MAD NOVEMBER 2023

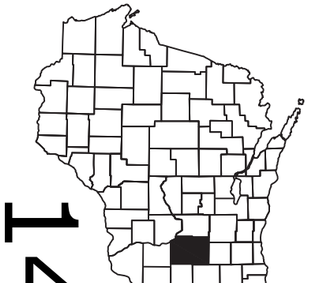
PROJECT ID: 6085-02-75
WITH: 6085-02-77

COUNTY: DANE

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 = 168



14

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MAZOMANIE - SUN PRAIRIE

USH 151 INTERCHANGE

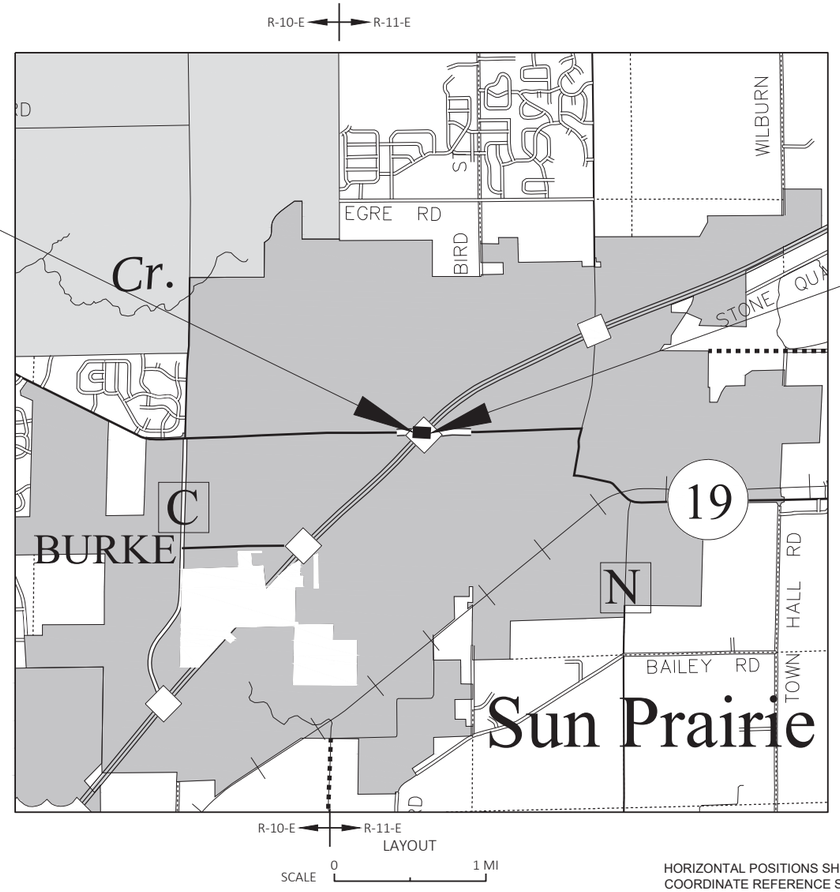
STH 19
DANE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6085-02-75	WISC 2024025	1

STATE PROJECT NUMBER
6085-02-75

BEGIN PROJECT 6085-02-75
STA 119+68.67'EB'
X=860,742.90
Y=523,975.87

END PROJECT 6085-02-75
STA 132+90.47'EB'



DESIGN DESIGNATION

A.A.D.T.	2025	=	15,800 (TURN LANE)
A.A.D.T.	2045	=	16,500 (TURN LANE)
D.H.V.		=	2,000
D.D.		=	59/41
T.		=	7.5%
DESIGN SPEED		=	40 MPH
ESALS		=	2,200,000

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

TOTAL NET LENGTH OF CENTERLINE = 0.250 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY:

ONEIDA Engineering Solutions

WISCONSIN
KYLE CORNELIUS
46106-6
MADISON, WI
PROFESSIONAL ENGINEER

DATE: 10/18/22 Kyle Cornelius (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	ONEIDA ENGINEERING SOLUTIONS
Designer	ONEIDA ENGINEERING SOLUTIONS
Project Manager	DAVID SCHMIDT, PE
Regional Examiner	SW REGION
Regional Supervisor	JENNIFER KOBRYN, PE

APPROVED FOR THE DEPARTMENT

DATE: David Schmidt Digitally signed by David Schmidt Date: 2023.07.24 13:35:36-05'00' (Signature)

E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\010101_TI.DWG PLOT DATE : 10/11/2022 10:48 AM PLOT BY : KYLE CORNELIUS PLOT NAME :

UTILITIES

ALLIANT ENERGY - ELECTRICITY
ADAM KROHN
6462 BLANCHAR'S CROSSING
WINDSOR, WI 53598
PHONE: (920) 290-5284
EMAIL: ADAMKROHN@ALLIANTENERGY.COM

ATC MANAGEMENT, INC - ELECTRICITY/TRANSMISSION
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
EMAIL: DVOSBERG@ATCLLC.COM

SPECTRUM F/K/A CHARTER COMMUNICATIONS - COMMUNICATIONS
DERRICK BUZZELL
2701 DANIELS STREET
MADISON, WI 53718
PHONE: (608) 287-4505
EMAIL: DERRICK.BUZZELL@CHARTER.COM

CITY OF SUN PRAIRIE - SEWER
ADAM SCHLEICHER
300 E MAIN ST
SUN PRAIRIE, WI 53590
PHONE: (608) 825-1170
EMAIL: ASCHLEICHER@CITYOFSUNPRAIRIE.COM

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION
TYLER COFFMAN
330 BLACKBURN STREET
RIPON, WI 54971
PHONE: (217) 491-7186
EMAIL: TCOFFMAN@MSCON.COM

SUN PRAIRIE UTILITIES - ELECTRICITY
ANDREW HIRVELA
125 W. MAIN STREET
SUN PRAIRIE, WI 53590
PHONE: (608) 837-5500
EMAIL: AHIRVELA@MYSPU.ORG

SUN PRAIRIE UTILITIES - WATER
ANDREW HIRVELA
125 W. MAIN ST
SUN PRAIRIE, WI 53590
PHONE: (608) 837-5500
EMAIL: AHIRVELA@MYSPU.ORG

VERIZON BUSINESS GROUP - COMMUNICATION LINE
RJ CICATELLO
(BEAR COMMUNICATIONS, LLC)
15725 W. RYERSON ROAD
NEW BERLIN, WI 53151
PHONE: (262) 232-1323
EMAIL: RANDY.CICATELLO@VERIZON.COM

WE ENERGIES - GAS/PETROLEUM
OTIS DUNNING
500 S. 116TH STREET
WEST ALLIS, WI 53214
PHONE: (262) 365-6414
EMAIL: OTIS.DUNNING1@WE-ENERGIES.COM

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

DESIGN CONSULTANT

LISA DREIFUERST
ONEIDA ENGINEERING SOLUTIONS, LLC (OES)
5100 EASTPARK BLVD, SUITE 300
MADISON, WI 53718
PHONE: (608) 243-6478
EMAIL: LDREIFUERST@OESCGROUP.COM

WISDOT PROJECT MANAGER

DAVID SCHMIDT
WISDOT SW REGION PROJECT MANAGER
2101 WRIGHT ST
MADISON, WI 53704
PHONE: (608) 246-3867
EMAIL: DAVID2.SCHMIDT@DOT.WI.GOV

WDNR LIAISON

ERIC HEGGELUND
DNR SOUTH CENTRAL REGION HEADQUARTERS
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
PHONE: (608) 228-7927
EMAIL: ERIC.HEGGELUND@WISCONSIN.GOV

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
PAVEMENT AND CURB & GUTTER REPAIRS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC SIGNALS
TRAFFIC CONTROL
DETOUR PLAN

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. THE CONTRACTOR SHALL COORDINATE HIS/HER CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
3. TEMPORARY STORAGE OF ANY EQUIPMENT OR EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WETLANDS, UNLESS APPROVED BY THE ENGINEER.
4. PLACE EROSION CONTROL DEVICES IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER. EROSION CONTROL FEATURES ARE SHOWN IN APPROXIMATE LOCATIONS WITH EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
5. NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
6. RESHAPING AND SEEDING OF ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OPERATIONS OUTSIDE OF THE ENGINEER DETERMINED CONSTRUCTION LIMITS ARE INCIDENTAL TO THE CONTRACT.

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 3.50 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.88 ACRES

2

2

N

SB USH 151 EXIT RAMP

NB USH 151 ENTRANCE RAMP

125+00 'WB'

130+00 'WB'

19

120+00 'EB'

125+00 'EB'

19

130+00 'EB'

BEGIN PROJECT 6085-02-75
STA 119+68.67'EB'

SB USH 151 ENTRANCE RAMP

NB USH 151 EXIT RAMP

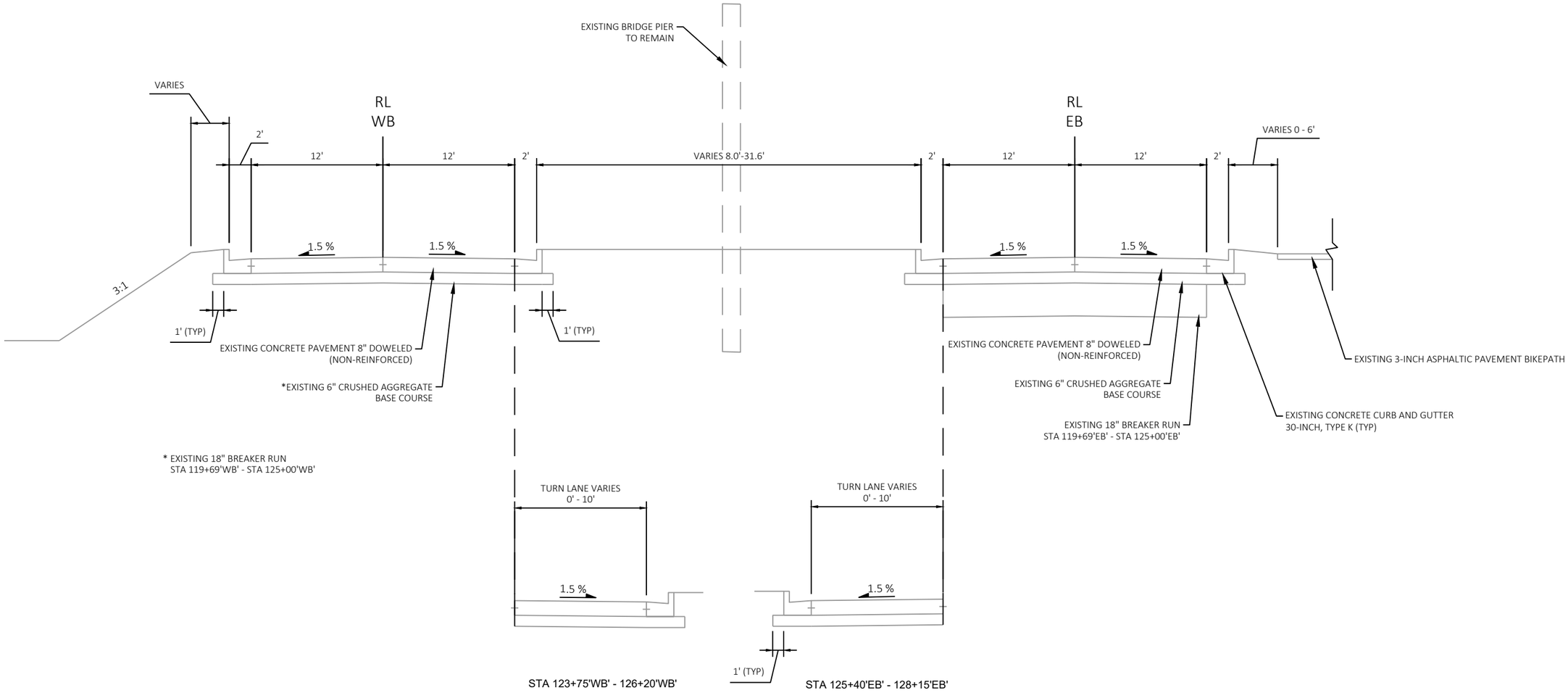
END PROJECT 6085-02-75
STA 132+90.47'EB'

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 01

PLOT DATE : 10/24/2022 11:13 AM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

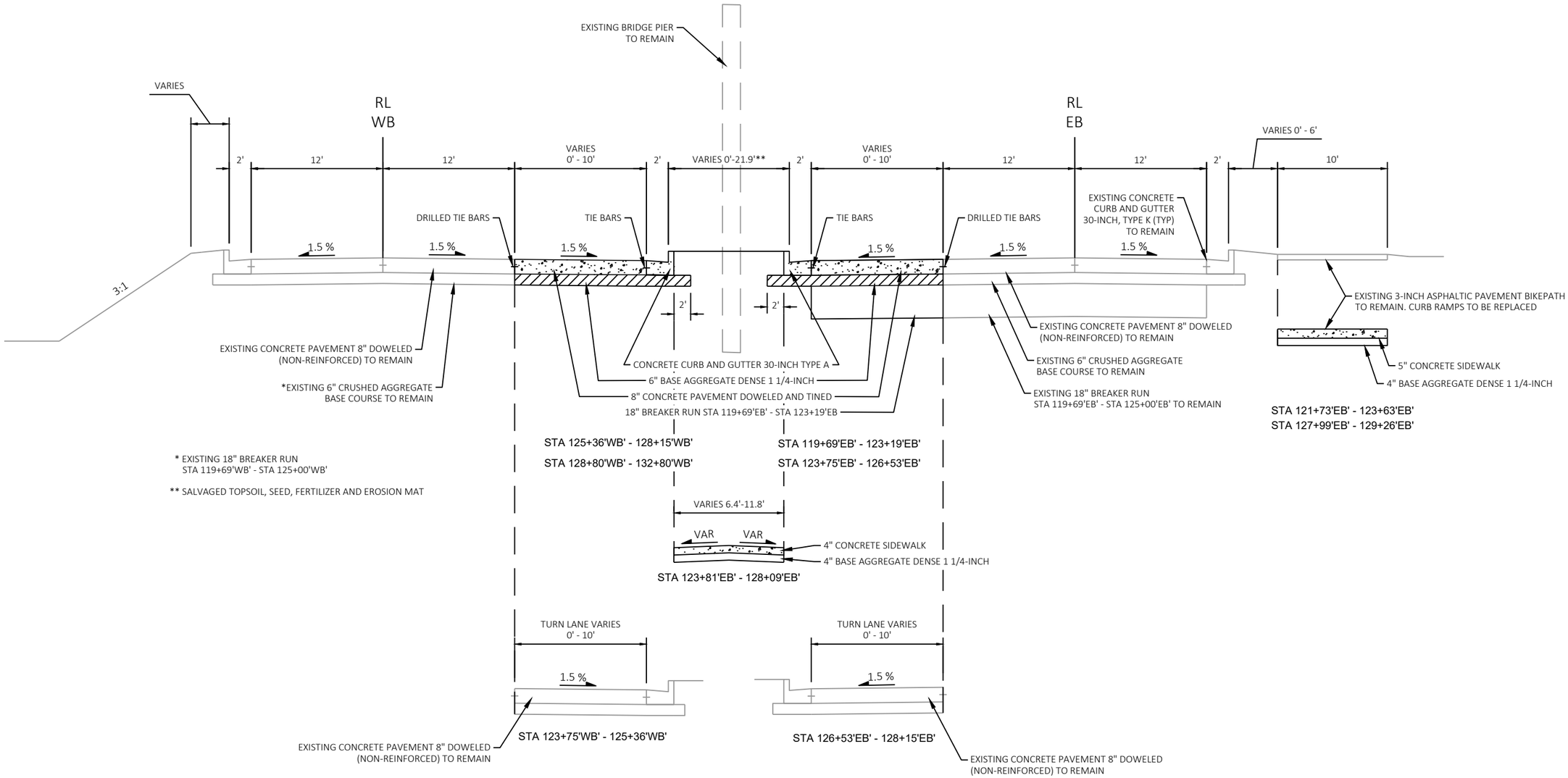


* EXISTING 18" BREAKER RUN
STA 119+69'WB' - STA 125+00'WB'

EXISTING TYPICAL SECTION

STA 119+69'EB' - 132+90'EB'

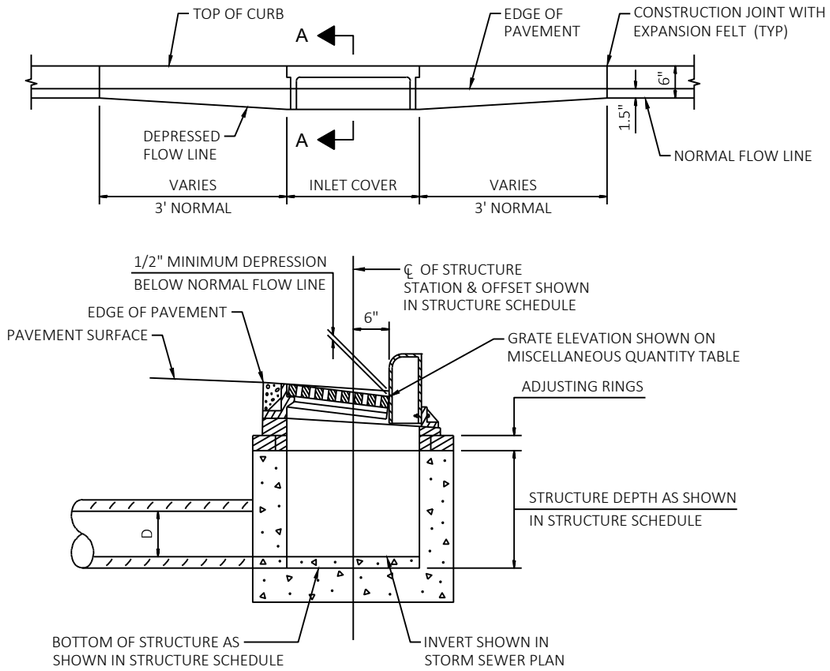
2



FINISHED TYPICAL SECTION

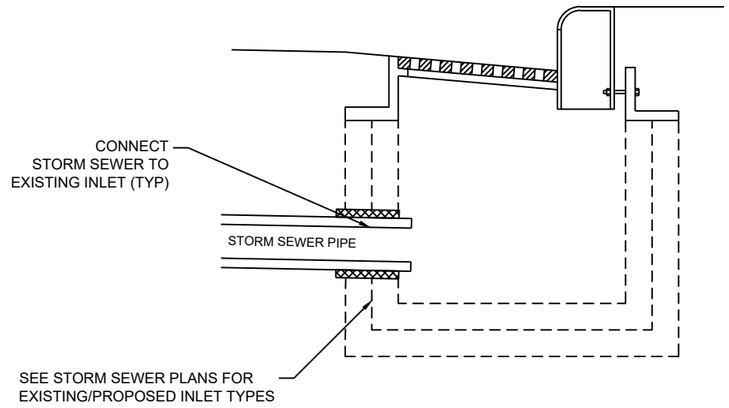
STA 119+69'EB' - 132+90'EB'

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 5	E

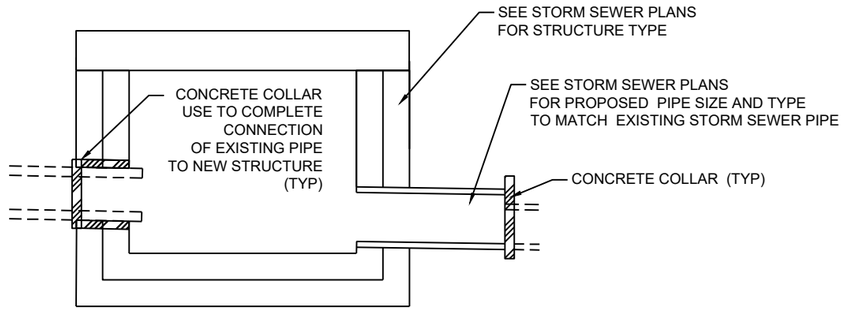


SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS



RECONNECT EXISTING STORM SEWER LATERAL DETAIL



CONCRETE COLLAR DETAIL

2

LEGEND

- REMOVING ASPHALTIC SURFACE
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING STORM SEWER
- X — CLEARING AND GRUBBING (TREE REMOVALS)

N

SB USH 151 EXIT RAMP

STH 19

121'WB' 122'WB' 123'WB' 124'WB' 125'WB' 126'WB'

119'EB' 120'EB' 121'EB' 122'EB' 123'EB' 124'EB' 125'EB' 126'EB'

REMOVING INLET

REMOVE 9' OF 12-INCH STORM SEWER

12" CONC

EL

UT

MATCH LINE STA. 126+50'EB'

SB USH 151 ENTRANCE RAMP

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	REMOVAL PLAN	SHEET 7	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\021200_RM.DWG
LAYOUT NAME - 021201_rm

PLOT DATE : 10/24/2022 11:27 AM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- REMOVING ASPHALTIC SURFACE
- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- REMOVING CONCRETE SIDEWALK
- SAWING ASPHALT
- SAWING CONCRETE
- REMOVING STORM SEWER
- X — CLEARING AND GRUBBING (TREE REMOVALS)

N

NB USH 151 ENTRANCE RAMP

NB USH 151 EXIT RAMP

STH 19

MATCH LINE STA. 126+50'EB'

REMOVING INLET

12" CONC

127'WB' 128'WB' 129'WB' 130'WB' 131'WB' 132'WB'

127'EB' 128'EB' 129'EB' 130'EB' 131'EB' 132'EB'

EL SS WV

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	REMOVAL PLAN	SHEET 8	E

2

N

SB USH 151 EXIT RAMP

R/W

CITY OF SUN PRAIRIE STORM SEWER

SUN PRAIRIE UTILITIES WATER

BEGIN CONSTRUCTION
STA 125+36.57'WB'
MATCH EXISTING
SAW CUT REQ'D

SUN PRAIRIE UTILITIES ELECTRIC

FRONTIER COMMUNICATIONS

STH 19

121+00 'WB'

122+00 'WB'

123+00 'WB'

124+00 'WB'

125+00 'WB'

126+0

STA. 120+43.61'EB'
22.00' LT

STA. 123+93.28'WB'
22.00' RT

STA. 123+29.87'EB'
38.23' LT

STA. 123+74.06'WB'
22.00' RT

STA. 124+02.37'WB'
18.00' RT

STA. 124+02.37'WB'
24.00' RT

STA. 125+36.57'WB'
22.00' RT

STA. 123+14.64'EB'
22.00' LT

STA. 123+93.08'EB'
22.00' LT

STA. 123+74.18'EB'
25.15' LT

STA. 123+25.15'EB'
25.34' LT

STA. 123+18.38'EB'
12.00' LT

STA. 123+74.18'EB'
12.00' LT

STA. 124+05.89'EB'
8.00' LT

STA. 124+15.89'EB'
8.00' LT

R641.4'

R2.5'

TS01

CG30

CCID

CM01

CS04

CP08

CS05

CG30R

10'

12'

987.50 987.60 987.67 987.78 987.88 988.01 988.14 988.25 988.34 988.37 988.41 988.50 988.69 988.88 989.19

987.47 987.52 987.68 987.80 987.93 988.03 988.16 988.29 988.40 988.49 988.52 988.56 988.65 988.84 989.03

989.16 989.07 989.30 989.12 989.12 989.36 989.55 989.69 989.83 989.97 990.10 990.25

989.33 989.38 989.51 989.70 989.84 989.98 990.12 990.25 990.40

990.19 990.31 990.12 990.04 990.16 989.97

119+00 'EB'

120+00 'EB'

121+00 'EB'

122+00 'EB'

123+00 'EB'

124+00 'EB'

125+00 'EB'

126+0

STA. 119+68.67'EB'
12.99' LT

STA. 120+35.47'EB'
8.03' LT

STA. 120+45.45'EB'
8.00' LT

BEGIN PROJECT
STA 119+68.67'EB'
X=860,742.90
Y=523,975.87
MATCH EXISTING
SAW CUT REQ'D

R/W

VERIFY LANDMARK REFERENCE MONUMENTS
X = 860636.04
Y = 523982.97
(PUBLISHED ON TIE SHEET)

FRONTIER COMMUNICATIONS

SB USH 151 ENTRANCE RAMP

CAUTION

WE ENERGIES GAS

MATCH LINE STA. 126+00'EB'

PLAN DETAIL LEGEND

CCID	CONCRETE CURB INTEGRAL TYPE D
CG30	CONCRETE CURB AND GUTTER 30 -INCH TYPE A
CG30R	CONCRETE CURB AND GUTTER 30 -INCH TYPE A REVERSE SLOPE
CM01	CONCRETE MEDIAN NOSE TYPE 1
CP08	CONCRETE PAVEMENT 8-INCH
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
TS01	SALVAGED TOPSOIL, SEED, FERTILIZER AND EROSION MAT

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 9	E

2

N

NB USH 151 ENTRANCE RAMP

R/W

CITY OF SUN PRAIRIE
STORM SEWER

SUN PRAIRIE UTILITIES ELECTRIC

SUN PRAIRIE UTILITIES WATER

END CONSTRUCTION
STA 132+80.44'WB'
MATCH EXISTING
SAW CUT REQ'D

CITY OF SUN PRAIRIE
STORM SEWER

STH 19

STA. 126+04.20'WB'
8.00' RT

STA. 126+14.20'WB'
8.00' RT

127+00 'WB'

STA. 127+94.35'WB'
22.00' RT

128+00 'WB'

STA. 128+15.96'WB'
12.00' RT

STA. 128+15.96'WB'
25.60' RT

STA. 128+67.34'WB'
30.42' RT

STA. 128+67.06'WB'
12.00' RT

STA. 128+83.86'WB'
8.00' RT

STA. 128+93.86'WB'
8.00' RT

129+00 'WB'

130+00 'WB'

131+00 'WB'

132+00 'WB'

STA. 132+80.44'WB'
12.00' RT

990.44 990.29 990.55 990.40 990.63 990.48 990.73 990.58 990.85 990.70 990.99 990.84 991.14 990.99 991.37 991.22 991.50 991.61 991.35 991.56 991.85 991.97 992.09 992.24 992.21 992.36 992.38 992.53 992.57 992.72 992.78 992.93 992.94 993.09 993.08 993.23 993.16 993.31 993.22 993.37 993.23 993.38 993.22 993.37 993.19 993.35 993.13 993.28 993.07 993.18 993.02 993.08 992.94 992.95 992.92

10' 12' 10' 12' 10'

CP08 CG30 CS04 CCID CM01 CP08 CCID CP08 TS01 CG30

STA. 126+52.68'EB'
12.00' LT

STA. 127+94.12'EB'
22.53' LT

STA. 128+15.94'EB'
22.65' LT

STA. 128+64.62'WB'
42.17' RT

STA. 128+78.69'WB'
22.00' RT

STA. 132+05.44'WB'
22.00' RT

END PROJECT
STA 132+90.47'EB'

990.53 990.38 990.72 990.57 990.82 990.59 990.84 991.39 991.59 991.68 991.73 991.74

MATCH LINE STA. 126+00'EB'

127+00 'EB'

128+00 'EB'

129+00 'EB'

130+00 'EB'

131+00 'EB'

132+00 'EB'

STH 19

10' 10' 10'

CS04 CS05 CS05 CG30 CG30 CG30R CS04 CG30R CS05

FRONTIER COMMUNICATIONS

R/W

END CONSTRUCTION
STA 129+24.81'EB'
MATCH EXISTING
SAW CUT REQ'D

CAUTION

WE ENERGIES GAS

NB USH 151 EXIT RAMP

PLAN DETAIL LEGEND

CCID	CONCRETE CURB INTEGRAL TYPE D
CG30	CONCRETE CURB AND GUTTER 30 -INCH TYPE A
CG30R	CONCRETE CURB AND GUTTER 30 -INCH TYPE A REVERSE SLOPE
CM01	CONCRETE MEDIAN NOSE TYPE 1
CP08	CONCRETE PAVEMENT 8-INCH
CS04	CONCRETE SIDEWALK 4-INCH
CS05	CONCRETE SIDEWALK 5-INCH
TS01	SALVAGED TOPSOIL, SEED, FERTILIZER AND EROSION MAT

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 10	E

2

LEGEND

CONCRETE PAVEMENT REPAIR

CONCRETE PAVEMENT REPLACEMENT

CONCRETE CURB AND GUTTER 30 -INCH TYPE A

N

R/W

SB USH 151 EXIT RAMP

CITY OF SUN PRAIRIE STORM SEWER

SUN PRAIRIE UTILITIES WATER

SUN PRAIRIE UTILITIES ELECTRIC

FRONTIER COMMUNICATIONS

STH 19

121'WB'

122'WB'

123'WB'

124'WB'

125'WB'

126'

STH 19

119'EB'

120'EB'

121'EB'

122'EB'

123'EB'

124'EB'

125'EB'

126'

BEGIN PROJECT
STA 119+68.67'EB'
X=860,742.90
Y=523,975.87
MATCH EXISTING
SAW CUT REQ'D

R/W

FRONTIER COMMUNICATIONS

SB USH 151 ENTRANCE RAMP

CAUTION

WE ENERGIES GAS

MATCH LINE STA. 126+00'EB'

2

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PAVEMENT AND CURB & GUTTTER REPAIRS	SHEET 11	E

2

2

LEGEND

CONCRETE PAVEMENT REPAIR

CONCRETE PAVEMENT REPLACEMENT

CONCRETE CURB AND GUTTER 30 -INCH TYPE A

N

NB USH 151 ENTRANCE RAMP

R/W

CITY OF SUN PRAIRIE STORM SEWER

SUN PRAIRIE UTILITIES ELECTRIC

SUN PRAIRIE UTILITIES WATER

CITY OF SUN PRAIRIE STORM SEWER

WB'

127'WB'

128'WB'

129'WB'

130'WB'

131'WB'

132'WB'

STH 19

END PROJECT STA 132+90.47'EB'

MATCH LINE STA. 126+00'EB'

'EB'

127'EB'

128'EB'

129'EB'

130'EB'

131'EB'

132'EB'

STH 19

FRONTIER COMMUNICATIONS

R/W

CAUTION

WE ENERGIES GAS

NB USH 151 EXIT RAMP

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PAVEMENT AND CURB & GUTTTER REPAIRS	SHEET 12	E

2

CURB RAMP POINTS SB 151 SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	122+06.65	26.85' RT	988.61	523949.53	860979.97
101	122+14.34	29.45' RT	988.65	523946.68	860987.51
102	122+16.39	30.35' RT	988.66	523945.72	860989.52
103	122+25.41	35.41' RT	988.72	523940.34	860998.28
104	122+31.41	40.03' RT	988.79	523935.51	861004.04
105	122+33.47	41.91' RT	988.83	523933.56	861006.00
106	122+40.32	49.64' RT	988.97	523925.56	861012.45
107	122+06.96	29.53' RT	989.03	523946.84	860980.20
108	122+09.39	30.28' RT	988.55	523946.01	860982.58
109	122+27.21	39.82' RT	988.66	523935.88	860999.89
110	122+28.59	40.95' RT	989.24	523934.70	861001.22
111	121+75.25	30.92' RT	988.57	523946.27	860948.73
112	121+96.27	30.56' RT	988.71	523946.11	860969.57
113	121+96.26	30.06' RT	988.71	523946.61	860969.57
114	122+02.32	30.44' RT	988.63	523946.07	860975.57
115	121+75.39	40.92' RT	988.34	523936.27	860948.65
116	121+96.47	40.56' RT	988.81	523936.11	860969.49
117	121+96.48	41.06' RT	988.87	523935.61	860969.49
118	122+02.54	40.44' RT	988.78	523936.07	860975.49
119	122+06.92	29.84' RT	989.04	523946.53	860980.15
120	122+26.21	40.35' RT	989.24	523935.38	860998.89

CURB RAMP POINTS SB 151 ISLAND					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	122+53.50	25.58' RT	989.11	523949.05	861026.50
201	122+55.82	27.03' RT	989.13	523947.50	861028.73
202	122+59.84	29.73' RT	989.16	523944.63	861032.59
203	122+65.88	34.29' RT	989.21	523939.80	861038.36
204	122+69.66	37.49' RT	989.25	523936.42	861041.94
205	122+71.60	39.25' RT	989.26	523934.57	861043.77
206	122+76.96	44.59' RT	989.31	523928.97	861048.81
207	122+84.53	43.31' RT	989.18	523929.86	861056.34
208	122+86.86	38.41' RT	989.18	523934.64	861058.89
209	122+87.22	37.65' RT	989.18	523935.38	861059.29
210	122+89.18	33.50' RT	989.18	523939.42	861061.45
211	122+91.49	28.59' RT	989.17	523944.20	861064.00
212	122+92.26	26.96' RT	989.17	523945.79	861064.85
213	122+93.80	23.67' RT	989.17	523948.98	861066.56
214	122+59.07	26.16' RT	989.73	523948.23	861031.99
215	122+60.59	27.20' RT	989.24	523947.13	861033.45

CURB RAMP POINTS SB 151 ISLAND					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
216	122+61.58	26.66' RT	989.59	523947.62	861034.46
217	122+72.57	36.73' RT	989.34	523937.04	861044.86
218	122+73.83	37.90' RT	989.85	523935.81	861046.04
219	122+74.10	37.17' RT	989.76	523936.53	861046.35
220	122+75.40	36.61' RT	989.36	523937.02	861047.66
221	122+79.43	36.44' RT	989.40	523936.98	861051.65
222	122+83.58	37.24' RT	989.95	523935.98	861055.72
223	122+84.16	38.21' RT	989.76	523934.98	861056.24
224	122+84.82	36.82' RT	989.26	523936.33	861056.96
225	122+89.40	27.11' RT	989.25	523945.79	861062.02
226	122+90.06	25.72' RT	989.75	523947.14	861062.74
227	122+88.43	26.54' RT	990.01	523946.40	861061.08
228	122+85.52	26.84' RT	989.31	523946.26	861058.18
229	122+79.57	26.43' RT	989.43	523946.98	861052.30
230	122+74.97	26.62' RT	989.38	523947.02	861047.74

N

122+00 'EB'

123+00 'EB'

STH 19

DETECTABLE WARNING FIELD,
RADIAL NATURAL PATINA
RADIUS = 55.8'
LANDING LENGTH 'XR' = 24.40'
AREA = 43.35 SF
LONG CHORD = 20.06'

DETECTABLE WARNING FIELD,
NATURAL PATINA(2'X10' TYP.)

DETECTABLE WARNING FIELD,
RADIAL NATURAL PATINA
RADIUS = 111.8'
LANDING LENGTH 'XR' = 13.70'
AREA = 29.37 SF
LONG CHORD = 14.83'

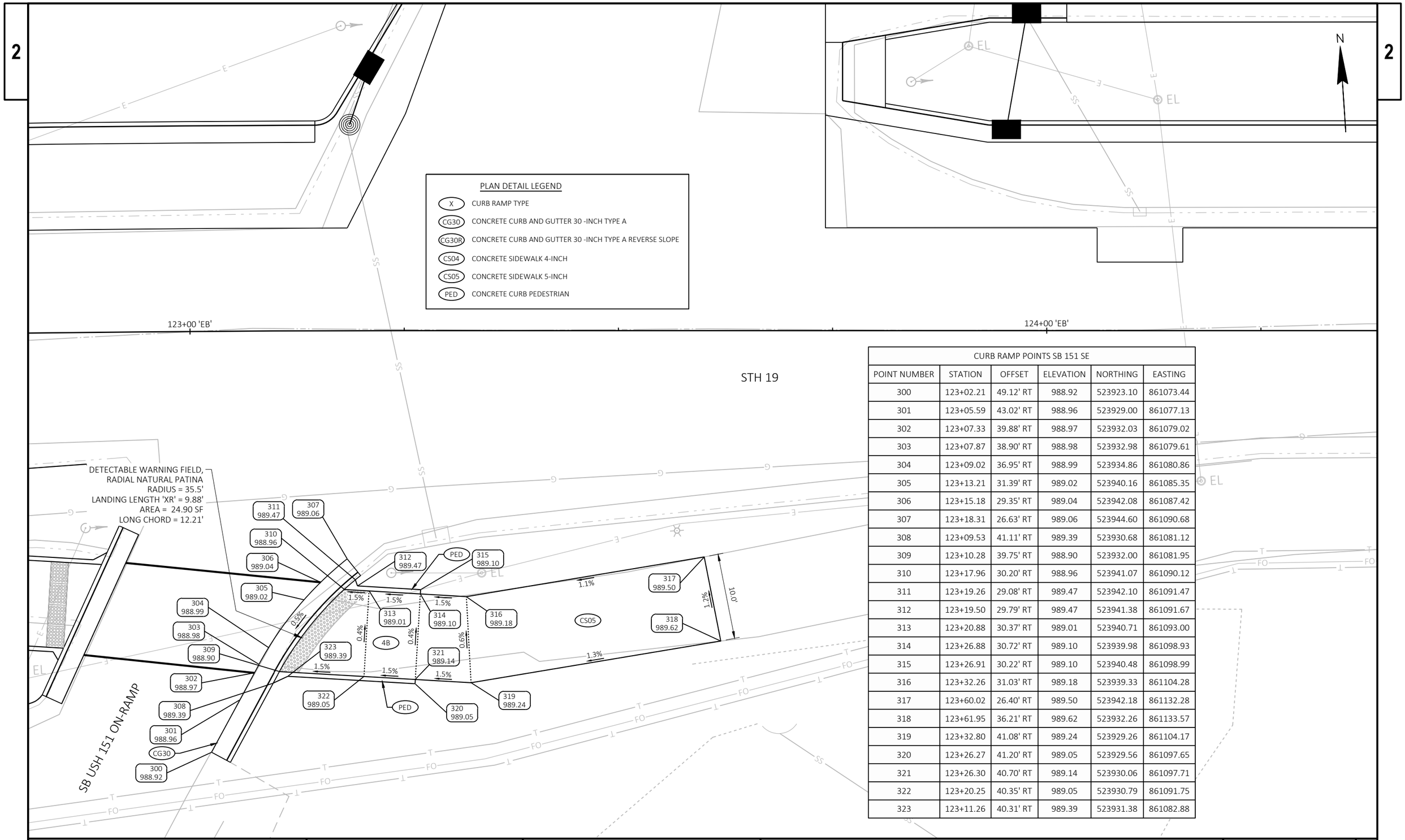
SB USH 151 ON-RAMP

PLAN DETAIL LEGEND

- X — CURB RAMP TYPE
- CG30 — CONCRETE CURB AND GUTTER 30 -INCH TYPE A
- CG30R — CONCRETE CURB AND GUTTER 30 -INCH TYPE A REVERSE SLOPE
- CS04 — CONCRETE SIDEWALK 4-INCH
- CS05 — CONCRETE SIDEWALK 5-INCH
- PED — CONCRETE CURB PEDESTRIAN

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 13	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 01
PLOT DATE : 10/11/2022 12:08 PM
PLOT BY : KYLE CORNELIUS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



CURB RAMP POINTS SB 151 SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	123+02.21	49.12' RT	988.92	523923.10	861073.44
301	123+05.59	43.02' RT	988.96	523929.00	861077.13
302	123+07.33	39.88' RT	988.97	523932.03	861079.02
303	123+07.87	38.90' RT	988.98	523932.98	861079.61
304	123+09.02	36.95' RT	988.99	523934.86	861080.86
305	123+13.21	31.39' RT	989.02	523940.16	861085.35
306	123+15.18	29.35' RT	989.04	523942.08	861087.42
307	123+18.31	26.63' RT	989.06	523944.60	861090.68
308	123+09.53	41.11' RT	989.39	523930.68	861081.12
309	123+10.28	39.75' RT	988.90	523932.00	861081.95
310	123+17.96	30.20' RT	988.96	523941.07	861090.12
311	123+19.26	29.08' RT	989.47	523942.10	861091.47
312	123+19.50	29.79' RT	989.47	523941.38	861091.67
313	123+20.88	30.37' RT	989.01	523940.71	861093.00
314	123+26.88	30.72' RT	989.10	523939.98	861098.93
315	123+26.91	30.22' RT	989.10	523940.48	861098.99
316	123+32.26	31.03' RT	989.18	523939.33	861104.28
317	123+60.02	26.40' RT	989.50	523942.18	861132.28
318	123+61.95	36.21' RT	989.62	523932.26	861133.57
319	123+32.80	41.08' RT	989.24	523929.26	861104.17
320	123+26.27	41.20' RT	989.05	523929.56	861097.65
321	123+26.30	40.70' RT	989.14	523930.06	861097.71
322	123+20.25	40.35' RT	989.05	523930.79	861091.75
323	123+11.26	40.31' RT	989.39	523931.38	861082.88

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 14	E

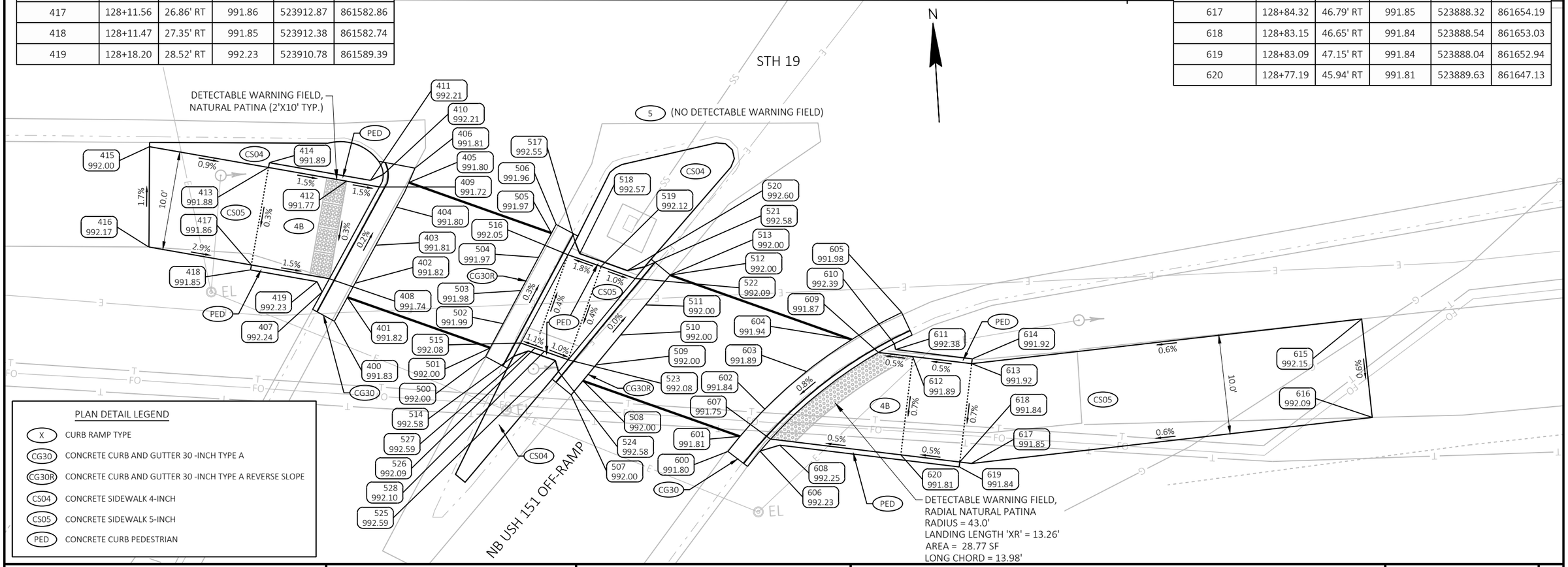
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 02
PLOT DATE : 10/11/2022 12:08 PM
PLOT BY : KYLE CORNELIUS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

CURB RAMP POINTS NB 151 SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
400	128+19.96	32.52' RT	991.83	523906.68	861590.88
401	128+21.27	30.10' RT	991.82	523909.01	861592.34
402	128+22.04	28.68' RT	991.82	523910.38	861593.20
403	128+24.13	24.84' RT	991.81	523914.08	861595.53
404	128+26.22	20.99' RT	991.80	523917.78	861597.86
405	128+27.46	18.50' RT	991.80	523920.19	861599.26
406	128+28.08	17.04' RT	991.81	523921.61	861599.97
407	128+18.71	29.57' RT	992.24	523909.70	861589.83
408	128+19.44	28.23' RT	991.74	523911.00	861590.64
409	128+24.48	18.95' RT	991.72	523919.93	861596.26
410	128+24.85	17.70' RT	992.21	523921.15	861596.71
411	128+23.58	18.29' RT	992.21	523920.65	861595.40
412	128+21.16	18.38' RT	991.77	523920.72	861592.98
413	128+13.28	17.00' RT	991.88	523922.59	861585.20
414	128+13.36	16.51' RT	991.89	523923.08	861585.32
415	128+01.25	14.91' RT	992.00	523925.45	861573.34
416	128+01.20	25.05' RT	992.17	523915.33	861572.64
417	128+11.56	26.86' RT	991.86	523912.87	861582.86
418	128+11.47	27.35' RT	991.85	523912.38	861582.74
419	128+18.20	28.52' RT	992.23	523910.78	861589.39

CURB RAMP POINTS NB 151 ISLAND					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
500	128+35.22	36.07' RT	992.00	523902.16	861605.88
501	128+35.69	35.19' RT	992.00	523903.01	861606.41
502	128+37.00	32.73' RT	991.99	523905.38	861607.87
503	128+38.78	29.39' RT	991.98	523908.60	861609.86
504	128+40.56	26.05' RT	991.97	523911.82	861611.85
505	128+41.87	23.59' RT	991.97	523914.19	861613.32
506	128+42.34	22.71' RT	991.96	523915.04	861613.84
507	128+43.88	39.93' RT	992.00	523897.76	861614.28
508	128+45.06	38.50' RT	992.00	523899.11	861615.55
509	128+46.38	36.89' RT	992.00	523900.63	861616.97
510	128+48.88	33.86' RT	992.00	523903.49	861619.65
511	128+51.37	30.83' RT	992.00	523906.36	861622.34
512	128+53.85	27.82' RT	992.00	523909.21	861625.01
513	128+53.87	27.80' RT	992.00	523909.22	861625.02
514	128+38.08	36.02' RT	992.58	523902.02	861608.74

CURB RAMP POINTS NB 151 ISLAND					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
515	128+38.79	34.70' RT	992.08	523903.31	861609.53
516	128+43.54	25.77' RT	992.05	523911.91	861614.85
517	128+44.25	24.44' RT	992.55	523913.19	861615.64
518	128+44.72	25.66' RT	992.57	523911.95	861616.03
519	128+46.89	26.95' RT	992.12	523910.52	861618.11
520	128+49.55	27.36' RT	992.60	523909.94	861620.74
521	128+51.30	26.98' RT	992.58	523910.21	861622.51
522	128+50.32	28.16' RT	992.09	523909.09	861621.46
523	128+43.56	36.37' RT	992.08	523901.32	861614.18
524	128+42.58	37.56' RT	992.58	523900.21	861613.13
525	128+42.28	36.46' RT	992.59	523901.32	861612.91
526	128+40.21	35.20' RT	992.09	523902.71	861610.92
527	128+39.56	35.50' RT	992.59	523902.45	861610.25
528	128+41.17	35.54' RT	992.10	523902.31	861611.86

CURB RAMP POINTS NB 151 SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
600	128+59.72	45.61' RT	991.80	523891.07	861629.73
601	128+60.94	44.10' RT	991.81	523892.50	861631.03
602	128+63.44	41.34' RT	991.84	523895.10	861633.71
603	128+67.65	37.53' RT	991.89	523898.63	861638.15
604	128+72.21	34.30' RT	991.94	523901.57	861642.91
605	128+77.26	31.56' RT	991.98	523903.98	861648.12
606	128+62.96	45.58' RT	992.23	523890.90	861632.96
607	128+64.02	44.37' RT	991.75	523892.04	861634.09
608	128+64.95	44.98' RT	992.25	523891.37	861634.99
609	128+74.90	35.60' RT	991.87	523900.10	861645.52
610	128+76.52	34.71' RT	992.39	523900.88	861647.19
611	128+76.63	35.30' RT	992.38	523900.28	861647.26
612	128+78.37	36.01' RT	991.89	523899.46	861648.95
613	128+84.33	36.73' RT	991.92	523898.37	861654.85
614	128+84.39	36.23' RT	991.92	523898.86	861654.94
615	129+23.72	32.15' RT	992.15	523900.42	861694.46
616	129+24.81	42.09' RT	992.09	523890.43	861694.90
617	128+84.32	46.79' RT	991.85	523888.32	861654.19
618	128+83.15	46.65' RT	991.84	523888.54	861653.03
619	128+83.09	47.15' RT	991.84	523888.04	861652.94
620	128+77.19	45.94' RT	991.81	523889.63	861647.13



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 15	E

LEGEND

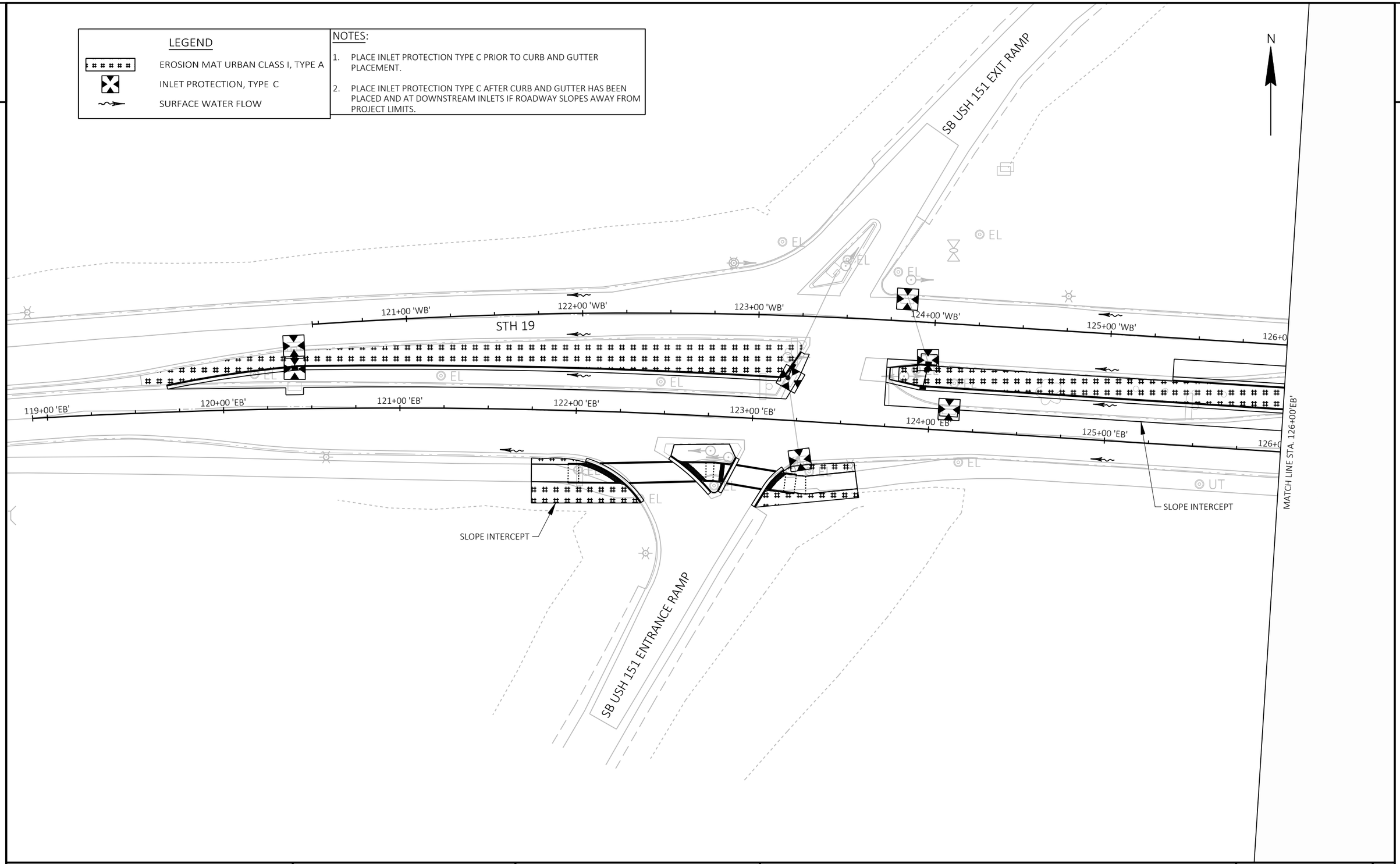
EROSION MAT URBAN CLASS I, TYPE A

INLET PROTECTION, TYPE C

SURFACE WATER FLOW

NOTES:

1. PLACE INLET PROTECTION TYPE C PRIOR TO CURB AND GUTTER PLACEMENT.
2. PLACE INLET PROTECTION TYPE C AFTER CURB AND GUTTER HAS BEEN PLACED AND AT DOWNSTREAM INLETS IF ROADWAY SLOPES AWAY FROM PROJECT LIMITS.



