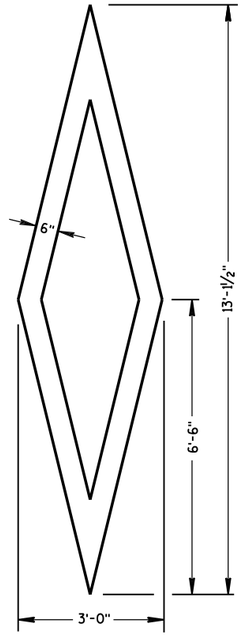
GENERAL NOTES

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



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

6

6

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

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

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

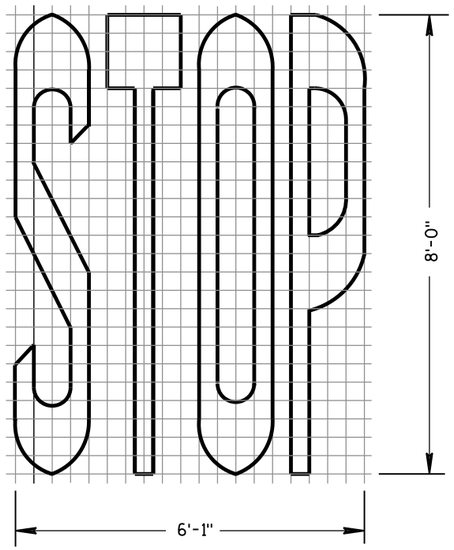
June 2017 — DATE

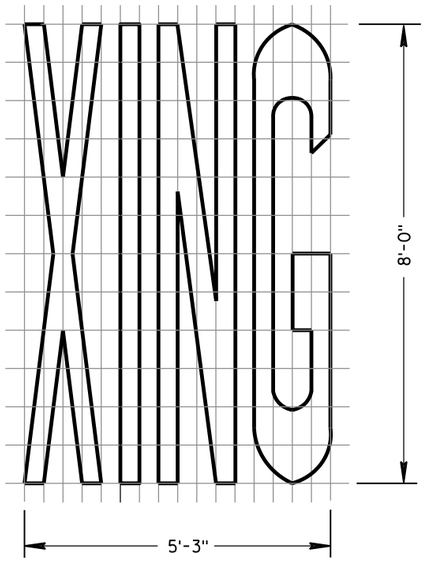
/S/ Matthew R. Rauch — STATE SIGNING AND MARK EER

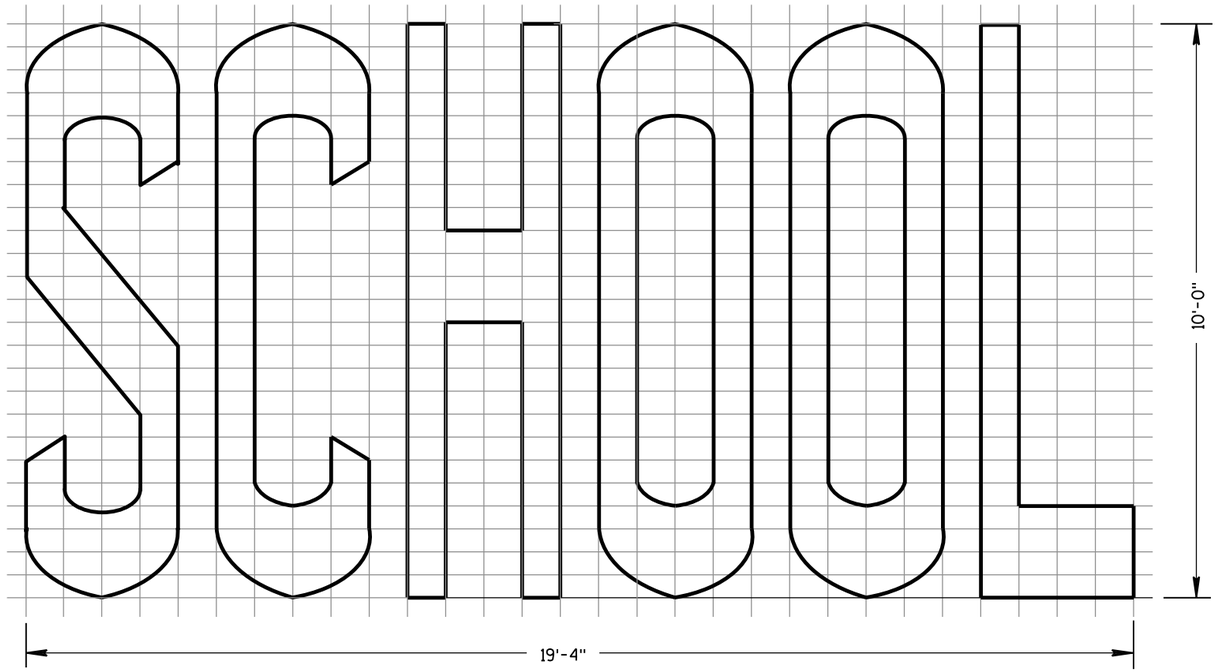
FHWA

GENERAL NOTES

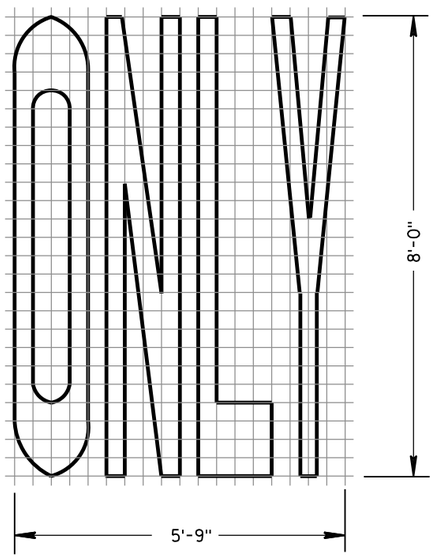
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

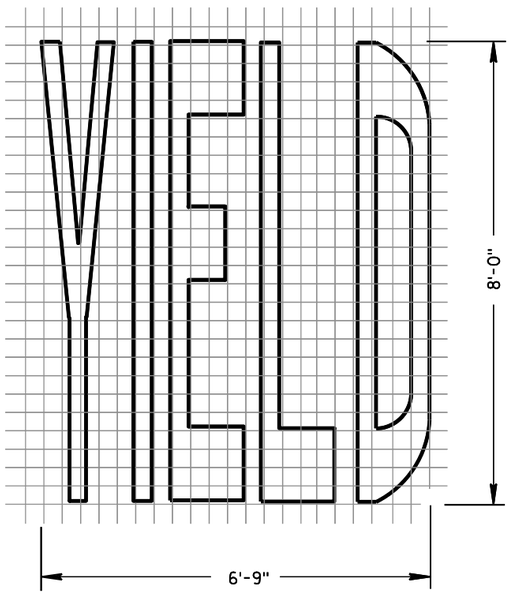


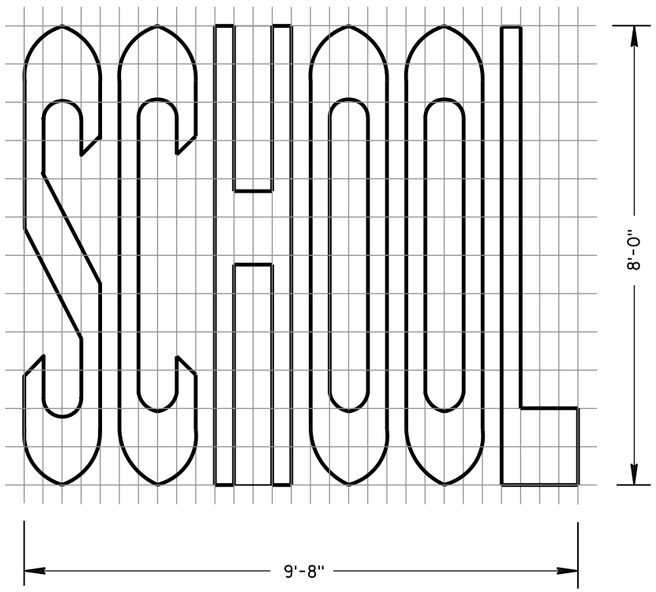




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

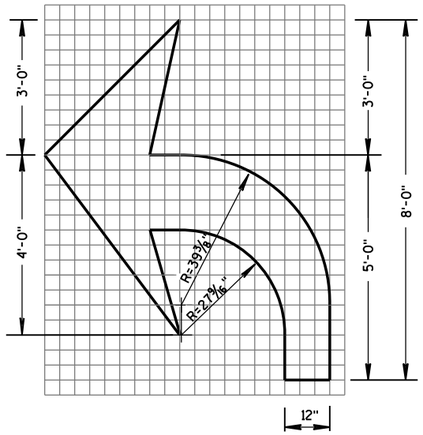
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
EER
FHWA

6

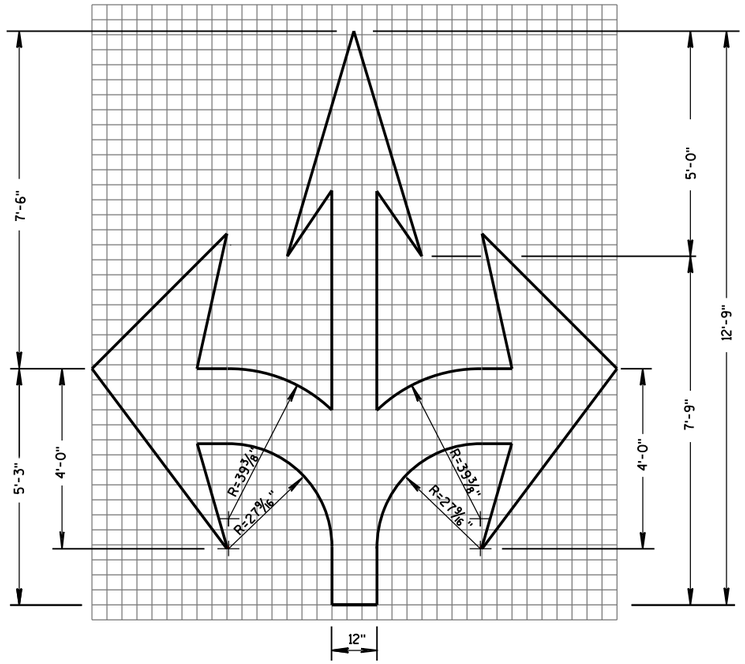
S.D.D. 15 C 7-14b

GENERAL NOTES

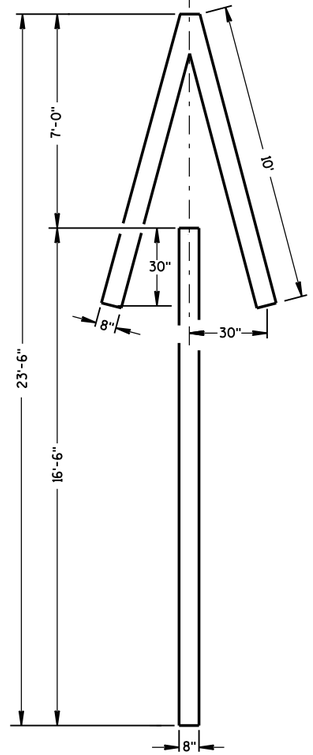
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



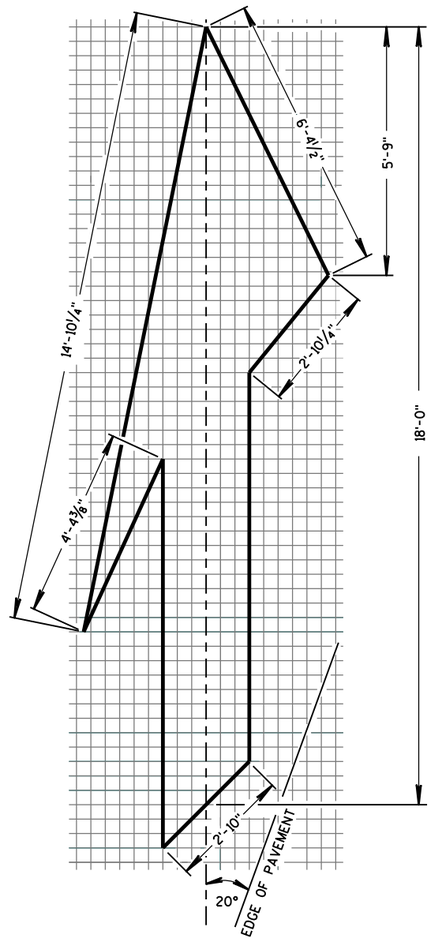
TYPE 2



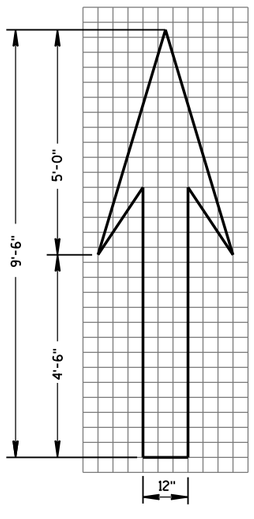
TYPE 6



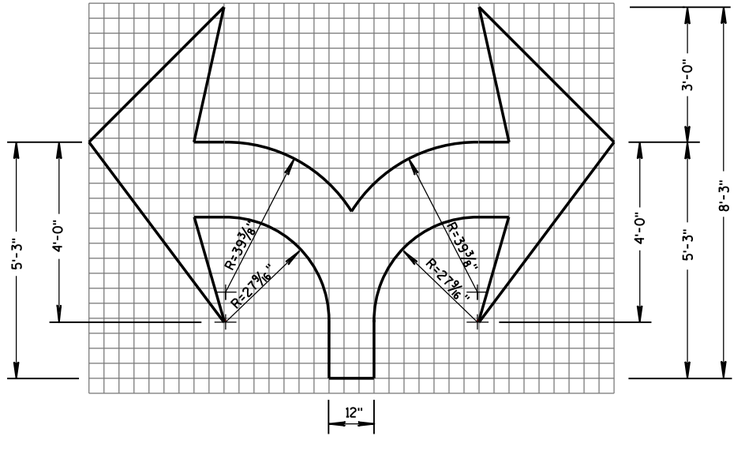
TYPE 4



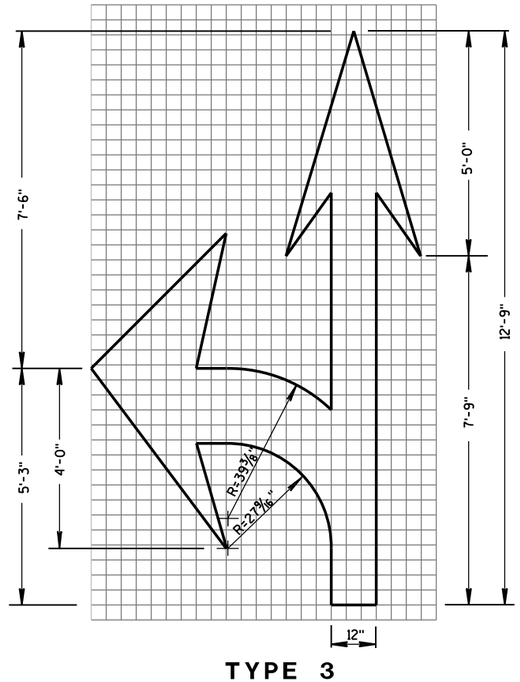
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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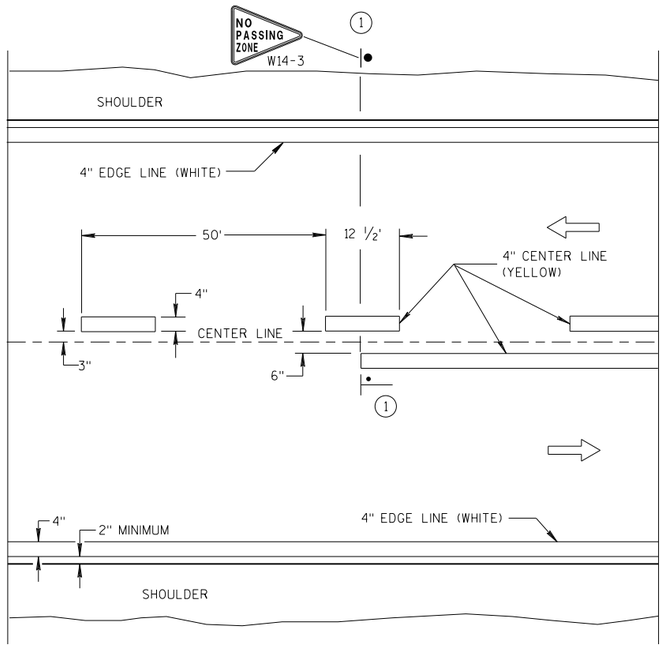
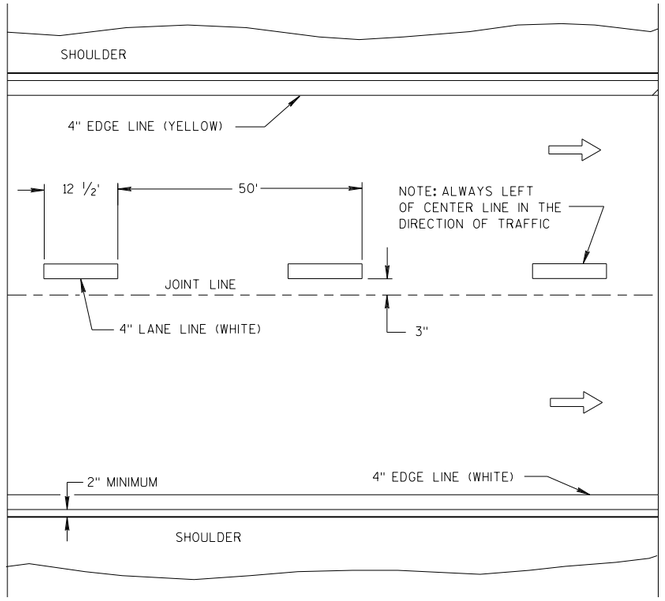
S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

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

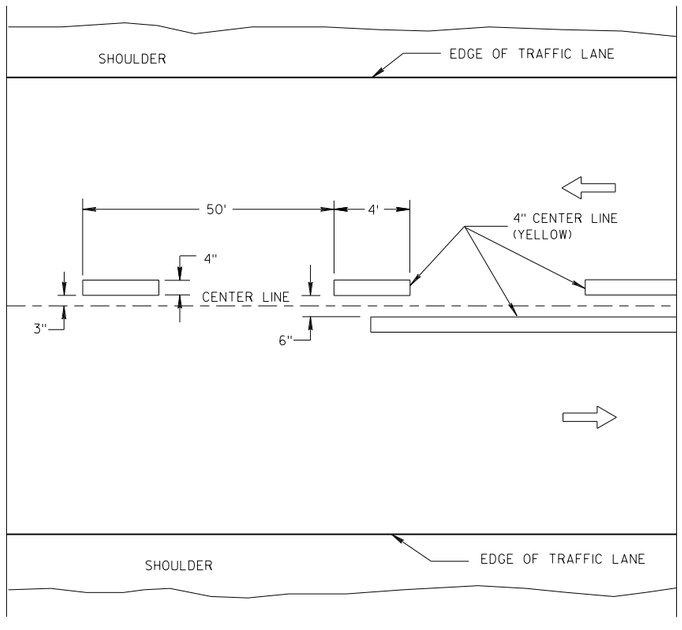
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

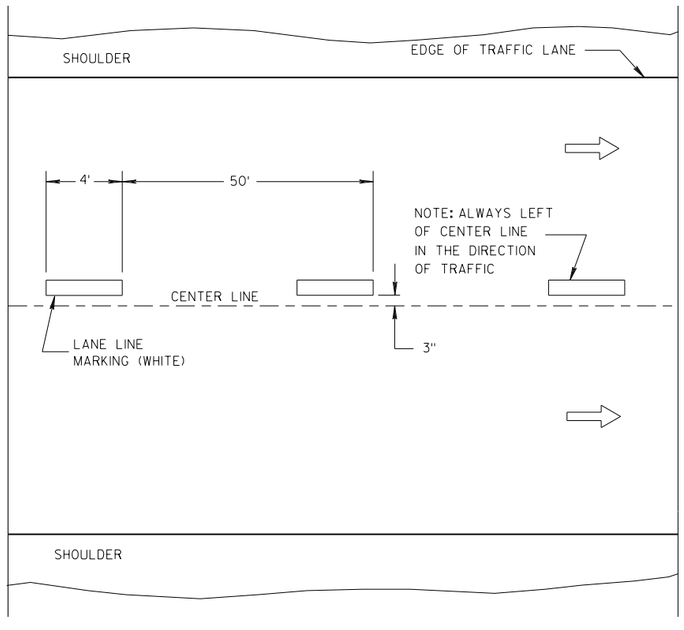
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

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

FHWA

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

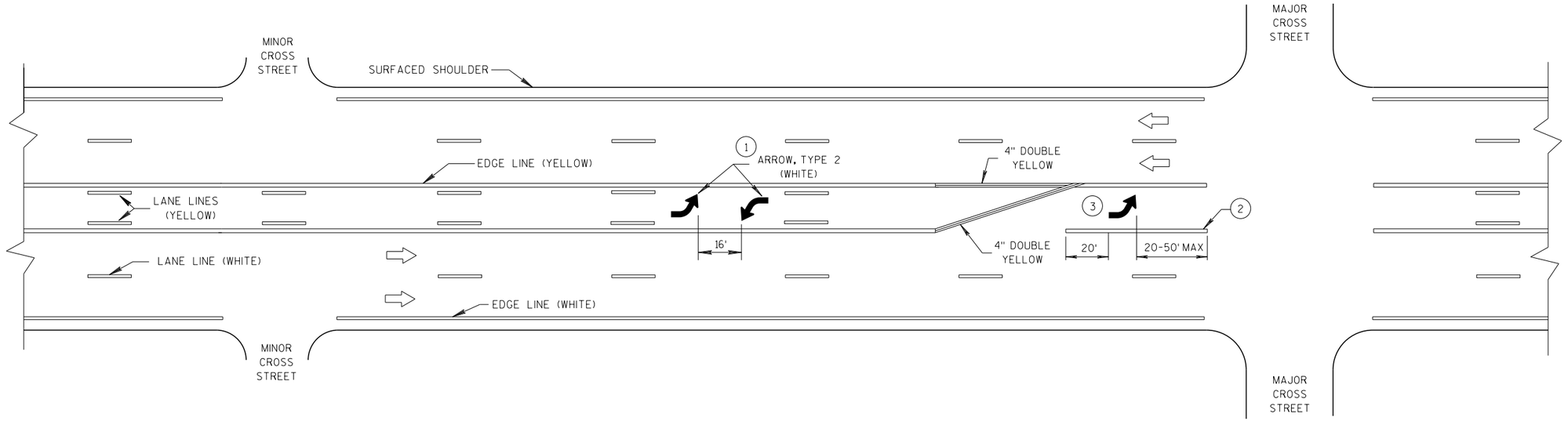
6

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

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48'DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

DIRECTION OF TRAFFIC



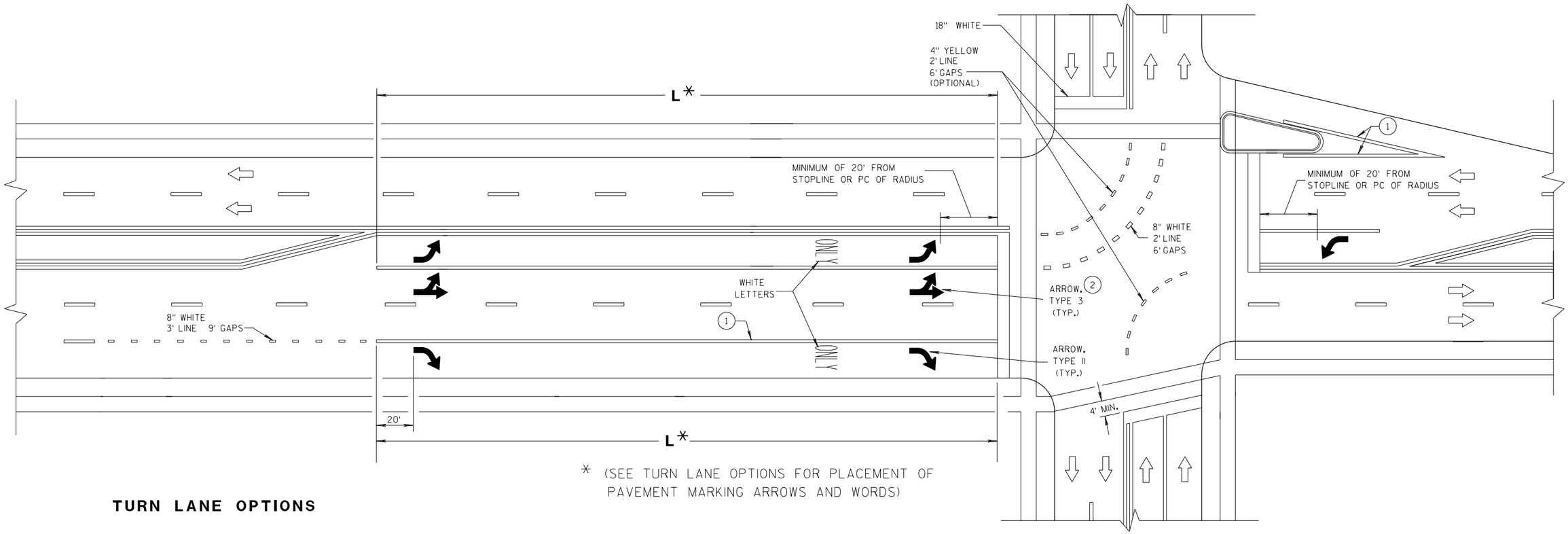
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

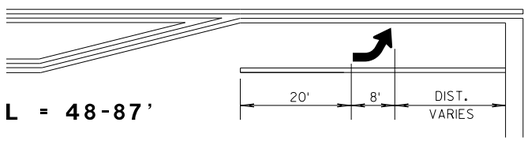
S.D.D. 15 C 8-19b



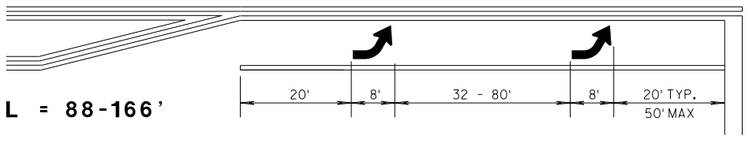
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

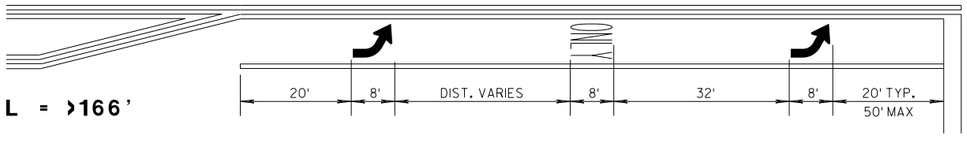
LENGTH OF TURN BAY (**L**) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48-87'



L = 88-166'



L = >166'

GENERAL NOTES

(1) 8" WHITE

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

⇨ DIRECTION OF TRAFFIC

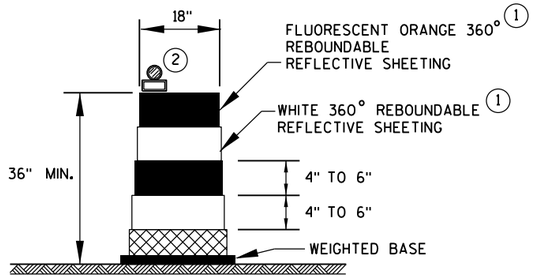
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

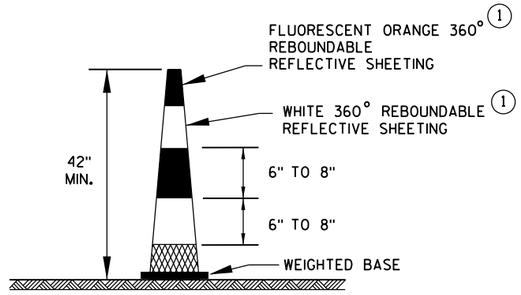
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORT

6

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



DRUM

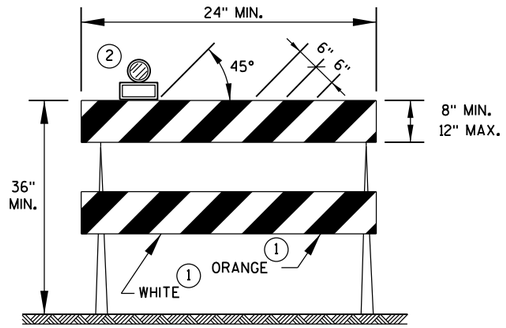


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

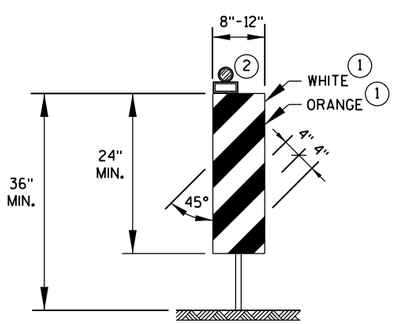
GENERAL NOTES

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.



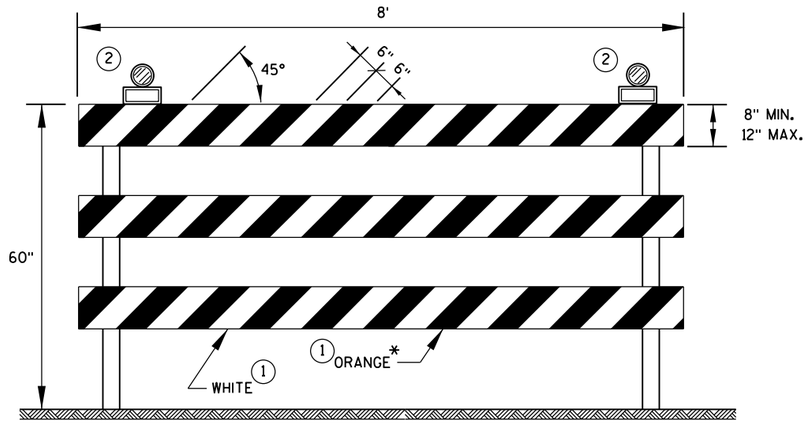
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 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	
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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

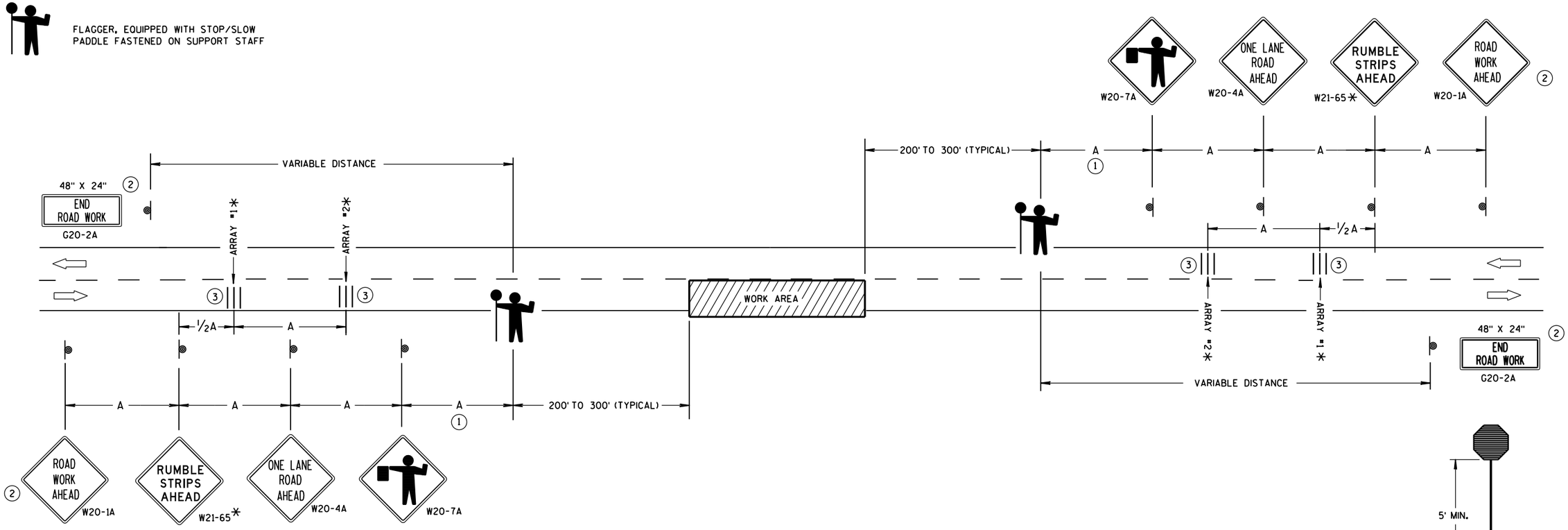
WORK AREA

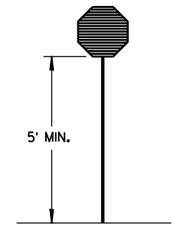
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

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





STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

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

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

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

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

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

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
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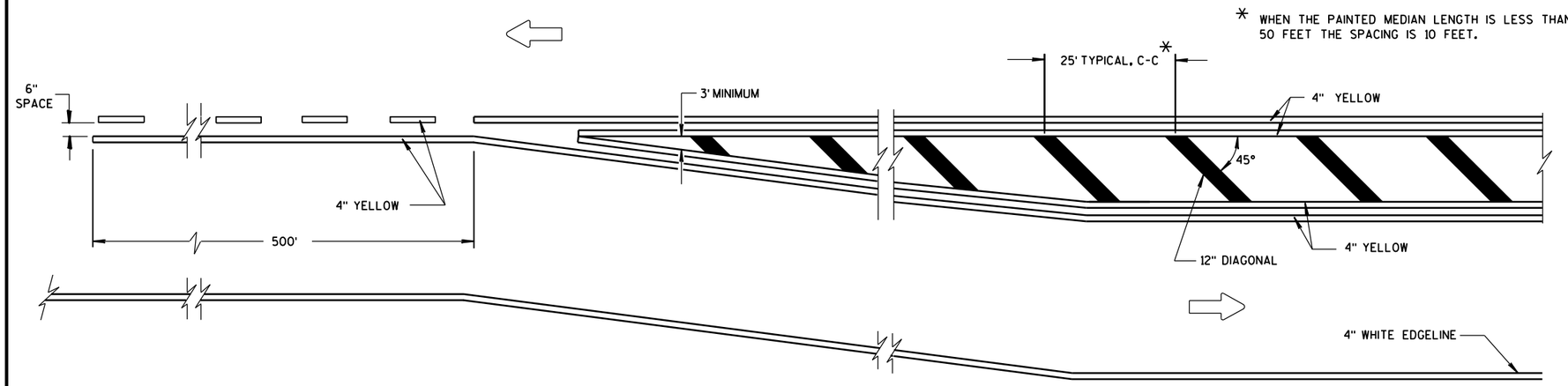
6 S.D.D. 15 C 12-6

6 S.D.D. 15 C 12-6

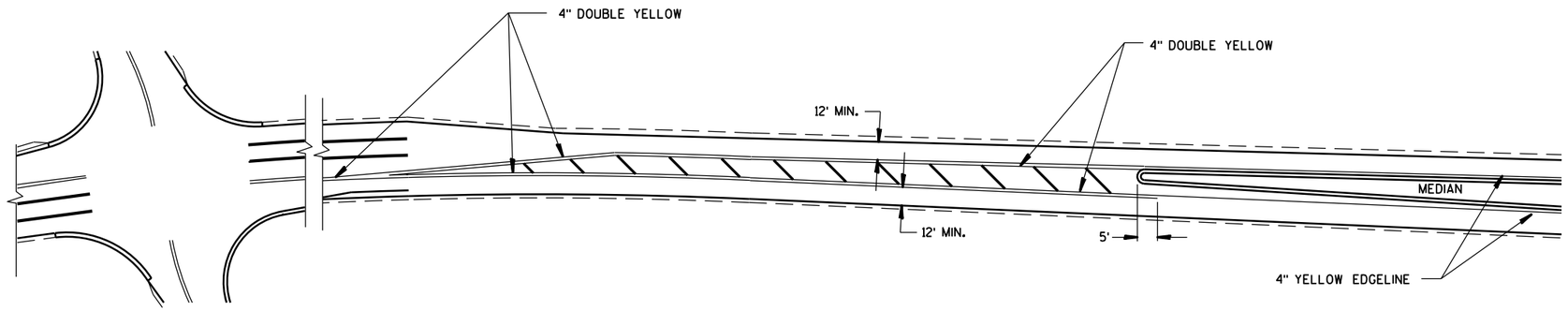


MEDIAN ISLAND DETAIL

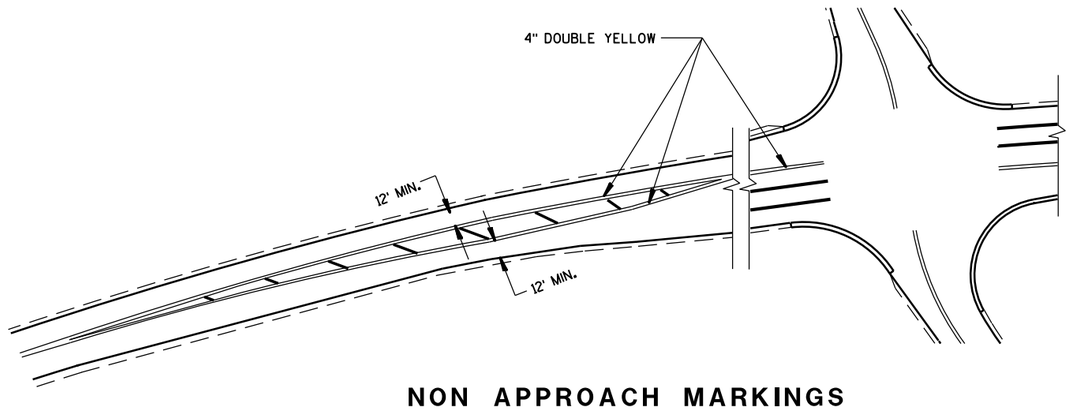
GENERAL NOTE

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

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK 180 EER

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S.D.D. 15 C 18-4

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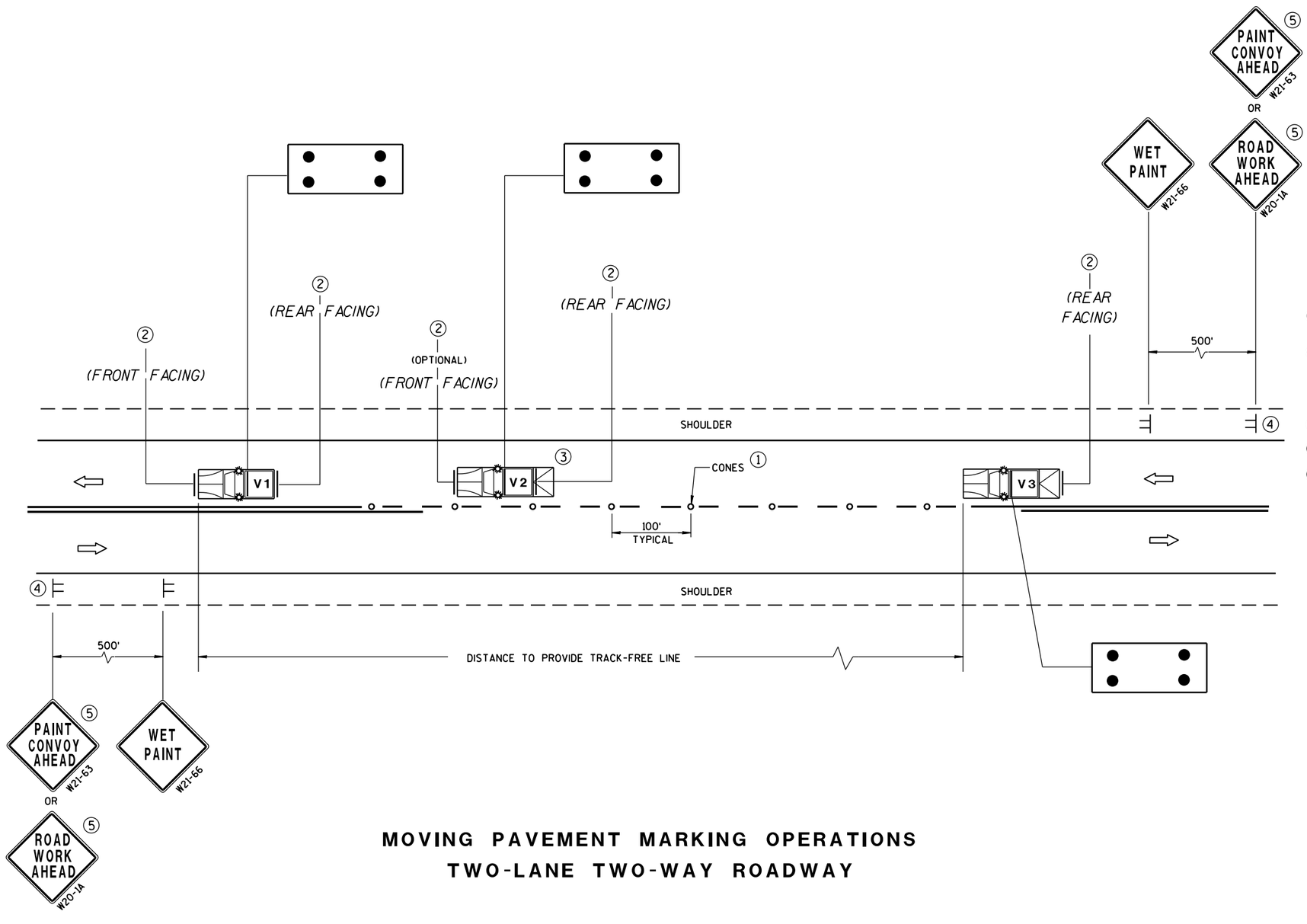
S.D.D. 15 C 18-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

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

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

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

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

LEGEND

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

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

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

SYMBOLS

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT

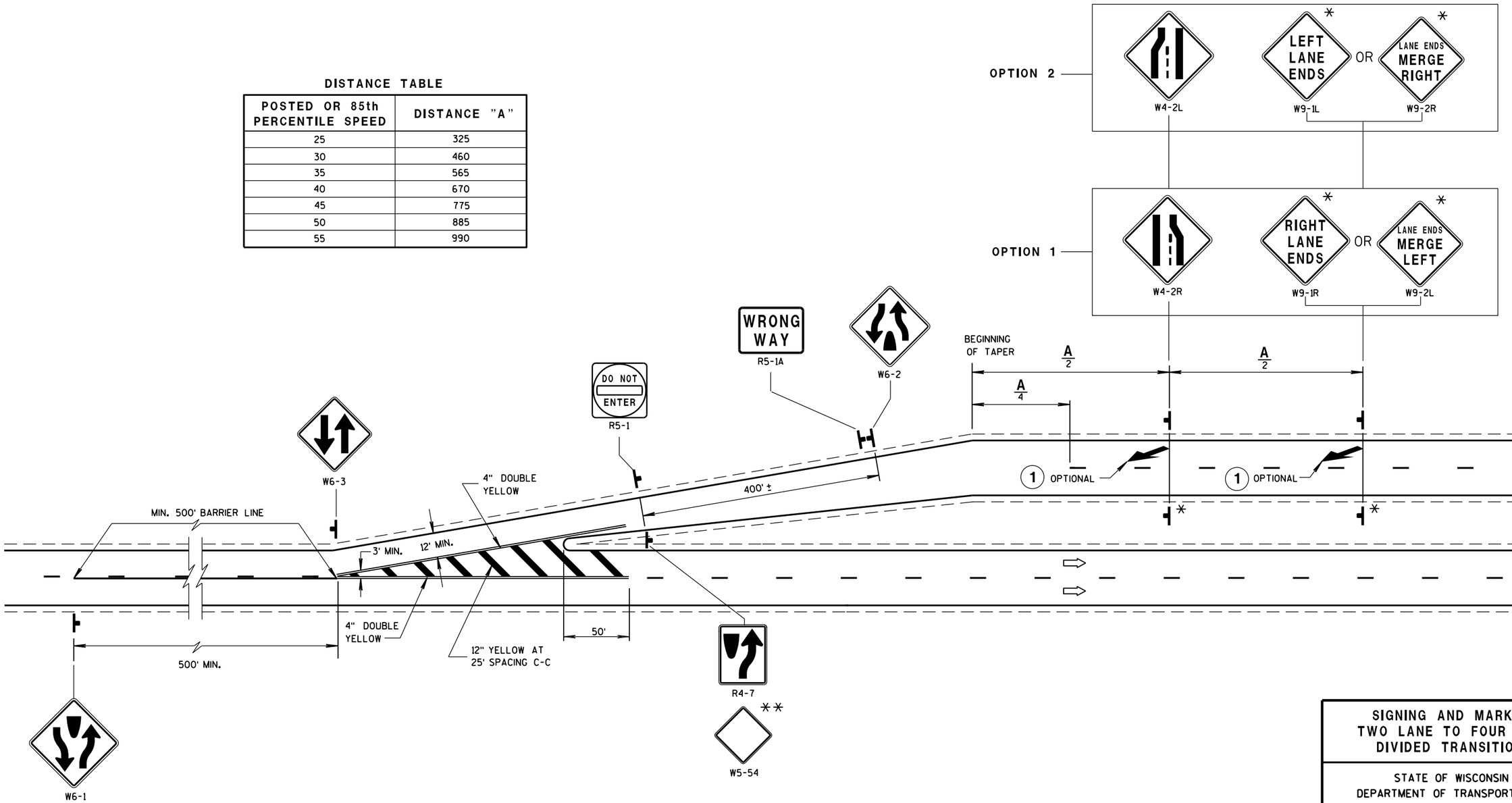
** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990



SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
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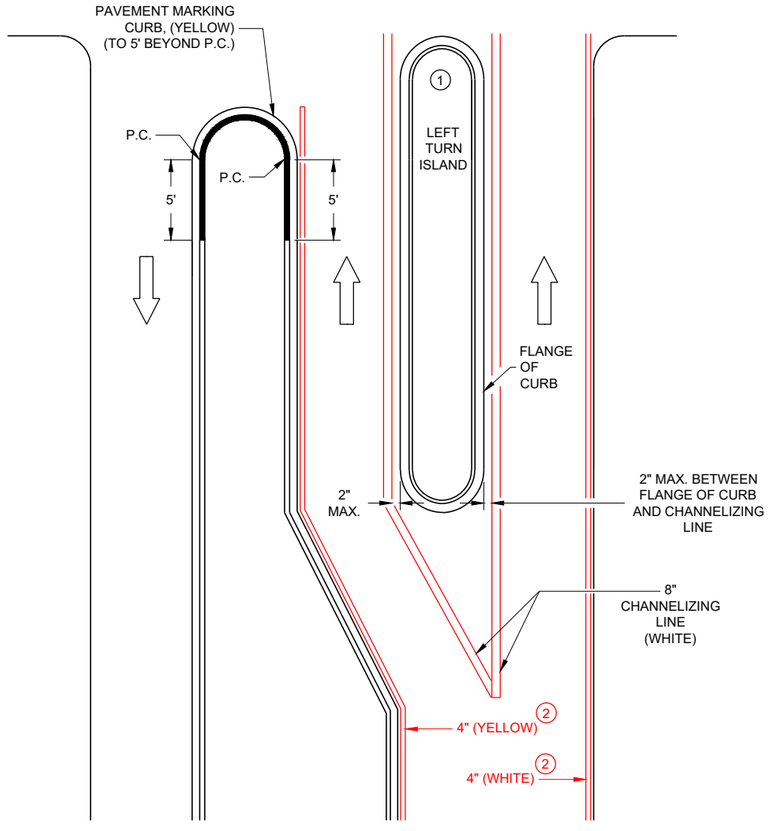
REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

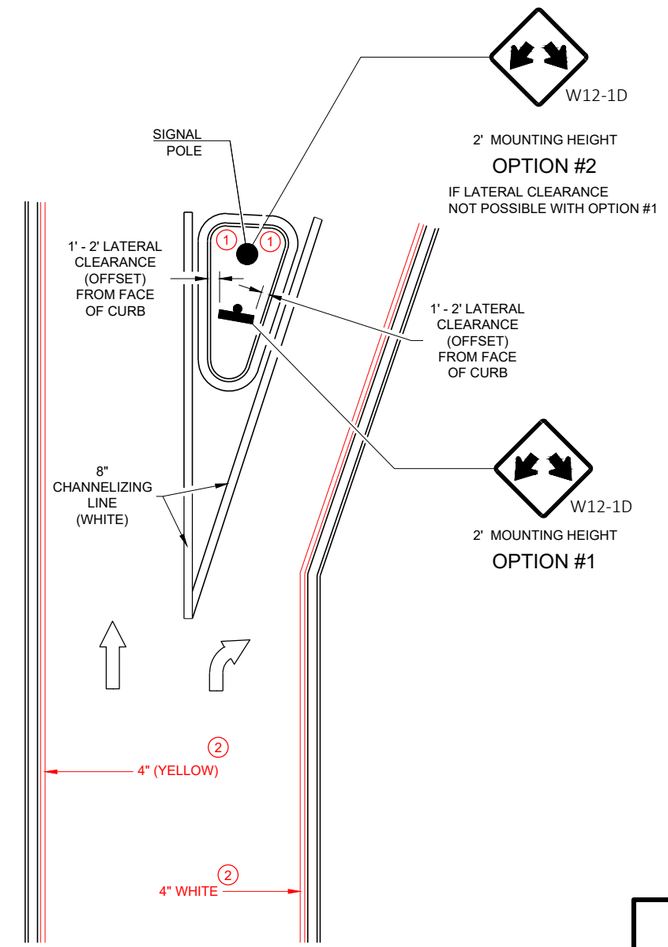
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

DOUBLE ARROW
WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

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SDD 15C27 - 03a

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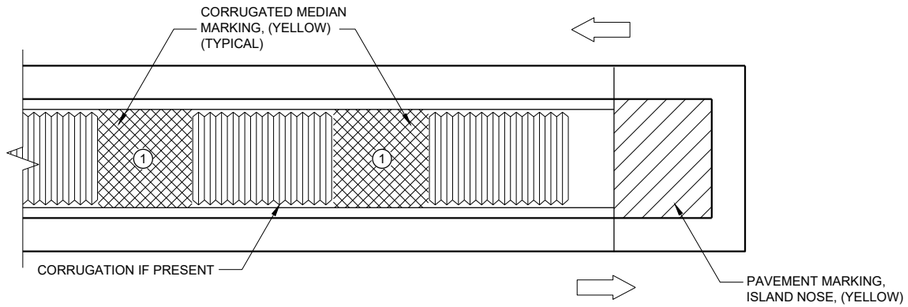
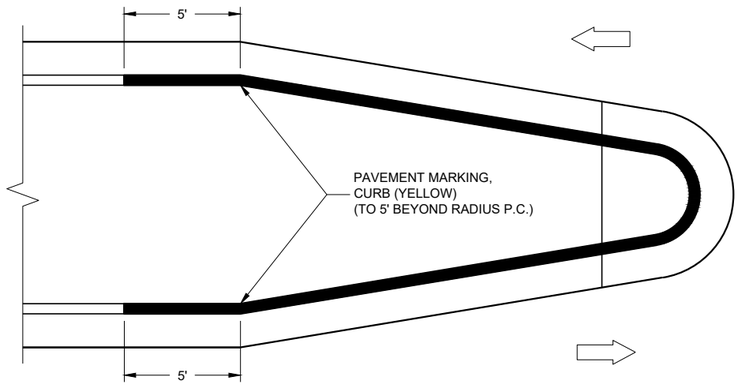
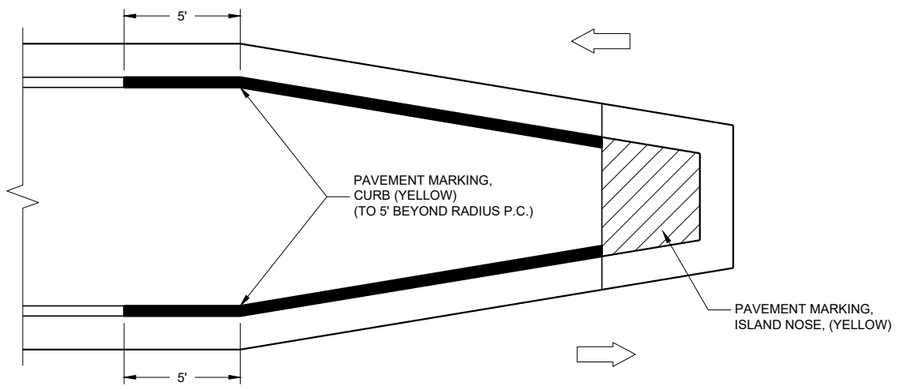
SDD 15C27 - 03a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS
(ISLANDS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