2

2

LEGEND

EROSION MAT URBAN CLASS I, TYPE A

INLET PROTECTION, TYPE C

SURFACE WATER FLOW

NOTES:

1. PLACE INLET PROTECTION TYPE C PRIOR TO CURB AND GUTTER PLACEMENT.
2. PLACE INLET PROTECTION TYPE C AFTER CURB AND GUTTER HAS BEEN PLACED AND AT DOWNSTREAM INLETS IF ROADWAY SLOPES AWAY FROM PROJECT LIMITS.

N

NB USH 151 ENTRANCE RAMP

STH 19

MATCH LINE STA. 126+00 'EB'

0 'WB'

127+00 'WB'

128+00 'WB'

129+00 'WB'

130+00 'WB'

131+00 'WB'

132+00 'WB'

0 'EB'

127+00 'EB'

128+00 'EB'

129+00 'EB'

130+00 'EB'

131+00 'EB'

132+00 'EB'

SLOPE INTERCEPT

SLOPE INTERCEPT

NB USH 151 EXIT RAMP

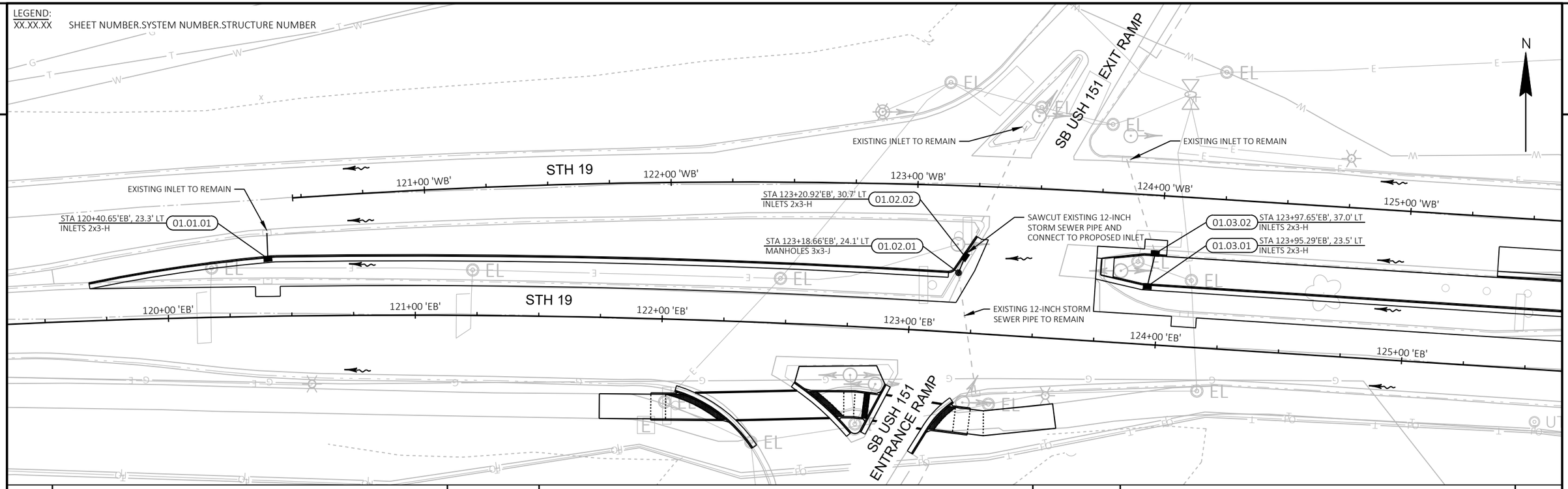
EL

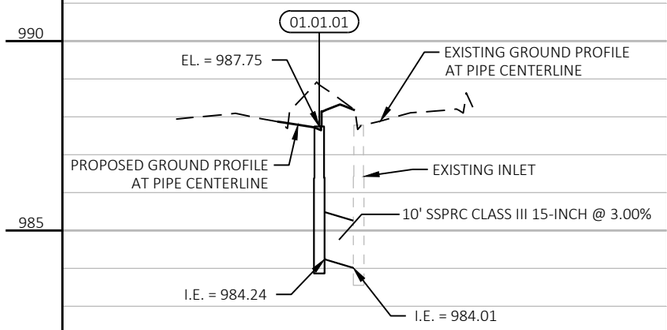
SS

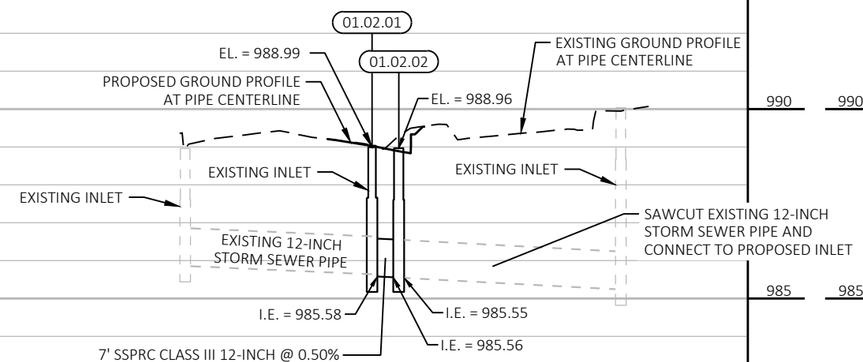
WV

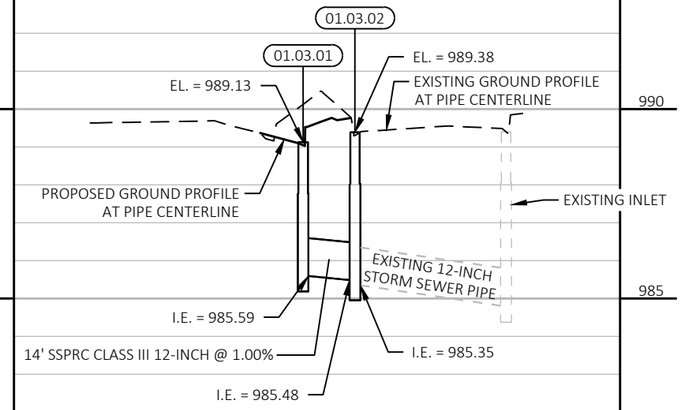
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	EROSION CONTROL	SHEET 17	E

LEGEND:
XX.XX.XX SHEET NUMBER.SYSTEM NUMBER.STRUCTURE NUMBER



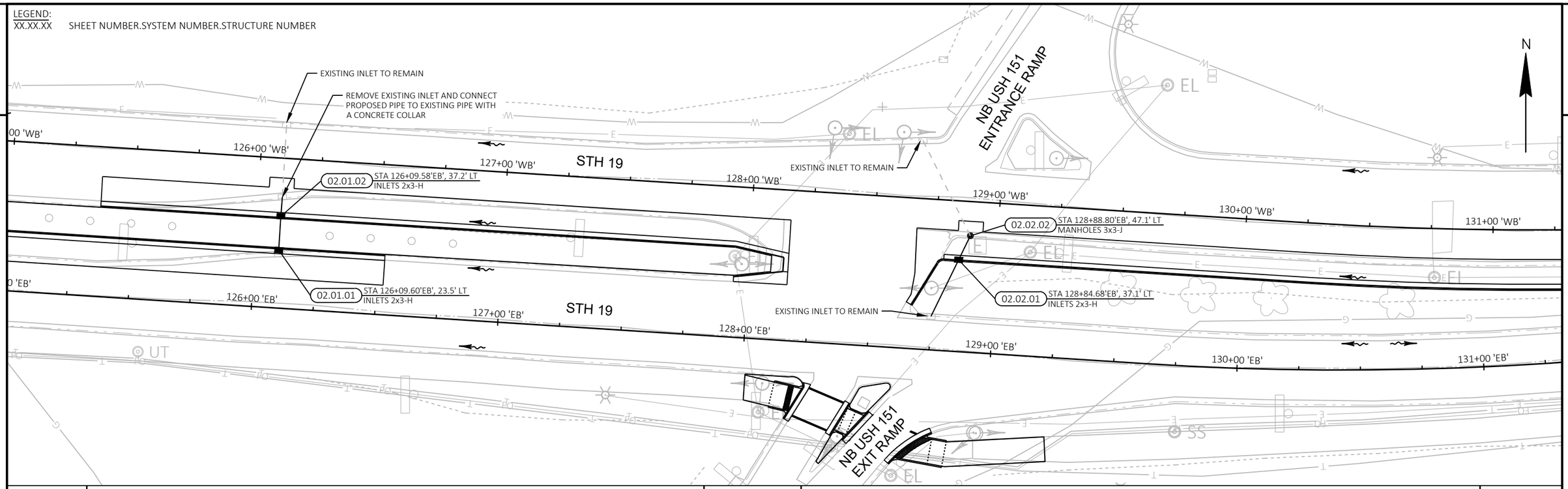


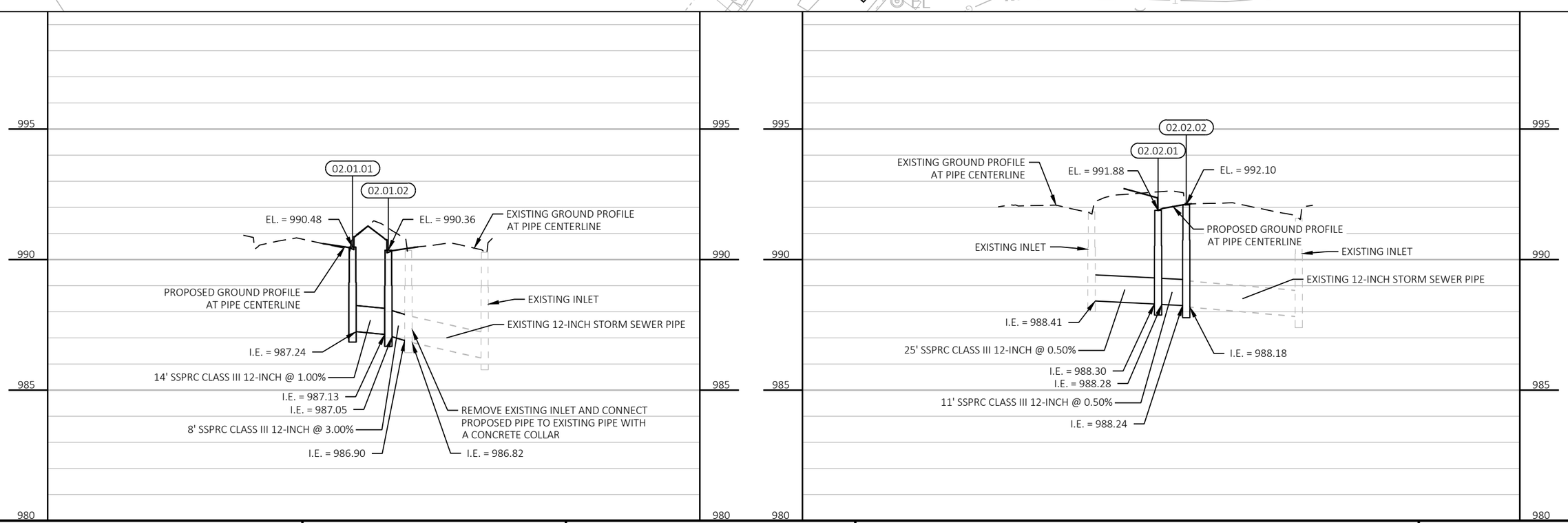




PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	STORM SEWER	SHEET 18	E

LEGEND:
XX.XX.XX SHEET NUMBER.SYSTEM NUMBER.STRUCTURE NUMBER





PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	STORM SEWER	SHEET 19	E

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

DENOTES SIGN NUMBER
- SIGN COUNT SEQUENCE PER PAGE
- PAGE NUMBER
- WORK CODE: R=REMOVE, N=NEW, W=WORK BY OTHERS, M=MOVE

N

SB USH 151 EXIT RAMP

EAST 19 WEST 19 — TO REMAIN

DIVIDED HIGHWAY STOP — TO REMAIN

WRONG WAY WEST 19 — TO REMAIN

YIELD — TO REMAIN

DO NOT ENTER — TO REMAIN

TO REMAIN

STOP DO NOT ENTER — TO REMAIN

SOUTH 151 — M1-08

STA 120+46'WB'

121'WB' 122'WB' 123'WB' 124'WB' 125'WB' 126'

STH 19

R3-2 24"X24" — N1-02

STA 118+92'EB'

119'EB' 120'EB' 121'EB' 122'EB' 123'EB' 124'EB' 125'EB' 126'

STH 19

MATCH LINE STA 126+00'EB'

NORTH 151 SOUTH — KEEP LEFT | KEEP RIGHT — TO REMAIN

NORTH 151 — D16-1 36"X60" — N1-01

WRONG WAY — TO REMAIN

YIELD — M1-01

151 NORTH Columbus / 151 SOUTH Madison — TO REMAIN

STOP — M1-02

SB USH 151 ENTRANCE RAMP

DO NOT ENTER STOP — TO REMAIN

STOP — M1-03

ONE WAY — M1-04

STOP — M1-05 M1-06

151 NORTH Columbus — M1-07

SB USH 151

NB USH 151

UT

EL

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PERMANENT SIGNING	SHEET 20	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2022 2:15 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

SB USH 151

NB USH 151

NB USH 151 ENTRANCE RAMP

N

WRONG WAY
TO REMAIN

151 SOUTH Madison
M2-06

STOP
M2-07

M2-08

ONE WAY
TO REMAIN

YIELD
TO REMAIN

STOP
DO NOT ENTER
TO REMAIN

151 SOUTH Madison
151 NORTH Columbus
TO REMAIN

SOUTH 151
D16-1
36"X60"
N2-01

SPEED LIMIT 35
TO REMAIN

WB'
127'WB'
128'WB'
129'WB'
130'WB'
131'WB'
132'WB'
STA 132+80'WB'

STH 19

MATCH LINE STA 126+00'EB'
'EB'
127'EB'
128'EB'
129'EB'
130'EB'
131'EB'
132'EB'
STA 132+90'EB'

STH 19

WRONG WAY
TO REMAIN

STOP
M2-09

STOP
M2-01

DO NOT ENTER
TO REMAIN

YIELD
M2-02

STOP
M2-03

TO REMAIN

DIVIDED HIGHWAY
STOP

NORTH 151
M2-04

M2-05

EAST 19
TO REMAIN

NB USH 151 EXIT RAMP

WEST 19 EAST 19
TO REMAIN

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON POST(S)

DENOTES SIGN NUMBER
SIGN COUNT SEQUENCE PER PAGE
PAGE NUMBER
WORK CODE: R=REMOVE, N=NEW, W=WORK BY OTHERS, M=MOVE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PERMANENT SIGNING	SHEET 21	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2022 2:15 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

SB USH 151 EXIT RAMP

STH 19

STH 19

STA 120+46'WB'

STA 118+92'EB'

119'EB' 120'EB' 121'EB' 122'EB' 123'EB' 124'EB' 125'EB' 126'

121'WB' 122'WB' 123'WB' 124'WB' 125'WB' 126'

*12.5' LINE - 37.5' GAP

*12.5' LINE - 37.5' GAP

*12.5' LINE - 37.5' GAP

*12.5' LINE - 37.5' GAP

MATCH LINE STA 126+00'EB'

SB USH 151 ENTRANCE RAMP

SB USH 151

NB USH 151

EL

UT

LEGEND

1. MARKING LINE EPOXY 4-INCH (WHITE)
2. MARKING LINE EPOXY 4-INCH (YELLOW)
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
5. MARKING STOP LINE EPOXY 18-INCH
6. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
7. MARKING CURB EPOXY
8. MARKING ISLAND NOSE EPOXY
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PAVEMENT MARKING	SHEET 22	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2022 2:16 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

SB USH 151

NB USH 151

NB USH 151 ENTRANCE RAMP

N

*12.5' LINE - 37.5' GAP

MATCH LINE STA 126+00'EB'

127'WB'

128'WB'

129'WB'

130'WB'

131'WB'

132'WB'

STA 132+80'WB'

STH 19

127'EB'

128'EB'

129'EB'

130'EB'

131'EB'

132'EB'

STA 132+90'EB'

STH 19

*12.5' LINE - 37.5' GAP

*12.5' LINE - 37.5' GAP

NB USH 151 EXIT RAMP

4 REPLACE MARKING WHERE MISSING

EL

SS

WV

LEGEND

1. MARKING LINE EPOXY 4-INCH (WHITE)
2. MARKING LINE EPOXY 4-INCH (YELLOW)
3. MARKING LINE EPOXY 8-INCH (WHITE)
4. MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
5. MARKING STOP LINE EPOXY 18-INCH
6. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
7. MARKING CURB EPOXY
8. MARKING ISLAND NOSE EPOXY
9. MARKING ARROW EPOXY
10. MARKING WORD EPOXY
11. MARKING YIELD LINE EPOXY 18-INCH

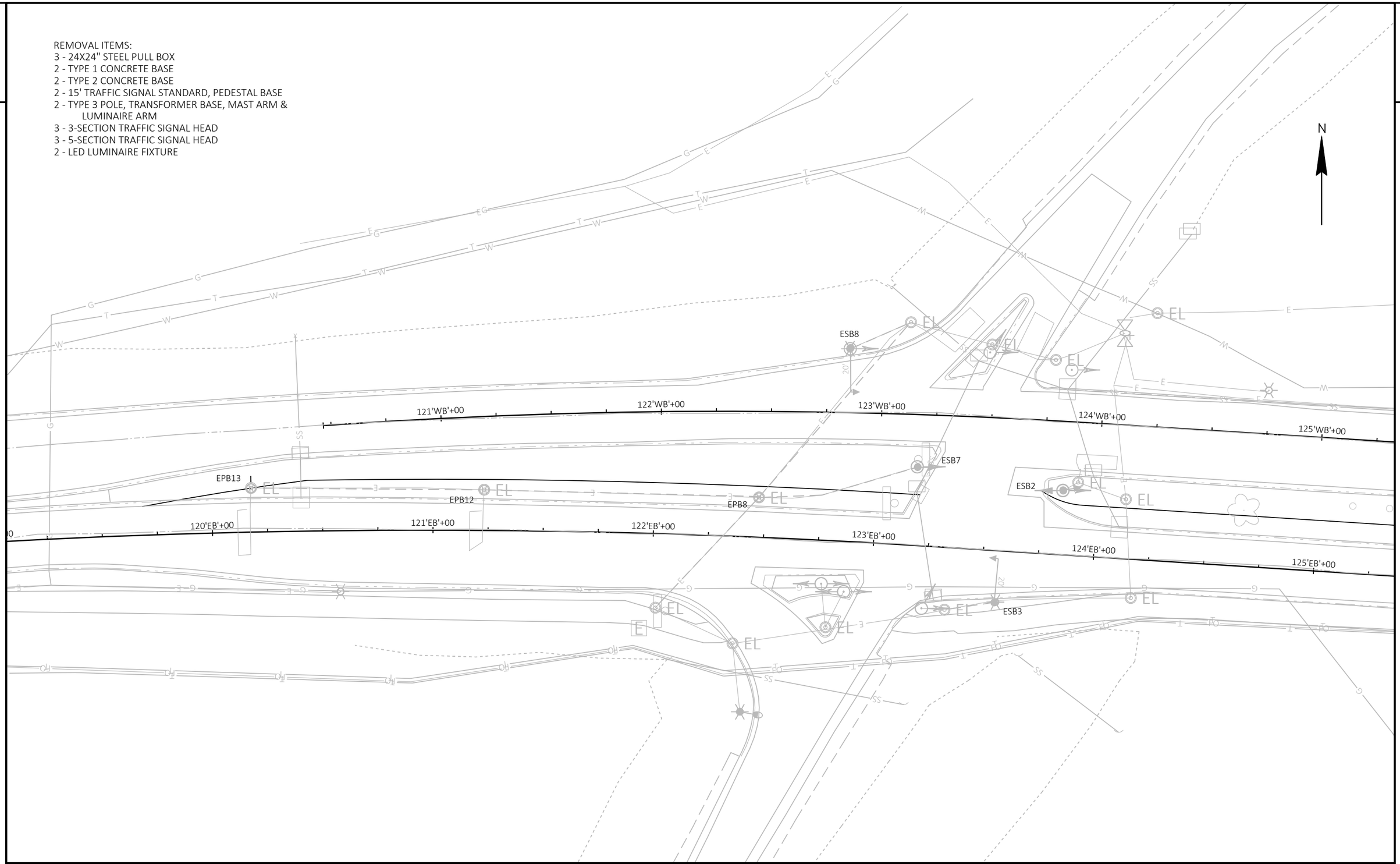
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PAVEMENT MARKING	SHEET 23	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2022 2:16 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

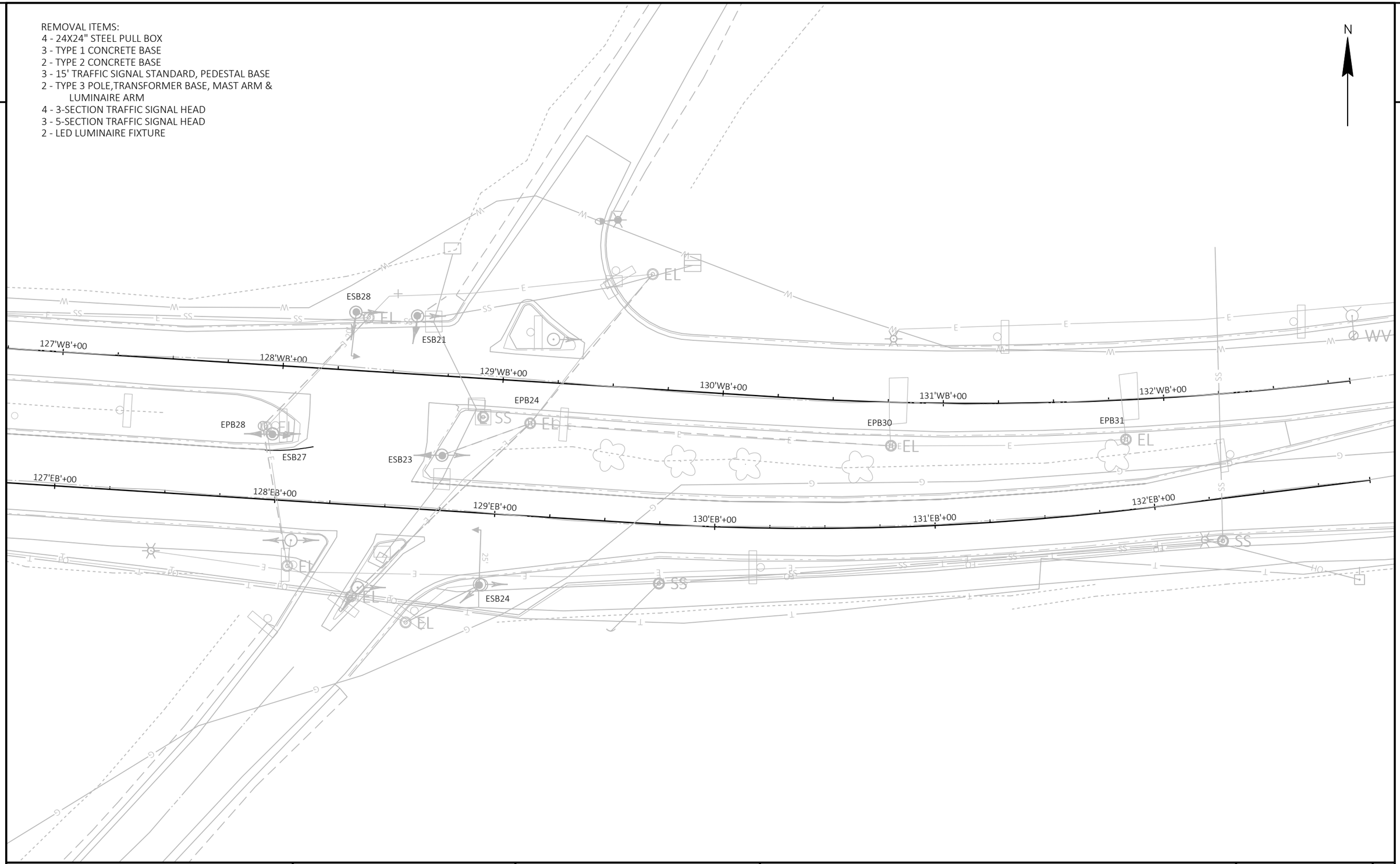
REMOVAL ITEMS:
3 - 24X24" STEEL PULL BOX
2 - TYPE 1 CONCRETE BASE
2 - TYPE 2 CONCRETE BASE
2 - 15' TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
2 - TYPE 3 POLE, TRANSFORMER BASE, MAST ARM & LUMINAIRE ARM
3 - 3-SECTION TRAFFIC SIGNAL HEAD
3 - 5-SECTION TRAFFIC SIGNAL HEAD
2 - LED LUMINAIRE FIXTURE



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL REMOVAL PLAN - USH 151 & STH 19	SHEET 24	E

FILE NAME : C:\BOXDRV\BOX\DTSD-PROJECTS-PUBLIC\SWR-PROJECTS-STATE\DESIGN\60850205\TRAFFIC\ELECTRICAL\SIGNALS\6085-02-05.SIGNALDESIGN.DWG
LAYOUT NAME - 024001-sr
PLOT DATE : 10/10/2022 6:29 PM PLOT BY : WEBB, COLLIN J PLOT NAME : PLOT SCALE : 1 IN:40 FT

REMOVAL ITEMS:
4 - 24X24" STEEL PULL BOX
3 - TYPE 1 CONCRETE BASE
2 - TYPE 2 CONCRETE BASE
3 - 15' TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
2 - TYPE 3 POLE,TRANSFORMER BASE, MAST ARM & LUMINAIRE ARM
4 - 3-SECTION TRAFFIC SIGNAL HEAD
3 - 5-SECTION TRAFFIC SIGNAL HEAD
2 - LED LUMINAIRE FIXTURE



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL REMOVAL PLAN - USH 151 & STH 19	SHEET 25	E

FILE NAME : C:\BOXDRV\BOX\DTSD-PROJECTS-PUBLIC\SWR-PROJECTS-STATE\DESIGN\60850205\TRAFFIC\ELECTRICAL\SIGNALS\6085-02-05.SIGNALDESIGN.DWG
LAYOUT NAME - 024002-sr
PLOT DATE : 10/10/2022 6:29 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- PULL BOX NON-CONDUCTIVE, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- FY Y YELLOW ARROW
- FG G GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
ALL LUMINAIRES ARE LED C
GRAYSHADE REPRESENTS EXISTING SIGNALS, MAY REQUIRE ADJUSTMENTS

N

CONNECT CONDUIT TO EXISTING PB9
EPB9
EPB10
EPB11
ESB9
ESC1
EPB1
ESB1
121'WB'+00
122'WB'+00
123'WB'+00
124'WB'+00
125'WB'+00
2 - 3" CONDUIT SPECIAL
PB1
PB2
PB3
CONNECT CONDUIT TO EXISTING LOOP DETECTOR CONDUIT
SB3
SB1
EPB2
120'EB'+00
121'EB'+00
122'EB'+00
123'EB'+00
124'EB'+00
125'EB'+00
STH 19 EB
ESB6
ESB5
ESB4
EPB7
EPB5
EPB4
EPB3
EPB6
SB2
CONNECT CONDUIT TO EXISTING PB7, ADJUST EXISTING PB7 TO BE FLUSH WITH NEW SIDEWALK

GENERAL NOTES:

1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE
   CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
3) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
4) ALL LUMINAIRES ARE LED C
5) INSTALL RETROREFLECTIVE BACKPLATES ON ALL NEW SIGNAL HEADS

TRAFFIC CONTROL SIGNAL

USH 151 & STH 19
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. S13-1023
CABINET TYPE: TS2
CONTROLLER TYPE: COBALT

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 8/15/05 — DENA G DRAMM, REGION TRAFFIC ENGINEER

APPROVED
DATE 8/16/05 — WILLIAM C GILDING, STATE TRAFFIC ENGINEER

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

PAGE 01 OF 02

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL PLAN - USH 151 & STH 19	SHEET 26	E

FILE NAME : C:\BOXDRV\BOX\DTSD-PROJECTS-PUBLIC\SWR-PROJECTS-STATE\DESIGN\60850205\TRAFFIC\ELECTRICAL\SIGNALS\6085-02-05.SIGNALDESIGN.DWG
LAYOUT NAME - 024201-sp
PLOT DATE : 10/10/2022 6:29 PM
PLOT BY : WEBB, COLLIN J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CONTROL CABINET	SIGNAL HEAD NUMBER
NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED	RED CIRCULAR INDICATOR
(XX) MONOTUBE BASE, POLE, 15'-30' ARM	YELLOW CIRCULAR INDICATOR
(XX) MONOTUBE BASE, POLE, 35'-45' ARM	GREEN CIRCULAR INDICATOR
PULL BOX NON-CONDUCTIVE, 24" X 42"	RED ARROW
	YELLOW ARROW
	GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
ALL LUMINAIRES ARE LED C
GRAYSHADE REPRESENTS EXISTING SIGNALS, MAY REQUIRE ADJUSTMENTS

N

ELB2
CONNECT CONDUIT TO EXISTING PB22
SB4
ESC2 (SPLICE CABINET)
EPB21
EPB22
EPB29
CONNECT CONDUIT TO EXISTING PB29
EPB23
ESB22
2 - 3" CONDUIT SPECIAL
127'WB'+00
128'WB'+00
129'WB'+00
130'WB'+00
131'WB'+00
132'WB'+00
PB7
SB5
SB6
PB4
PB5
PB6
CONNECT CONDUIT TO EXISTING LOOP DETECTOR CONDUIT
127'EB'+00
128'EB'+00
129'EB'+00
130'EB'+00
131'EB'+00
132'EB'+00
SB7
ESB26
CONNECT CONDUIT TO EXISTING PB27
EPB27
ESB25
EPB25
3" CONDUIT SPECIAL
CONNECT CONDUIT TO EXISTING PB25
EPB26

GENERAL NOTES:

1) THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT INSPECTED THREE WORKING DAYS PRIOR TO PLACING SIGNAL CABLE IN TO THE SYSTEM. CONTACT WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS
2) CENTER HEADS CONTROLLING THROUGH MOVEMENTS OVER RECEIVING LANE
   CENTER HEADS CONTROLLING LEFT TURN MOVEMENTS OVER APPROACH LANE EXTENDED
3) THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT WHICH ARE NOT SHOWN
4) ALL LUMINAIRES ARE LED C
5) INSTALL RETROREFLECTIVE BACKPLATES ON ALL NEW SIGNAL HEADS

TRAFFIC CONTROL SIGNAL
USH 151 & STH 19
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO. S13-1023

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

PAGE 02 OF 02

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL PLAN - USH 151 & STH 19	SHEET 27	E

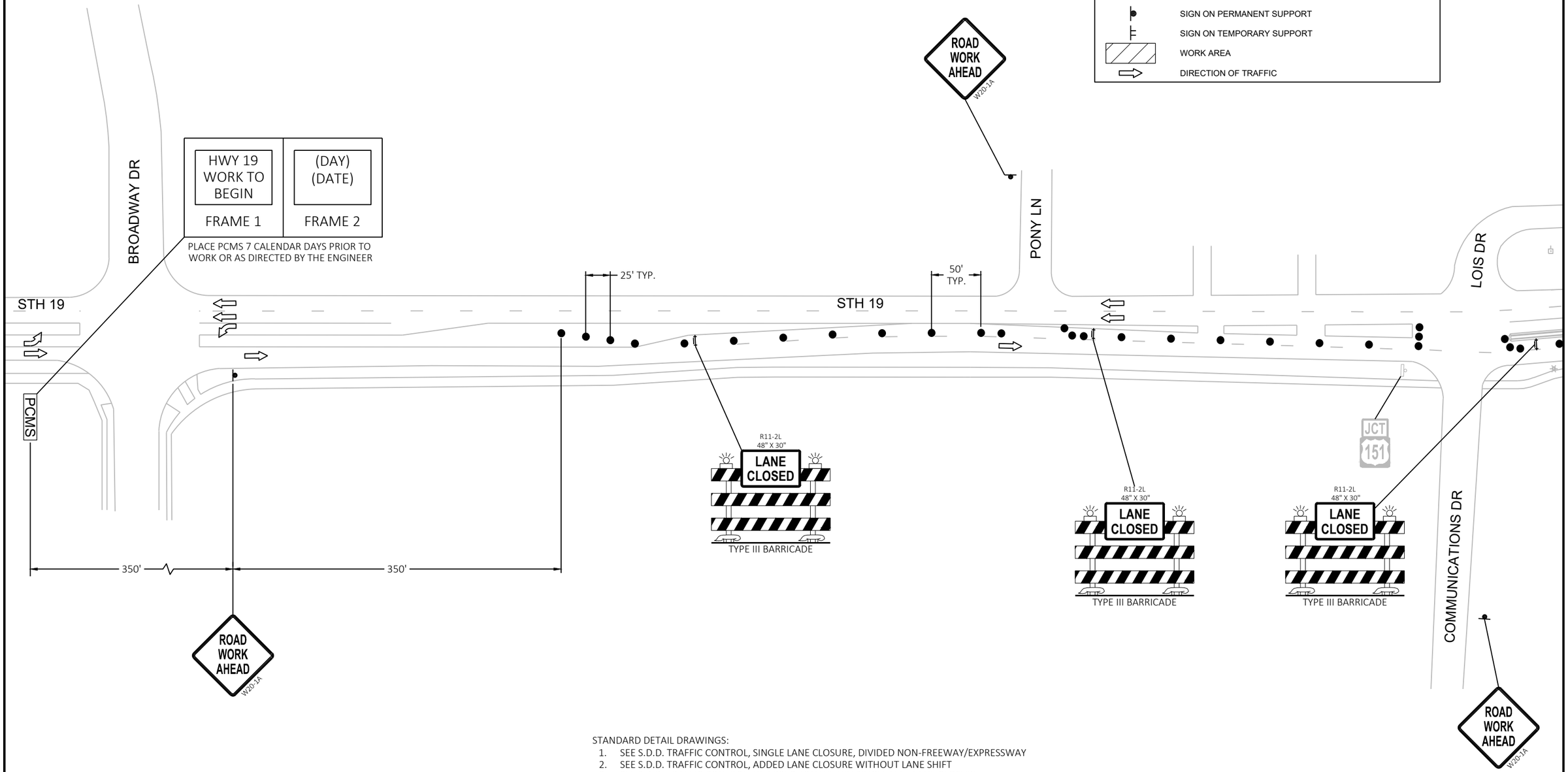
2

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N



STANDARD DETAIL DRAWINGS:

1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 28	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\025001_TC_S1.DWG
LAYOUT NAME - 01
PLOT DATE : 7/11/2023 8:57 AM
PLOT BY : KYLE CORNELIUS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

ROAD WORK AHEAD W20-1A

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

SB USH 151 EXIT RAMP

TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH

SB USH 151

NB USH 151

NB USH 151 ENTRANCE RAMP

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

SOUTH 151 M3-3 24"X12" M1-4 24"X24" M6-1 21"X21"

WO1-6 48" X 24" TYPE III BARRICADE

SOUTH 151 Madison / NORTH Columbus

LOIS DR

END ROAD WORK G20-2A 48"X24"

STH 19

WEST 19

100' 25' TYP. 100' 25' TYP. 50' TYP.

STA. 123+74'WB' STA. 124+69'WB' STA. 126+86'EB' STA. 128+16'EB' STA. 132+80'WB' STA. 119+69'EB'

119'EB' 120'EB' 121'EB' 122'EB' 123'EB' 124'EB' 125'EB' 126'EB' 127'EB' 128'EB' 129'EB' 130'EB' 131'EB' 132'EB'

121'WB' 122'WB' 123'WB' 124'WB' 125'WB' 126'WB' 127'WB' 128'WB' 129'WB' 130'WB' 131'WB' 132'WB'

50' TYP. 50' TYP. 25' TYP. 50' TYP. 25' TYP.

NORTH 151 SOUTH KEEP LEFT KEEP RIGHT

NORTH 151 Columbus / SOUTH 151 Madison

SB USH 151 ENTRANCE RAMP

WO1-6 48" X 24" TYPE III BARRICADE

NORTH 151 M3-1 24"X12" M1-4 24"X24" M6-1 21"X21"

NORTH 151 Columbus

SB USH 151

NB USH 151

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

100' 25' TYP.

SOUTH 151 Madison

TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH

NB USH 151 EXIT RAMP

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

EAST 19

50' TYP. 25' TYP. 100'

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

ROAD WORK AHEAD W20-1A

LEGEND

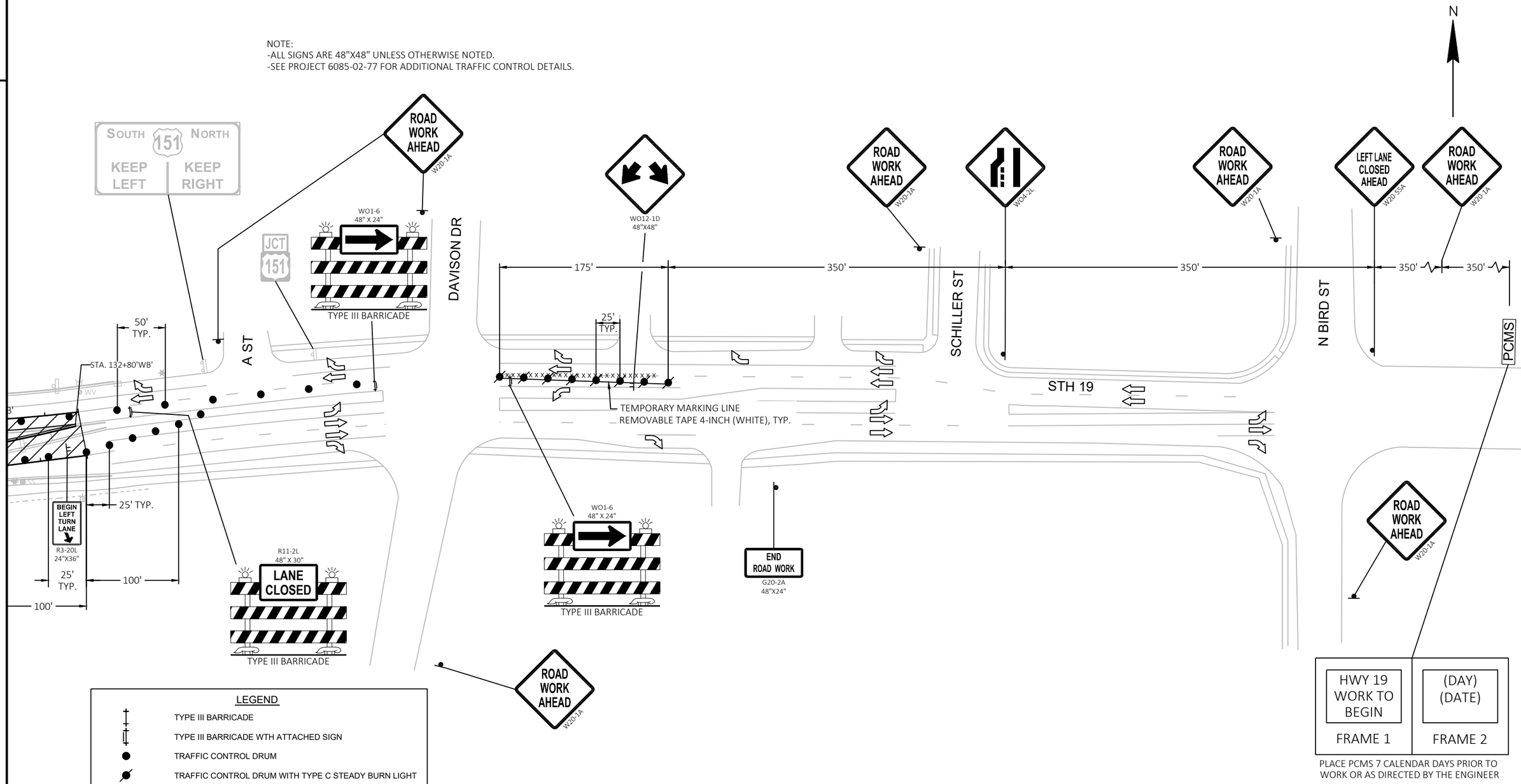
	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
xxxxx	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA
	DIRECTION OF TRAFFIC

STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 29	E

2

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1	SHEET 30	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\025001_TC_S1.DWG
LAYOUT NAME - 03
PLOT DATE : 7/11/2023 8:57 AM
PLOT BY : KYLE CORNELIUS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

ROAD WORK AHEAD
W20-1A

BROADWAY DR

WO1-6
48" X 24"
TYPE III BARRICADE

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (WHITE), TYP.

ROAD WORK AHEAD
W20-1A

PONY LN

STH 19

STH 19

25' TYP.

xxxxxxxxxxx

50'
TYP.

60'

JCT
151

PCMS

350'

350'

350'

120'

ROAD WORK AHEAD
W20-1A

WO1-4L

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

ROAD WORK AHEAD
W20-1A

RAMP TO SB 151 TO CLOSE	(DAY) (DATE)
FRAME 1	FRAME 2

PLACE PCMS 7 CALENDAR DAYS PRIOR TO WORK OR AS DIRECTED BY THE ENGINEER

STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

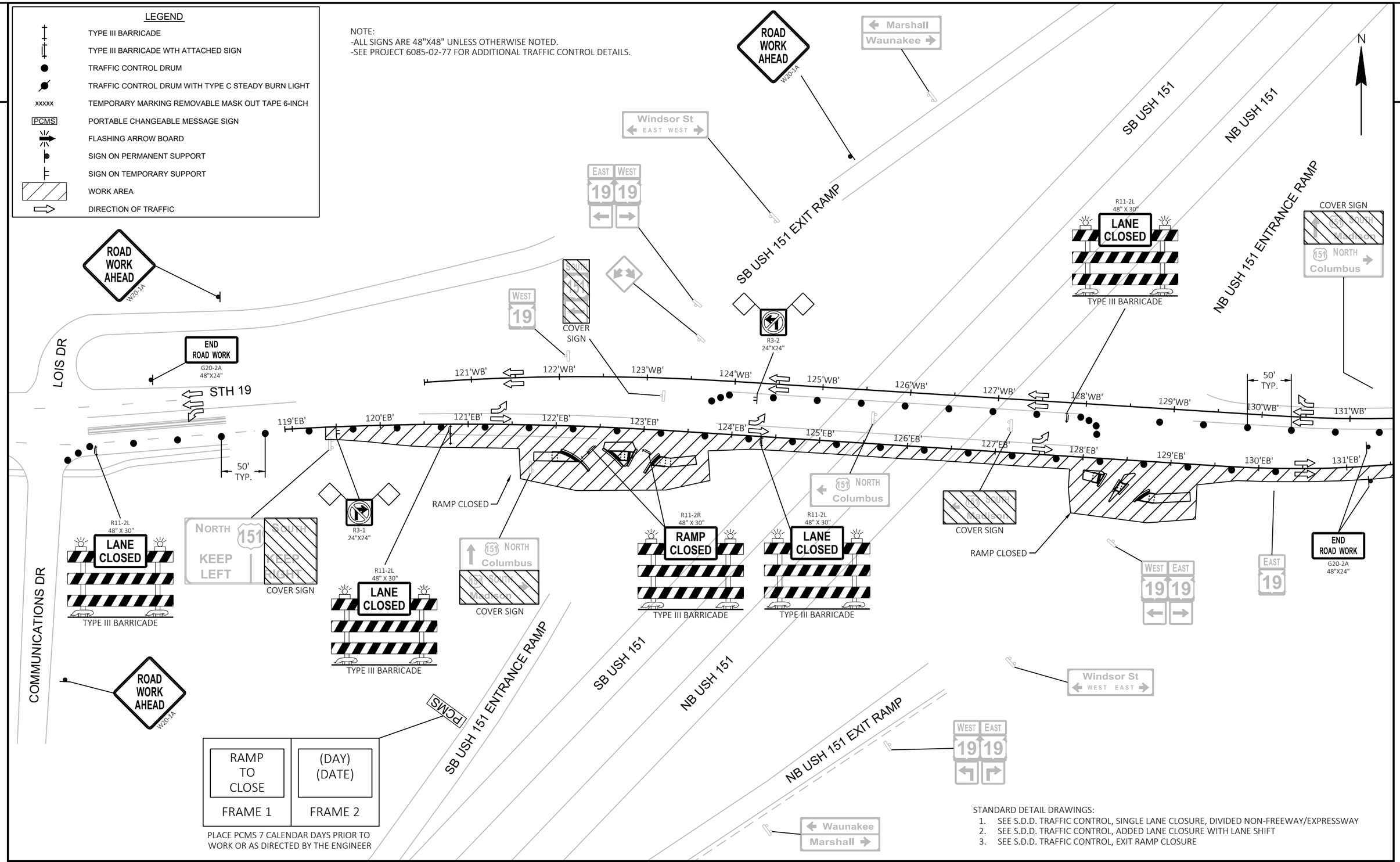
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 31	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.



STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 32	E

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

SOUTH 151 NORTH
KEEP LEFT
KEEP RIGHT
COVER SIGN

ROAD WORK AHEAD W20-1A

ROAD WORK AHEAD W20-1A

ROAD WORK AHEAD W20-1A

RAMP TO SB 151 TO CLOSE | (DAY) (DATE)
FRAME 1 | FRAME 2

PLACE PCMS 7 CALENDAR DAYS PRIOR TO WORK OR AS DIRECTED BY THE ENGINEER

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

JCT 151

A ST

DAVISON DR

PCMS

SCHILLER ST

N BIRD ST

STH 19

25' TYP.

132'WB'

132'EB'

ROAD WORK AHEAD W20-1A

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2	SHEET 33	E

2

2

N

122'WB'

123'WB'

124'WB'

STH 19

EL

EL

STH 19

TEMPORARY PEDESTRIAN CURB RAMP

122'EB'

50' TYP.

123'EB'

TEMPORARY PEDESTRIAN CURB RAMP

124'EB'

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

8'

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

8'

24'

TEMPORARY PEDESTRIAN SURFACE PLATE

18'

TEMPORARY PEDESTRIAN SURFACE PLATE

5'

8'

5'

8'

12'

12'

EL

EL

EL

EL

M4-60L
30"X24"

M4-60R
30"X24"

SB USH 151 ON-RAMP

NOTES:
-REFER TO S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL GUIDANCE.

-RAMP TO CLOSE DURING CURB RAMP WORK.

-SEE "TRAFFIC CONTROL - STAGE 2" PLAN SHEETS FOR MORE DETAILS.

-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

LEGEND

- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEDESTRIAN ACCESS	SHEET 34	E

2

2

N

'WB'

128'WB'

129'WB'

130'WB'

STH 19

EL

EL

EL

TEMPORARY PEDESTRIAN
CURB RAMP

128'EB'

50' TYP.

STH 19

129'EB'

TEMPORARY PEDESTRIAN
CURB RAMP

130'EB'

12'

TEMPORARY PEDESTRIAN
DETECTABLE WARNING FIELD

8'

TEMPORARY PEDESTRIAN
DETECTABLE WARNING FIELD

8'

5'

TEMPORARY PEDESTRIAN
SURFACE PLATE

24'

TEMPORARY PEDESTRIAN
SURFACE PLATE

12'

EL

EL

SS

5'

8'

12'

M4-60L
30"X24"

M4-60R
30"X24"

NB USH 151 OFF-RAMP

NOTES:
-REFER TO S.D.D. "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL GUIDANCE.

-RAMP TO CLOSE DURING CURB RAMP WORK.

-SEE "TRAFFIC CONTROL - STAGE 2" PLAN SHEETS FOR MORE DETAILS.

-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

LEGEND

- DIRECTION OF TRAFFIC
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEDESTRIAN ACCESS	SHEET 35	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\025004_TC_PED.DWG
LAYOUT NAME - 02

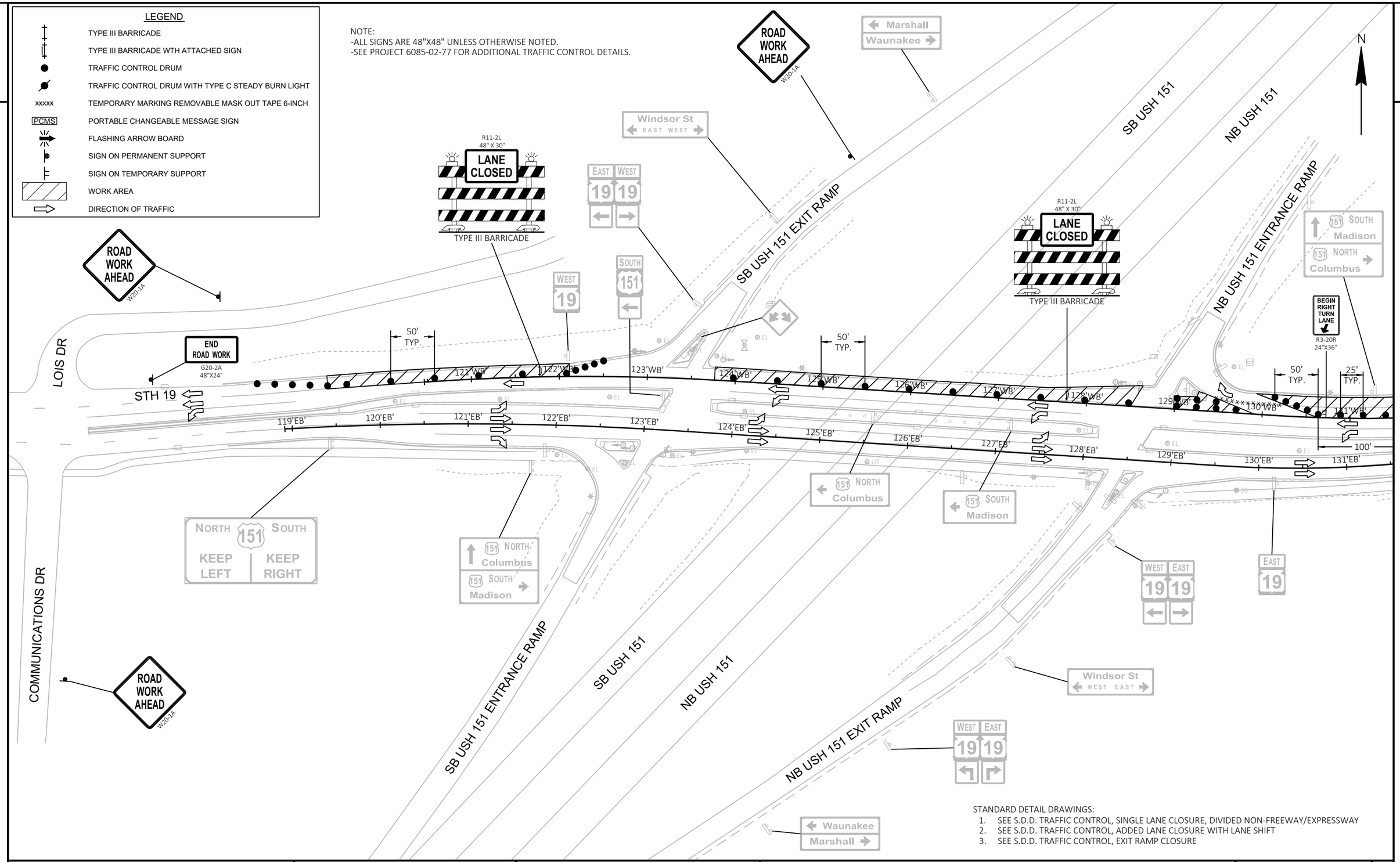
PLOT DATE : 7/11/2023 9:25 AM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

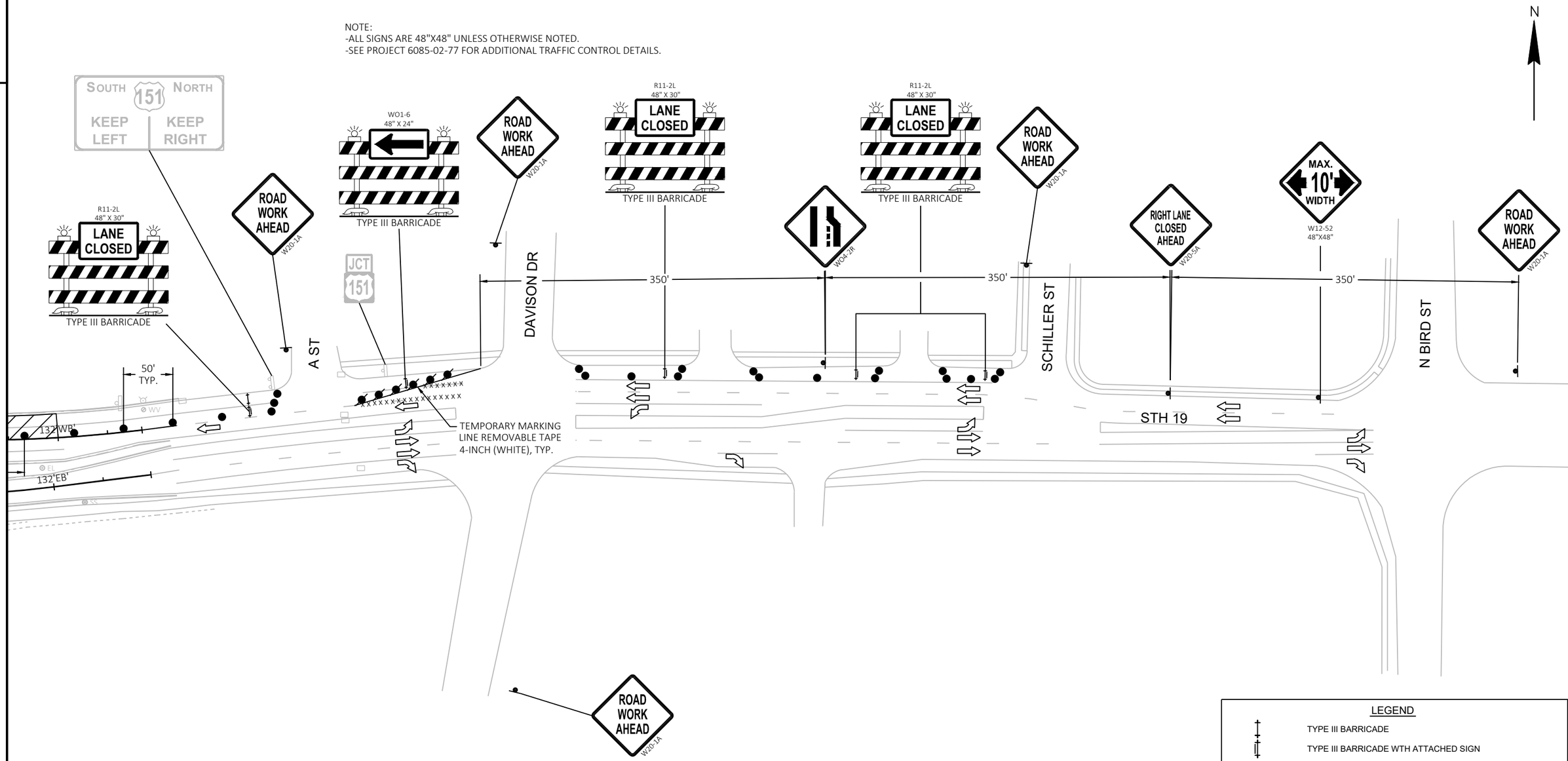


STANDARD DETAIL DRAWINGS:

1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 36	E

NOTE:
-ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
-SEE PROJECT 6085-02-77 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.