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SDD 15C27 - 03b

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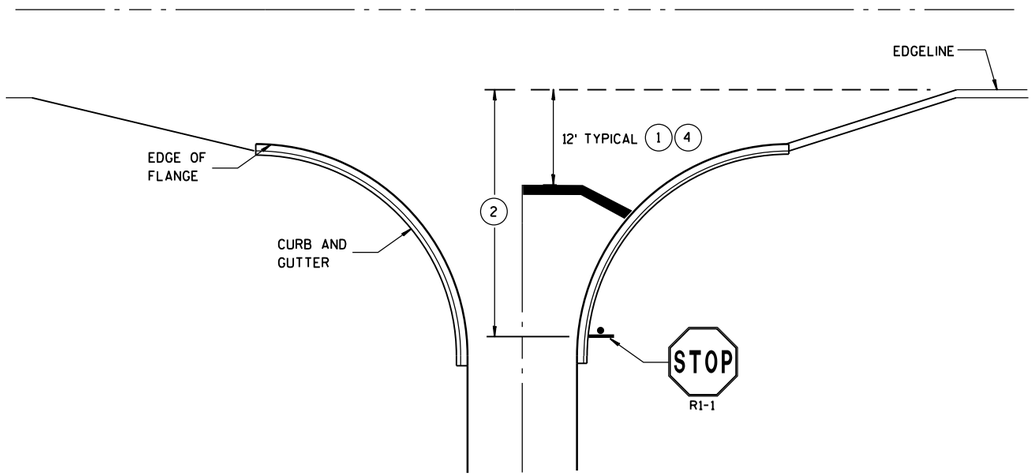
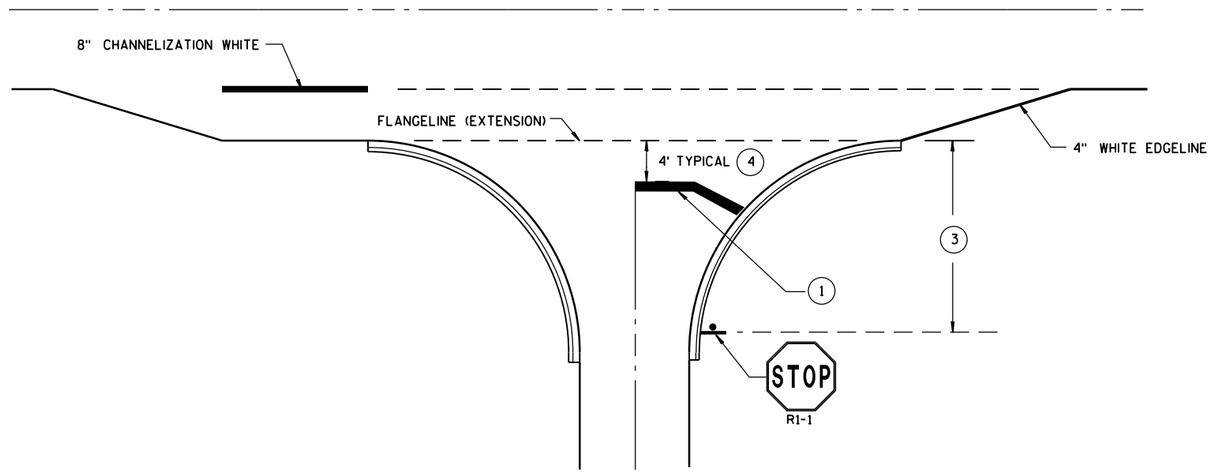
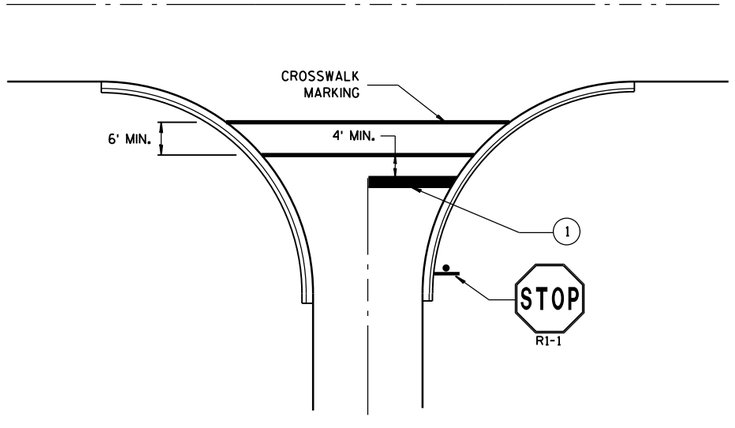


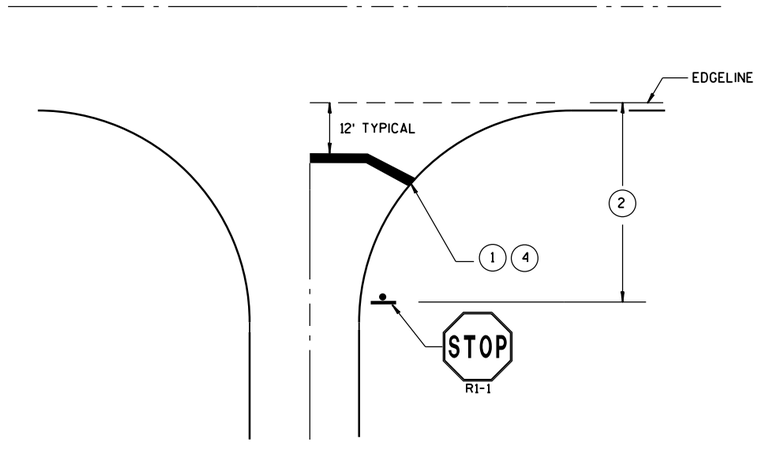
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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 PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]NEER

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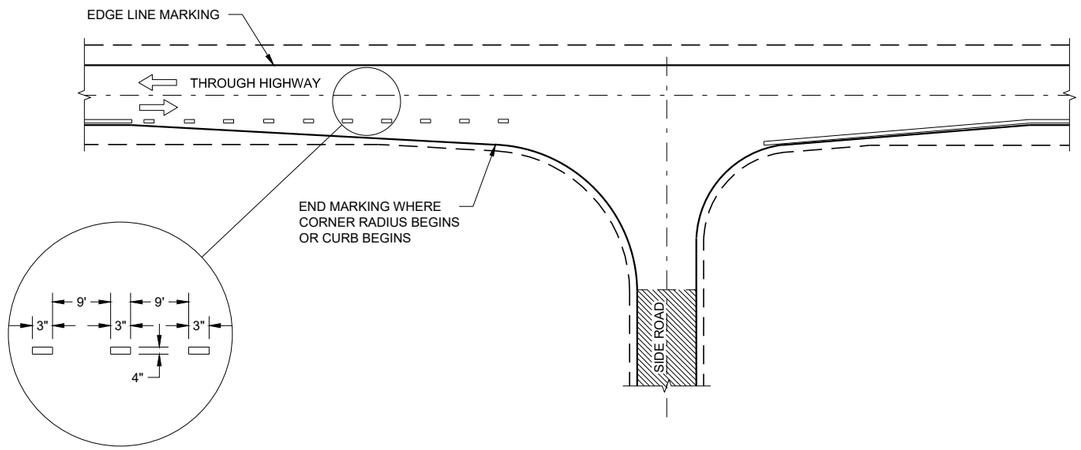
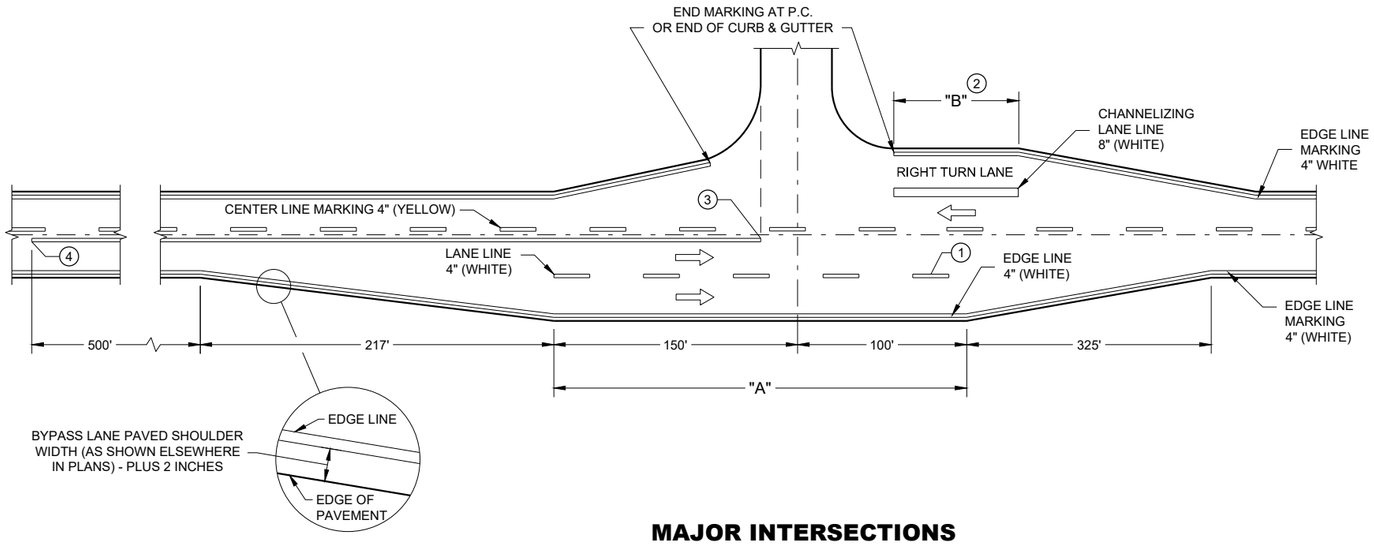


MINOR INTERSECTION



MAJOR INTERSECTIONS

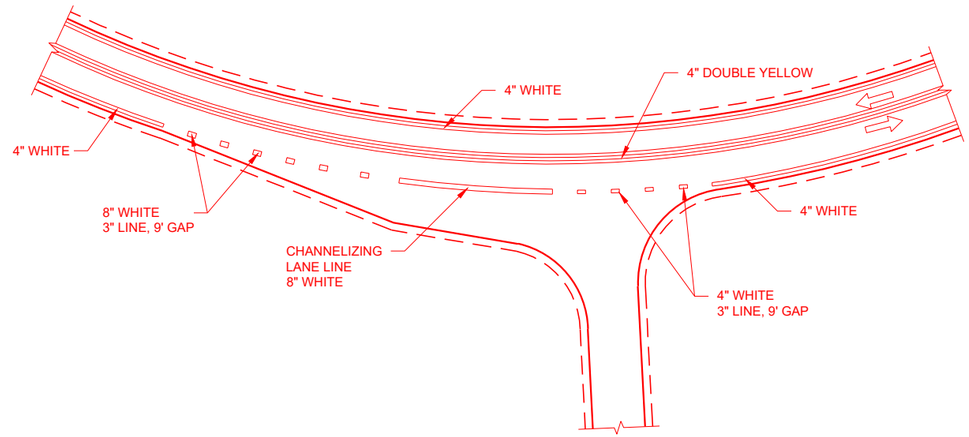
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 03a

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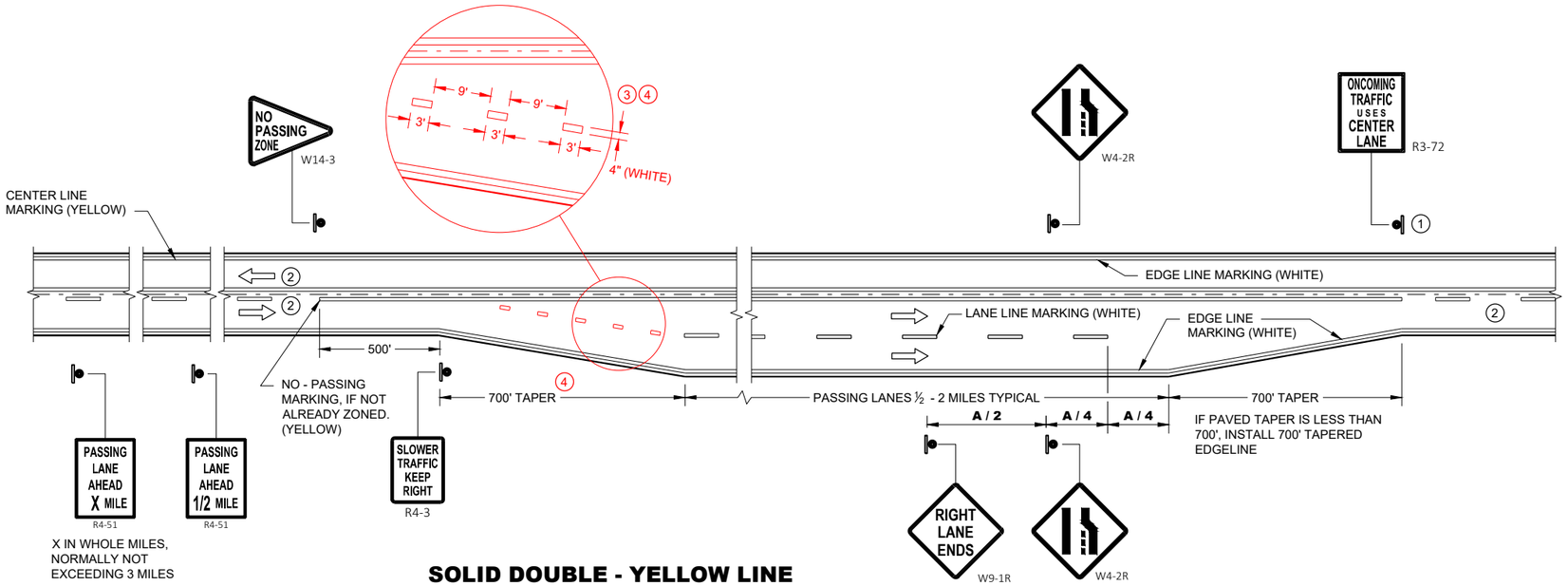
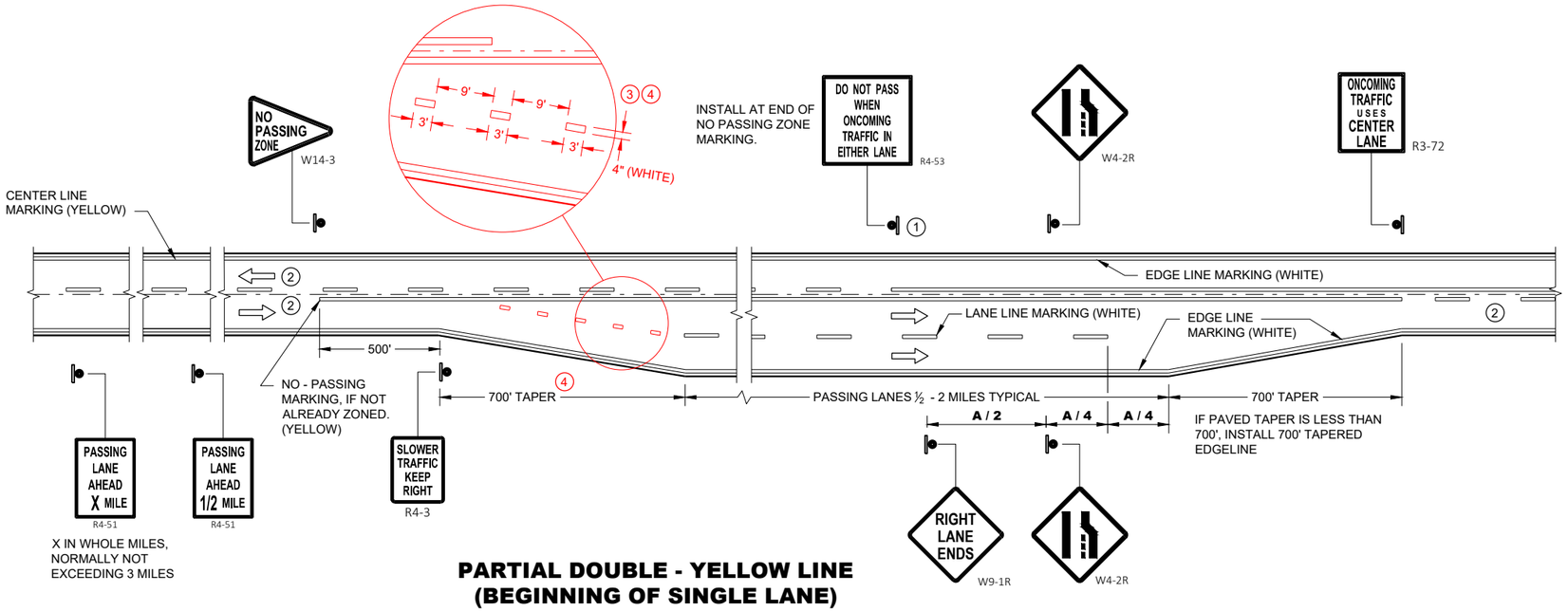
SDD 15C35 - 03a



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

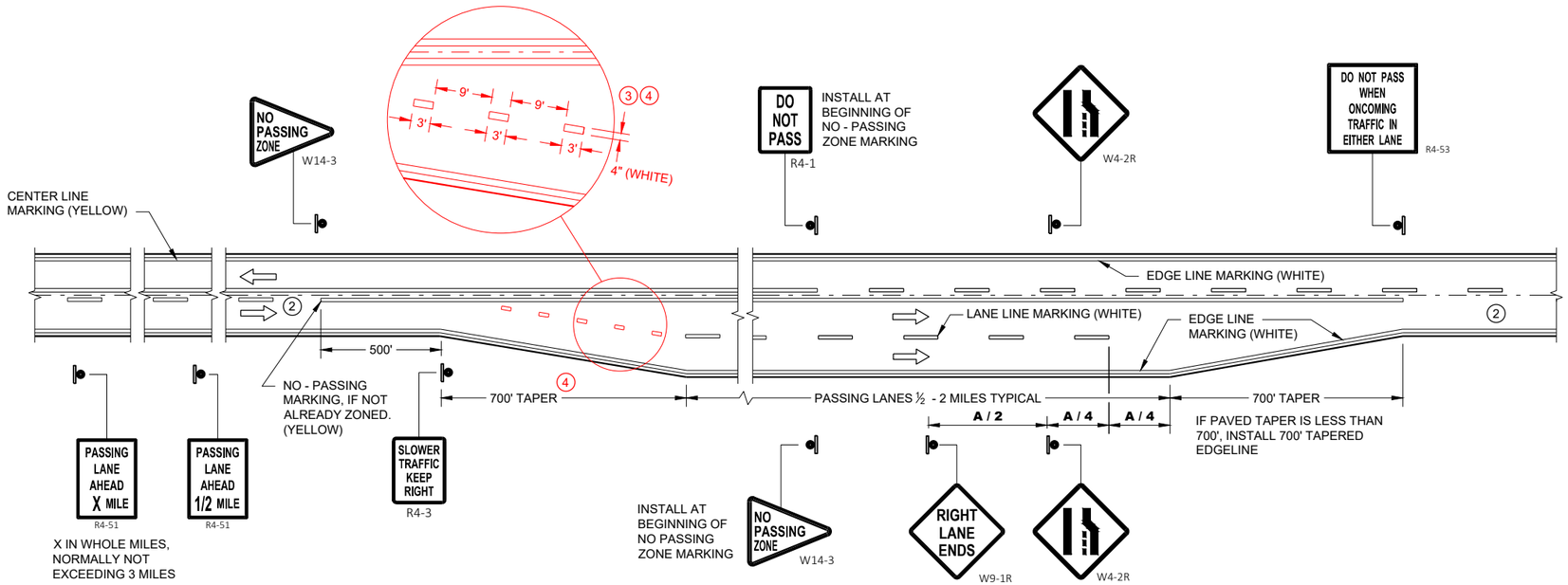
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

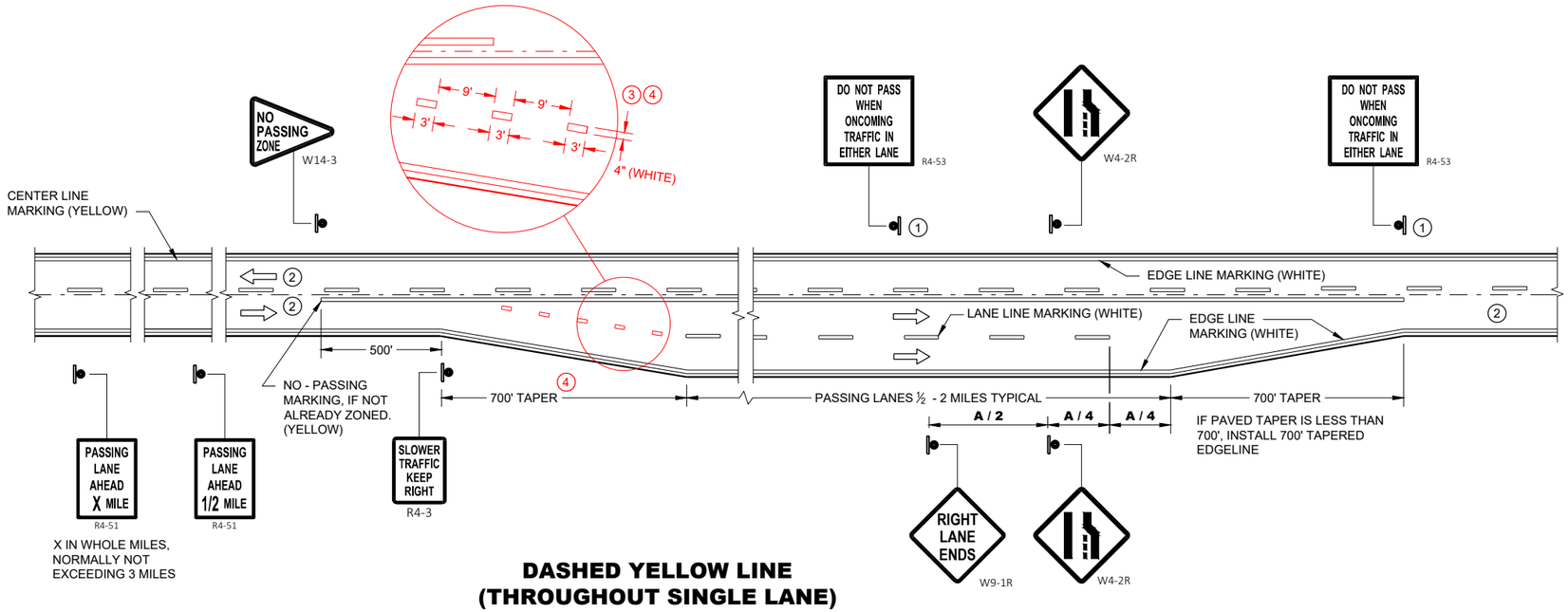
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 03b

SDD 15C35 - 03b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
00-00-00 DATE
/S/ <AUTHOR> ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15C35 - 03c

SDD 15C35 - 03c

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

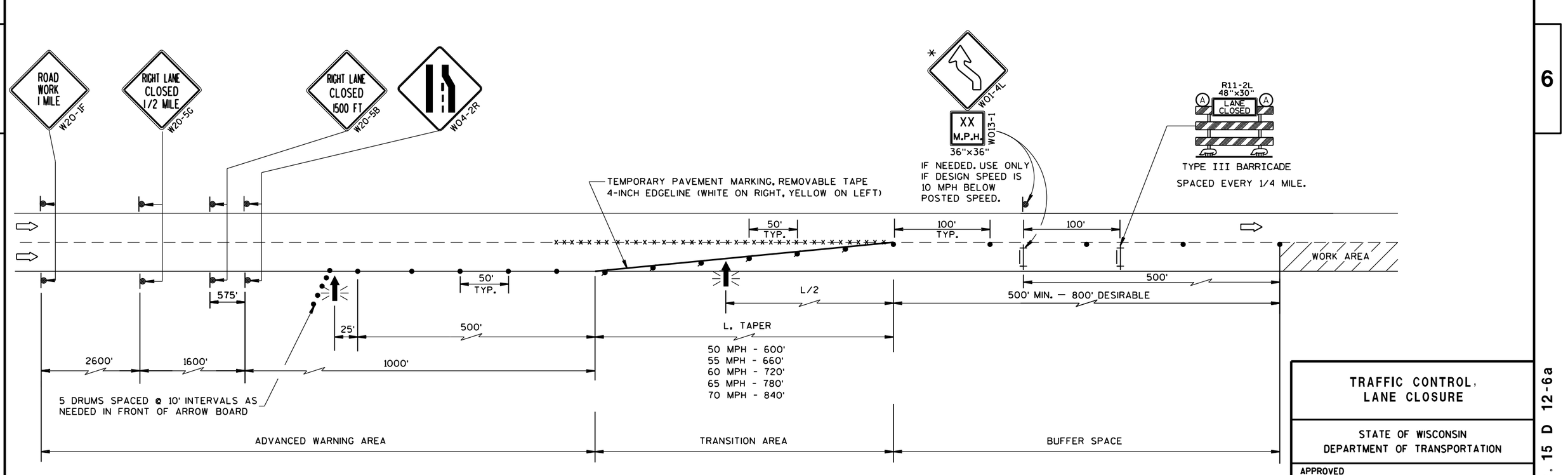
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



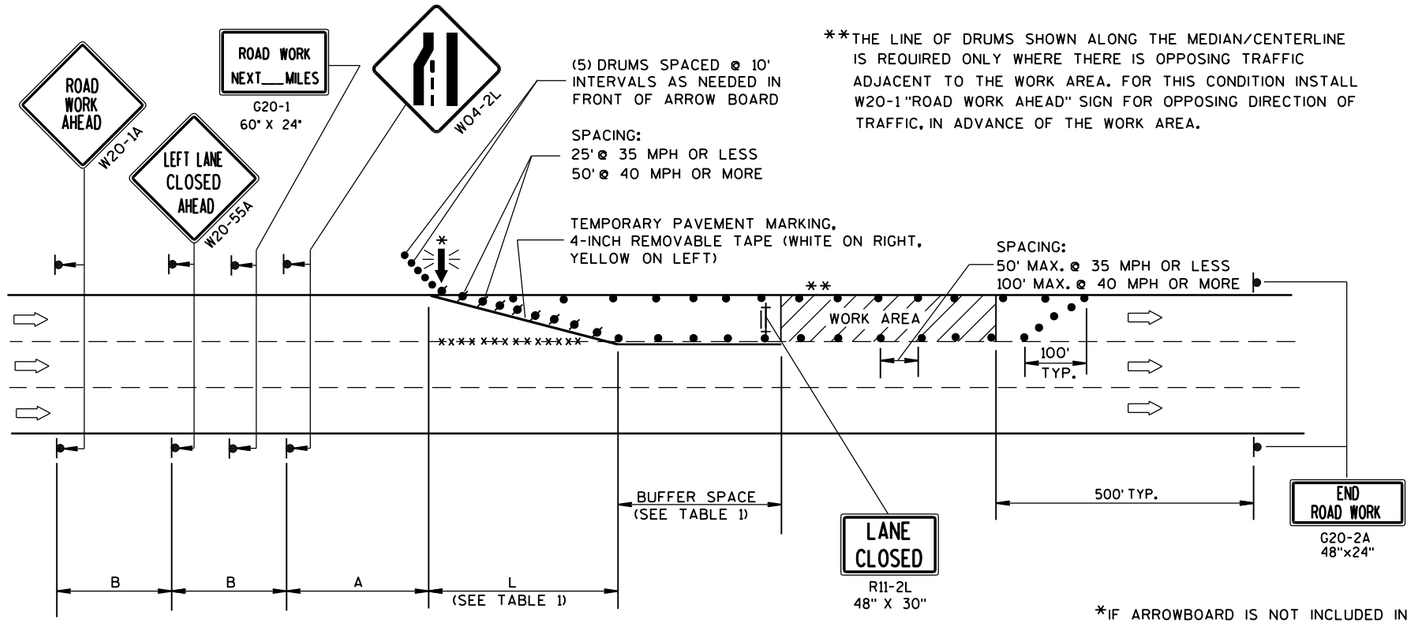
TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 12-6a



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

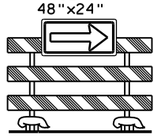


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER

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S.D.D. 15 D 20-4

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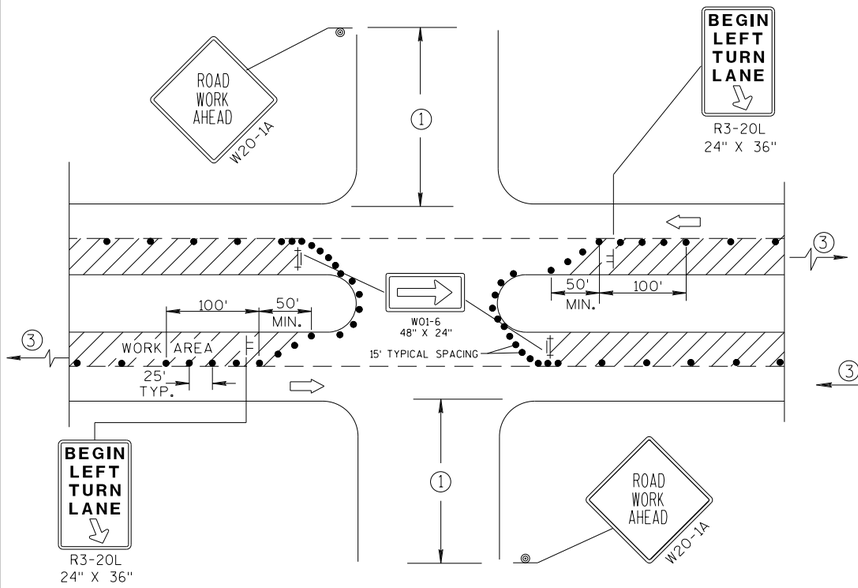
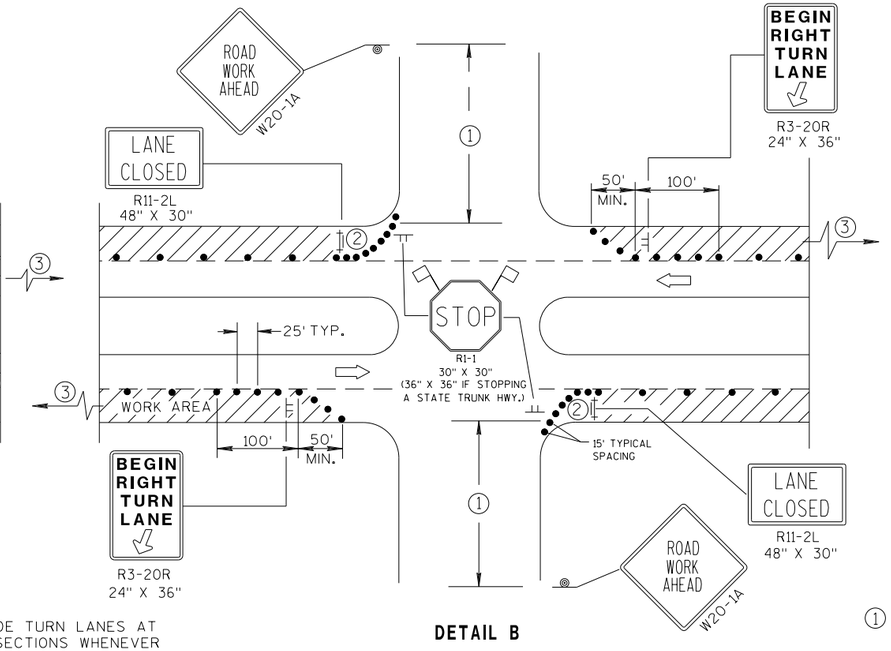
S.D.D. 15 D 20-4



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

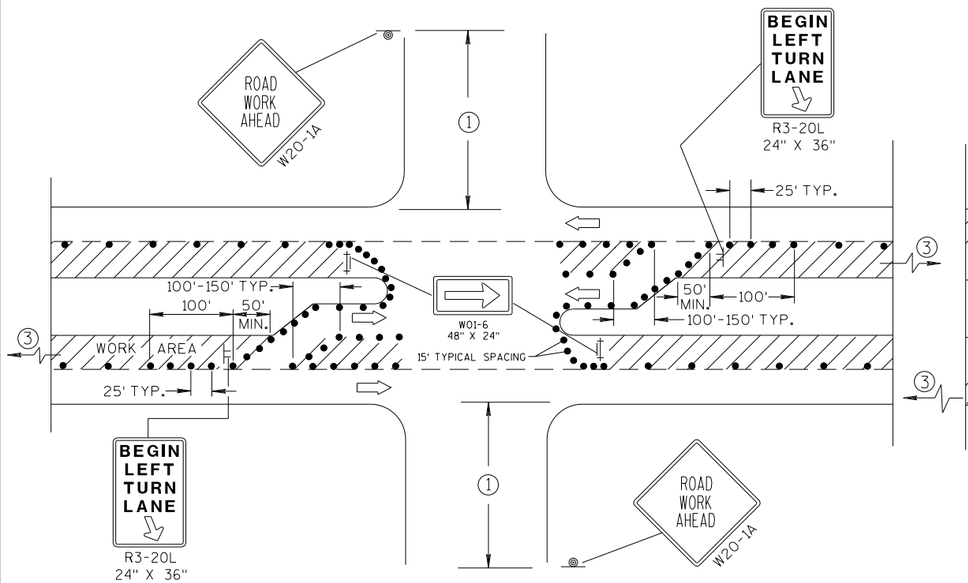
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

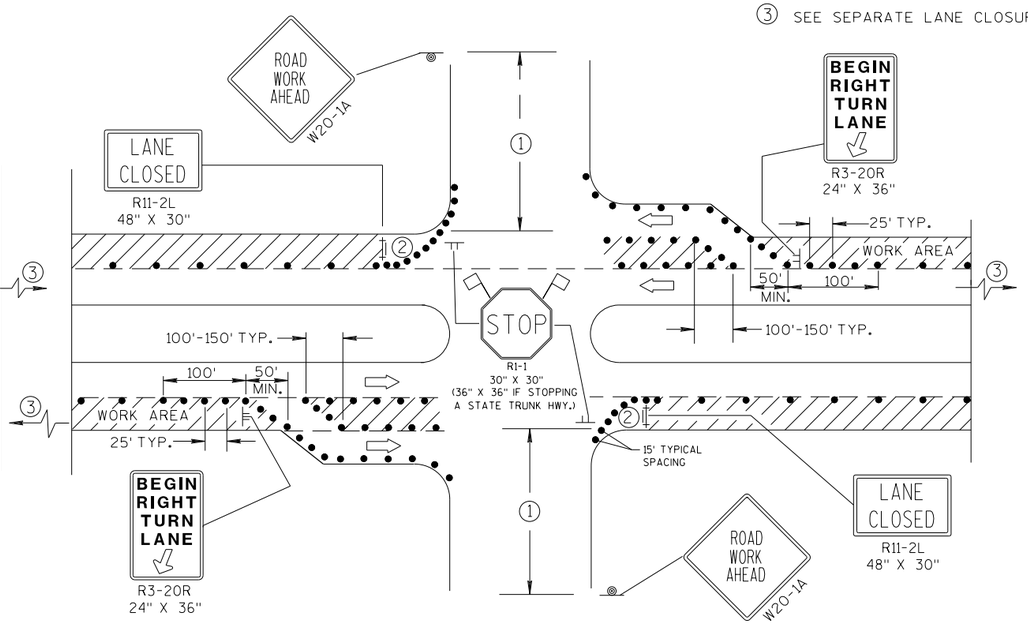
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

6

S.D.D. 15 D 21-6

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

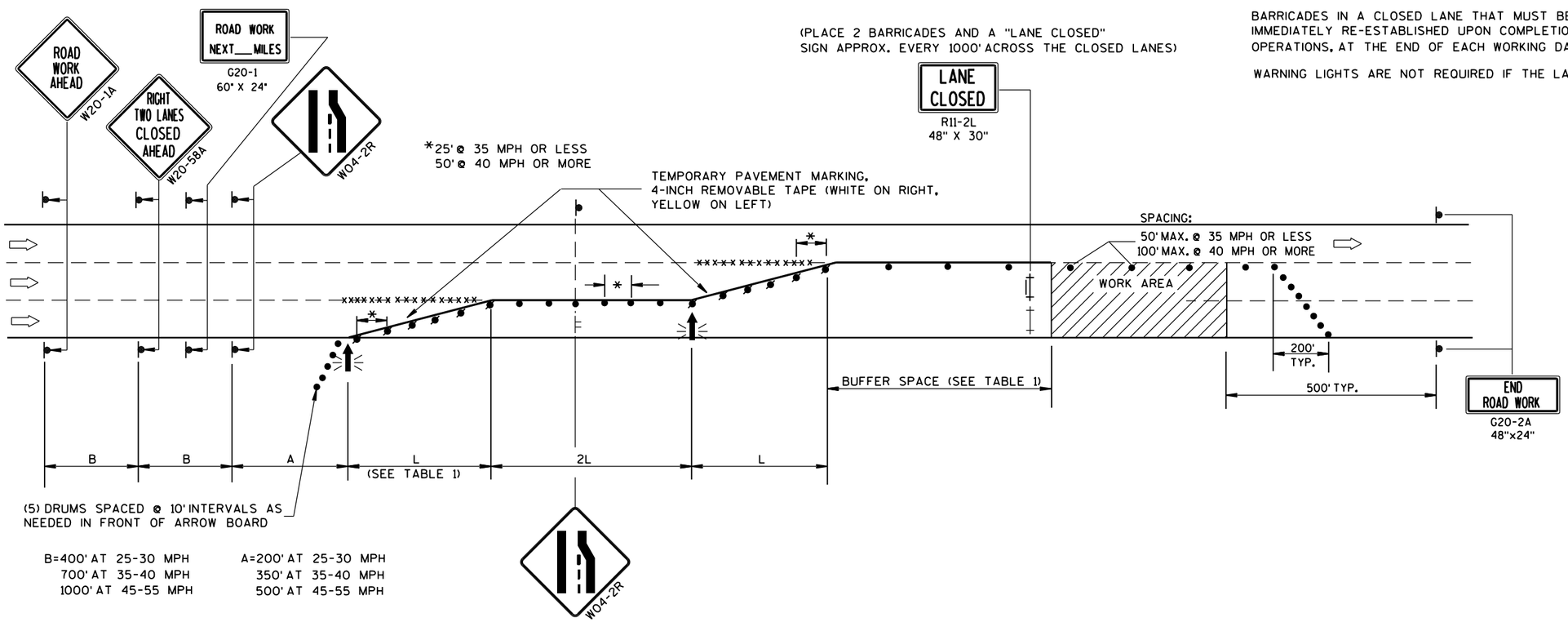
TRAFFIC CONTROL DRUM

FLASHING ARROW BOARD

DIRECTION OF TRAFFIC

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

WORK AREA



B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

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

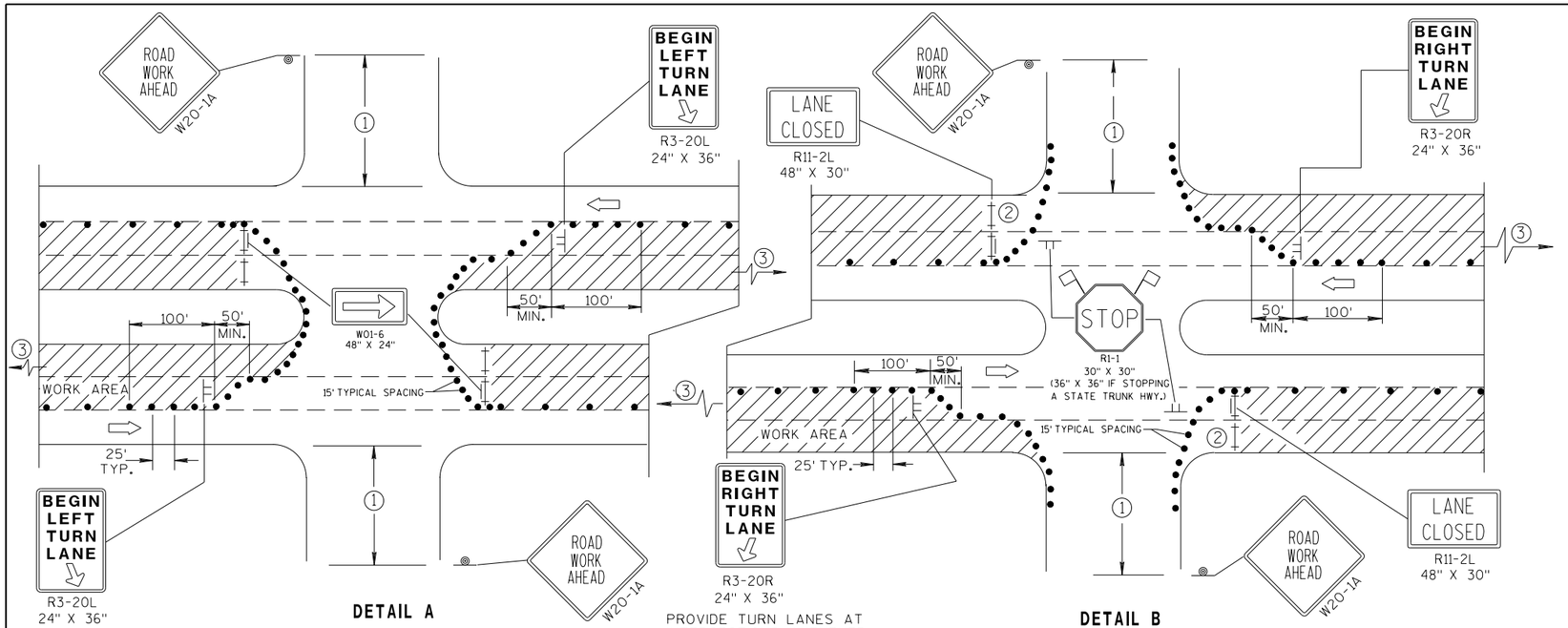
TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 D 22-3



DETAIL A

FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

DETAIL B

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

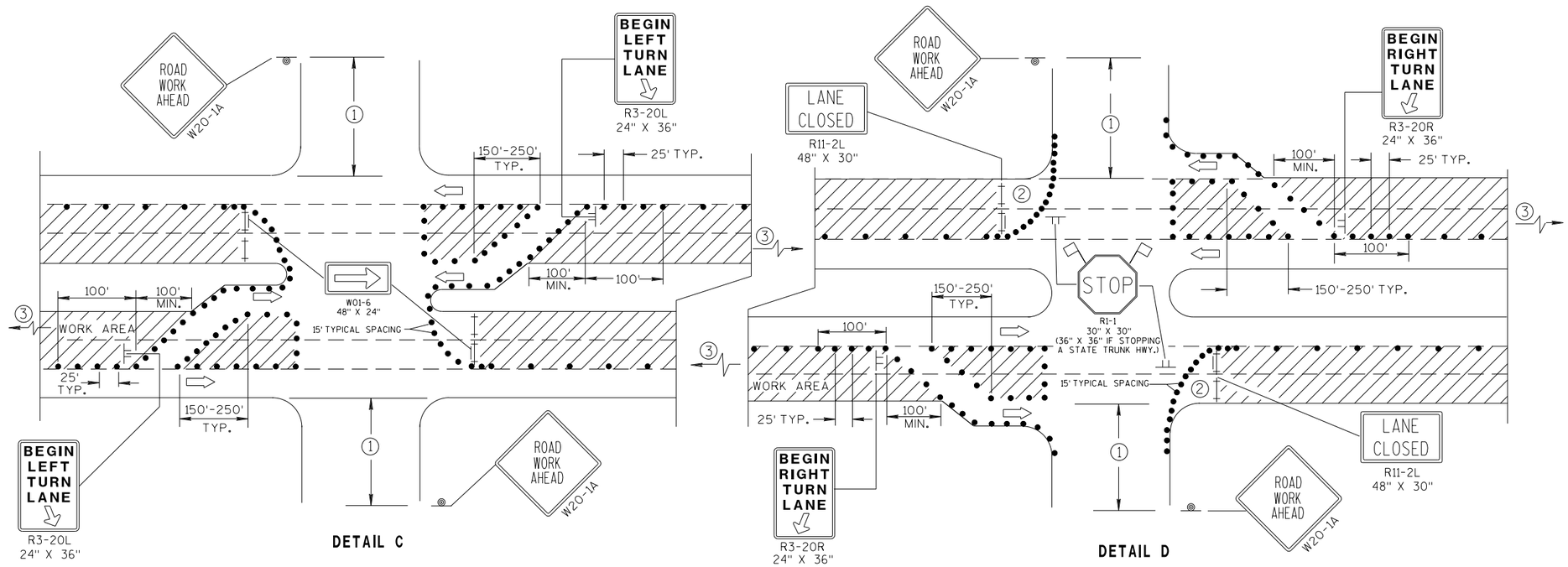
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE 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.

(1) 500 FEET TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350 FEET IF 35-40 MPH.
200 FEET IF 25-30 MPH.

(2) ALSO USE BARRICADES AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

DETAIL D

FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Andrew Heidtke
WORK ZONE ENG
FHWA

6

S.D.D. 15 D 23-6

6

S.D.D. 15 D 23-6

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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

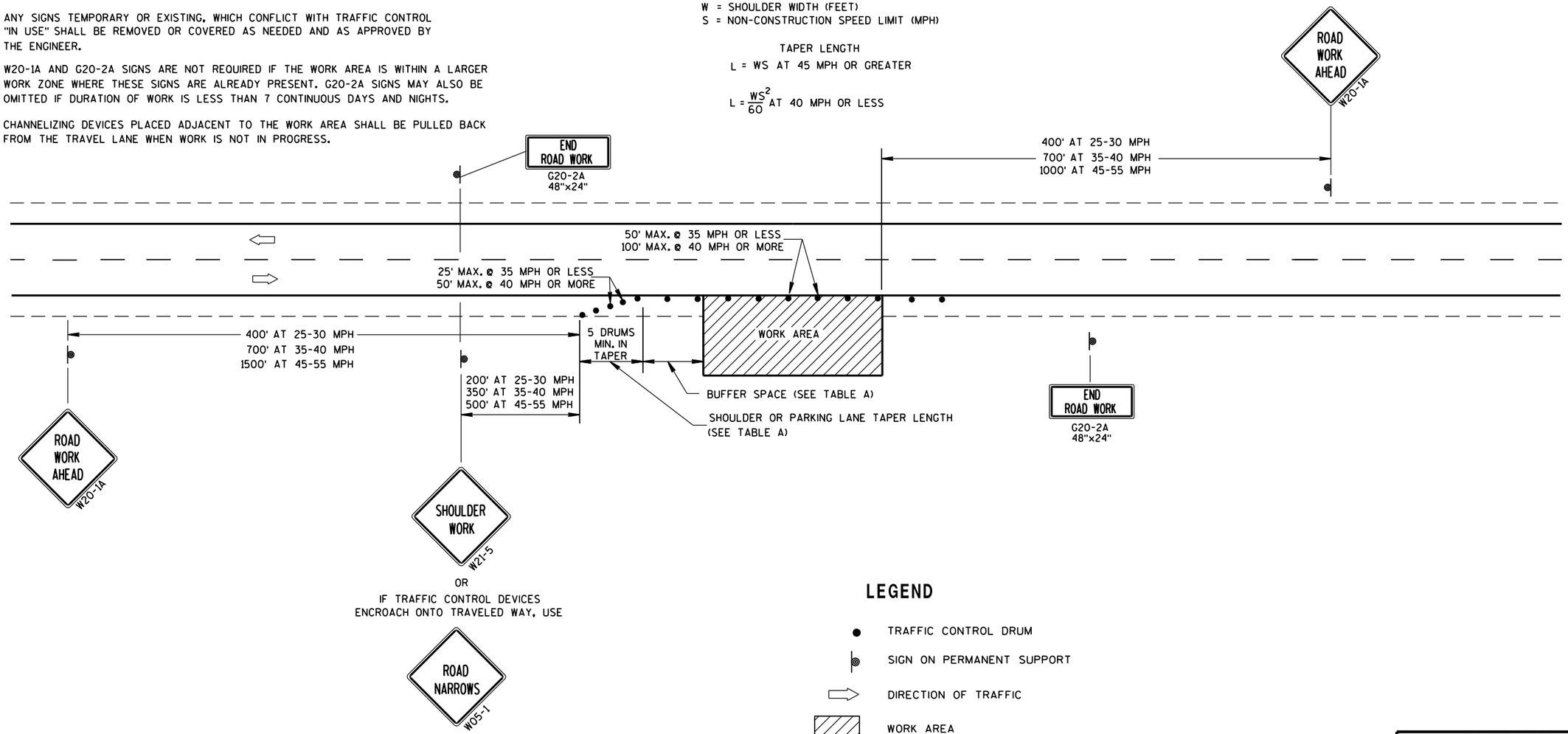
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

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

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

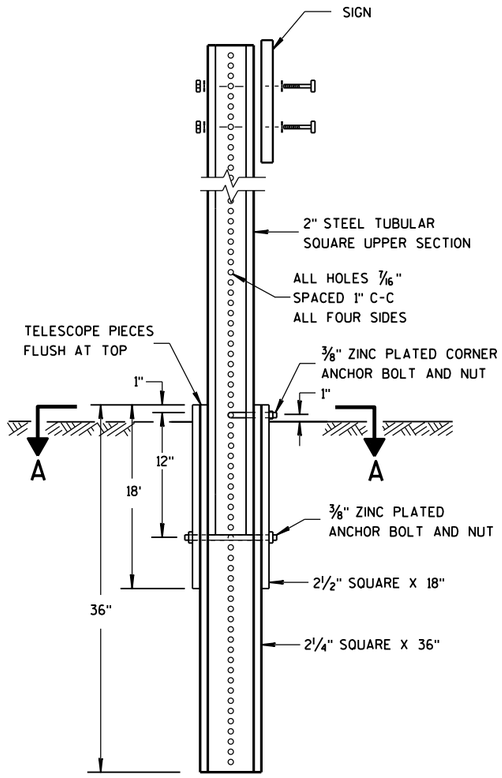
FHWA

6

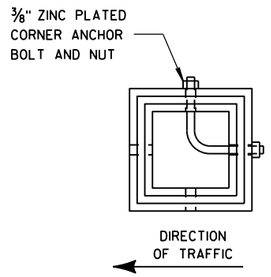
S.D.D. 15 D 28-3

6

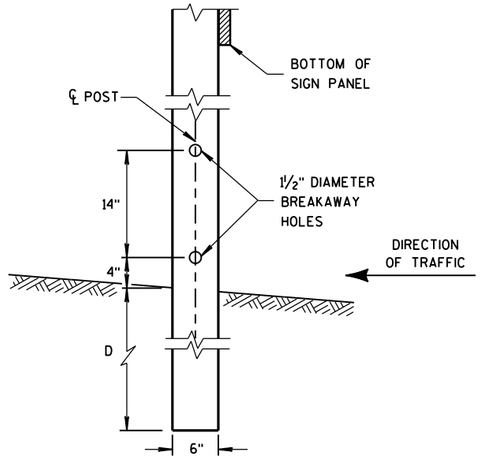
S.D.D. 15 D 28-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



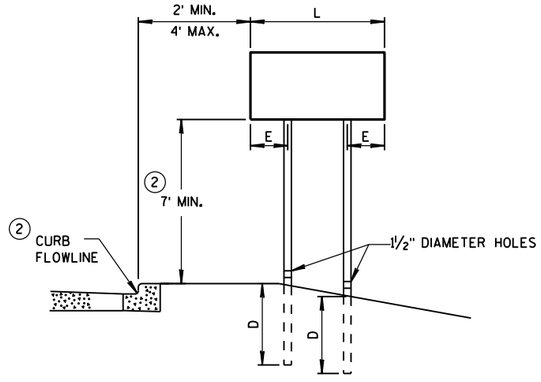
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

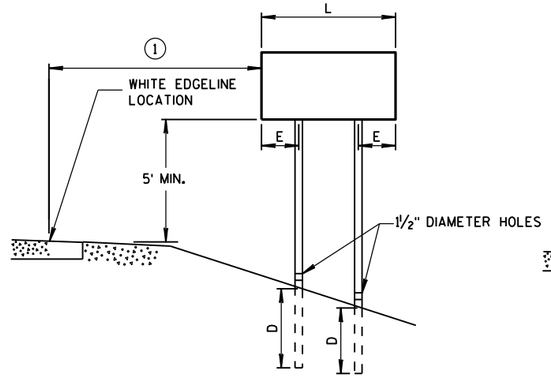
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

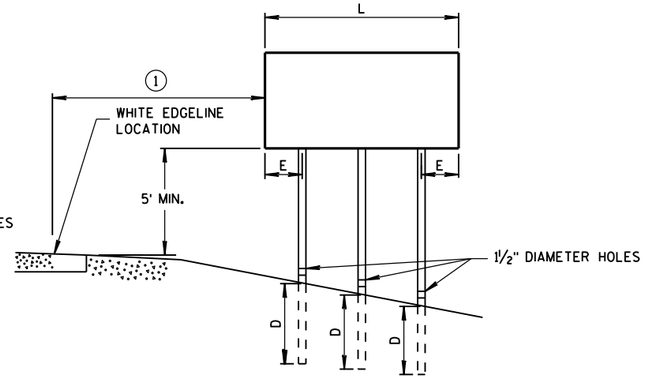
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

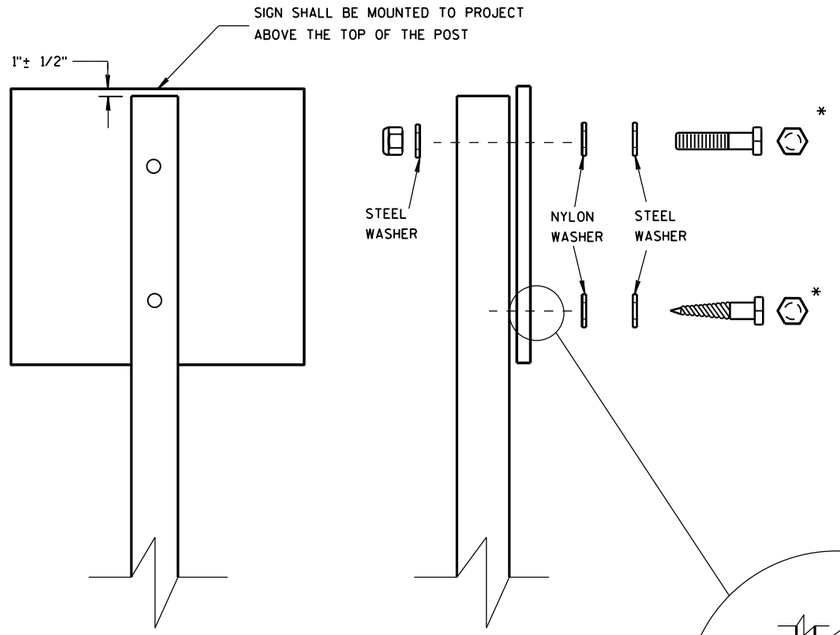
SEE NOTE (3)

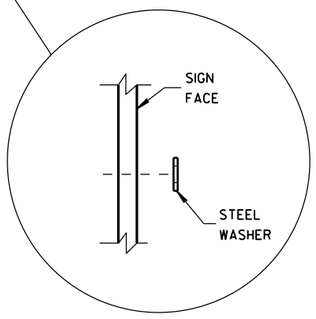
TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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





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

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

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

LAG SCREWS - 3/8" X 3"

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

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

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

ATTACHMENT OF SIGNS TO POSTS

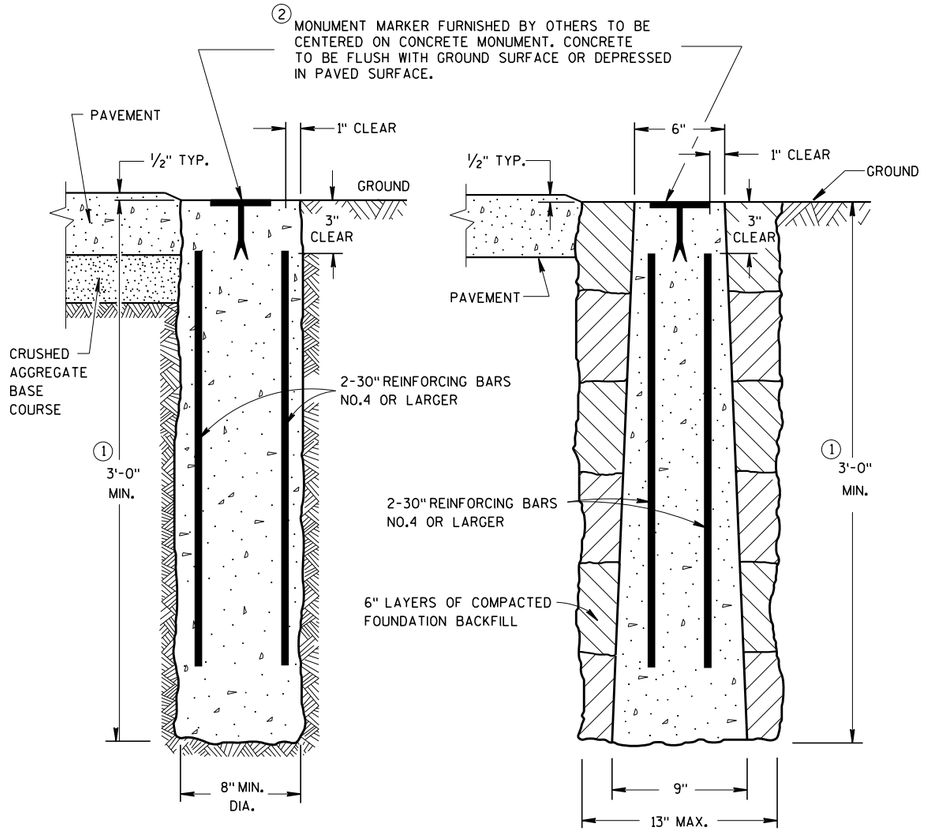
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

FHWA

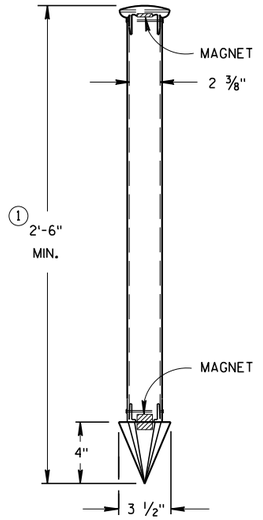


CAST-IN-PLACE

PRECAST

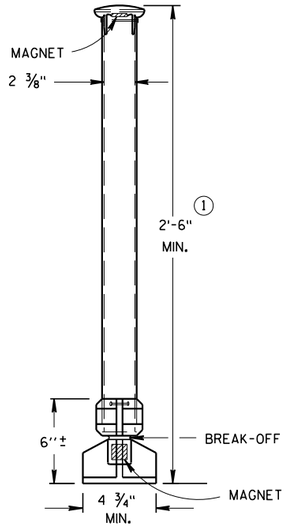
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

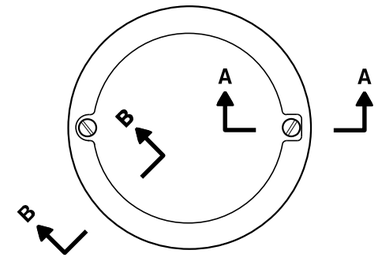
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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.