STANDARD DETAIL DRAWINGS:
1. SEE S.D.D. TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
2. SEE S.D.D. TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
3. SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- xxxxx — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3	SHEET 37	E

2

EGRE RD

EGRE RD

EGRE RD

N BIRD ST

N BIRD ST

WILBURN RD

N

COUNTY C

COUNTY C

COUNTY C

COUNTY N

COUNTY N

COUNTY N

COUNTY N

COUNTY VV

COUNTY VV

151

151

19

19

19

19

ST ALBERT THE GREAT DR

TOWER DR

BROADWAY DR

N THOMPSON RD

RAMP CLOSED

RAMP CLOSED

BUSINESS 151

MAIN ST

S BIRD ST

BAILEY RD

REINER RD

SEE DETAIL 1

Sun Prairie

LEGEND

- WORK ZONE
- DETOUR ROUTE
- X — SIGN NUMBER
- PROPOSED SIGN MOUNTED ON POSTS
- DOUBLE STEEL SIGN SUPPORT
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

NOTES

ADJUST NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

REMOVE OR COVER ALL SIGNS TEMPORARY OR EXISTING THAT CONFLICT WITH THE TRAFFIC CONTROL "IN USE" AS APPROVED BY THE ENGINEER.

PLACE PCMS 7 CALENDAR DAYS PRIOR TO WORK OR AS DIRECTED BY THE ENGINEER.

SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

SEE S.D.D. OFF RAMP LANE CLOSURE

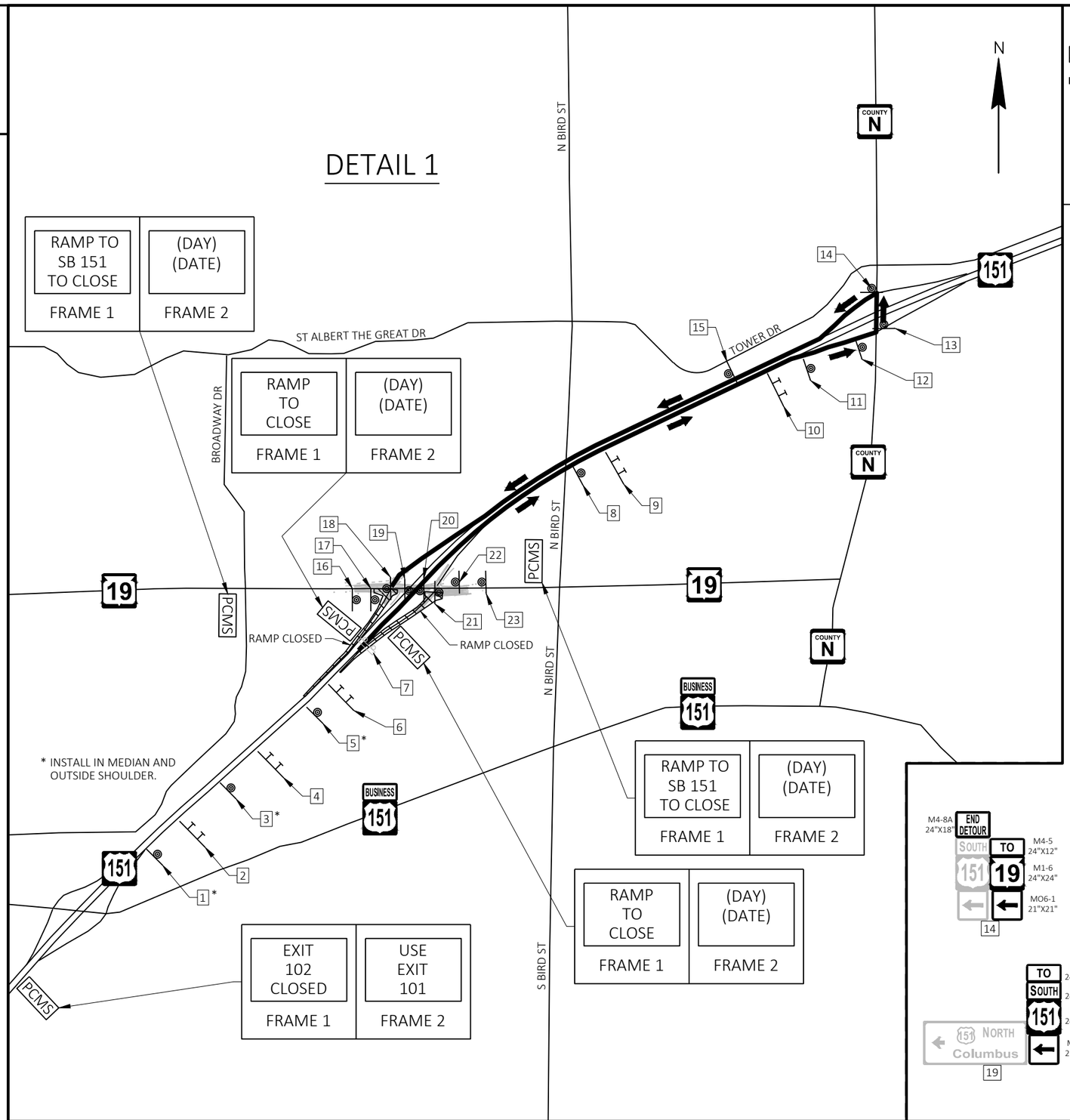
2

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	DETOUR - USH 151 NB TO STH 19 - OVERVIEW	SHEET 38	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - OVERVIEW 0.5mi

PLOT DATE : 10/19/2022 10:53 AM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

DETAIL 1



LEGEND

- WORK ZONE
- DETOUR ROUTE
- [X] SIGN NUMBER
- PROPOSED SIGN MOUNTED ON POSTS
- DOUBLE STEEL SIGN SUPPORT
- [PCMS] PORTABLE CHANGEABLE MESSAGE SIGN

NOTES

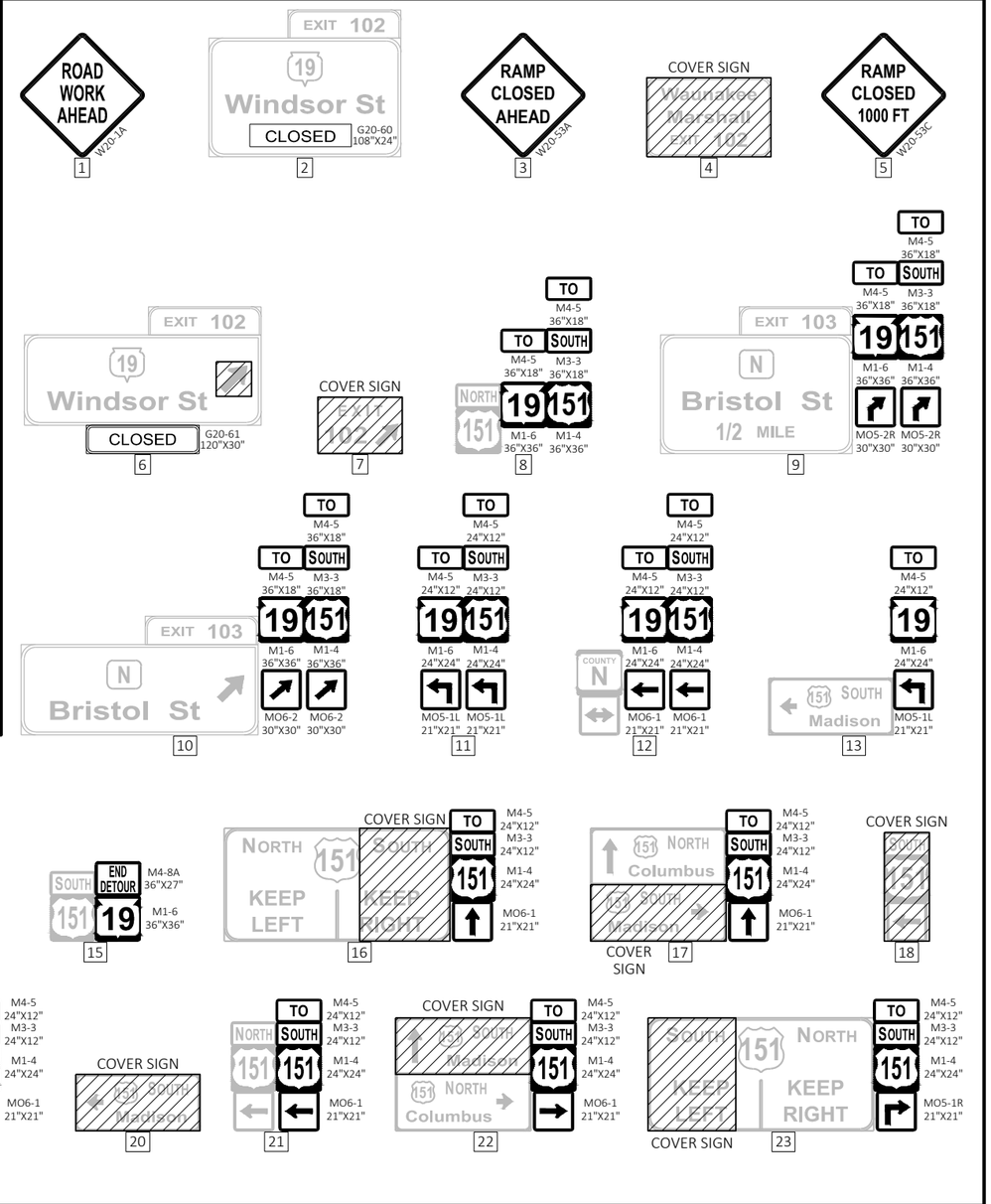
ADJUST NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

REMOVE OR COVER ALL SIGNS TEMPORARY OR EXISTING THAT CONFLICT WITH THE TRAFFIC CONTROL "IN USE" AS APPROVED BY THE ENGINEER.

PLACE PCMS 7 CALENDAR DAYS PRIOR TO WORK OR AS DIRECTED BY THE ENGINEER.

SEE S.D.D. TRAFFIC CONTROL, EXIT RAMP CLOSURE

SEE S.D.D. OFF RAMP LANE CLOSURE



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	DETOUR - SB USH 151 ON RAMP AND NB USH 151 OFF RAMP	SHEET 39	E

6085-02-75

Line	Item	Item Description	Unit	Total	Qty
0002	201.0220	Grubbing	ID	43.000	43.000
0004	204.0100	Removing Concrete Pavement	SY	370.000	370.000
0006	204.0110	Removing Asphaltic Surface	SY	163.000	163.000
0008	204.0150	Removing Curb & Gutter	LF	1,827.000	1,827.000
0010	204.0155	Removing Concrete Sidewalk	SY	140.000	140.000
0012	204.0195	Removing Concrete Bases	EACH	9.000	9.000
0014	204.0220	Removing Inlets	EACH	7.000	7.000
0016	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	121.000	121.000
0018	205.0100	Excavation Common	CY	1,676.000	1,676.000
0022	213.0100	Finishing Roadway (project) 01. 6085-02-75	EACH	1.000	1.000
0026	305.0110	Base Aggregate Dense 3/4-Inch	TON	264.000	264.000
0028	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	880.000	880.000
0032	311.0110	Breaker Run	TON	340.000	340.000
0034	415.0080	Concrete Pavement 8-Inch	SY	1,388.000	1,388.000
0038	416.0610	Drilled Tie Bars	EACH	1,150.000	1,150.000
0040	416.0620	Drilled Dowel Bars	EACH	471.000	471.000
0042	416.1710	Concrete Pavement Repair	SY	72.000	72.000
0044	416.1720	Concrete Pavement Replacement	SY	794.000	794.000
0054	520.8000	Concrete Collars for Pipe	EACH	7.000	7.000
0056	531.2030	Drilling Shaft 30-Inch	LF	34.000	34.000
0058	531.5110	Foundation Single-Shaft Type MC-I (structure) 01. S-13-0577	EACH	1.000	1.000
0060	531.5110	Foundation Single-Shaft Type MC-I (structure) 02. S-13-0578	EACH	1.000	1.000
0062	532.5110	Monotube Cantilever Type I (structure) 01. S-13-0577	EACH	1.000	1.000
0064	532.5110	Monotube Cantilever Type I (structure) 02. S-13-0578	EACH	1.000	1.000
0066	601.0150	Concrete Curb Integral Type D	LF	90.000	90.000
0070	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	2,131.000	2,131.000
0074	601.0600	Concrete Curb Pedestrian	LF	158.000	158.000
0076	602.0405	Concrete Sidewalk 4-Inch	SF	6,040.000	6,040.000
0078	602.0410	Concrete Sidewalk 5-Inch	SF	2,150.000	2,150.000
0082	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	70.000	70.000
0086	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	139.000	139.000
0090	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	79.000	79.000
0092	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	10.000	10.000
0096	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0098	611.0624	Inlet Covers Type H	EACH	7.000	7.000
0100	611.2033	Manholes 3x3-FT	EACH	2.000	2.000
0102	611.3230	Inlets 2x3-FT	EACH	7.000	7.000
0108	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6085-02-75	EACH	1.000	1.000
0110	619.1000	Mobilization	EACH	0.500	0.500
0114	620.0300	Concrete Median Sloped Nose	SF	150.000	150.000
0116	624.0100	Water	MGAL	9.000	9.000
0120	625.0500	Salvaged Topsoil	SY	2,232.000	2,232.000
0126	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0128	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0130	628.2006	Erosion Mat Urban Class I Type A	SY	2,232.000	2,232.000
0132	628.7015	Inlet Protection Type C	EACH	16.000	16.000
0134	629.0210	Fertilizer Type B	CWT	1.000	1.000
0136	630.0130	Seeding Mixture No. 30	LB	40.000	40.000
0138	630.0500	Seed Water	MGAL	50.000	50.000

6085-02-75

Line	Item	Item Description	Unit	Total	Qty
0140	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	12.000	12.000
0144	637.2210	Signs Type II Reflective H	SF	34.000	34.000
0146	638.2102	Moving Signs Type II	EACH	18.000	18.000
0148	638.2601	Removing Signs Type I	EACH	18.000	18.000
0152	638.3000	Removing Small Sign Supports	EACH	18.000	18.000
0154	642.5201	Field Office Type C	EACH	0.500	0.500
0156	643.0300	Traffic Control Drums	DAY	5,415.000	5,415.000
0158	643.0420	Traffic Control Barricades Type III	DAY	500.000	500.000
0160	643.0705	Traffic Control Warning Lights Type A	DAY	1,000.000	1,000.000
0162	643.0715	Traffic Control Warning Lights Type C	DAY	310.000	310.000
0166	643.0900	Traffic Control Signs	DAY	1,990.000	1,990.000
0168	643.0910	Traffic Control Covering Signs Type I	EACH	1.000	1.000
0170	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000
0172	643.1050	Traffic Control Signs PCMS	DAY	42.000	42.000
0174	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	947.000	947.000
0176	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	236.000	236.000
0182	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	499.000	499.000
0184	643.5000	Traffic Control	EACH	0.500	0.500
0186	644.1430	Temporary Pedestrian Surface Plate	SF	756.000	756.000
0190	644.1601	Temporary Pedestrian Curb Ramp	DAY	44.000	44.000
0192	644.1605	Temporary Pedestrian Detectable Warning Field	SF	64.000	64.000
0194	644.1810	Temporary Pedestrian Barricade	LF	1,014.000	1,014.000
0196	646.1020	Marking Line Epoxy 4-Inch	LF	2,864.000	2,864.000
0198	646.3020	Marking Line Epoxy 8-Inch	LF	1,935.000	1,935.000
0200	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	50.000	50.000
0202	646.5020	Marking Arrow Epoxy	EACH	5.000	5.000
0204	646.5120	Marking Word Epoxy	EACH	3.000	3.000
0206	646.6120	Marking Stop Line Epoxy 18-Inch	LF	151.000	151.000
0208	646.6220	Marking Yield Line Epoxy 18-Inch	EACH	16.000	16.000
0212	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	192.000	192.000
0216	646.8120	Marking Curb Epoxy	LF	132.000	132.000
0218	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0228	650.4000	Construction Staking Storm Sewer	EACH	9.000	9.000
0230	650.4500	Construction Staking Subgrade	LF	350.000	350.000
0234	650.7000	Construction Staking Concrete Pavement	LF	1,600.000	1,600.000
0236	650.8501	Construction Staking Electrical Installations (project) 01. 6085-02-75	EACH	1.000	1.000
0240	650.9000	Construction Staking Curb Ramps	EACH	6.000	6.000
0242	650.9500	Construction Staking Sidewalk (project) 01. 6085-02-75	EACH	1.000	1.000
0246	650.9911	Construction Staking Supplemental Control (project) 01. 6085-02-75	EACH	1.000	1.000
0250	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	566.000	566.000
0252	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	208.000	208.000
0256	652.0615	Conduit Special 3-Inch	LF	969.000	969.000
0260	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	7.000	7.000
0262	653.0900	Adjusting Pull Boxes	EACH	1.000	1.000
0264	653.0905	Removing Pull Boxes	EACH	7.000	7.000
0266	654.0101	Concrete Bases Type 1	EACH	1.000	1.000
0270	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0272	654.0120	Concrete Bases Type 10-Special	EACH	2.000	2.000
0276	655.0210	Cable Traffic Signal 3-14 AWG	LF	15.000	15.000

6085-02-75

Line	Item	Item Description	Unit	Total	Qty
0278	655.0230	Cable Traffic Signal 5-14 AWG	LF	806.000	806.000
0280	655.0240	Cable Traffic Signal 7-14 AWG	LF	2,245.000	2,245.000
0282	655.0250	Cable Traffic Signal 9-14 AWG	LF	339.000	339.000
0284	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,734.000	1,734.000
0288	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,920.000	1,920.000
0292	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	2,779.000	2,779.000
0294	655.0610	Electrical Wire Lighting 12 AWG	LF	954.000	954.000
0296	655.0700	Loop Detector Lead In Cable	LF	3,049.000	3,049.000
0298	657.0100	Pedestal Bases	EACH	1.000	1.000
0304	657.0350	Poles Type 10	EACH	4.000	4.000
0306	657.0352	Poles Type 10-Special	EACH	2.000	2.000
0308	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000	1.000
0312	657.0525	Monotube Arms 25-FT	EACH	1.000	1.000
0314	657.0530	Monotube Arms 30-FT	EACH	3.000	3.000
0316	657.0536	Monotube Arms 35-FT-Special	EACH	1.000	1.000
0318	657.0541	Monotube Arms 40-FT-Special	EACH	1.000	1.000
0328	657.0815	Luminaire Arms Steel 15-FT	EACH	6.000	6.000
0330	658.0173	Traffic Signal Face 3S 12-Inch	EACH	15.000	15.000
0332	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0334	658.0416	Pedestrian Signal Face 16-Inch	EACH	1.000	1.000
0336	658.0500	Pedestrian Push Buttons	EACH	1.000	1.000
0338	658.5070	Signal Mounting Hardware (location) 01. STH 19 & USH 151	EACH	1.000	1.000
0344	659.1125	Luminaires Utility LED C	EACH	6.000	6.000
0346	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	15.000	15.000
0352	690.0150	Sawing Asphalt	LF	31.000	31.000
0354	690.0250	Sawing Concrete	LF	3,910.000	3,910.000
0358	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,000.000	1,000.000
0360	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	625.000	625.000
0378	SPV.0060	Special 09. Adjust Concrete Bases	EACH	10.000	10.000
0390	SPV.0060	Special 15. Removing Traffic Signal - STH 19 & USH 151	EACH	1.000	1.000
0392	SPV.0060	Special 16. Retroreflective Backplate 3S	EACH	15.000	15.000
0394	SPV.0060	Special 17. Retroreflective Backplate 4S	EACH	4.000	4.000

3

GRUBBING

CATEGORY	STATION	LOCATION	O/S	201.0220 GRUBBING ID
0010	120+52 'EB'	STH 19	LT	5
0010	121+39 'EB'	STH 19	LT	6
0010	122+42 'EB'	STH 19	LT	4
0010	124+67 'EB'	STH 19	LT	6
0010	129+50 'EB'	STH 19	LT	5
0010	129+83 'EB'	STH 19	LT	6
0010	130+13 'EB'	STH 19	LT	5
0010	130+66 'EB'	STH 19	LT	6
			TOTAL:	43

PAVEMENT REMOVAL

CATEGORY	STATION	TO	STATION	O/S	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY
0010	120+35 'EB'	-	120+45 'EB'	LT	STH 19	10	--
0010	121+73 'EB'	-	121+88 'EB'	RT	STH 19	--	16
0010	122+54 'EB'	-	122+91 'EB'	RT	STH 19	--	44
0010	123+15 'EB'	-	123+30 'EB'	LT	STH 19	20	--
0010	123+38 'EB'	-	123+63 'EB'	RT	STH 19	--	26
0010	123+74 'EB'	-	124+08 'EB'	LT	STH 19	50	--
0010	125+37 'EB'	-	126+53 'EB'	LT	STH 19	110	--
0010	125+37 'WB'	-	126+23 'WB'	RT	STH 19	90	--
0010	127+80 'WB'	-	128+16 'WB'	RT	STH 19	50	--
0010	128+32 'EB'	-	128+60 'EB'	RT	STH 19	--	18
0010	128+66 'WB'	-	128+81 'WB'	RT	STH 19	40	--
0010	128+95 'EB'	-	129+33 'EB'	RT	STH 19	--	30
0010	132+54 'WB'	-	132+80 'WB'	RT	STH 19	--	29
					TOTALS:	**370**	**163**

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	O/S	204.0150 LF
0010	119+68 'EB'	-	123+24 'EB'	LT	336
0010	122+06 'EB'	-	123+20 'EB'	RT	119
0010	124+16 'EB'	-	125+35 'EB'	LT	119
0010	128+17 'EB'	-	128+86 'EB'	RT	69
0010	126+23 'WB'	-	127+80 'WB'	LT	157
0010	128+94 'WB'	-	132+91 'WB'	RT	390
				CATEGORY 0010 TOTALS:	**1,190**
0020	121+01 'EB'	-	121+16 'EB'	RT	15
0020	123+55 'EB'	-	123+62 'EB'	RT	7
0020	123+95 'EB'	-	124+11 'EB'	RT	16
0020	124+21 'EB'	-	124+39 'EB'	RT	18
0020	126+50 'EB'	-	126+64 'EB'	LT/RT	20
0020	126+83 'EB'	-	127+80 'EB'	LT/RT	109
0020	120+27 'WB'	-	120+46 'WB'	RT	19
0020	121+46 'WB'	-	122+07 'WB'	LT	60
0020	122+39 'WB'	-	122+59 'WB'	RT	20
0020	122+96 'WB'	-	123+07 'WB'	LT	12
0020	123+95 'WB'	-	125+57 'WB'	LT/RT	202
0020	125+92 'WB'	-	126+38 'WB'	LT	39
0020	127+31 'WB'	-	127+57 'WB'	LT	26
0020	127+92 'WB'	-	128+65 'WB'	LT	74
				CATEGORY 0020 TOTALS:	**637**
				PROJECT TOTALS:	**1,827**

3

REMOVING CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	O/S	ROADWAY	204.0155 SY
0010	121+88 'EB'	-	122+35 'EB'	RT	STH 19	40
0010	122+63 'EB'	-	122+90 'EB'	RT	STH 19	20
0010	123+10 'EB'	-	123+39 'EB'	RT	STH 19	20
0010	128+01 'EB'	-	128+25 'EB'	RT	STH 19	30
0010	128+40 'EB'	-	128+51 'EB'	RT	STH 19	10
0010	128+66 'EB'	-	128+95 'EB'	RT	STH 19	20
					TOTALS:	**140**

REMOVING STORM SEWER

CATEGORY	STATION		STATION	O/S	ROADWAY	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER 12-INCH LF
0010	120+40 'EB'	-	120+40 'EB'	LT	STH 19	1	18
0010	123+19 'EB'	-	123+21 'EB'	LT	STH 19	1	9
0010	123+98 'EB'	-	124+11 'EB'	LT	STH 19	2	30
0010	126+10 'EB'	-	126+10 'EB'	LT	STH 19	2	26
0010	128+75 'EB'	-	128+89 'EB'	LT	STH 19	1	38
					TOTALS:	7	121

FINISHING ROADWAY (6085-02-75)

CATEGORY	LOCATION	213.0100 EACH
0010	PROJECT LIMITS	1
	TOTALS:	**1**

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (6) FACTOR 1.25	MASS ORDINATE +/- (7)
DIVISION 1									
QR-STH 19 EB	119+68.845/126+50	STH 19 EB	863	178	0	863	2	-176	1,039
QR-STH 19 WB	126+50/132+75.94	STH 19 WB	635	0	0	635	49	61	574
DIVISION 1 SUBTOTAL			1,498	178	0	1,498	51	-114	1,612
GRAND TOTAL			1,498	178	0	1,498	51	-114	1,612
CATEGORY 0010 TOTAL COMMON EXC			1,676						

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) EXPANDED FILL FACTOR = 1.25
(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

BASE AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	305.0110* BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	624.0100** WATER MGAL
0010	119+68 'EB'	-	123+30 'EB'	STH 19	--	180	310	2
0010	123+74 'EB'	-	126+53 'EB'	STH 19	--	270	--	3
0010	125+37 'WB'	-	128+09 'WB'	STH 19	--	150	--	2
0010	128+65 'WB'	-	132+81 'WB'	STH 19	--	200	--	2
				UNDISTRIBUTED	50	80	30	1
				TOTALS:	**50**	**880**	**340**	**9**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE
** WATER CONVERSION IS 1 MGAL/100 TON OF BASE AGGREGATE DENSE MATERIAL. USE WATER FOR BASE COMPACTION AND DUST CONTROL.

CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	416.0610* DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	690.0250* SAWING CONCRETE LF
0010	119+68 'EB'	-	123+24 'EB'	STH 19	354	152	11	--	--	395
0010	123+74 'EB'	-	126+53 'EB'	STH 19	310	123	19	--	--	364
0010	125+37 'WB'	-	128+16 'WB'	STH 19	315	120	19	--	--	351
0010	128+73 'WB'	-	132+80 'WB'	STH 19	409	166	16	--	--	460
				CATEGORY 0010 TOTALS:	**1,388**	**561**	**65**	**--**	**--**	**1,570**
0020	119+42 'EB'	-	119+81 'EB'	STH 19	--	35	22	12	61	141
0020	119+92 'EB'	-	120+25 'EB'	STH 19	--	18	51	--	81	149
0020	120+64 'EB'	-	120+83 'EB'	STH 19	--	8	58	--	77	110
0020	121+00 'EB'	-	121+26 'EB'	STH 19	--	10	58	19	69	137
0020	130+12 'EB'	-	130+34 'EB'	STH 19	--	18	19	--	30	69
0020	132+63 'EB'	-	133+00 'EB'	STH 19	--	97	22	--	85	121
0020	119+37 'WB'	-	120+57 'WB'	STH 19	--	34	42	--	279	374
0020	124+21 'WB'	-	124+35 'WB'	STH 19	--	6	19	18	--	51
0020	130+75 'WB'	-	130+99 'WB'	STH 19	--	13	58	12	59	133
0020	131+80 'WB'	-	132+00 'WB'	STH 19	--	16	58	11	53	136
				CATEGORY 0020 TOTALS:	**--**	**253**	**406**	**72**	**794**	**1,421**
				PROJECT TOTALS:	**1,388**	**814**	**471**	**72**	**794**	**2,991**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

3

CONCRETE CURB AND GUTTER

CATEGORY	STA	TO	STA	O/S	ROADWAY	416.0610* DRILLED TIE BARS EACH	601.0150 CONCRETE CURB INTEGRAL TYPE D LF	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	690.0250* SAWING CONCRETE LF	COMMENTS
0010	119+68 'EB'	-	123+24 'EB'	LT	STH 19	--	18	350	--	--	--	
0010	121+96 'EB'	-	122+39 'EB'	RT	USH 151 SB ENTRANCE RAMP	19	--	40	41	--	40	
0010	122+55 'EB'	-	122+78 'EB'	RT	USH 151 SB ENTRANCE RAMP	14	--	31	18	--	30	REVERSE SLOPED
0010	122+83 'EB'	-	122+92 'EB'	RT	USH 151 SB ENTRANCE RAMP	11	--	22	17	--	22	REVERSE SLOPED
0010	123+04 'EB'	-	123+27 'EB'	RT	USH 151 SB ENTRANCE RAMP	13	--	27	23	--	27	
0010	123+74 'EB'	-	123+81 'EB'	LT	STH 19	--	--	--	--	80	--	
0010	123+81 'EB'	-	126+53 'EB'	LT	STH 19	--	--	279	--	--	--	
0010	127+94 'EB'	-	128+09 'EB'	LT	STH 19	--	22	--	--	--	--	
0010	128+09 'EB'	-	128+16 'EB'	LT	STH 19	--	--	--	--	70	--	
0010	128+11 'EB'	-	128+25 'EB'	RT	USH 151 NB EXIT RAMP	11	--	18	18	--	28	
0010	128+37 'EB'	-	128+44 'EB'	RT	USH 151 NB EXIT RAMP	8	--	15	5	--	15	REVERSE SLOPED
0010	128+43 'EB'	-	128+53 'EB'	RT	USH 151 NB EXIT RAMP	8	--	16	7	--	15	REVERSE SLOPED
0010	128+59 'EB'	-	128+86 'EB'	RT	USH 151 NB EXIT RAMP	16	--	23	29	--	22	
0010	123+81 'WB'	-	124+01 'WB'	RT	STH 19	--	28	--	--	--	--	
0010	125+37 'WB'	-	128+09 'WB'	RT	STH 19	--	--	279	--	--	--	
0010	128+70 'WB'	-	132+81 'WB'	RT	STH 19	--	22	406	--	--	--	
					CATEGORY 0010 TOTALS:	**100**	**90**	**1506**	**158**	**150**	**199**	
0020	121+01 'EB'	-	121+16 'EB'	RT	STH 19	--	--	15	--	--	20	
0020	123+55 'EB'	-	126+62 'EB'	RT	STH 19	3	--	7	--	--	12	
0020	123+95 'EB'	-	124+11 'EB'	RT	STH 19	6	--	16	--	--	21	
0020	124+21 'EB'	-	124+39 'EB'	RT	STH 19	7	--	18	--	--	23	
0020	126+50 'EB'	-	126+64 'EB'	LT/RT	STH 19	8	--	20	--	--	30	
0020	126+83 'EB'	-	127+80 'EB'	LT/RT	STH 19	44	--	109	--	--	119	
0020	120+27 'WB'	-	120+46 'WB'	RT	STH 19	--	--	19	--	--	24	
0020	121+46 'WB'	-	122+07 'WB'	LT	STH 19	24	--	60	--	--	65	
0020	122+39 'WB'	-	122+59 'WB'	RT	STH 19	8	--	20	--	--	25	
0020	123+95 'WB'	-	125+57 'WB'	LT/RT	STH 19	81	--	202	--	--	227	
0020	125+92 'WB'	-	126+38 'WB'	LT	STH 19	16	--	39	--	--	44	
0020	127+31 'WB'	-	127+57 'WB'	LT	STH 19	10	--	26	--	--	31	
0020	127+92 'WB'	-	128+65 'WB'	LT	STH 19	30	--	74	--	--	79	
					CATEGORY 0020 TOTALS:	**236**	**--**	**625**	**--**	**--**	**720**	
					PROJECT TOTALS:	**337**	**90**	**2131**	**158**	**150**	**919**	

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	305.0110* BASE AGGREGATE DENSE 3/4-INCH TON	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500 CONSTRUCTION STAKING SIDEWALK (6085-02-75) EACH
0010	121+75 'EB'	-	122+37 'EB'	STH 19	11	--	440	--	43	--	--
0010	122+62 'EB'	-	122+89 'EB'	STH 19	5	380	200	--	29	--	--
0010	123+08 'EB'	-	123+62 'EB'	STH 19	12	--	480	20	25	--	--
0010	123+81 'EB'	-	128+09 'EB'	STH 19	121	4,900	--	--	--	--	--
0010	128+01 'EB'	-	128+25 'EB'	STH 19	5	50	210	20	--	--	--
0010	128+39 'EB'	-	128+50 'EB'	STH 19	2	160	60	20	--	--	--
0010	128+61 'EB'	-	129+33 'EB'	STH 19	14	--	560	--	29	--	--
				UNDISTRIBUTED	17	550	200	10	13	6	1
				TOTALS:	**186**	**6,040**	**2,150**	**70**	**139**	**6**	**1**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

STORM SEWER

CATEGORY	PIPE LOCATION FROM	TO	LOCATION	INVERT INLET	DISCHARGE	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 15-INCH LF	COMMENTS
0010	01.01.01	EX INLET	EB	984.24	984.01	3.00%	--	10	CONCRETE COLLAR REQ'D
0010	01.02.01	01.02.01	EB	985.58	985.56	0.50%	7	--	CONCRETE COLLAR REQ'D
0010	01.03.01	01.03.02	EB	985.59	985.48	0.50%	14	--	CONCRETE COLLAR REQ'D
0010	02.01.01	02.01.02	EB	987.24	987.13	1.00%	14	--	CONCRETE COLLAR REQ'D
0010	02.01.02	EX INLET	EB	987.05	986.90	3.00%	8	--	CONCRETE COLLAR REQ'D
0010	EX INLET	02.02.01	EB	988.41	988.30	0.50%	25	--	CONCRETE COLLAR REQ'D
0010	02.02.01	EX INLET	EB	988.28	988.24	0.50%	11	--	CONCRETE COLLAR REQ'D
						TOTALS:	**79**	**10**	

NOTES:

1) PIPE LENGTHS ARE MEASURED TO THE CENTER OF STRUCTURES.

STORM SEWER STRUCTURE SCHEDULE

CATEGORY	STRUCTURE NUMBER	(1) STATION	(1) OFFSET FT	LOCATION	CASTING HEIGHT INCHES	TOP SLAB THICKNESS INCHES	ADJUSTING RINGS HEIGHT INCHES	RIM ELEVATION	(2) TOP OF STRUCTURE ELEVATION	BOTTOM OF STRUCTURE ELEVATION	(3) DEPTH OF STRUCTURE FT	611.0530 MANHOLE COVERS TYPE J EACH	611.0624 INLET COVERS TYPE H EACH	611.2033 MANHOLES 3x3-FT EACH	611.3230 INLETS 2x3-FT EACH	520.8000 CONCRETE COLLARS FOR PIPE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
0010	01.01.01	120+40.65 'EB'	23.3 LT	EB	10.00	8.00	6.00	987.75	986.42	984.05	2.37	--	1	--	1	1	1
0010	01.02.01	123+18.66 'EB'	24.1 LT	EB	8.75	8.00	6.00	988.99	987.76	985.41	2.35	1	--	1	--	1	1
0010	01.02.02	123+20.92 'EB'	30.7 LT	EB	10.00	8.00	6.00	988.96	987.63	985.39	2.24	--	1	--	1	1	1
0010	01.03.01	123+95.29 'EB'	23.5 LT	EB	10.00	8.00	6.00	989.29	987.96	985.42	2.54	--	1	--	1	--	1
0010	01.03.02	123+97.65 'EB'	37.5 LT	EB	10.00	8.00	6.00	989.38	988.05	985.31	2.74	--	1	--	1	1	1
0010	02.01.01	126+09.60 'EB'	23.5 LT	EB	10.00	8.00	6.00	990.48	989.15	987.06	2.09	--	1	--	1	--	1
0010	02.01.02	126+09.58 'EB'	37.2 LT	EB	10.00	8.00	6.00	990.36	989.03	986.90	2.13	--	1	--	1	1	1
0010	02.02.01	128+84.68 'EB'	37.1 LT	EB	10.00	8.00	6.00	991.88	990.55	988.08	2.47	--	1	--	1	1	1
0010	02.02.02	128+88.80 'EB'	47.1 LT	EB	10.00	8.00	6.00	992.10	990.77	988.07	2.70	1	--	1	--	1	1
											TOTALS:	**2**	**7**	**2**	**7**	**7**	**9**

NOTES:

1) STATIONS AND OFFSETS ARE TO THE CENTER OF THE STRUCTURE.

2) TOP OF STRUCTURE ELEVATION = RIM ELEVATION - CASTING HEIGHT - ADJUSTING RINGS HEIGHT.

3) DEPTH OF STRUCTURE = TOP OF STRUCTURE ELEVATION - BOTTOM OF STRUCTURE ELEVATION.

3

LANDSCAPING

CATEGORY	STATION	TO	STATION	O/S	ALIGNMENT	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO.30 LB	630.0500 SEED WATER MGAL
0010	119+52 'EB'	-	123+26 'EB'	LT	STH 19 EB	539	0.3	9.7	12.1
0010	121+75 'EB'	-	122+38 'EB'	RT	STH 19 EB	83	0.1	1.5	1.9
0010	123+04 'EB'	-	123+63 'EB'	RT	STH 19 EB	61	0.0	1.1	1.4
0010	123+81 'WB'	-	128+10 'WB'	LT	STH 19 EB	548	0.3	9.9	12.3
0010	128+01 'EB'	-	129+25 'EB'	RT	STH 19 EB	63	0.0	1.1	1.4
0010	128+67 'EB'	-	132+90 'EB'	LT	STH 19 EB	735	0.5	13.2	16.5
					UNDISTRIBUTED	203	0	4	5
					TOTALS:	**2,232**	**1**	**40**	**50**

EROSION CONTROL

CATEGORY	STA	TO	STA	OFFSET	ALIGNMENT	628.7015 INLET PROTECTION TYPE C EACH	628.2006 EROSION MAT URBAN CLASS I TYPE A SY
0010	119+52 'EB'	-	123+26 'EB'	LT	STH 19 EB	4	539
0010	121+75 'EB'	-	122+38 'EB'	RT	STH 19 EB	--	83
0010	123+04 'EB'	-	123+63 'EB'	RT	STH 19 EB	1	61
0010	123+81 'EB'	-	128+10 'EB'	LT	STH 19 EB	6	548
0010	128+01 'EB'	-	129+25 'EB'	RT	STH 19 EB	1	63
0010	128+67 'EB'	-	132+90 'EB'	LT	STH 19 EB	4	735
					UNDISTRIBUTED	--	203
					TOTALS:	**16**	**2,232**

3

EROSION CONTROL MOBILIZATION

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT 6085-02-75	1	1
	TOTALS:	**1**	**1**

SIGNING

CATEGORY	SIGN NO.	SIGN CODE	W INCH	X	H INCH	STATION	OFFSET	637.2210 SIGNS TYPE II REFLECTIVE TYPE H SF	634.0612 POSTS WOOD 4X6X12 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2601 REMOVING SIGNS TYPE I EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	N1-01	D16-1	36	X	60	120+44 'EB'	LT	15.00	--	--	--	--	OVERHEAD SIGN
0010	N1-02	R3-2	24	X	24	123+10 'EB'	LT	4.00	1	--	--	--	
0010	M1-01	-	-	X	-	121+85 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M1-02	-	-	X	-	122+30 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M1-03	-	-	X	-	123+10 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M1-04	-	-	X	-	123+23 'EB'	RT	--	--	1	1	1	MOVE SIGN
0010	M1-05	-	-	X	-	123+84 'EB'	LT	--	--	1	1	1	MOVE SIGN
0010	M1-06	-	-	X	-	123+98 'EB'	LT	--	--	1	1	1	MOVE SIGN
0010	M1-07	-	-	X	-	125+42 'EB'	LT	--	2	1	1	1	MOVE SIGN
0010	M1-08	-	-	X	-	123+16 'WB'	LT	--	--	1	1	1	MOVE SIGN
0010	N2-01	D16-1	36	X	60	132+05 'EB'	LT	15.00	--	--	--	--	OVERHEAD SIGN
0010	M2-01	-	-	X	-	128+13 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M2-02	-	-	X	-	128+62 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M2-03	-	-	X	-	128+75 'EB'	RT	--	1	1	1	1	MOVE SIGN
0010	M2-04	-	-	X	-	128+83 'EB'	LT	--	--	1	1	1	MOVE SIGN
0010	M2-05	-	-	X	-	129+21 'EB'	LT	--	--	1	1	1	
0010	M2-06	-	-	X	-	127+26 'WB'	RT	--	2	1	1	1	MOVE SIGN
0010	M2-07	-	-	X	-	127+96 'WB'	RT	--	--	1	1	1	MOVE SIGN
0010	M2-08	-	-	X	-	128+06 'WB'	RT	--	1	1	1	1	MOVE SIGN
0010	M2-09	-	-	X	-	128+08 'EB'	RT	--	--	2	2	2	MOVE SIGN
							TOTALS:	**34**	**12**	**18**	**18**	**18**	

TRAFFIC CONTROL SUMMARY

CATEGORY	STAGE	DURATION CALENDAR DAYS*	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I** EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH
0010	1	20	133	2,660	9	180	18	360	8	160	30	600	--	--	2	14	--
0010	2	20	85	1,700	12	240	24	480	6	120	23	460	--	6	4	14	--
0010	2 (PEDESTRIAN)	10	34	340	--	--	--	--	--	--	4	40	--	--	--	--	--
0010	3	5	63	315	8	40	16	80	6	30	20	100	--	--	--	--	--
0010	DETOUR	10	40	400	4	40	8	80	--	--	79	790	1	2	1	14	--
0010	PROJECT 6085-02-75		--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5
	TOTALS:	**65**		**5,415**		**500**		**1,000**		**310**		**1,990**	**1**	**8**		**42**	**0.5**

* FOR INFORMATION ONLY

** COVERING SIGNS IS FOR ONE CYCLE.

TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) LF	643.3250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE) LF	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH (BLACK) LF
0010	1	174	225	175
0010	2	120	--	50
0010	3	133	--	250
0010	DETOUR	475	--	--
0010	UNDISTRIBUTED	45	11	24
	TOTALS:	**947**	**236**	**499**

TEMPORARY PEDESTRIAN ITEMS

CATEGORY	STAGE	DURATION CALENDAR DAYS**	305.0110* BASE AGGREGATE DENSE 3/4-INCH TON	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP EACH	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
0010	2 (PEDESTRIAN)	10	25	687	4	40	64	922
0010	UNDISTRIBUTED		3	69	--	4	--	92
		TOTALS:	**28**	**756**		**44**	**64**	**1,014**

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

** FOR INFORMATION ONLY

PAVEMENT MARKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH (WHITE) LF	646.1020 MARKING LINE EPOXY 4-INCH (YELLOW) LF	646.3020 MARKING LINE EPOXY 8-INCH (WHITE) LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) LF	646.5020 MARKING ARROW EPOXY (WHITE) EACH	646.5120 MARKING WORD EPOXY (WHITE) EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF	646.6220 MARKING YIELD LINE EPOXY 18-INCH (WHITE) EACH	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF	646.8120 MARKING CURB EPOXY (YELLOW) LF	646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH
0010	118+92 'EB'	-	122+77 'EB'	STH 19 EB SKIPS	100	--	--	--	--	--	--	--	--	--	--
0010	118+92 'EB'	-	122+77 'EB'	STH 19 EB	--	388	--	--	--	--	--	--	--	--	--
0010	118+92 'EB'	-	122+77 'EB'	STH 19 EB	--	--	449	--	--	--	--	--	--	--	--
0010		-	122+77 'EB'	STH 19 EB	--	--	--	--	--	--	34	--	--	--	--
0010	122+15 'EB'	-	123+15 'EB'	STH 19 EB	--	--	--	--	--	--	--	8	125	--	--
0010	120+46 'WB'	-	123+47 'WB'	STH 19 WB SKIPS	75	--	--	--	--	--	--	--	--	--	--
0010	120+46 'WB'	-	123+47 'WB'	STH 19 WB	--	276	--	--	--	--	--	--	--	--	--
0010	123+08 'WB'	-	123+24 'WB'	STH 19 WB	--	--	--	--	--	--	--	--	--	30	--
0010		-	123+91 'WB'	STH 19 WB	--	--	--	--	--	--	34	--	--	--	--
0010	123+76 'WB'	-	123+93 'WB'	STH 19 WB	--	--	--	--	--	--	--	--	--	17	--
0010	123+81 'EB'	-	123+98 'EB'	STH 19 EB	--	--	--	--	--	--	--	--	--	17	--
0010	123+81 'EB'	-	127+94 'EB'	STH 19 EB SKIPS	100	--	--	--	--	--	--	--	--	--	--
0010	123+81 'EB'	-	127+94 'EB'	STH 19 EB	--	--	413	--	--	--	--	--	--	--	--
0010	123+81 'EB'	-	127+94 'EB'	STH 19 EB	--	401	--	--	--	--	--	--	--	--	--
0010	123+95 'WB'	-	127+94 'WB'	STH 19 WB	--	399	--	--	--	--	--	--	--	--	--
0010	123+95 'WB'	-	127+94 'WB'	STH 19 WB	--	--	399	--	--	--	--	--	--	--	--
0010	123+95 'WB'	-	127+70 'WB'	STH 19 WB SKIPS	100	--	--	--	--	--	--	--	--	--	--
0010	126+91 'EB'	-	127+26 'EB'	NB USH 151 EXIT RAMP	--	--	--	50	--	-	--	--	-	--	--
0010	127+89 'WB'	-	128+09 'WB'	STH 19 WB	--	--	--	--	--	--	--	--	--	20	--
0010	127+89 'EB'	-	128+09 'EB'	STH 19 EB	--	--	--	--	--	--	--	--	--	20	--
0010			127+94 'EB'	STH 19 EB	--	--	--	--	--	--	34	--	--	--	--
0010	128+21 'EB'	-	128+72 'EB'	STH 19 EB	--	--	--	--	--	--	15	8	67	--	--
0010	128+67 'EB'	-	132+90 'EB'	STH 19 EB SKIPS	113	-	--	--	--	--	--	--	--	--	--
0010	128+70 'EB'	-	132+90 'EB'	STH 19 EB	--	419	--	--	--	--	--	--	--	--	--
0010	128+70 'EB'	-	128+84 'EB'	STH 19 EB	--	-	--	--	--	--	--	--	--	28	--
0010	128+79 'WB'	-	132+80 'WB'	STH 19 WB	--	406	--	--	--	--	--	--	--	--	--
0010		-	129+22 'WB'	STH 19 WB	--	--	--	--	--	--	34	--	--	--	--
0010	129+22 'WB'	-	132+06 'WB'	STH 19 WB	--	--	285	--	--	--	--	--	--	--	--
0010	129+22 'WB'	-	132+80 'WB'	STH 19 WB SKIPS	88	--	-	--	--	--	--	--	--	--	--
0010	129+23 'WB'	-	132+81 'WB'	STH 19 WB	--	--	356	--	--	--	--	--	--	--	--
0010	129+28 'WB'	-	129+58 'WB'	STH 19 WB	--	--	33	--	--	--	--	--	--	--	--
0010	118+92 'EB'	-	132+90 'EB'	STH 19 EB	--	--	--	--	5	3	--	--	--	--	4
				TOTALS:	**575**	**2,289**	**1,935**	**50**	**5**	**3**	**151**	**16**	**192**	**132**	**4**
					2,864										

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9911 SUPPLEMENTAL CONTROL EACH
0010	119+00 'EB'	-	127+00 'EB'	STH 19	350	800	--
0010	125+00 'WB'	-	133+00 'WB'	STH 19	--	800	--
0010	PROJECT 6085-02-75				--	--	1
				TOTALS:	**350**	**1,600**	**1**

SAW CUTTING

CATEGORY	STATION	O/S	ROADWAY	690.0150 SAWING ASPHALT LF
0010	121+75 'EB'	RT	STH 19	10
0010	123+60 'EB'	RT	STH 19	10
0010	129+33 'EB'	RT	STH 19	11
			TOTALS:	**31**

Pull Boxes

Category	Station	Dir	Location	653.0164 Pull Boxes Non-Conductive 24x42-Inch EACH	Description
0010	122 19EB + 71	LEFT	35	1	PB1
0010	121 19EB + 36	LEFT	28	1	PB2
0010	120 19EB + 18	LEFT	26	1	PB3
0010	129 19EB + 0	LEFT	22	1	PB4
0010	130 19EB + 46	LEFT	20	1	PB5
0010	131 19EB + 90	LEFT	20	1	PB6
0010	127 19EB + 89	LEFT	31	1	PB7
		Total		**7**	

Signal Bases

Category	Station	Dir	Location	654.0101 Concrete Bases Type 1 EACH	654.0110 Concrete Bases Type 10 EACH	654.0120 Concrete Bases Type 10-Special EACH	Description
0010	123 + 99	LEFT	30			1	SB1
0010	123 + 17	RIGHT	42		1		SB2
0010	123 + 17	LEFT	39		1		SB3
0010	128 + 78	LEFT	111		1		SB4
0010	128 + 83	LEFT	23		1		SB5
0010	127 + 98	LEFT	31			1	SB6
0010	128 + 21	RIGHT	17	1			SB7
		Total		**1**	**4**	**2**	

Electrical Conduit

Category	Station	to	Station	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch LF	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch LF	652.0615 Conduit Special 3-Inch LF	Description
0010	122 + 02	to	122 19EB + 71			195	Existing PB7 to PB1
0010	123 + 11	to	122 19EB + 71			155	Existing PB9 to PB1
0010	128 + 65	to	129 19EB + 00			196	Existing PB22 to PB4
0010	129 + 37	to	129 19EB + 00			147	Existing PB25 to PB4
0010	128 + 08	to	127 19EB + 89			128	Existing PB27 to PB7
0010	127 + 38	to	127 19EB + 89			148	Existing PB29 to PB7
0010	124 + 13	to	123 19EB + 99		15		Existing PB2 to SB1
0010	123 + 34	to	123 19EB + 17		22		Existing PB4 to SB2
0010	122 + 71	to	123 19EB + 17		47		PB1 to SB3
0010	129 + 73	to	128 19EB + 78		96		Existing PB21 to SB4
0010	129 + 00	to	128 19EB + 83		18		PB4 to SB5
0010	127 + 89	to	127 19EB + 98		10		PB7 to SB6
0010	122 + 71	to	121 19EB + 36	136			PB1 to PB2
0010	121 + 36	to	120 19EB + 18	119			PB2 to PB3
0010	129 + 00	to	130 19EB + 46	147			PB4 to PB5
0010	130 + 46	to	131 19EB + 90	145			PB5 to PB6
0010	128 + 08	to	128 19EB + 21	19			Existing PB27 to SB7
			Total	**566**	**208**	**969**	

Poles, Arms & Equipment

Category	Station	Dir	Location	657.0350 Poles Type 10 EACH	657.0352 Poles Type 10 Special EACH	657.0525 Monotube Arms 25-FT EACH	657.0530 Monotube Arms 30-FT EACH	657.0536 Monotube Arms 35-FT Special EACH	657.0541 Monotube Arms 40-FT Special EACH	657.0815 Luminaire Arms Steel 15-FT EACH	657.0100 Pedestal Bases EACH	657.0420 Traffic Signal Standard Aluminum 13' EACH	658.0173 Traffic Signal Face 3S 12-Inch EACH	658.0174 Traffic Signal Face 4S 12-Inch EACH	SPV.0060.16 Retroreflective Backplate 3S EACH	SPV.0060.17 Retroreflective Backplate 4S EACH	658.0500 Pedestrian Push Button EACH	658.0416 Pedestrian Signal Face 16-inch EACH	659.1125 Luminaires Utility LED C EACH	Desc
0010	123 + 99	LEFT	30		1			1		1			3		3				1	SB1
0010	123 + 17	RIGHT	42	1		1				1			1	1	1	1			1	SB2
0010	123 + 17	LEFT	39	1			1			1			3		3				1	SB3
0010	128 + 78	LEFT	111	1			1			1			1	1	1	1			1	SB4
0010	128 + 83	LEFT	23	1			1			1			3		3				1	SB5
0010	127 + 98	LEFT	31		1				1	1			3		3				1	SB6
0010	122 + 77	RIGHT	20											1		1				Existing SB6
0010	129 + 22	LEFT	81											1		1				Existing SB22
0010	128 + 21	RIGHT	17								1	1	1		1		1	1		SB7
		Total		**4**	**2**	**1**	**3**	**1**	**1**	**6**	**1**	**1**	**15**	**4**	**15**	**4**	**1**	**1**	**6**	

Electrical Items

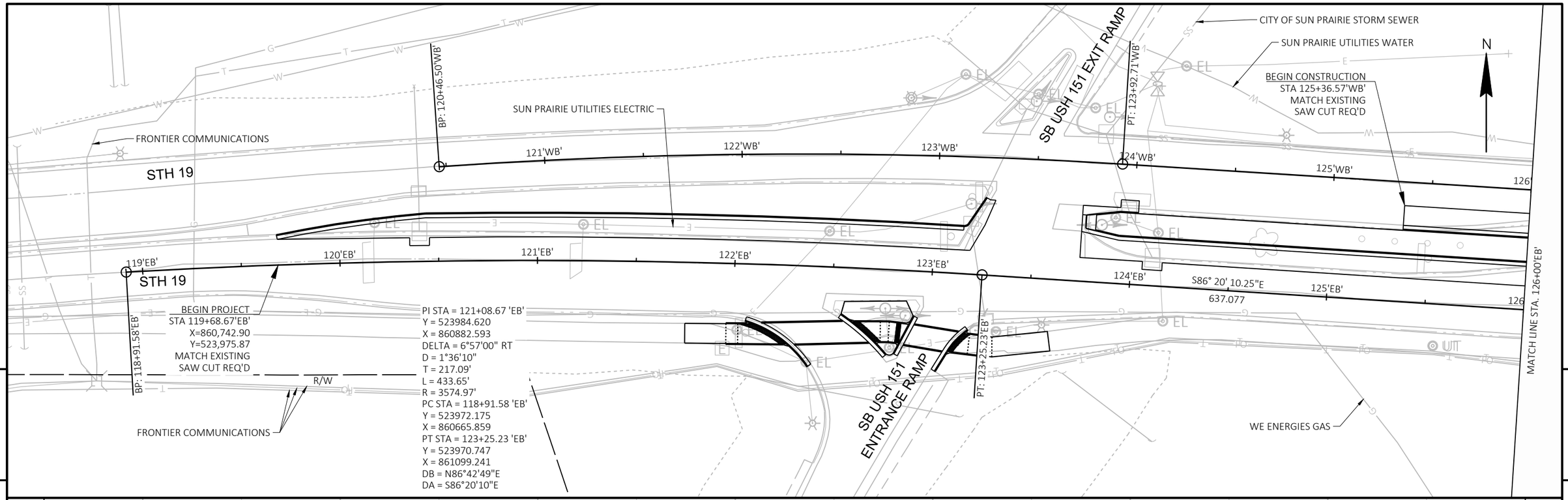
Category	Station	Dir	Location	650.8501 Construction Staking Electrical Installations 6085-02-75 EACH	658.5070 Signal Mounting Hardware (STH 19 & USH 151) EACH	SPV.0060.15 Removing Traffic Signals (STH 19 & USH 151) EACH	659.5000.S Lamp, Ballast, LED, Switch Disposal by Contractor EACH	Description
0010	124 + 40	LEFT	102		1	1	15	Existing SC1
0010	124 + 40	LEFT	102	1				Project
		Total		**1**	**1**	**1**	**15**	

Removals

Category	Station	Dir	Location	653.0900 Adjusting Pull Box EACH	653.0905 Removing Pull Box EACH	204.0195 Removing Concrete Bases EACH	SPV.0060.09 Adjust Concrete Bases EACH	Description
0010	122 19EB + 2	RIGHT	34	1				Existing PB7
0010	122 19EB + 47	LEFT	18		1			Existing PB8
0010	121 19EB + 23	LEFT	18		1			Existing PB12
0010	120 19EB + 18	LEFT	20		1			Existing PB13
0010	129 19EB + 13	LEFT	42		1			Existing PB24
0010	128 19EB + 95	LEFT	30		1			Existing PB28
0010	130 19EB + 81	LEFT	37		1			Existing PB30
0010	131 19EB + 91	LEFT	32		1			Existing PB31
0010	123 19EB + 85	LEFT	84				1	Existing SB1
0010	123 19EB + 84	LEFT	29			1		Existing SB2
0010	123 19EB + 57	RIGHT	23			1		Existing SB3
0010	123 19EB + 24	RIGHT	28				1	Existing SB4
0010	122 19EB + 88	RIGHT	23				1	Existing SB5
0010	122 19EB + 77	RIGHT	20				1	Existing SB6
0010	123 19EB + 18	LEFT	36			1		Existing SB7
0010	122 19EB + 85	LEFT	87			1		Existing SB8
0010	123 19EB + 47	LEFT	90				1	Existing SB9
0010	128 19EB + 60	LEFT	87			1		Existing SB21
0010	129 19EB + 22	LEFT	81				1	Existing SB22
0010	128 19EB + 75	LEFT	25			1		Existing SB23
0010	128 19EB + 96	RIGHT	32			1		Existing SB24
0010	128 19EB + 40	RIGHT	37				1	Existing SB25
0010	128 19EB + 9	RIGHT	18				1	Existing SB26
0010	127 19EB + 97	LEFT	30			1		Existing SB27
0010	128 19EB + 31	LEFT	87			1		Existing SB28
0010	122 19EB + 44	RIGHT	80				1	Existing LB1
0010	129 19EB + 48	LEFT	137				1	Existing LB2
			Total	**1**	**7**	**9**	**10**	

Signal Wire

Category	Station	to Station	655.0210 Cable Traffic Signal 3-14 AWG LF	655.0230 Cable Traffic Signal 5-14 AWG LF	655.0240 Cable Traffic Signal 7-14 AWG LF	655.0250 Cable Traffic Signal 9-14 AWG LF	655.0260 Cable Traffic Signal 12-14 AWG LF	655.0305 Cable Type UF 2-12 AWG Grounded LF	655.0515 Electrical Wire Traffic Signals 10 AWG LF	655.0610 Electrical Wire Traffic Lighting 12 AWG LF	655.0700 Loop Dectector Lead in Cable LF	Description
0010	123 + 99			153						159		SB1 - Up Pole
0010	123 + 17			73						159		SB2 - Up Pole
0010	123 + 17			138						159		SB3 - Up Pole
0010	128 + 78			78						159		SB4 - Up Pole
0010	128 + 83			138						159		SB5 - Up Pole
0010	127 + 98			168						159		SB6 - Up Pole
0010	128 + 21		15	18								SB7 - Up Pole
0010	124 + 40	to 123 19EB + 85					85					Existing SC1 to Existing SB1
0010	124 + 40	to 123 19EB + 99			142							Existing SC1 to SB1
0010	124 + 40	to 123 19EB + 17					299					Existing SC1 to SB2
0010	124 + 40	to 123 19EB + 34			283							Existing SC1 to Existing PB4
0010	124 + 40	to 122 19EB + 88			362							Existing SC1 to Existing SB5
0010	124 + 40	to 122 19EB + 77					363					Existing SC1 to Existing SB6
0010	124 + 40	to 123 19EB + 17					310					Existing SC1 to SB3
0010	124 + 40	to 123 19EB + 47			129							Existing SC1 to Existing SB9
0010	128 + 78	to 128 19EB + 78			213							Existing SC2 to SB4
0010	128 + 78	to 129 19EB + 22					314					Existing SC2 to Existing SB22
0010	128 + 78	to 128 19EB + 83					363					Existing SC2 to SB5
0010	128 + 78	to 128 19EB + 40			527							Existing SC2 to Existing SB25
0010	128 + 78	to 128 19EB + 9			333							Existing SC2 to Existing SB26
0010	128 + 78	to 127 19EB + 98			256							Existing SC2 to SB6
0010	124 + 40	to 120 19EB + 18									534	Existing SC1 to PB3
0010	128 + 78	to 128 19EB + ##									341	Existing SC2 to PB4
0010	128 + 78	to 131 19EB + 90									653	Existing SC2 to PB6
0010	124 + 40	to 122 19EB + 88									362	Existing SC1 to Existing SB5
0010	124 + 40	to 123 19EB + 17									299	Existing SC1 to SB2
0010	128 + 78	to 128 19EB + 40									527	Existing SC2 to Existing SB25
0010	128 + 78	to 128 19EB + 9									333	Existing SC2 to Existing SB26
0010	124 + 40	to 123 19EB + 99						142				Existing SC1 to SB1
0010	123 + 99	to 123 19EB + 17						205				SB1 to SB2
0010	124 + 40	to 123 19EB + 17						310				Existing SC1 to SB3
0010	123 + 17	to 122 19EB + 44						250				SB3 to Existing LB1
0010	128 + 78	to 128 19EB + 78						213				Existing SC2 to SB4
0010	128 + 78	to 129 19EB + 48						317				SB4 to Existing LB2
0010	129 + 48	to 128 19EB + 83						227				Existing LB2 to SB5
0010	128 + 78	to 127 19EB + 98						256				Existing SC2 to SB6
0010	124 + 40	to 123 19EB + 17							397			Existing SC1 to SB2 Grounding Conductor
0010	123 + 17	to 123 19EB + 17							469			SB2 to SB3 Grounding Conductor
0010	123 + 17	to 124 19EB + 40							330			SB3 to Existing SC1 Grounding Conductor
0010	128 + 78	to 128 19EB + 40							951			Existing SC2 to Existing SB25 Grounding Conductor
0010	128 + 40	to 128 19EB + 78							632			Existing SB25 to Existing SC2 Grounding Conductor
0010	128 + 78	to 128 19EB + 21				339						Existing SC2 to SB7
		Total	**15**	**806**	**2245**	**339**	**1734**	**1920**	**2779**	**954**	**3049**	

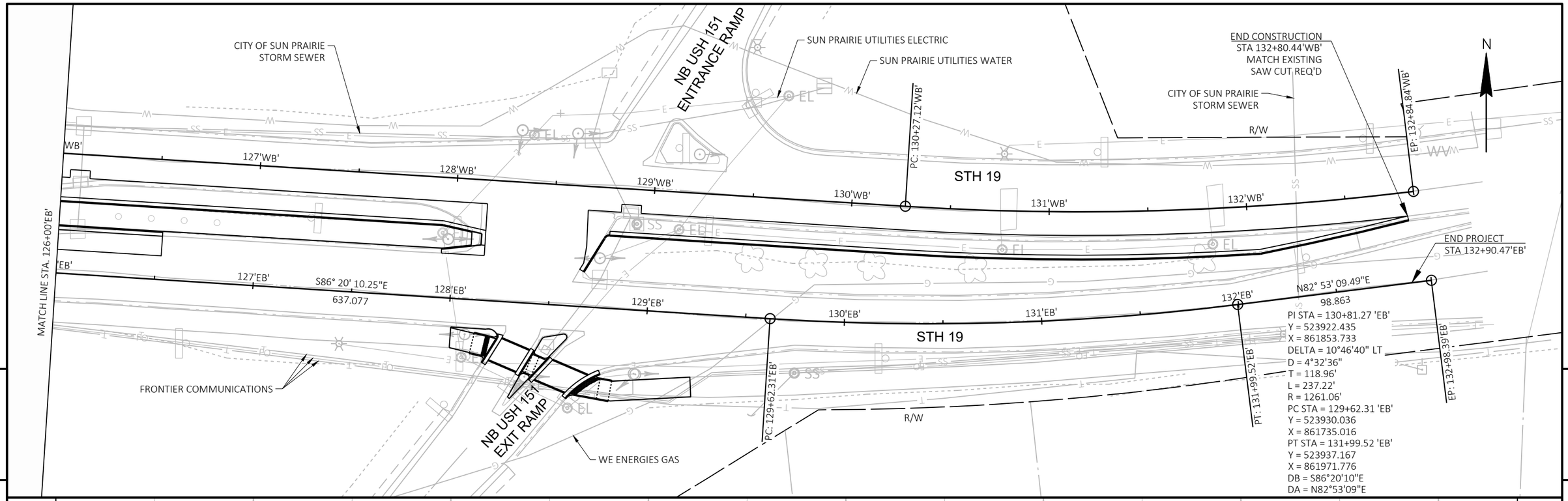


PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN AND PROFILE: STH 19 EB	SHEET 53 E

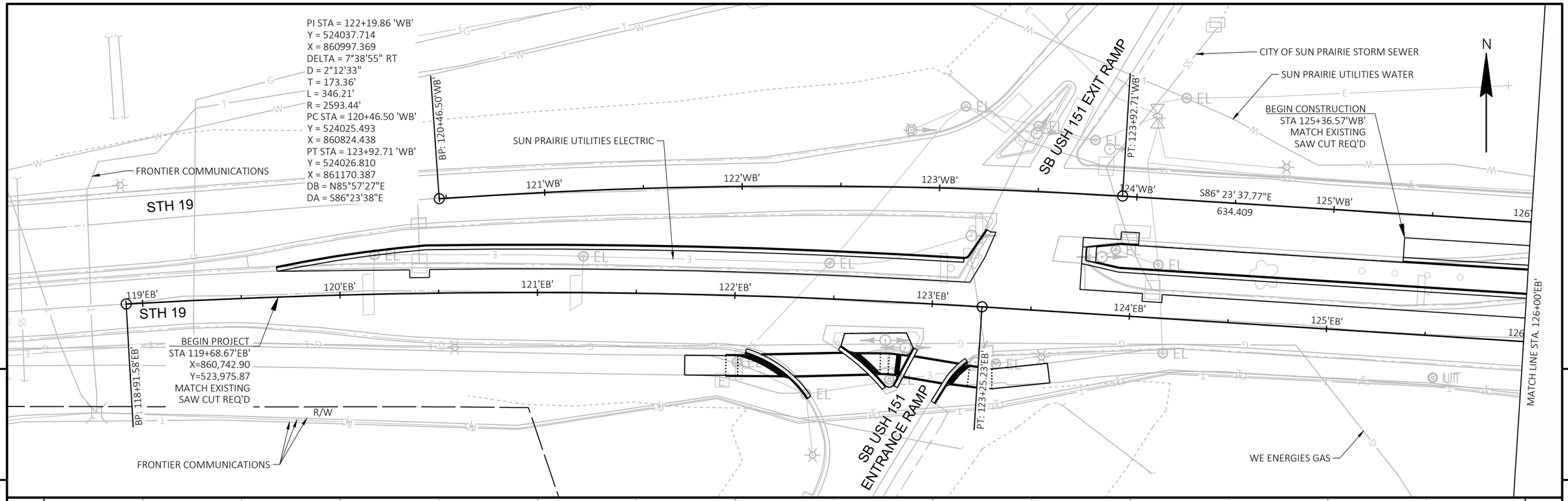
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 01

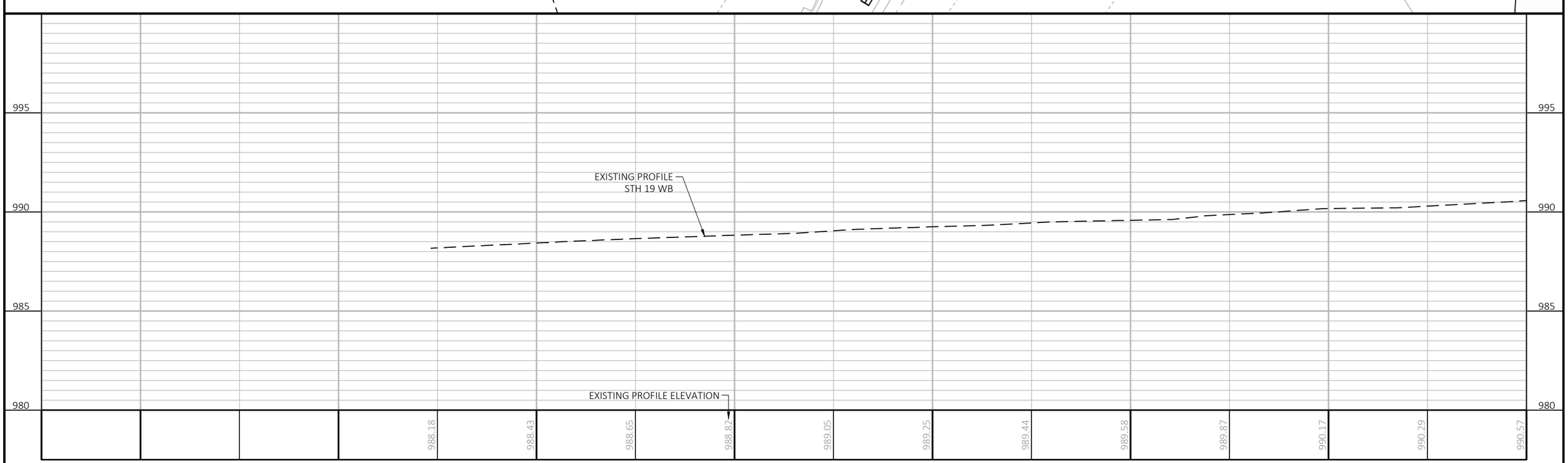
PLOT DATE : 10/11/2022 12:58 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



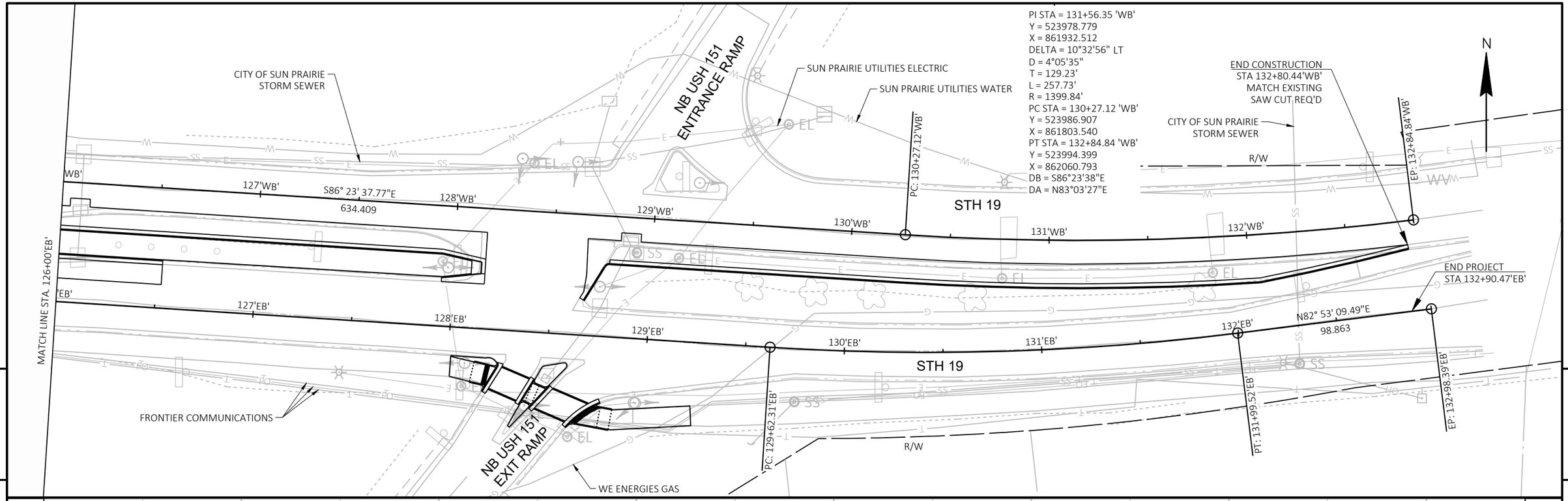
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN AND PROFILE: STH 19 EB	SHEET 54	E





PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN AND PROFILE: STH 19 WB	SHEET 55	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 03
PLOT DATE : 10/11/2022 12:58 PM
PLOT BY : KYLE CORNELIUS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PLAN AND PROFILE: STH 19 WB	SHEET 56	E

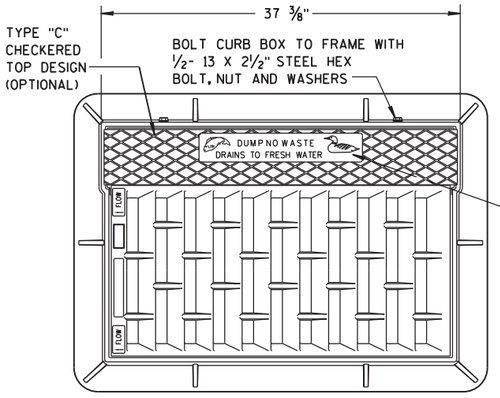
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2022 12:58 PM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:50 FT

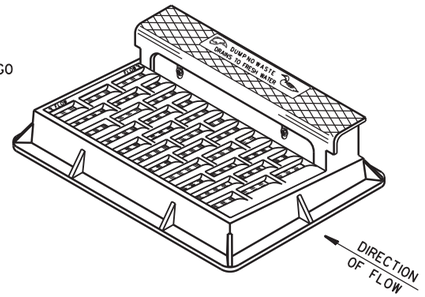
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B10-02	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-12	PULL BOX
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C11-10	CONCRETE BASE TYPE 10
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
09E08-09G	TYPE 10 SPECIAL POLE 40' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C20-02	YIELD MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-06A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D50-03A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-03B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

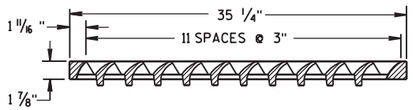
6

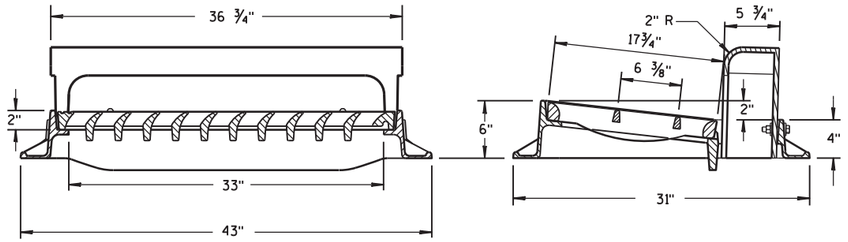


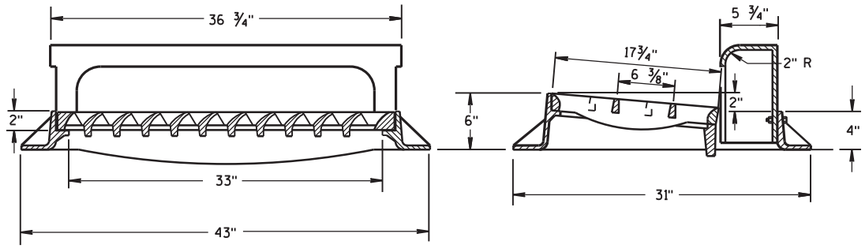
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

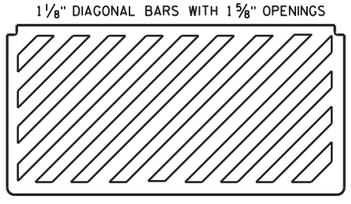






TYPE "H"

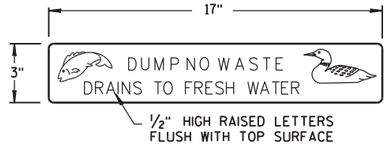
NOTE: EITHER CASTING IS ACCEPTABLE



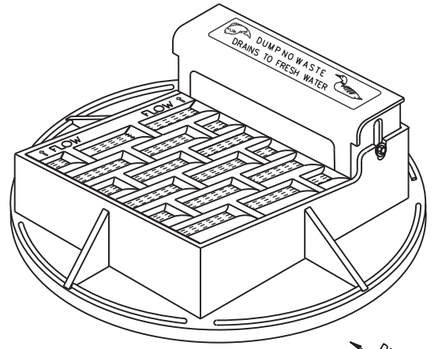
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

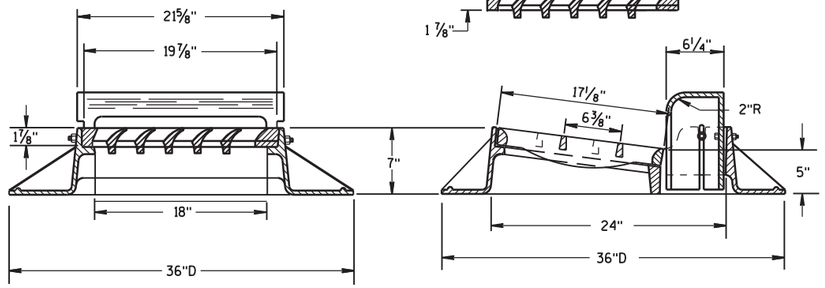


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



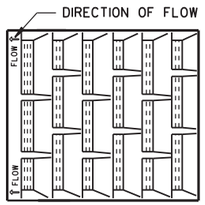
TYPE "A"

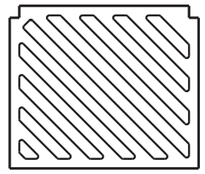
GENERAL NOTES

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

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

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

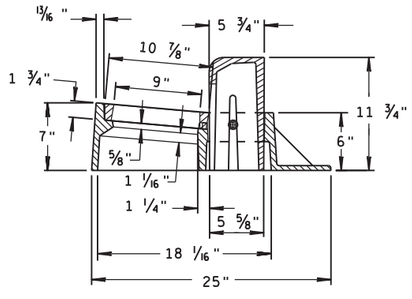


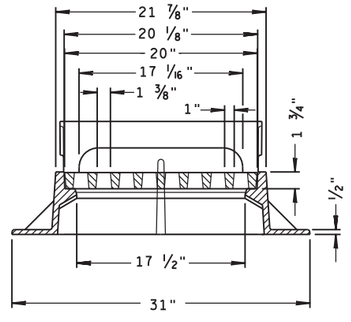


SPECIAL GRATE FOR TYPE "A" COVER

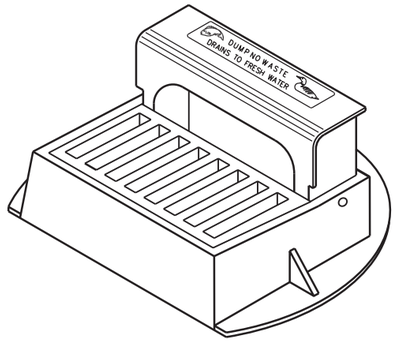
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



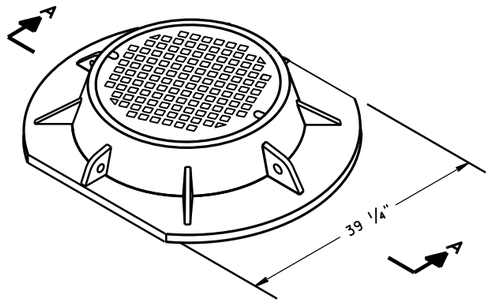
INLET COVERS TYPE A, H, A-S, H-S & Z

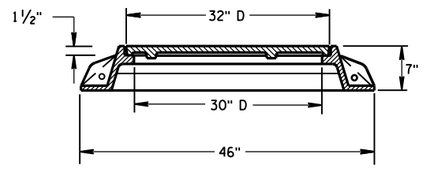
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

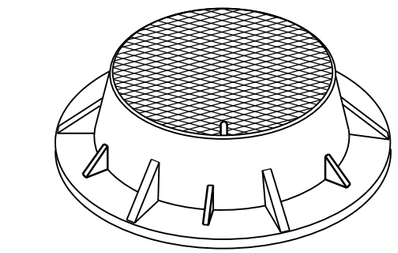
S.D.D. 8 A 5-19a

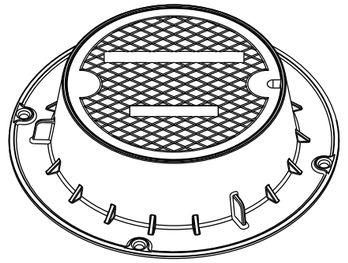
S.D.D. 8 A 5-19a

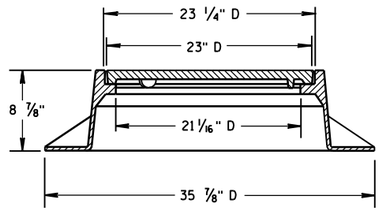


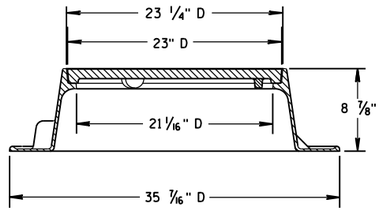


SECTION A-A
TYPE "K"









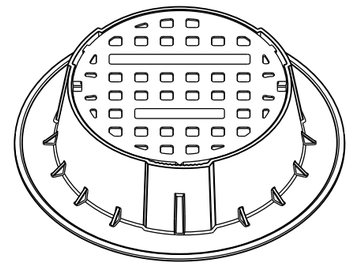
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

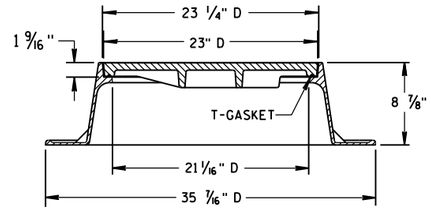
GENERAL NOTES

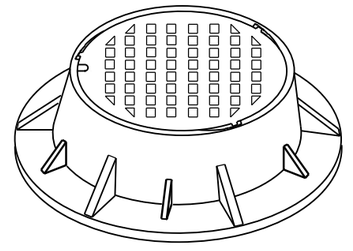
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

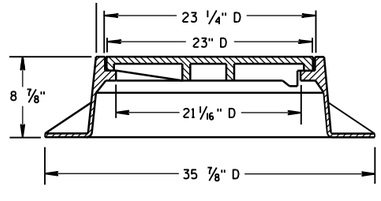
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

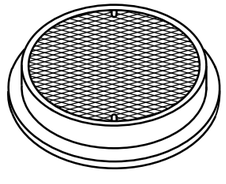


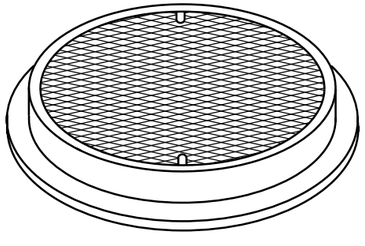


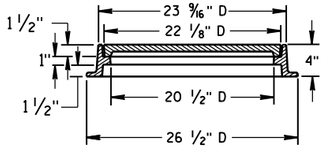




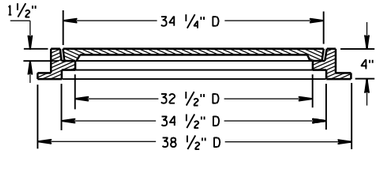
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



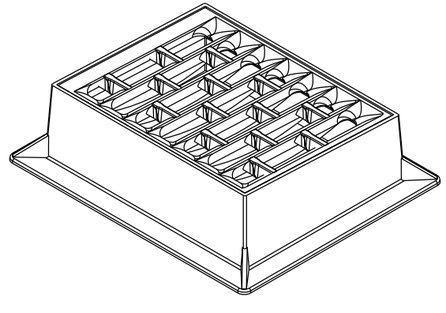


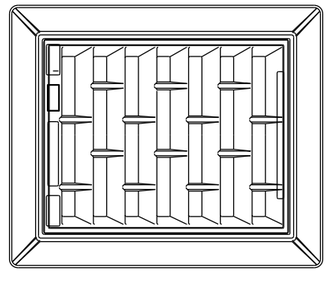


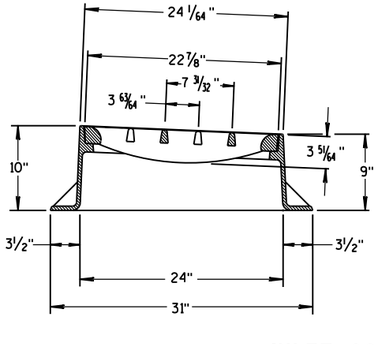
TYPE "L"

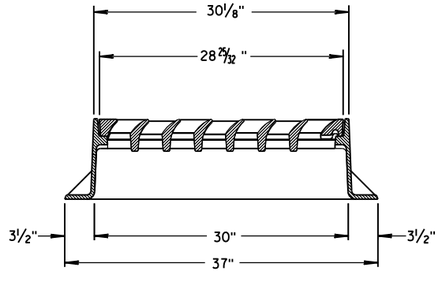


TYPE "M"









INLET COVER TYPE "BW"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

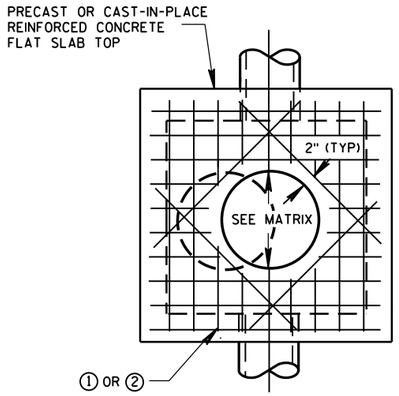
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

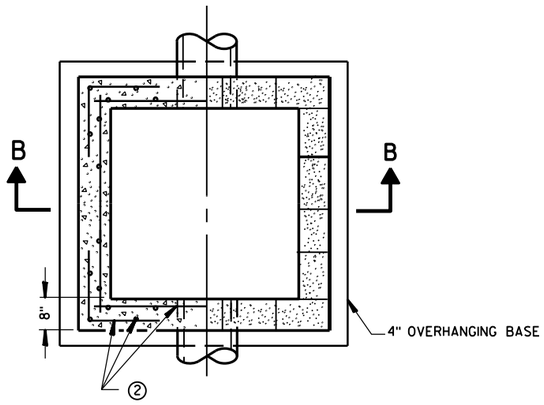
S.D.D. 8 A 5-19d

6

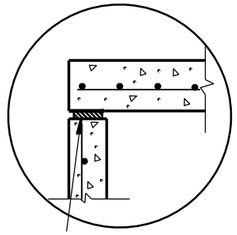
S.D.D. 8 A 5-19d



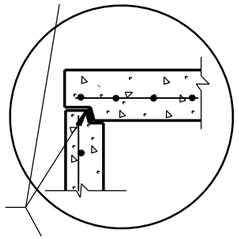
PLAN VIEW
CIRCULAR OPENING



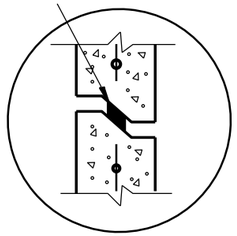
SECTION A-A
PLAN VIEW



TOP WITH PLAIN END JOINT

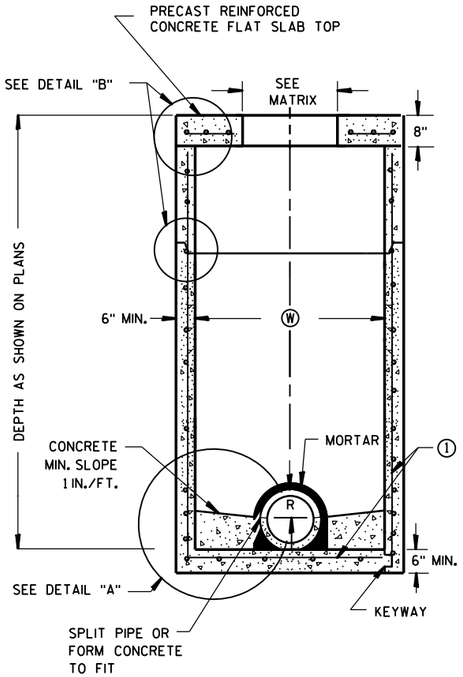


TOP WITH TONGUE AND GROOVE JOINT

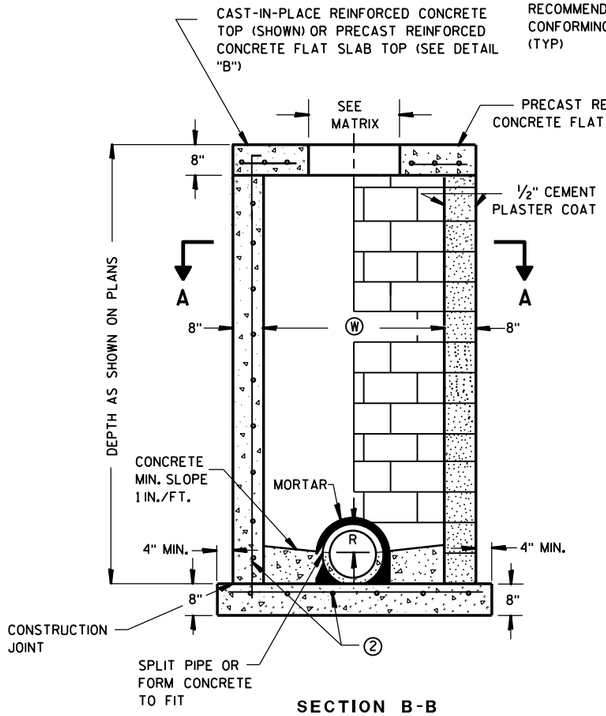


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

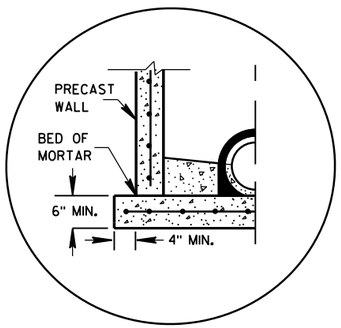


SECTION B-B

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

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

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

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

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

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

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.

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

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

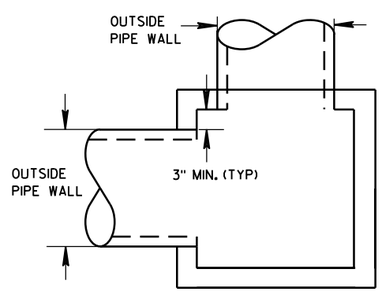
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (W) (IN)	LENGTH (L) (IN)
3X3-FT	24	24
4X4-FT	30	30
5X5-FT	42	42
6X6-FT	54	54



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT

MANHOLES 3X3-FT, 4X4-FT 5X5-FT AND 6X6-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

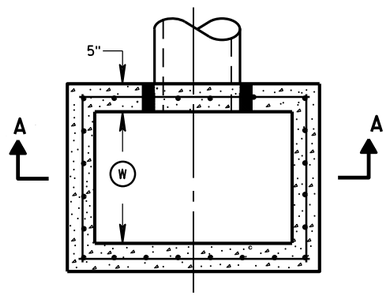
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6

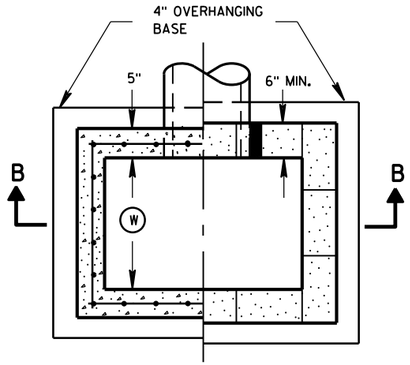
S.D.D. 8 B 10-2

6

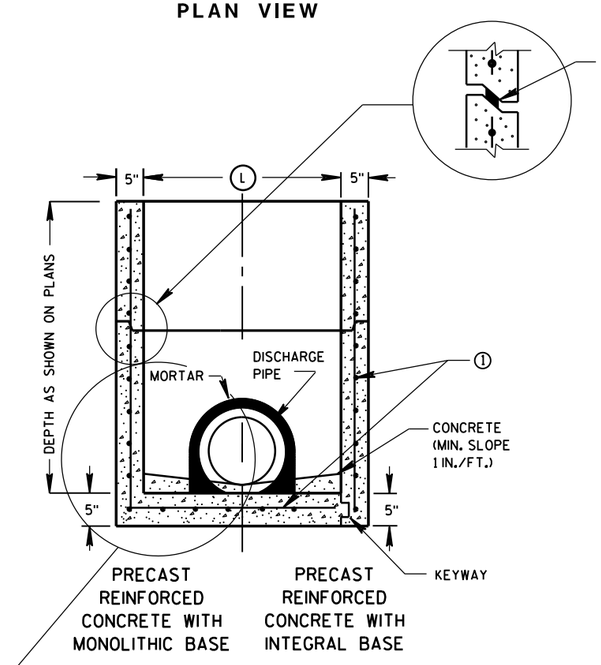
S.D.D. 8 B 10-2



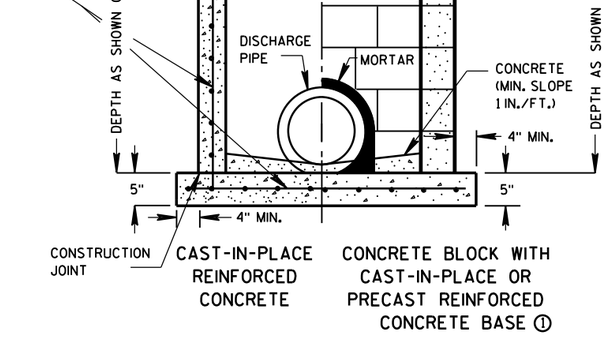
PLAN VIEW



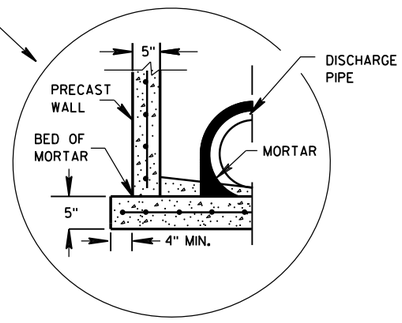
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

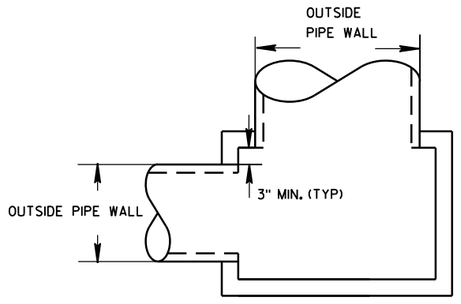
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



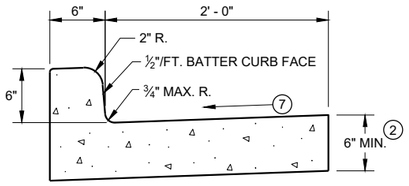
DETAIL "A"

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

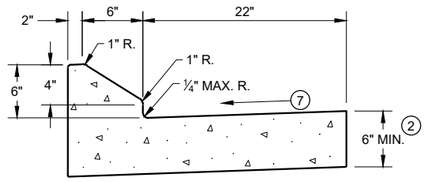
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

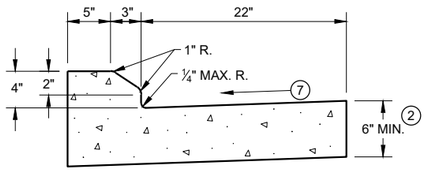
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



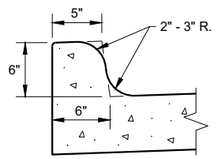
TYPES A (1) & D



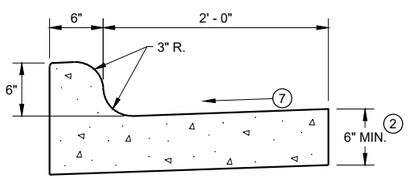
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

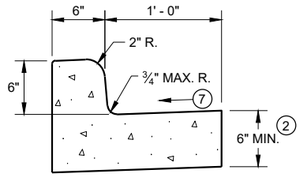


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



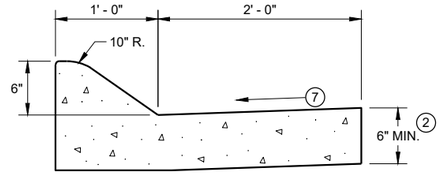
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

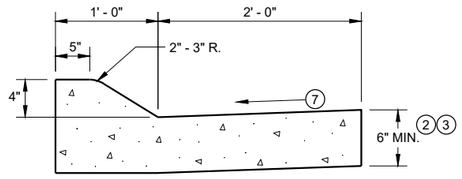


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

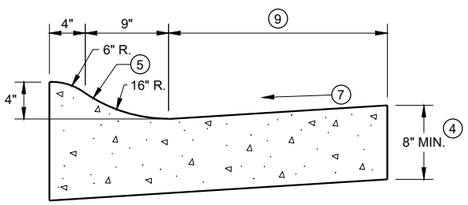


6" SLOPED CURB TYPES A (1) & D



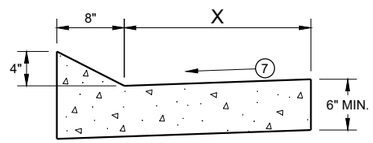
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

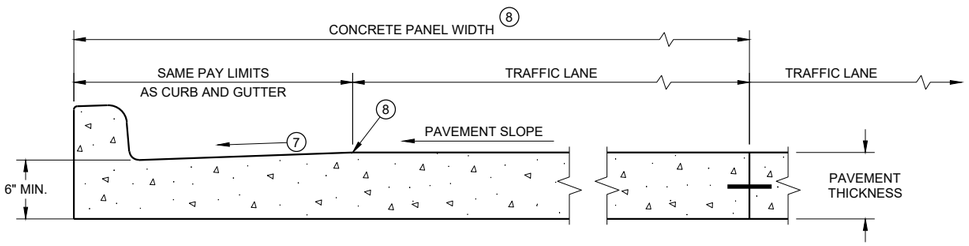


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

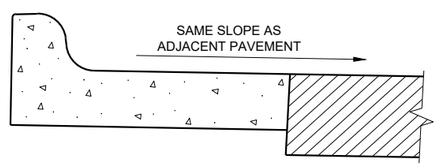
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

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

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

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

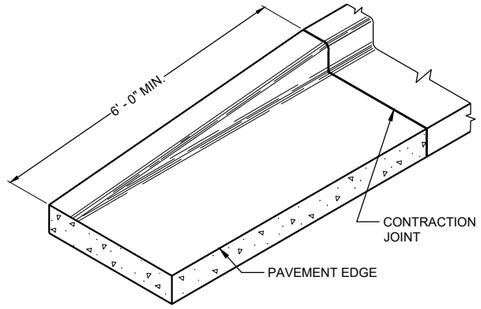
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

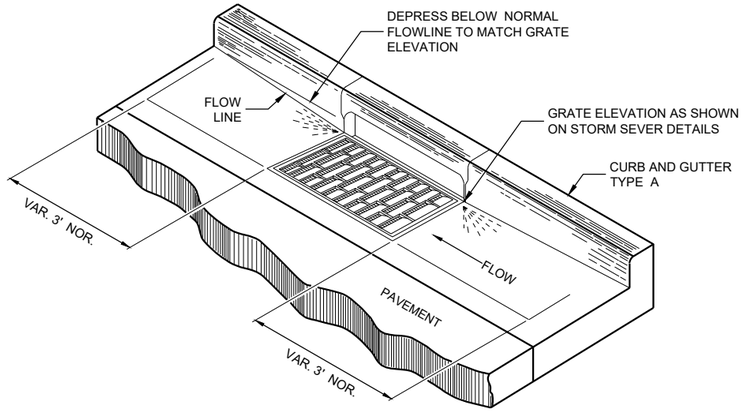
6

SDD 08D01 - 23a

SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

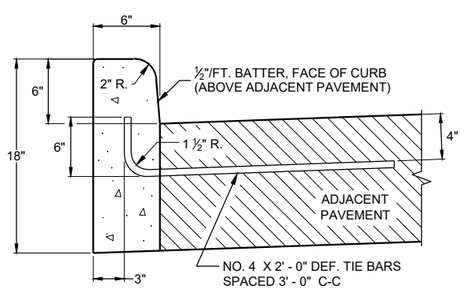
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

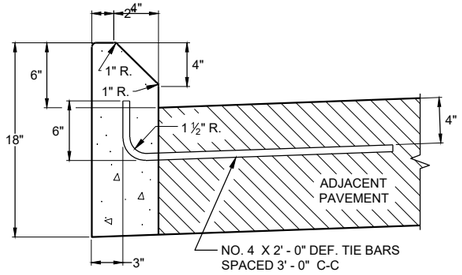
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

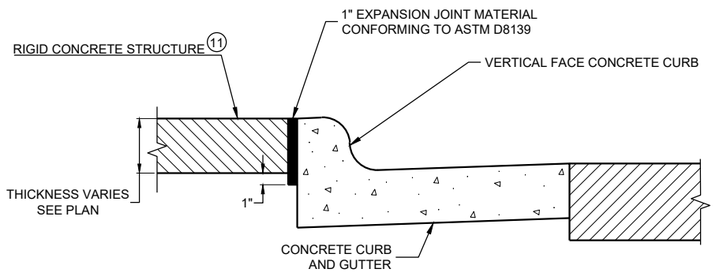


TYPES A(1) & D

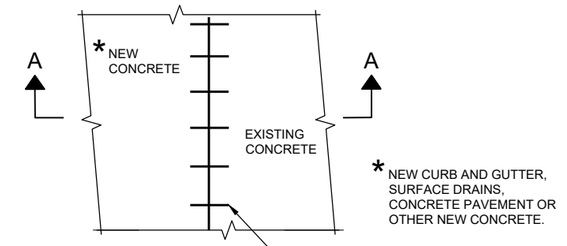


TYPES G(1) & J

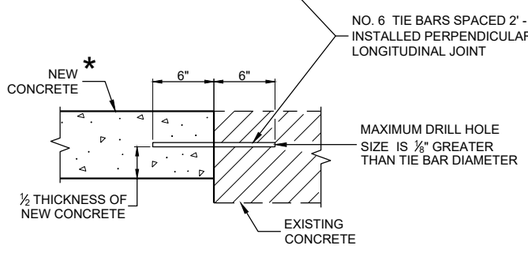
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE(11)