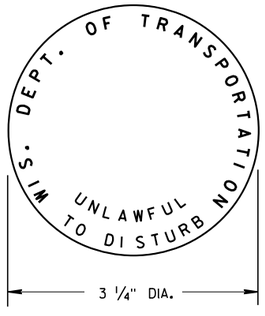
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

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 WIS DOT MARKER.

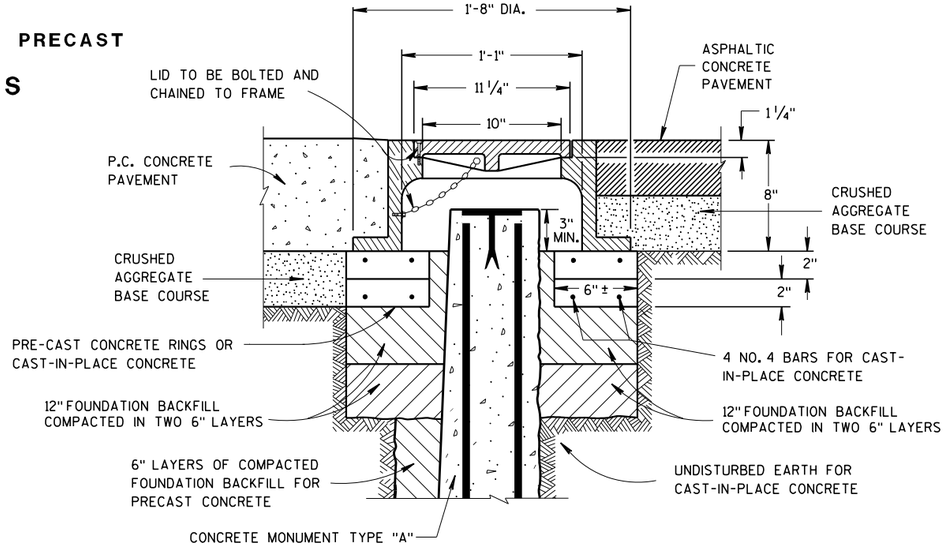


TOP VIEW



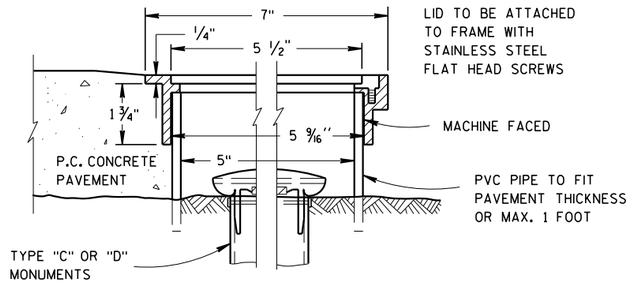
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



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

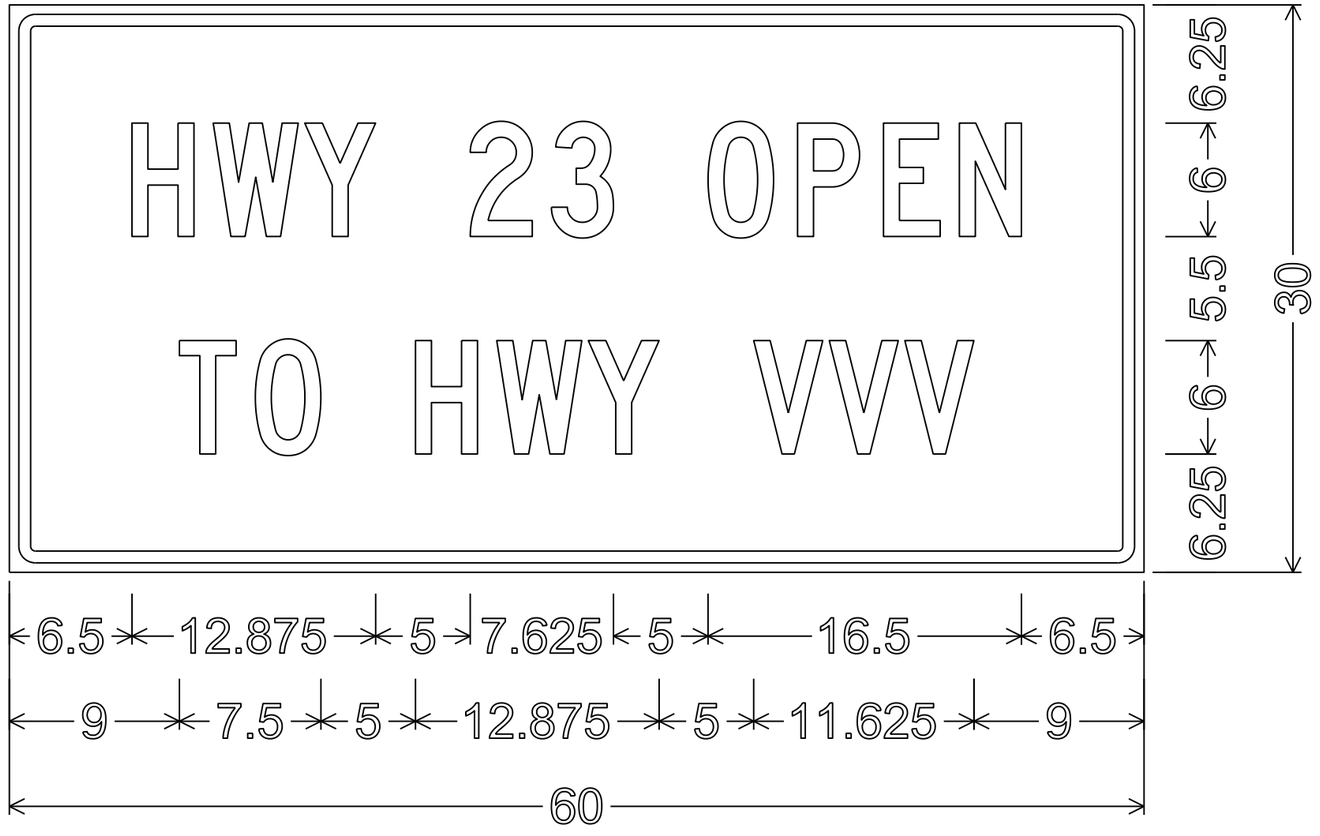
APPROVED
March 2018 — DATE
/S/ Raymond A. [illegible] — CHIEF SURVEYING AND M[illegible] ENGINEER
FHWA

6

S.D.D. 16 A 1-7

NOTES

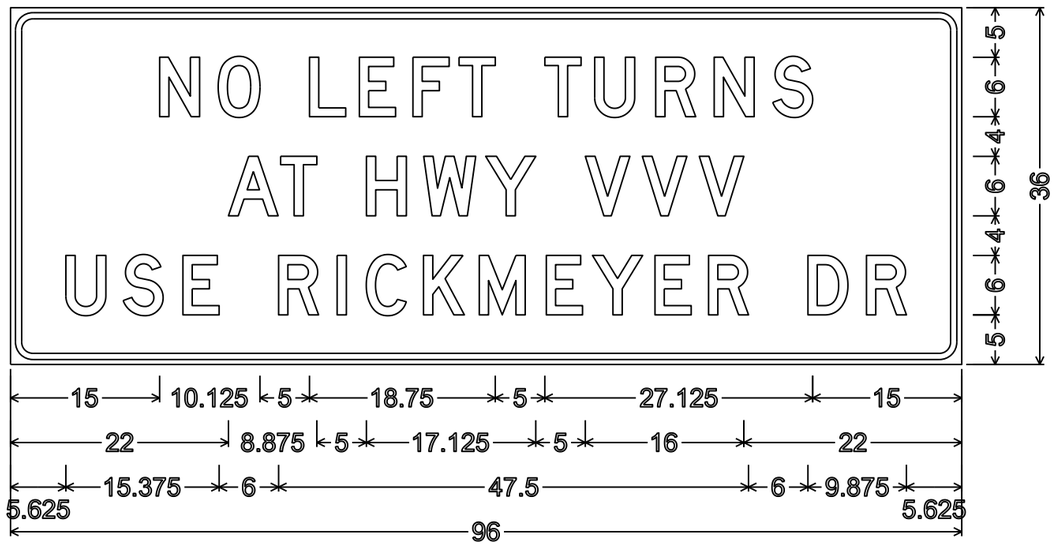
1. All Signs Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



1.375" Radius, 0.625" Border, 0.500" Indent

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



2.250" Radius, 0.625" Border, 0.500" Indent

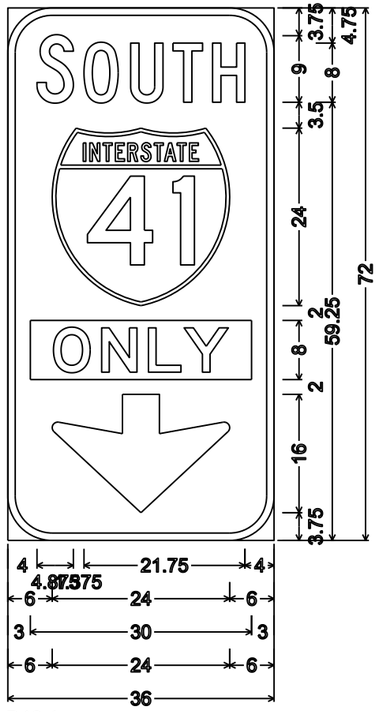
7

7

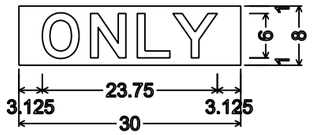
PROJECT NO:1430-18-73	HWY: STH 23	COUNTY:FOND DU LAC	TEMPORARY SIGNING	SHEET NO: 199	E

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted
4. ONLY plaque basematerial is .040" aluminum on Type F Reflective sheeting with Black Message



D16-1;
6.000" Radius, 1.000" Border,
"SOUTH" C;



No border, Black on Fluorescent yellow;
"ONLY" Black E;

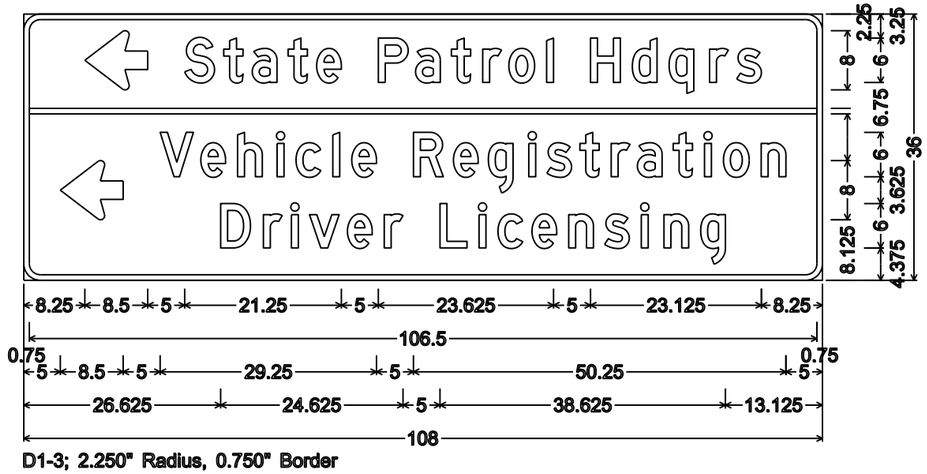
7

7

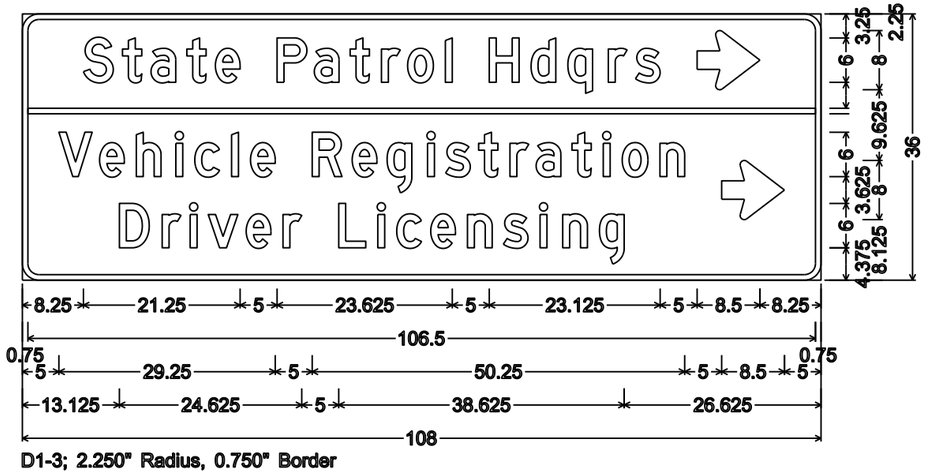
PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	PERMANENT SIGNING	SHEET NO: 200	E

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D



D1-3; 2.250" Radius, 0.750" Border



D1-3; 2.250" Radius, 0.750" Border

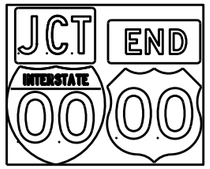
7

7

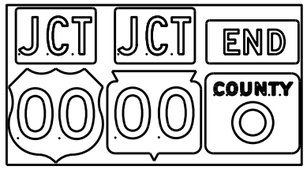
PROJECT NO:1430-18-73	HWY:STH 23	COUNTY:FOND DU LAC	PERMANENT SIGNING	SHEET NO: 201	E

TYPICAL ASSEMBLIES

J1-1

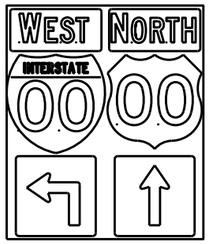


J1-2

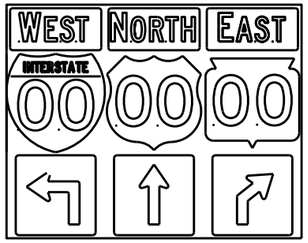


J1-3

J2-1



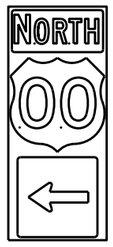
J2-2



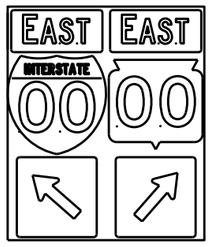
J2-3

JV

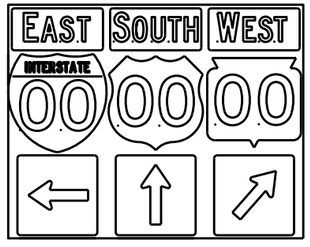
(Typical Vertical J-Assembly
See Note 10 and 11)



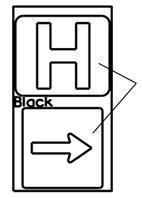
J3-1



J3-2

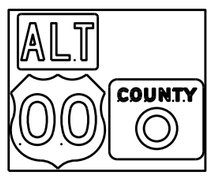


J3-3

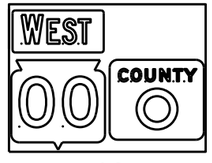


JH-1

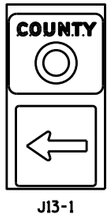
J4-1



J4-2



J4-2



J13-1

J12-1

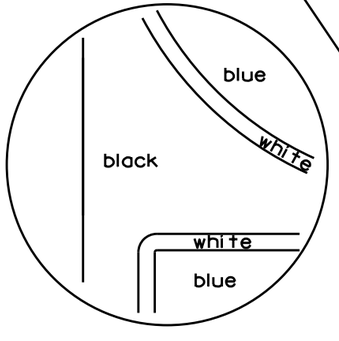
J32-1

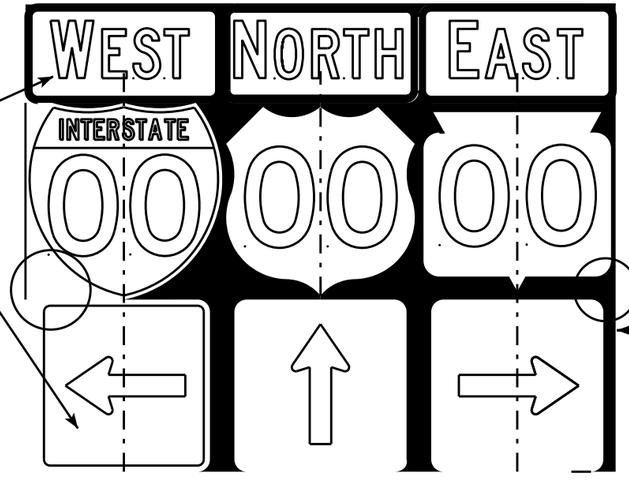
J33-1

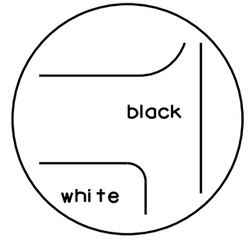
J23-1

J22-1

blue background
with interstate







black background

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

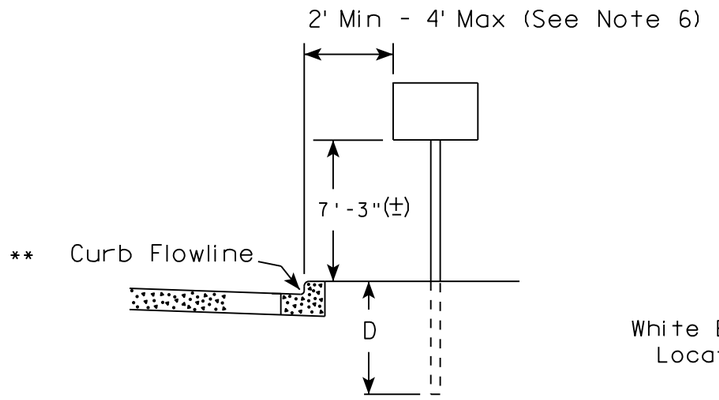
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

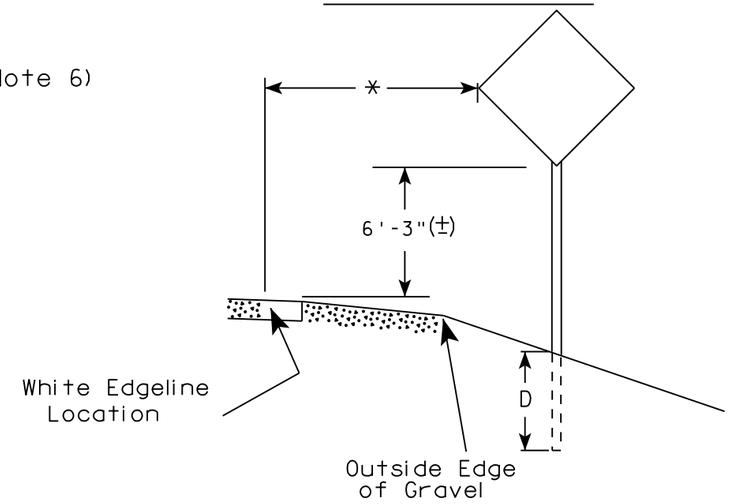
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

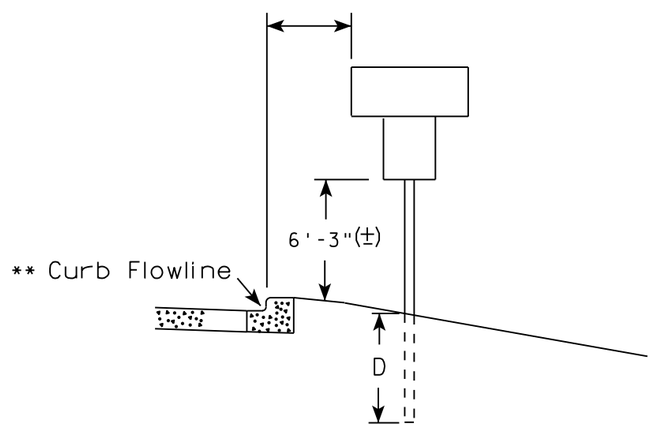
WISDOT/CADDS SHEET 42

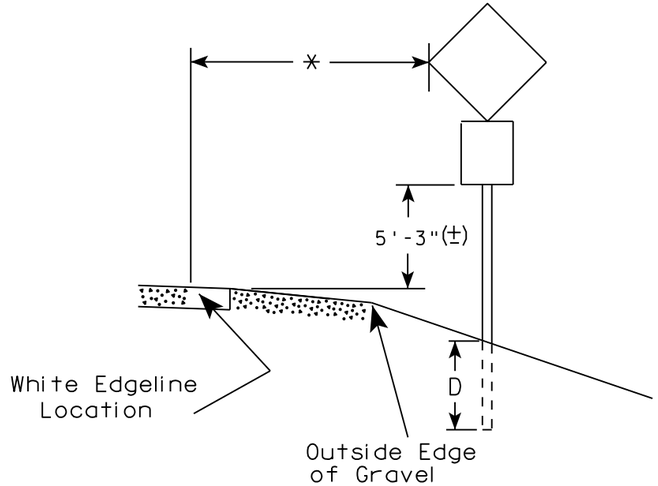
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

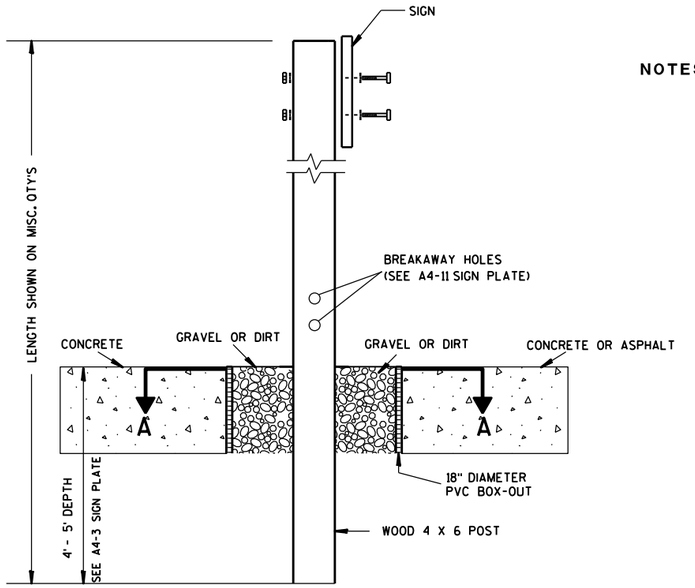
APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

7

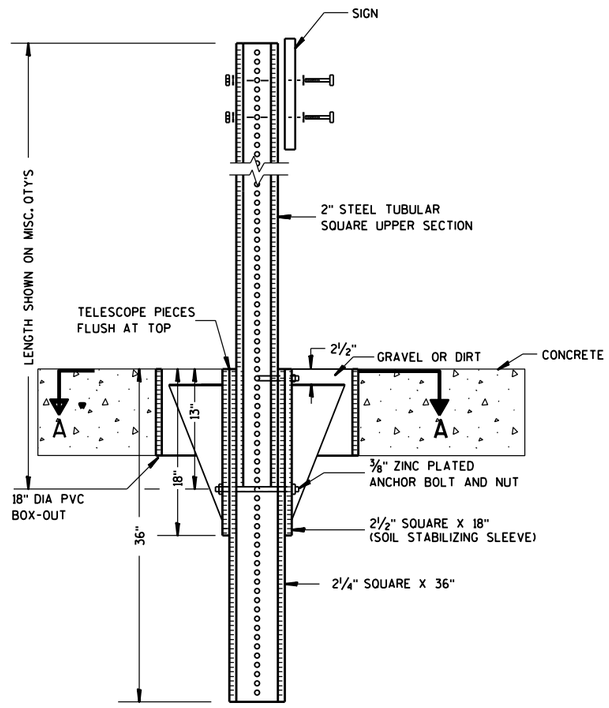
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	E



ELEVATION VIEW

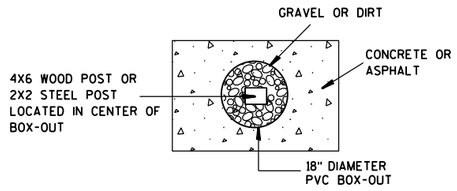
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

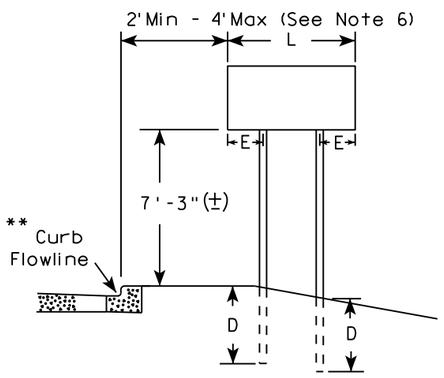
APPROVED Matthew R Rauch
for State Traffic Engineer

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

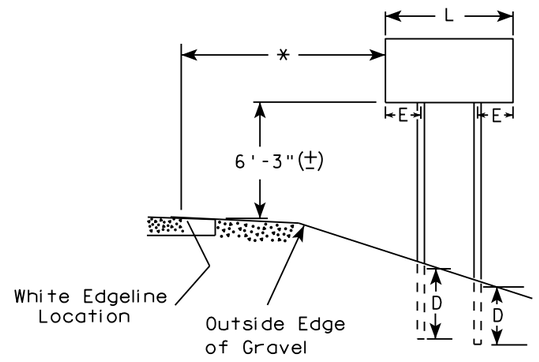
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

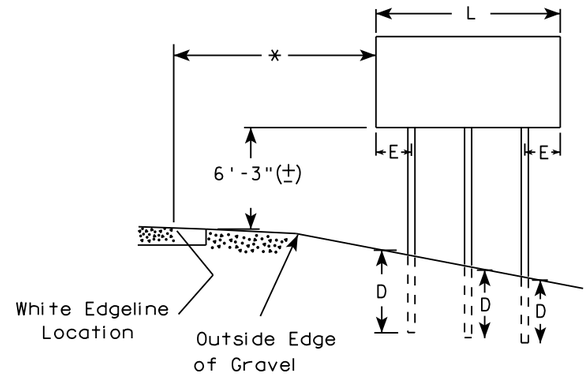
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

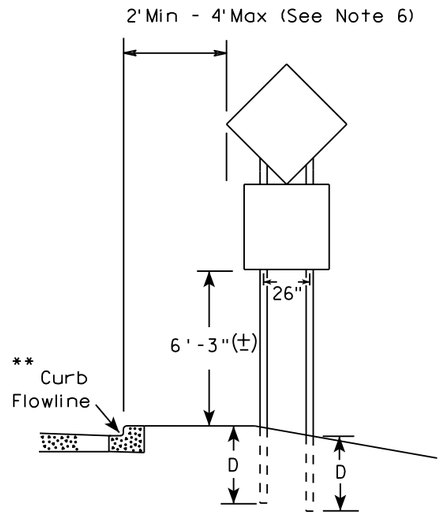
URBAN AREA



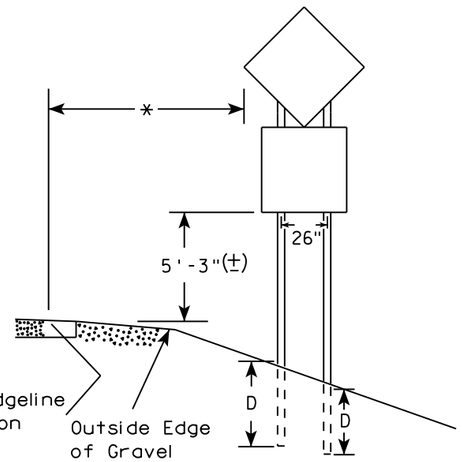
RURAL AREA (See Note 3)







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'

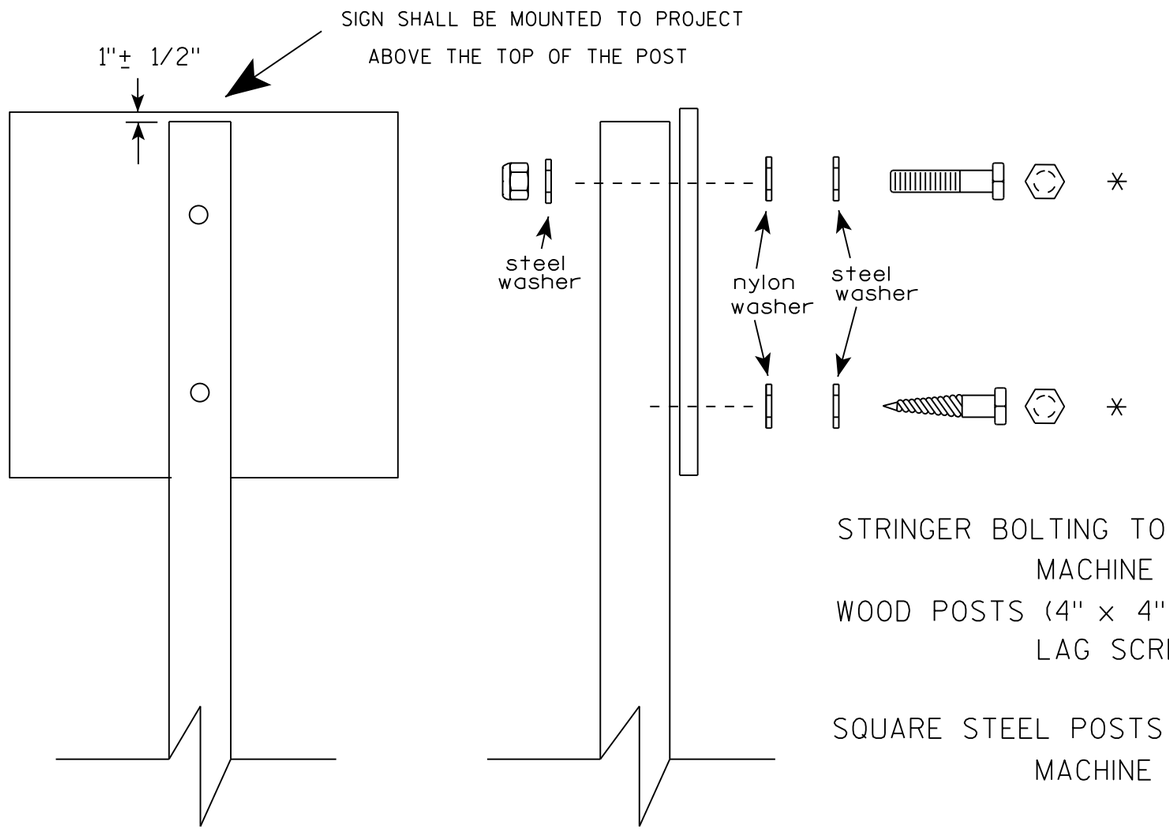
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 205	E



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

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

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

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

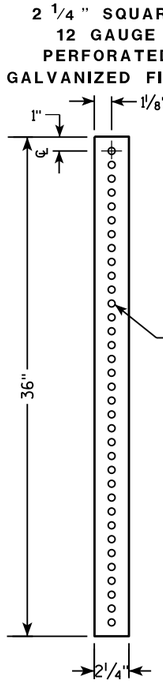
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

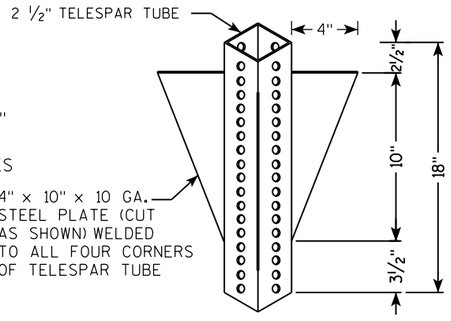
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

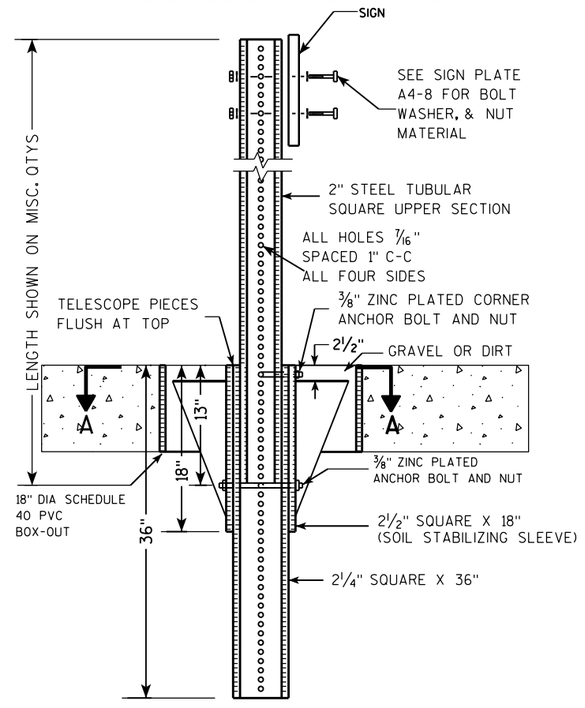
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



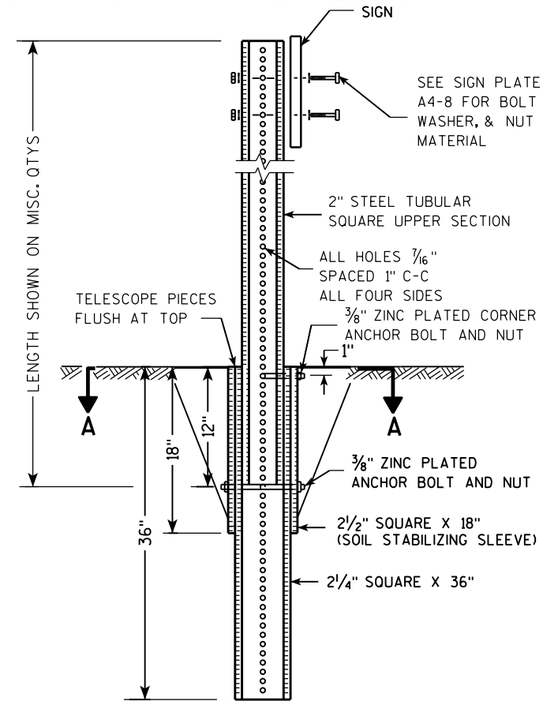
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

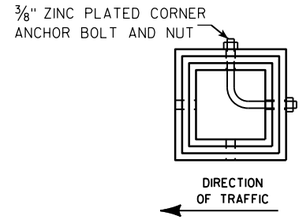


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

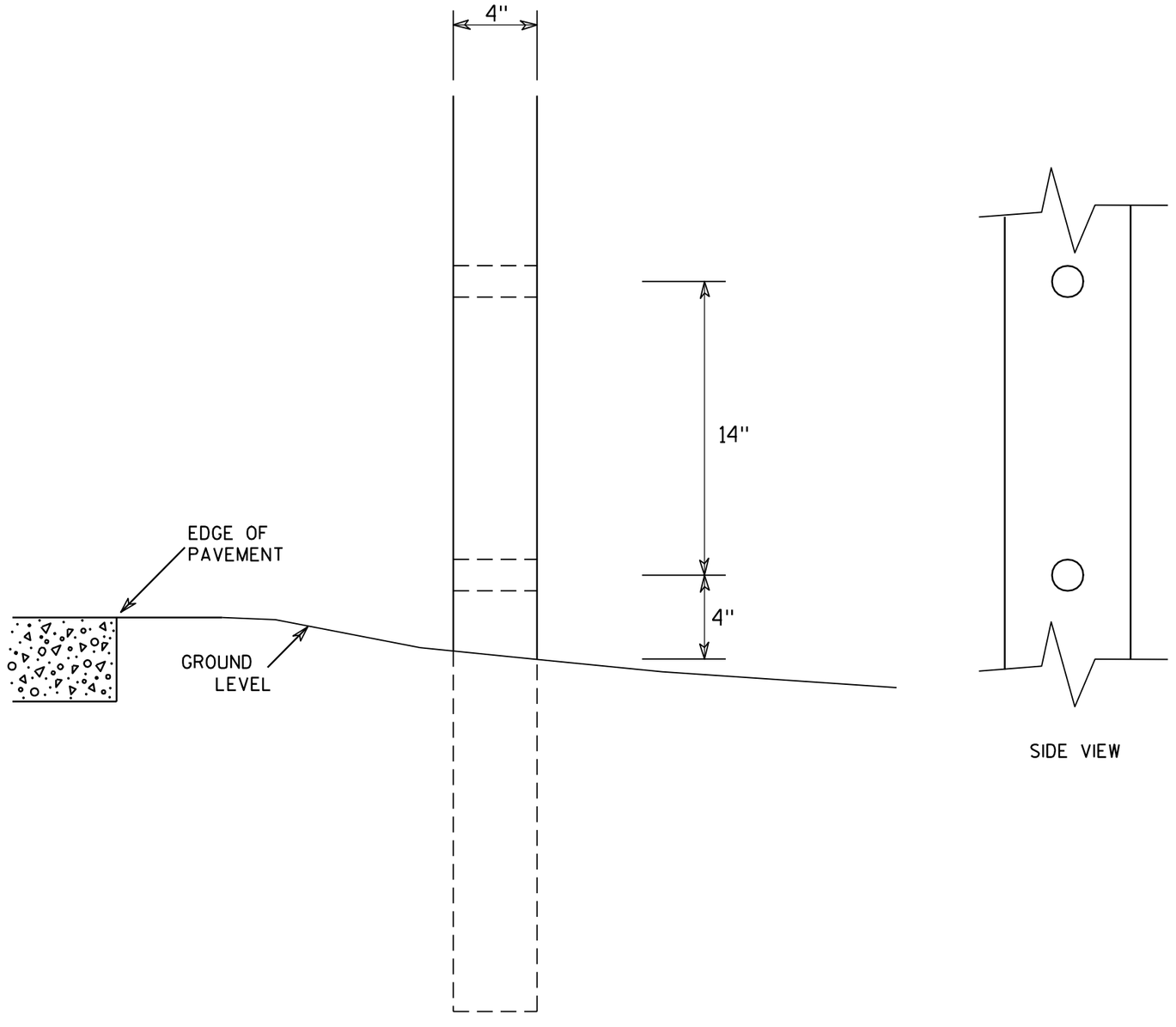
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 207 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

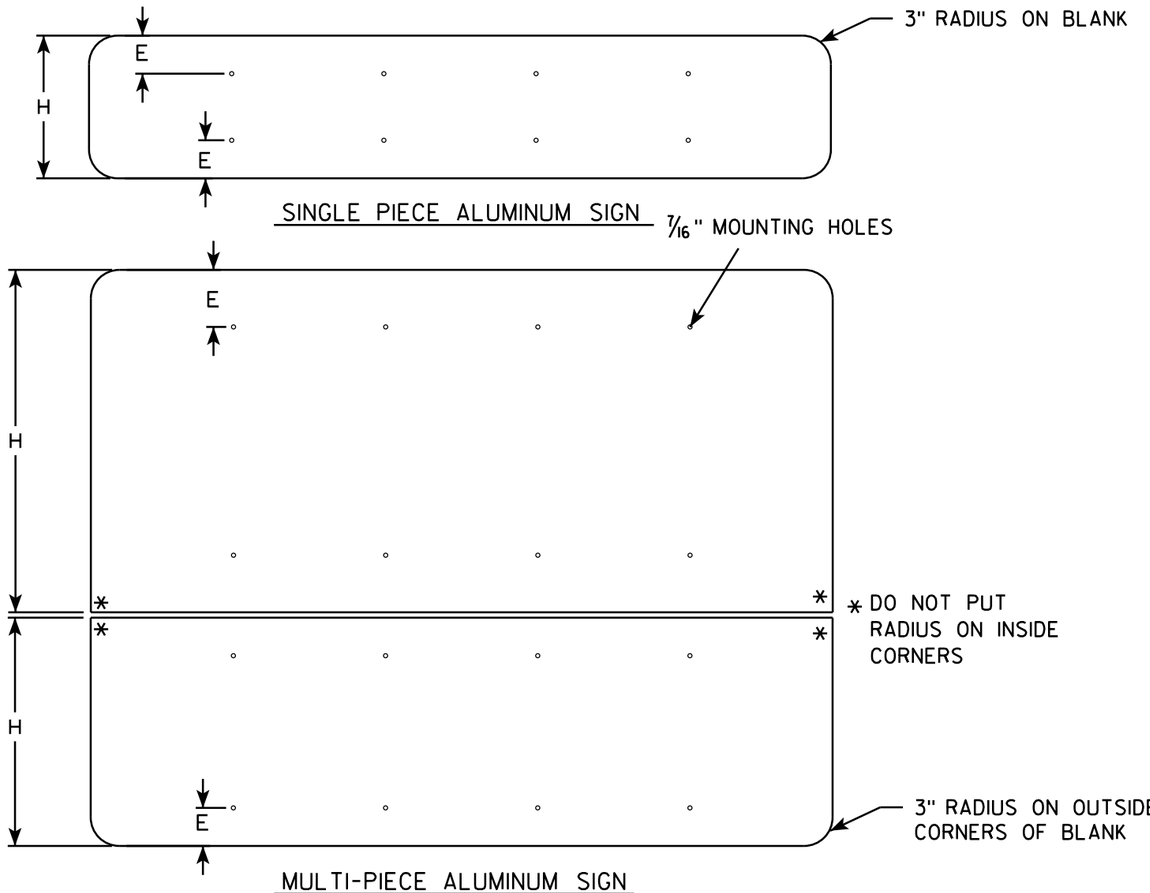
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

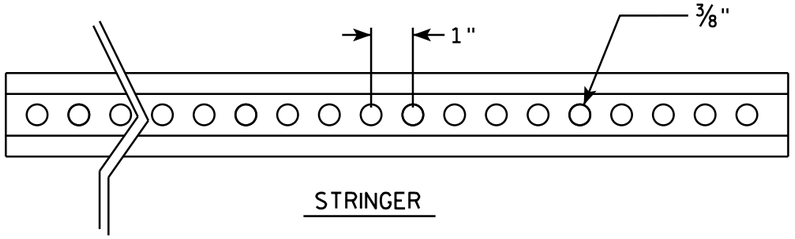
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 208	E



GENERAL NOTES

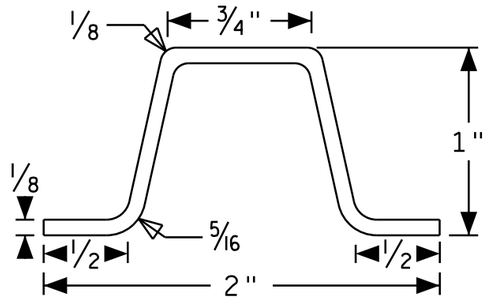
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

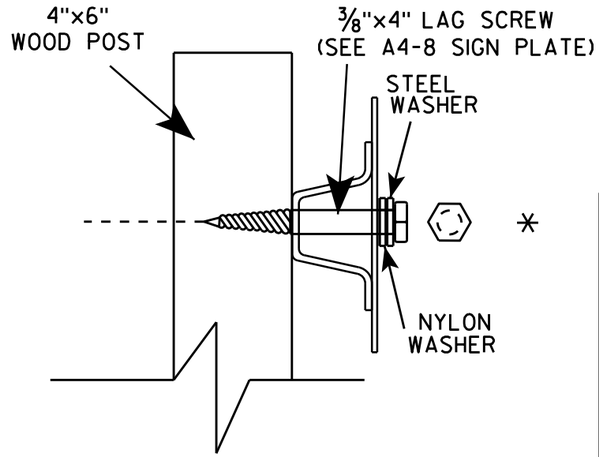


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

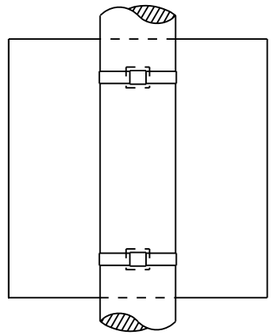
DATE 4/26/16 PLATE NO A4-18.1

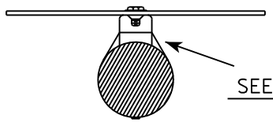
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

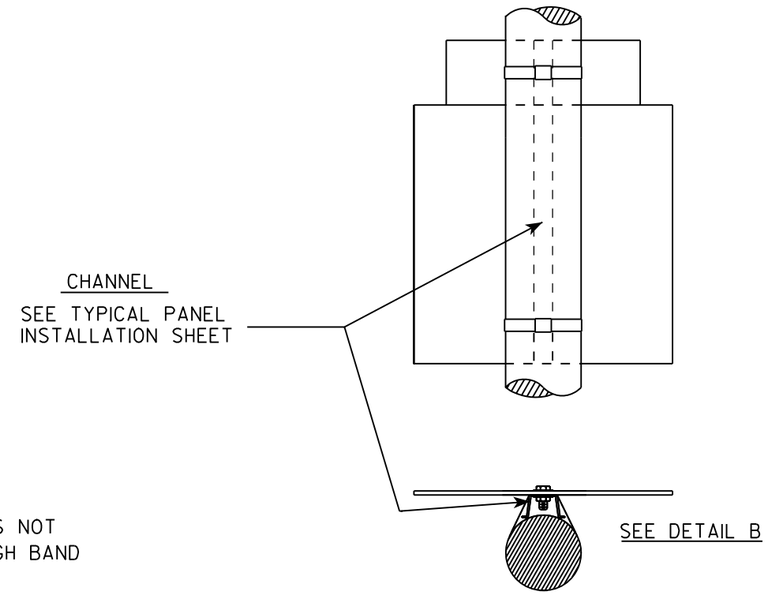
BANDING

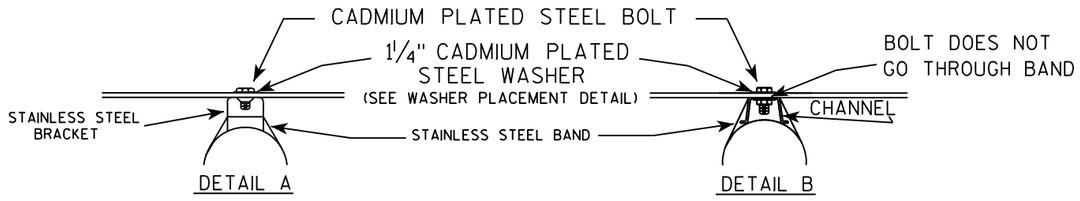
SINGLE SIGN



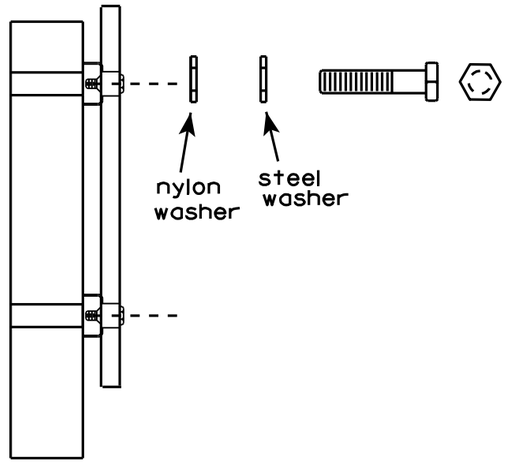


"J" ASSEMBLY





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 3/4" in width and 0.025" thickness.

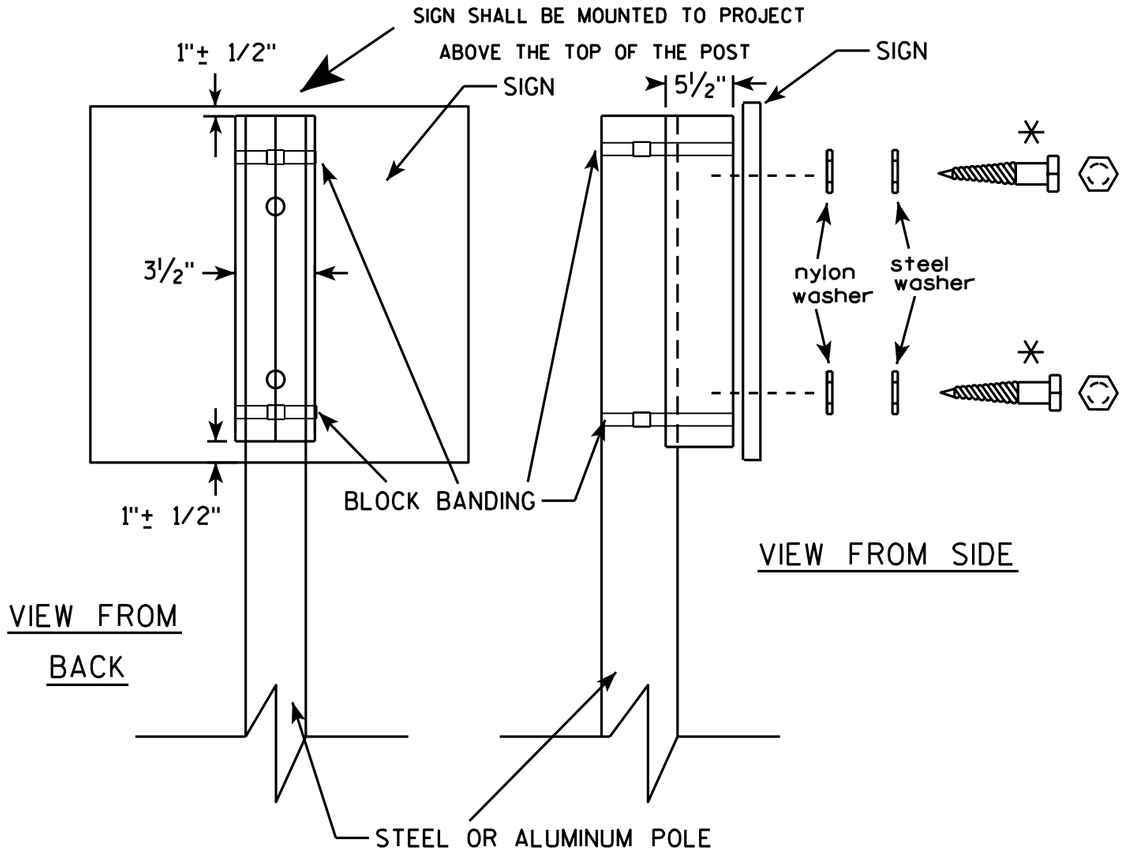
STANDARD SIGN
SIGN BANDING DETAILS

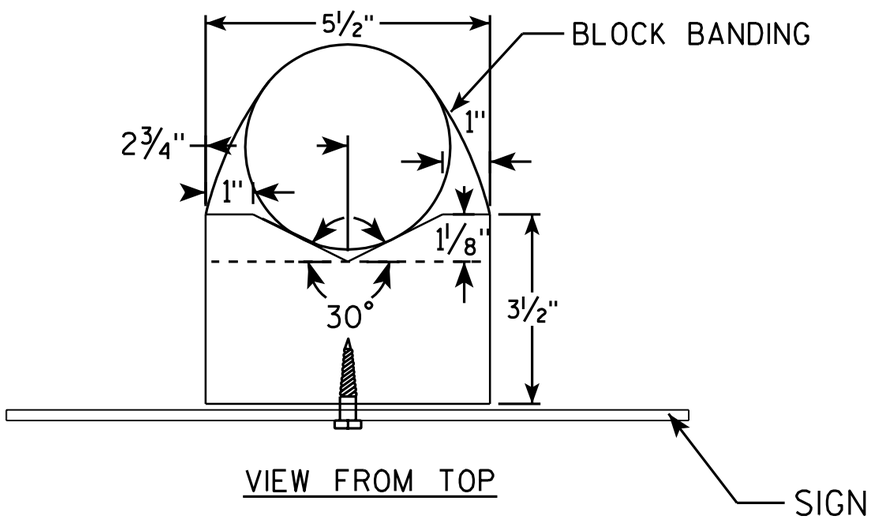
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 210	E





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, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. 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

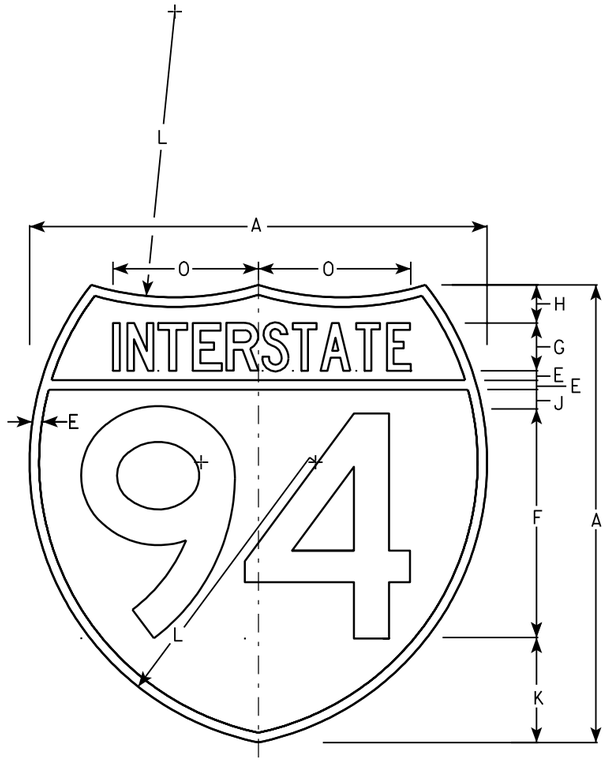
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

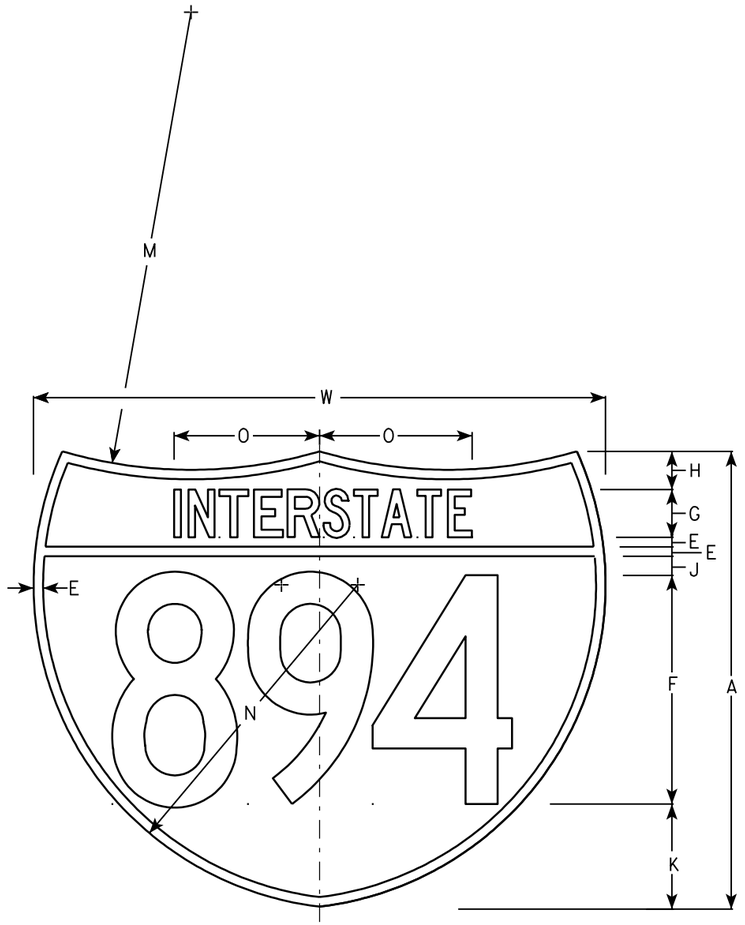
SHEET NO: 211 E

FILE NAME : C:\Users\Projects\tr_stdplate\A510.dgn PLOT DATE : 06-AUG-2007 13:37 PLOT BY : ditjph

WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

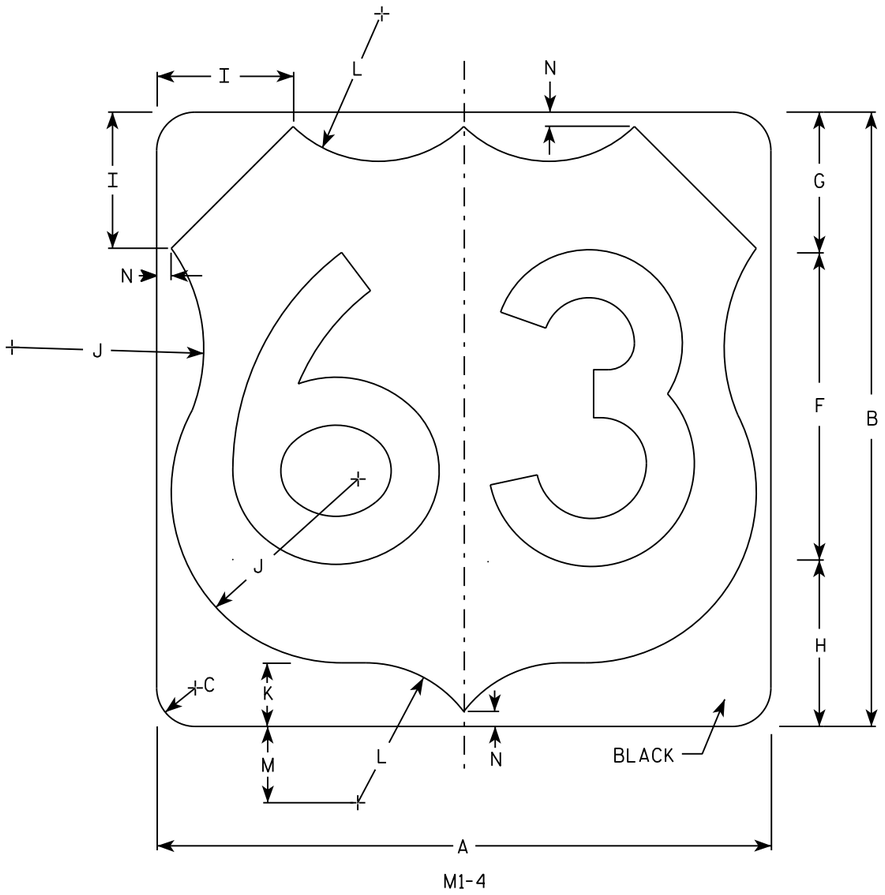
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

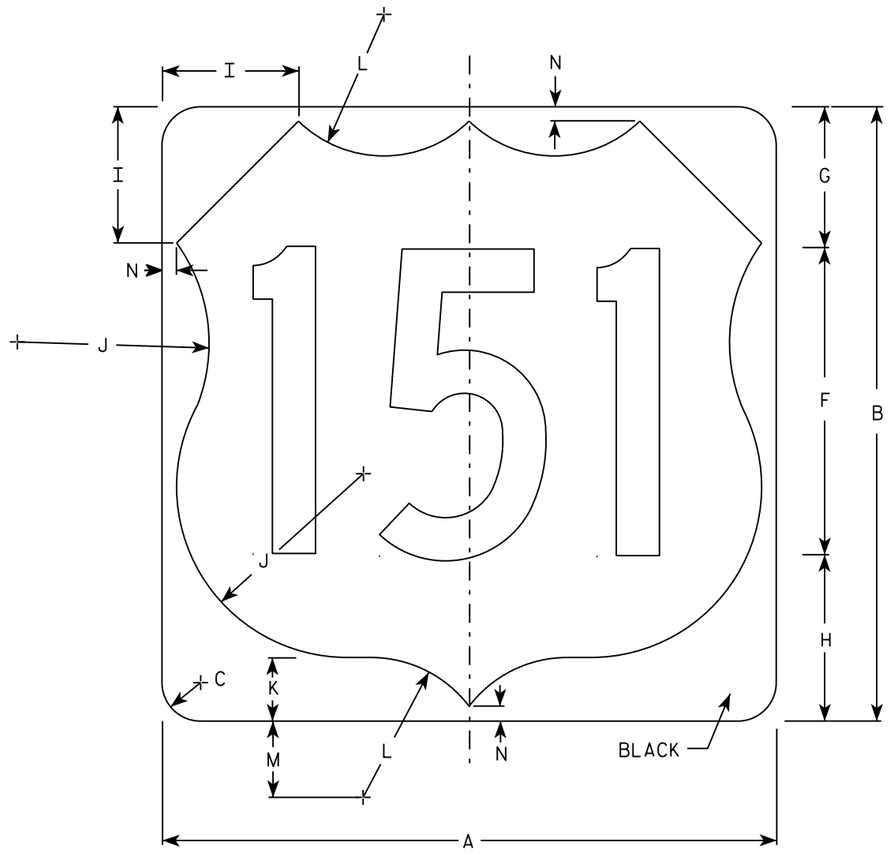
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 212	E

NOTES

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



M1-4



M1-4

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

USH MARKER
M1-4 FOR ASSEMBLIES

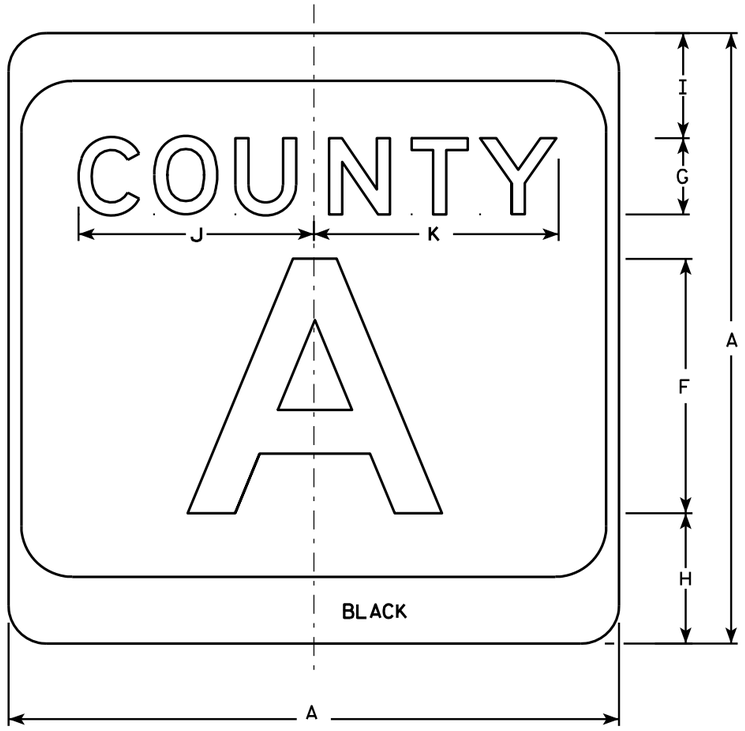
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

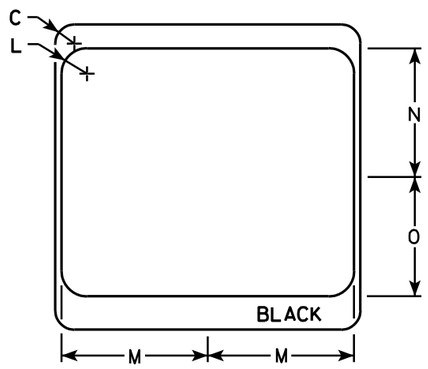
DATE 3/16/18 PLATE NO. M1-4.10

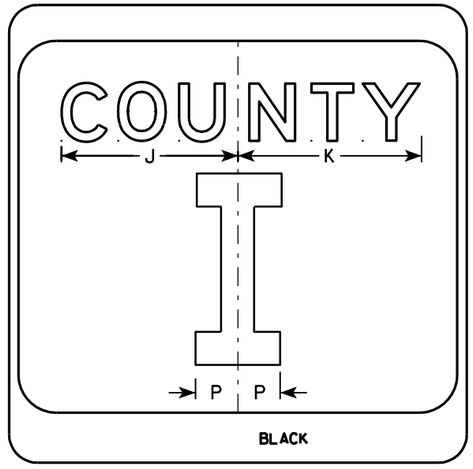
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 213 | E

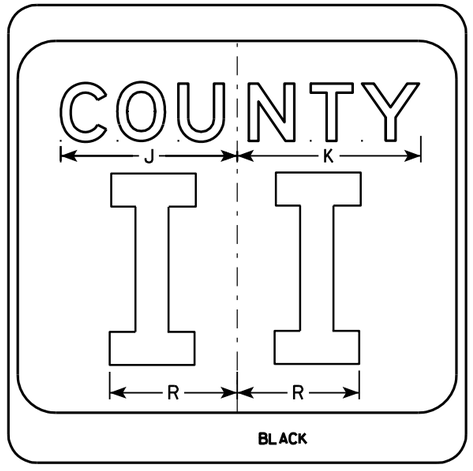
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M14.DGN PLOT DATE : 16-MAR-2018 14:06 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.918903:1.000000
WISDOT/CADDS SHEET 42



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

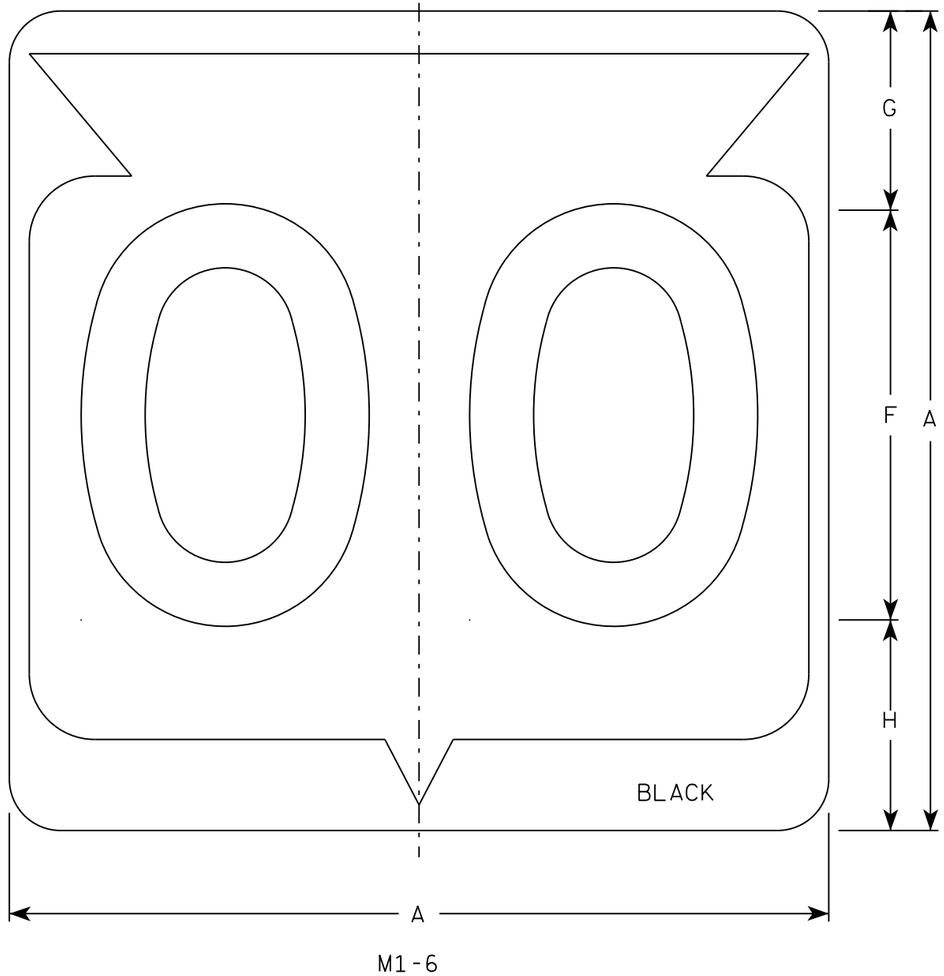
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

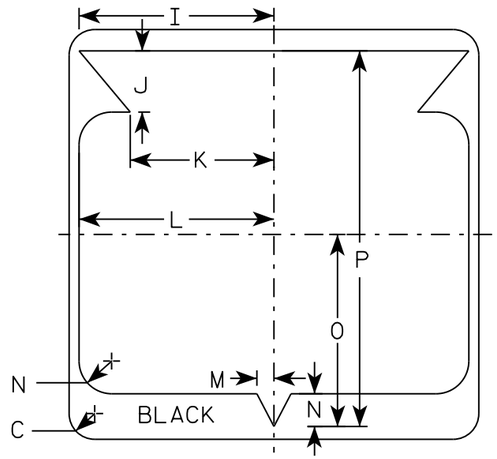
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 214	E



M1-6

NOTES

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



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

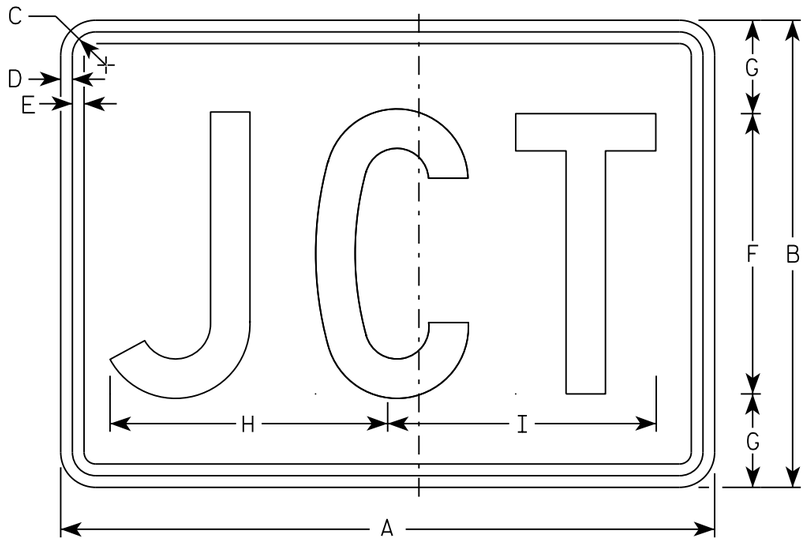
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

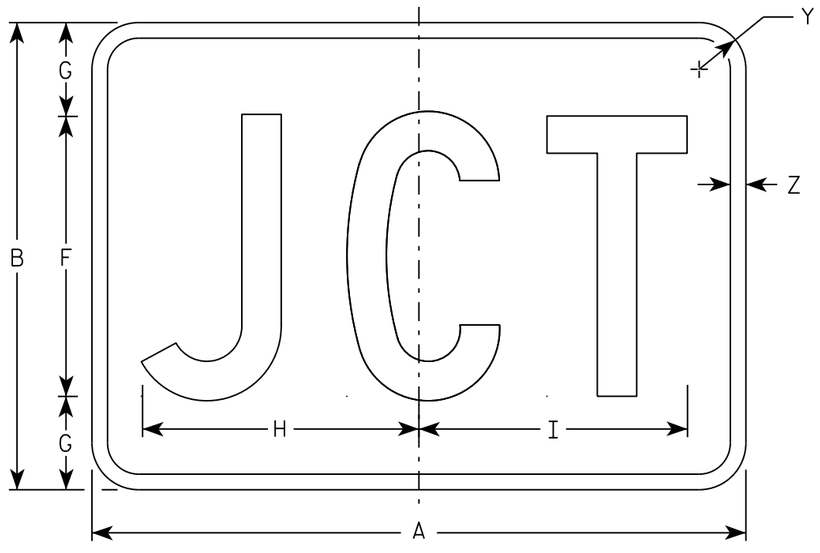
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E



M2-1
MM2-1
MP2-1



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

NOTES

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

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

STANDARD SIGN
M2-1

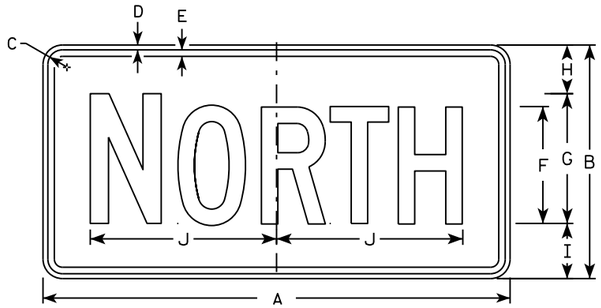
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

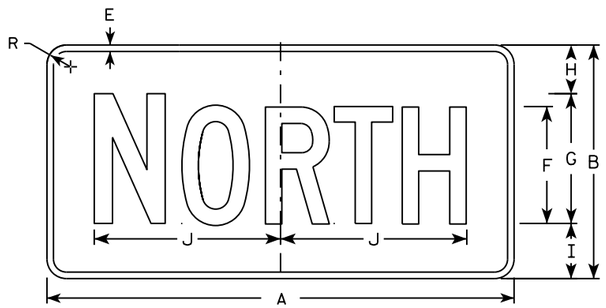
DATE 10/15/15 PLATE 216 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



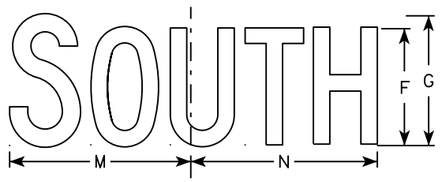
M3-1
MM3-1
MP3-1



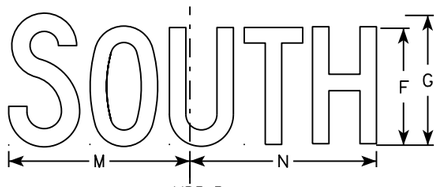
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

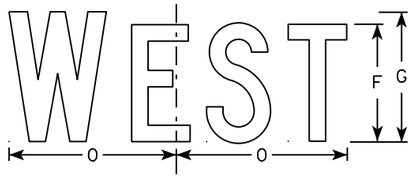
MB3-2
MK3-2
MN3-2



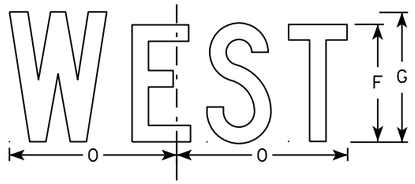
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

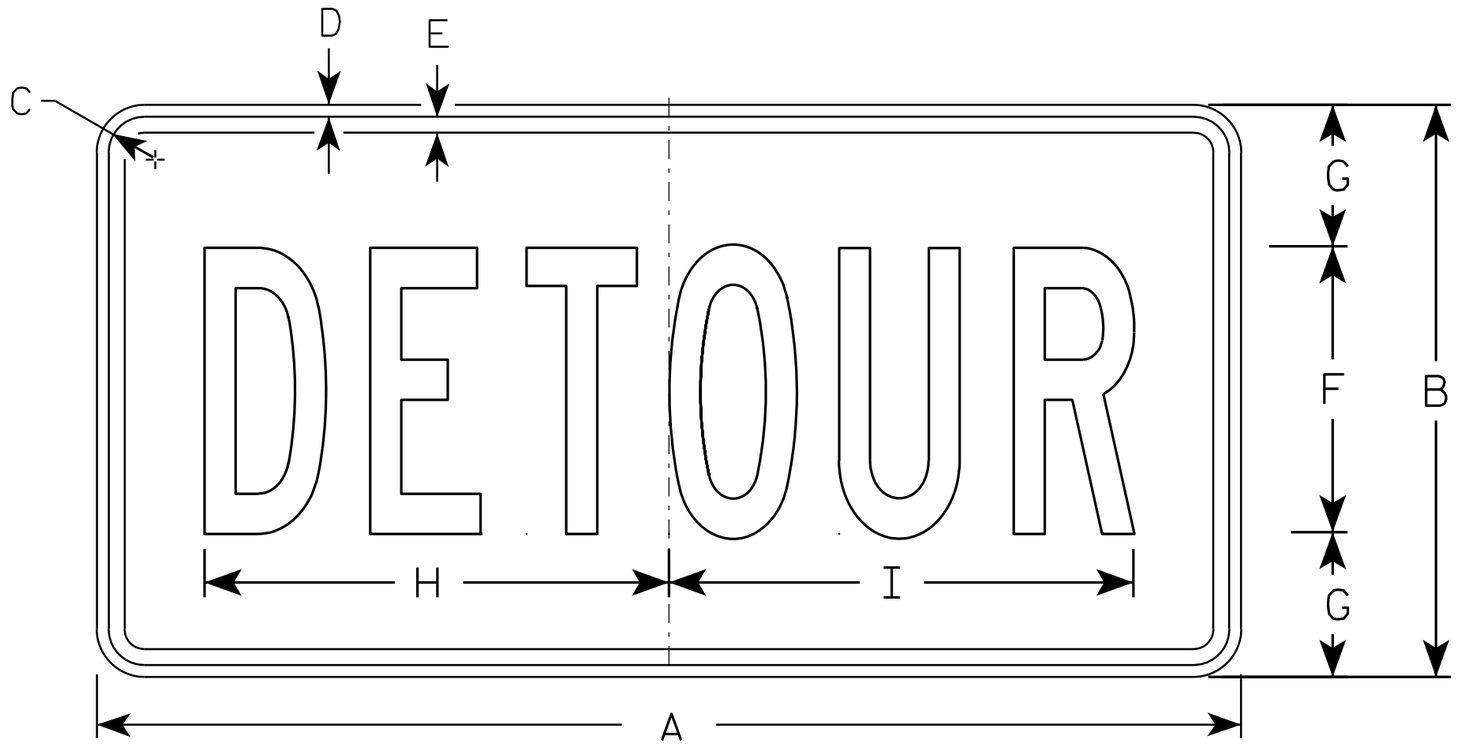
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



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																											

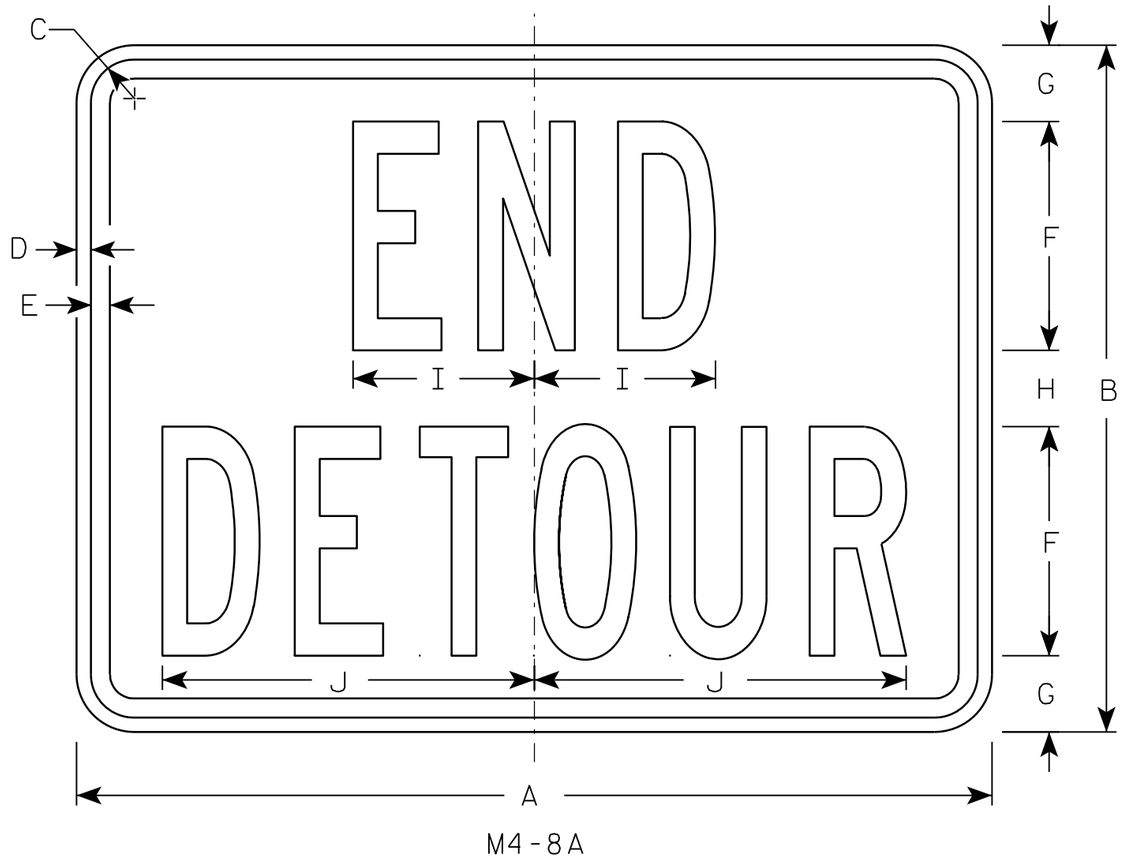
STANDARD SIGN
M4-8

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: 218 | 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																											

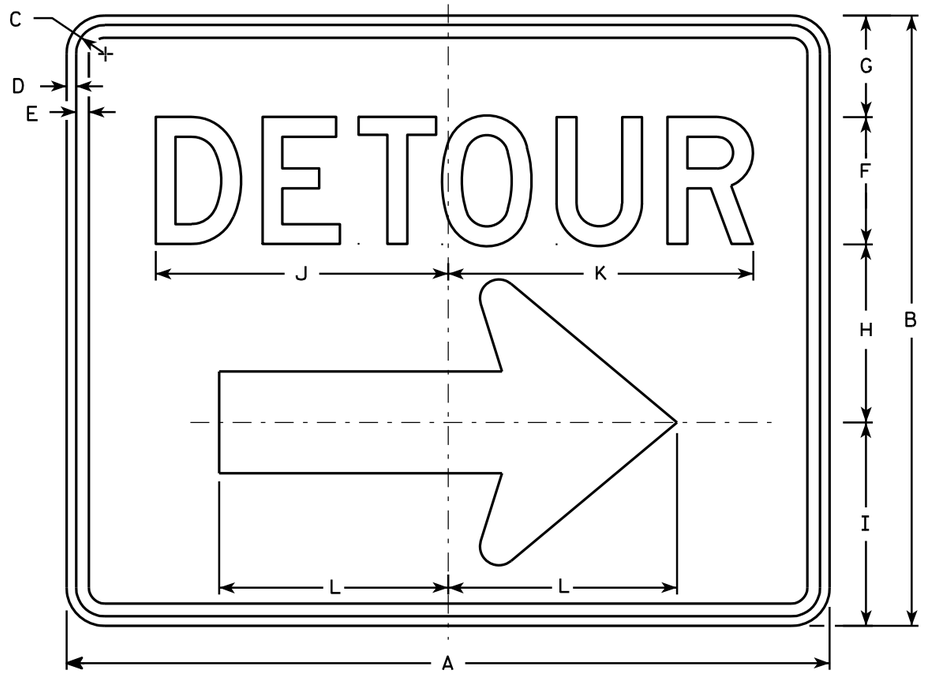
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

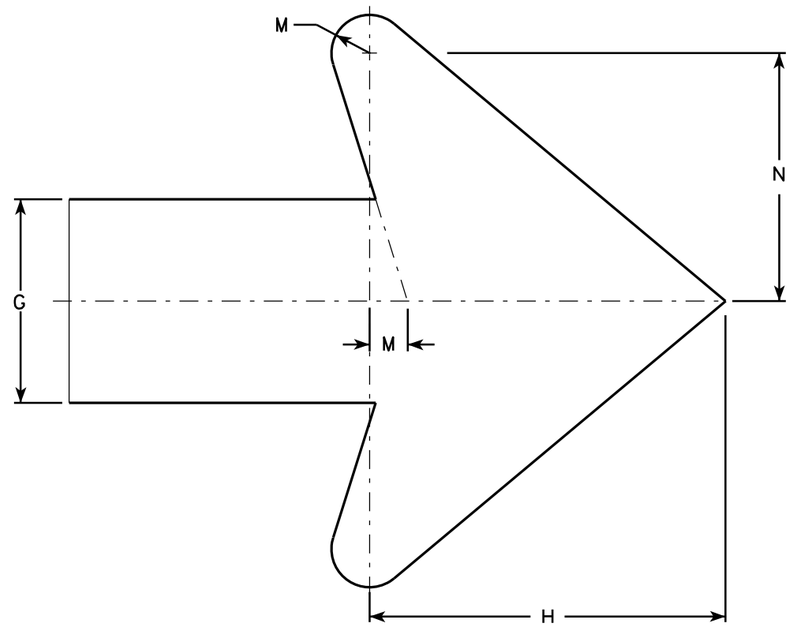
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 219	E



M4-9R

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 - 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. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

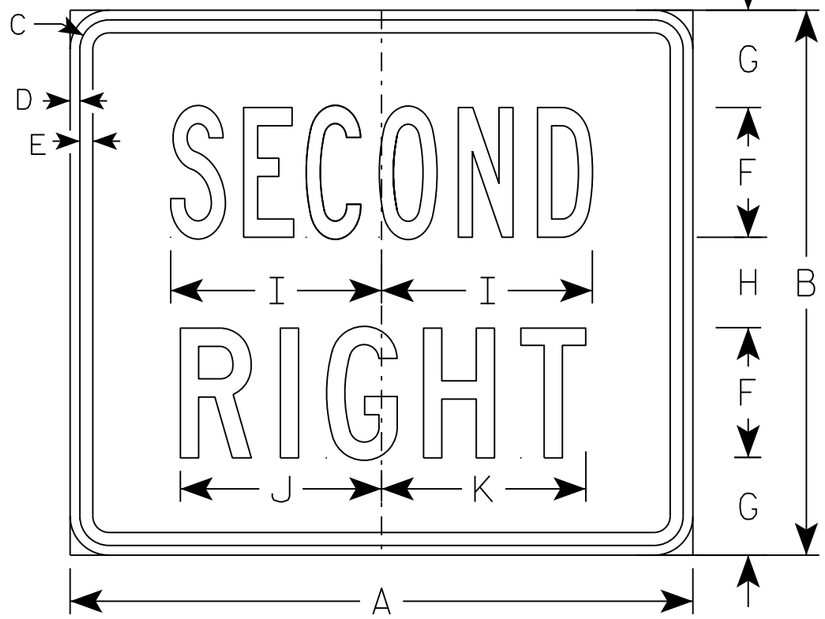
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

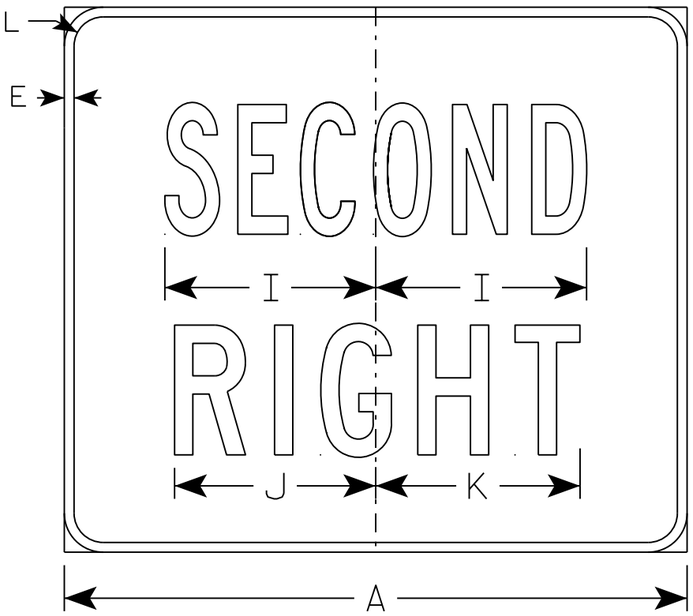
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

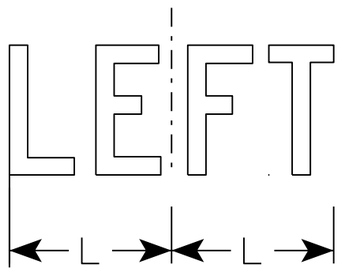
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 220 | E



M4-22R
MM4-22R
M04-22R
MP4-22R



MB4-22R
MK4-22R
MN4-22R
MR4-22R



M4-22L
MB4-22L
MK4-22L
MM4-22L
MN4-22L
M04-22L
MP4-22L
MR4-22L

NOTES

1. Sign is Type II - Type H except as Shown
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. M4-22 Background - White
   Message - Black
   MB4-22 Background - Blue
   Message - White
   MK4-22 Background - Green
   Message - White
   MM4-22 Background - White
   Message - Green
   MN4-22 Background - Brown
   Message - White
   M04-22 Background - Orange - Type F Reflective
   Message - Black
   MP4-22 Background - White
   Message - Blue
   MR4-22 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	21	1 1/8	3/8	1/2	5	3 3/4	3 1/2	8 1/8	7 3/4	7 7/8	1 1/2															3.5
3	36	30	1 5/8	5/8	3/4	8	4 3/4	4 1/2	13 1/8	12 5/8	12 1/2	1 7/8															7.5
4																											
5																											

STANDARD SIGN
M4-22

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

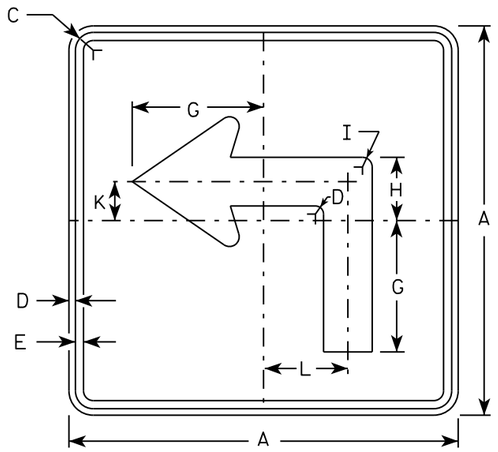
DATE 10/15/15 PLATE M4-22.4

221

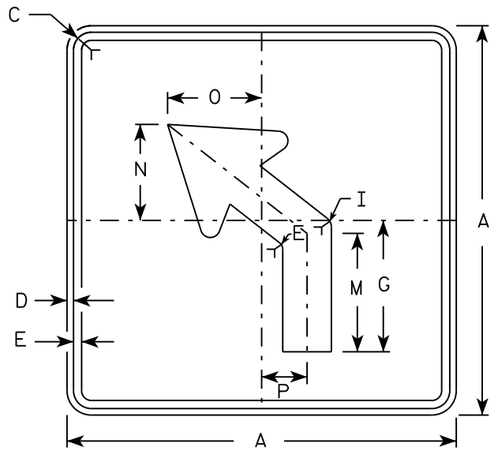
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M422.DGN PLOT DATE : 01-DEC-2015 18:04 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000

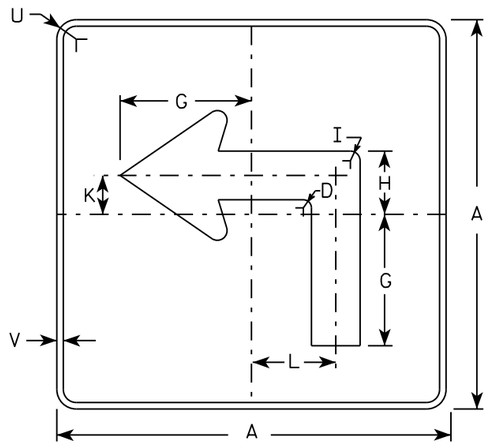
7



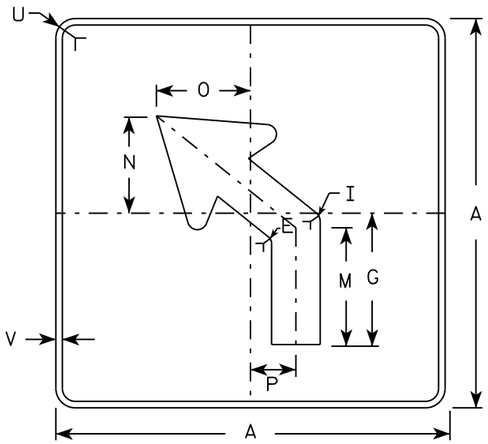
M5-1L
MM5-1L
MO5-1L
MP5-1L



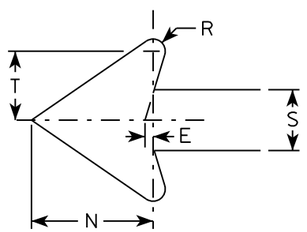
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

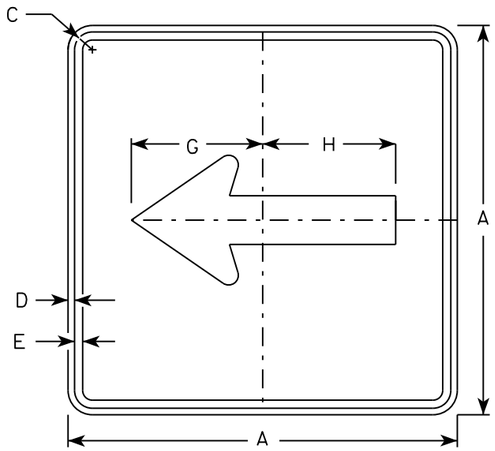
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

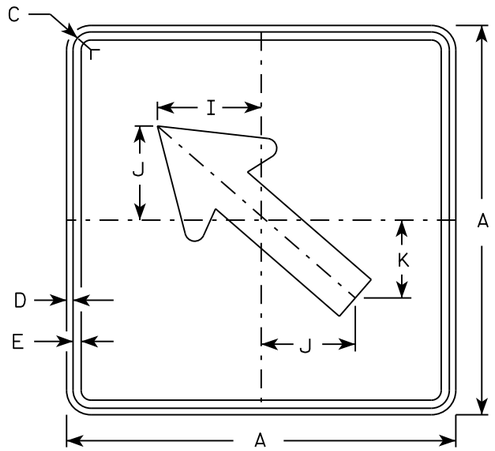
DATE 10/15/15 PLATE NO. M5-1.13

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



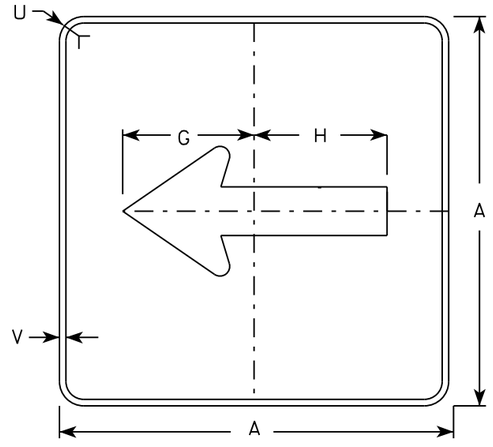
M6-1
MM6-1
MO6-1
MP6-1



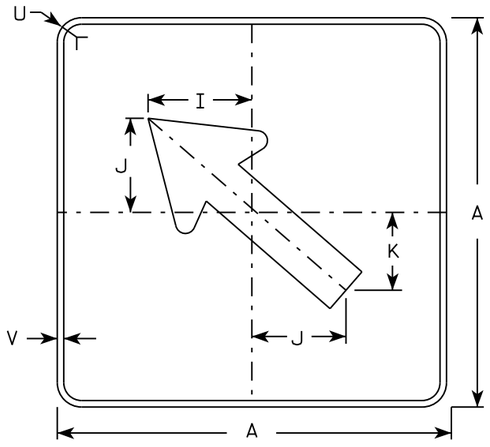
M6-2
MM6-2
MO6-2
MP6-2

NOTES

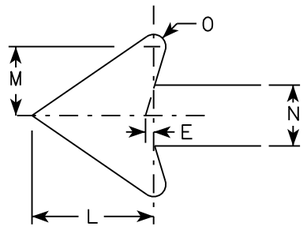
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



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

STANDARD SIGN
M6-1 & M6-2
SERIES

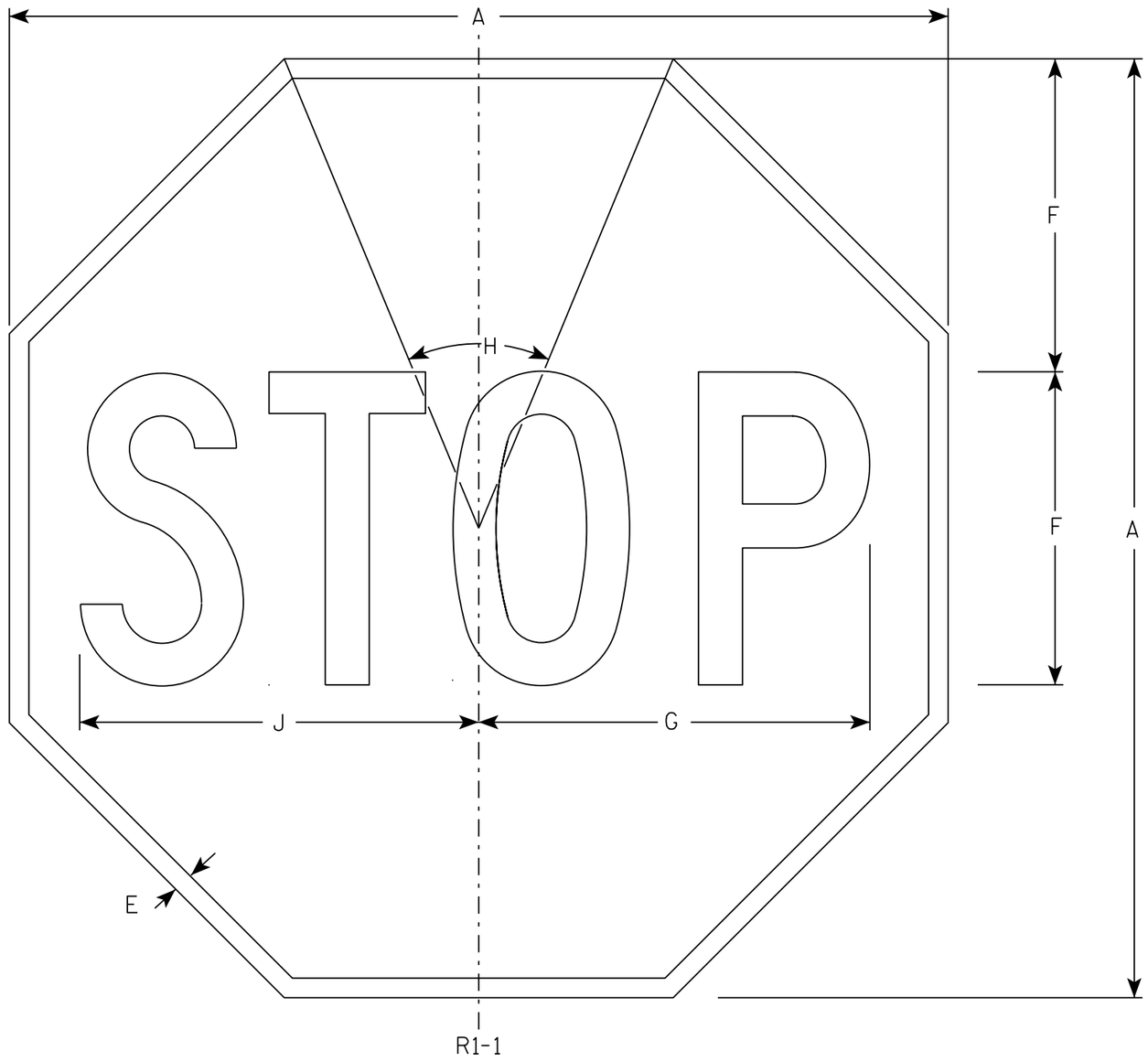
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 223 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

STANDARD SIGN

R1-1

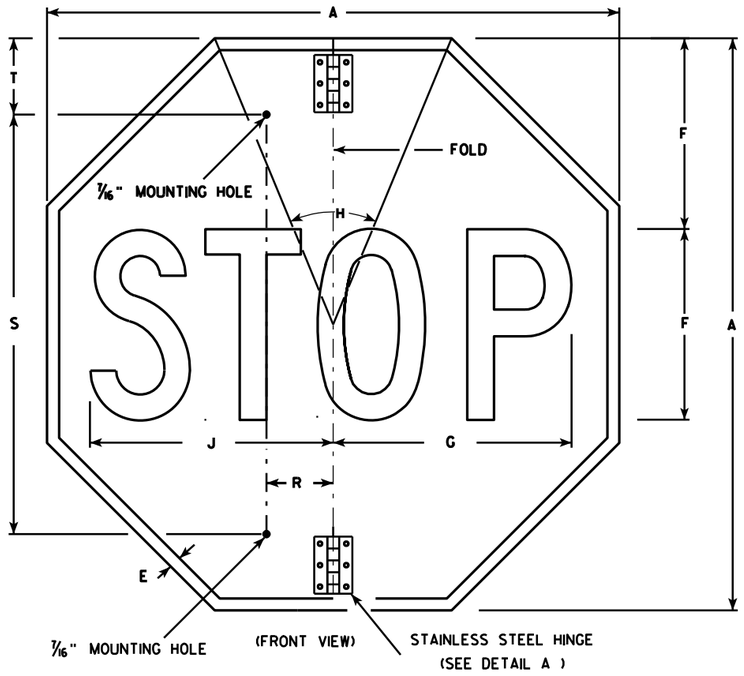
WISCONSIN DEPT OF TRANSPORTATION

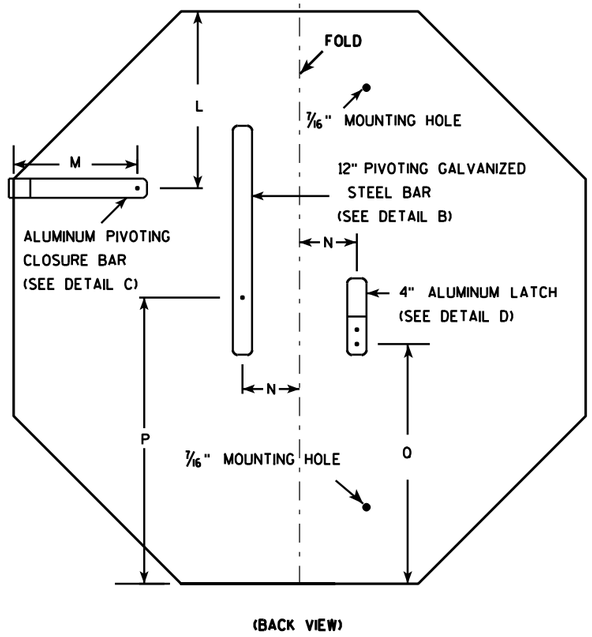
APPROVED Matthew R Rauch

for State Traffic Engineer

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

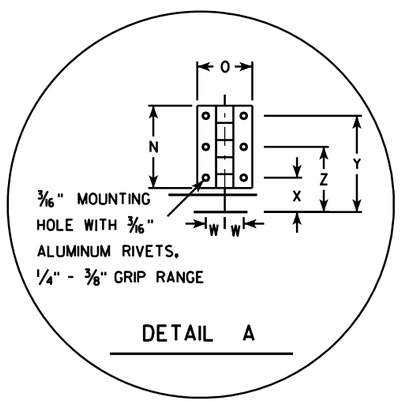
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 224	E



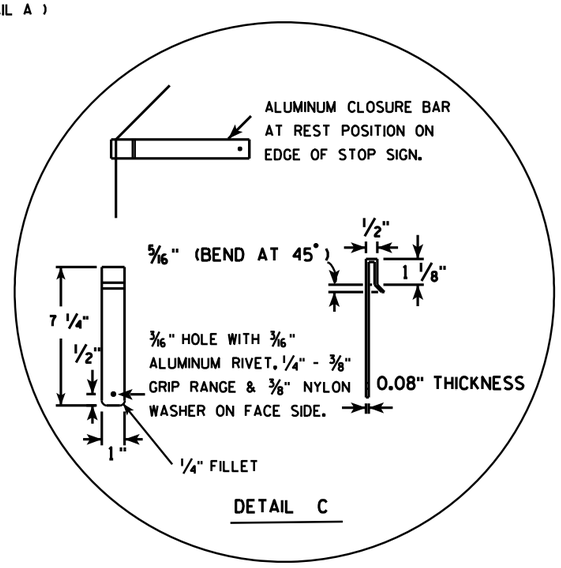


NOTES

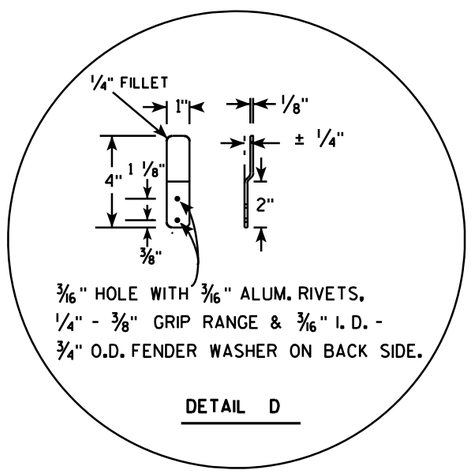
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