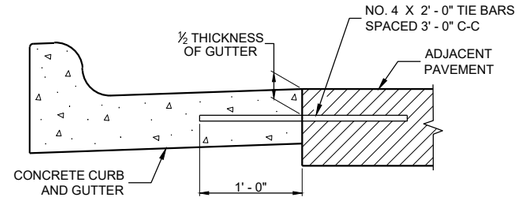


PLAN VIEW

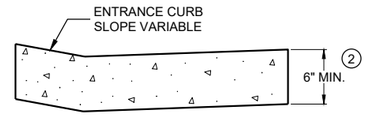


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION(1)



DRIVEWAY ENTRANCE CURB(10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

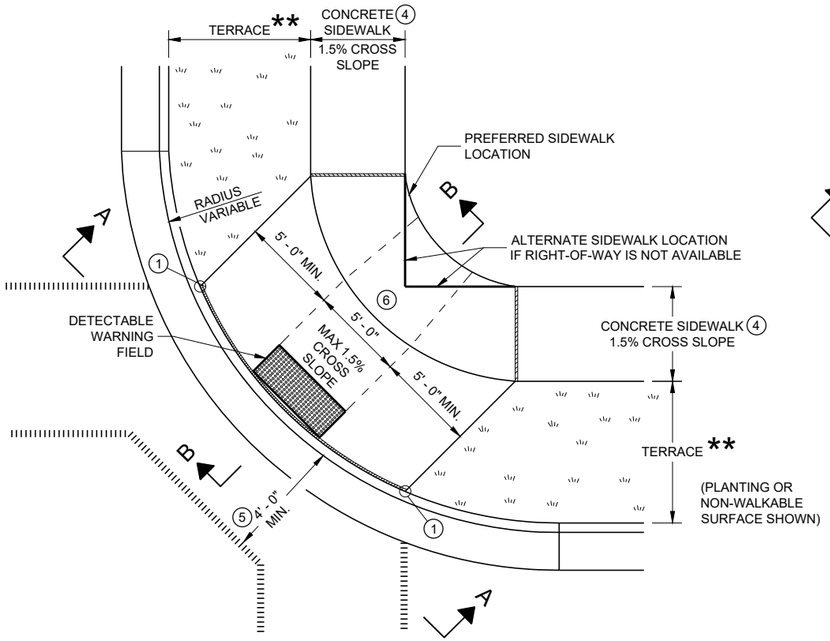
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

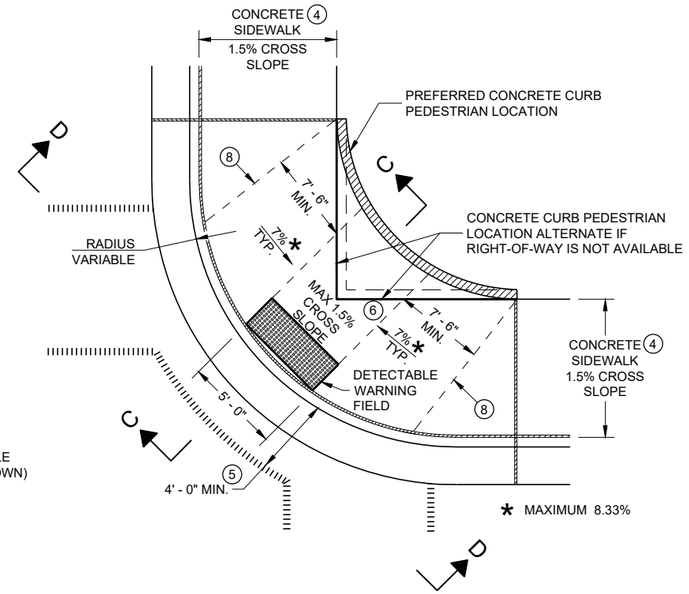
SDD08D01 - 23b



PLAN VIEW

CURB RAMP TYPE 1

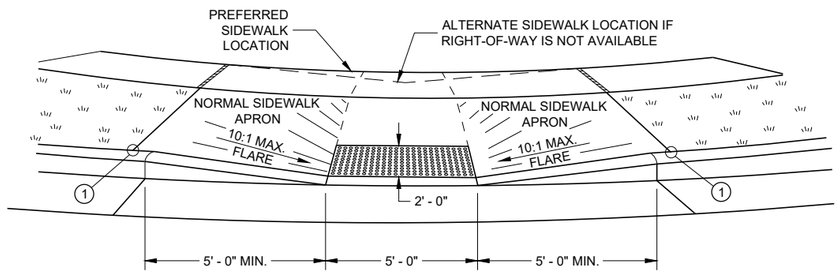
(CENTER OF CORNER RADIUS)



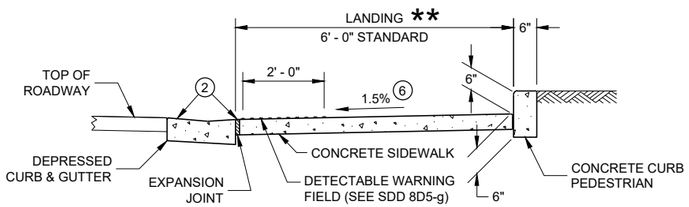
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

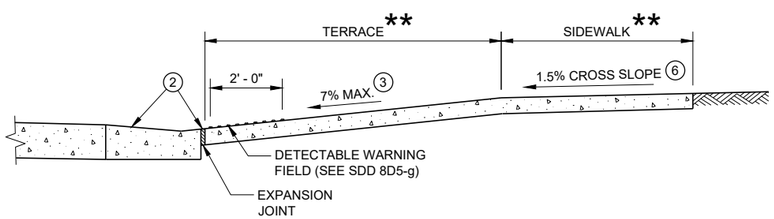


VIEW A - A FOR TYPE 1

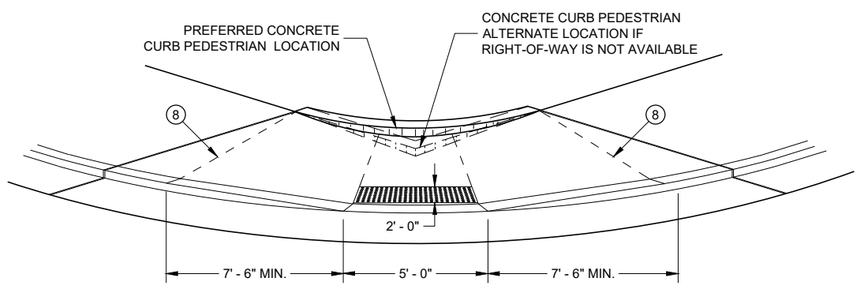


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

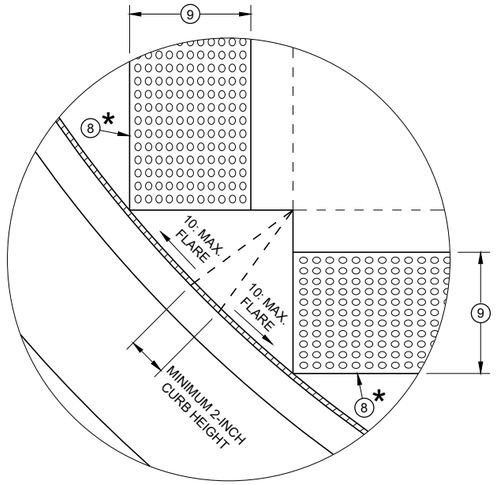
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

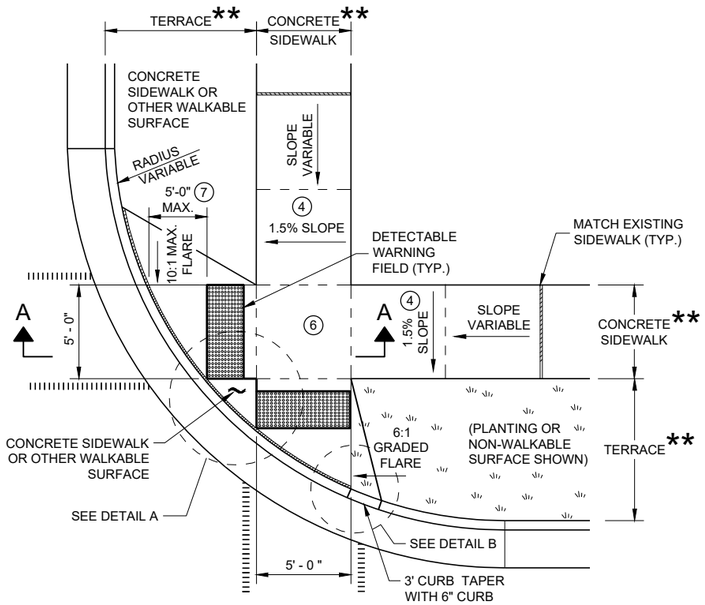
LEGEND

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

CURB RAMPS
TYPE 1 AND 1-A



DETAIL A



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

GENERAL NOTES

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

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

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

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

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

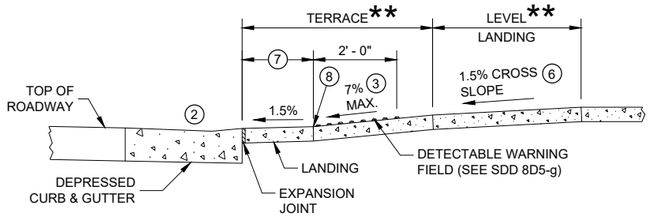
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

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

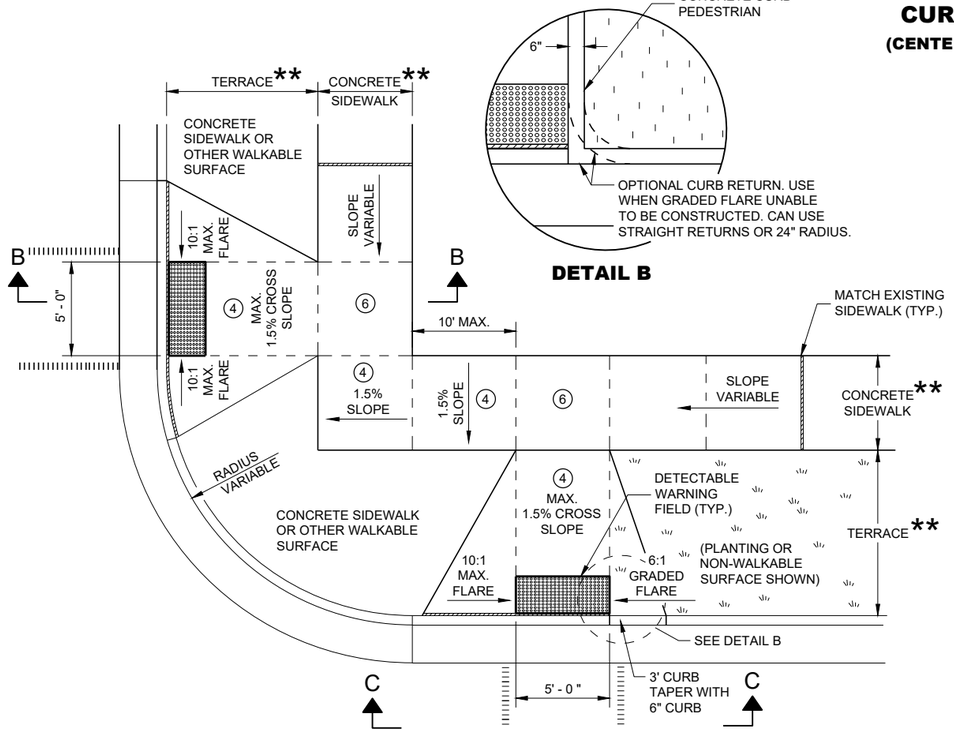
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

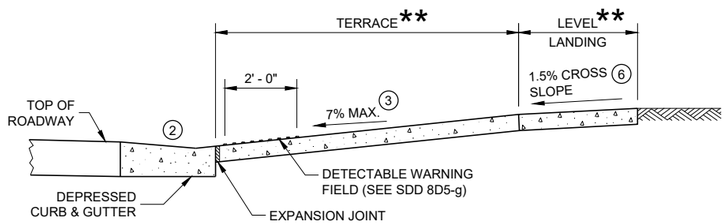
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

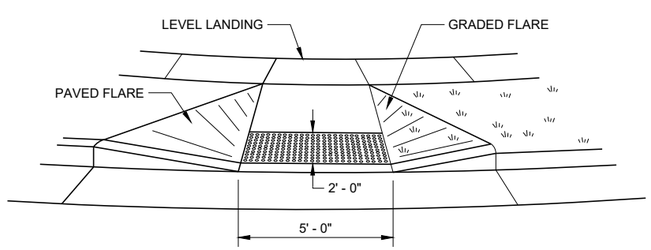


DETAIL B

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



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

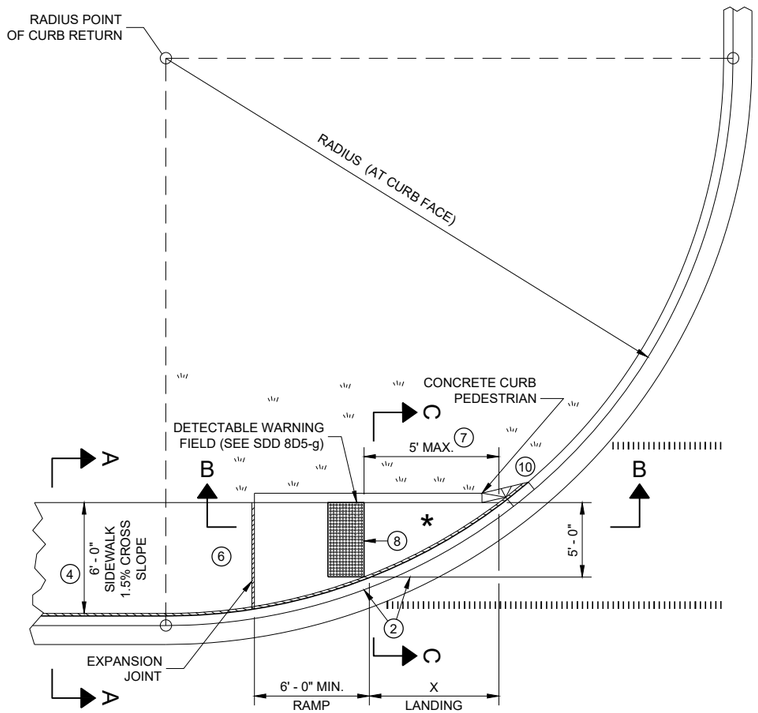
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

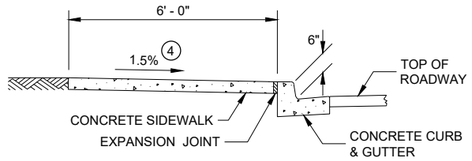


PLAN VIEW

CURB RAMP TYPE 4A

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

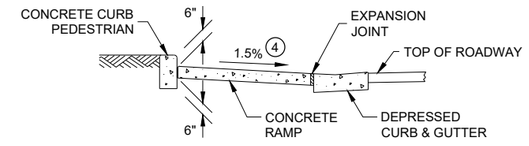
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

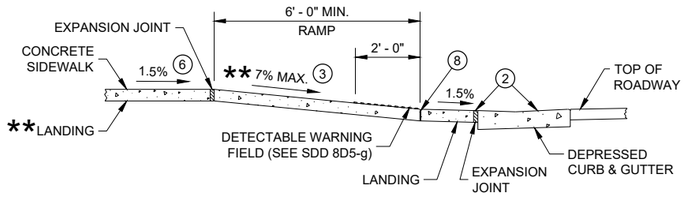
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



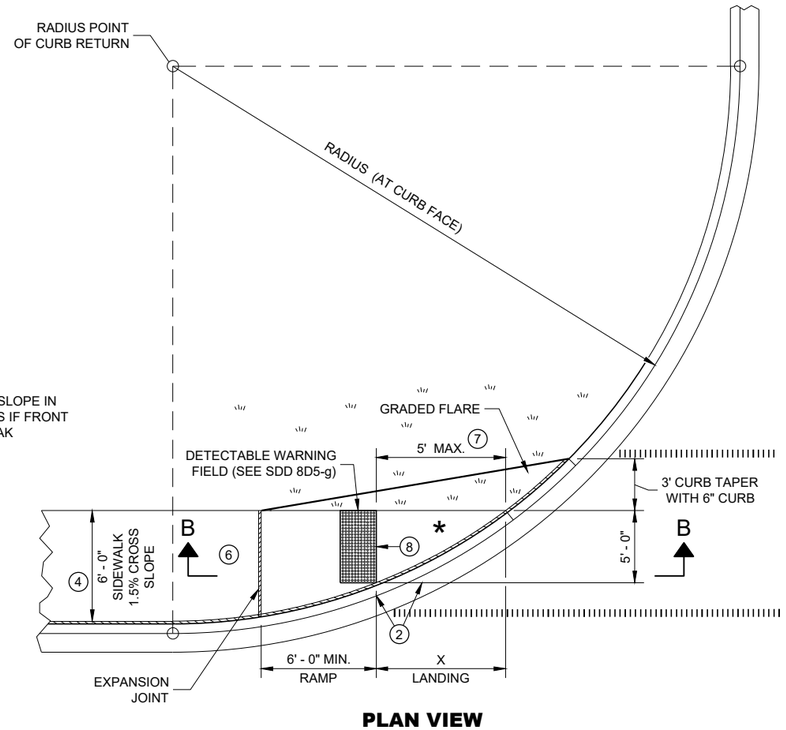
SECTION C - C FOR TYPE 4A



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

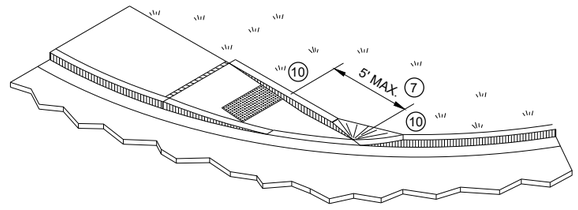
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

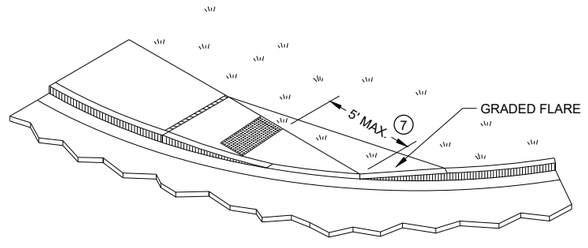


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



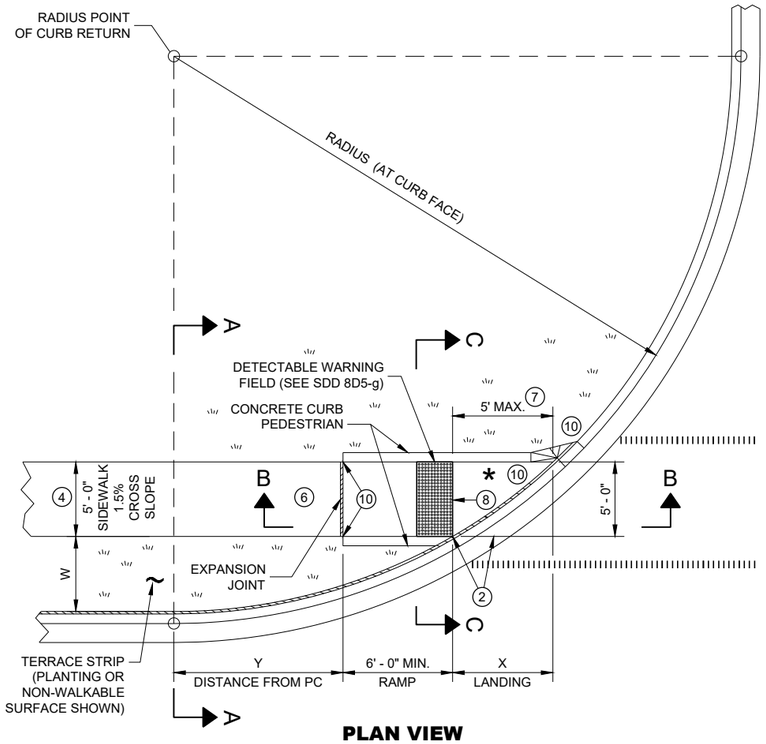
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

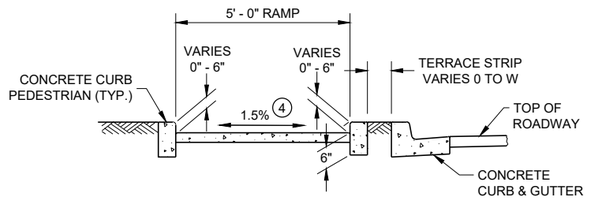


PLAN VIEW

CURB RAMP TYPE 4B

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

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



SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

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

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

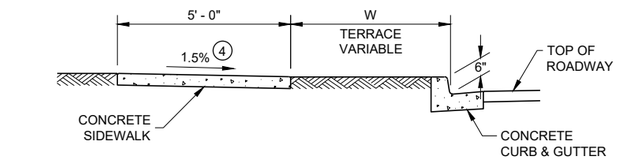
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

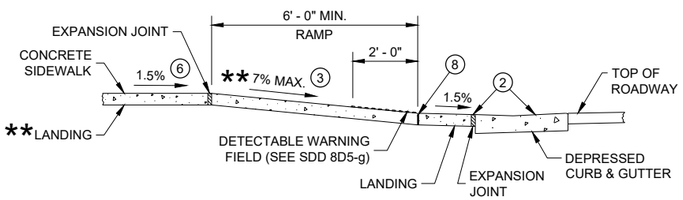
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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



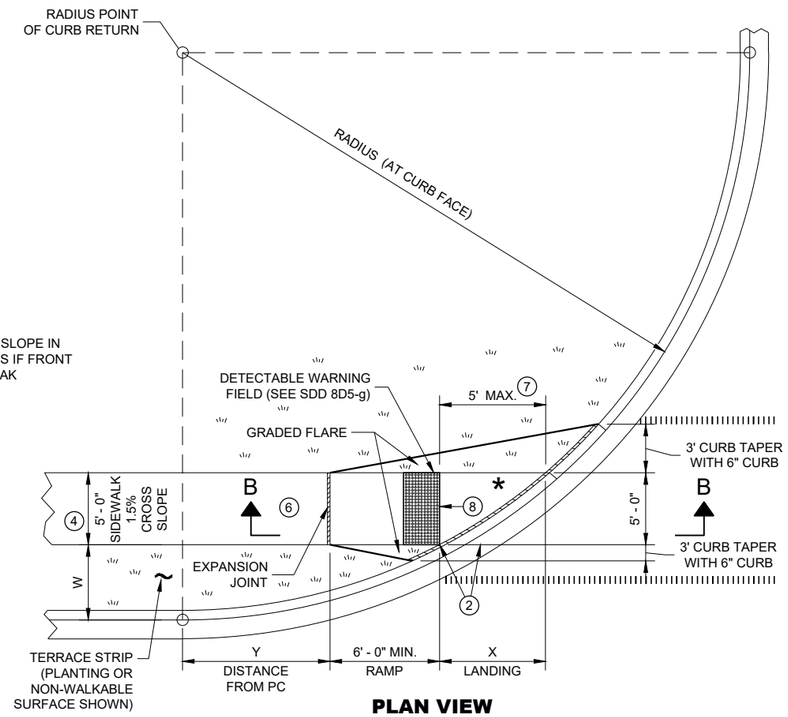
SECTION A - A FOR TYPE 4B



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

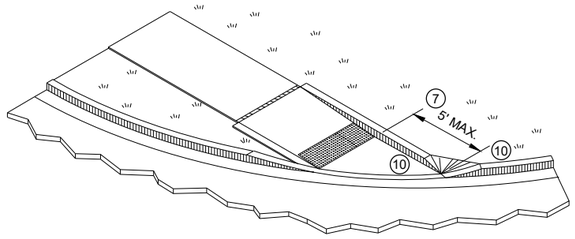
SECTION B - B FOR TYPE 4B AND TYPE 4B1

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

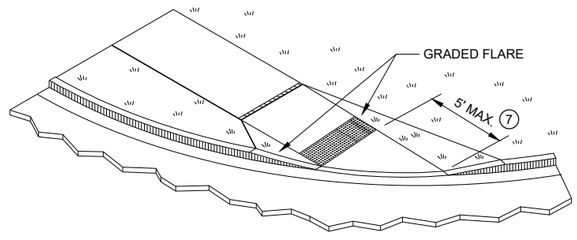


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



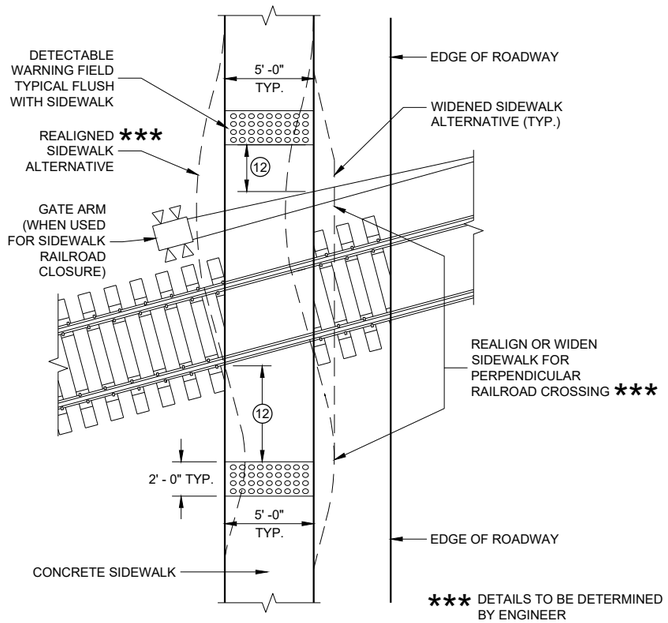
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

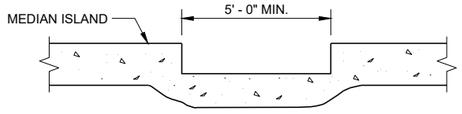
6

SDD 08D05 - 20d

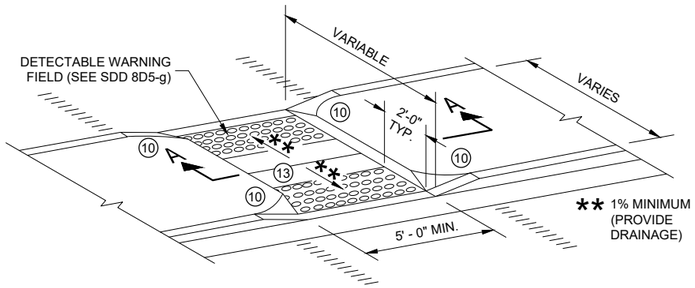


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

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

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

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

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

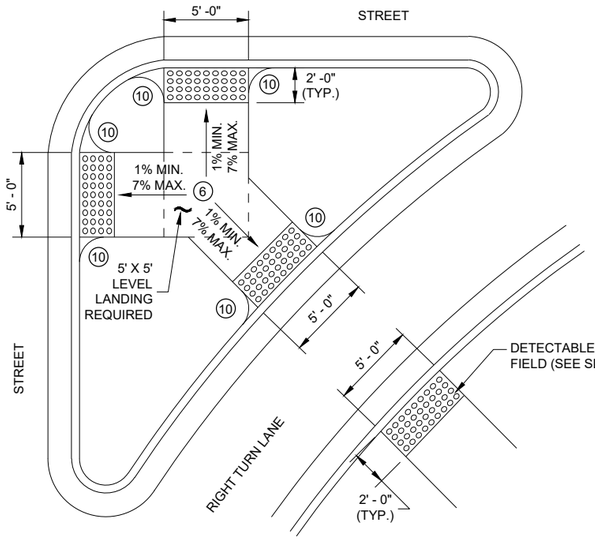
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

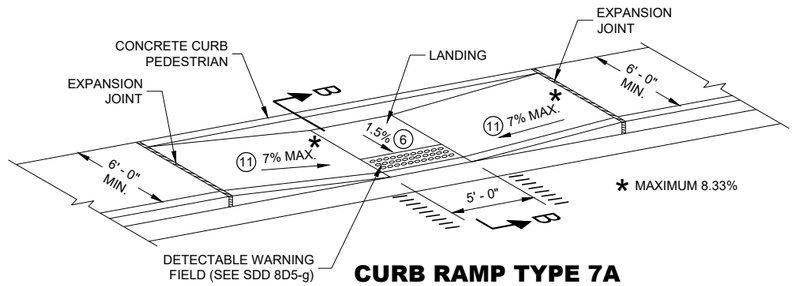
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

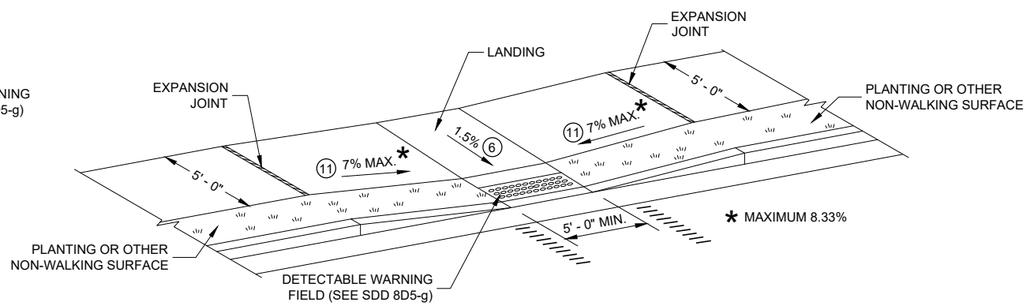
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

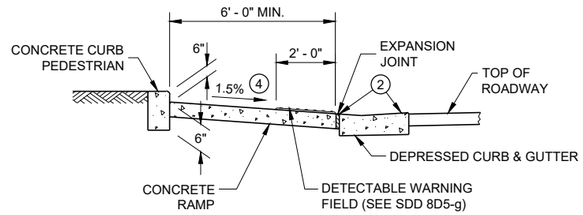
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

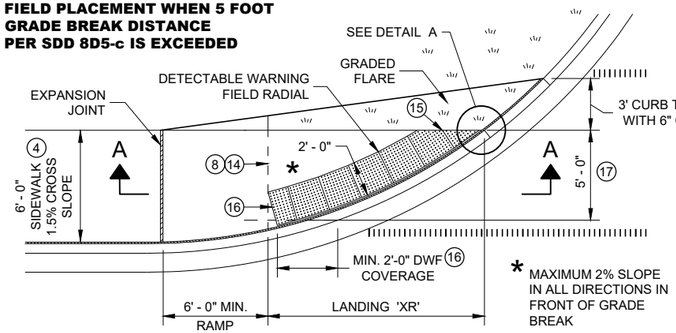
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

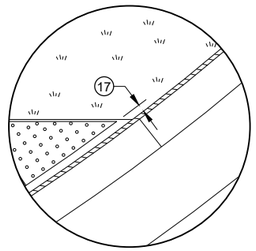
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



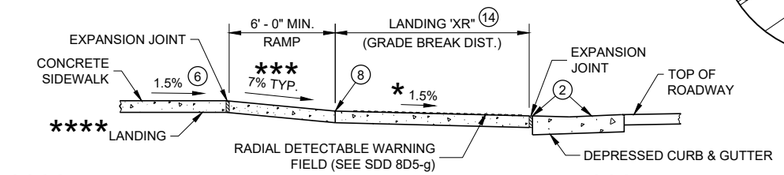
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A



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

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

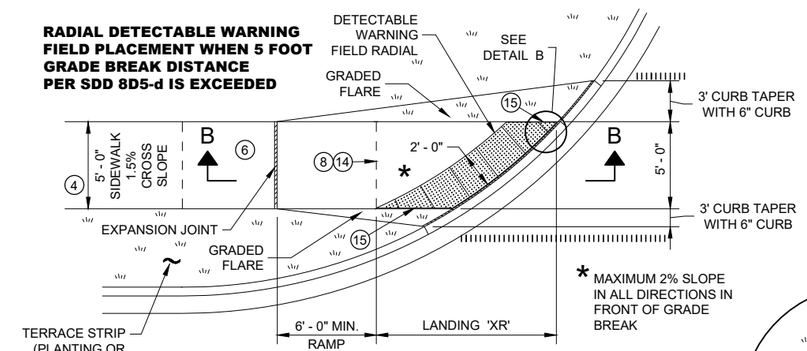
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

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

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

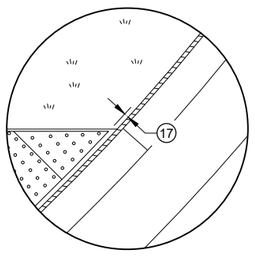
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



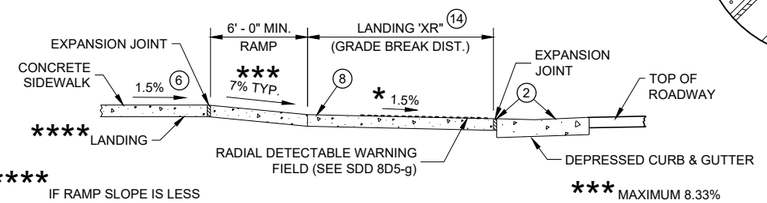
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

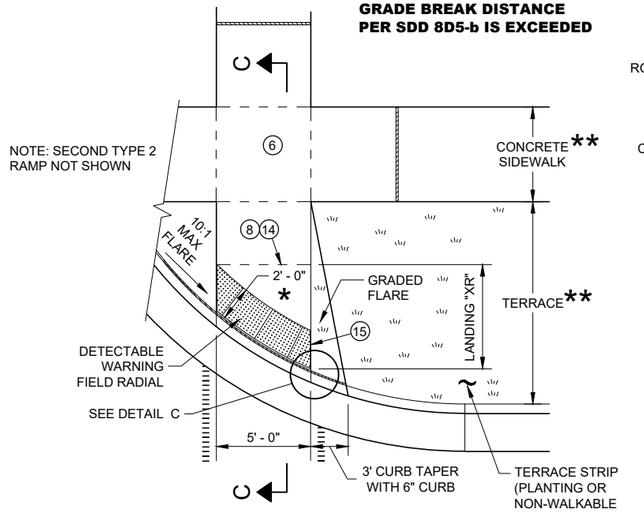


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

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

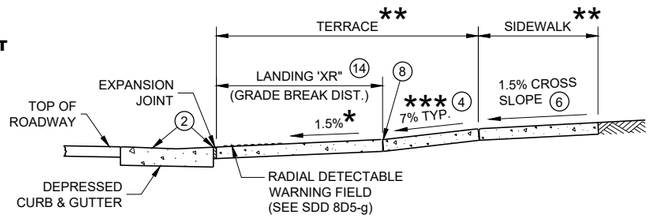


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

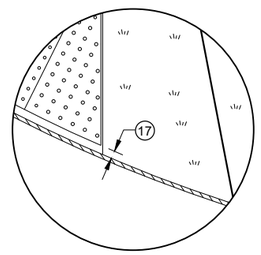


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

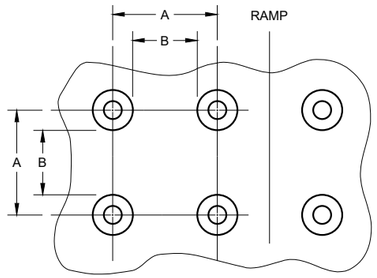
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

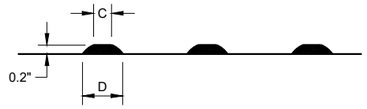
SDD 08D05 - 20f

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

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

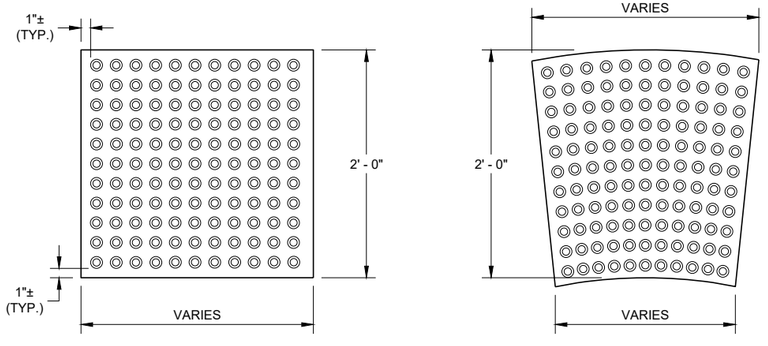


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

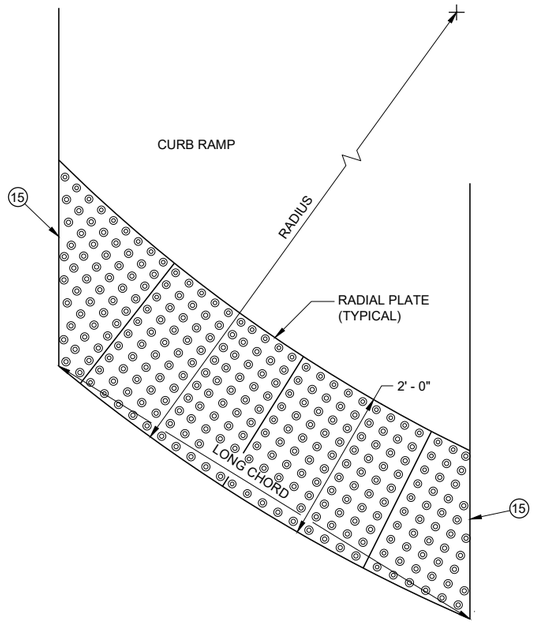
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

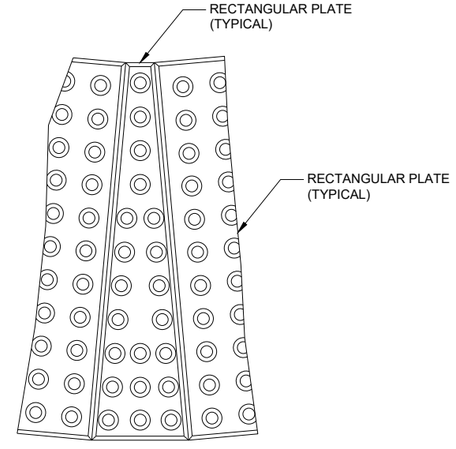
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

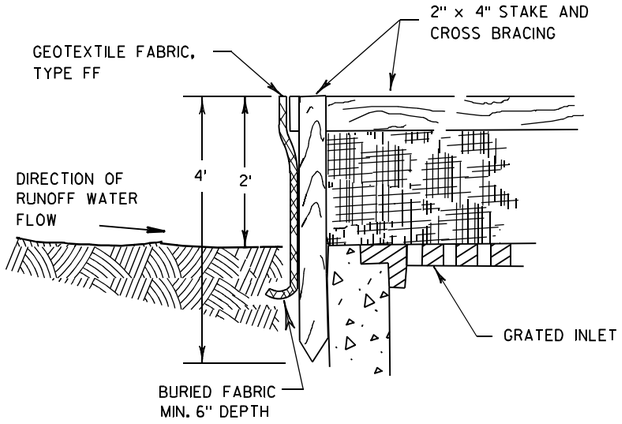
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

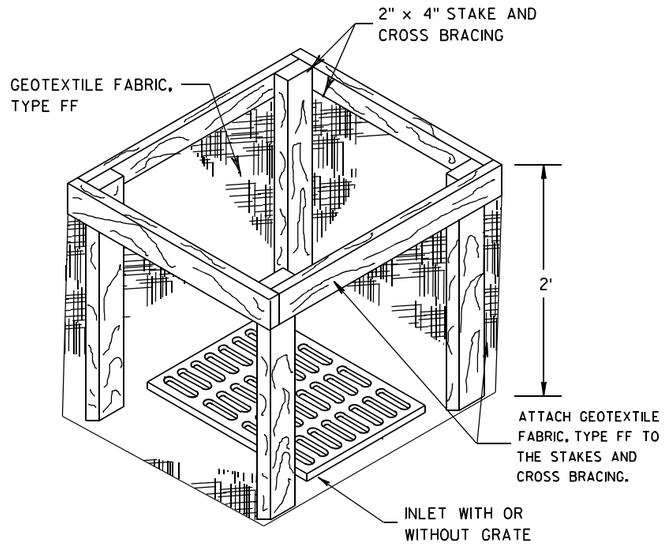
APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

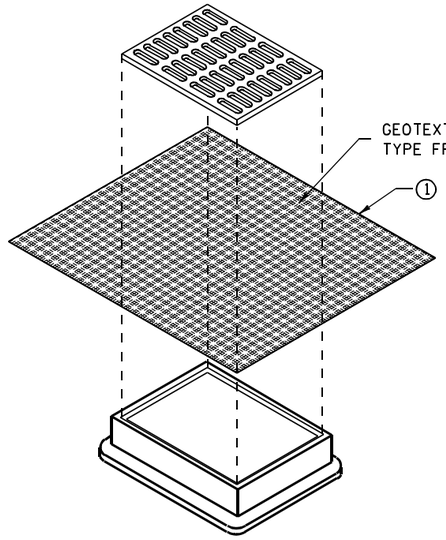
6

SDD 08D05 - 20g



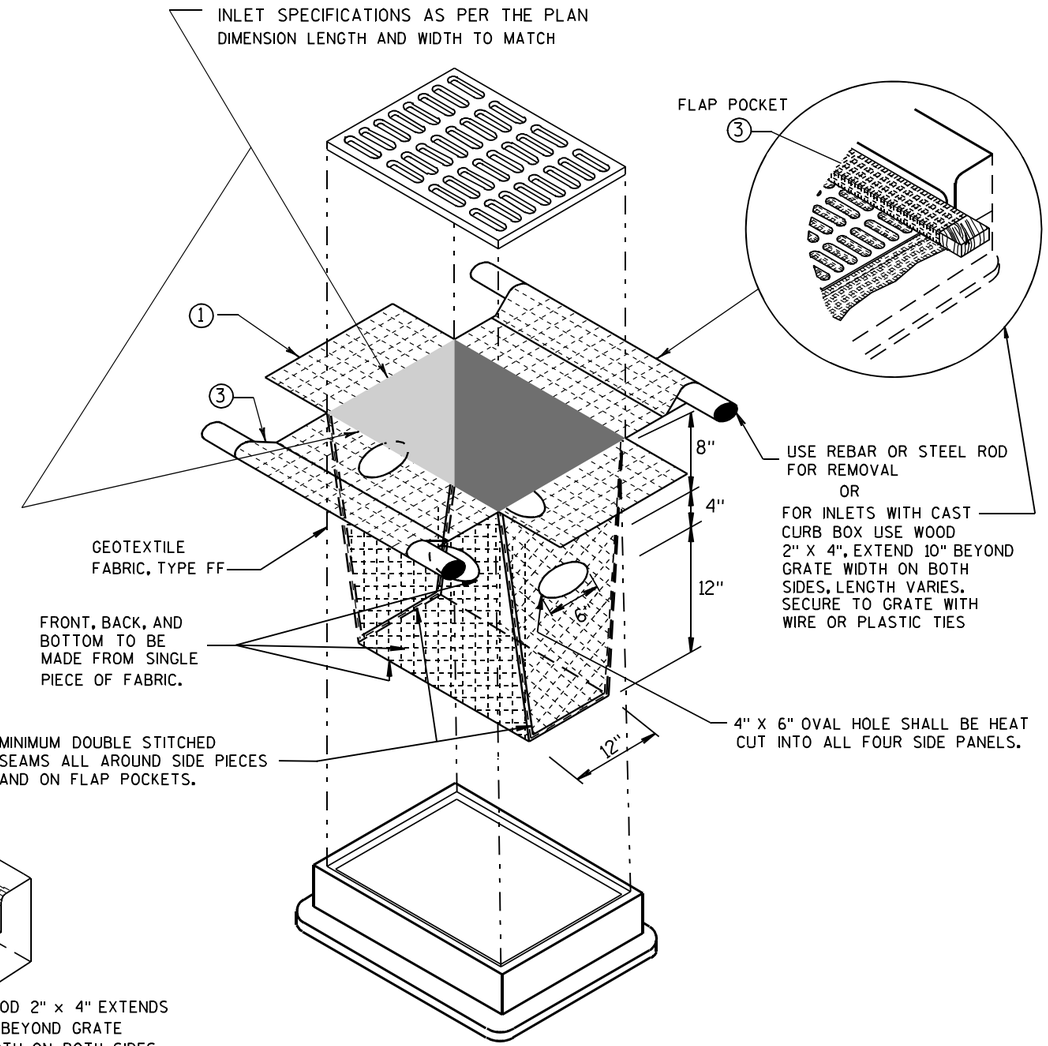


INLET PROTECTION, TYPE A



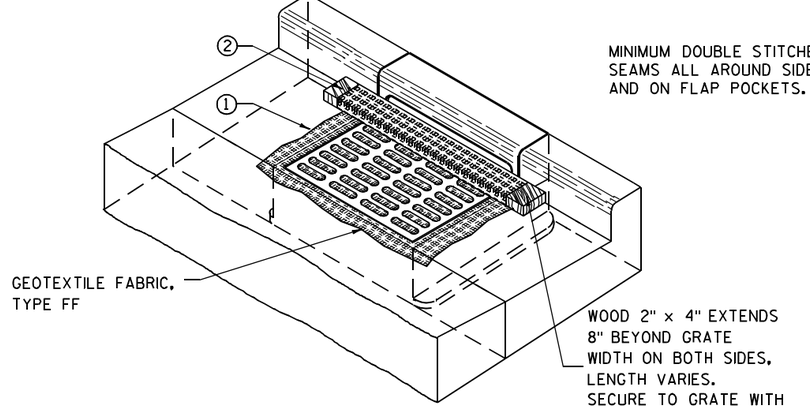
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

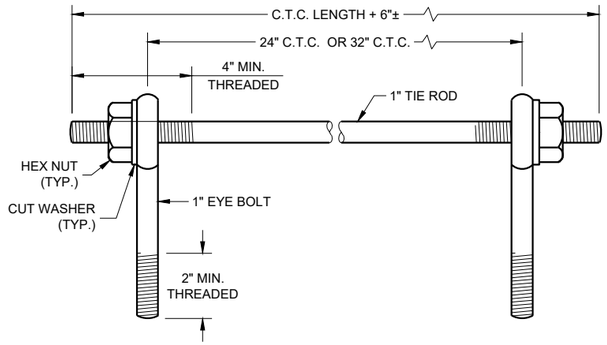
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

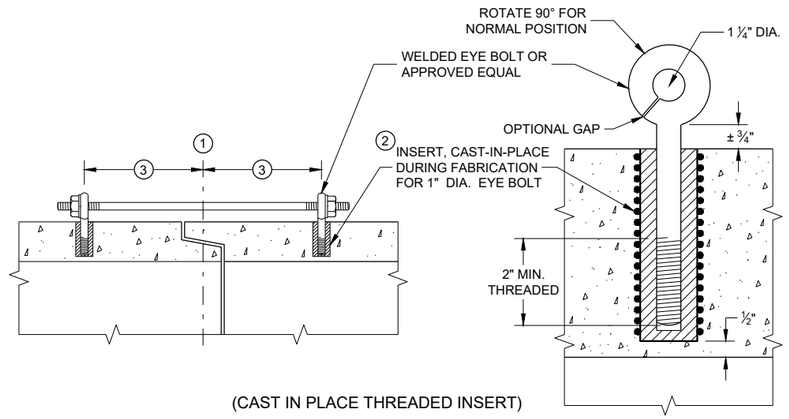
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



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) CENTER LINE 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.

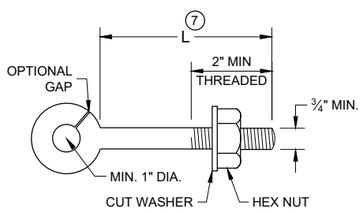
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

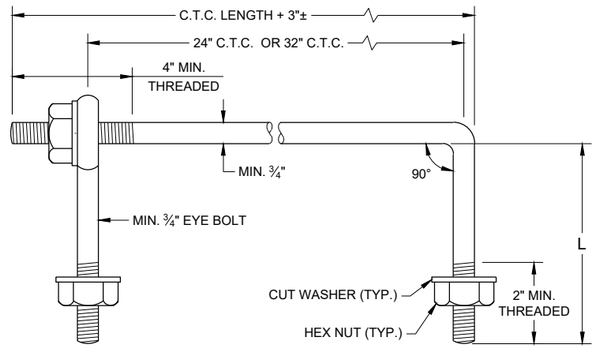
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

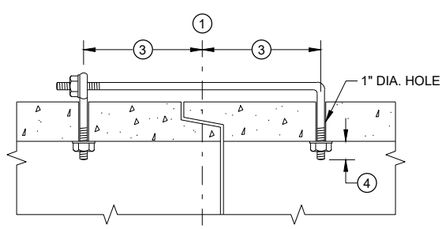


EYE BOLT (7)

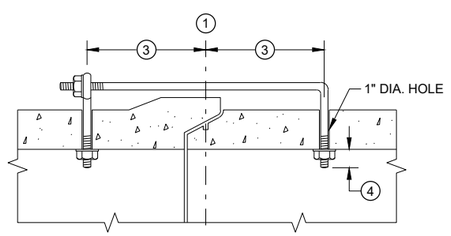
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

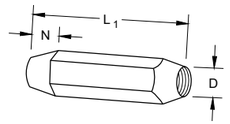
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

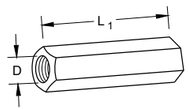
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



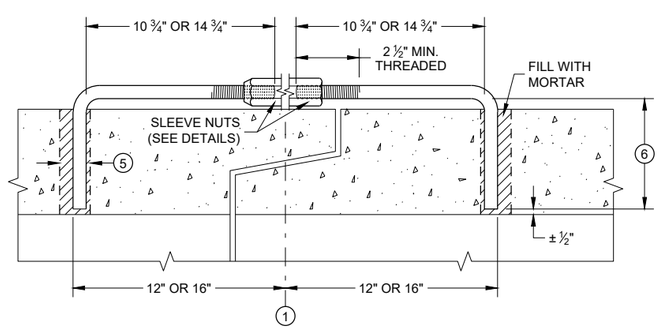
TAPERED



PLAIN

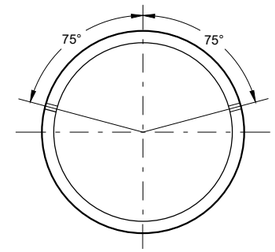
RIGHT AND LEFT THREADS

SLEEVE NUTS



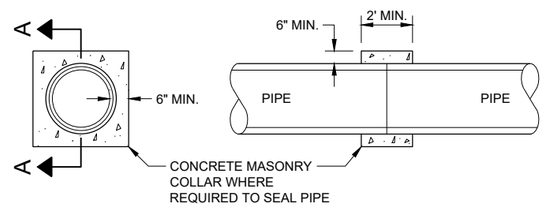
LONGITUDINAL SECTION

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

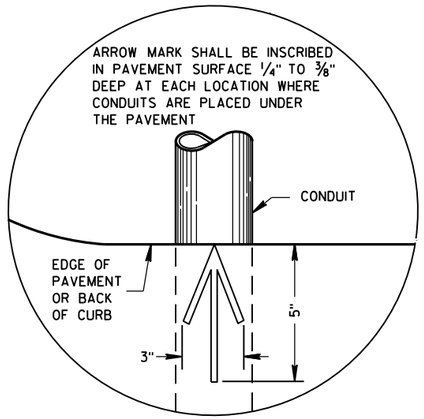
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

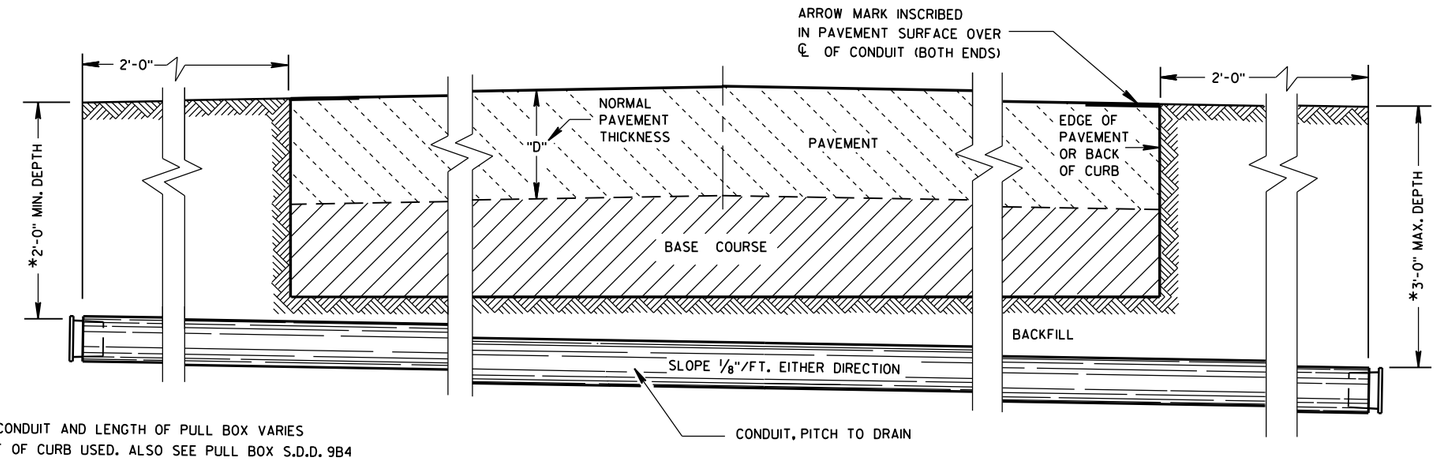
SDD 08F04 - 08

SDD 08F04 - 08



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.

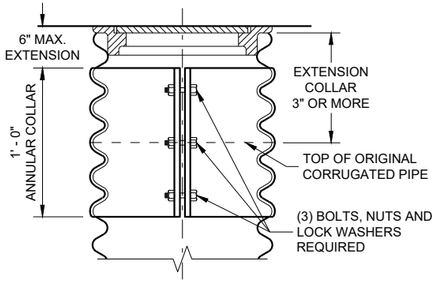
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

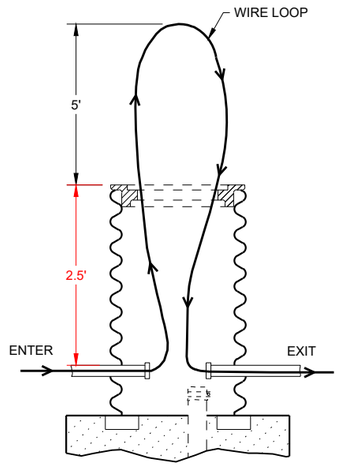
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

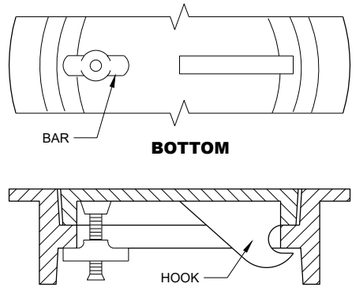
S.D.D. 9 B 2-10



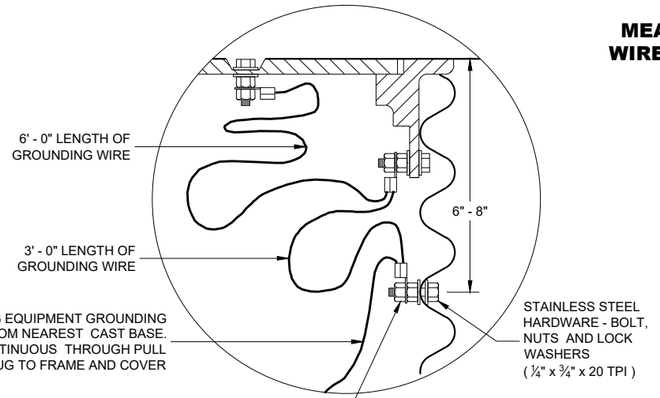
CORRUGATED PIPE EXTENDER



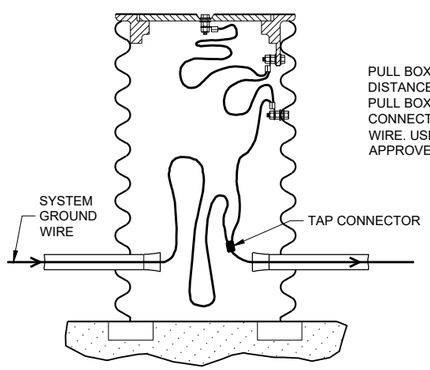
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

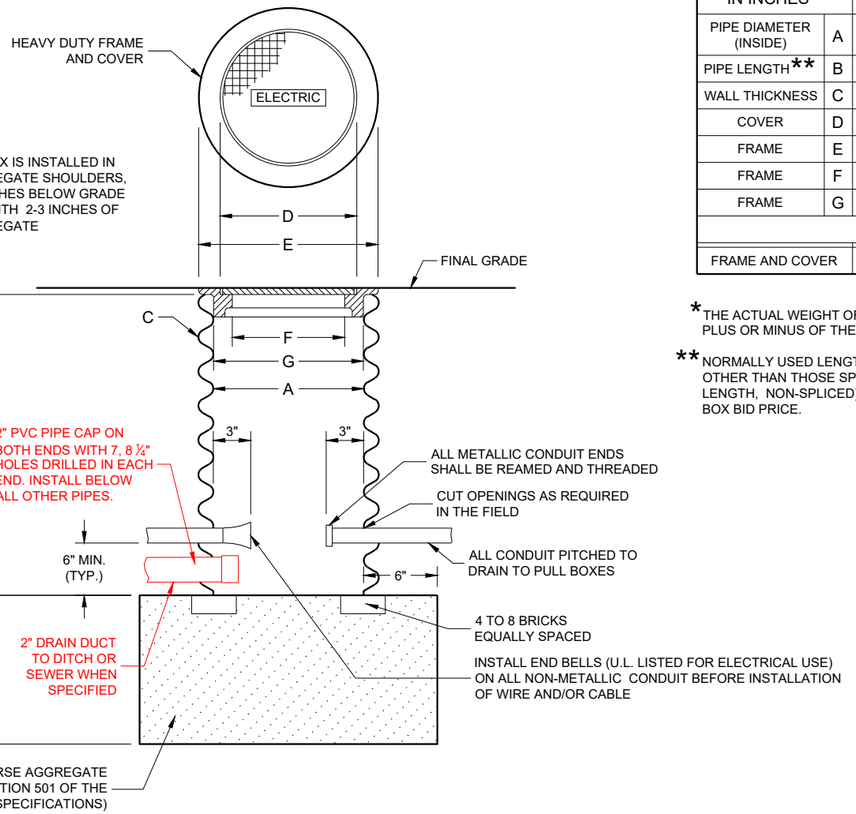


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH**	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

**NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

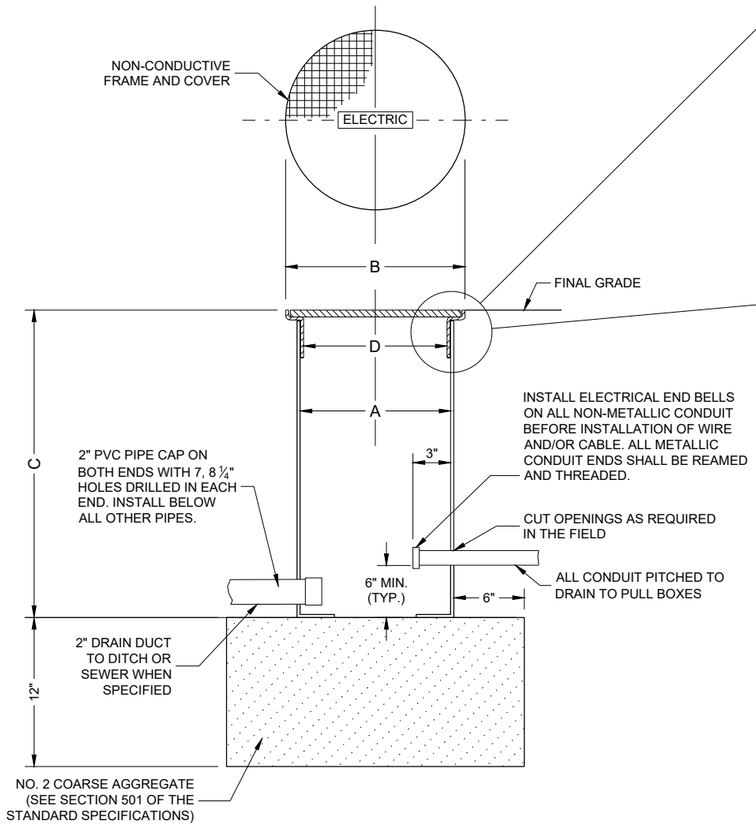
6
SDD 09B04-12

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

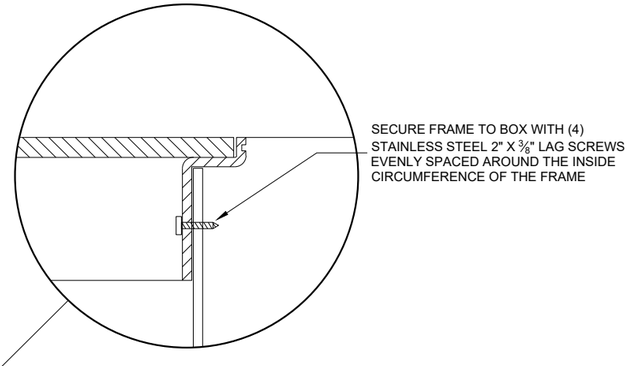
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

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

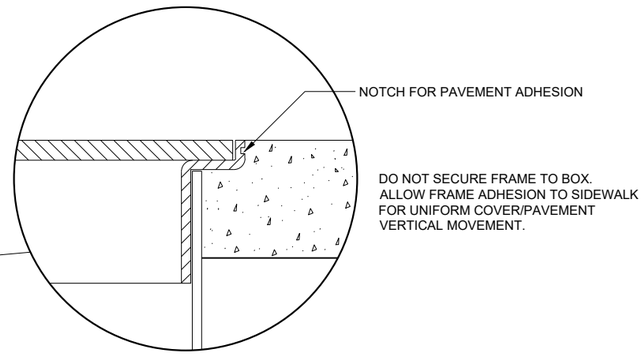
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



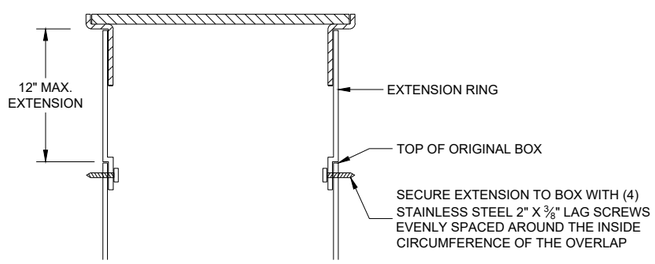
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

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

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

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

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

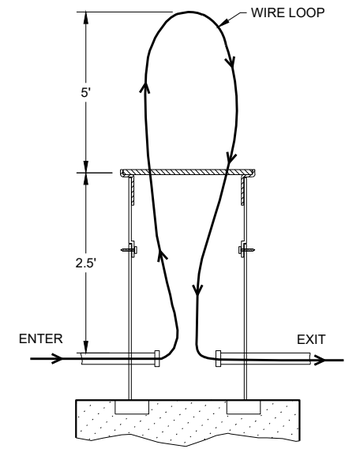
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

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

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

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



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

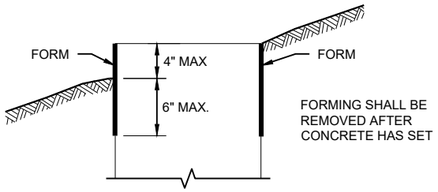
APPROVED
May 2022
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6

SDD 09B16 - 02
SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

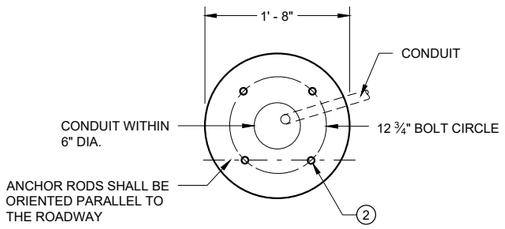
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

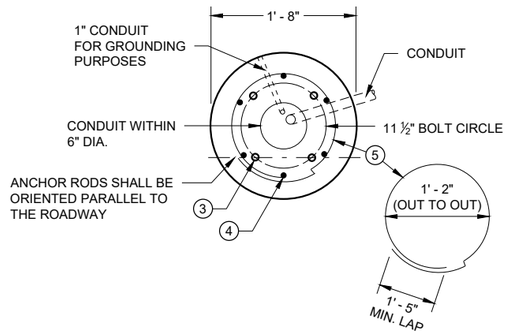
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

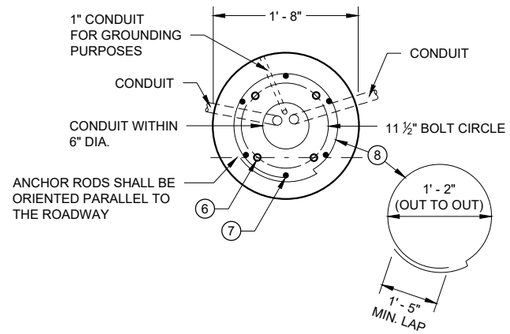
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

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

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

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

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

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

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

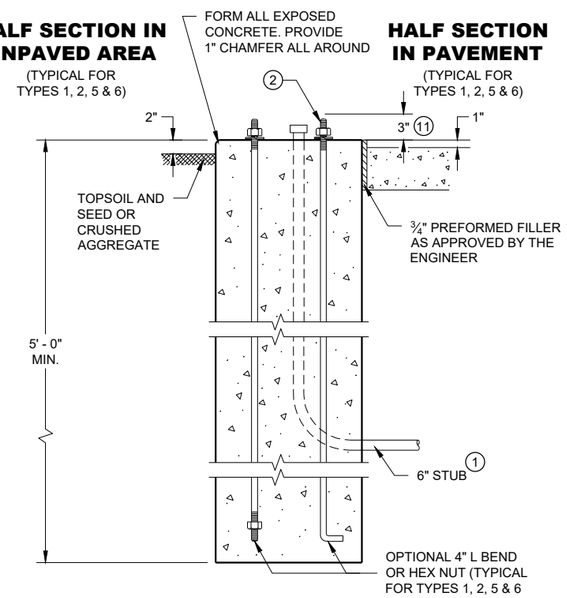
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

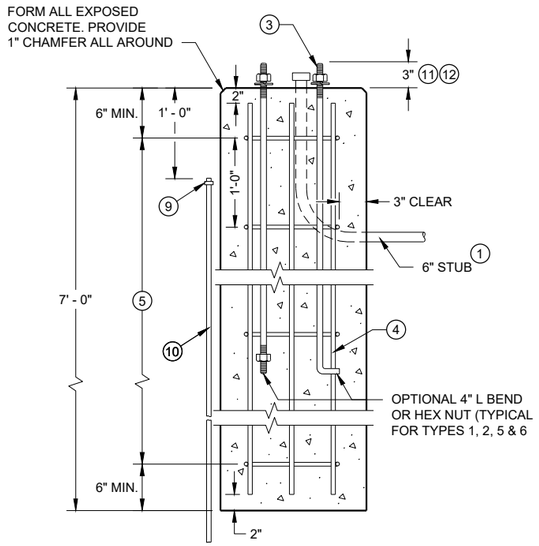
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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

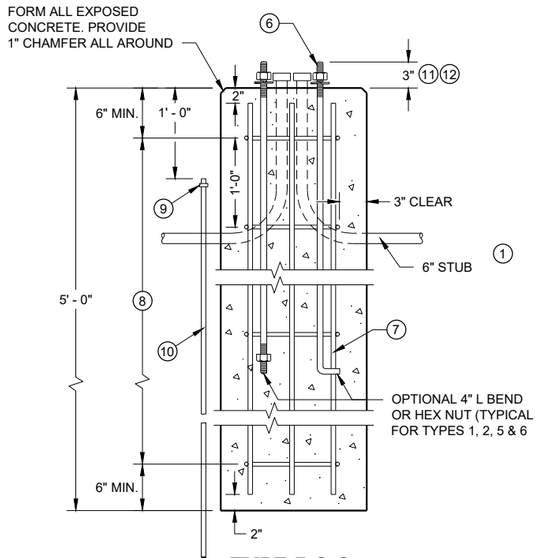
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

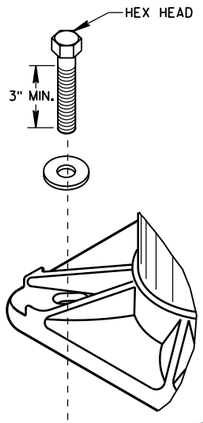
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

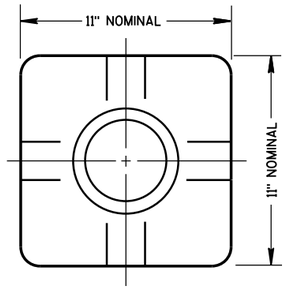
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

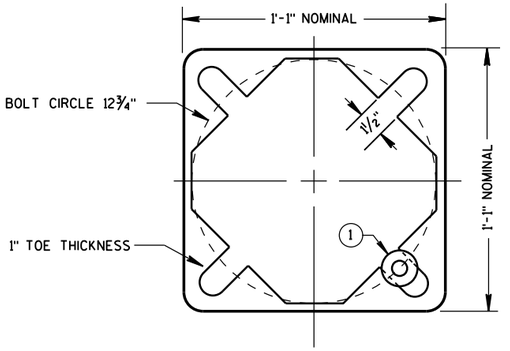
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

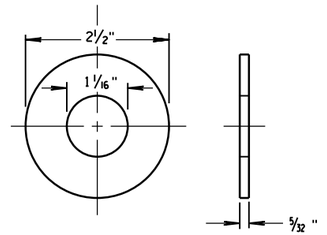




TOP VIEW
(PEDESTAL BASE)

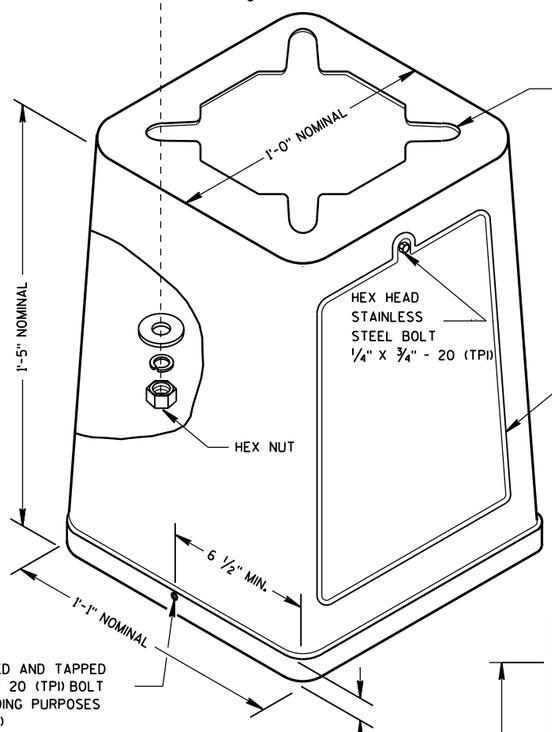


BOTTOM VIEW
(PEDESTAL BASE)

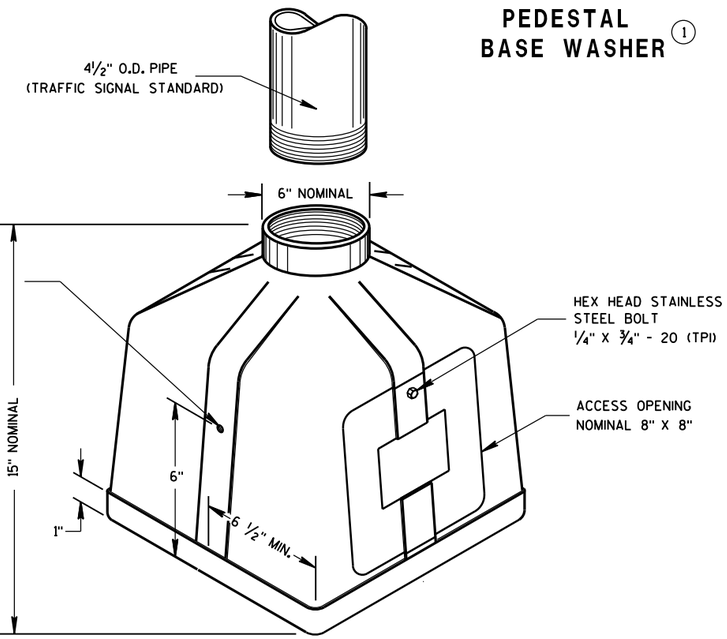


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

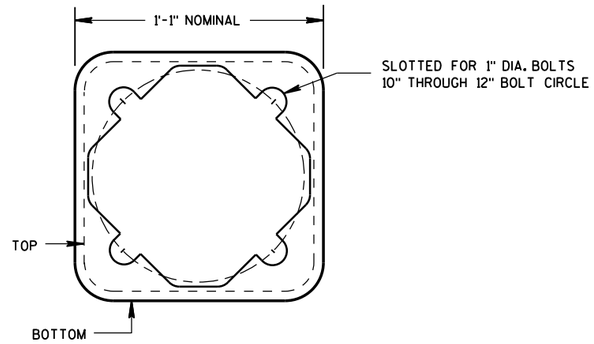


ISOMETRIC VIEW

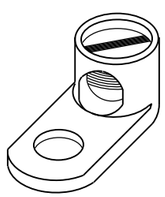


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

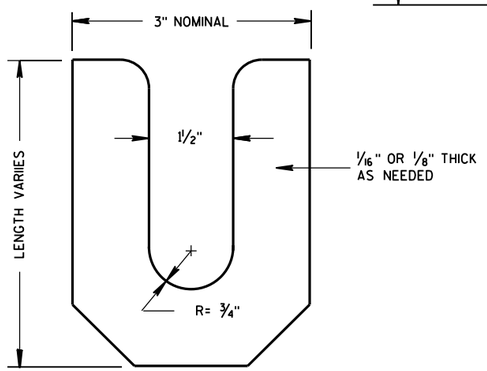


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 9 C 3-4

6

S.D.D. 9 C 3-4

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

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

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

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

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

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

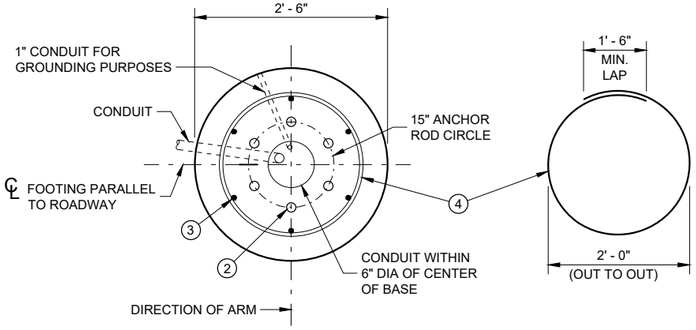
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

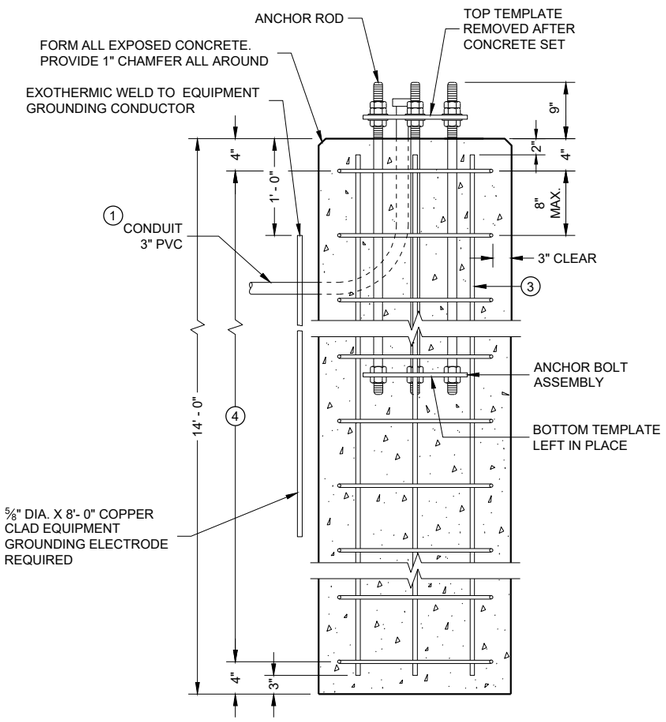
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

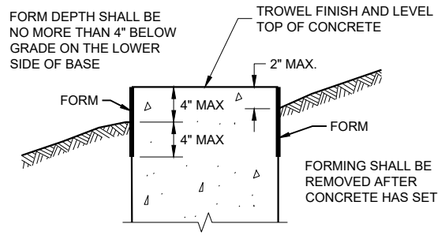
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



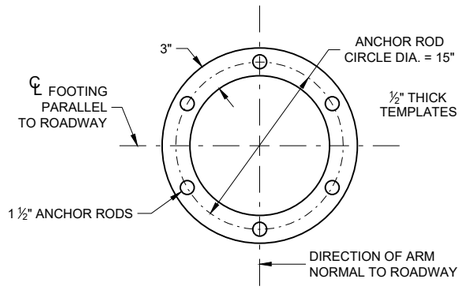


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

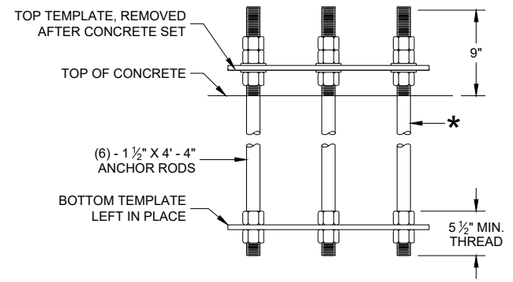
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

GENERAL NOTES

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

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

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

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

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

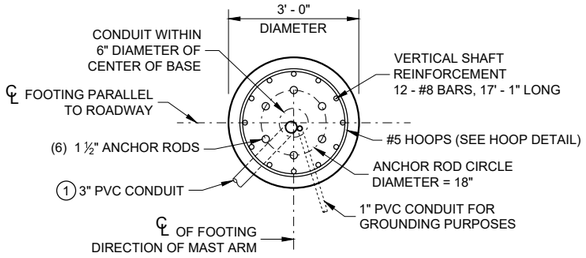
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

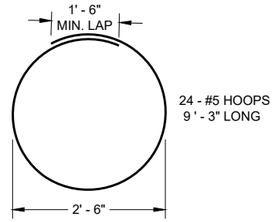
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

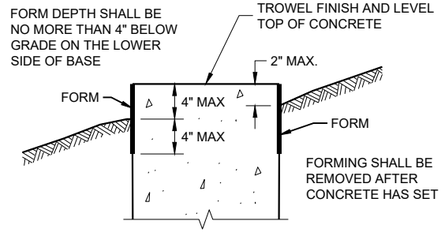
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



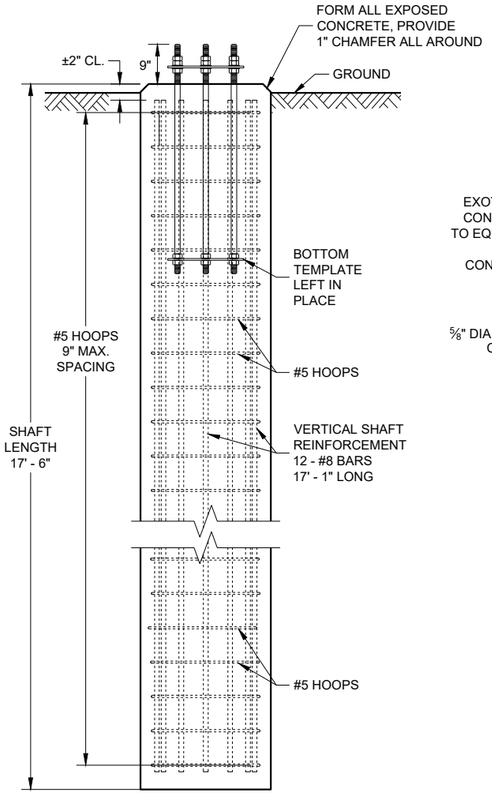
PLAN VIEW



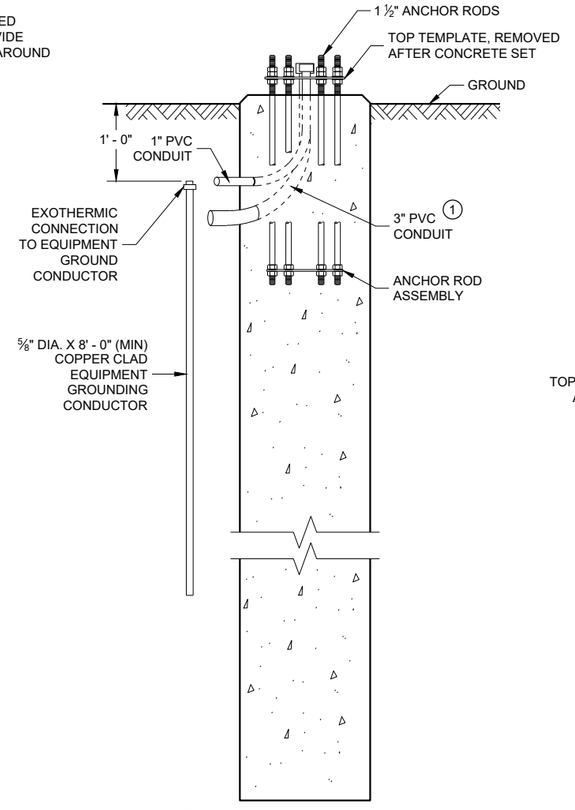
HOOP DETAIL



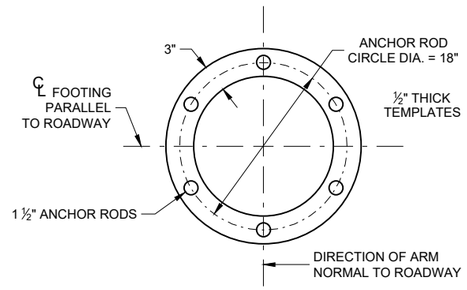
FORMING DETAIL



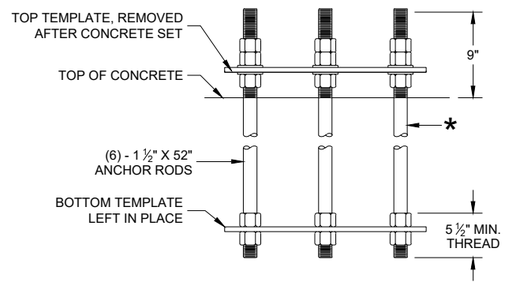
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

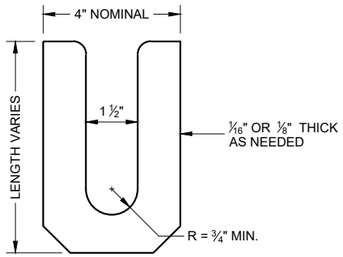
APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

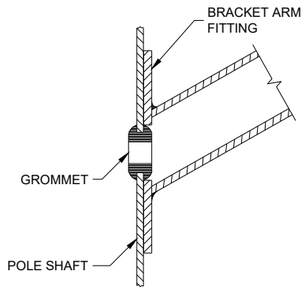
SDD 09C15 - 01

6

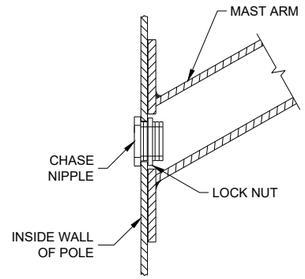
SDD 09C15 - 01



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

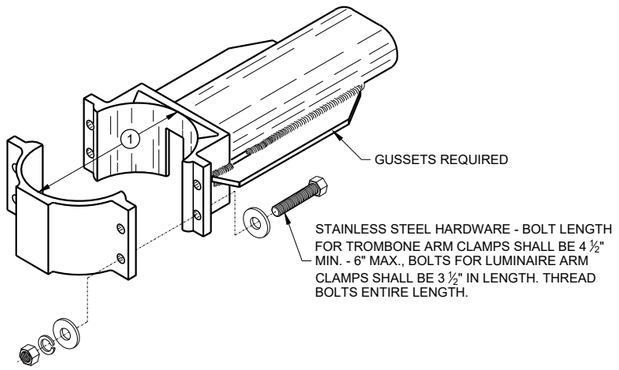
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

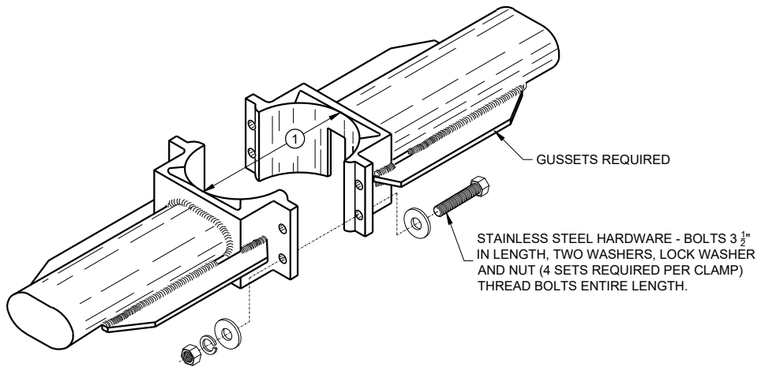
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

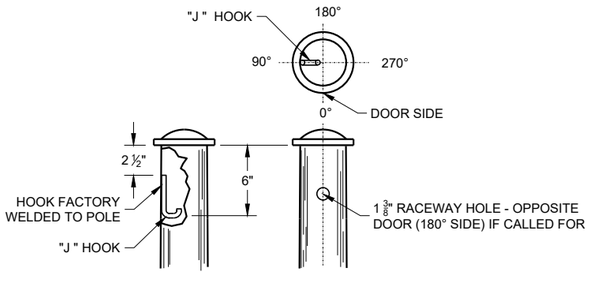
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



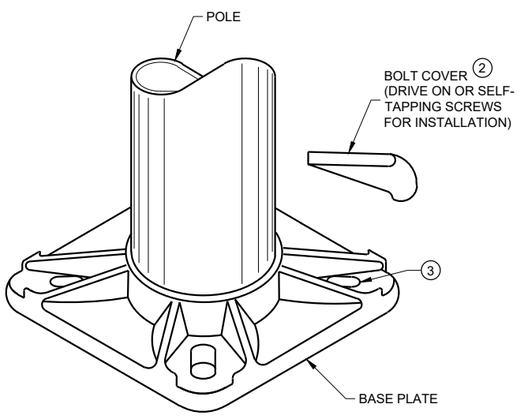
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



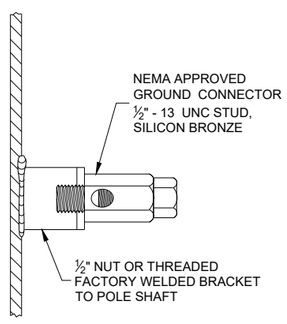
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

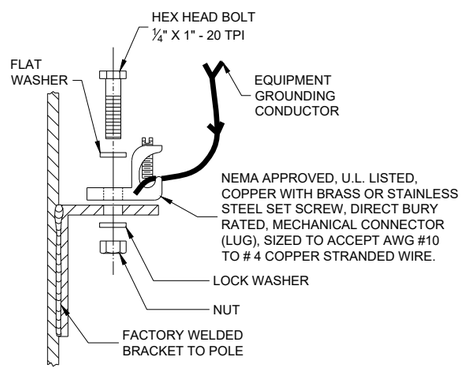


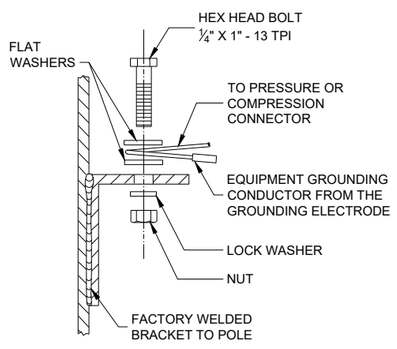
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

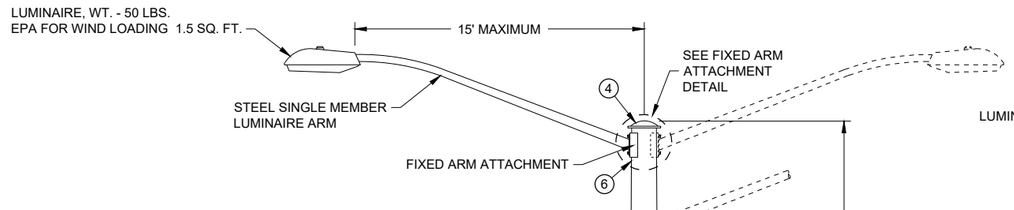
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

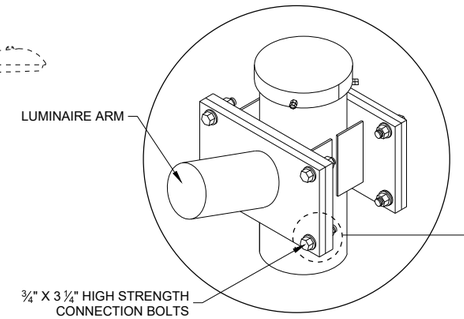
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 80

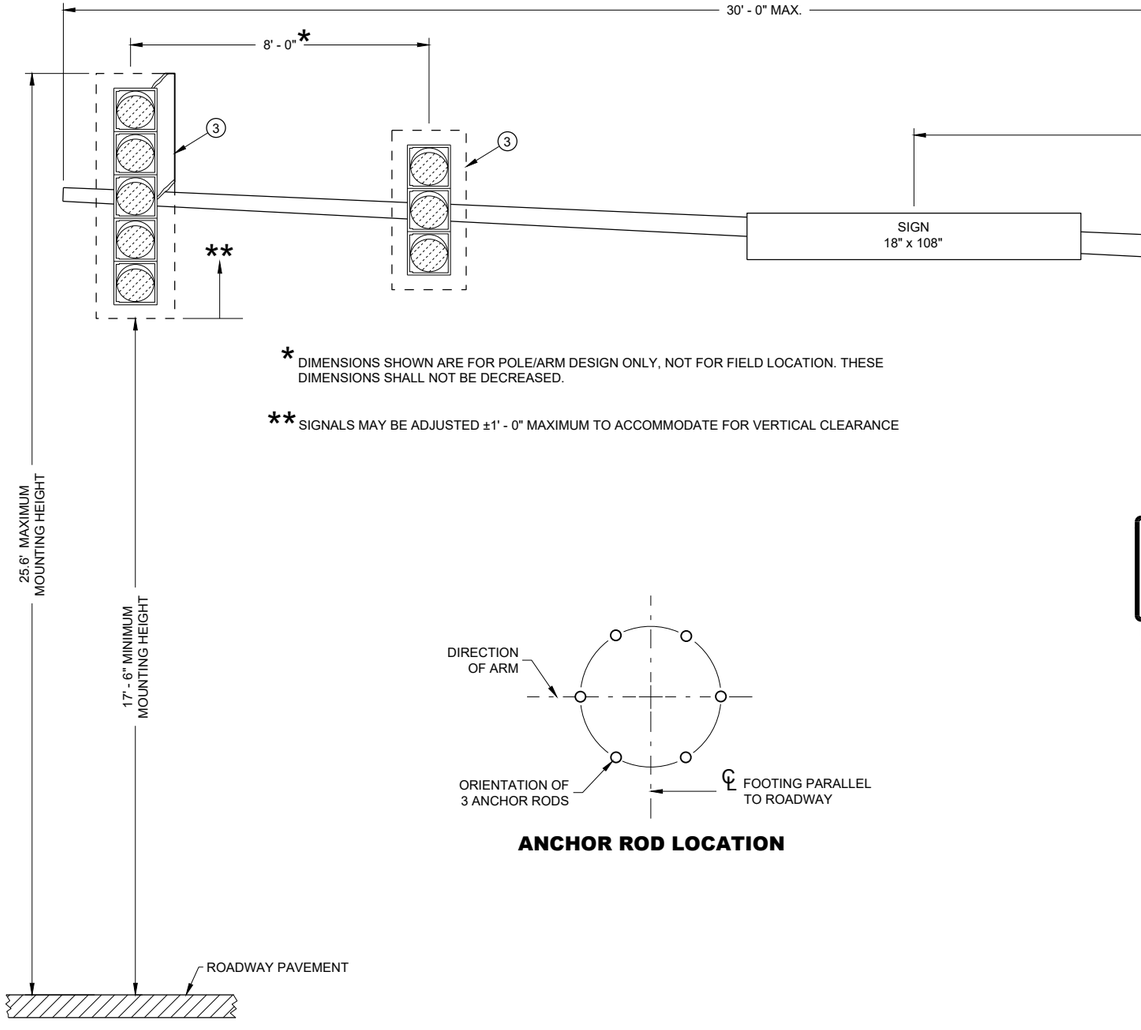
FHWA

6
SDD 09E01 - 15g





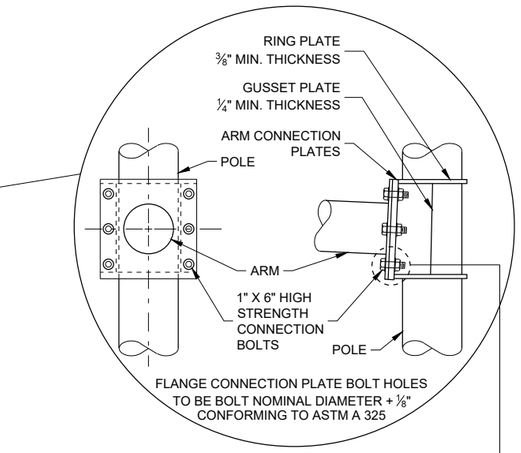
FIXED ARM ATTACHMENT DETAIL



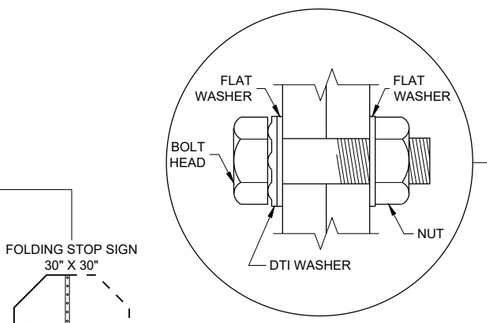
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

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

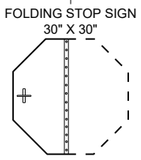
ANCHOR ROD LOCATION



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30 MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

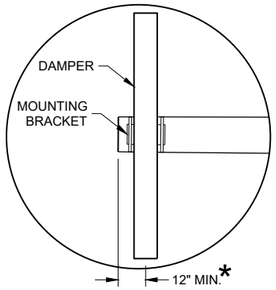
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

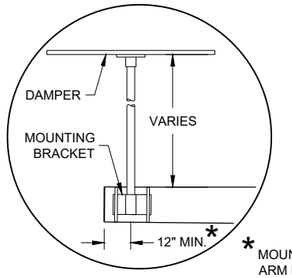
6

SDD 09E08 - 09e

SDD 09E08 - 09e

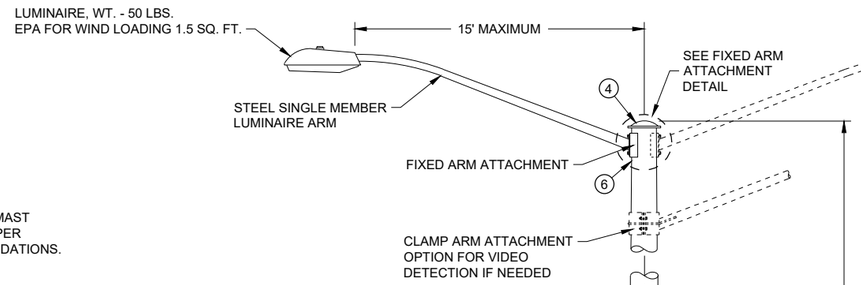


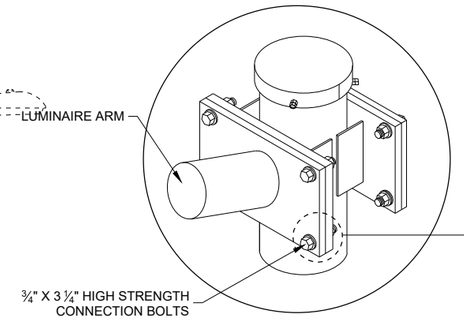
DUMBBELL VIBRATION DAMPER



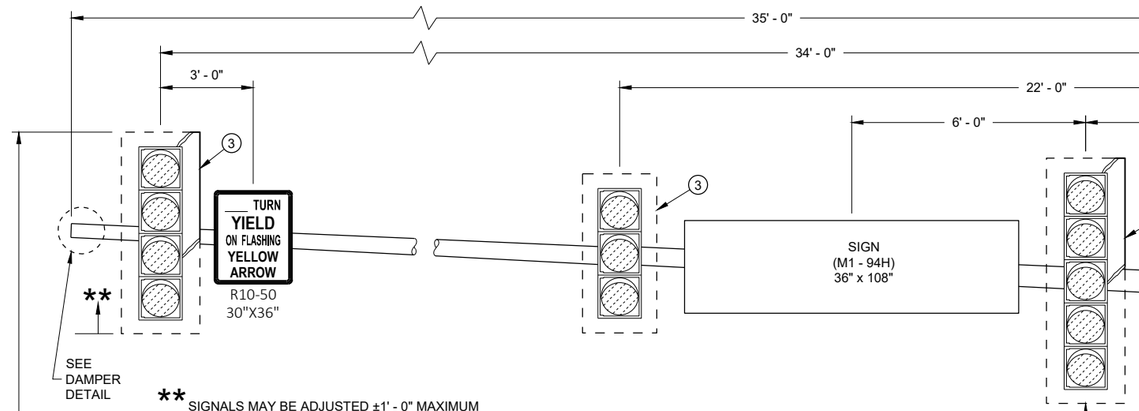
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

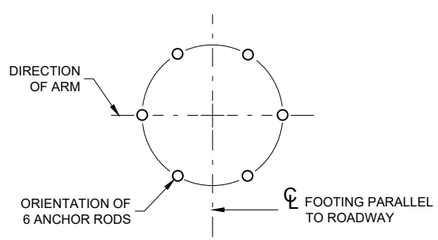




FIXED ARM ATTACHMENT DETAIL

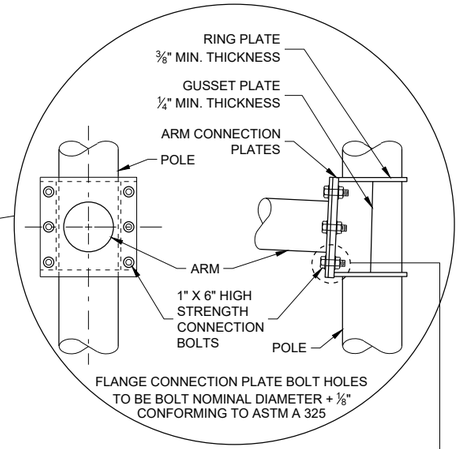


** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

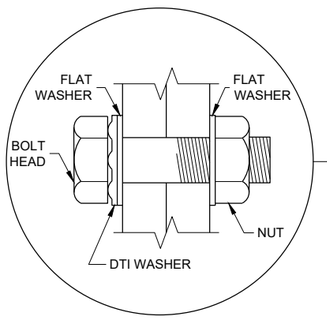


ANCHOR ROD LOCATION

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM
(MAXIMUM LOAD)



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
35' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

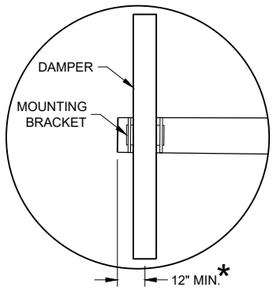
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

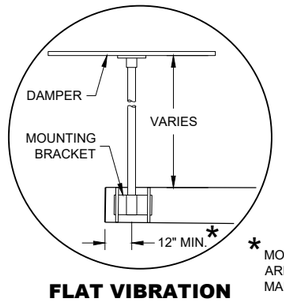
6

SDD 09E08 - 09f

SDD 09E08 - 09f

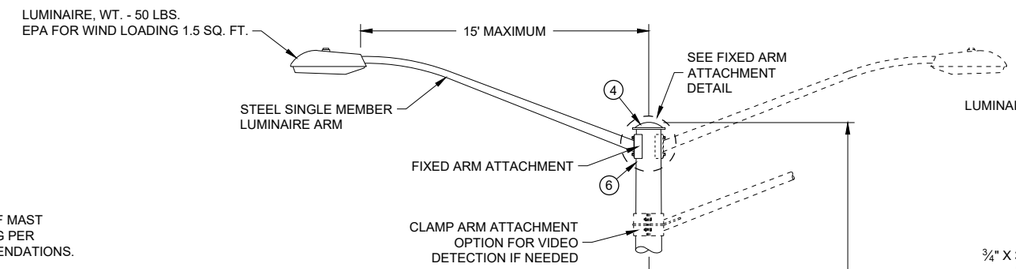


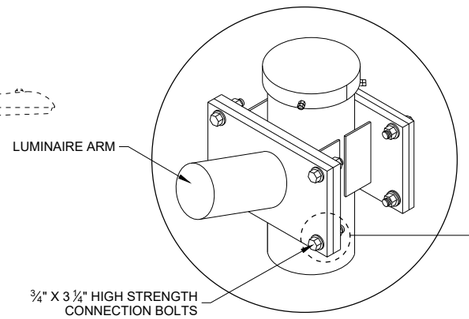
DUMBBELL VIBRATION DAMPER



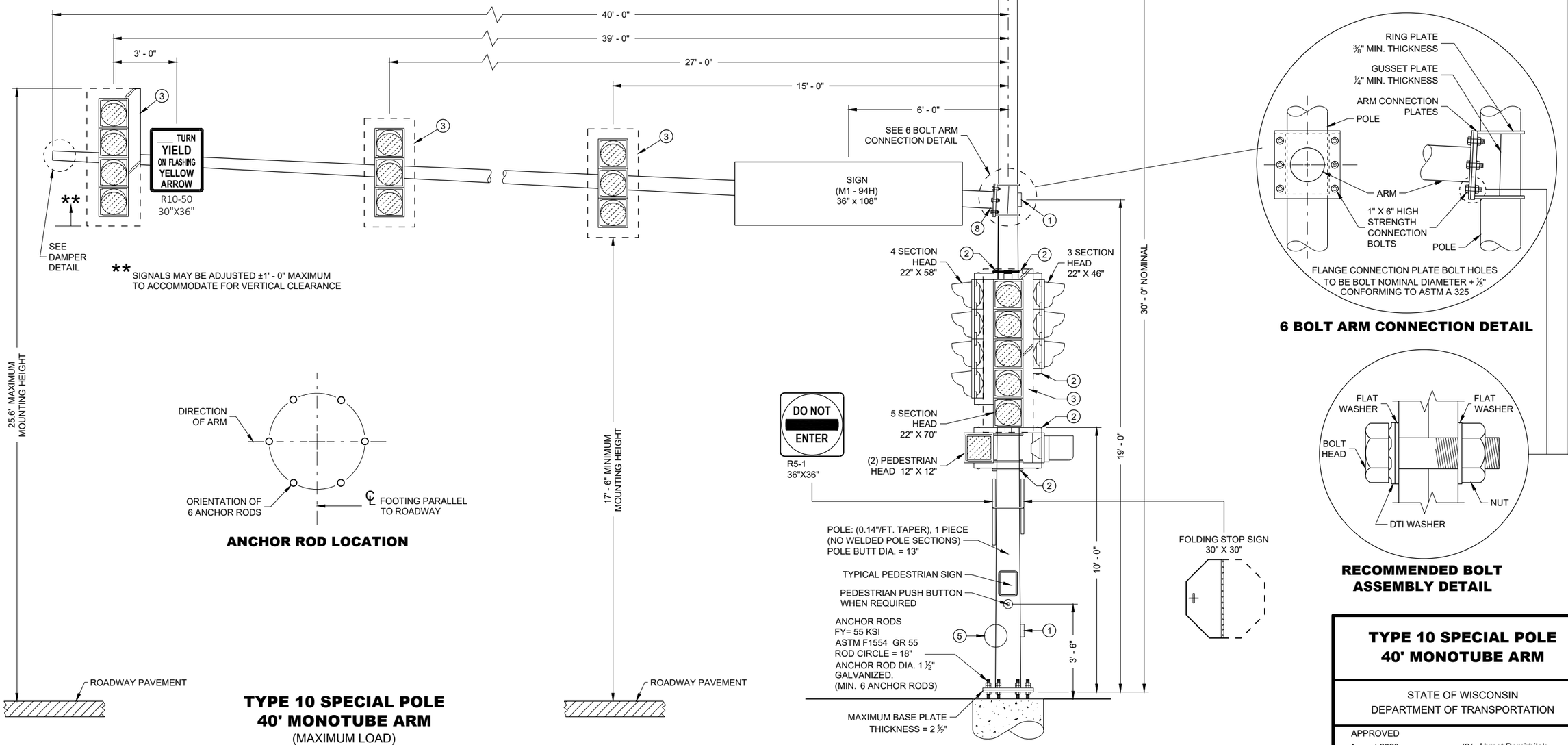
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.