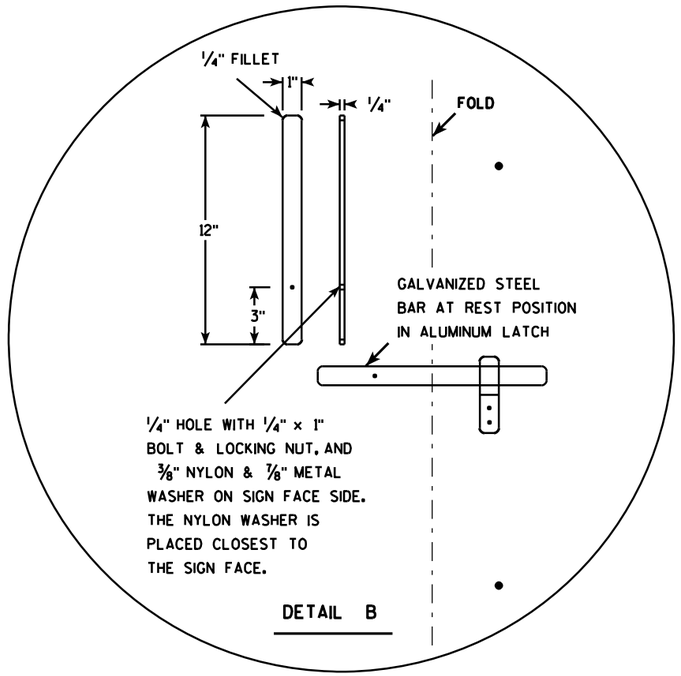
DETAIL A



DETAIL C



DETAIL D



DETAIL B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

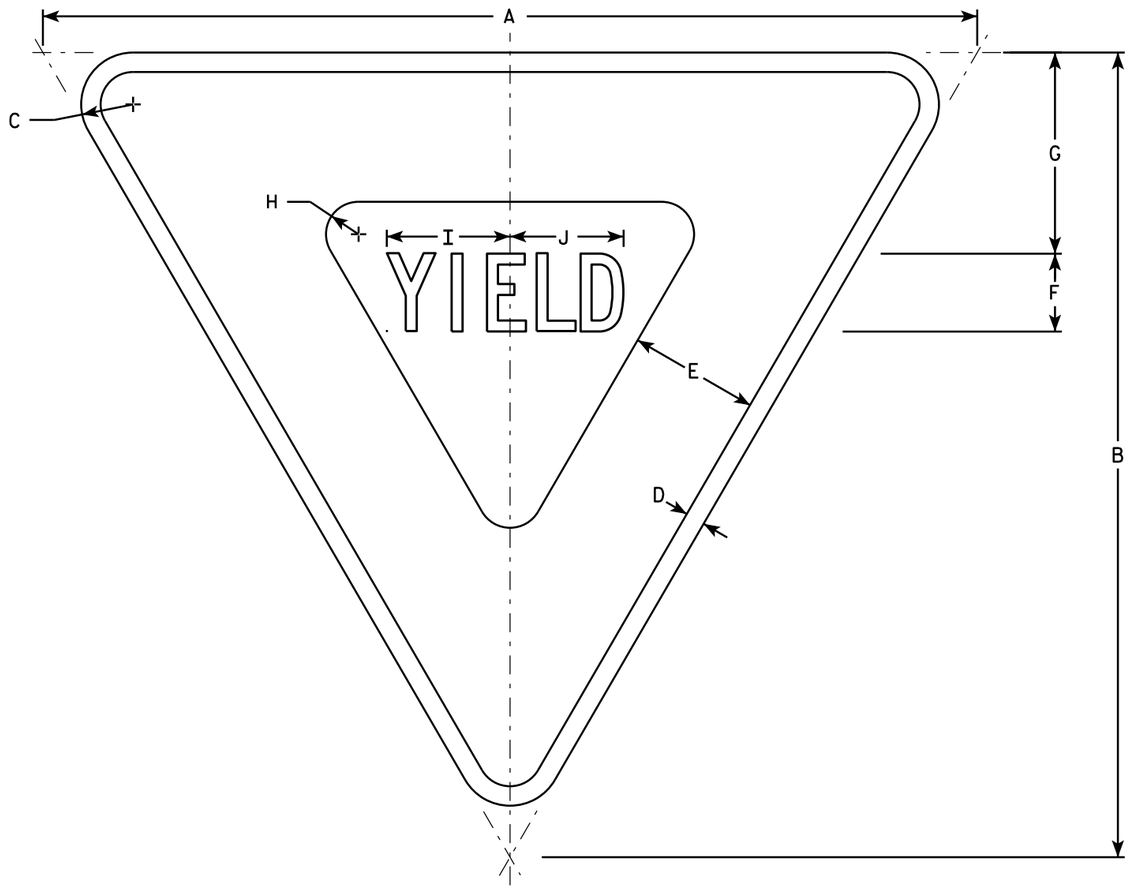
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 225	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

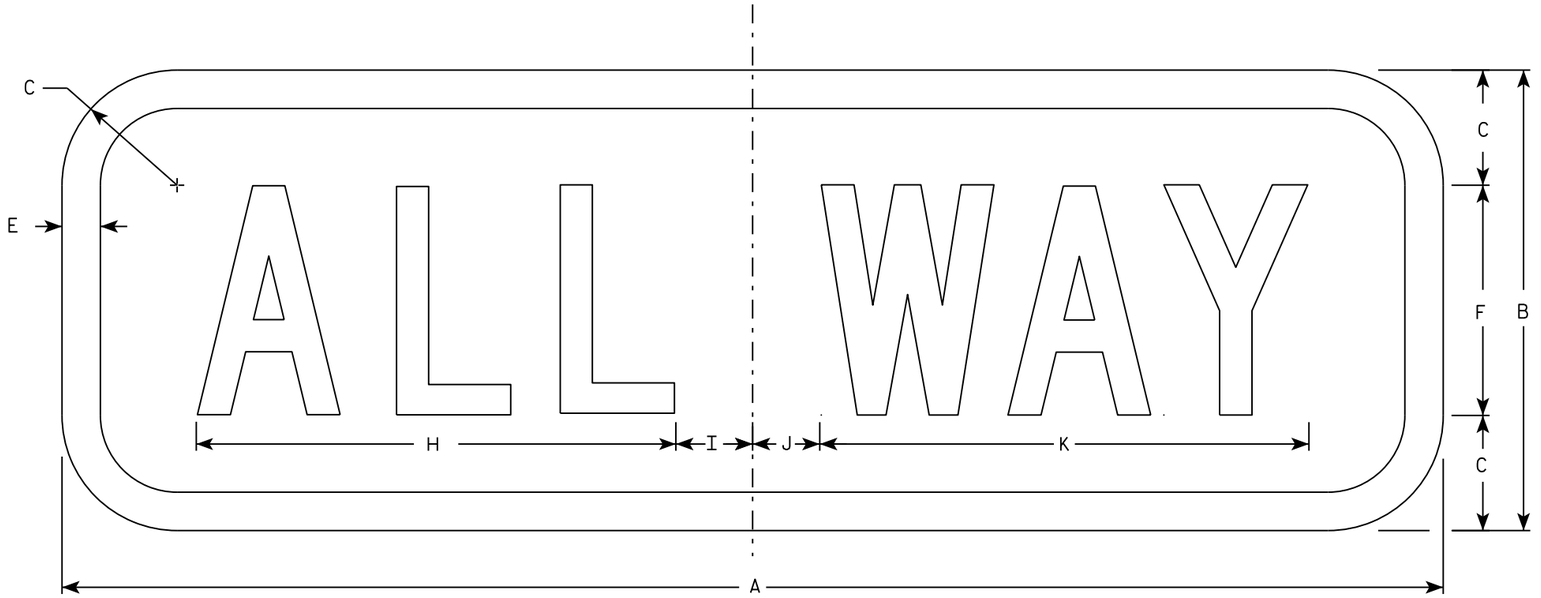
DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign



R1-3P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

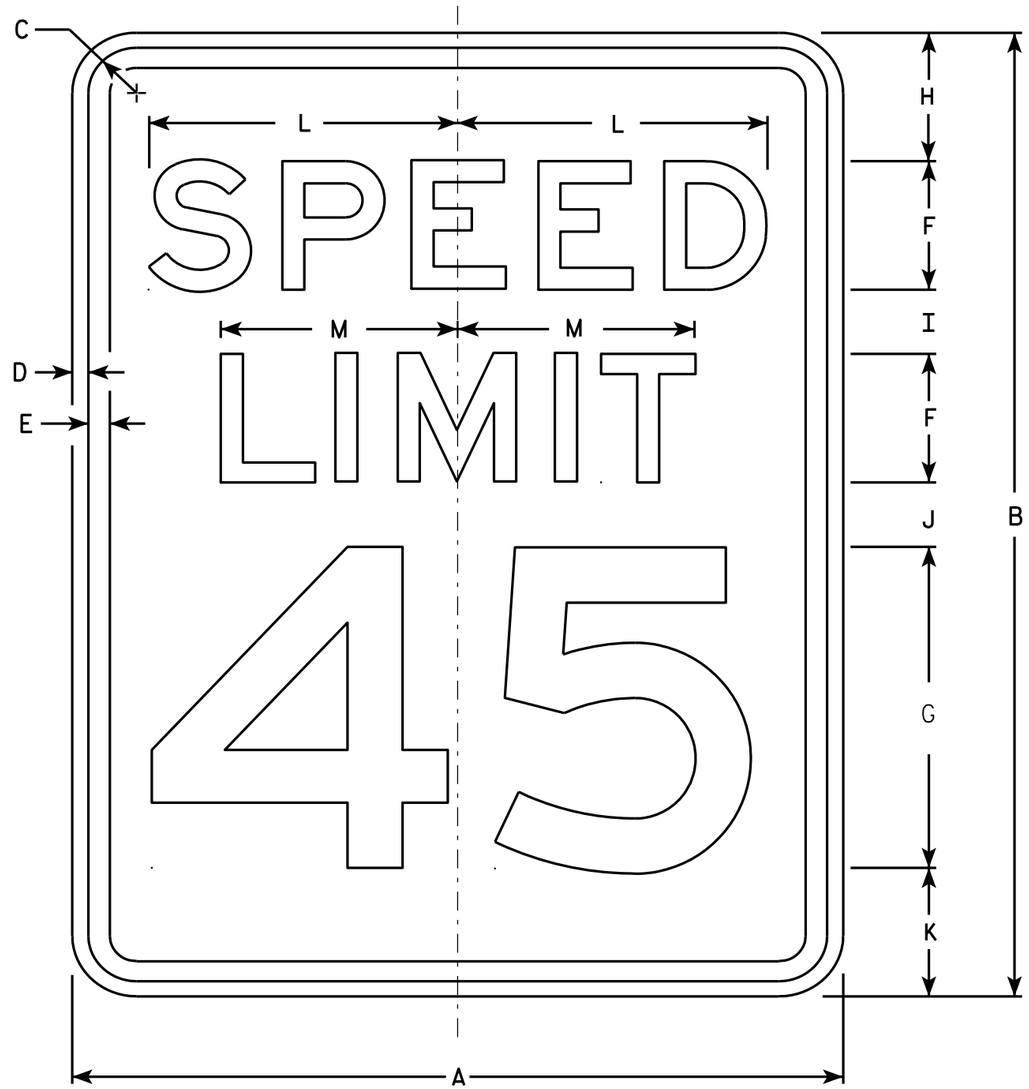
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E



R2-1

NOTES

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

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

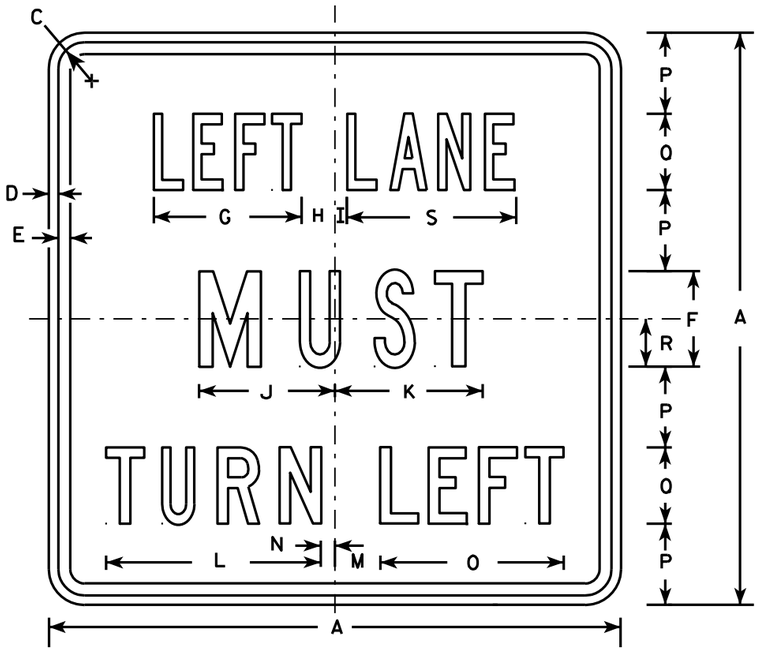
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

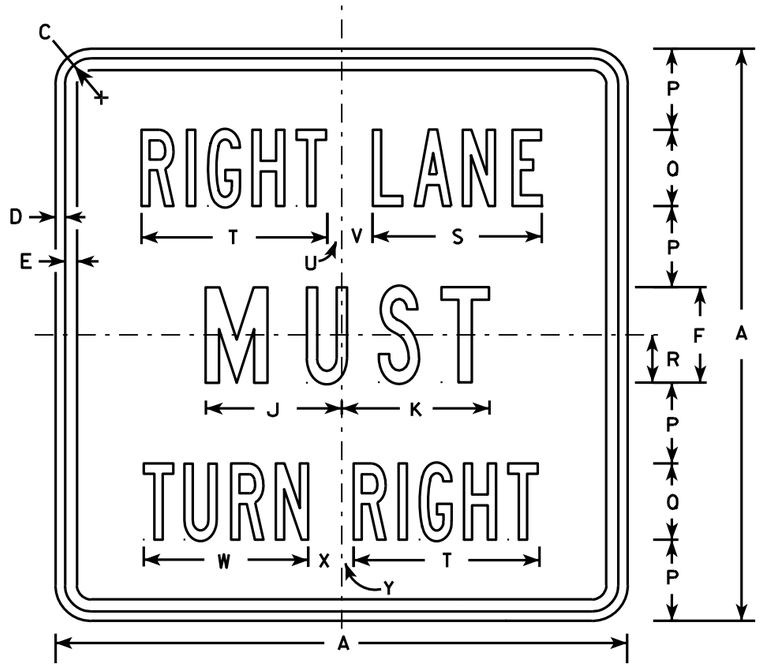
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 228 | 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																											

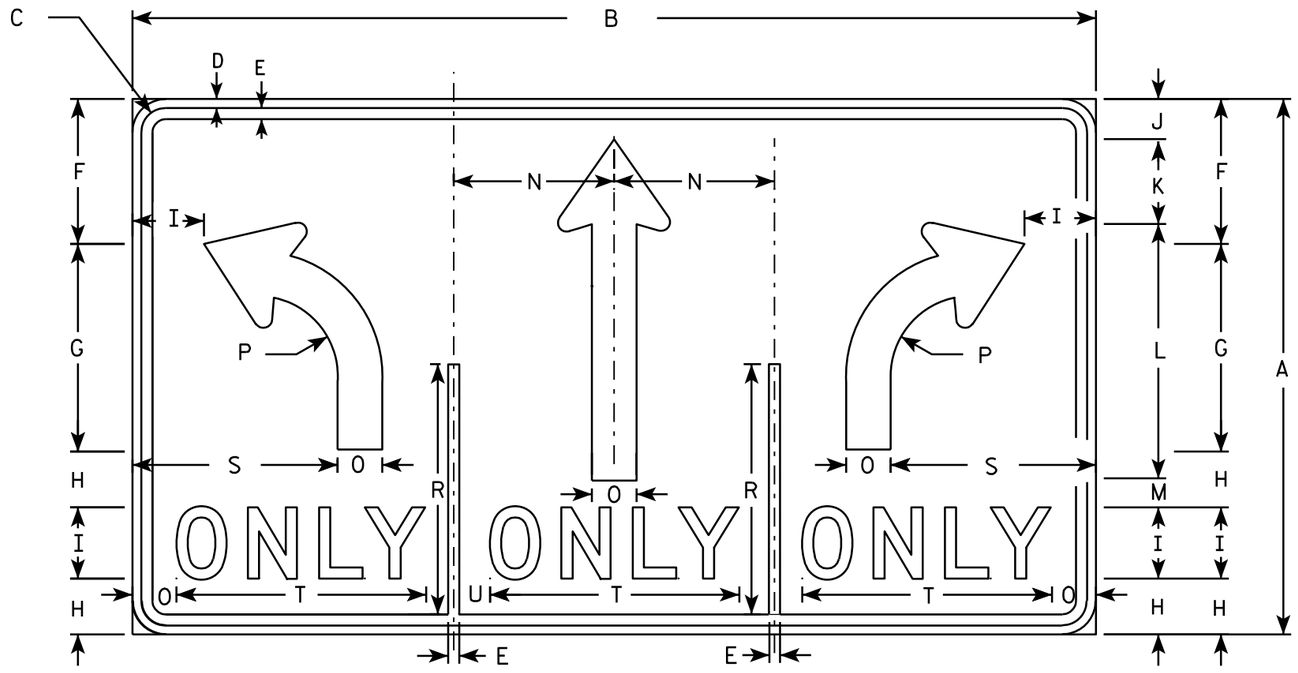
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

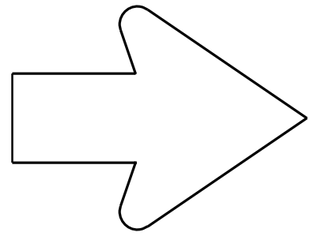
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 229	E



R3-8W

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.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

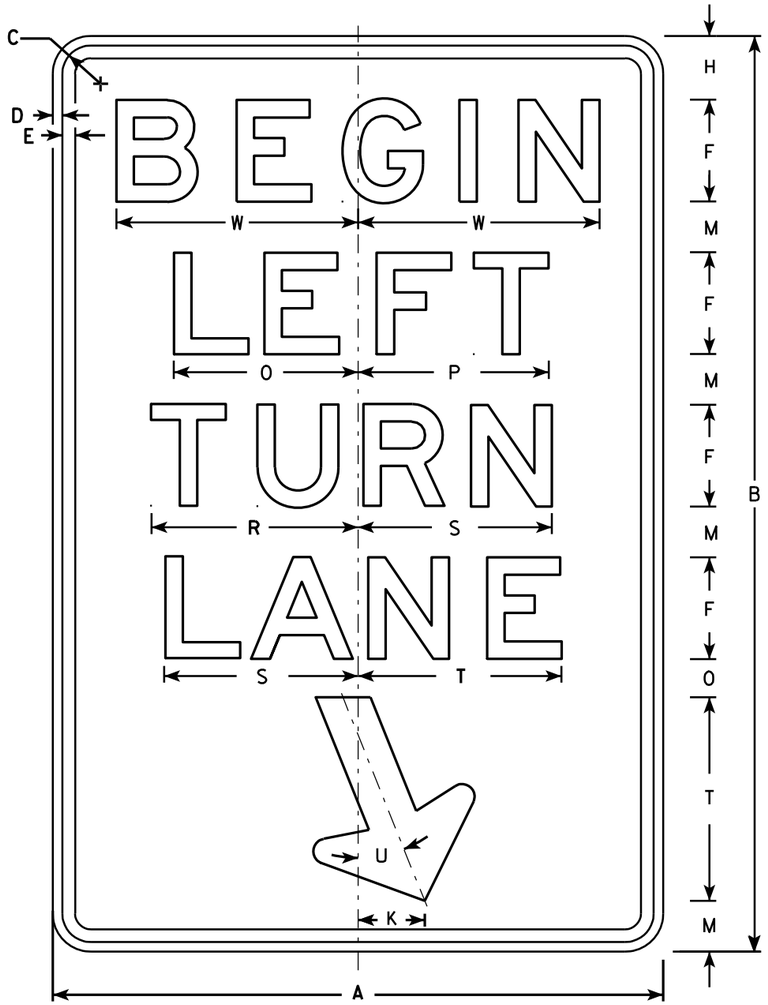
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

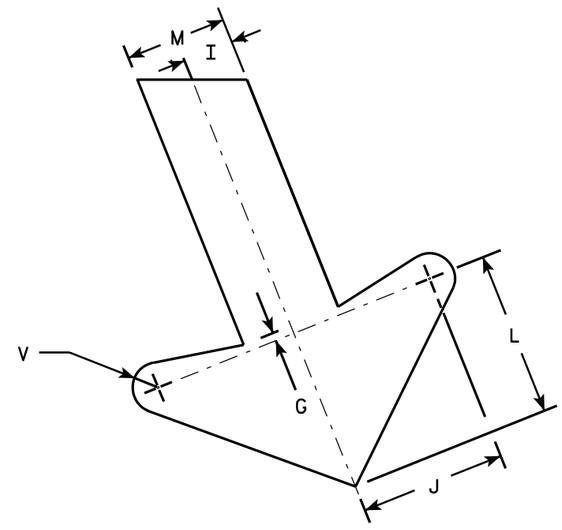
SHEET NO: 230 E



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																											

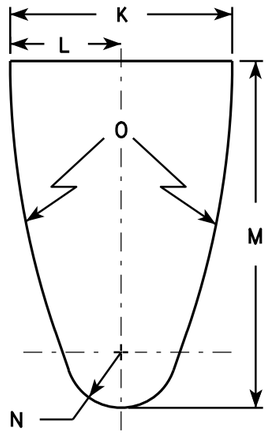
STANDARD SIGN
R3-20L

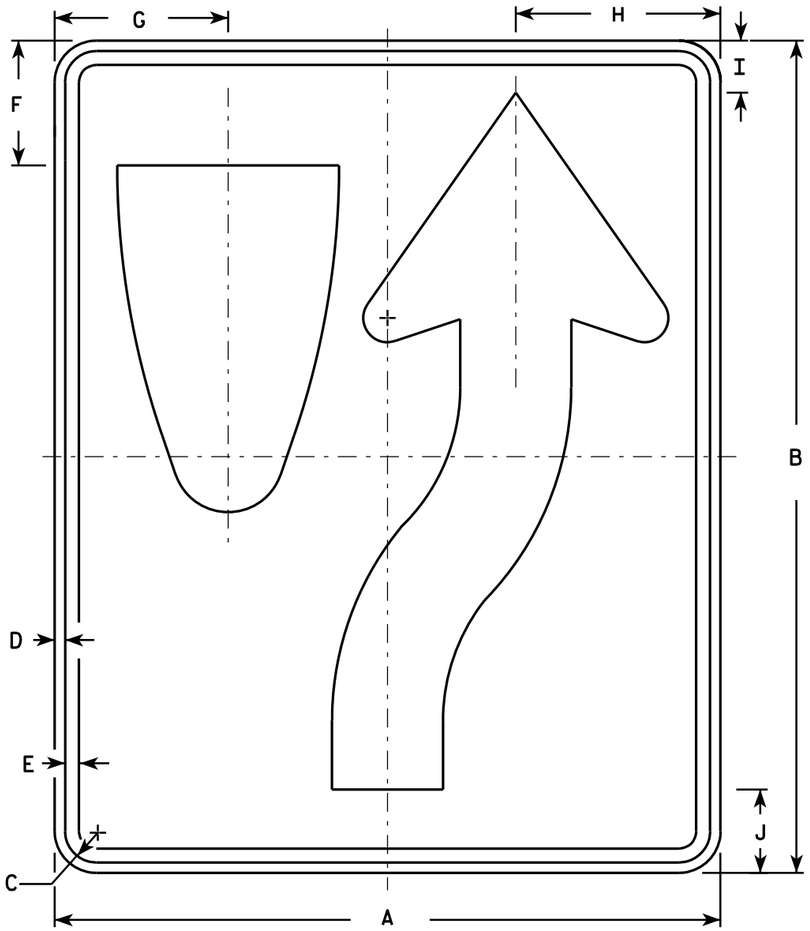
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 231 | E

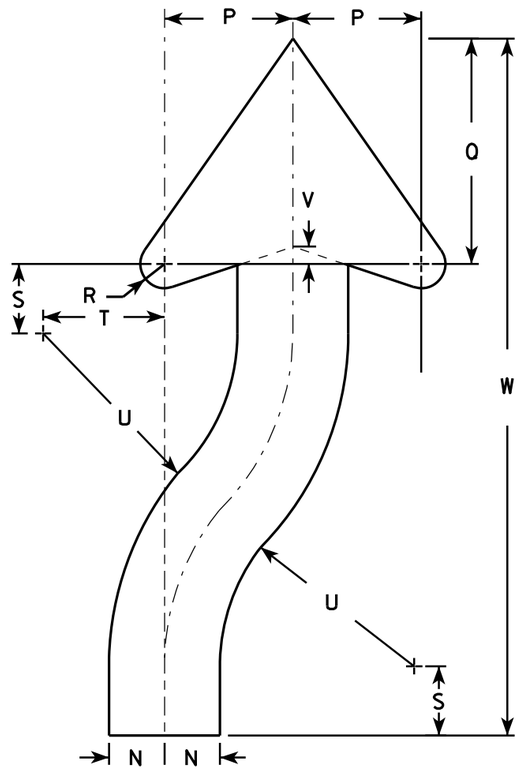




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

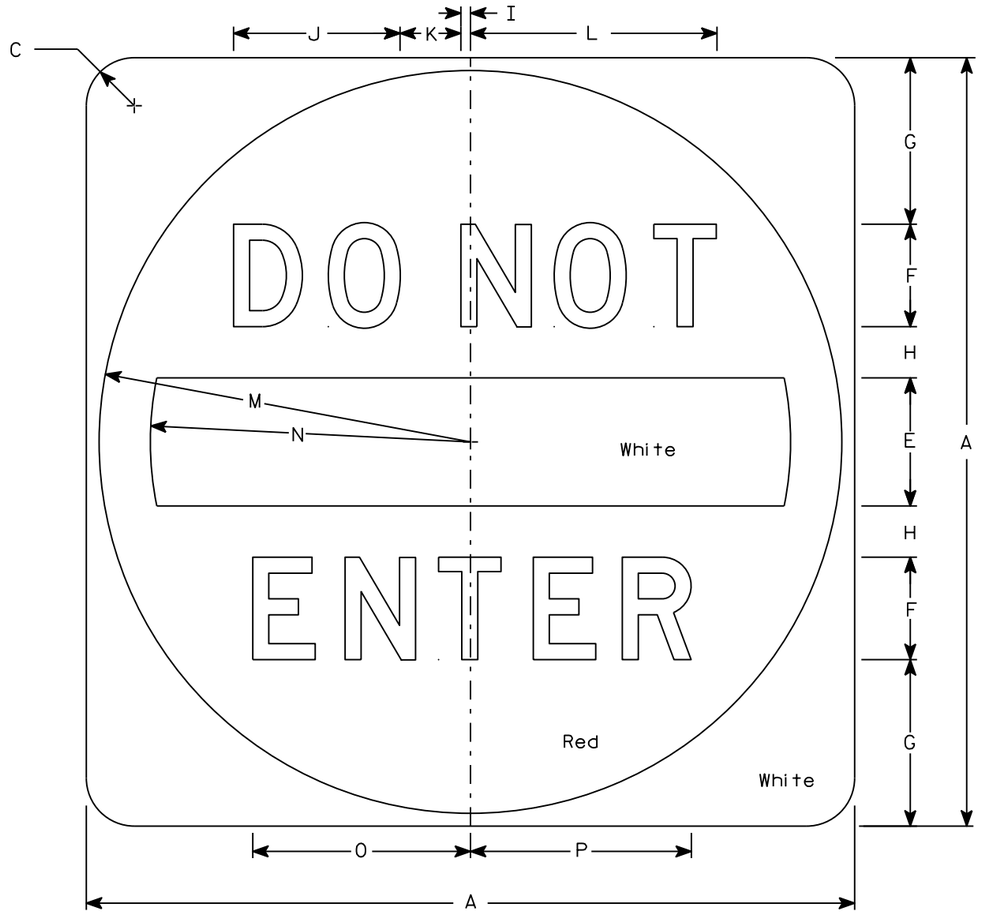
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 232	E



R5-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

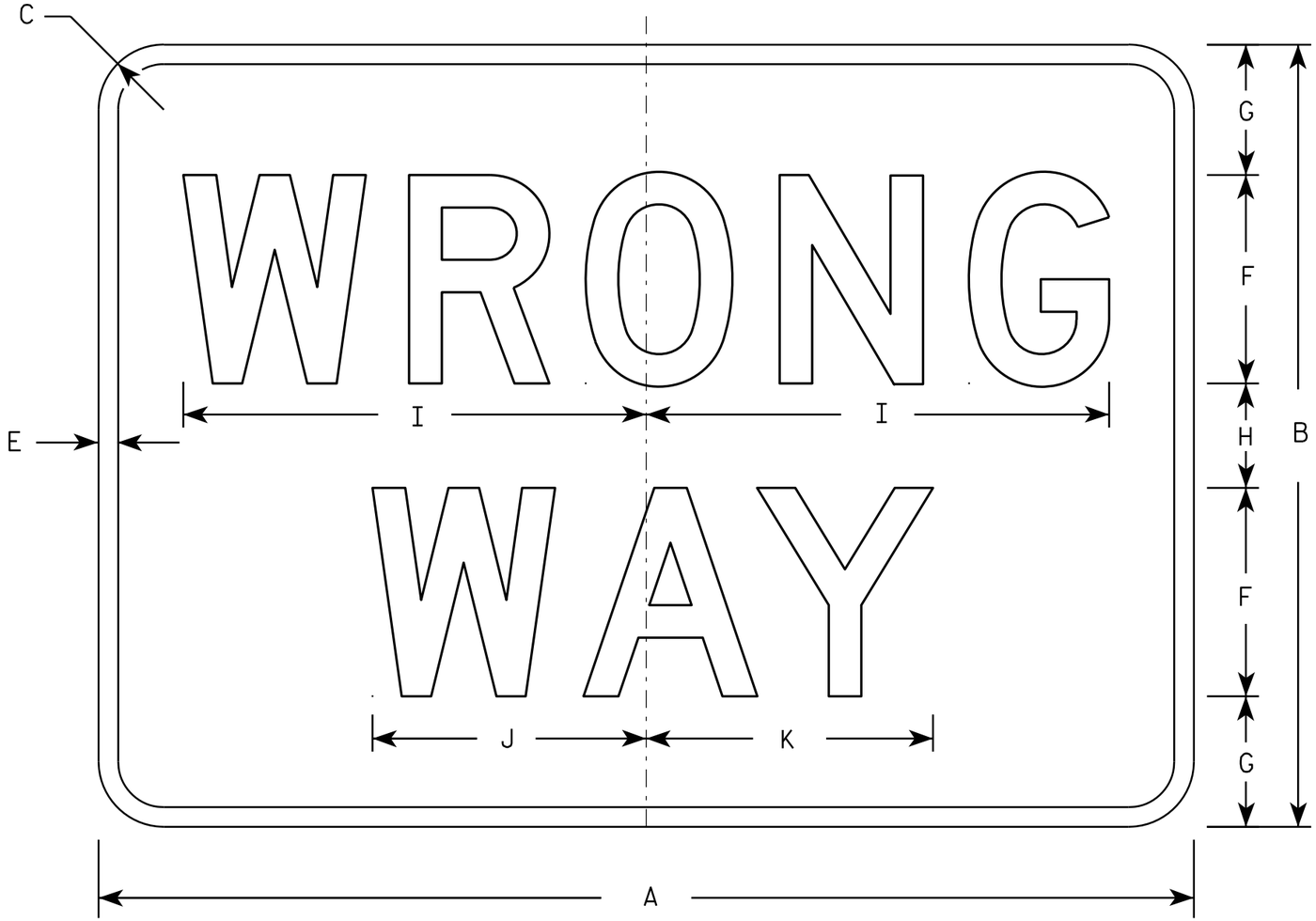
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

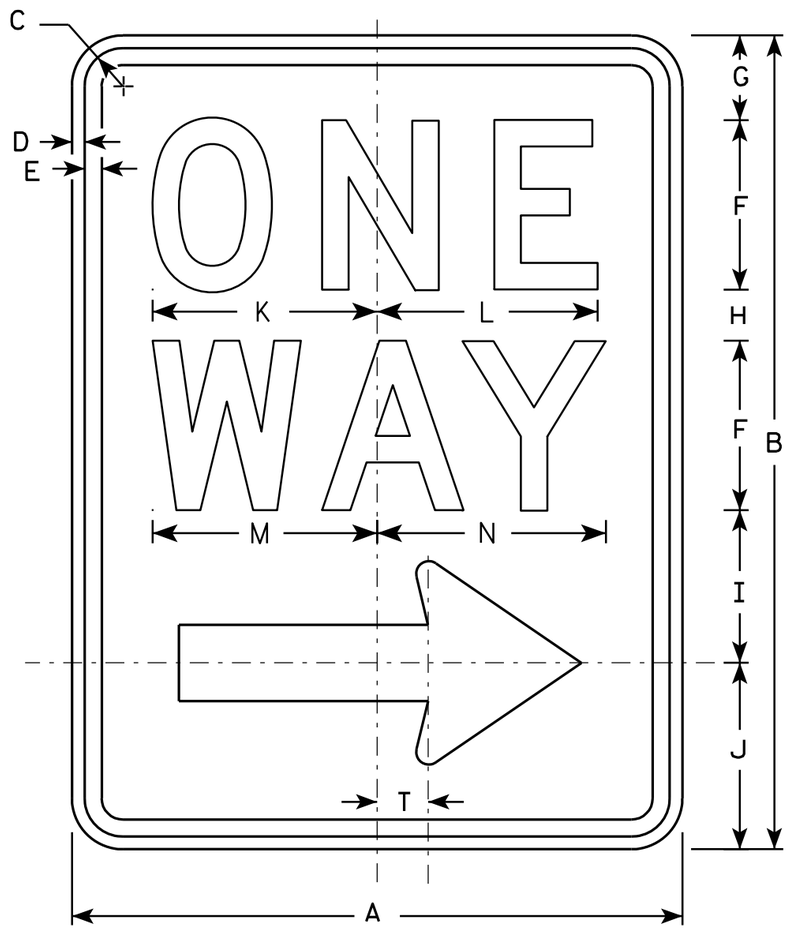
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

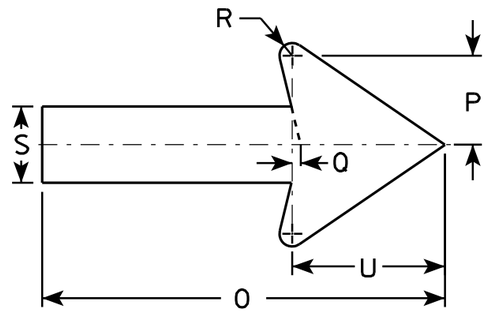
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 234 | E



R6-2R

NOTES

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



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

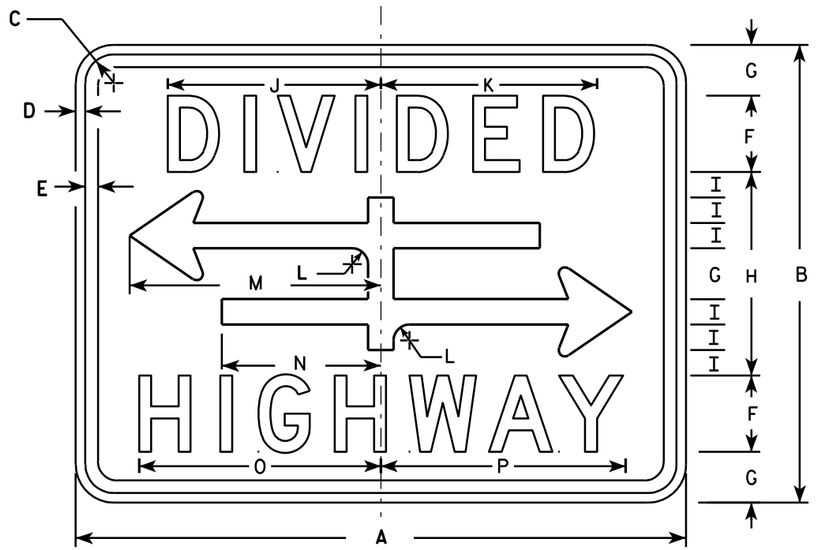
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

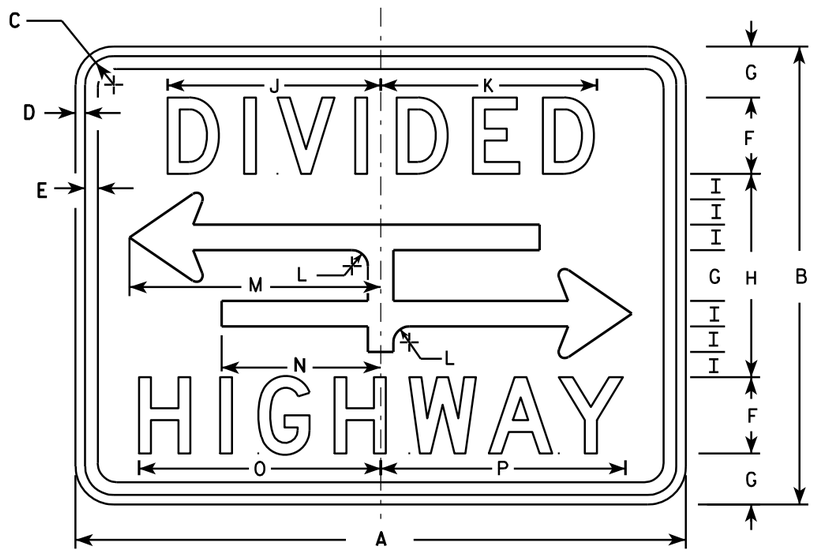
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 235	E



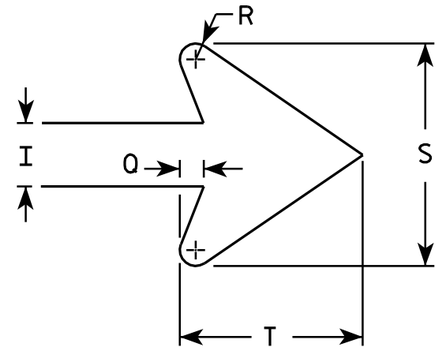
R6-3

NOTES

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



R6-3A



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	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

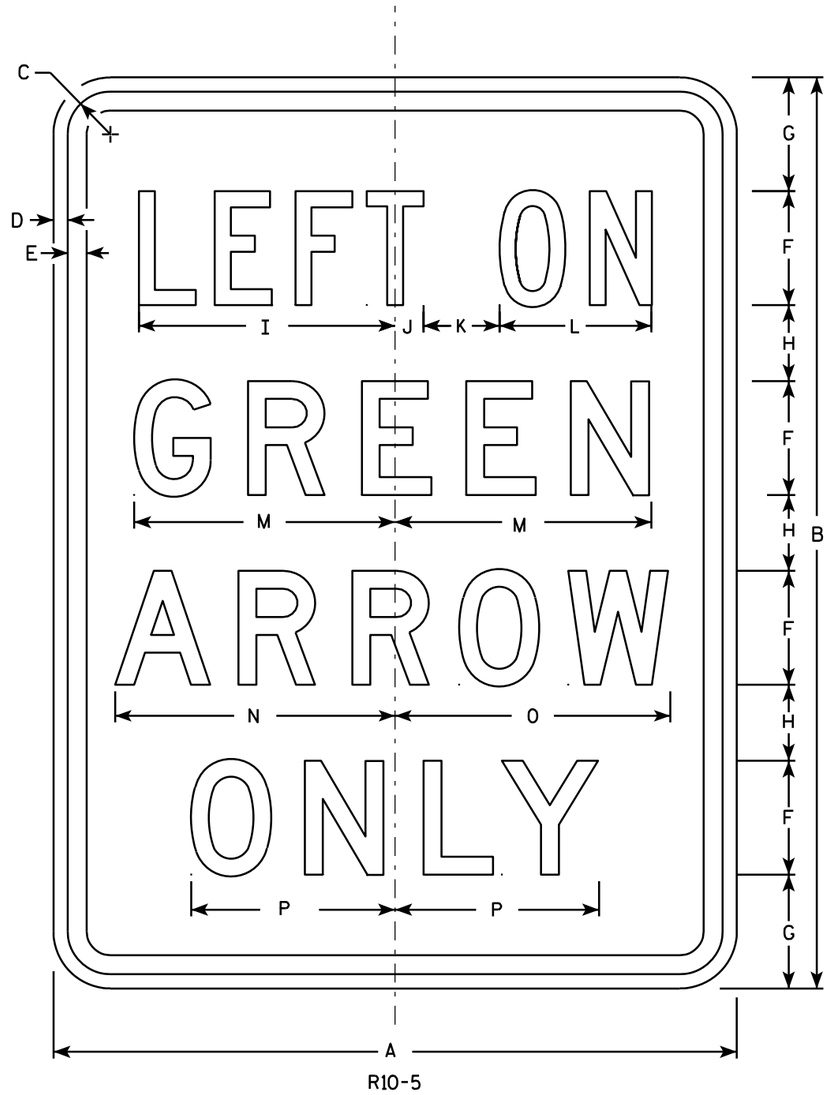
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 236 E



R10-5

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. Lines 2, 3 and 4 are Series D.
   Line 1 is Series C.

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

STANDARD SIGN
R10-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

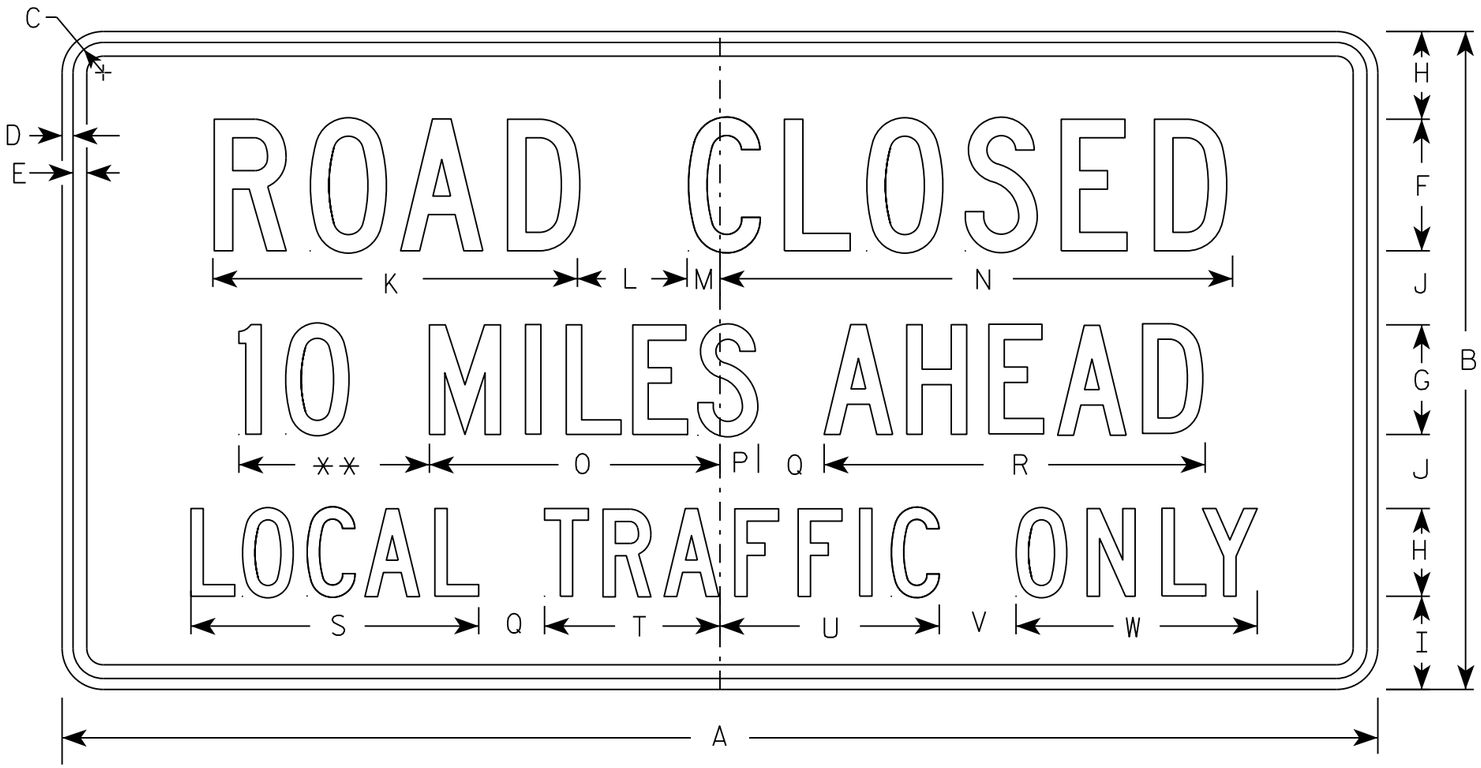
DATE 11/02/10 PLATE NO. R10-5.7

PROJECT NO:

SHEET NO: 237 E

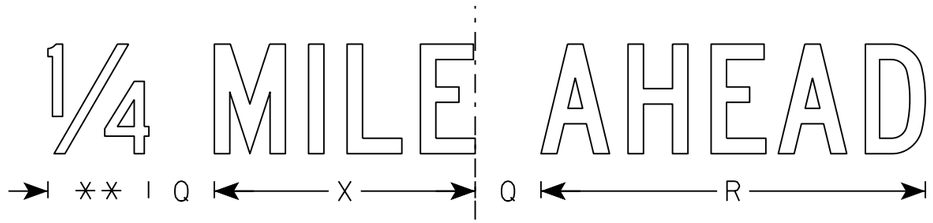
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

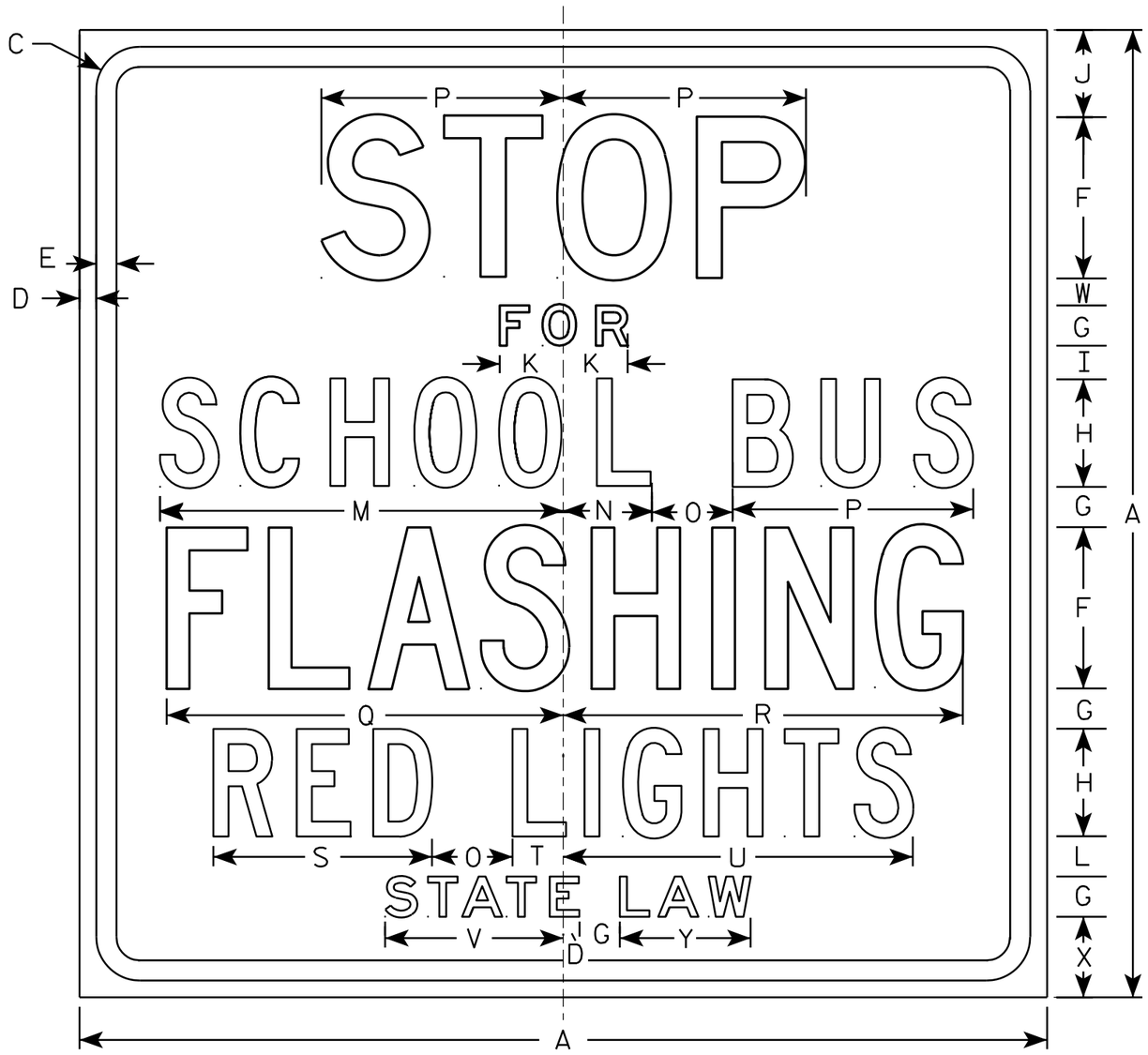
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 238	E



R59-51

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 D
   Lines 2 & 6 are Series E
   Line 3, 4 & 5 are Series C

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

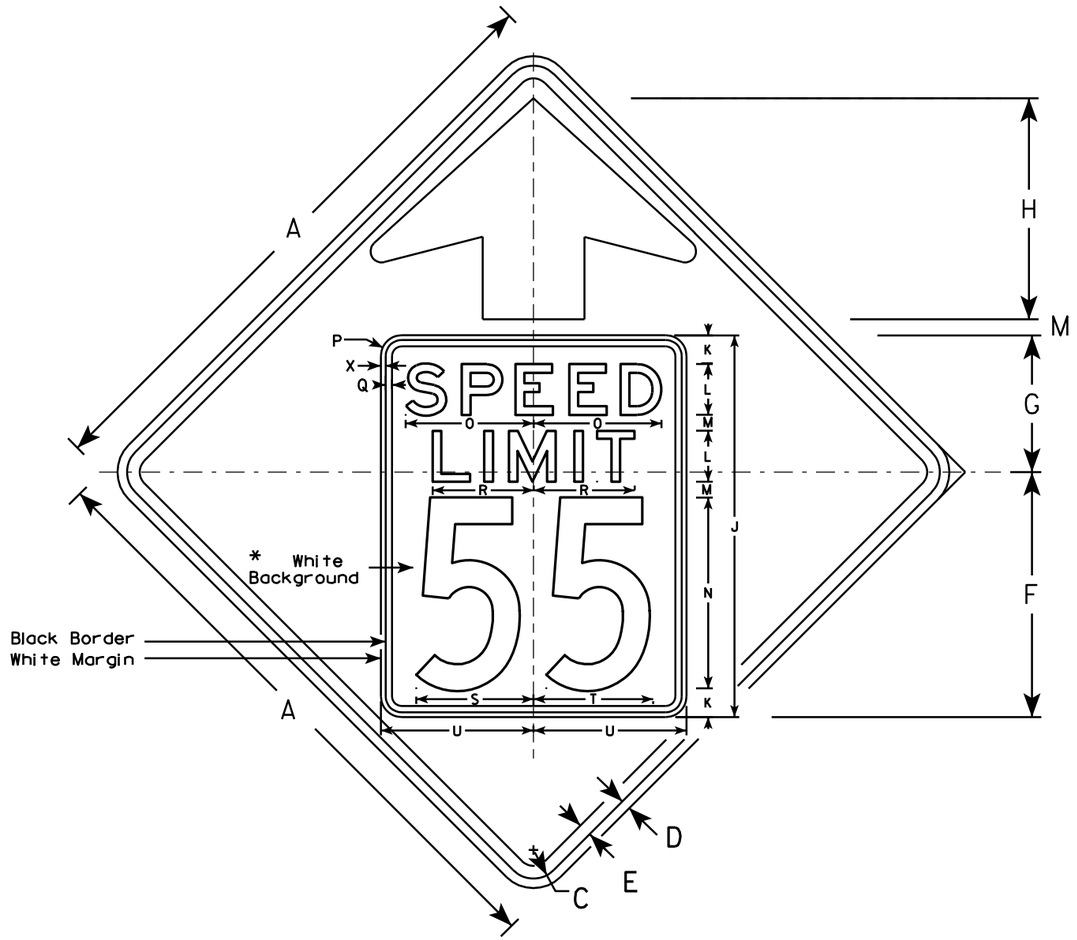
STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 239 | E

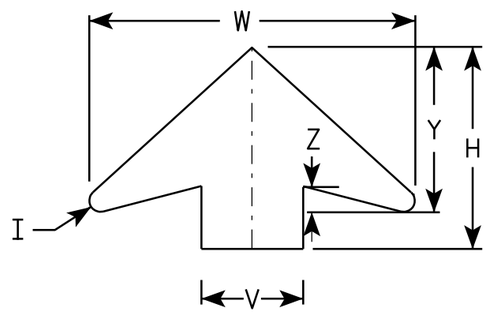


W3-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN
W3-5

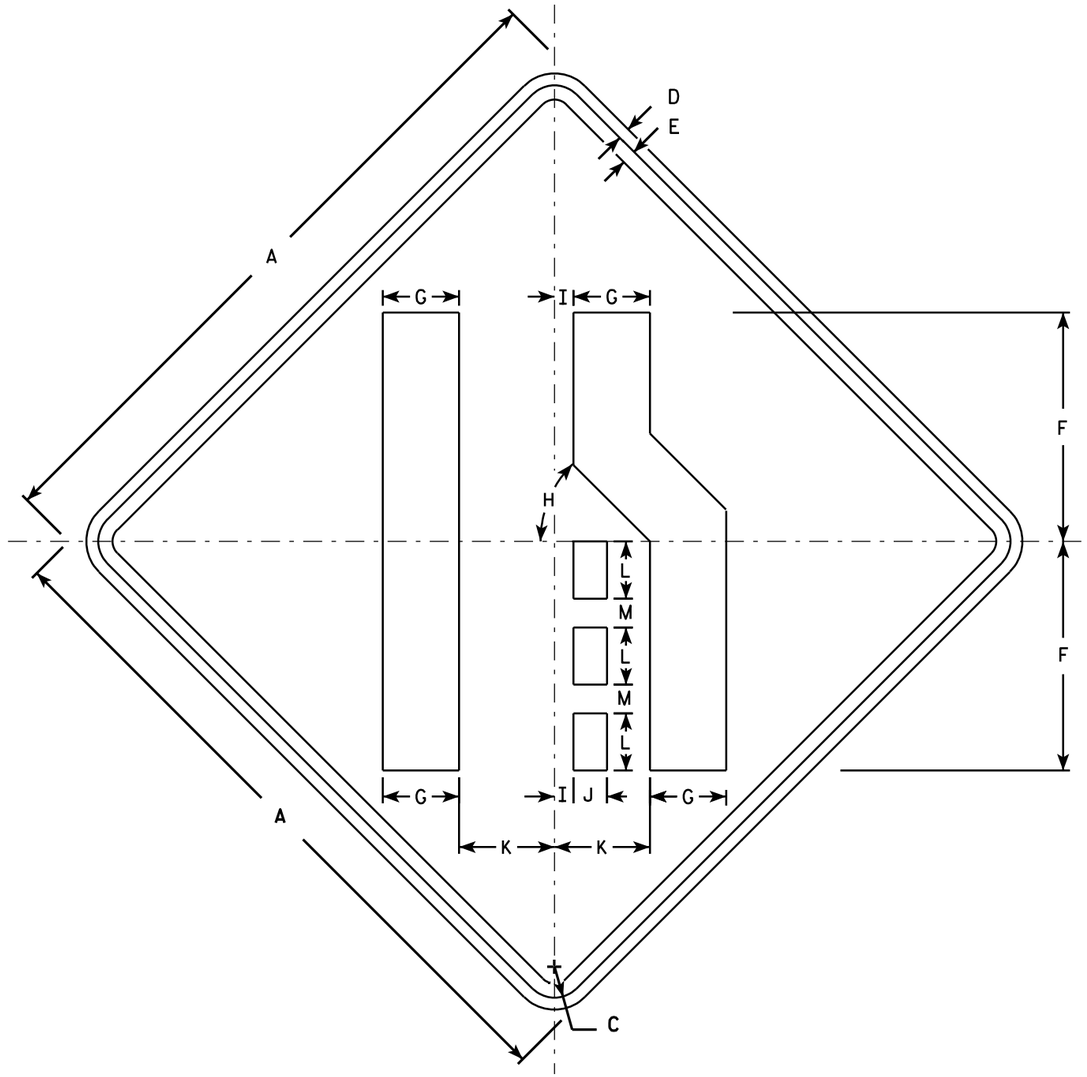
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 240 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