FIXED ARM ATTACHMENT DETAIL



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

ANCHOR ROD LOCATION

6 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

SDD 09E08 - 09g

SDD 09E08 - 09g

6

6

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

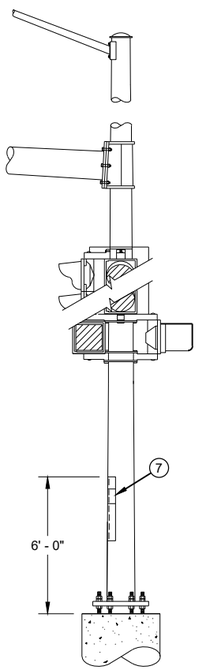
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

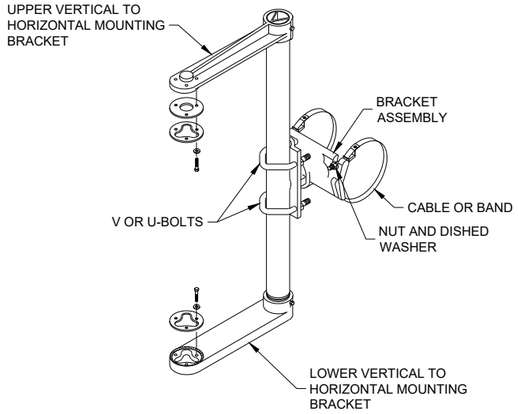
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

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

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

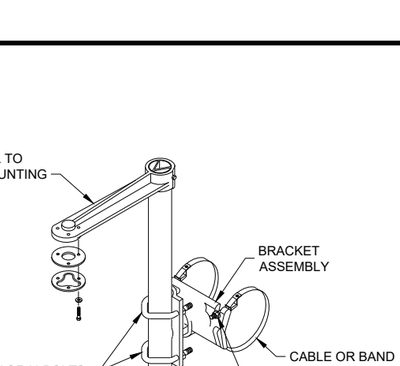


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



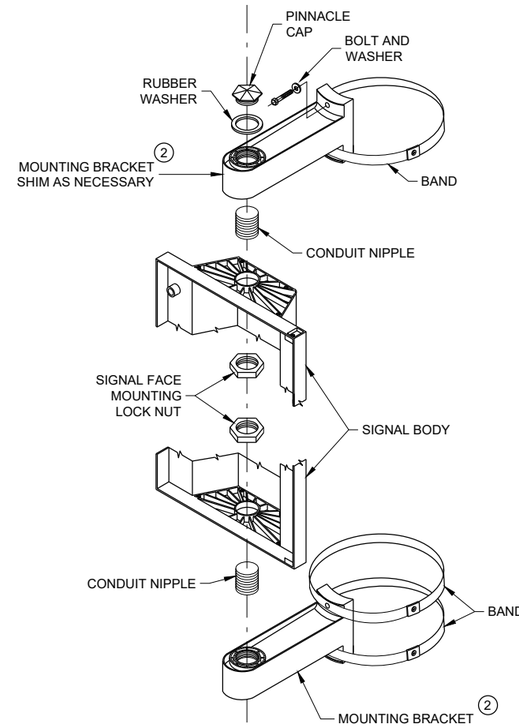
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

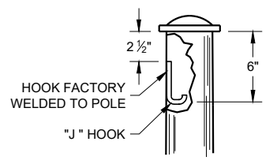


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

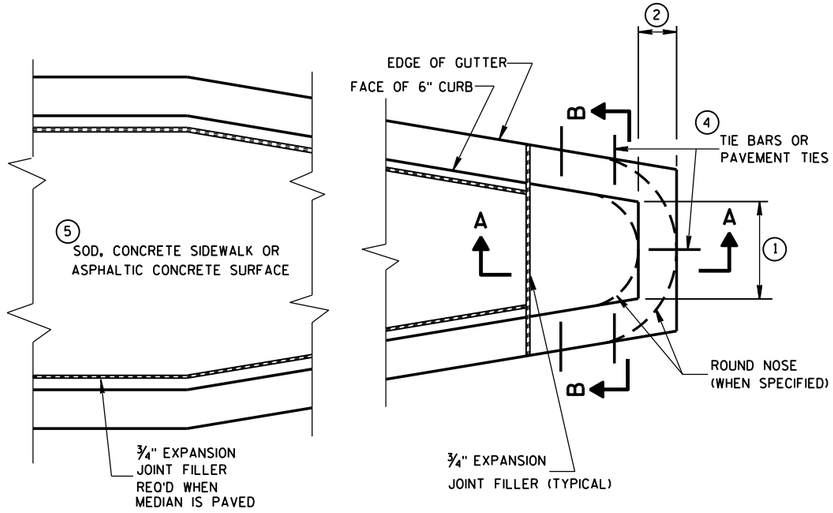
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

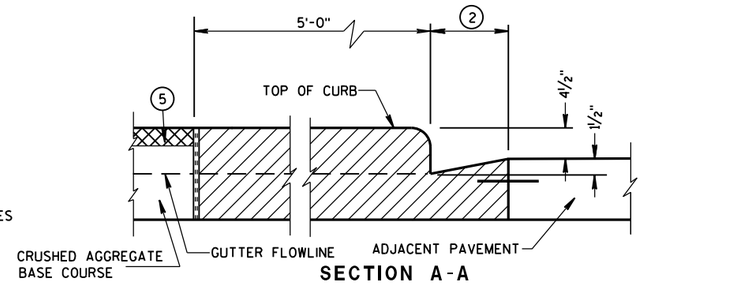
APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

6

SDD 09E08 - 09k





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

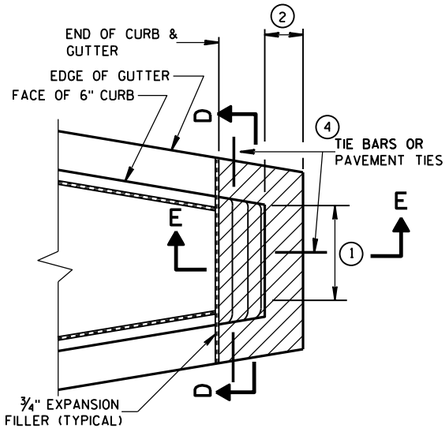
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

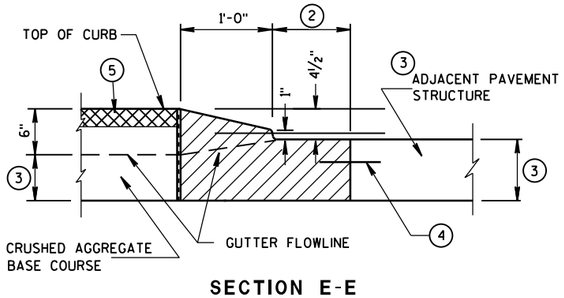
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

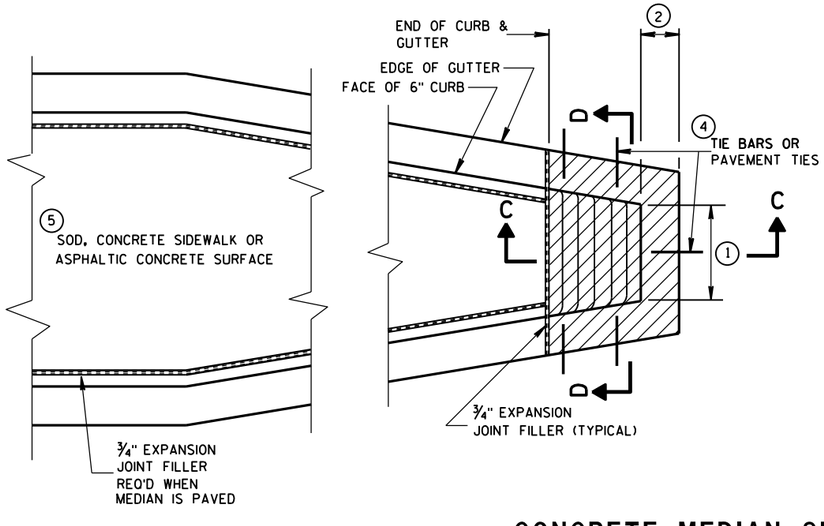
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

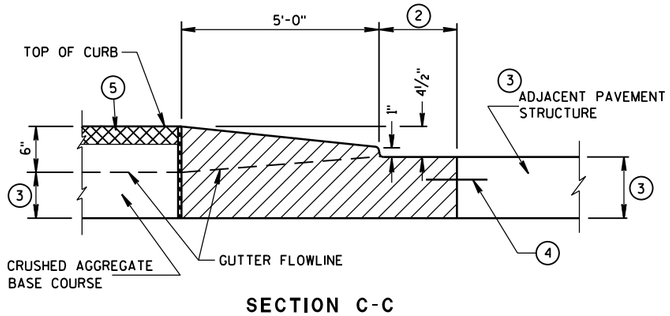




SECTION E-E

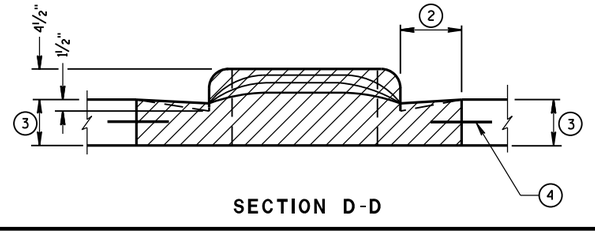
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

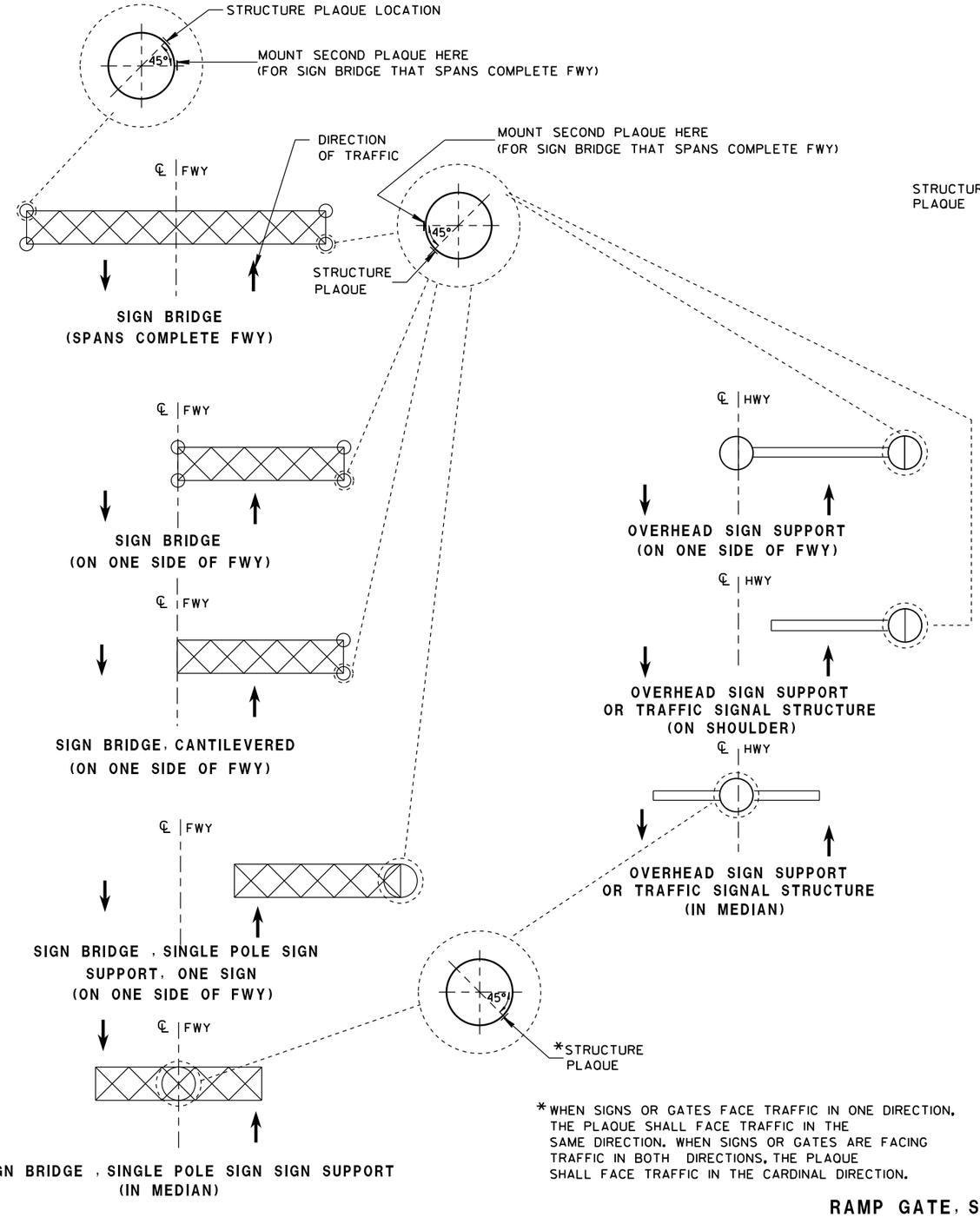
FHWA

6

S.D.D. 11 B 2-2

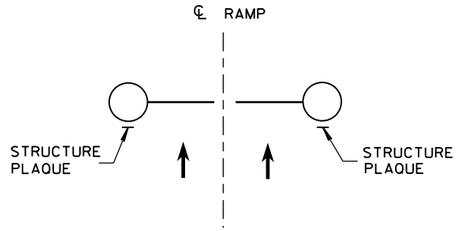
6

S.D.D. 11 B 2-2

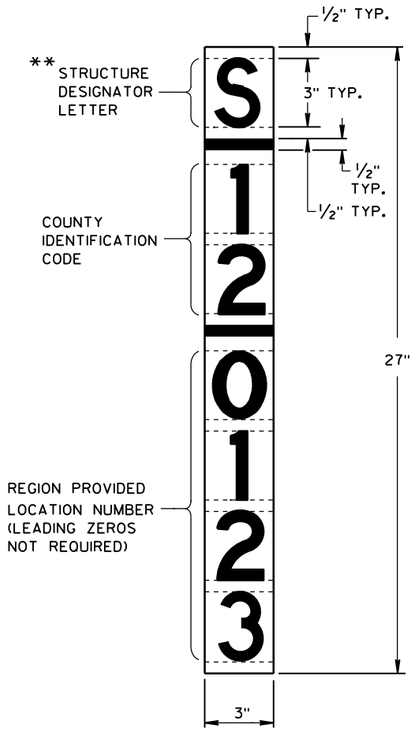


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

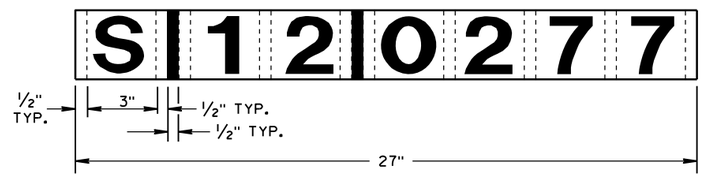
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

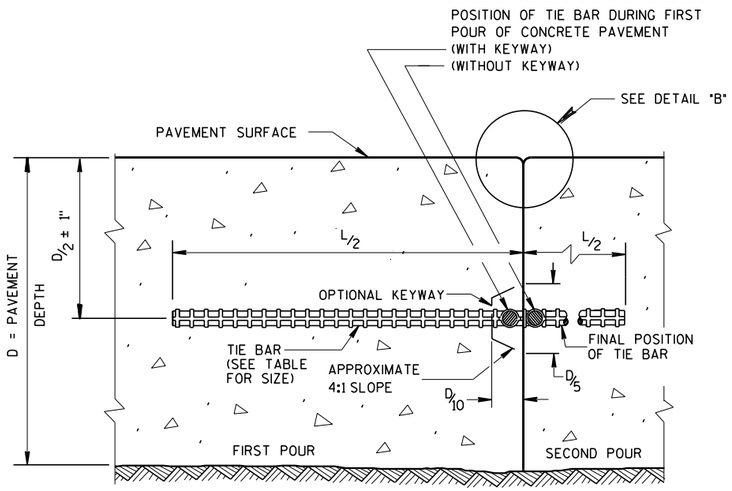
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

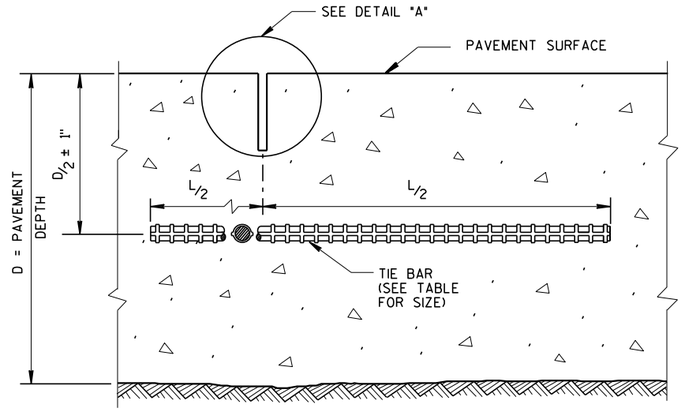
S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

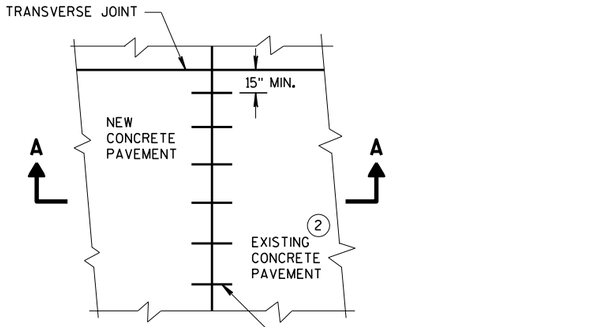
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

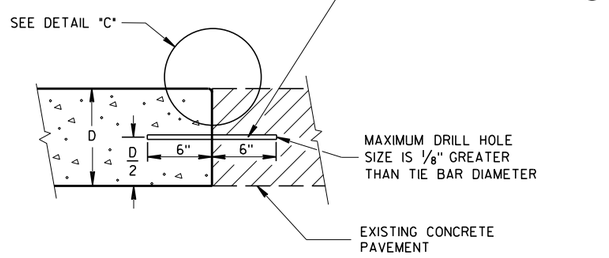
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

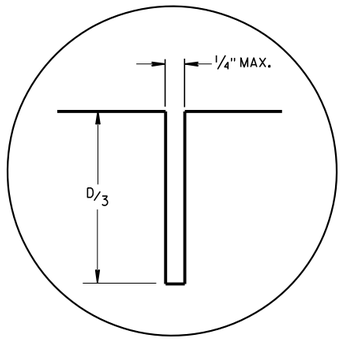


PLAN VIEW

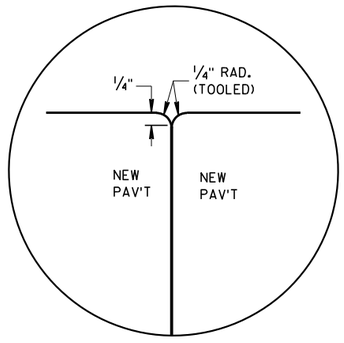


SECTION A-A

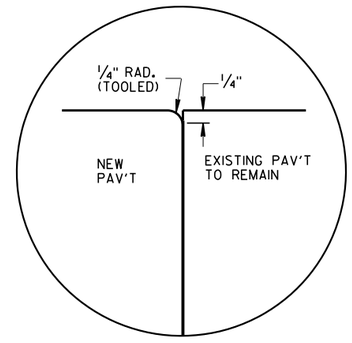
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



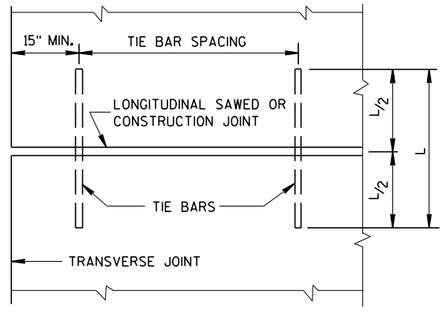
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

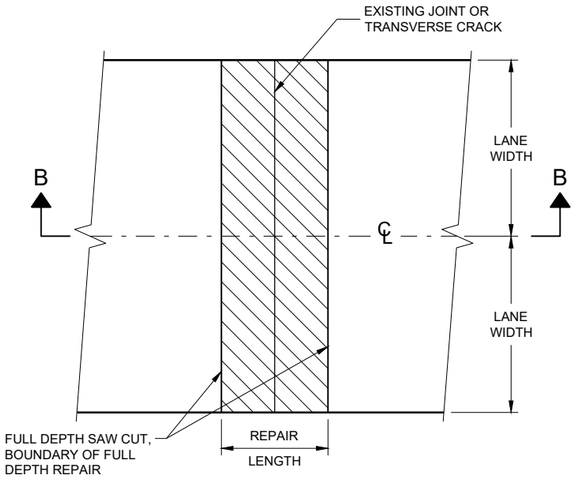
APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

6

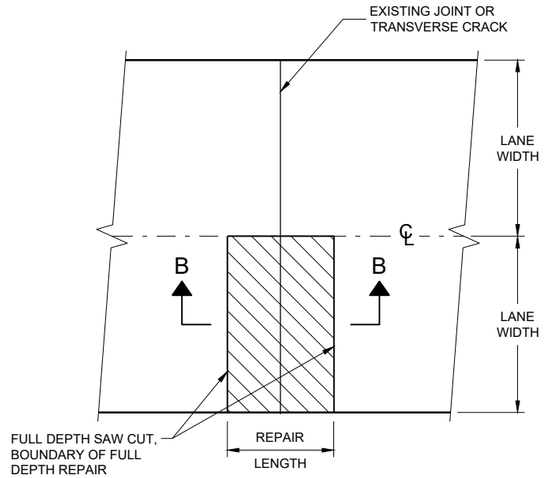
S.D.D. 13 C 1-19

6

S.D.D. 13 C 1-19



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

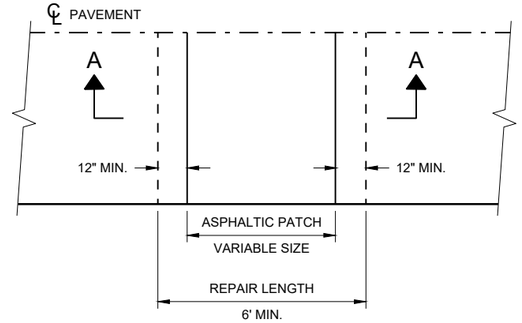
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

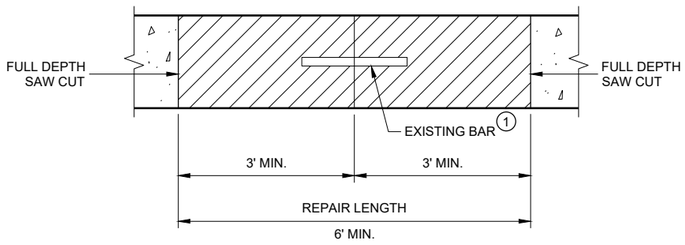
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



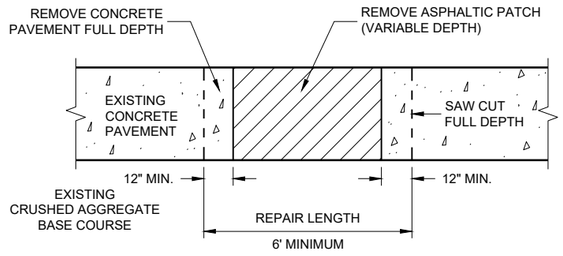
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

CONCRETE REMOVAL



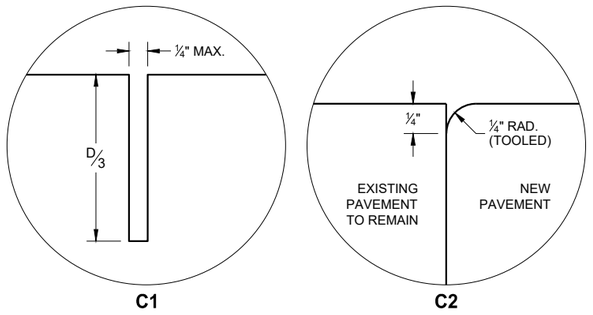
SECTION A - A

HMA PATCH REMOVAL

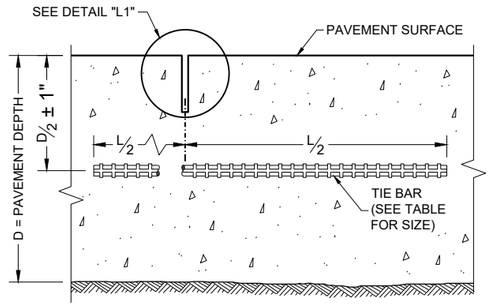
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

SDD13C09 - 17a

6

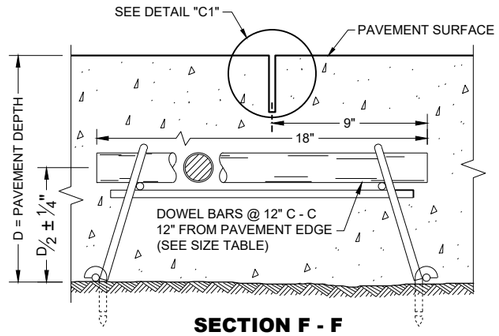


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

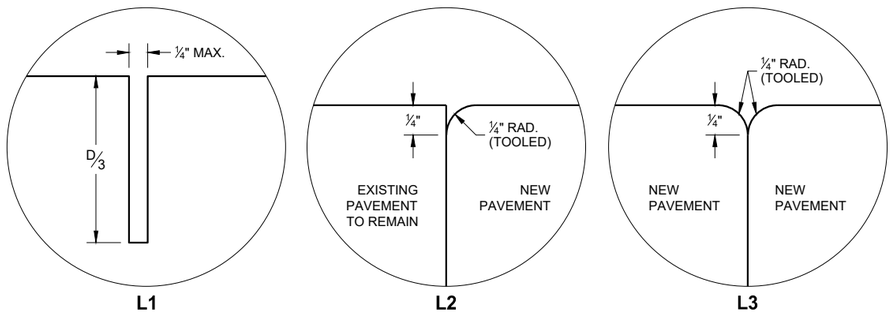
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

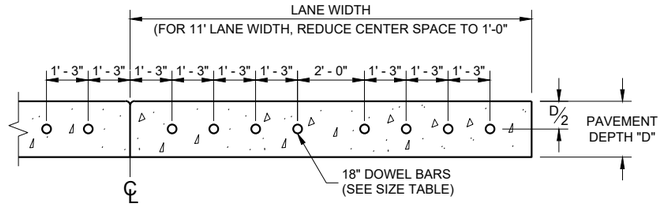
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

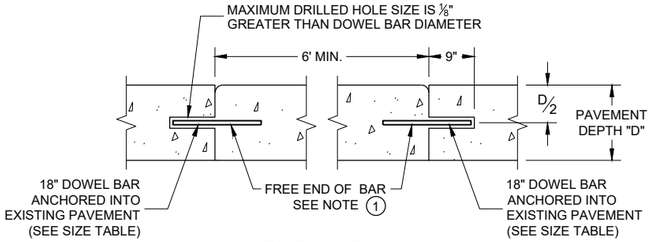


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

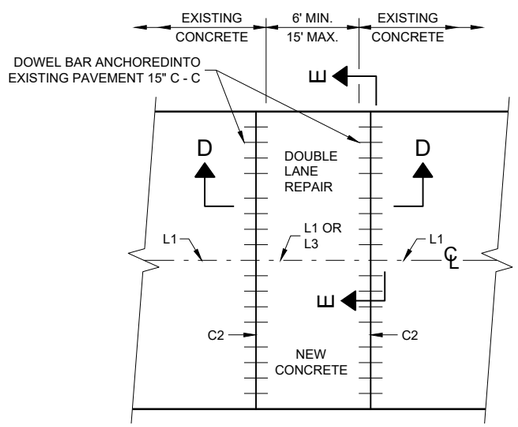
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

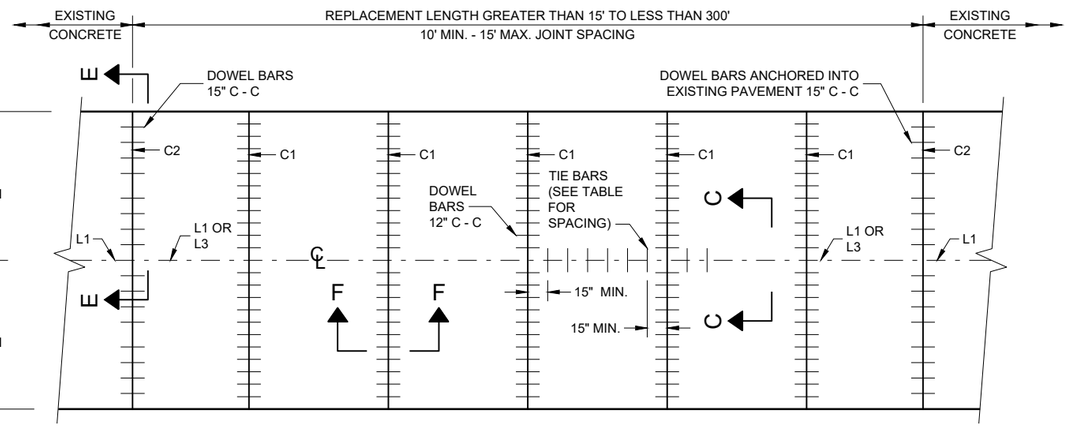
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	NONE	12'
7", 7 ½"	1"	1"	14'
8" & ABOVE	1 ¼"	1 ¼"	15'



PLAN VIEW

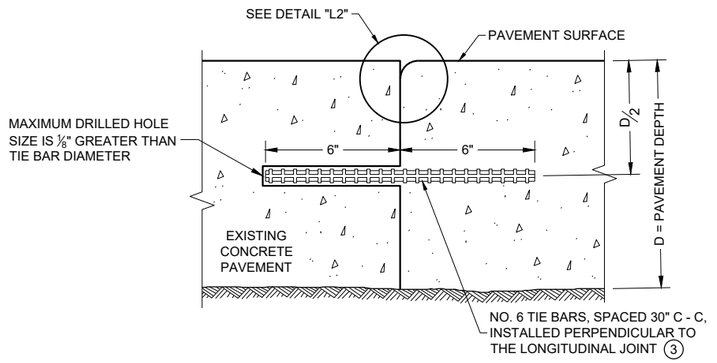
MULTILANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

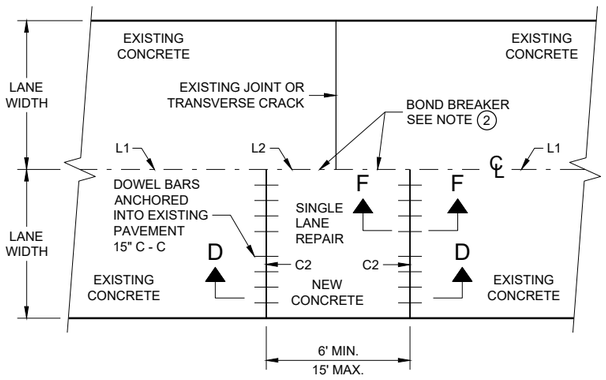


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

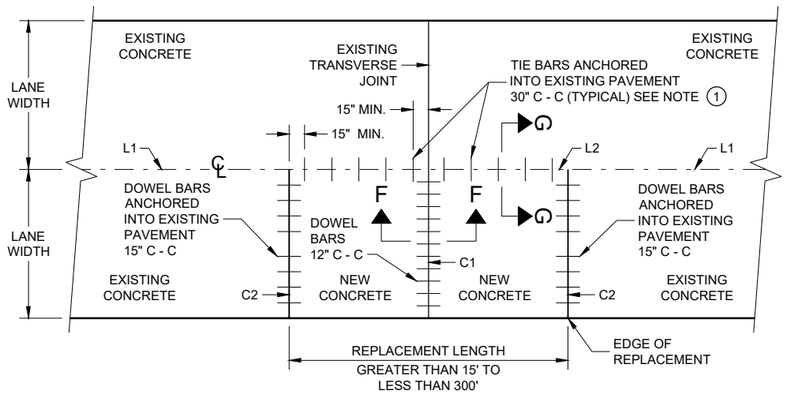
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

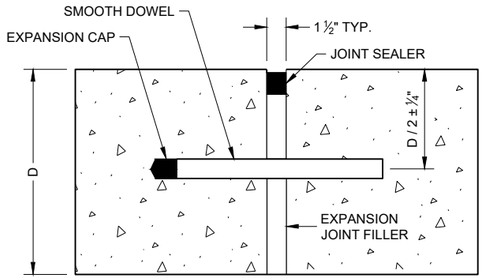
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

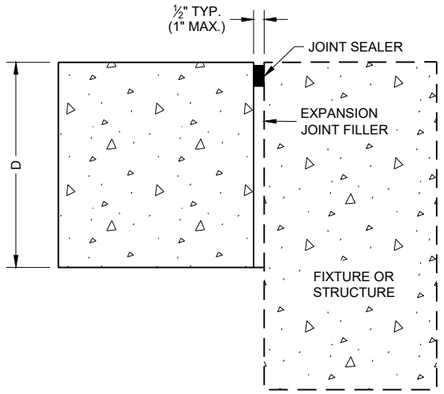
FHWA

6

SDD 13C09 - 17c



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

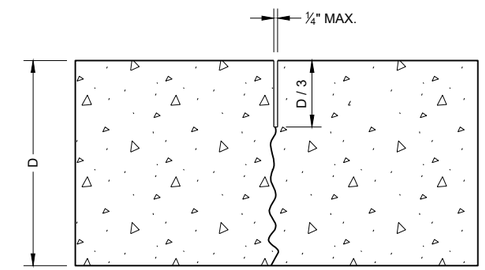
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

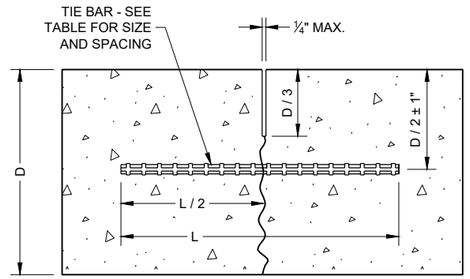
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

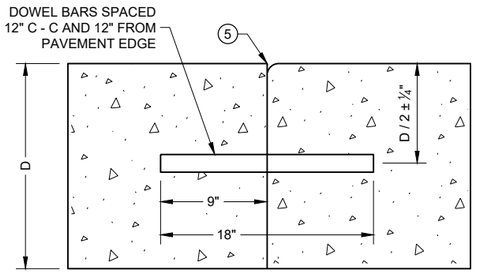
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



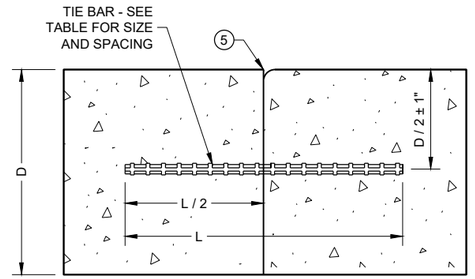
UNDOWELED TRANSVERSE



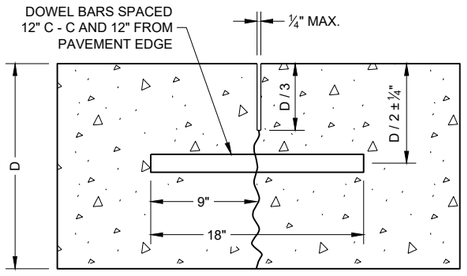
TIED LONGITUDINAL



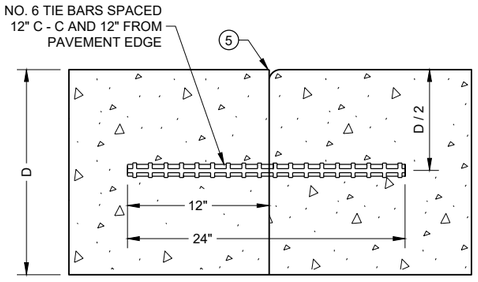
DOWELED TRANSVERSE (3)



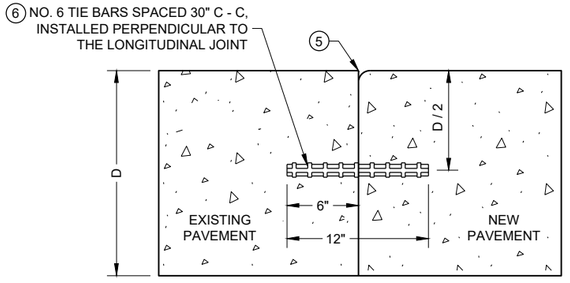
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

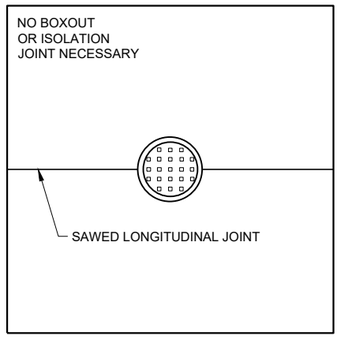


TIED LONGITUDINAL TO EXISTING

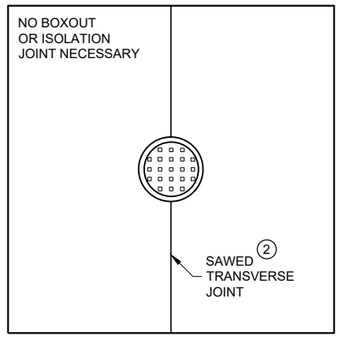
CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

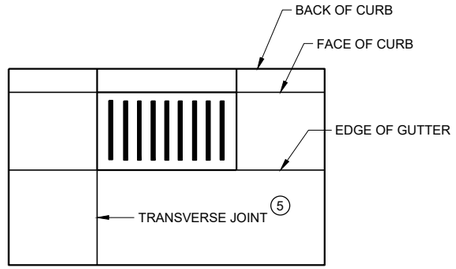
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



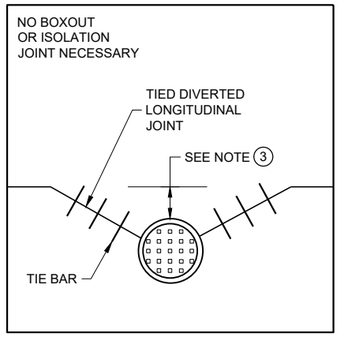
MANHOLE WITH TRANSVERSE JOINT



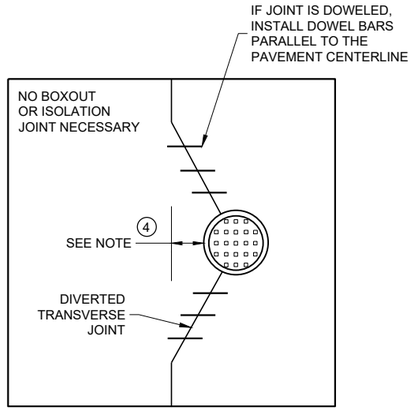
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

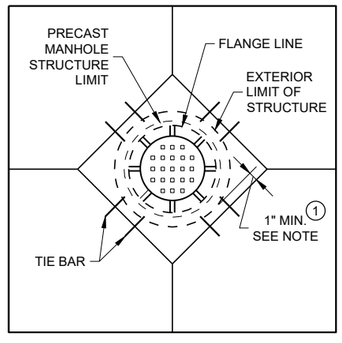
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

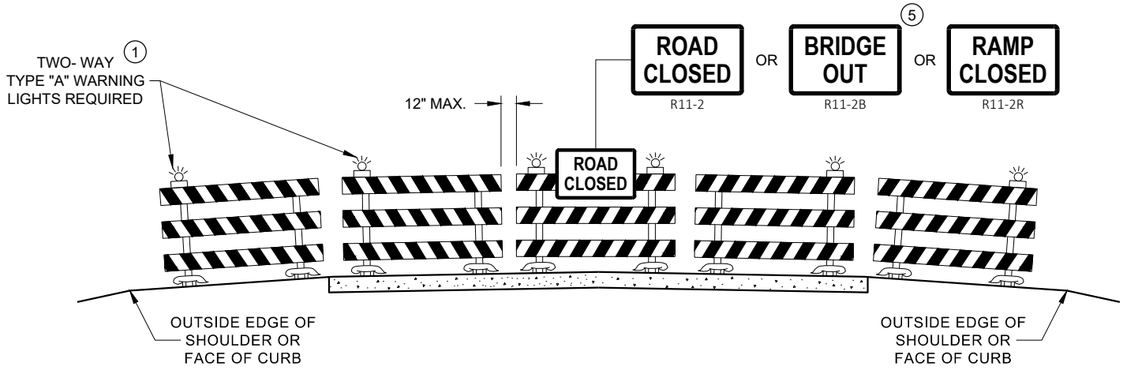
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

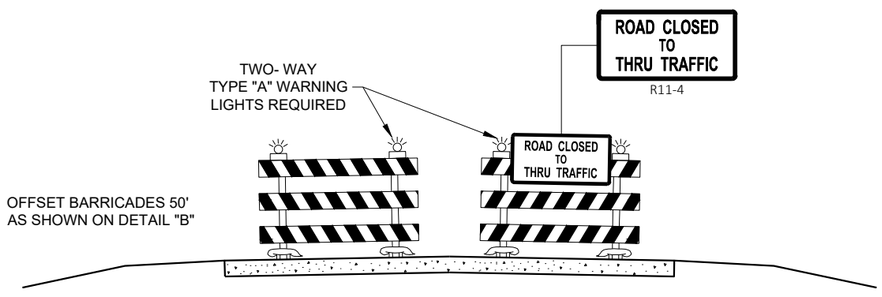
6

SDD13C18 - 08d

SDD13C18 - 08d



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

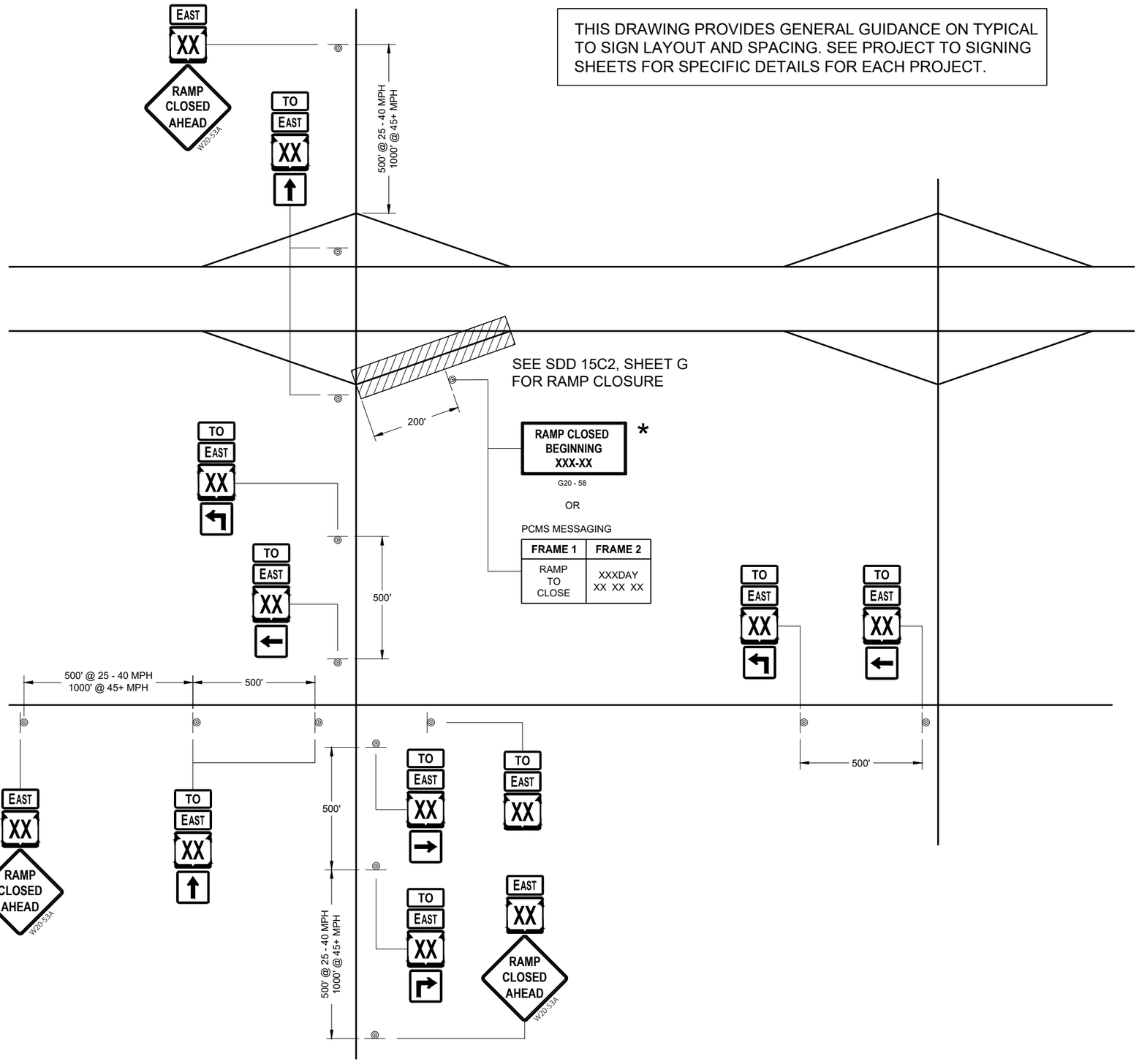
(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15C02 - 09b



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

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 ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 SHALL 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 FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

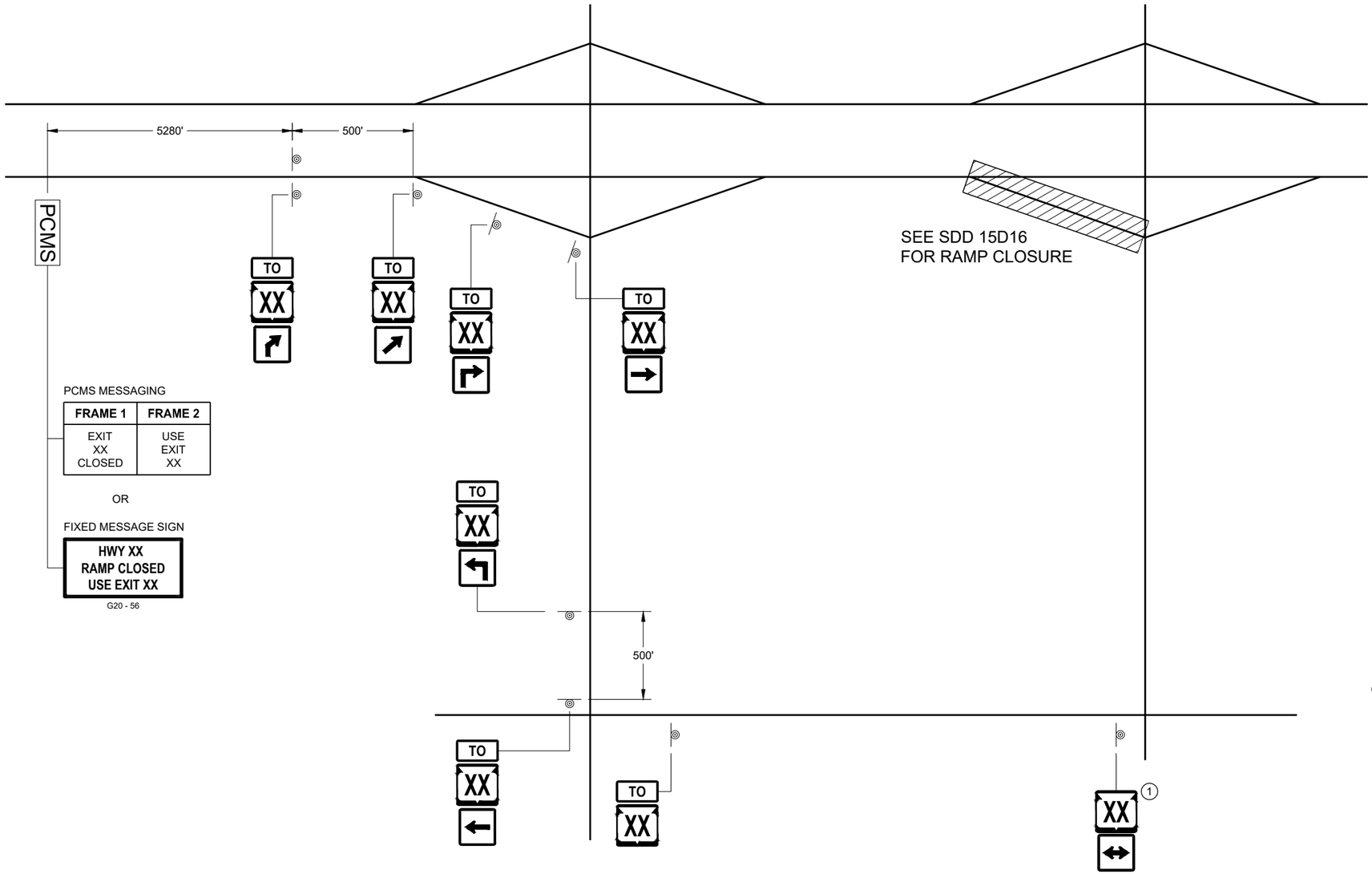
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C02 - 09d

SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 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 SHALL 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 FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

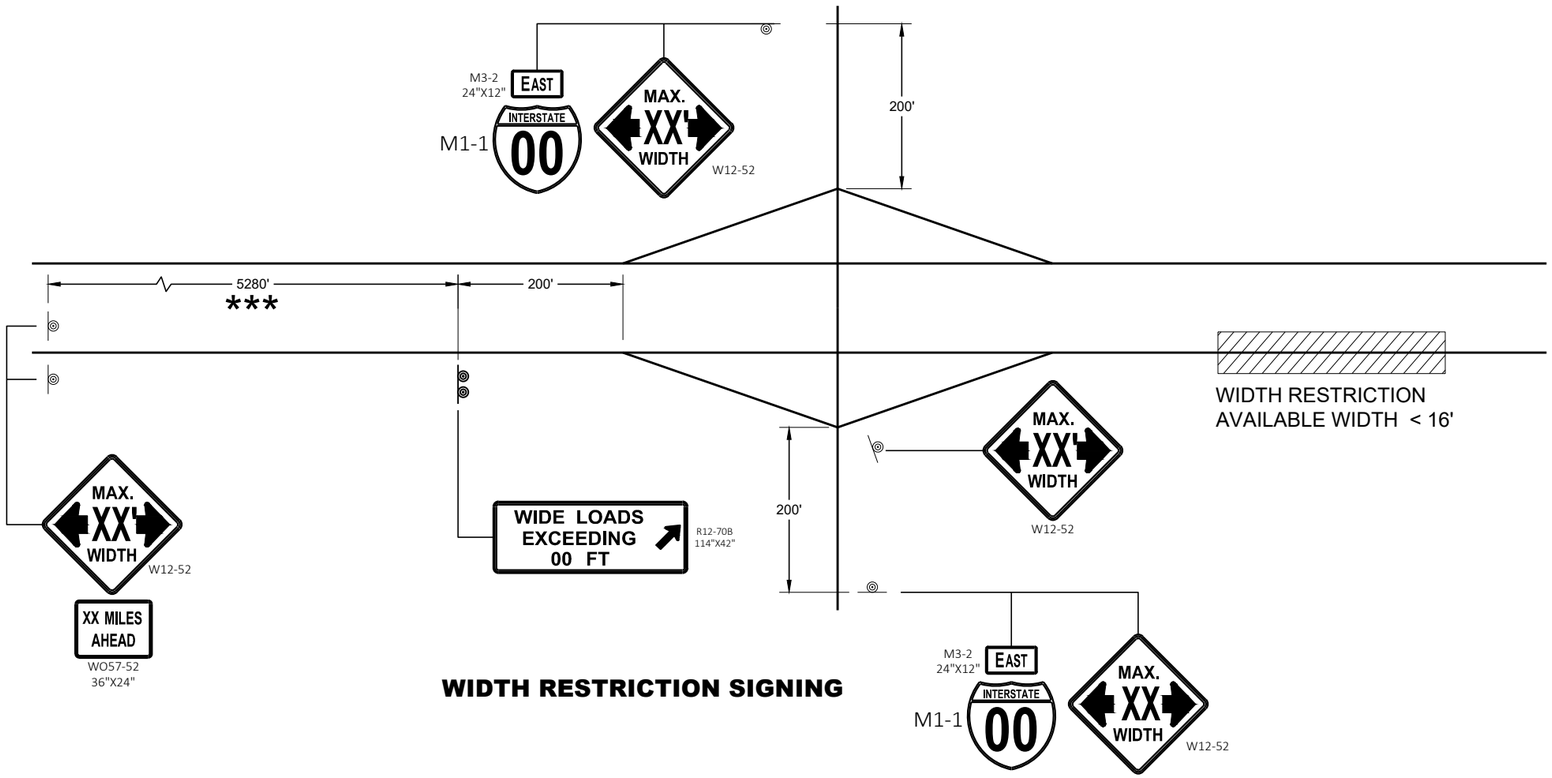
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