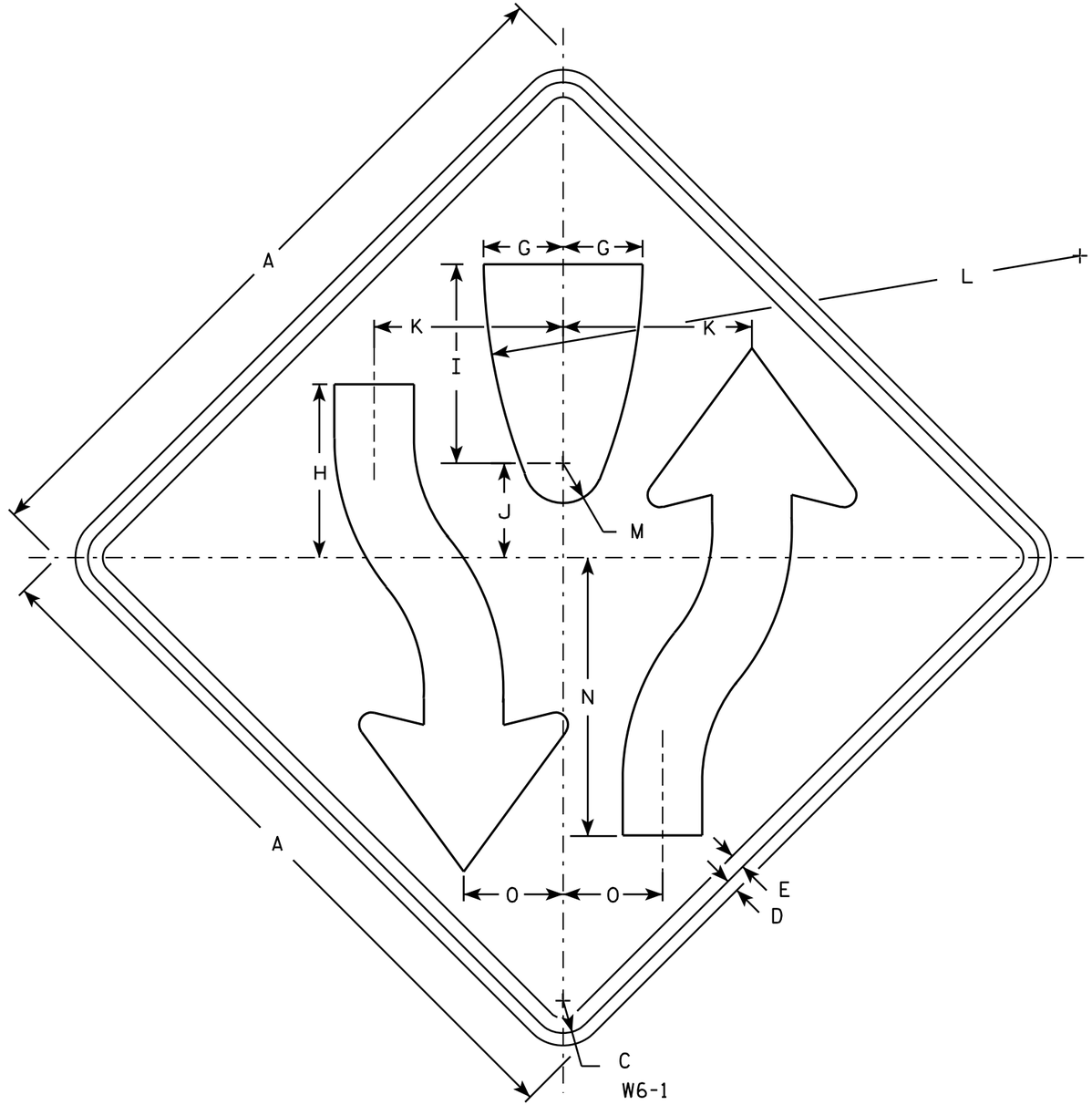
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

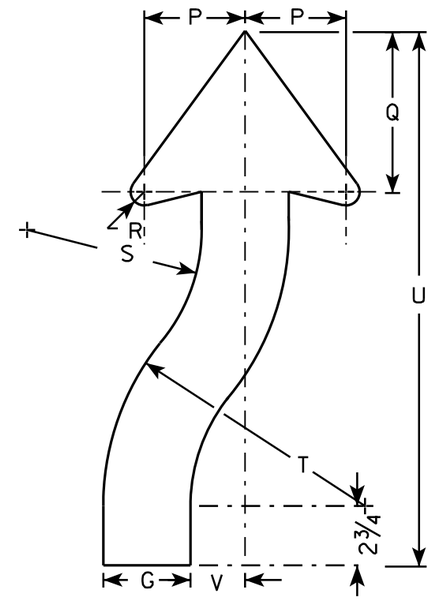
PROJECT NO:

SHEET NO: 241 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

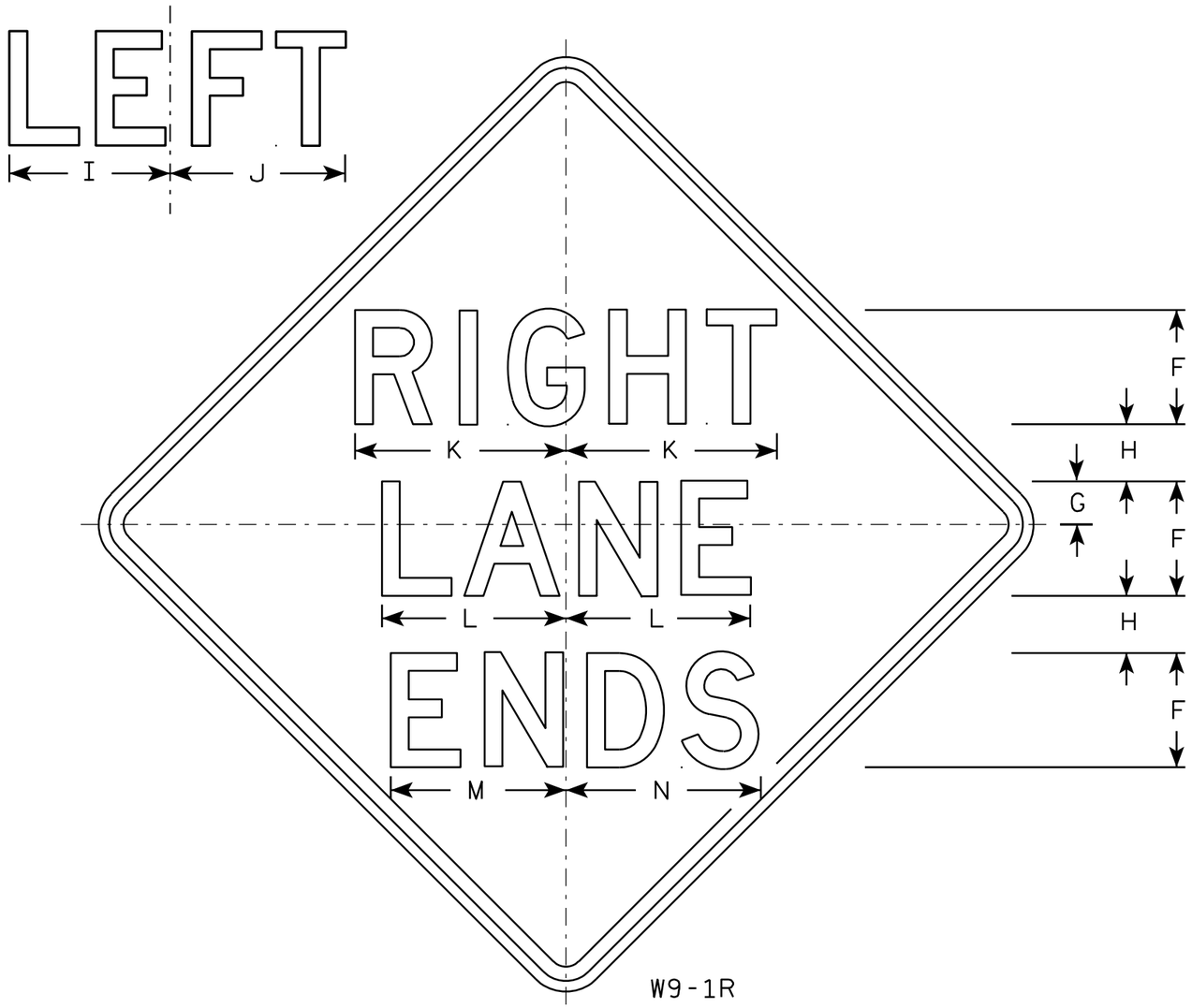
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 242	E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - 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. W9-1L same as W9-1R except the word Left replaces 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	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

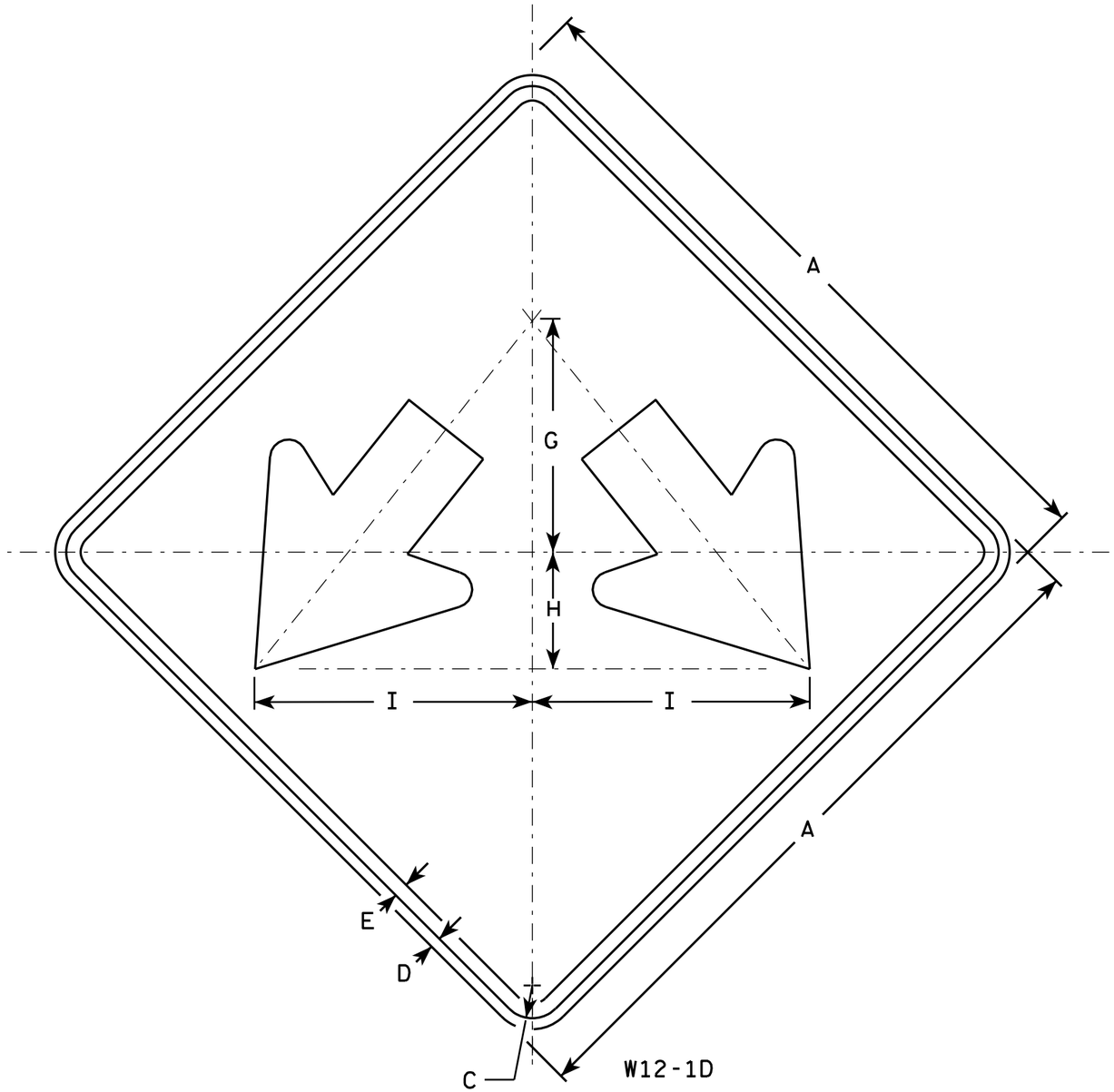
DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 243 E

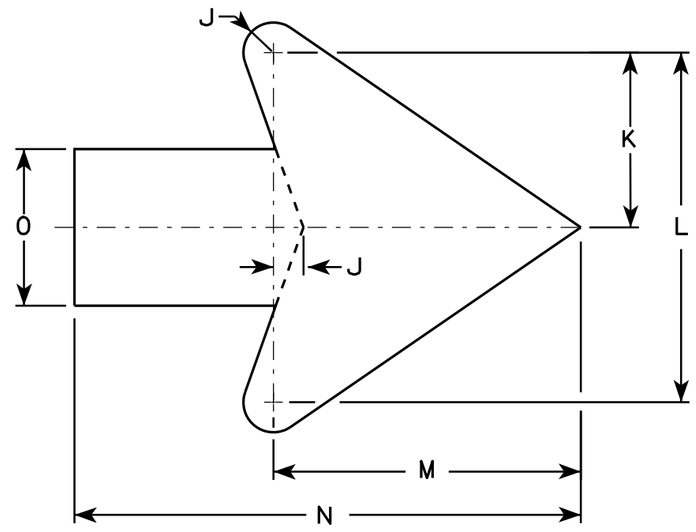
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

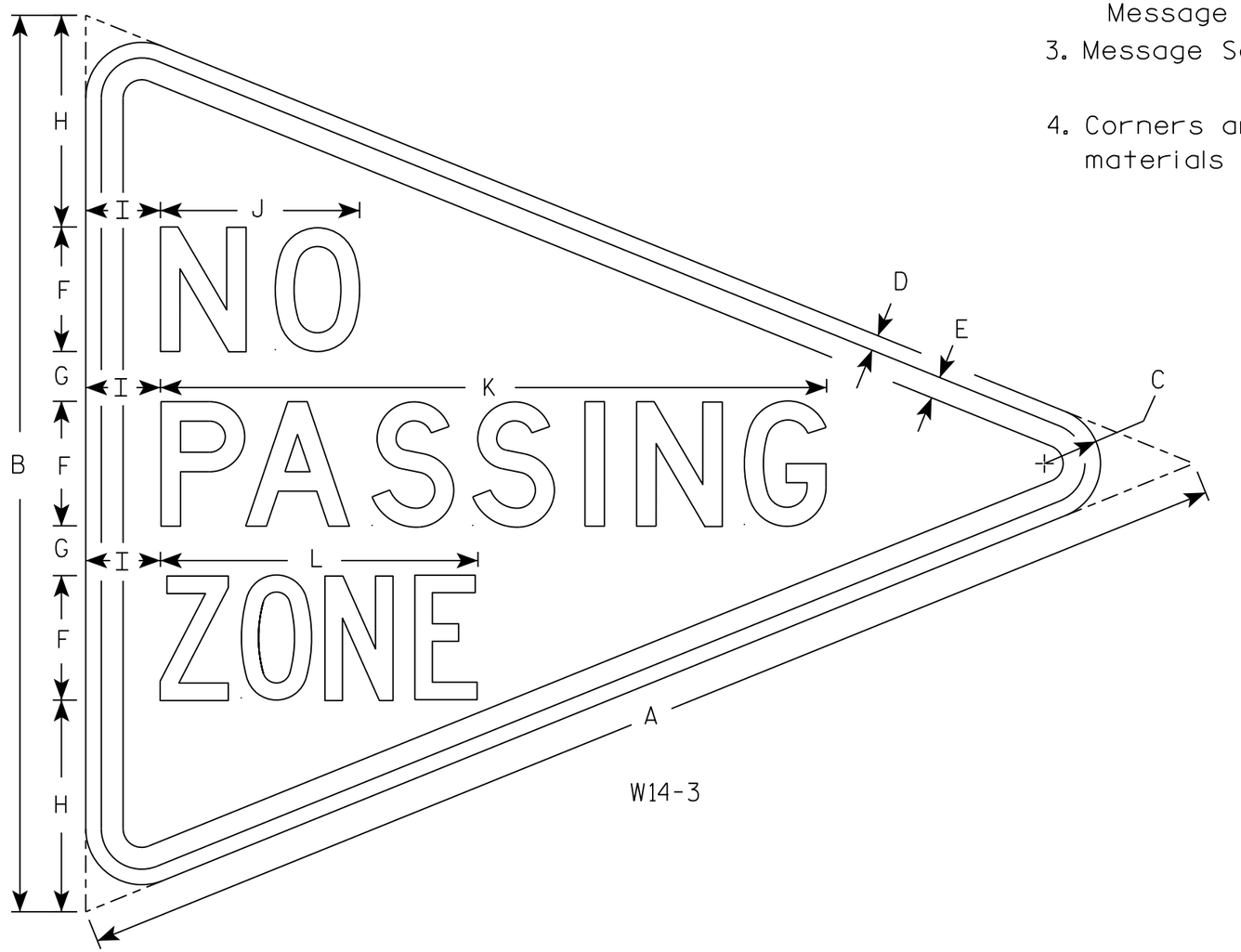
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 244	E

NOTES

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



W14-3

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

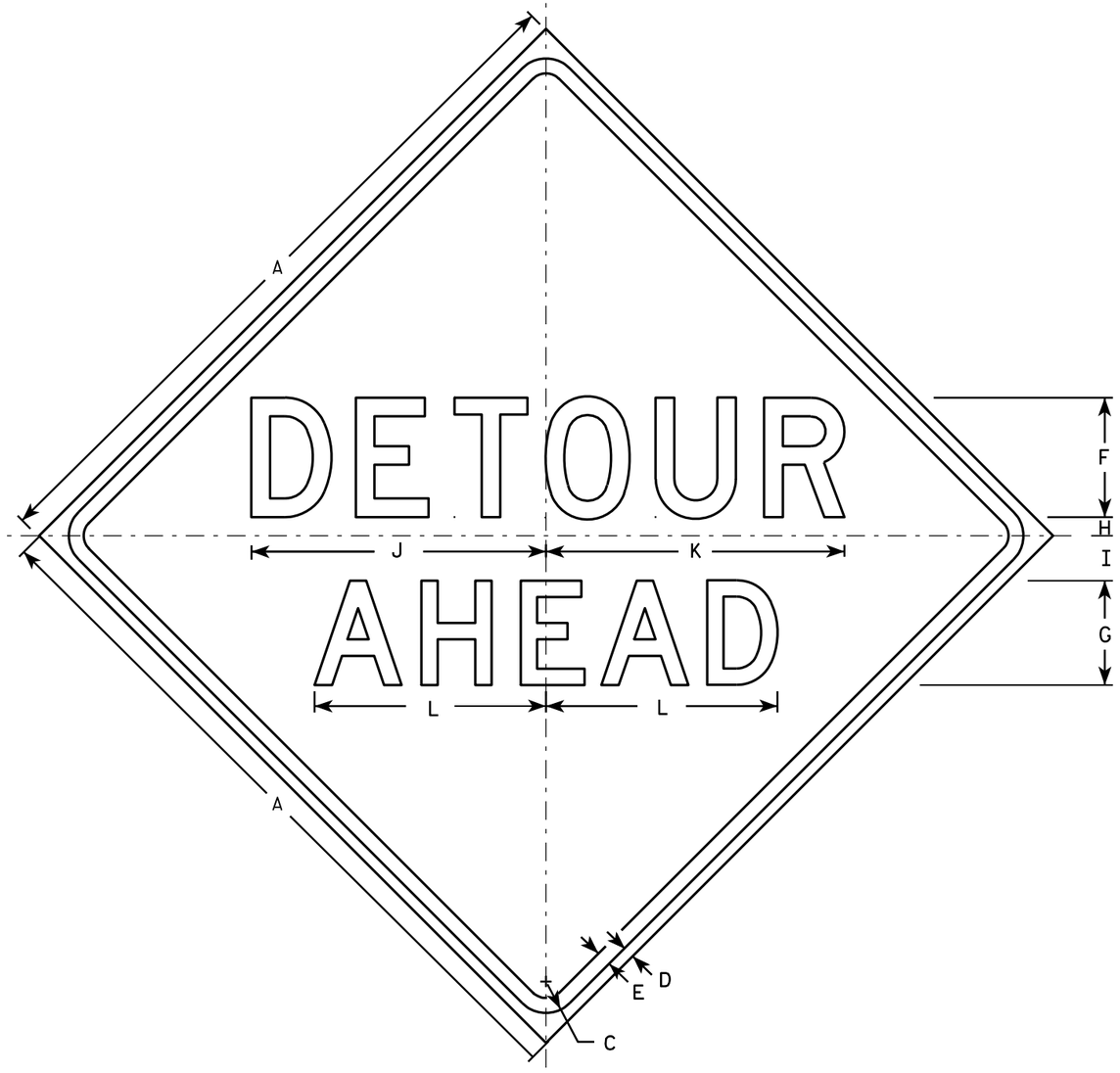
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

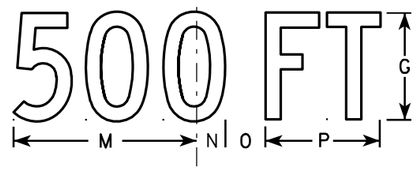
APPROVED Matthew R Rauch
for State Traffic Engineer

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

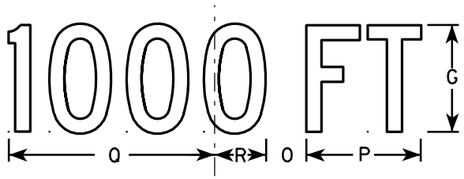
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E



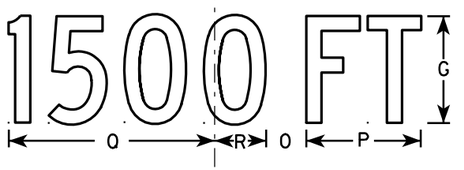
W20-2A



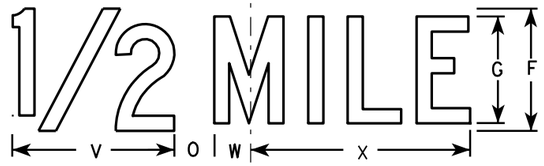
W20-2D



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	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

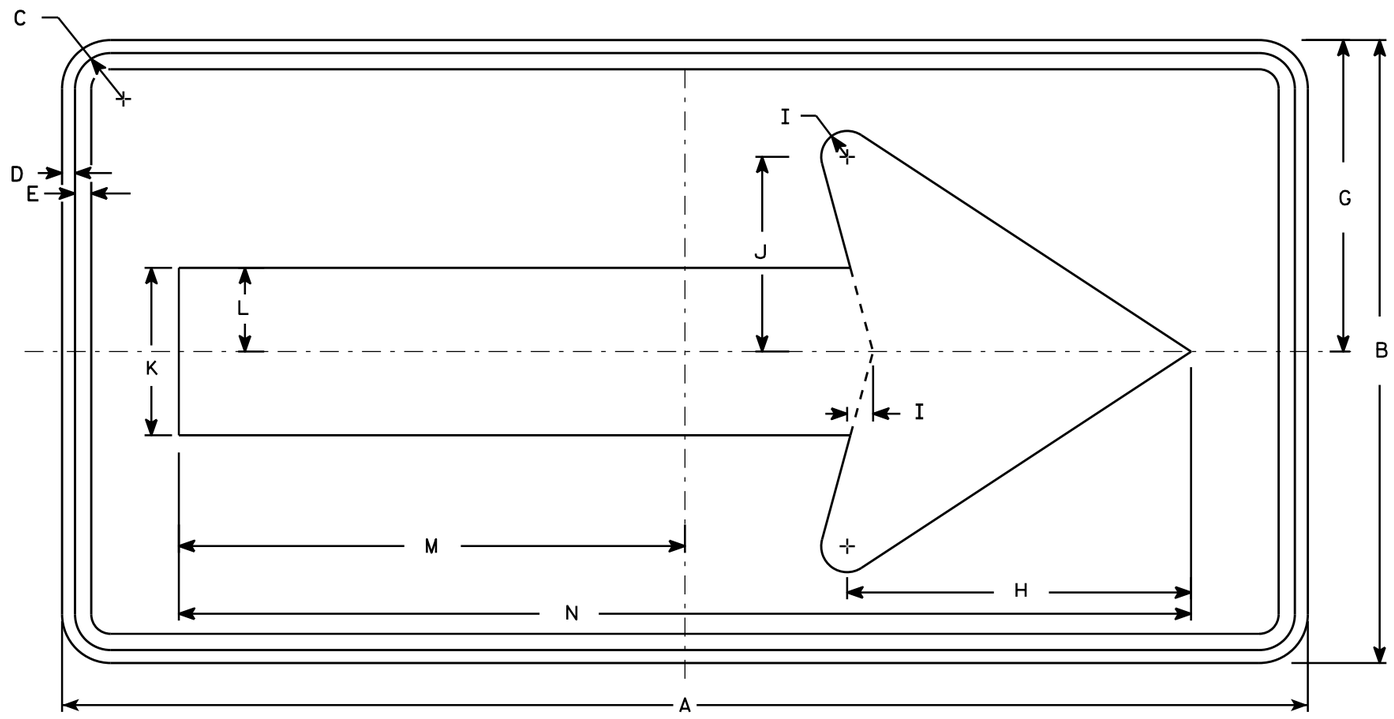
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E



W01-6

NOTES

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

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

STANDARD SIGN
W01-6

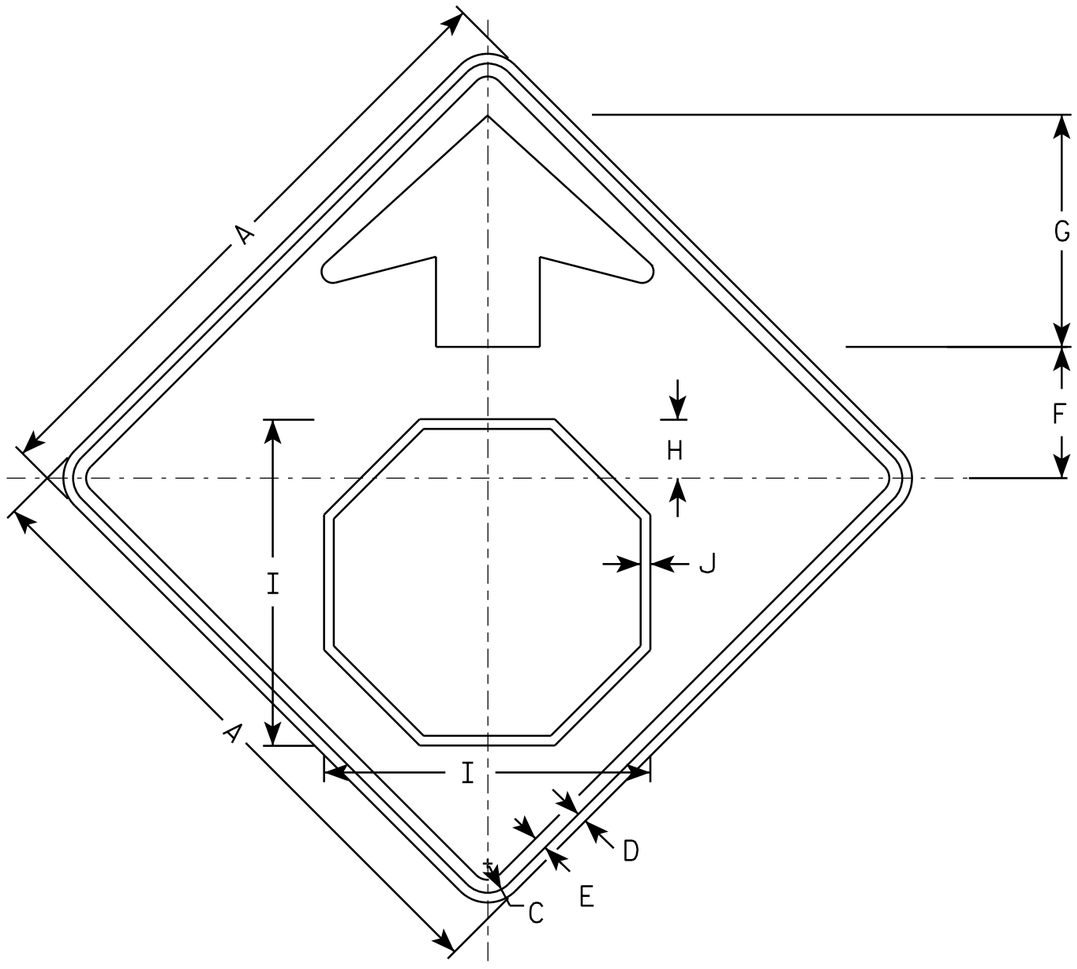
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

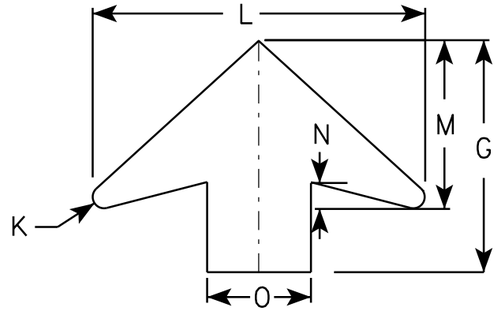
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

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

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

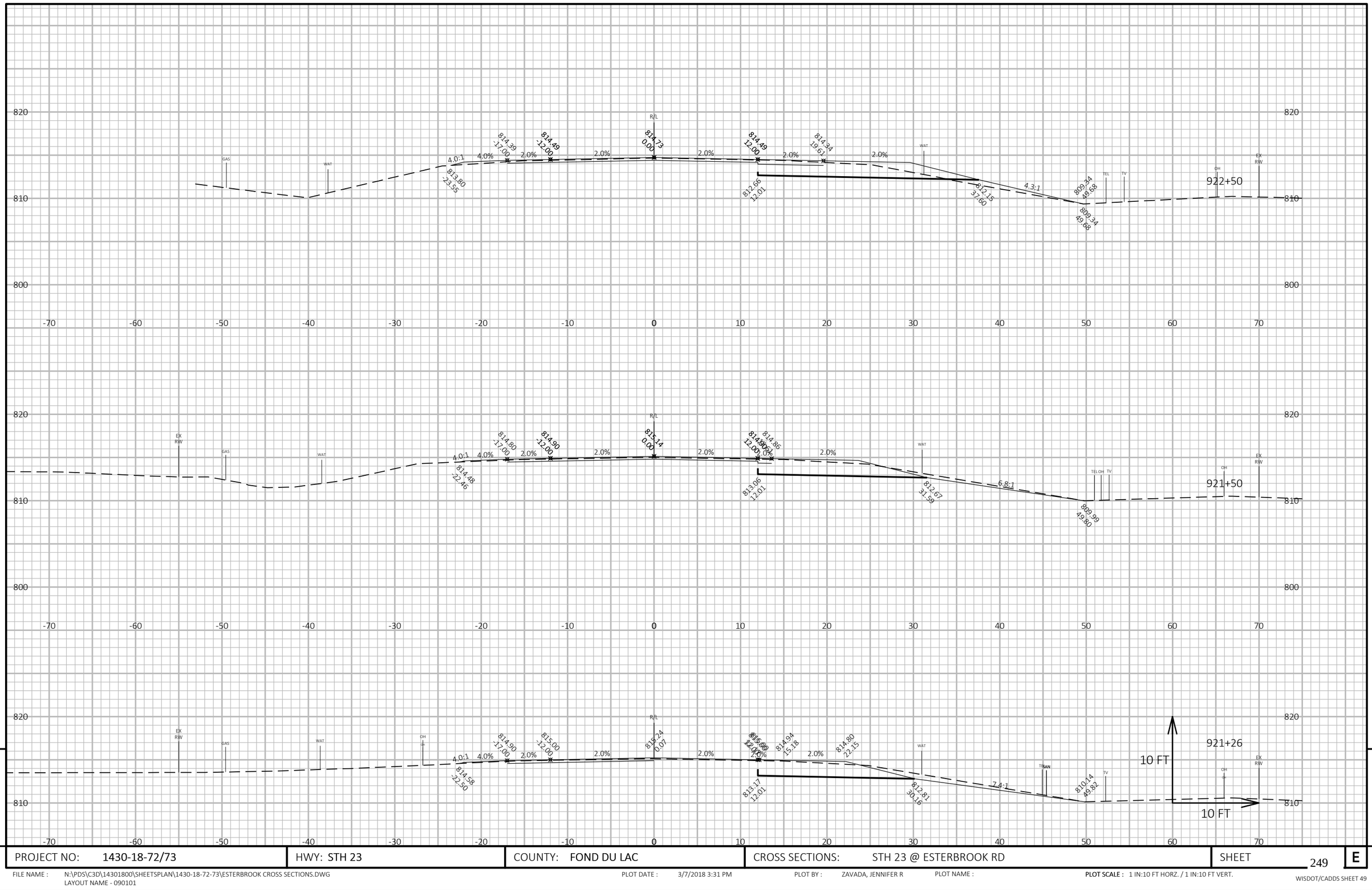
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 248 03-1.1

PROJECT NO: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 249	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090101

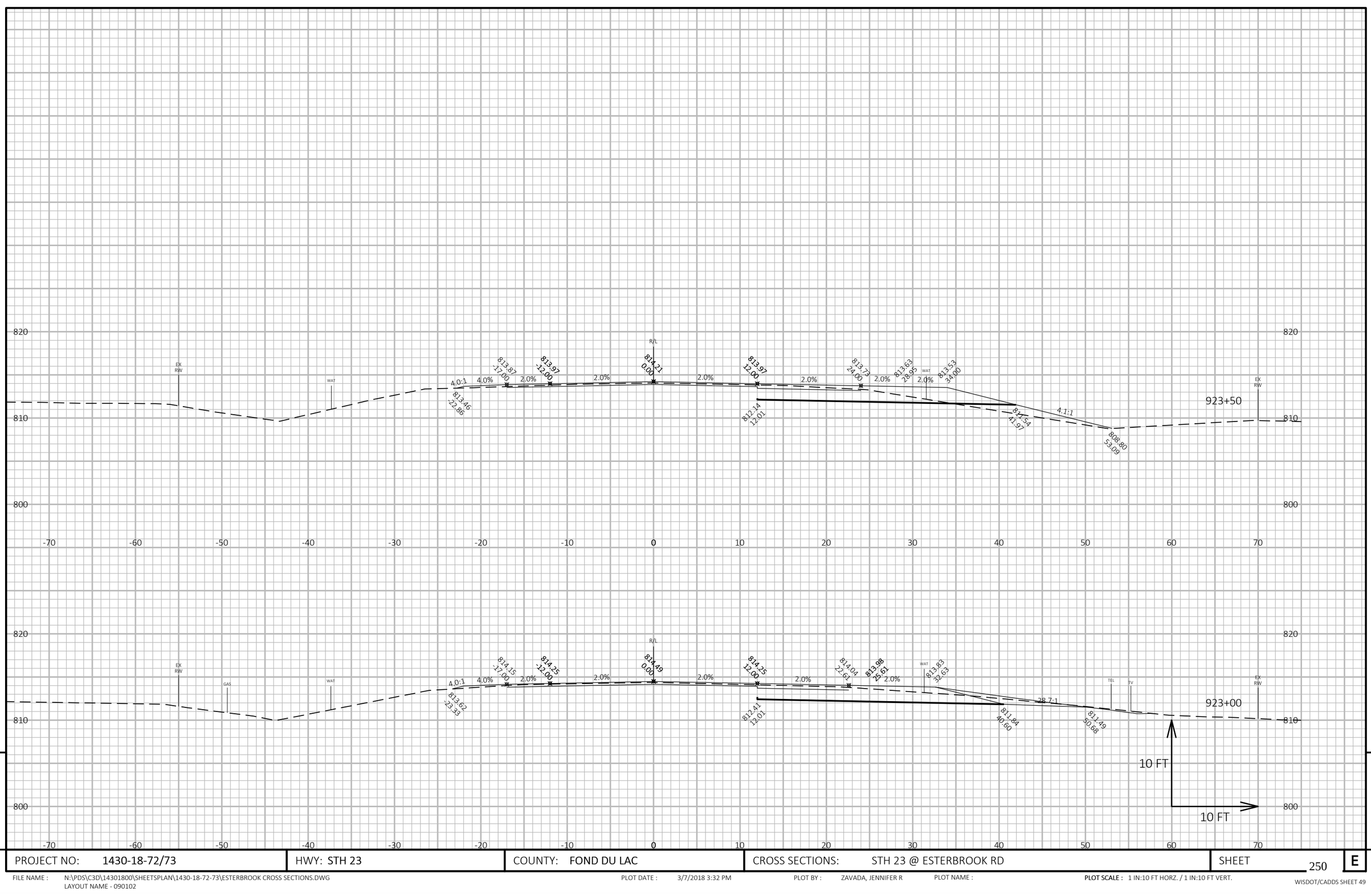
PLOT DATE : 3/7/2018 3:31 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



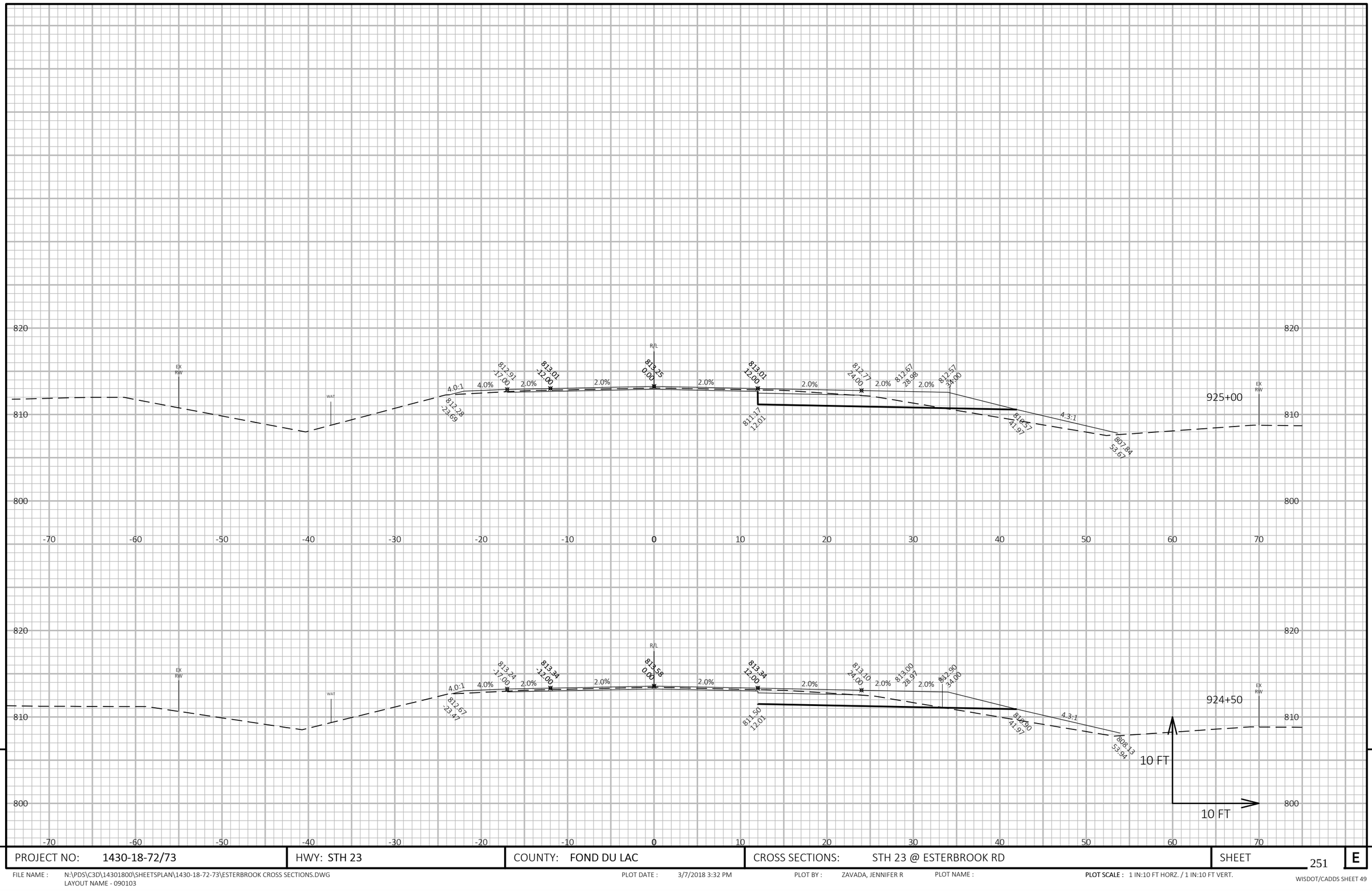
9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 250	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090102

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 251	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090103

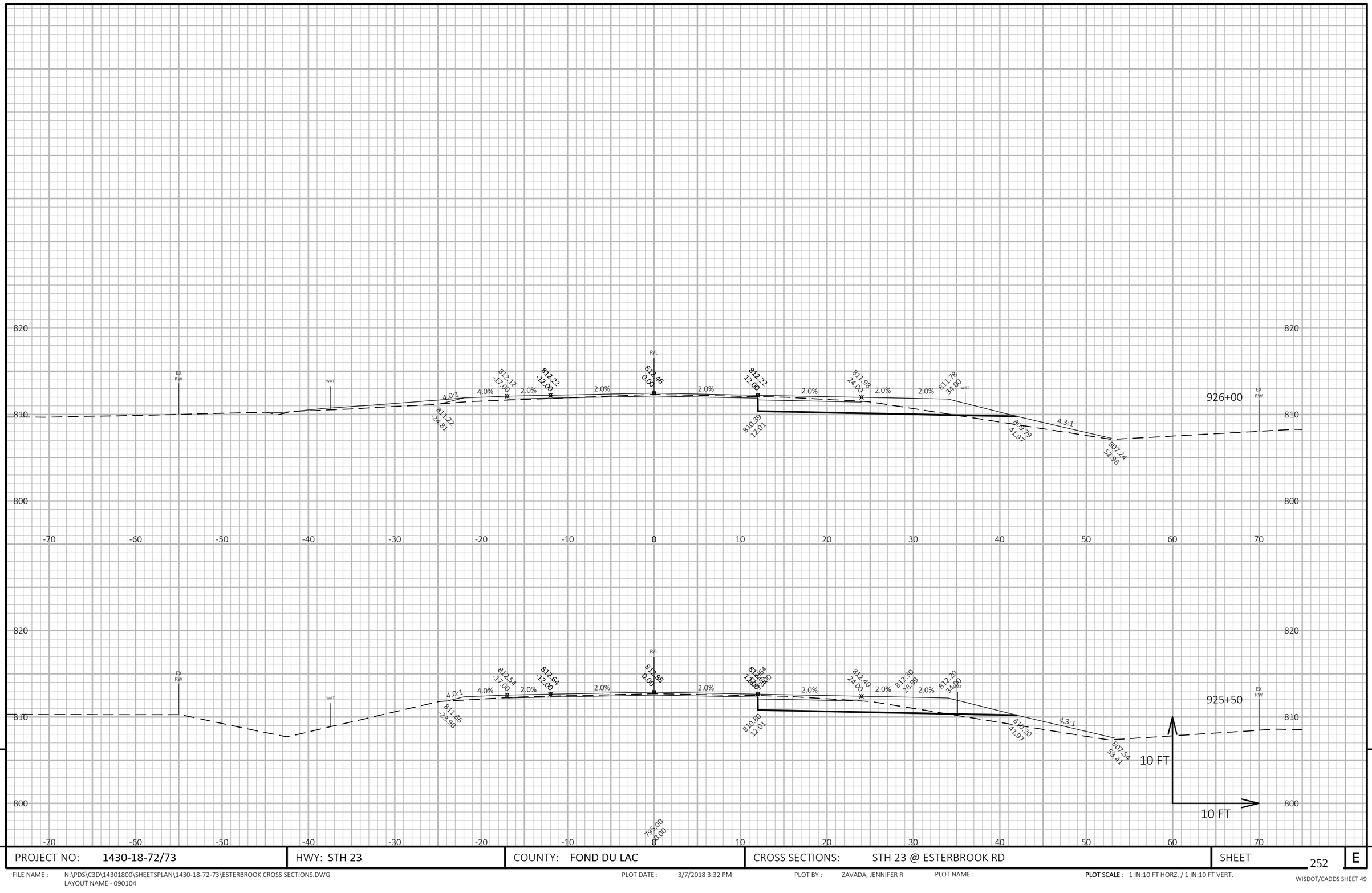
PLOT DATE : 3/7/2018 3:32 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

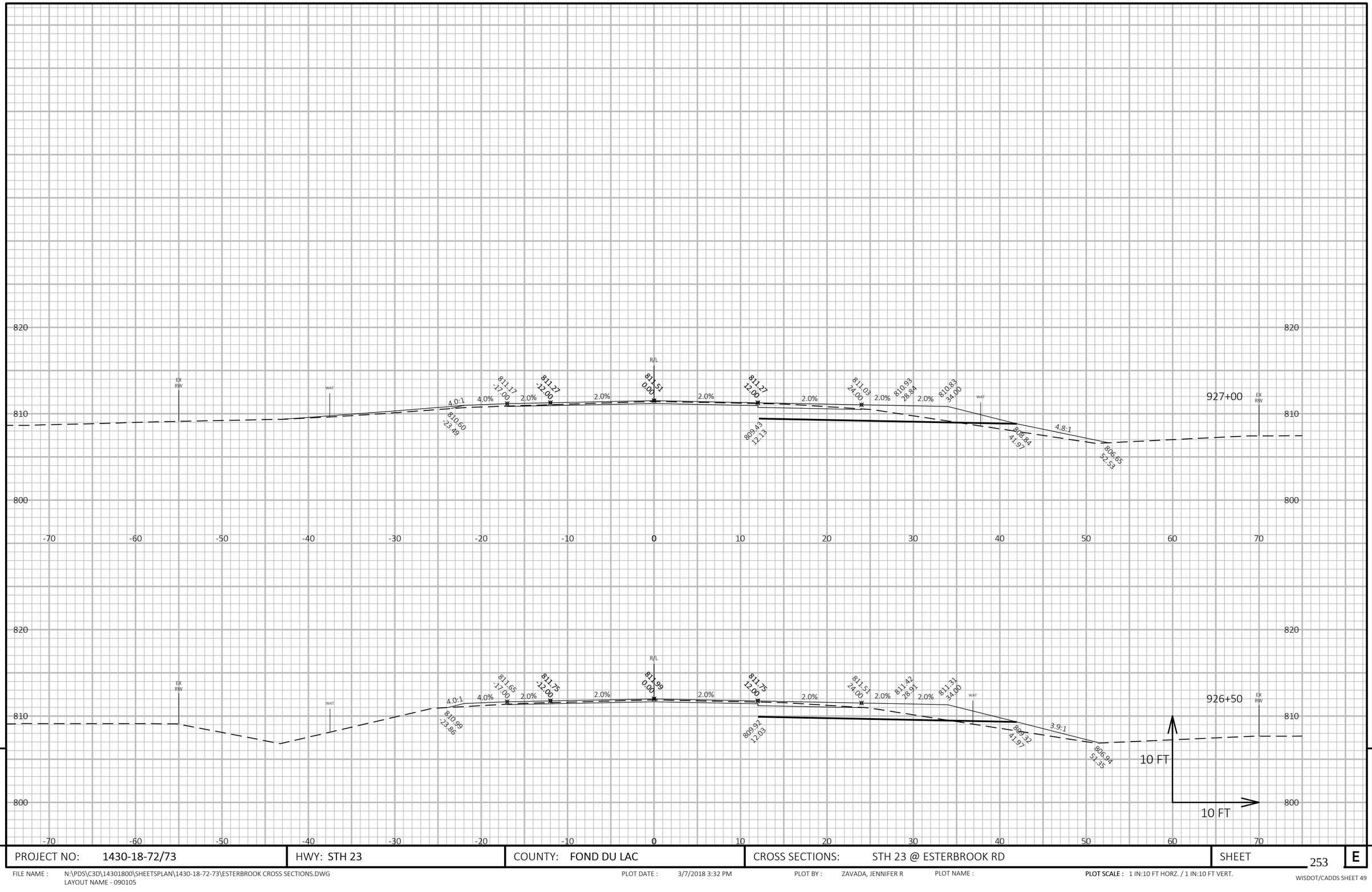
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 252	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090104

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

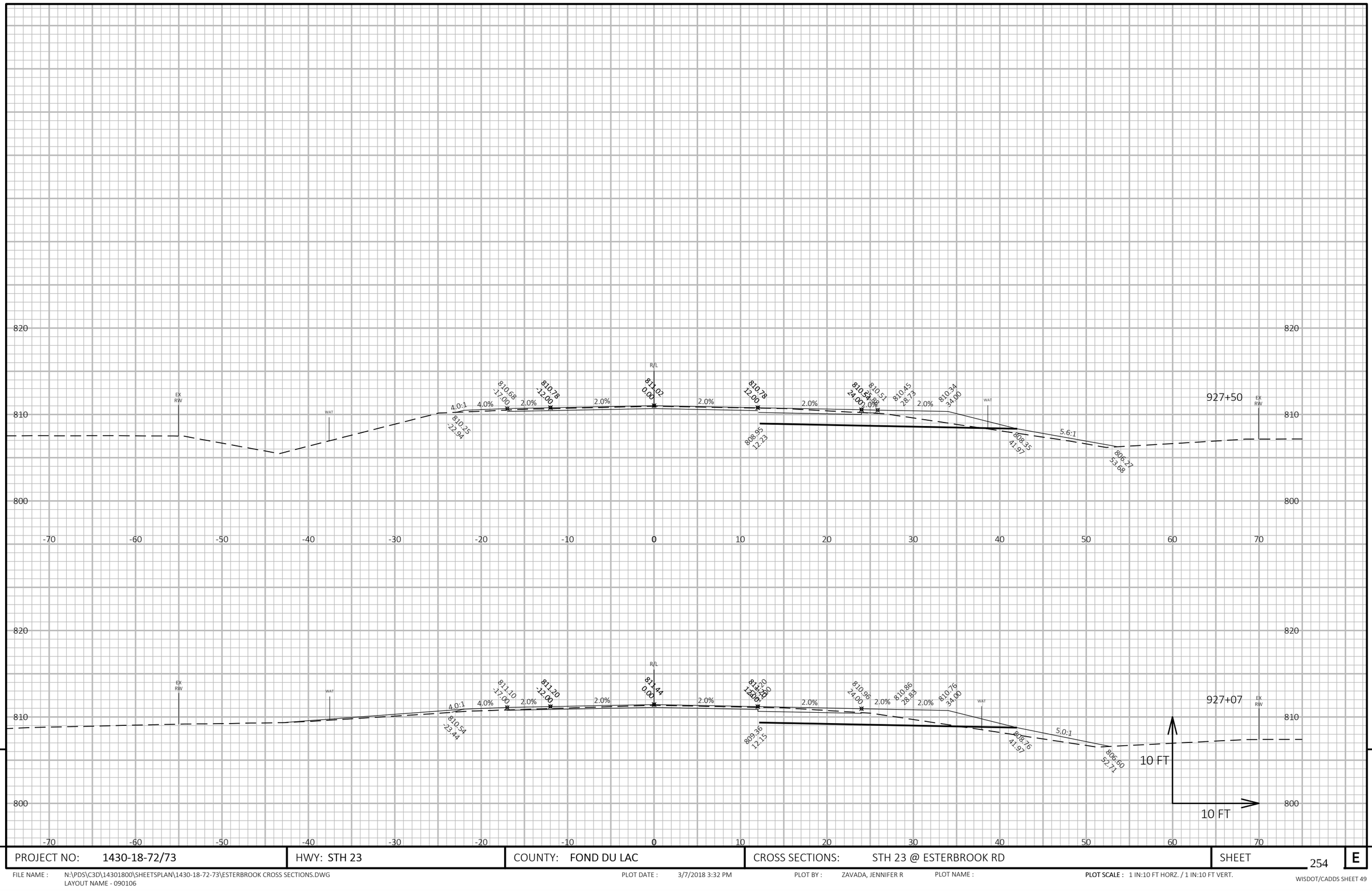
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 253	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090105

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



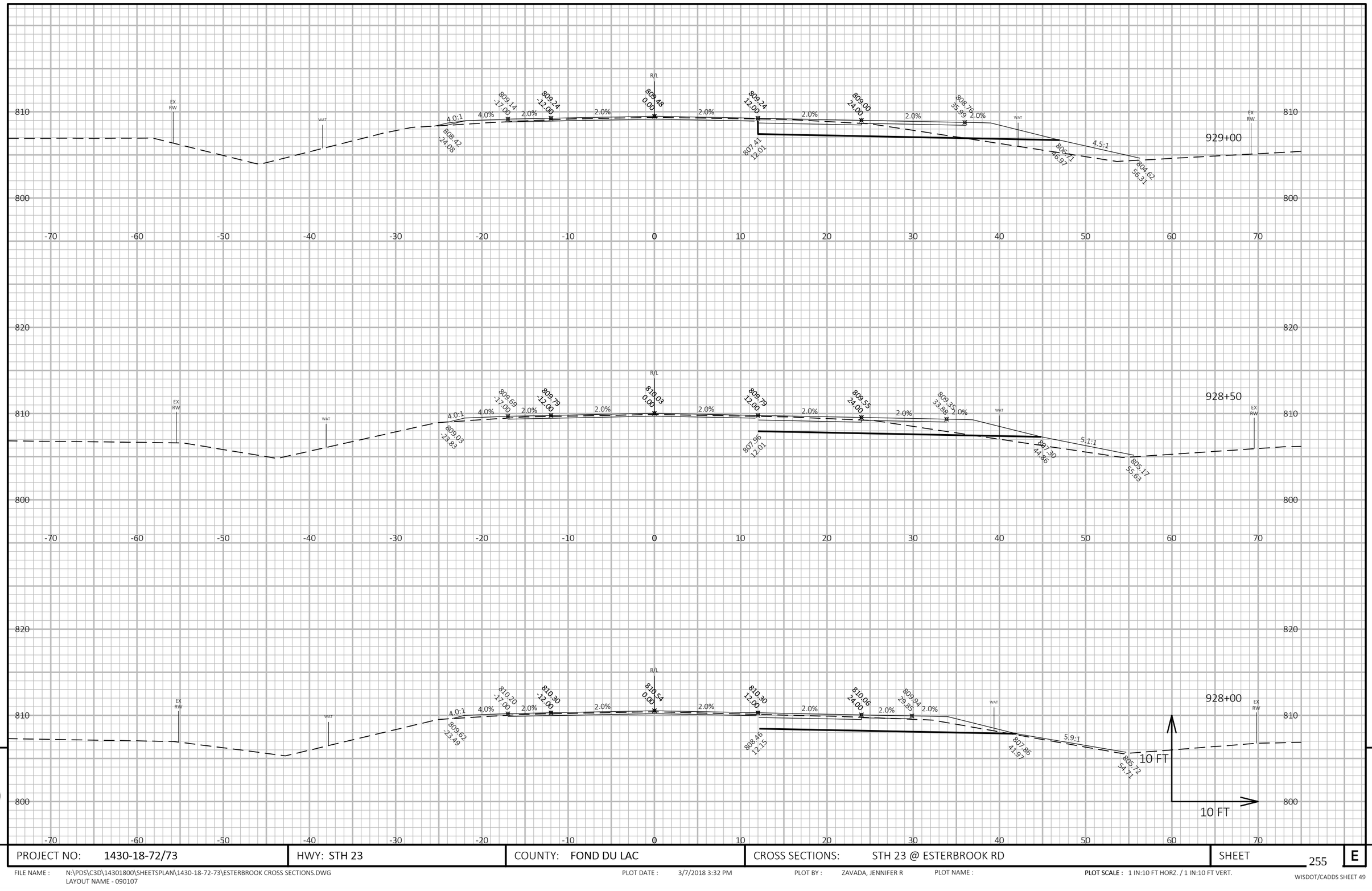
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 254	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090106

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 255	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090107

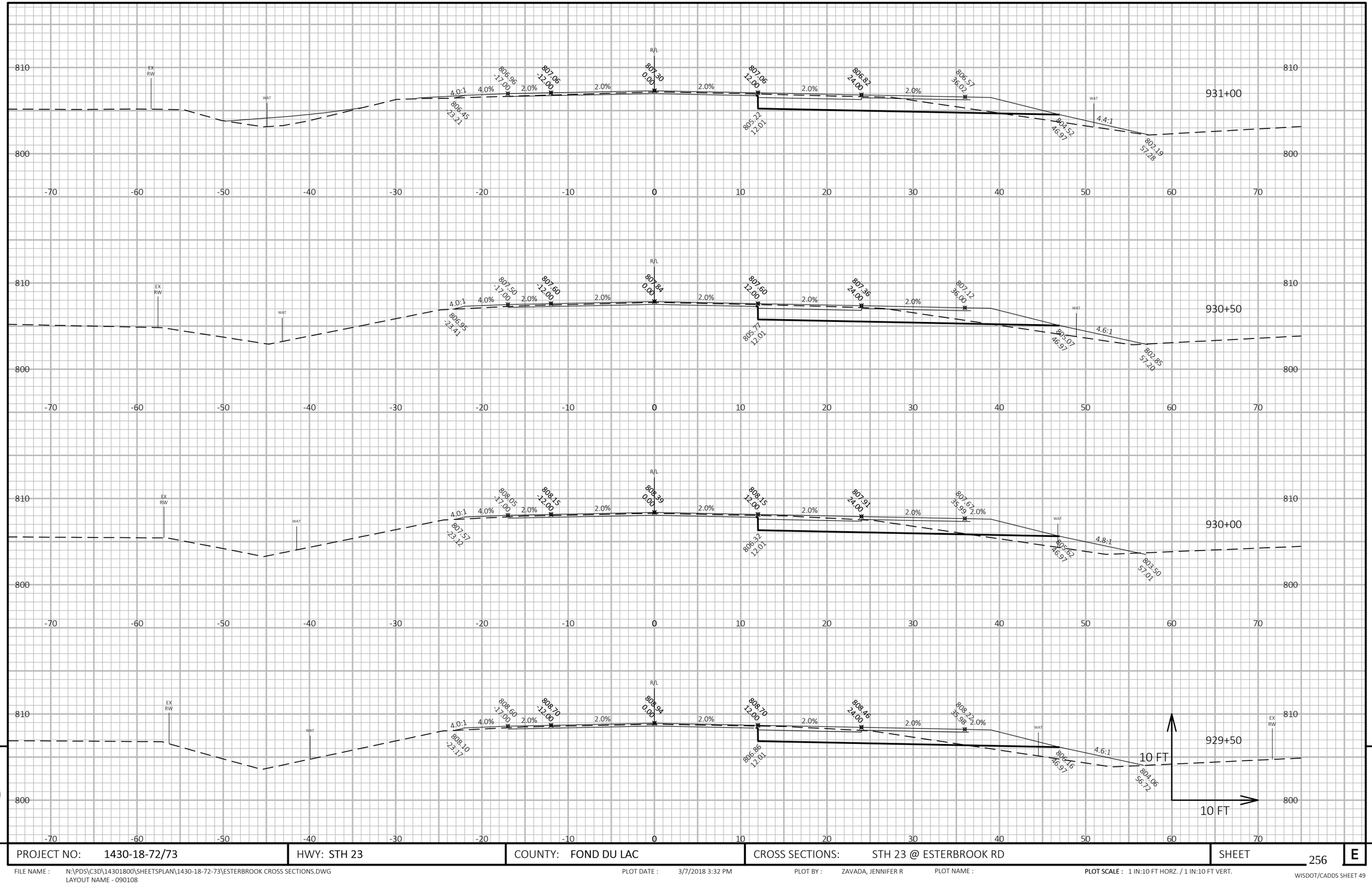
PLOT DATE : 3/7/2018 3:32 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

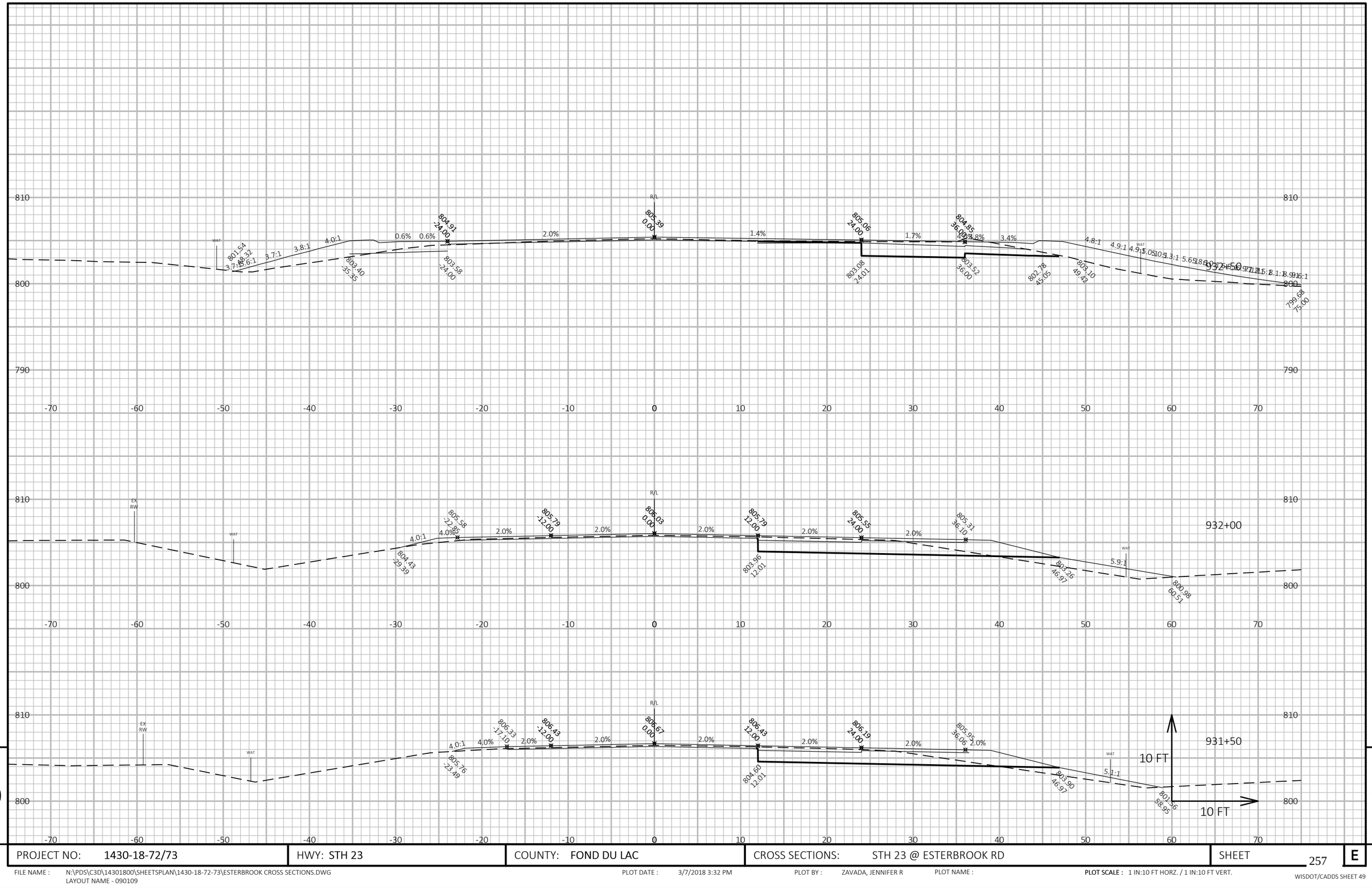
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 256	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090108

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 257	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090109

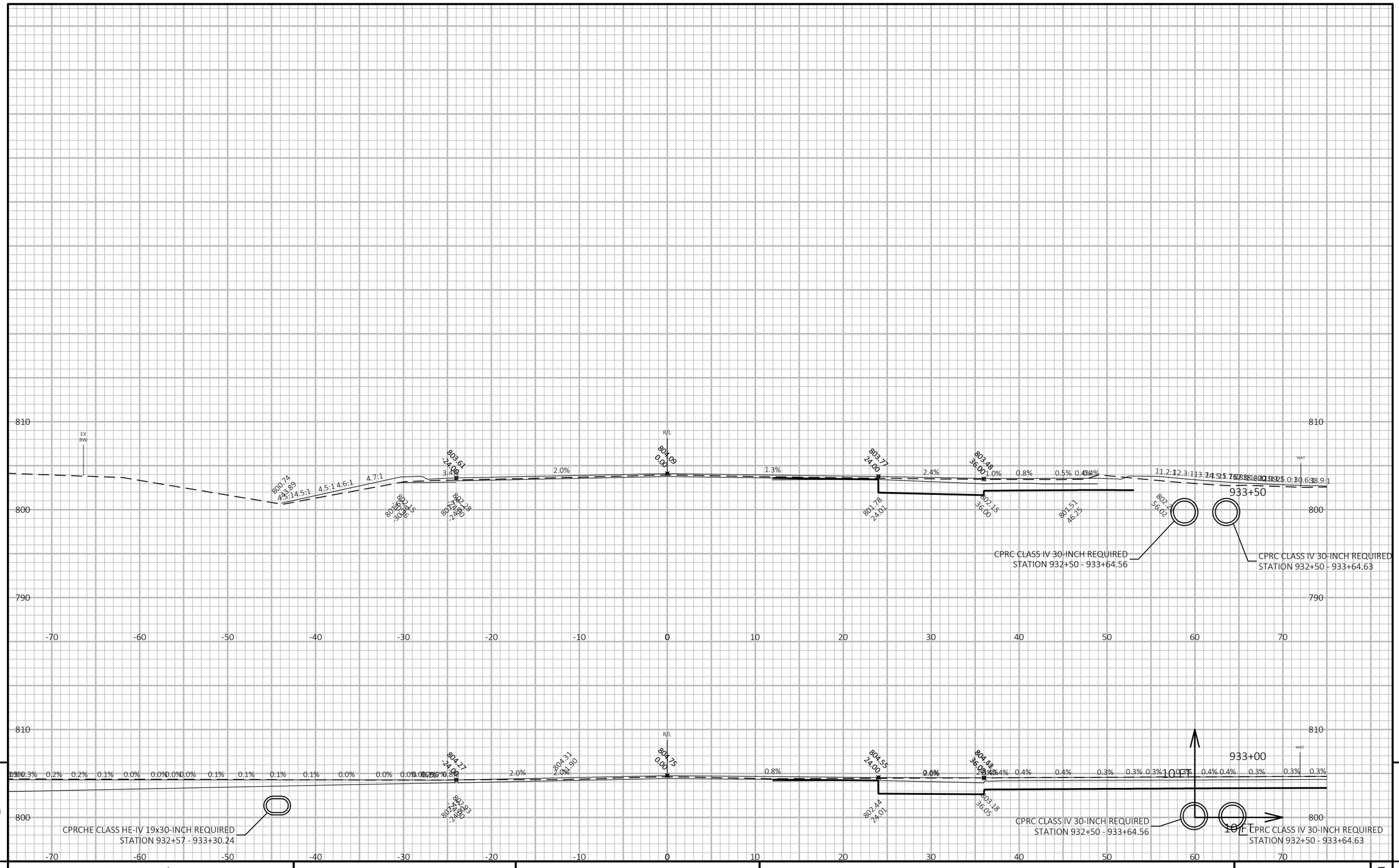
PLOT DATE : 3/7/2018 3:32 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 258	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090110

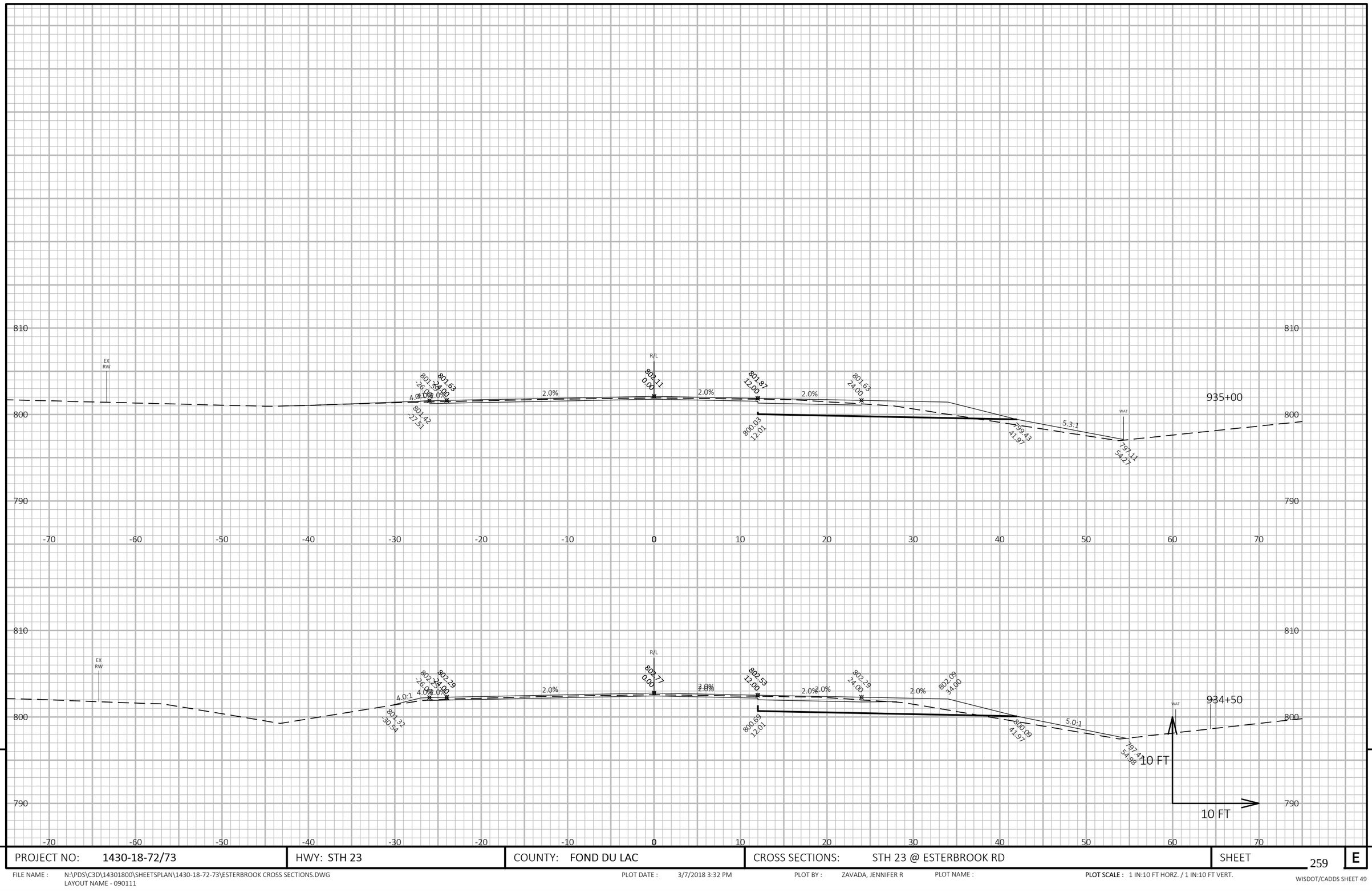
PLOT DATE : 3/7/2018 3:32 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

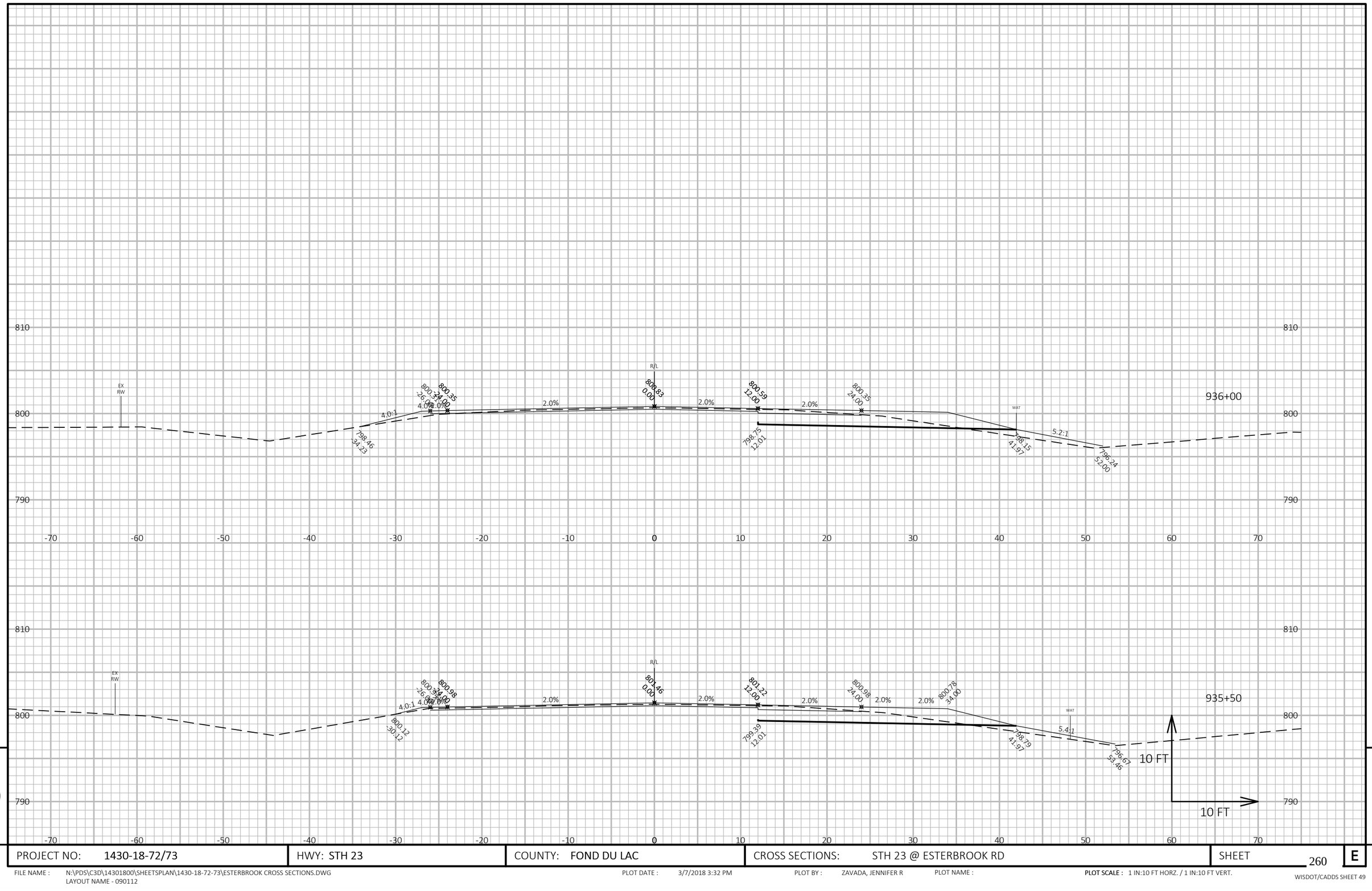
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 259	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090111

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

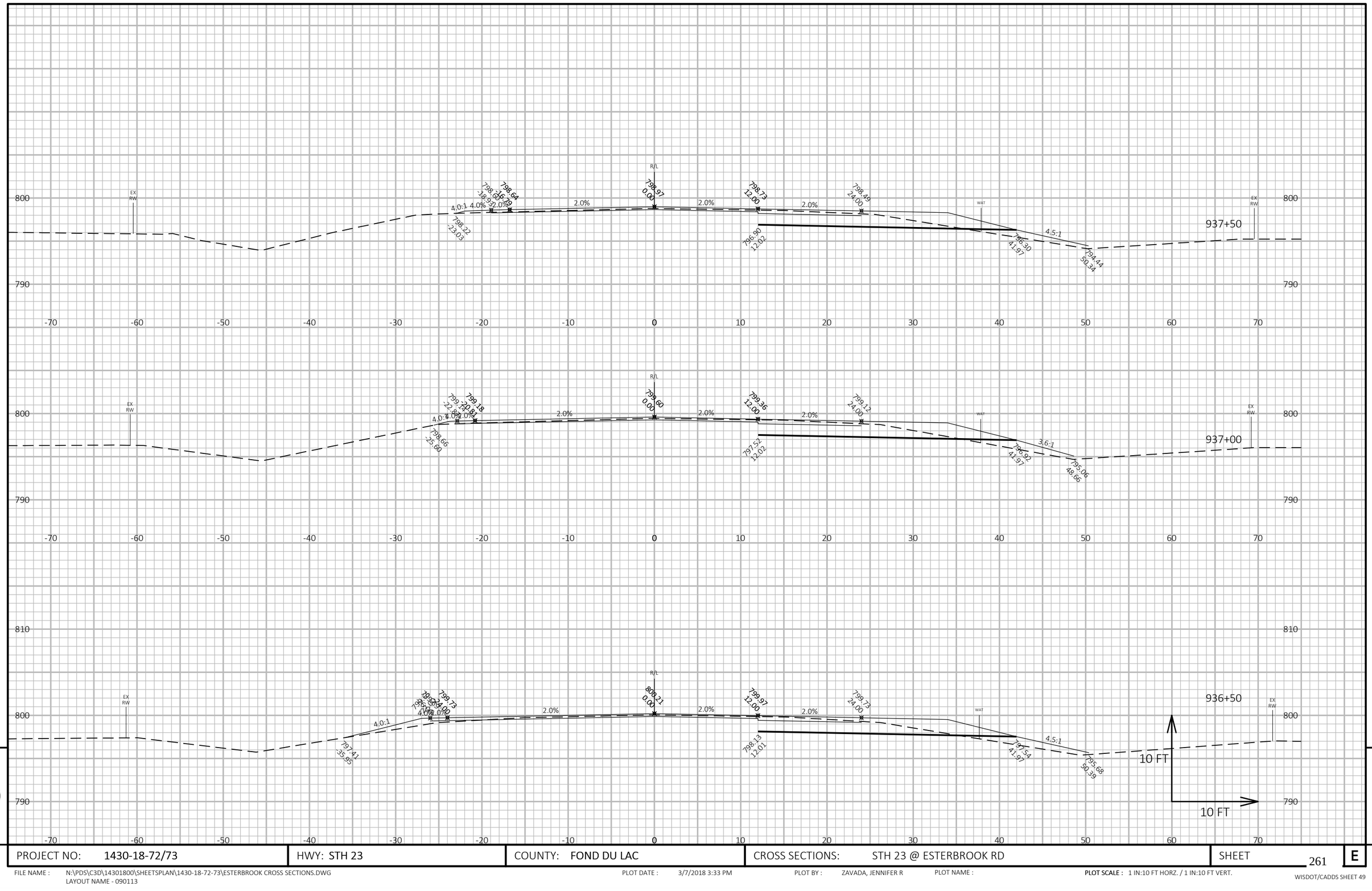


PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 260	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090112

PLOT DATE : 3/7/2018 3:32 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

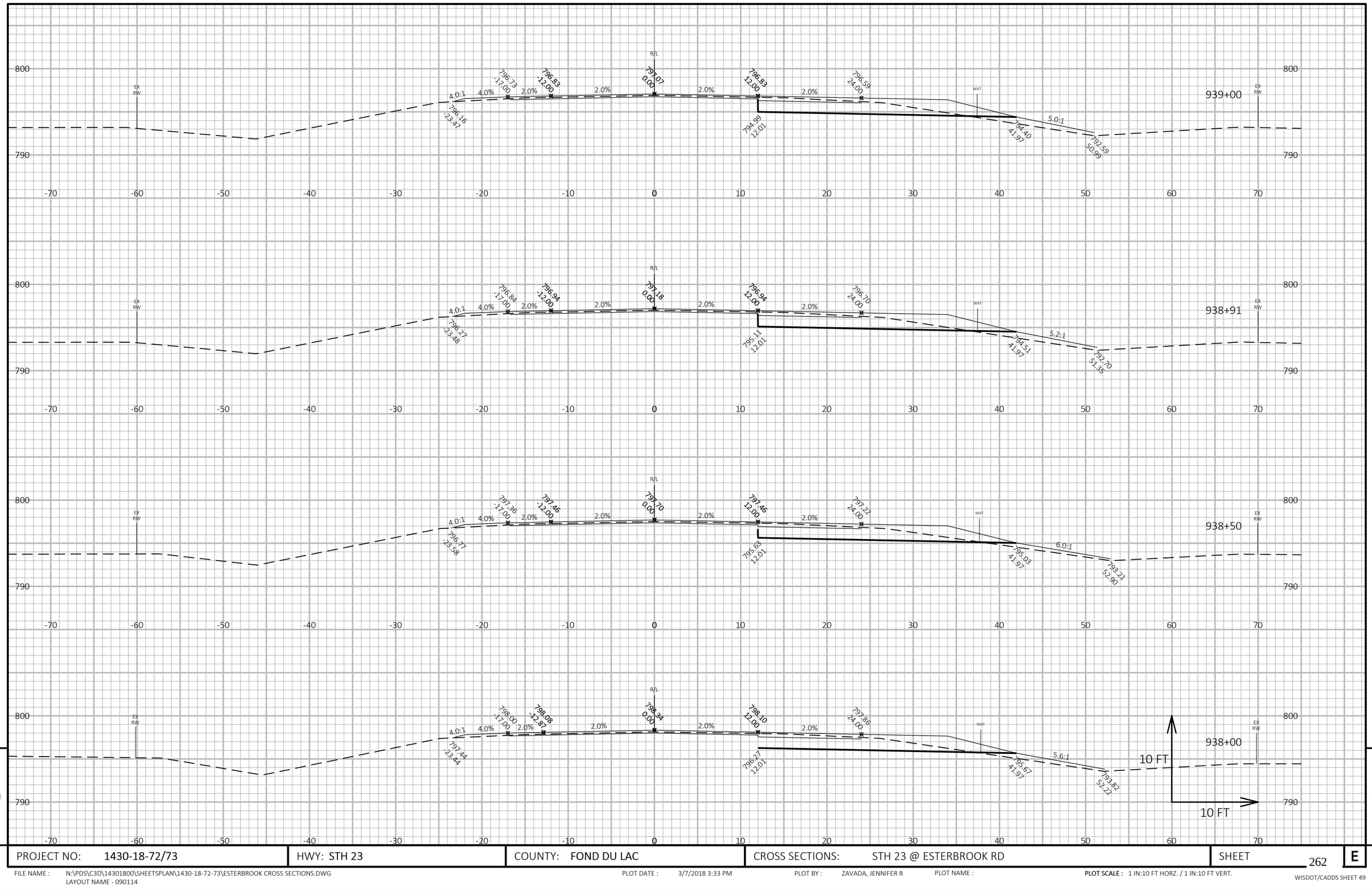
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 261	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090113

PLOT DATE : 3/7/2018 3:33 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 262	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090114

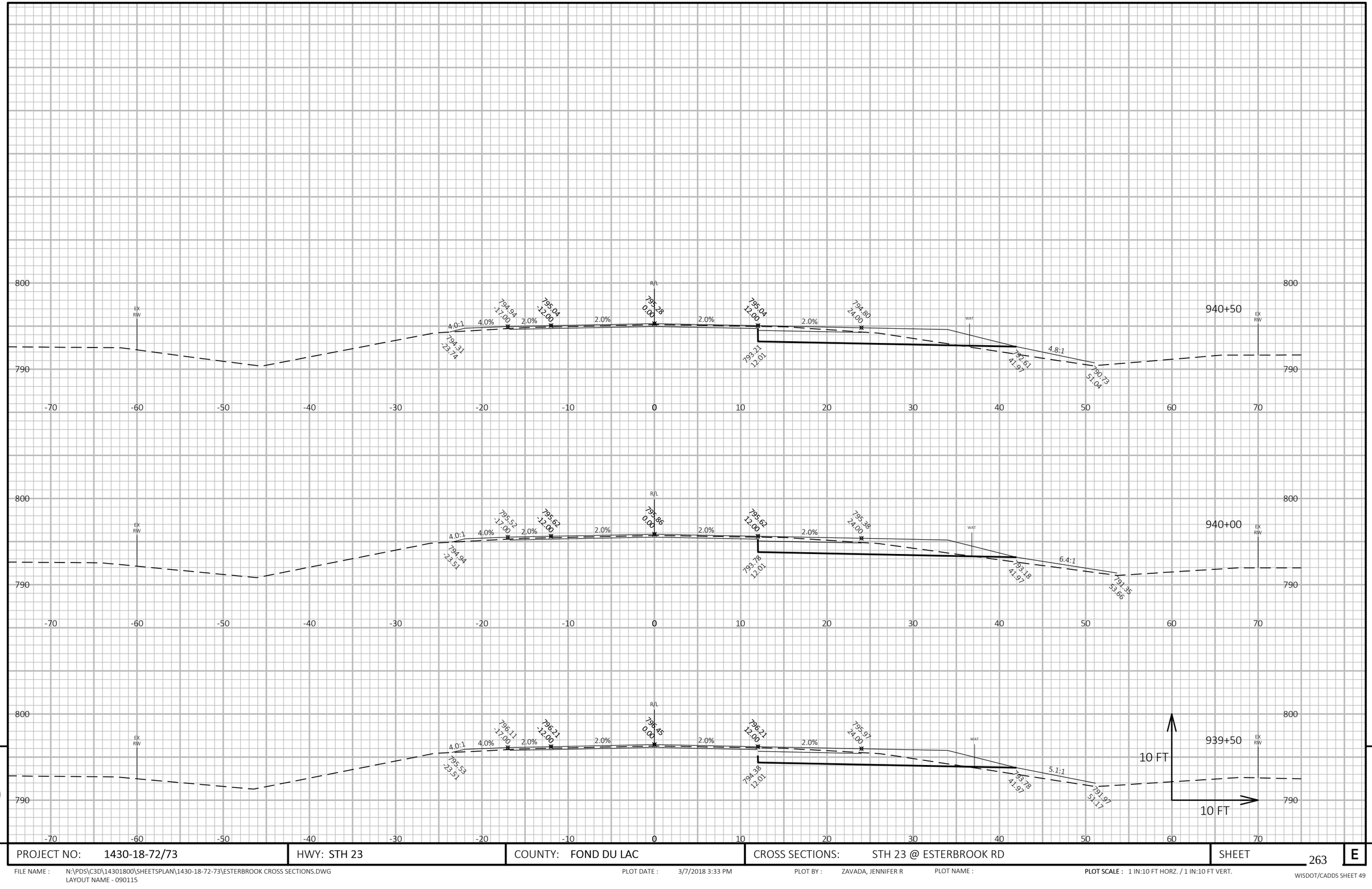
PLOT DATE : 3/7/2018 3:33 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49

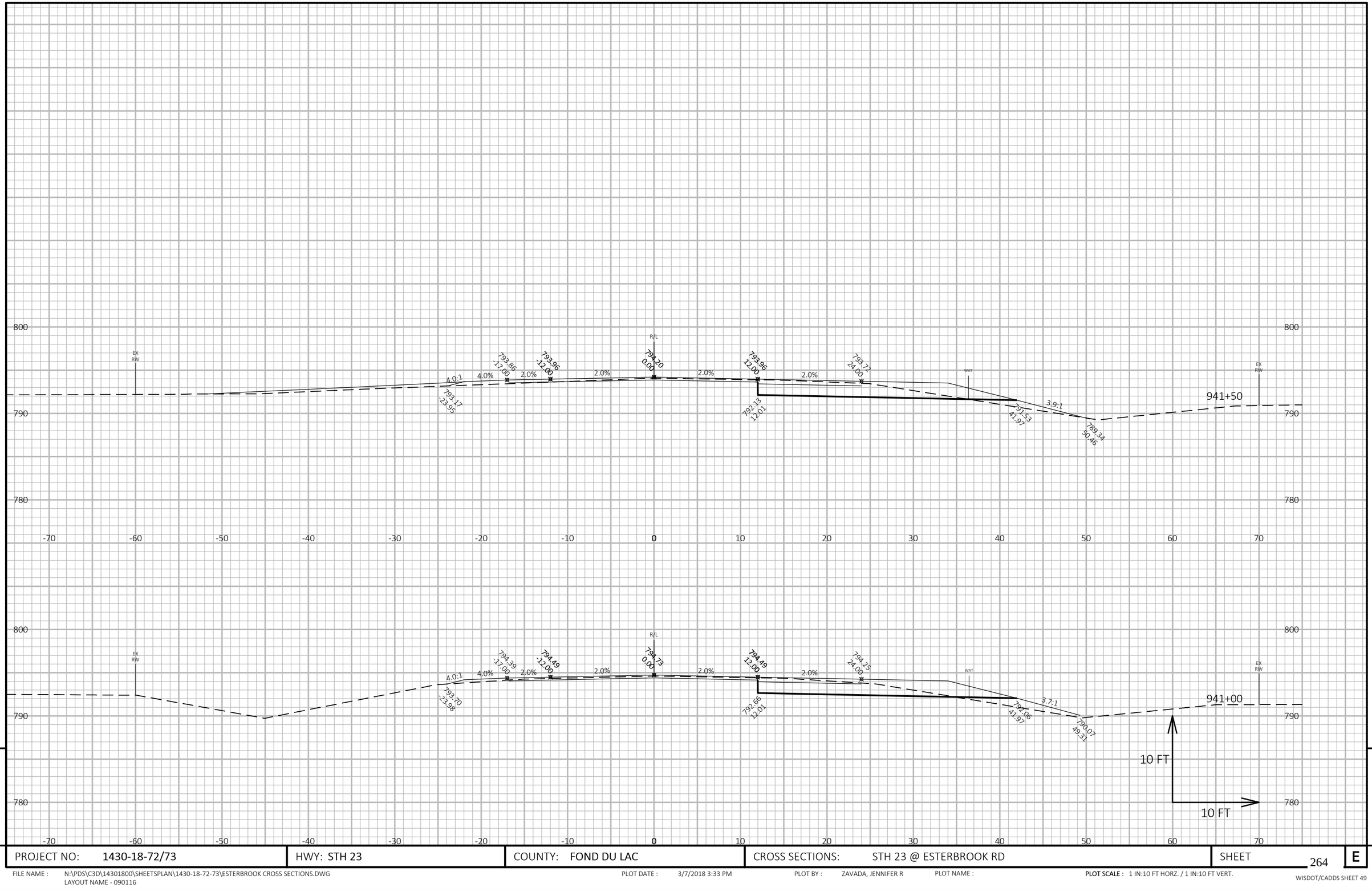


PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 263	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090115

PLOT DATE : 3/7/2018 3:33 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

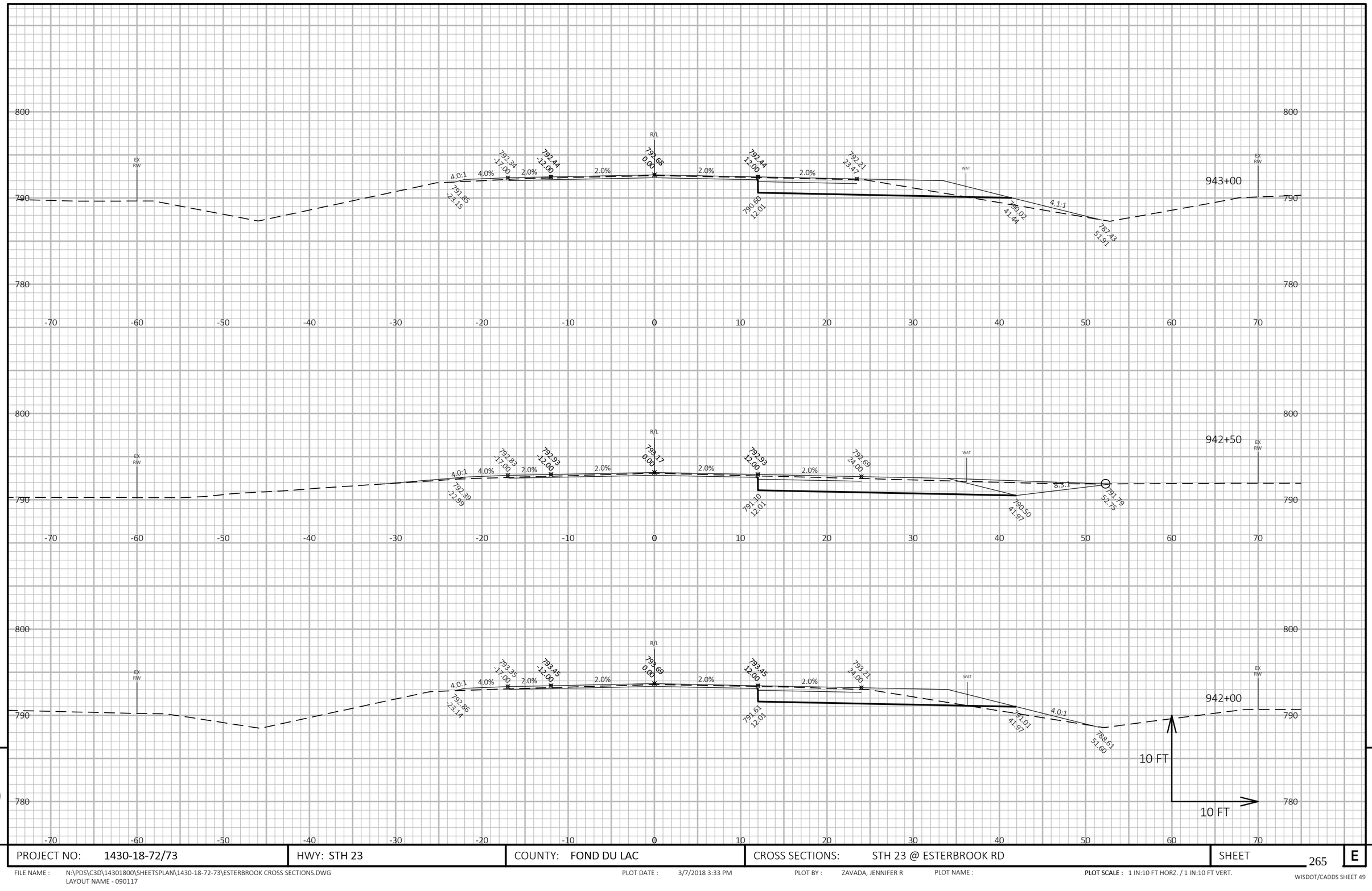
9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 264	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090116

PLOT DATE : 3/7/2018 3:33 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 265	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090117

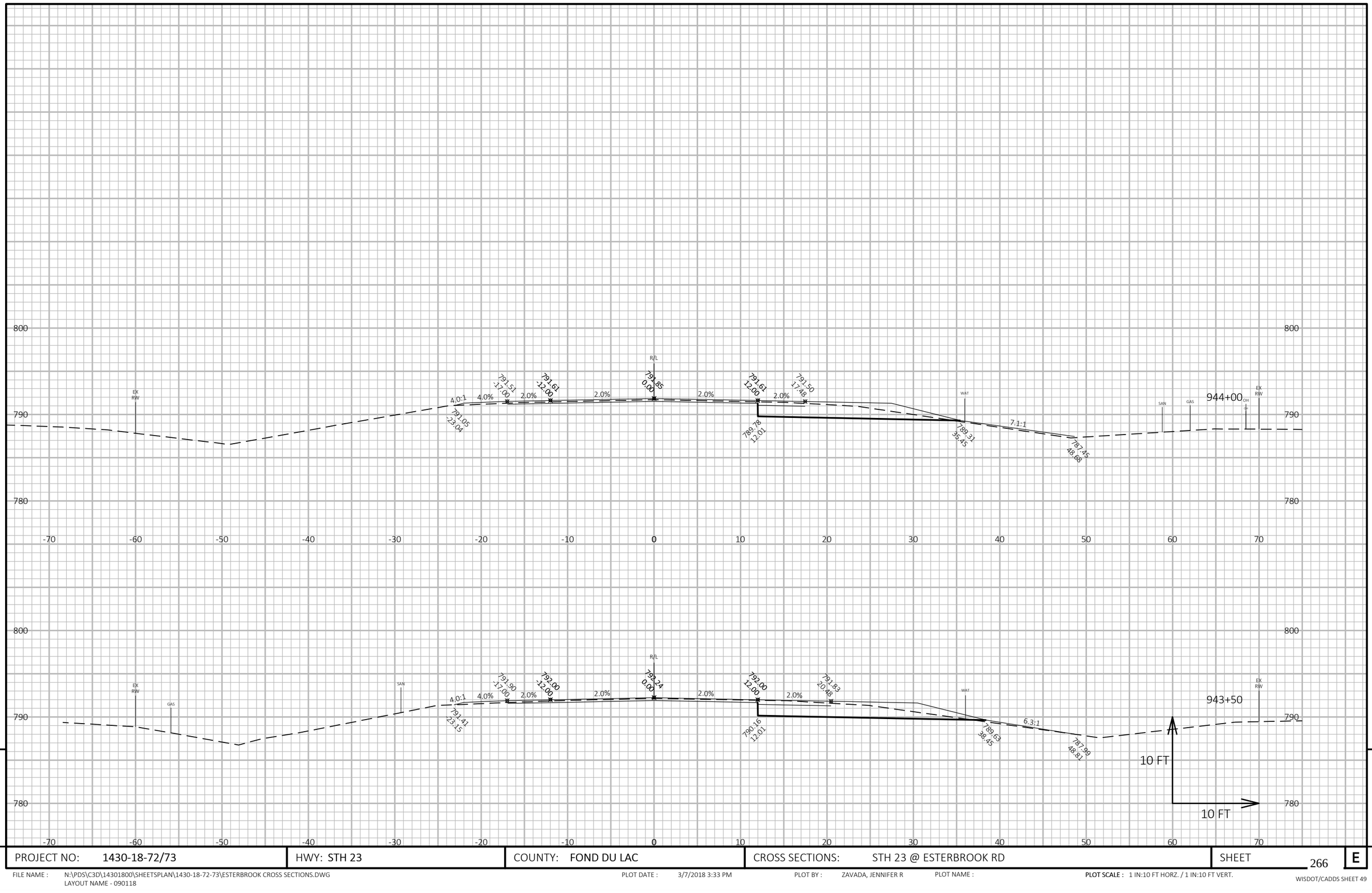
PLOT DATE : 3/7/2018 3:33 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



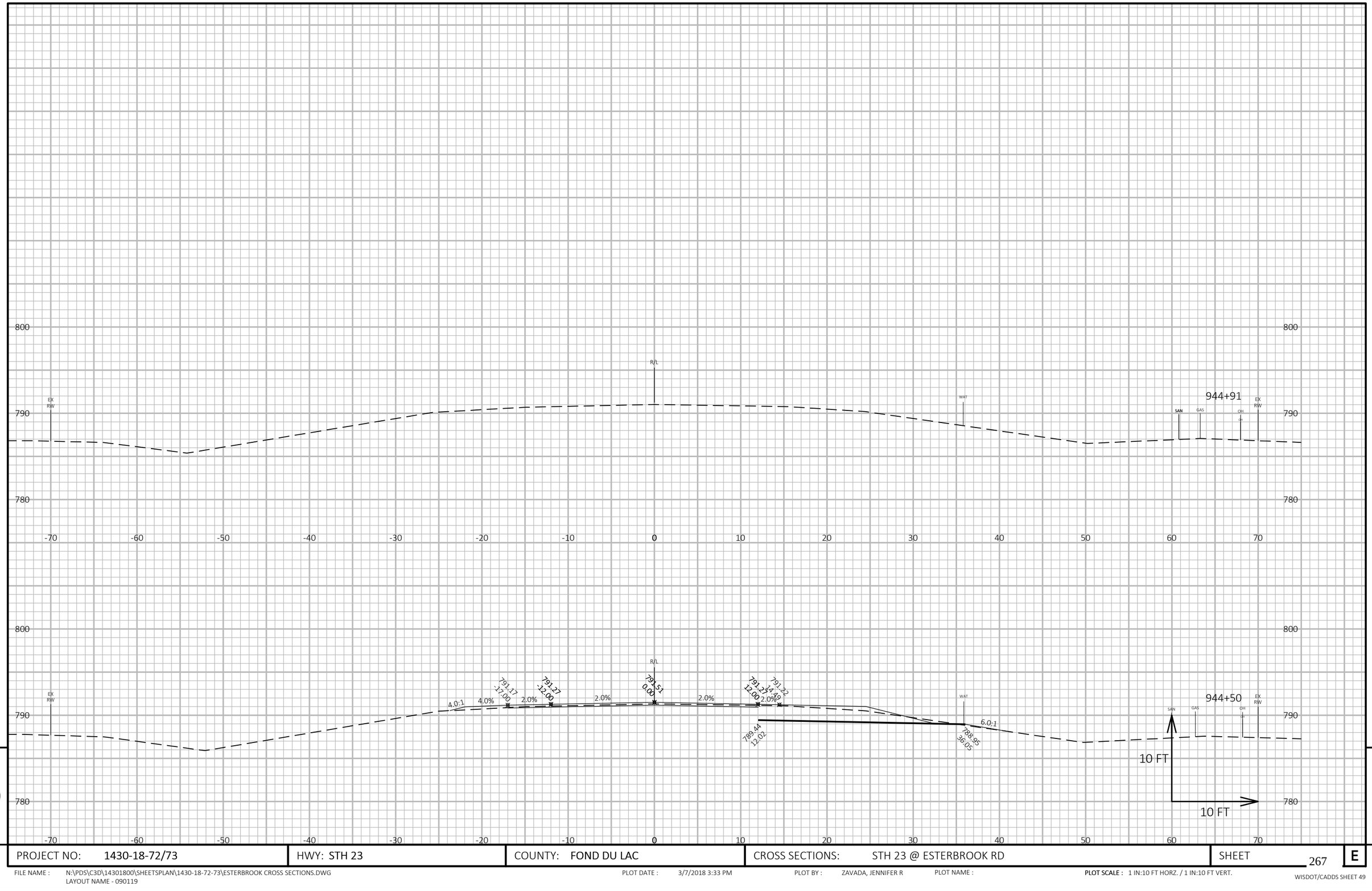
9 9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 266	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090118

PLOT DATE : 3/7/2018 3:33 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ ESTERBROOK RD	SHEET 267	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - 090119

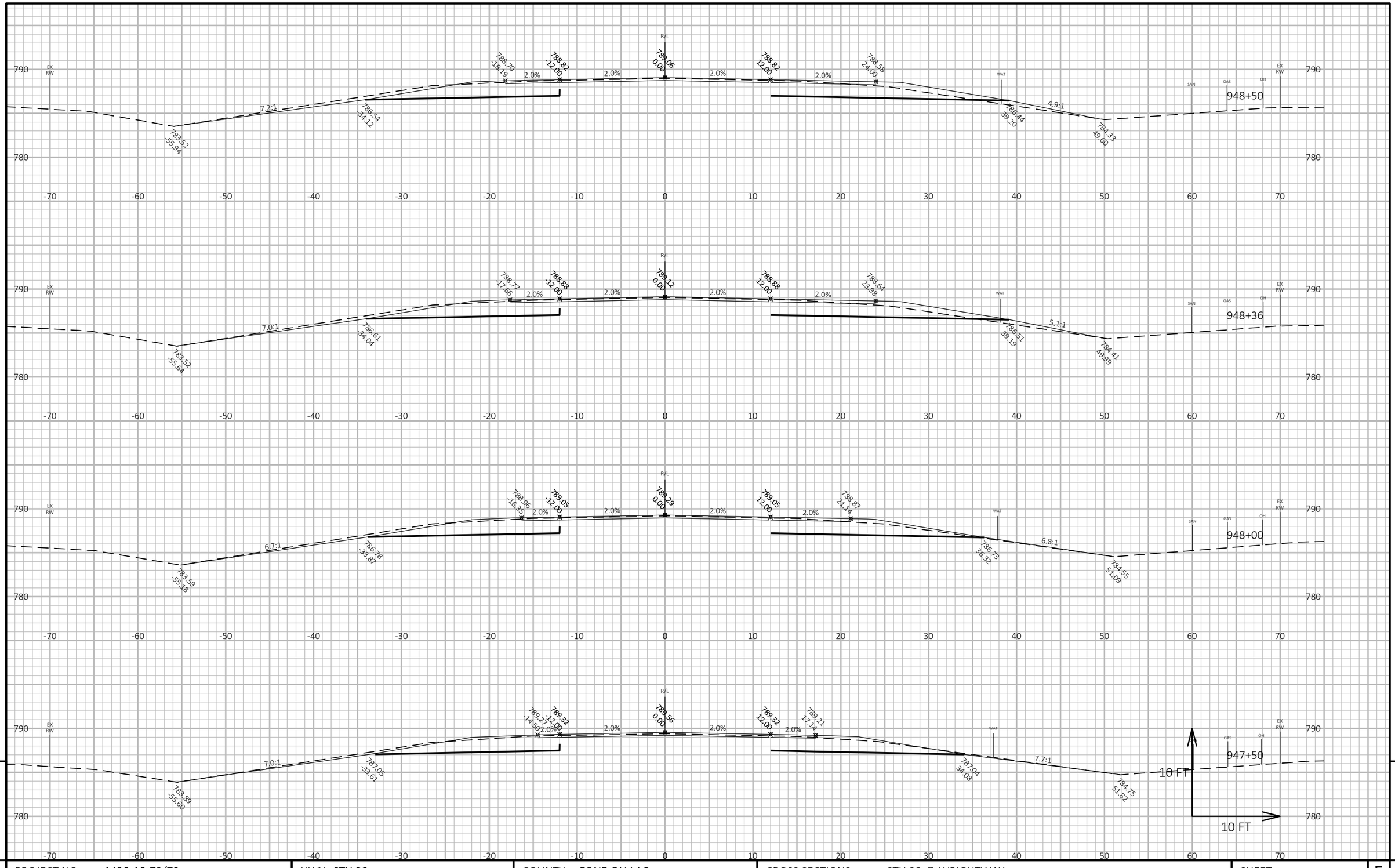
PLOT DATE : 3/7/2018 3:33 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY	SHEET 268	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (53)