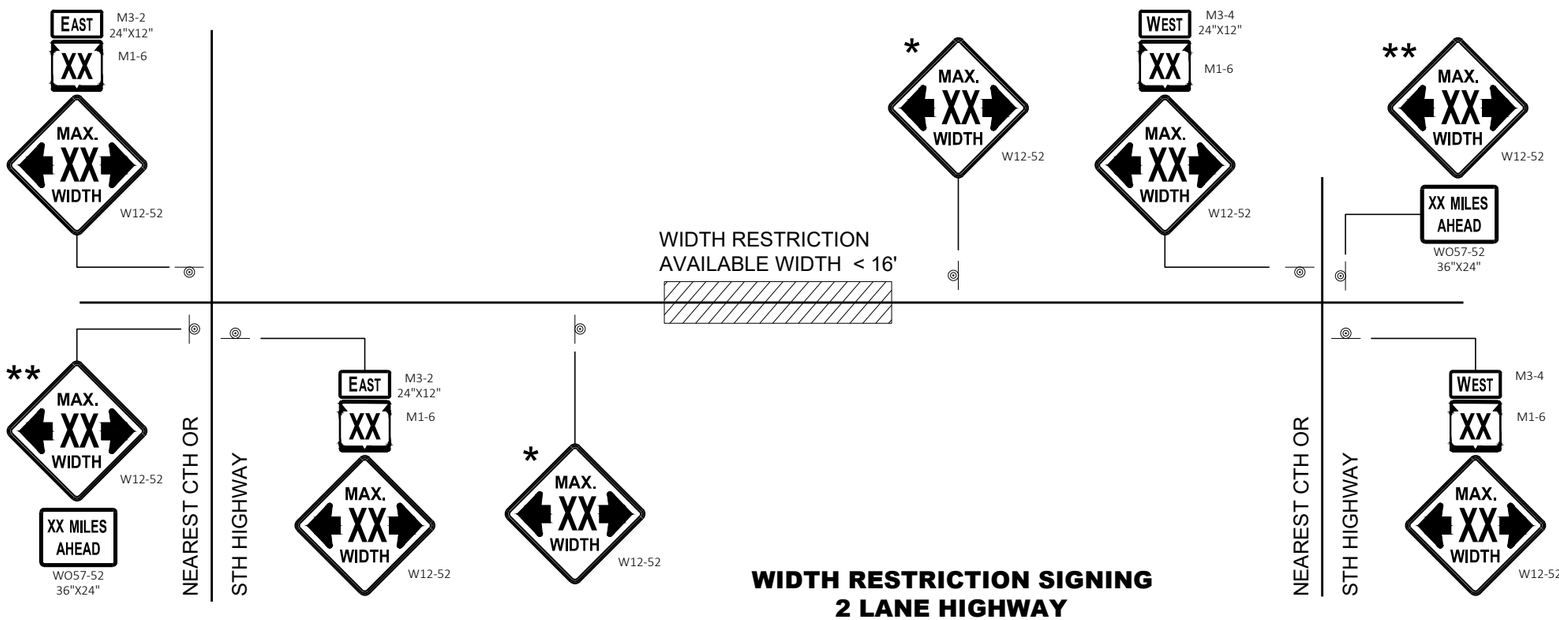
APPROVED
May 2023 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA

6

SDD 15C02 - 09e



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

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

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

** SIGN SHALL BE VISIBLE FROM ROADWAY.

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



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

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

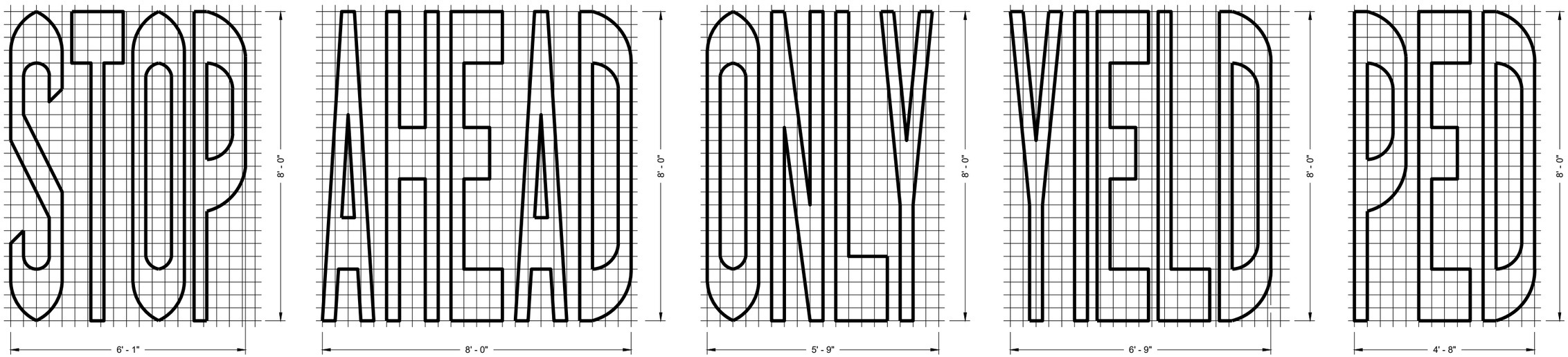
FHWA

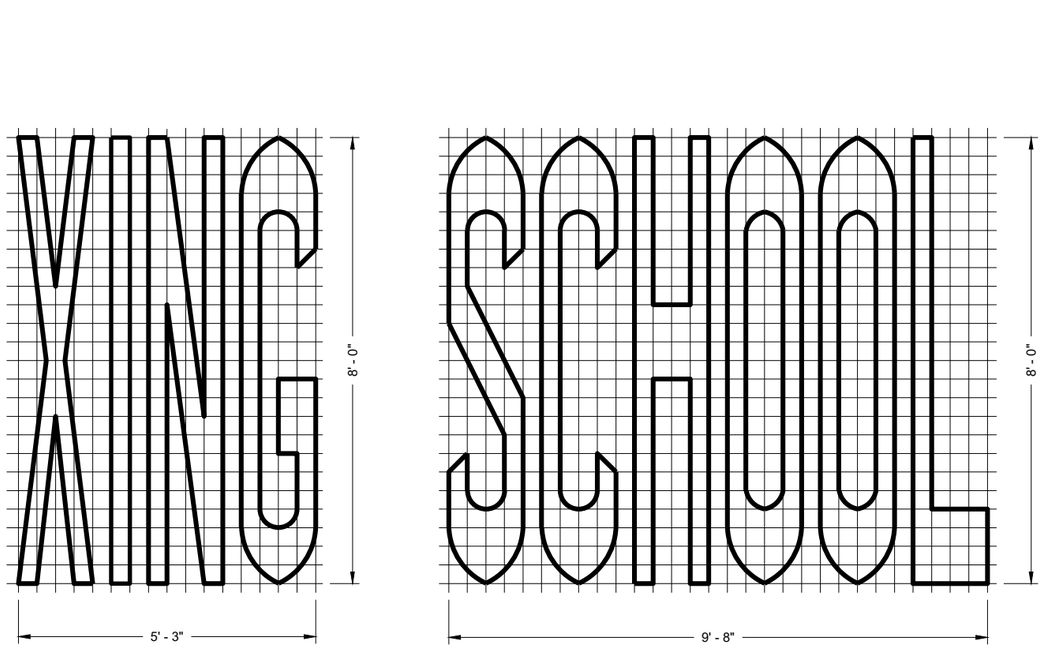
6

SDD 15C02 - 09f

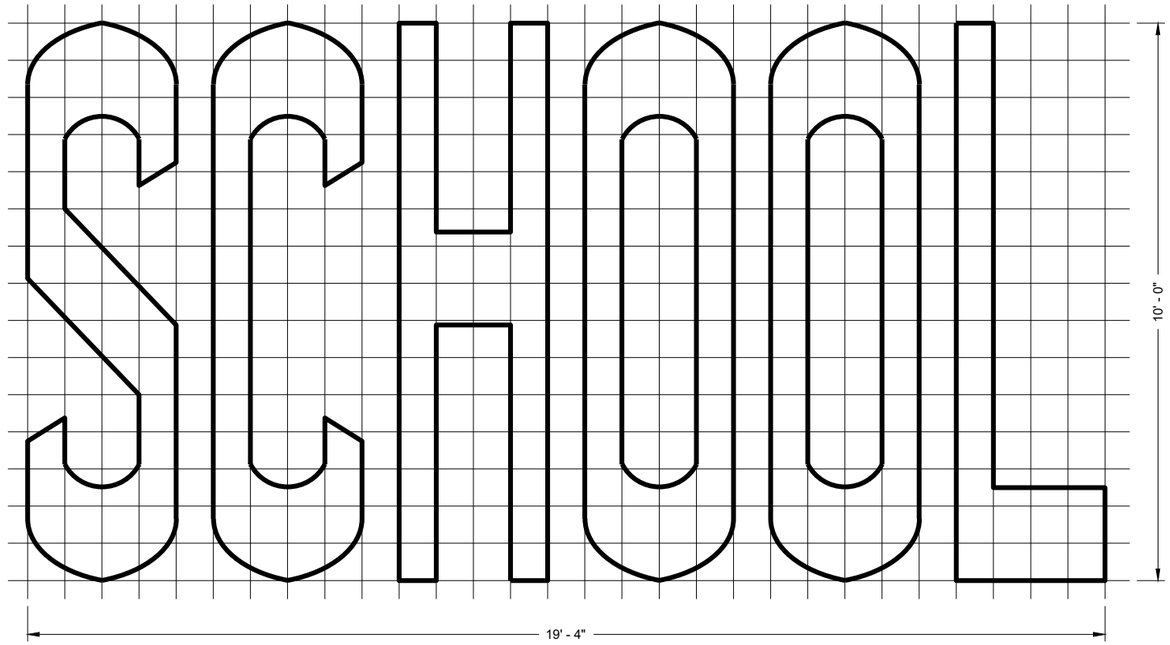
6

SDD 15C02 - 09f





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

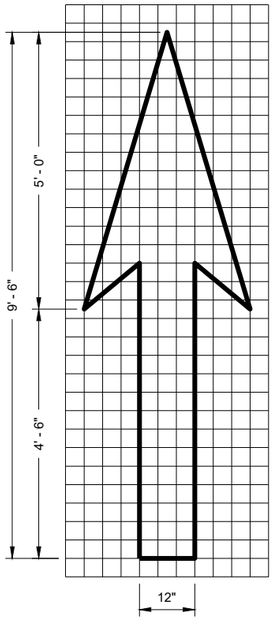
6

SDD 15C07 - 15b

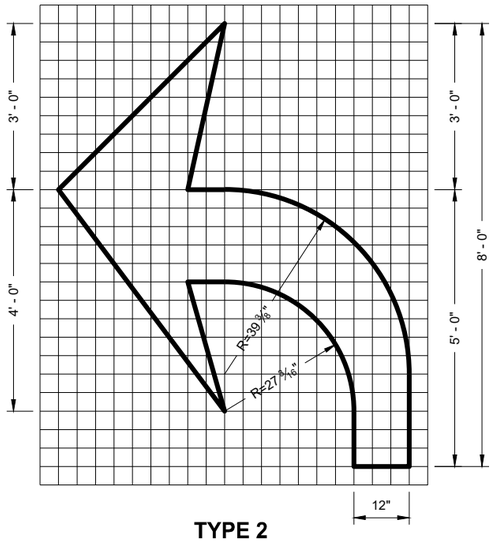
SDD 15C07 - 15b

GENERAL NOTES

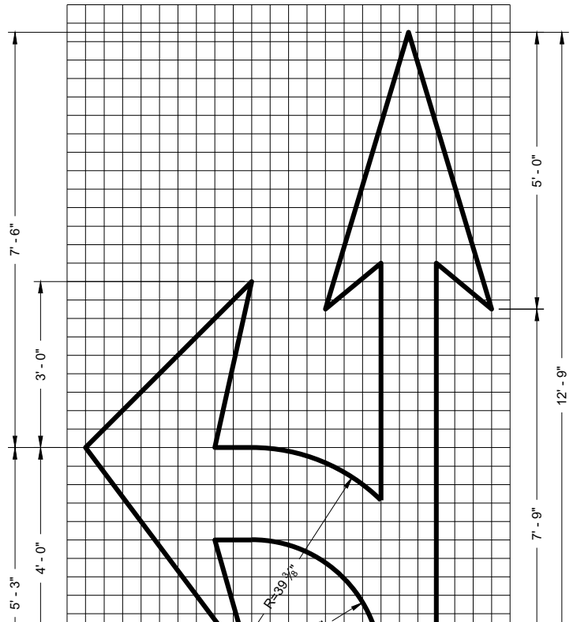
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



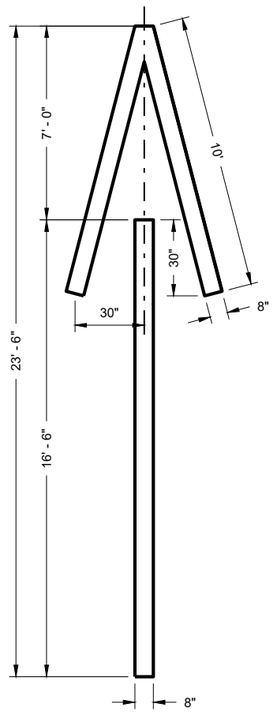
TYPE 1



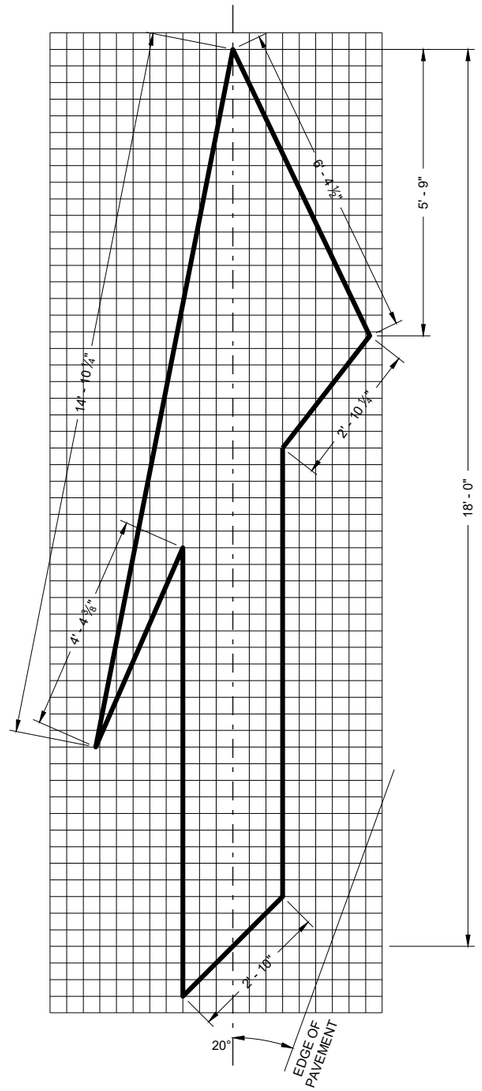
TYPE 2



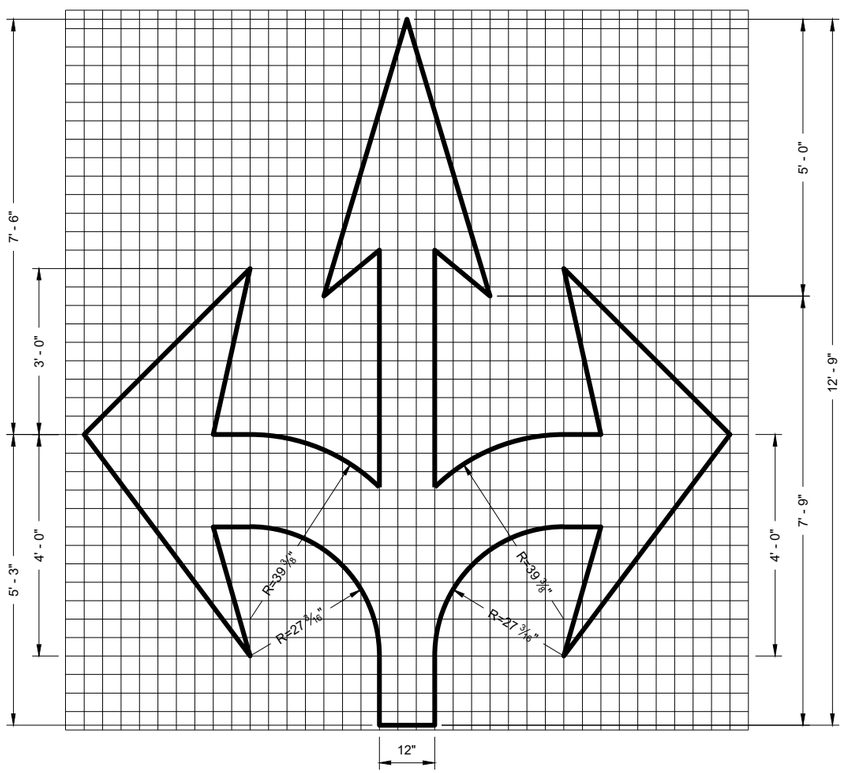
TYPE 3



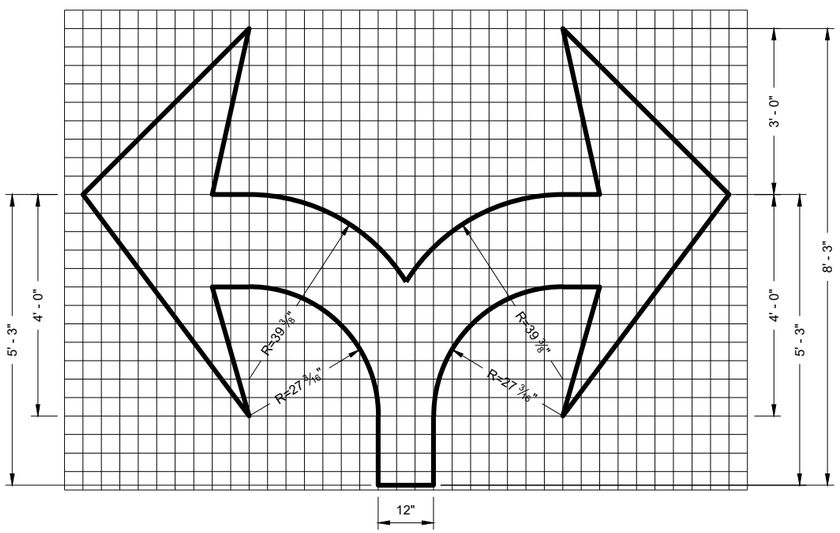
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

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

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

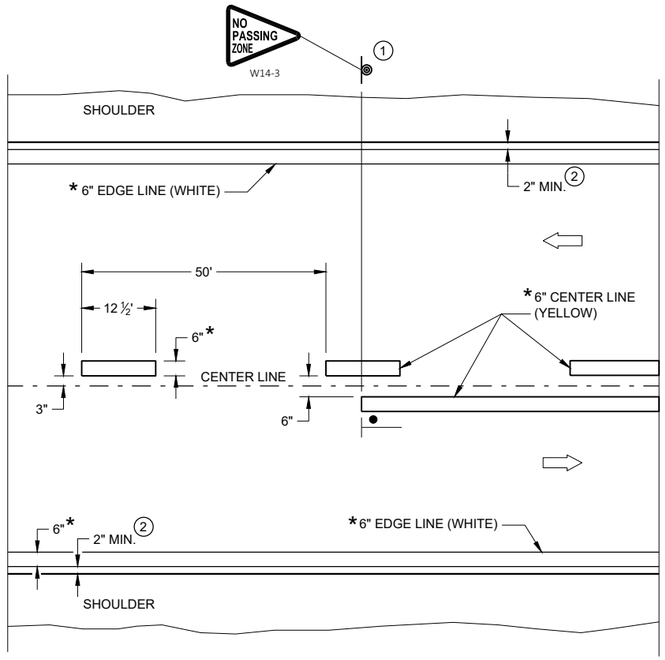
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

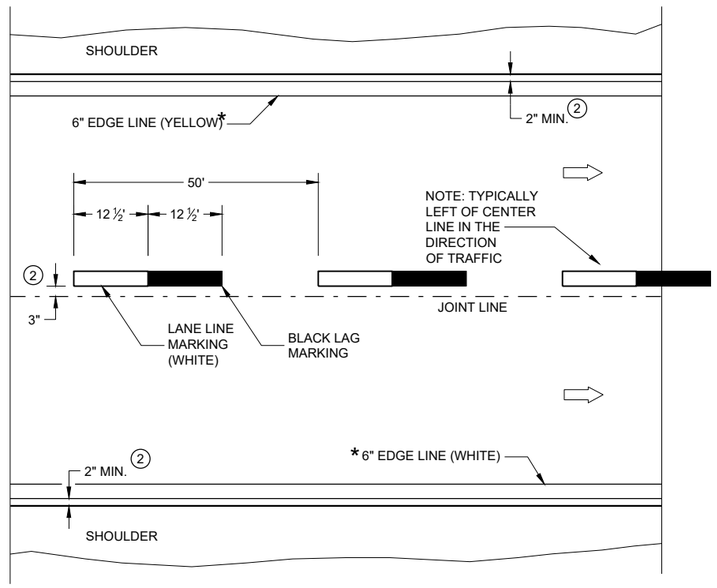
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

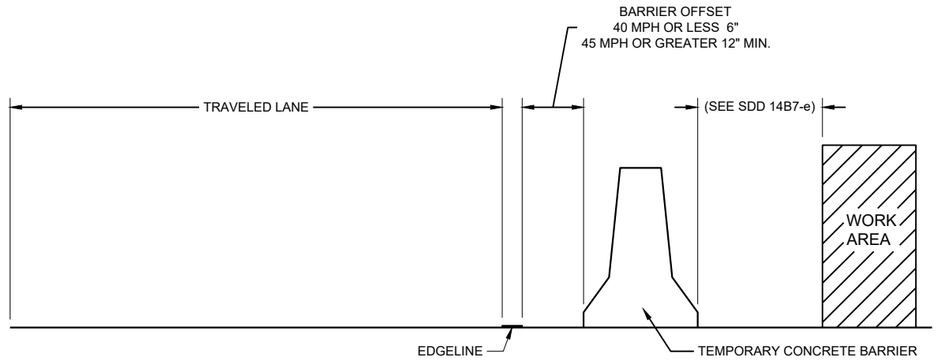
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

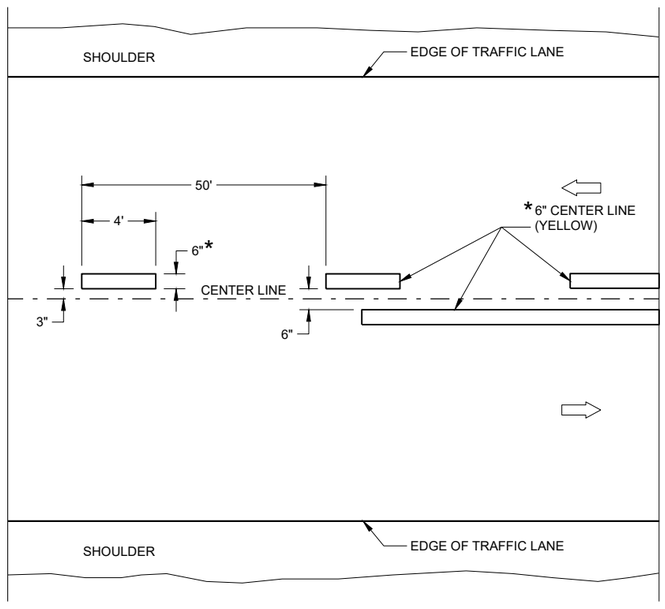
GENERAL NOTES

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

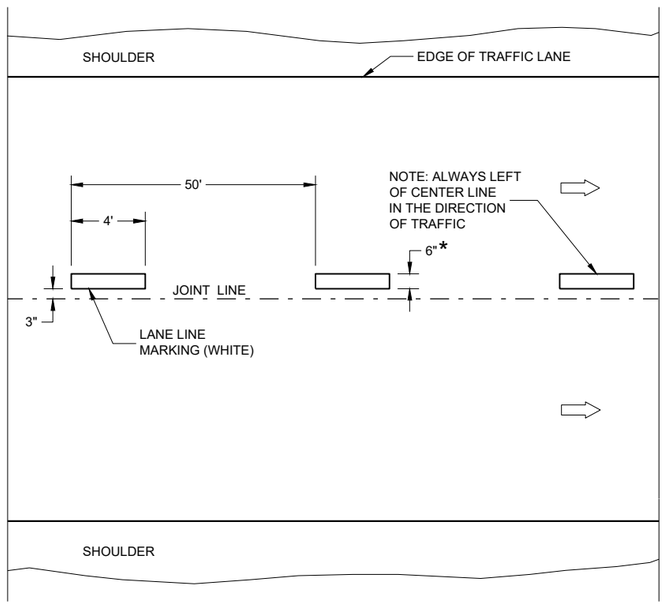
LEGEND

⇨ DIRECTION OF TRAFFIC

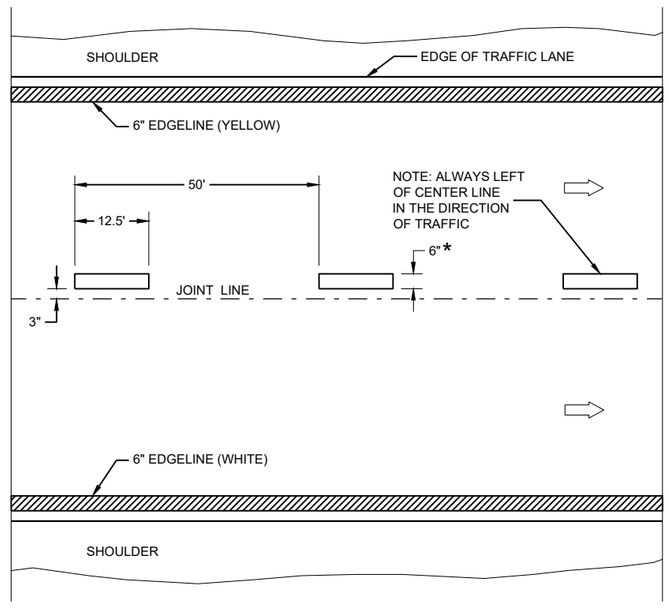
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

SDD 15C08-23b

6

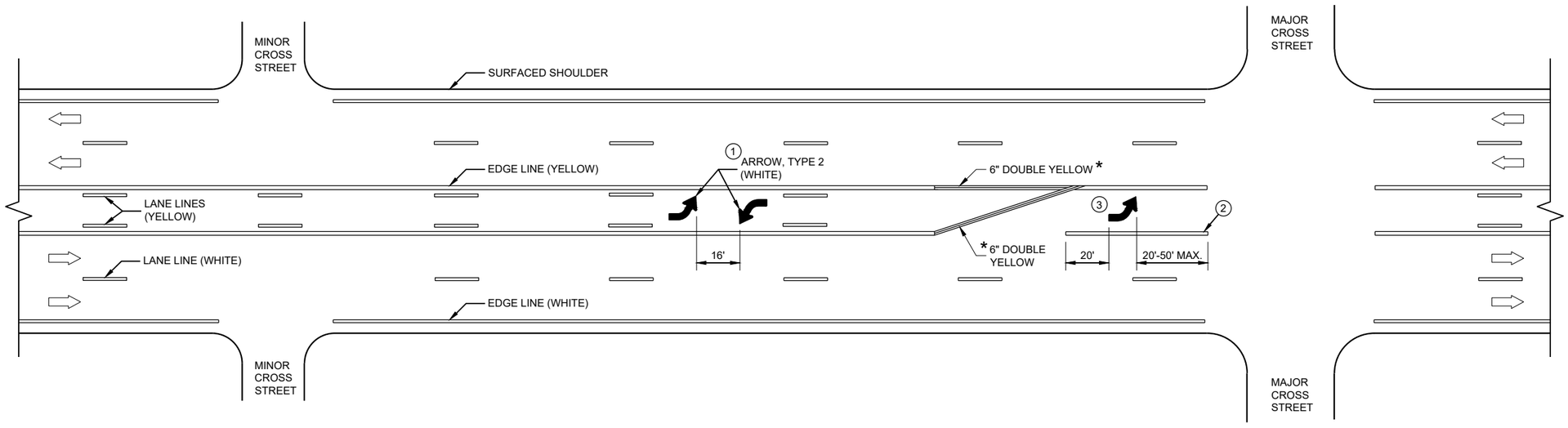
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



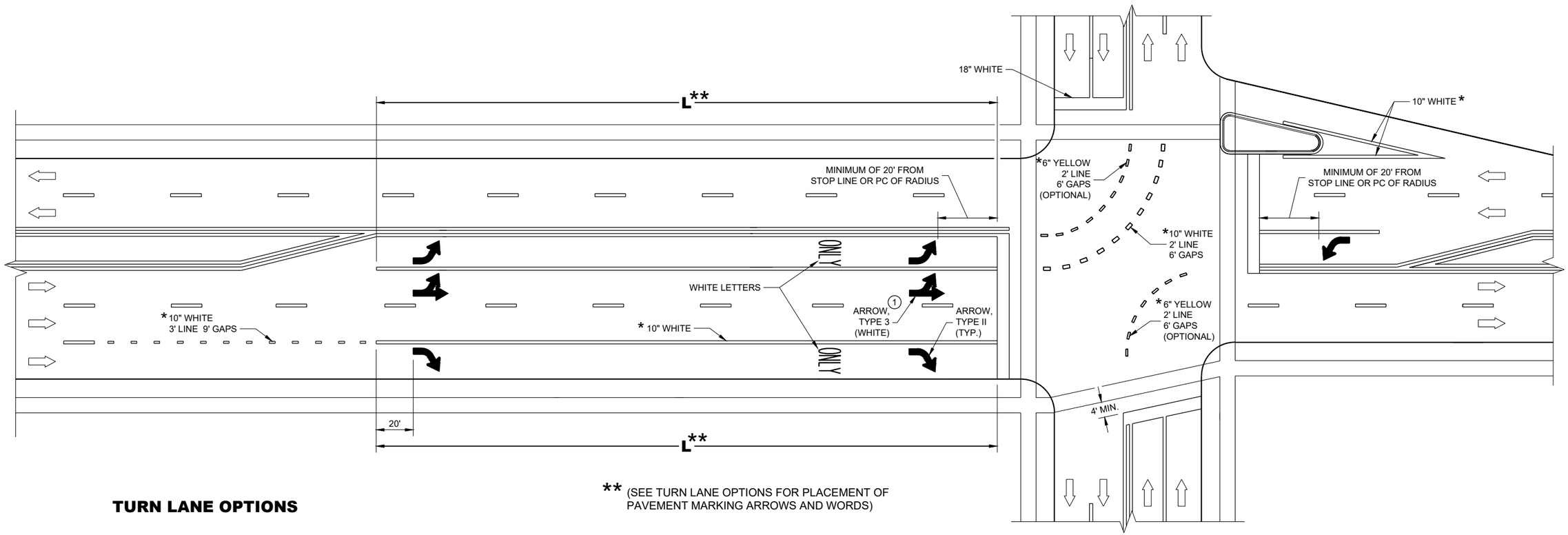
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 101

SDD 15C08-23c

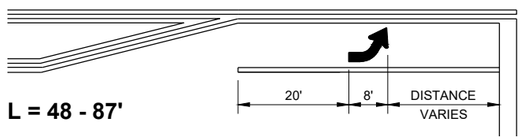
6



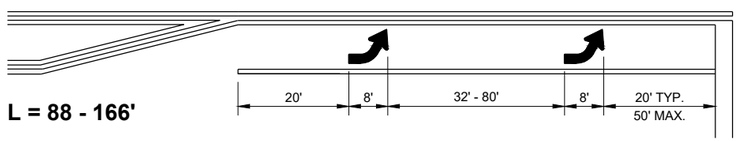
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

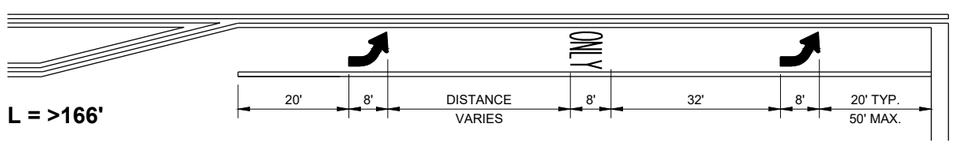
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

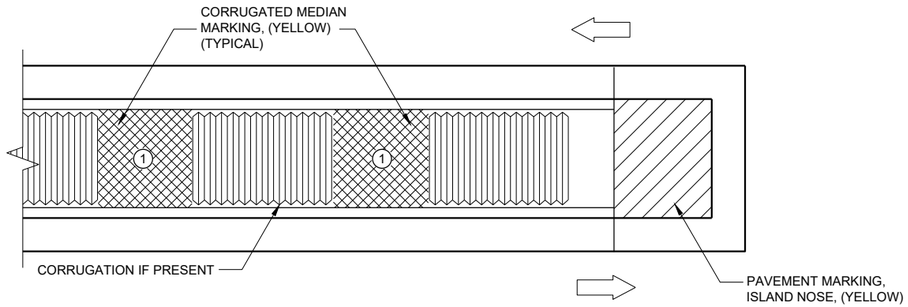
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

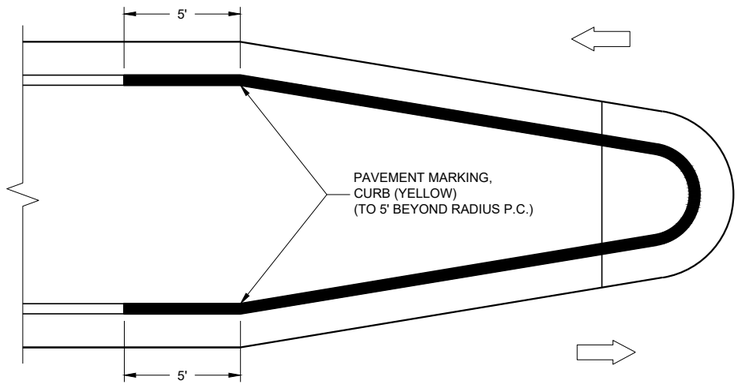
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

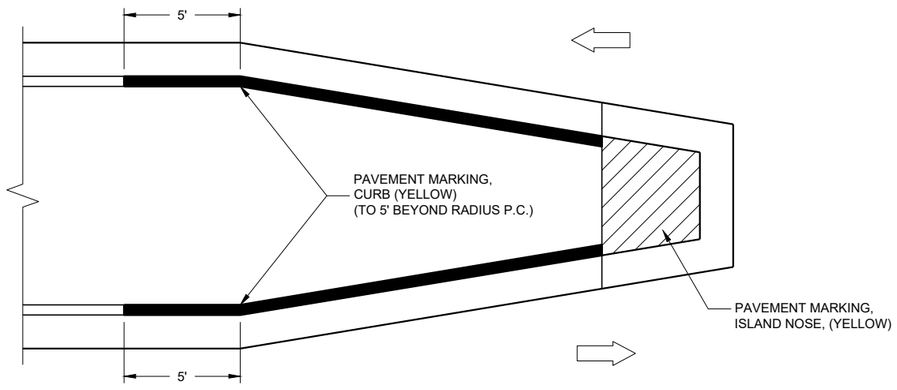
SDD 15C08-23d



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

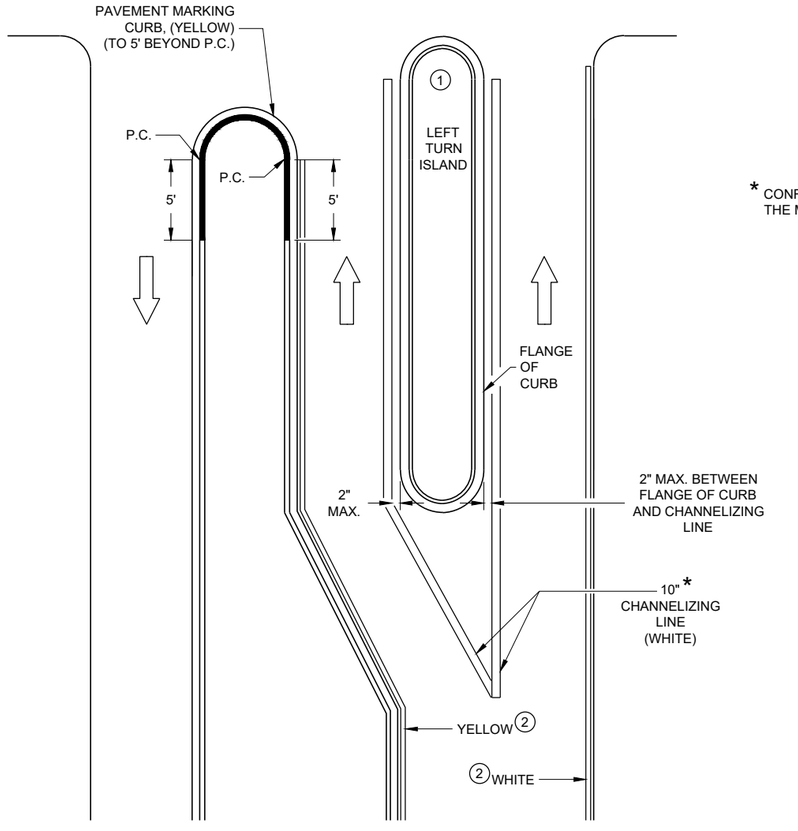
/S/ Jeannie Silver
STATE SIGNING AND MAR
ENGINEER

FHWA

6

SDD 15C18-08b

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



* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEFT TURN & MEDIAN ISLAND

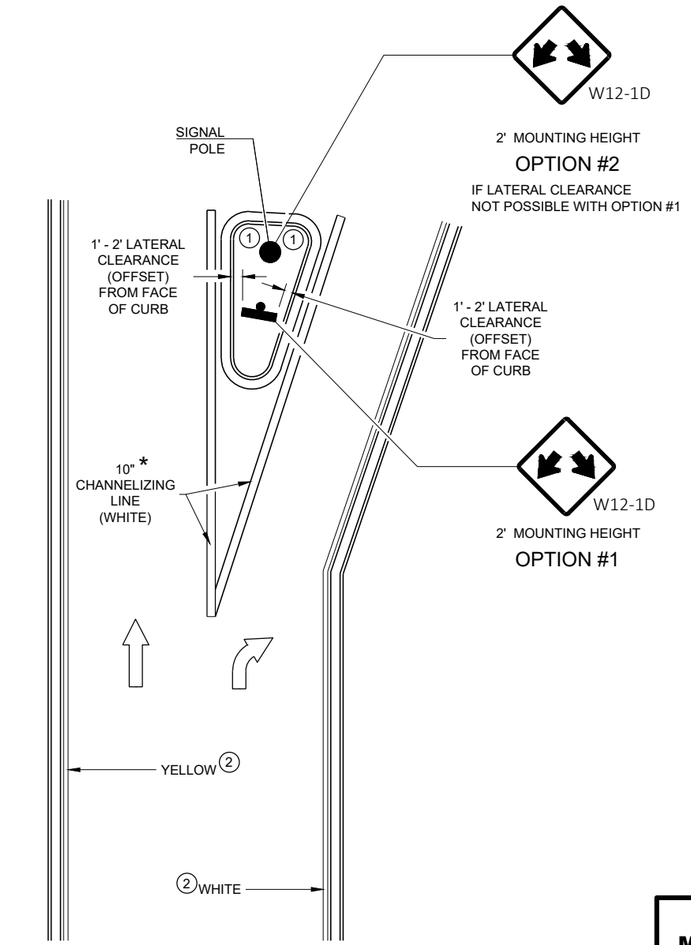
GENERAL NOTES

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

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

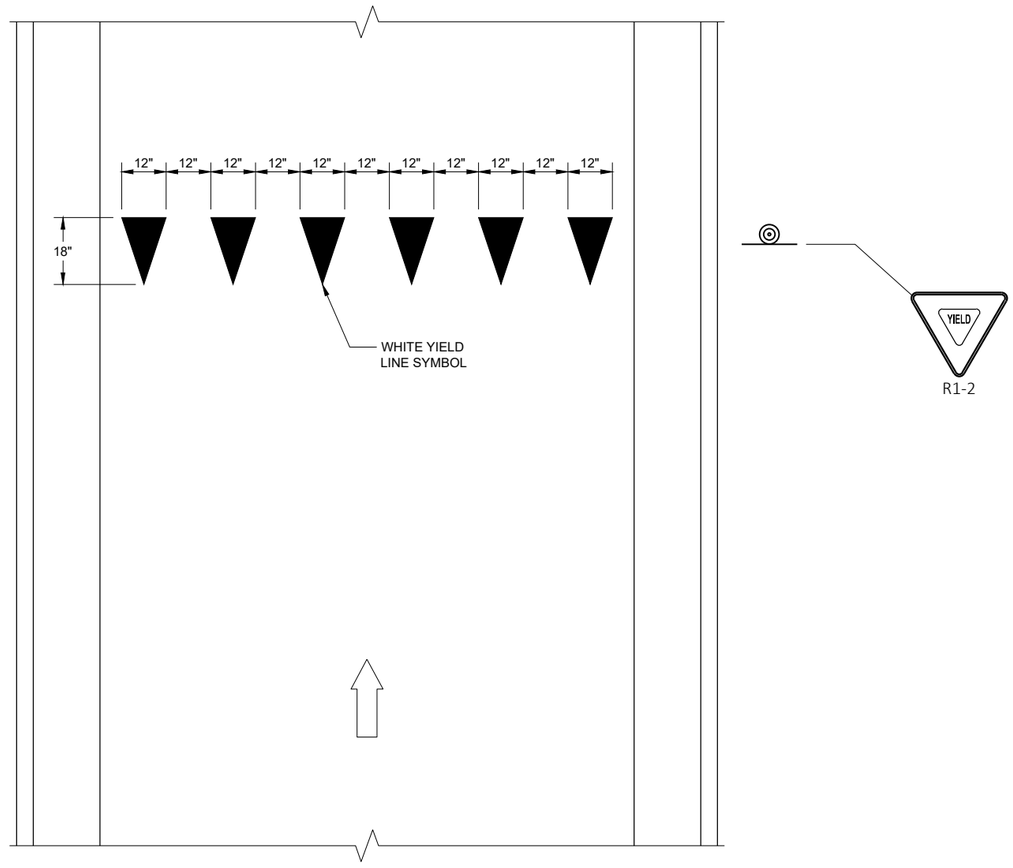
FHWA

6
SDD 15C18-08c

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



R1-2

YIELD LINE

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-81-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

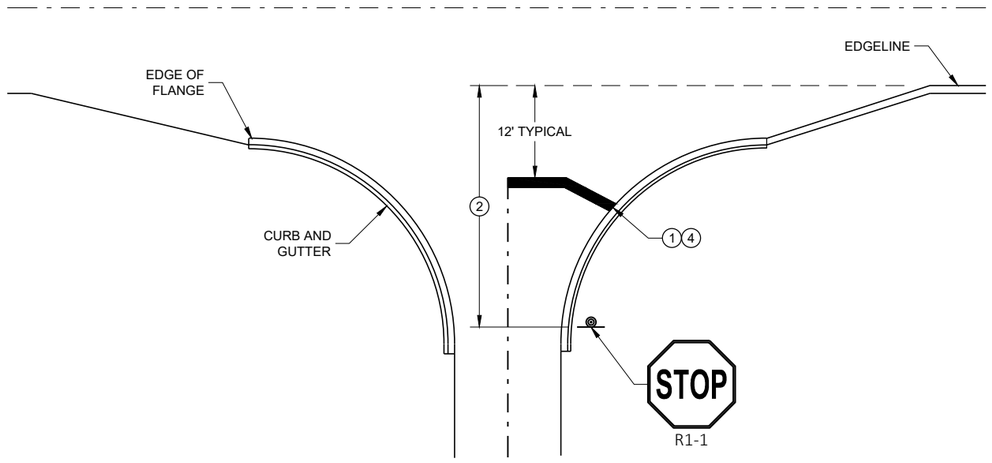
6

SDD 15C20 - 02

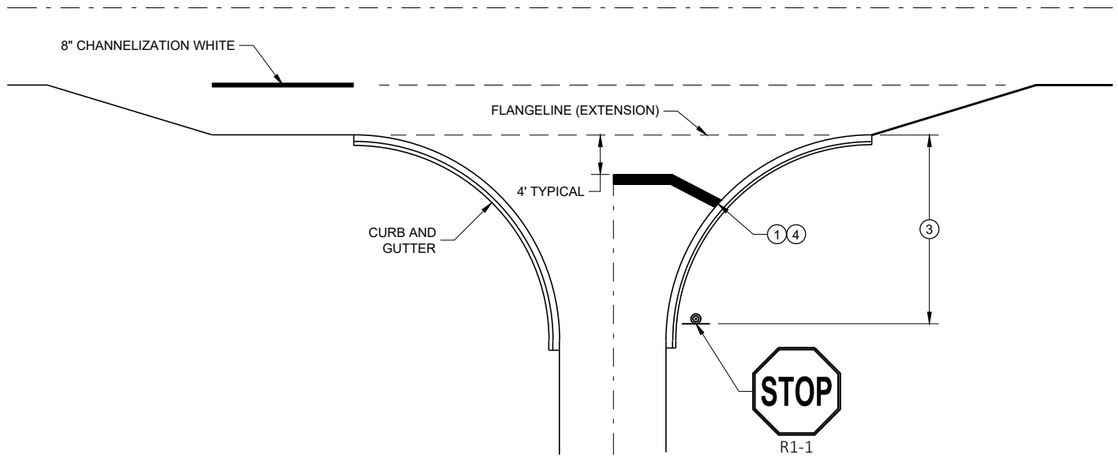
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

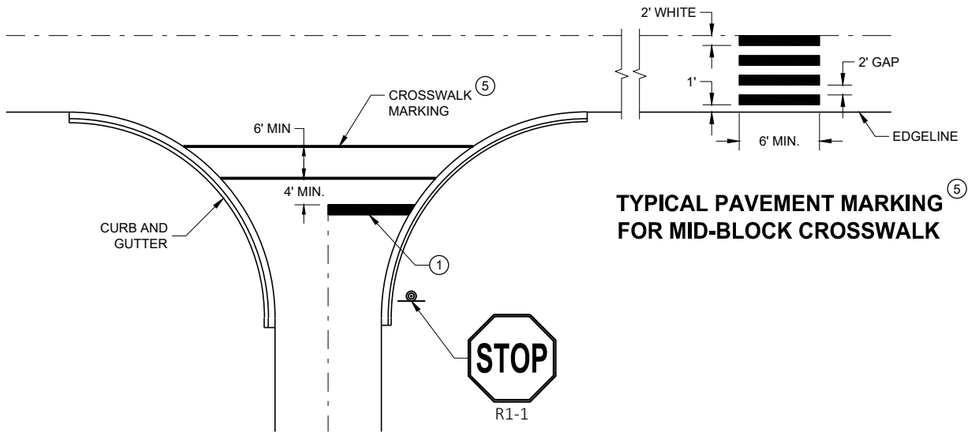
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

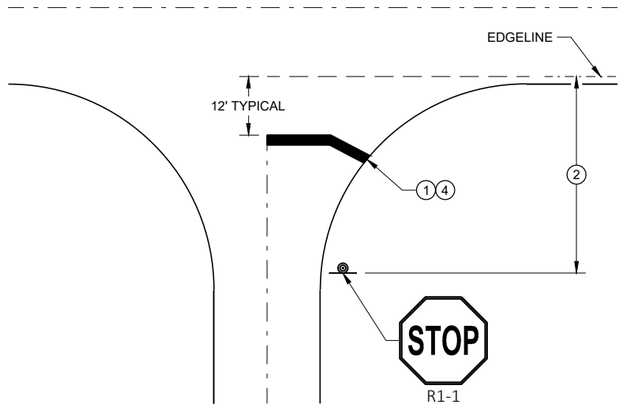


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6
SDD 15C33 - 04

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, 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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 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.

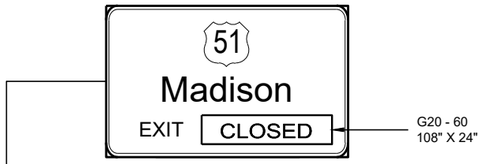
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

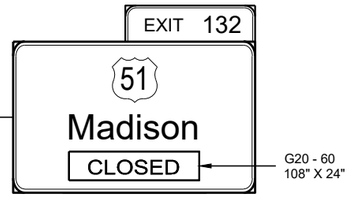
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

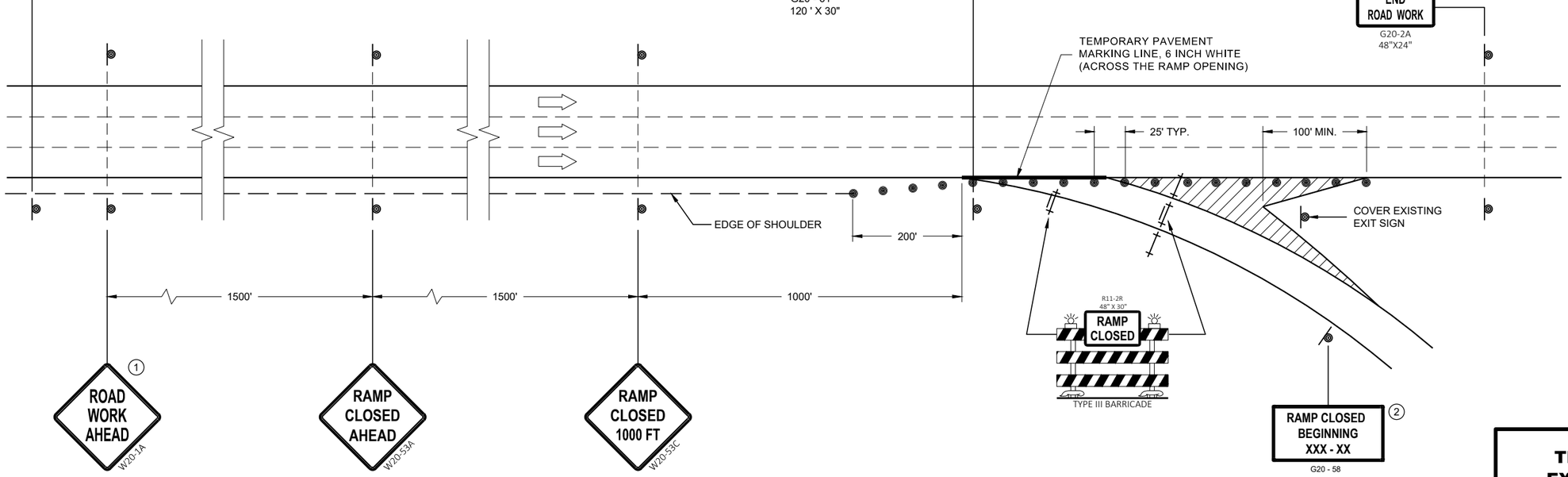


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

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 REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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

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

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