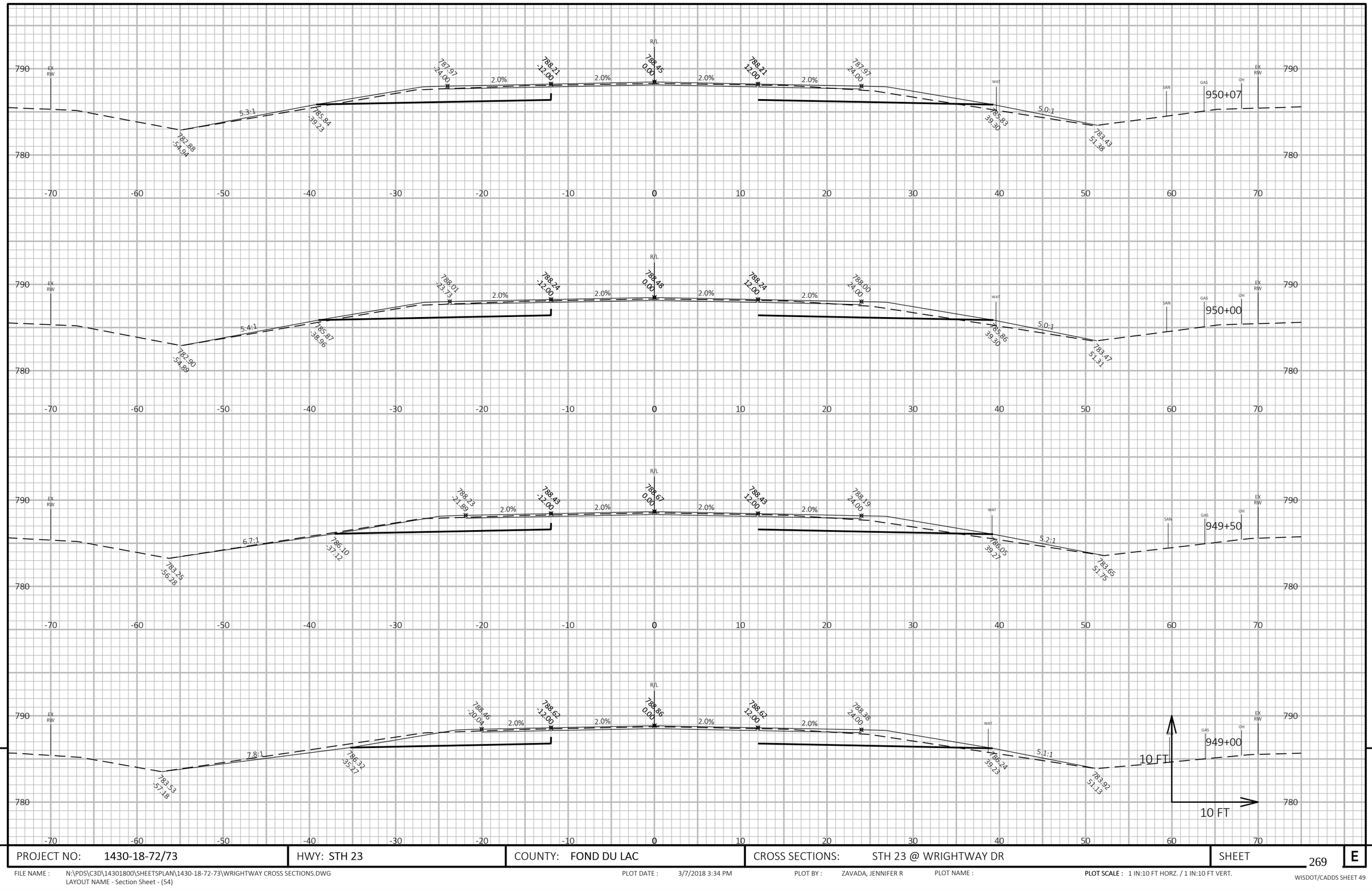
PLOT DATE : 3/7/2018 3:34 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY DR	SHEET 269	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (54)

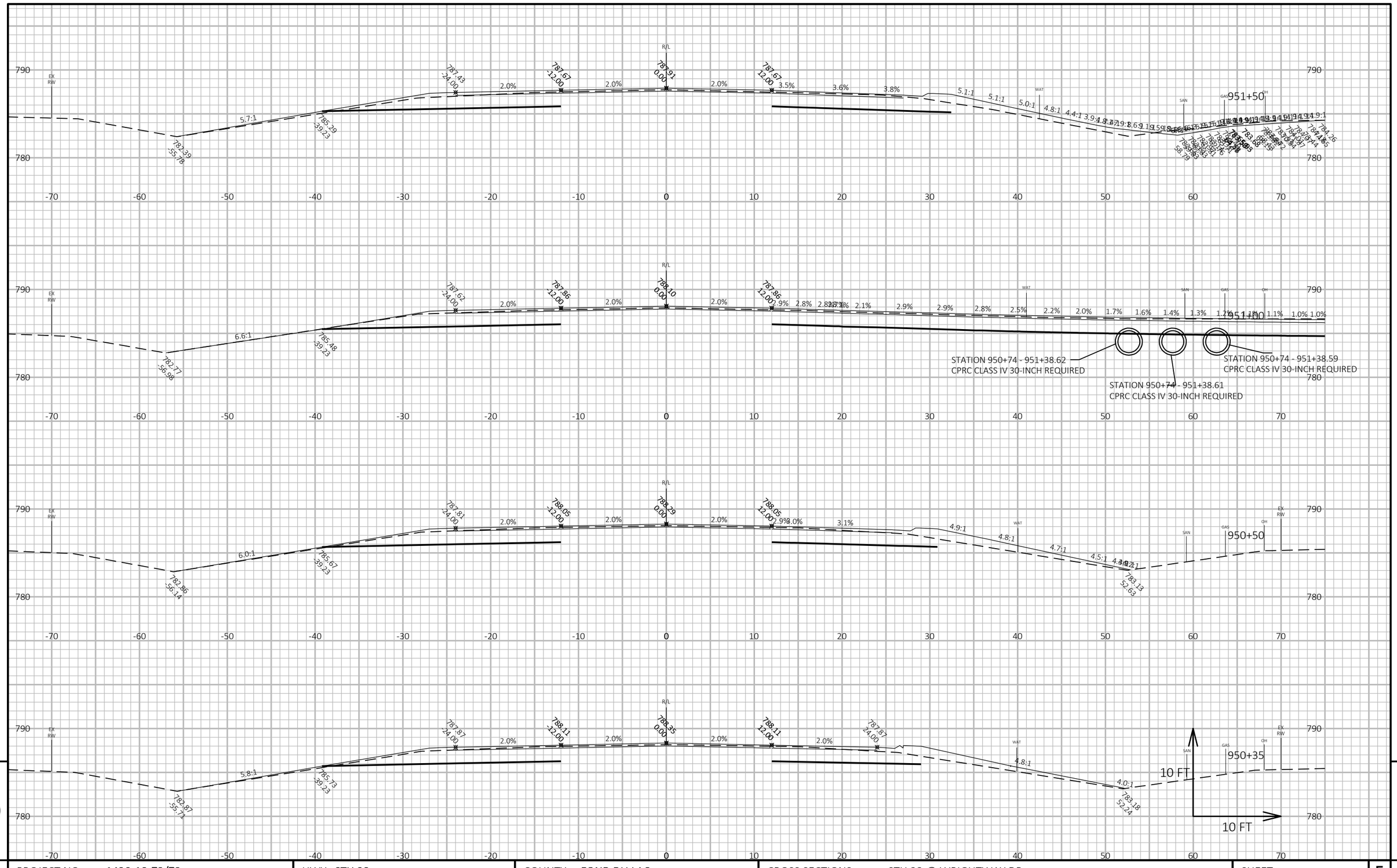
PLOT DATE : 3/7/2018 3:34 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY DR	SHEET 270	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (55)

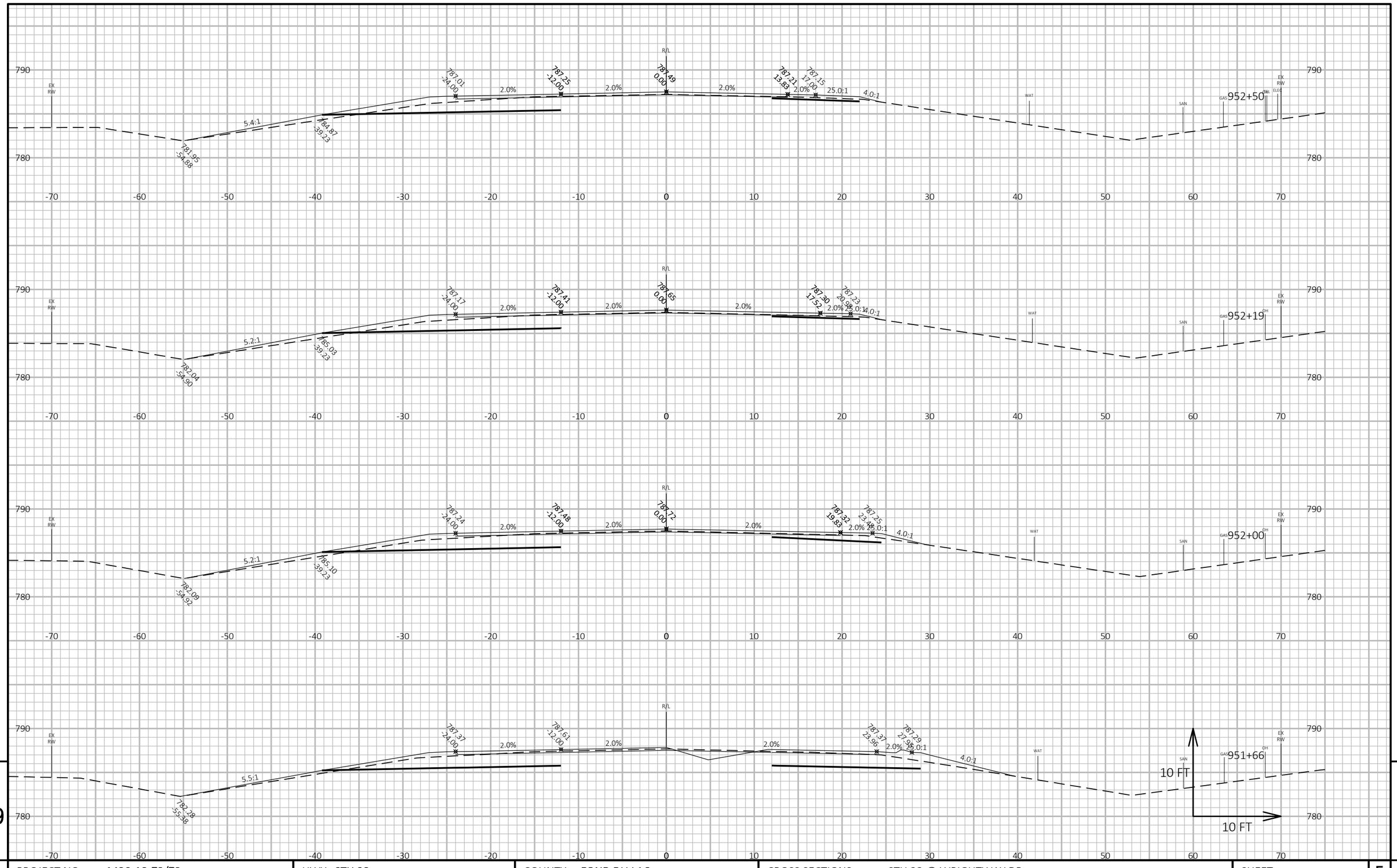
PLOT DATE : 3/7/2018 3:34 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY DR	SHEET 271	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (56)

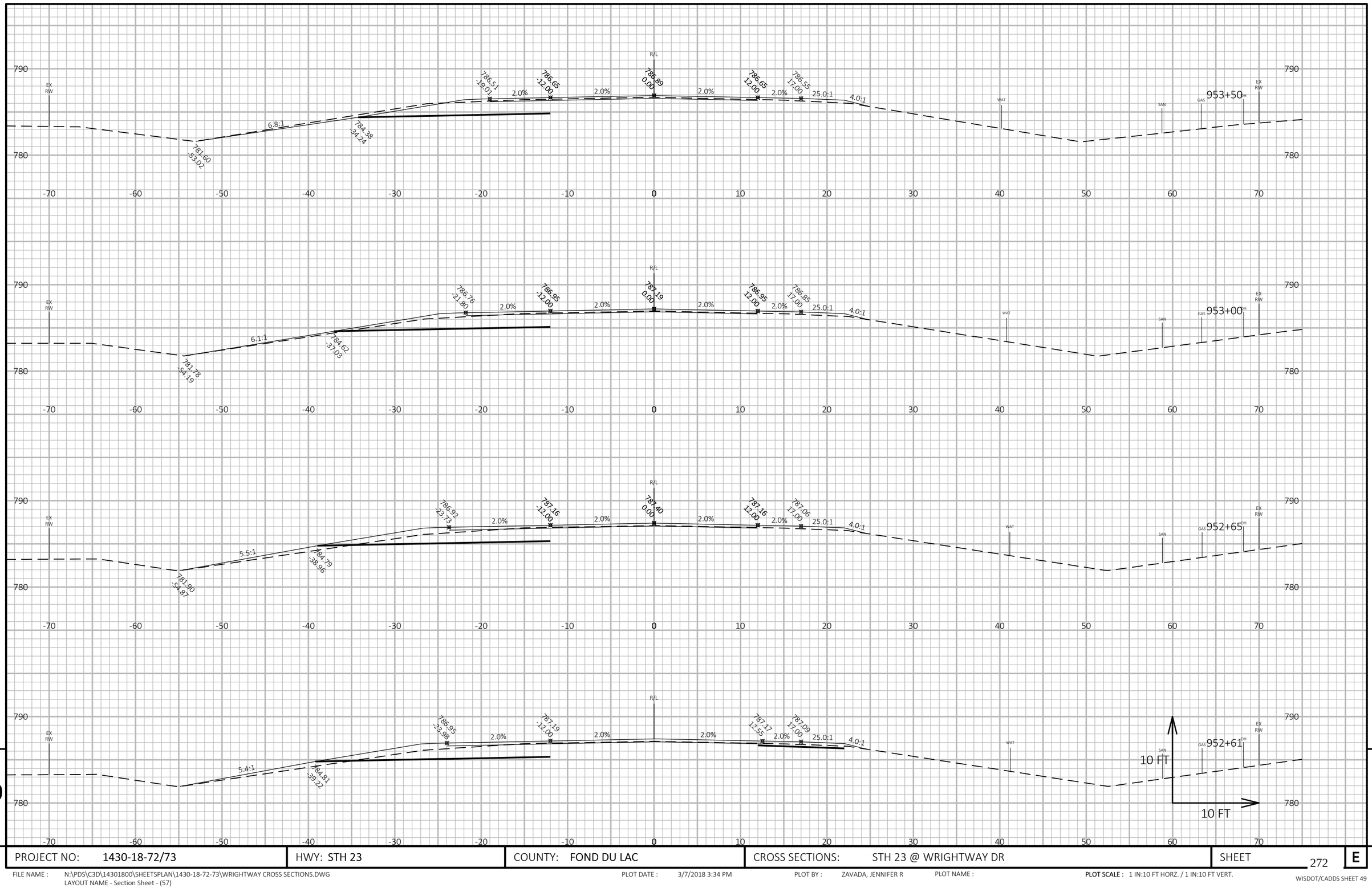
PLOT DATE : 3/7/2018 3:34 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49

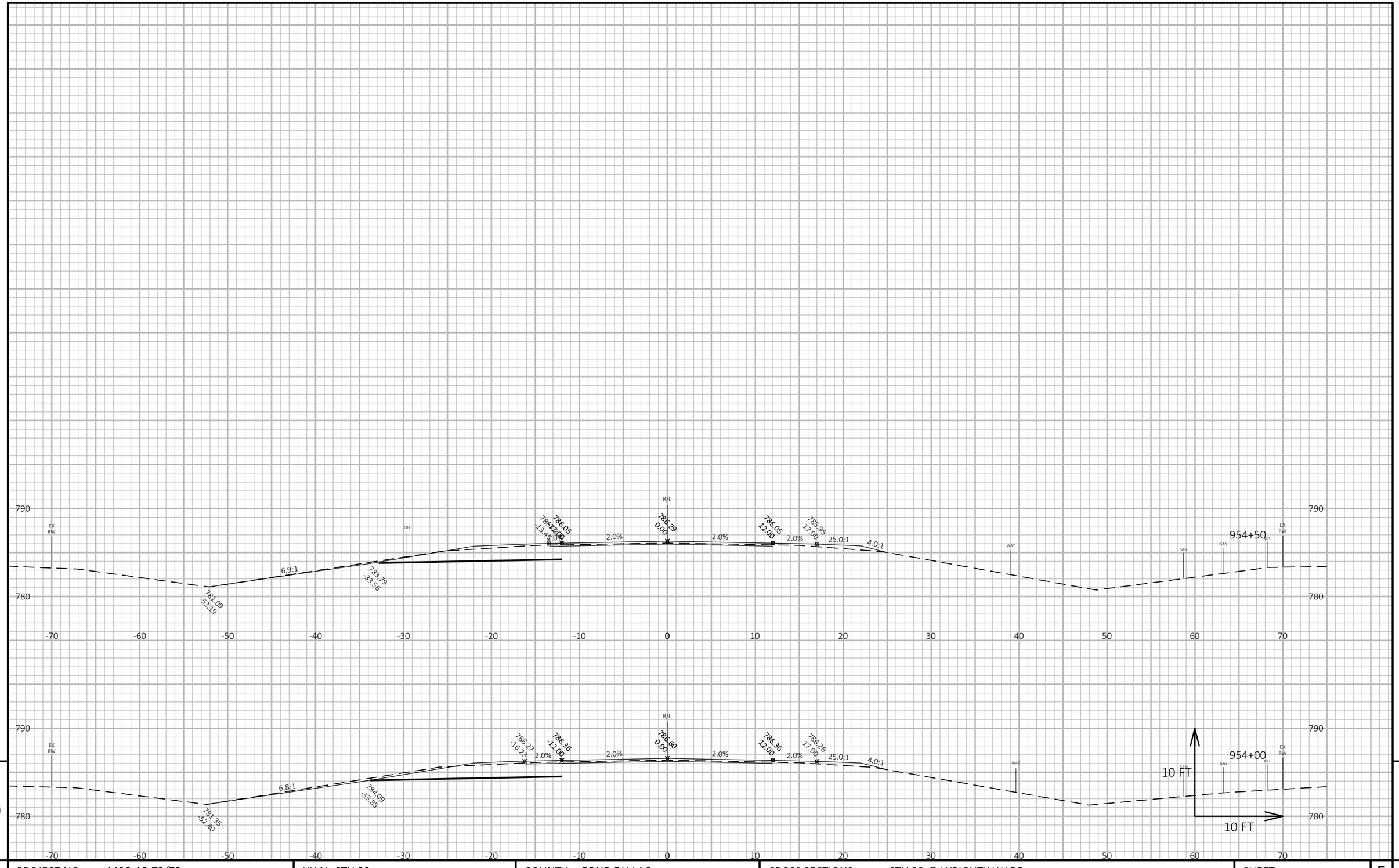


PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY DR	SHEET 272	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (57)

PLOT DATE : 3/7/2018 3:34 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ WRIGHTWAY DR	SHEET 273	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (58)

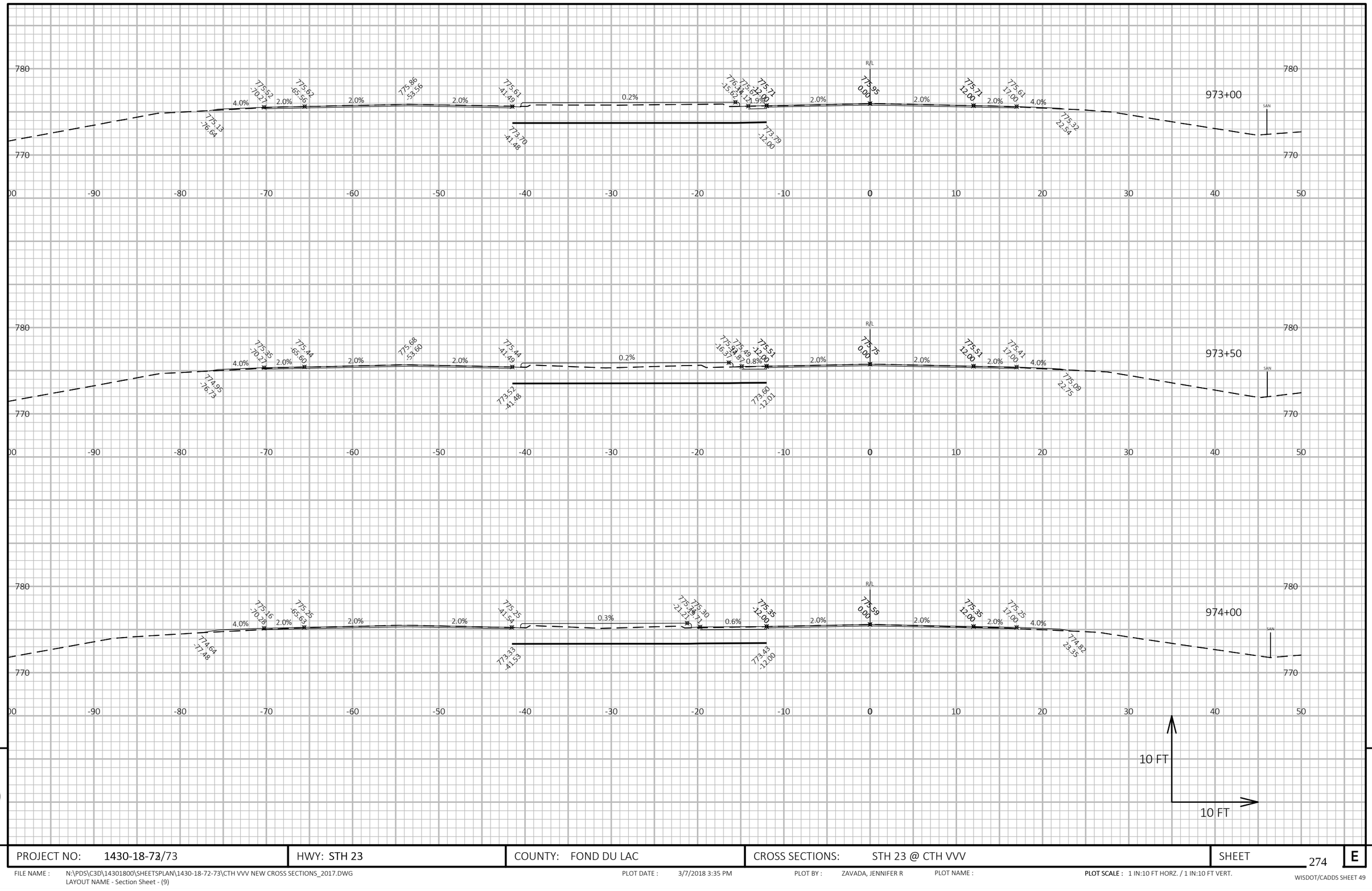
PLOT DATE : 3/7/2018 3:34 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ CTH VVV	SHEET 274	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\CTH VVV NEW CROSS SECTIONS_2017.DWG
LAYOUT NAME - Section Sheet - (9)

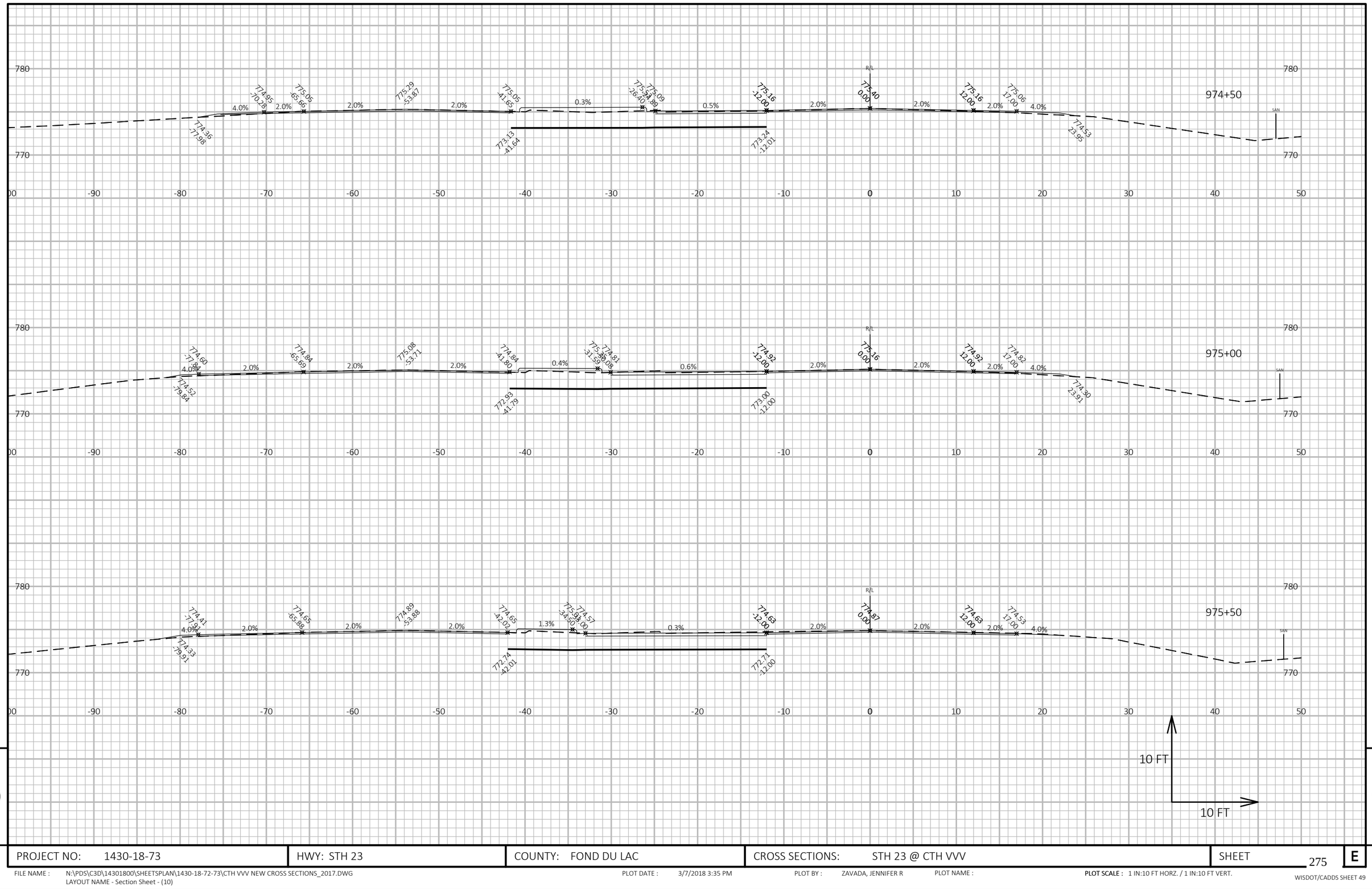
PLOT DATE : 3/7/2018 3:35 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ CTH VVV	SHEET 275	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\CTH VVV NEW CROSS SECTIONS_2017.DWG
LAYOUT NAME - Section Sheet - (10)

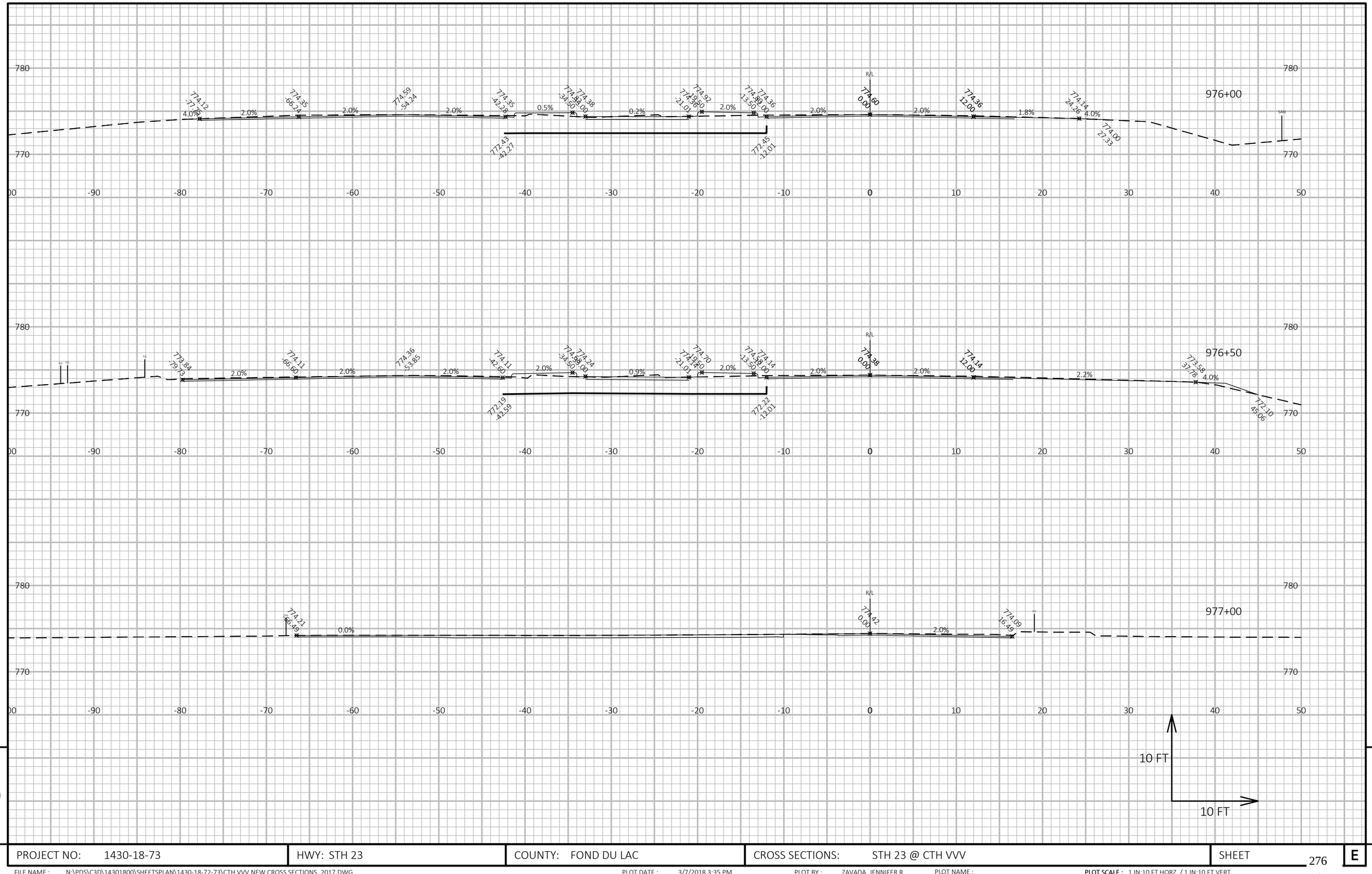
PLOT DATE : 3/7/2018 3:35 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ CTH VVV	SHEET 276	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\CTH VVV NEW CROSS SECTIONS_2017.DWG
LAYOUT NAME - Section Sheet - (11)

PLOT DATE : 3/7/2018 3:35 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

977+50

978+00

978+50

10 FT

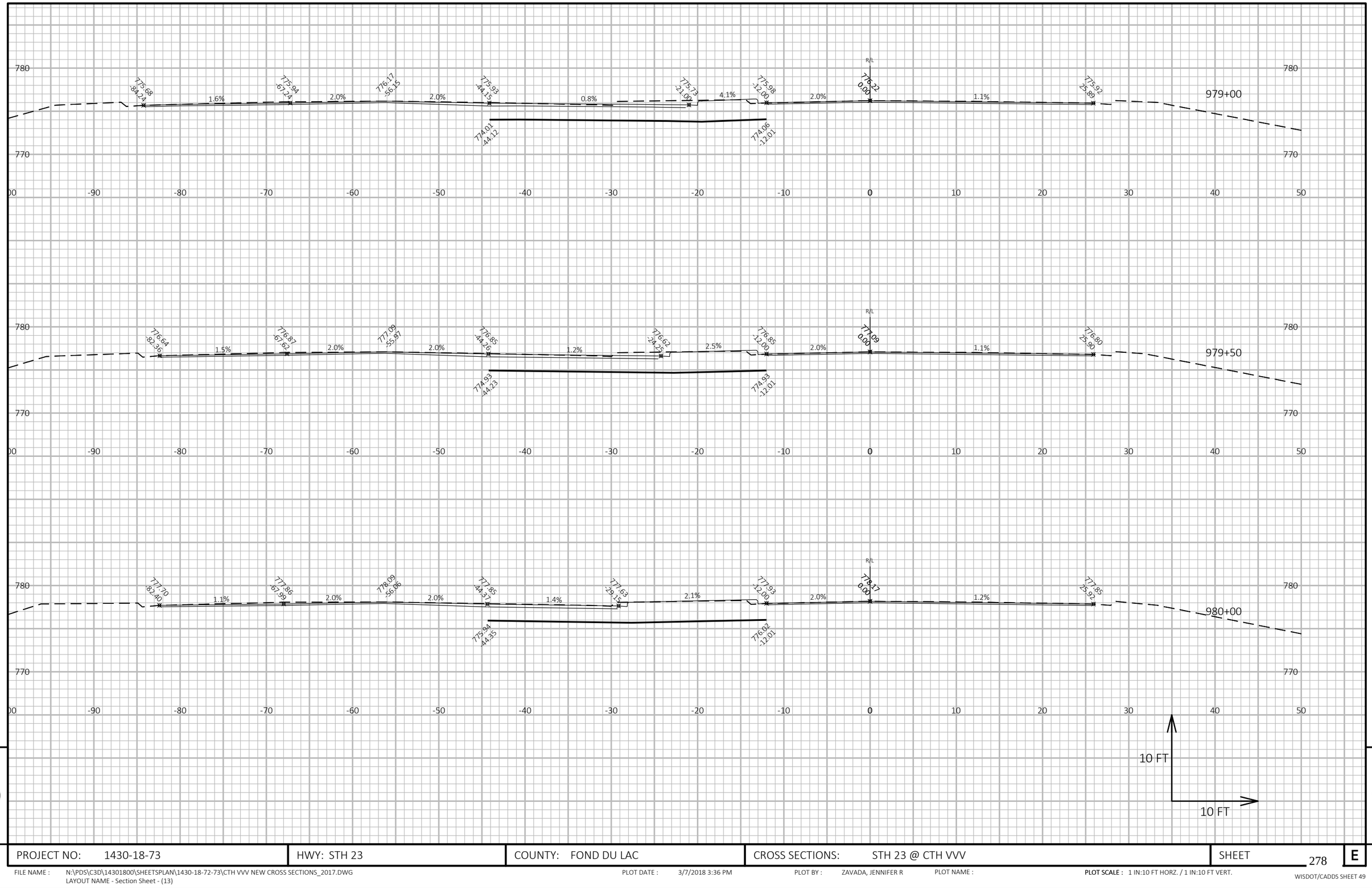
10 FT

PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ CTH VVV	SHEET 277	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\CTH VVV NEW CROSS SECTIONS_2017.DWG
LAYOUT NAME - Section Sheet - (12)

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1430-18-73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: STH 23 @ CTH VVV	SHEET 278	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\CTH VVV NEW CROSS SECTIONS_2017.DWG
LAYOUT NAME - Section Sheet - (13)

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9

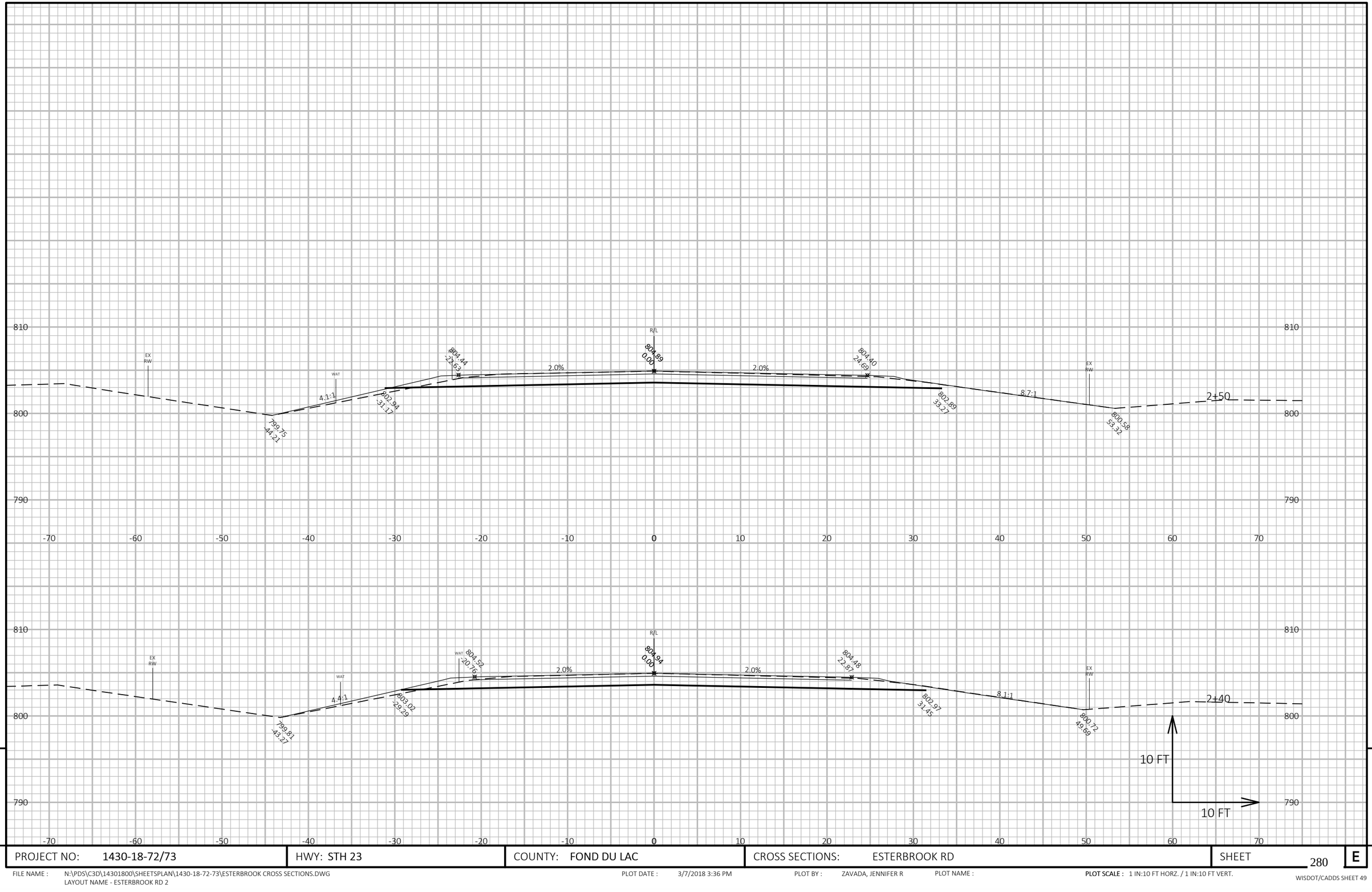
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: ESTERBROOK RD	SHEET 279	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - ESTERBROOK RD 1

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME :

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

WISDOT/CADDS SHEET 49



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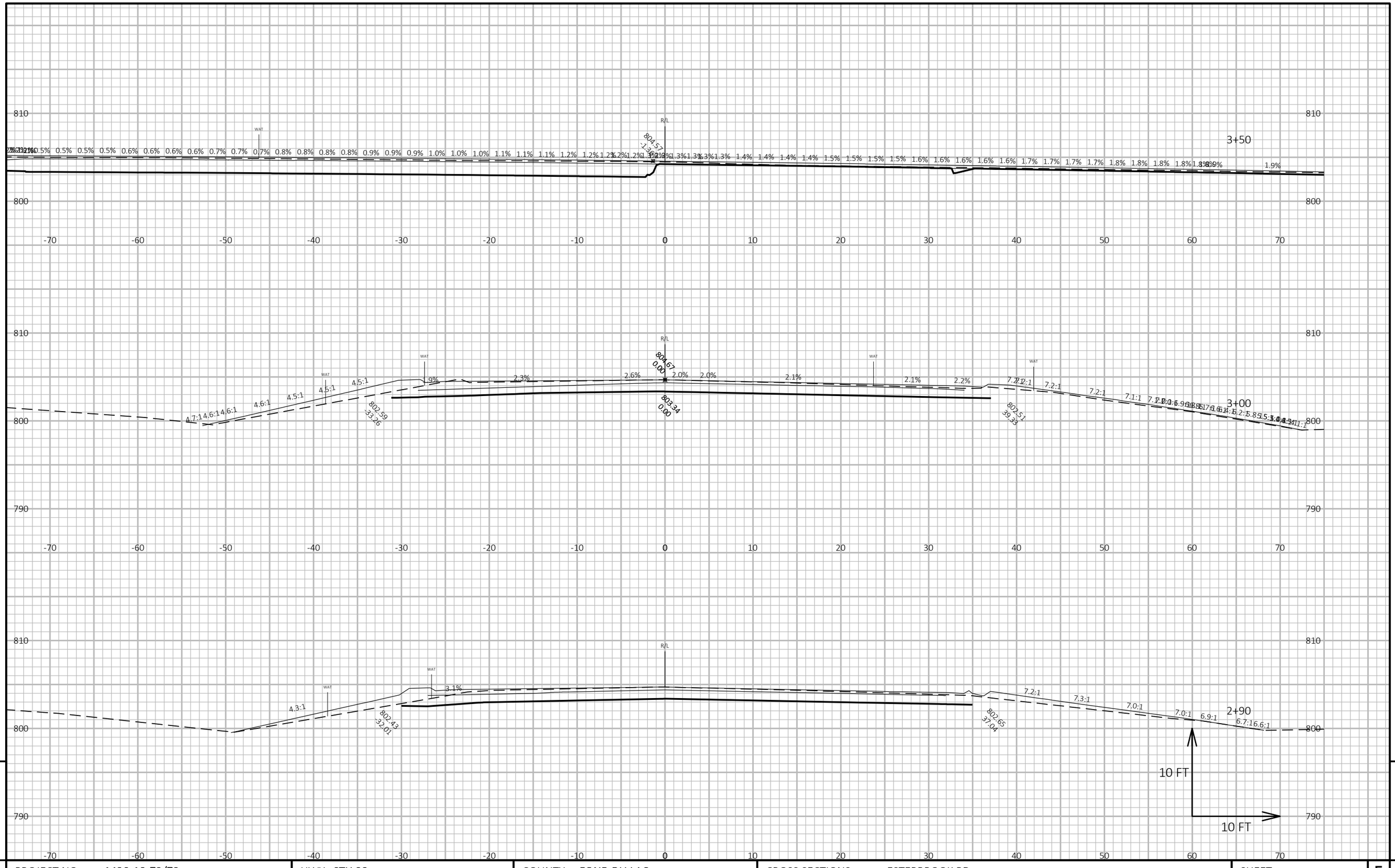
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: ESTERBROOK RD	SHEET 280	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - ESTERBROOK RD 2

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

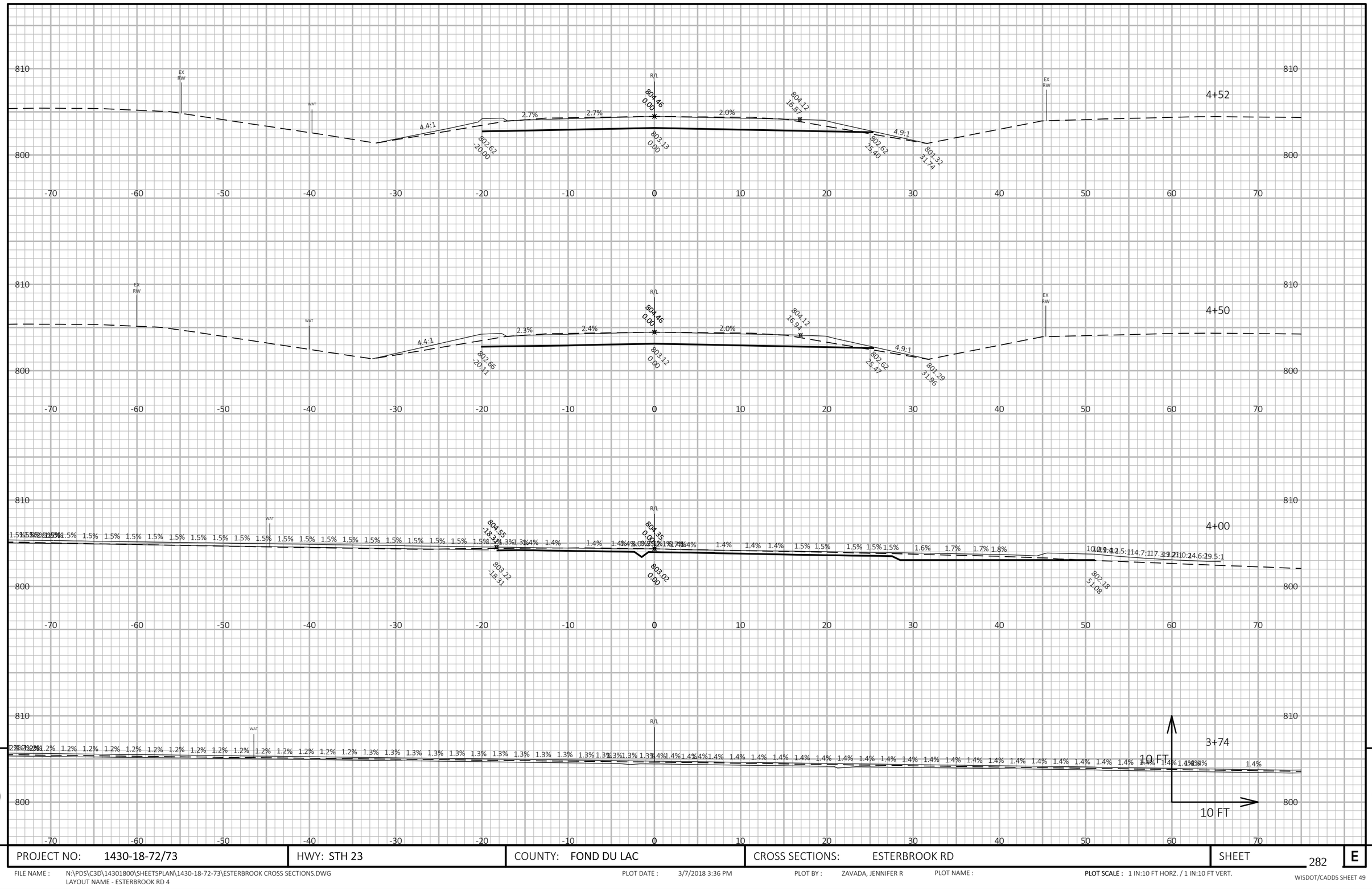


PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: ESTERBROOK RD	SHEET 281 E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - ESTERBROOK RD 3

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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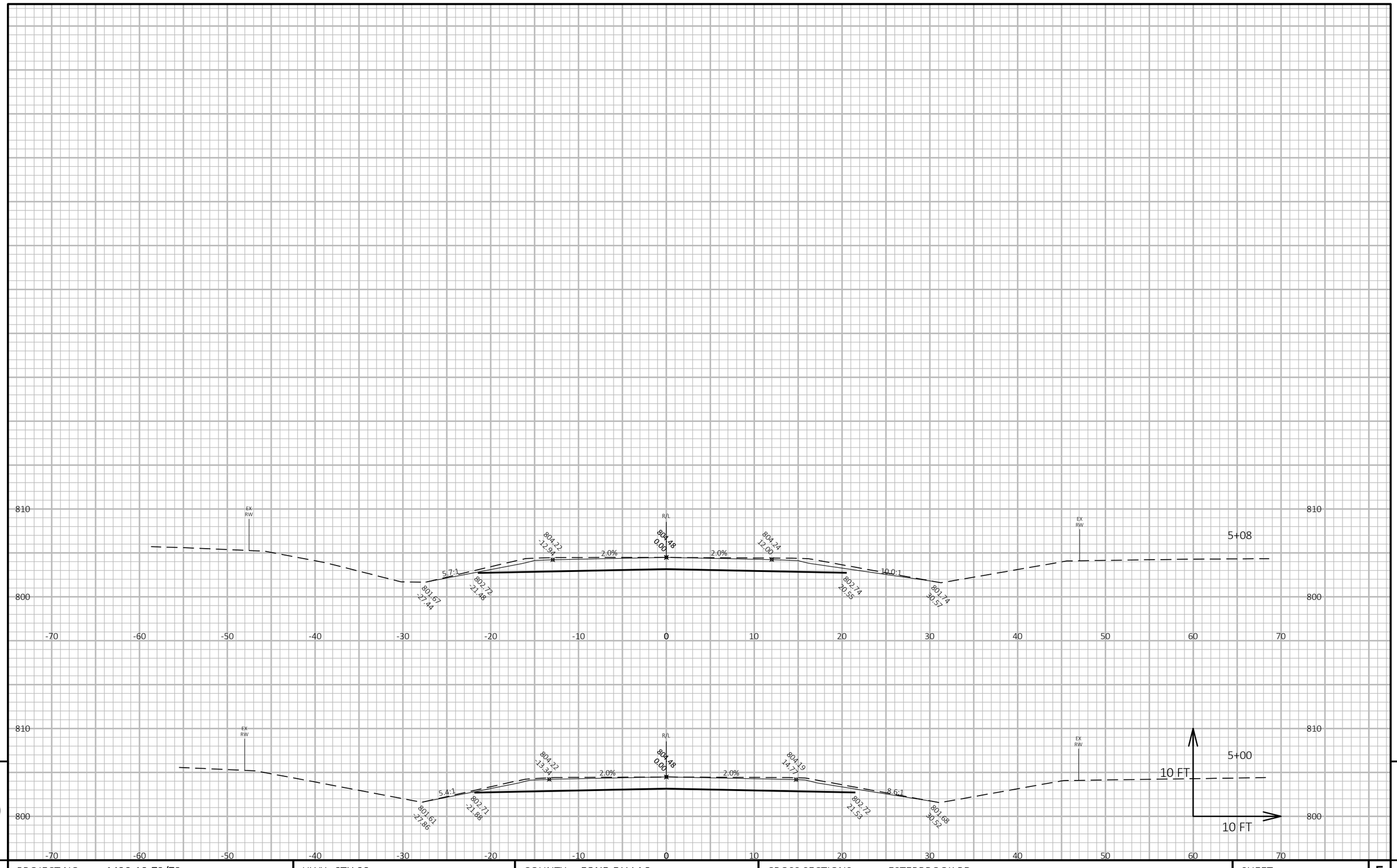
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: ESTERBROOK RD	SHEET 282	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - ESTERBROOK RD 4

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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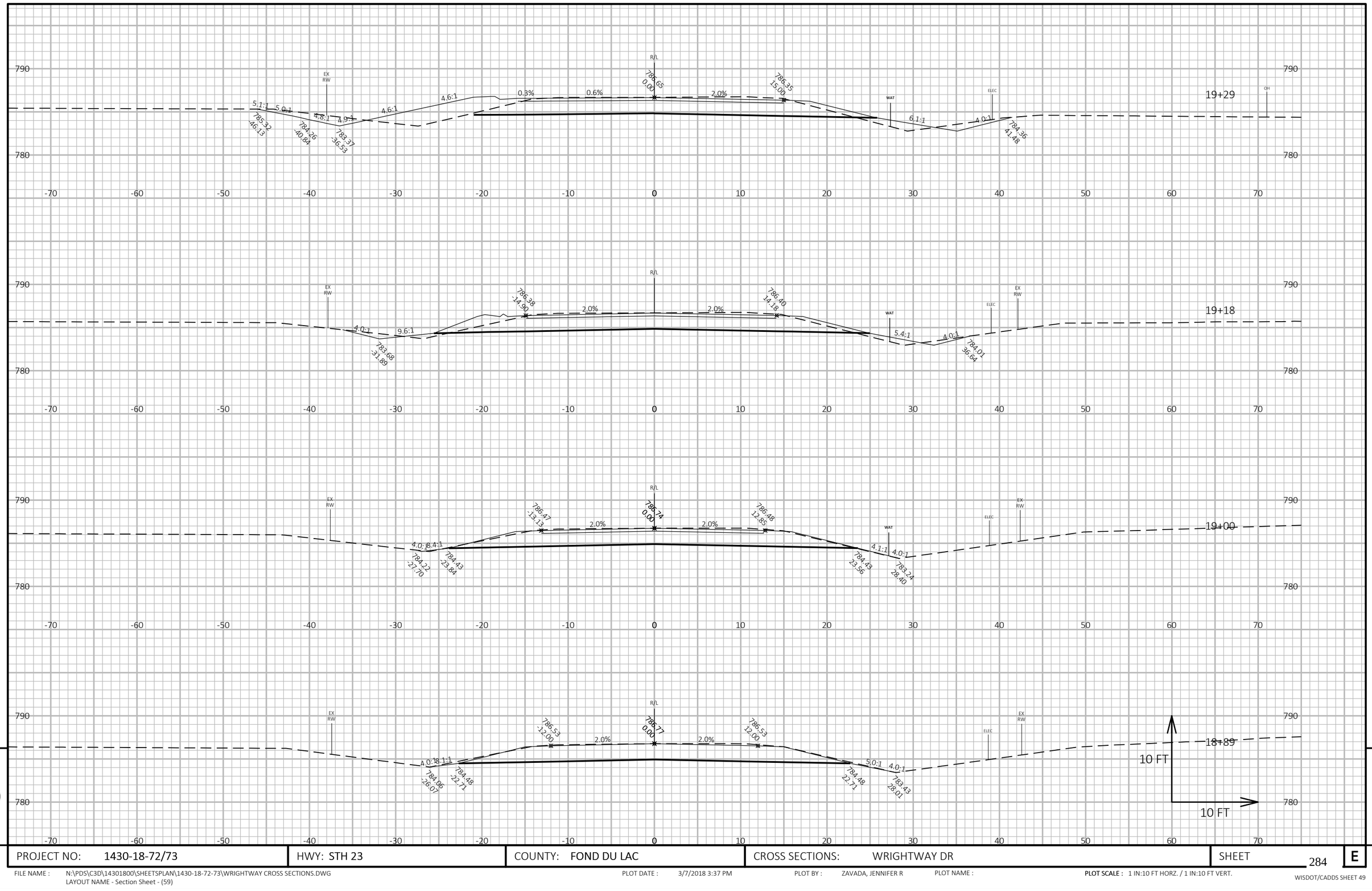
PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: ESTERBROOK RD	SHEET 283	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\ESTERBROOK CROSS SECTIONS.DWG
LAYOUT NAME - ESTERBROOK RD 5

PLOT DATE : 3/7/2018 3:36 PM PLOT BY : ZAVADA, JENNIFER R PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1430-18-72/73	HWY: STH 23	COUNTY: FOND DU LAC	CROSS SECTIONS: WRIGHTWAY DR	SHEET 284	E

FILE NAME : N:\PDS\C3D\14301800\SHEETSPLAN\1430-18-72-73\WRIGHTWAY CROSS SECTIONS.DWG
LAYOUT NAME - Section Sheet - (59)

PLOT DATE : 3/7/2018 3:37 PM

PLOT BY : ZAVADA, JENNIFER R

PLOT NAME :

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

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov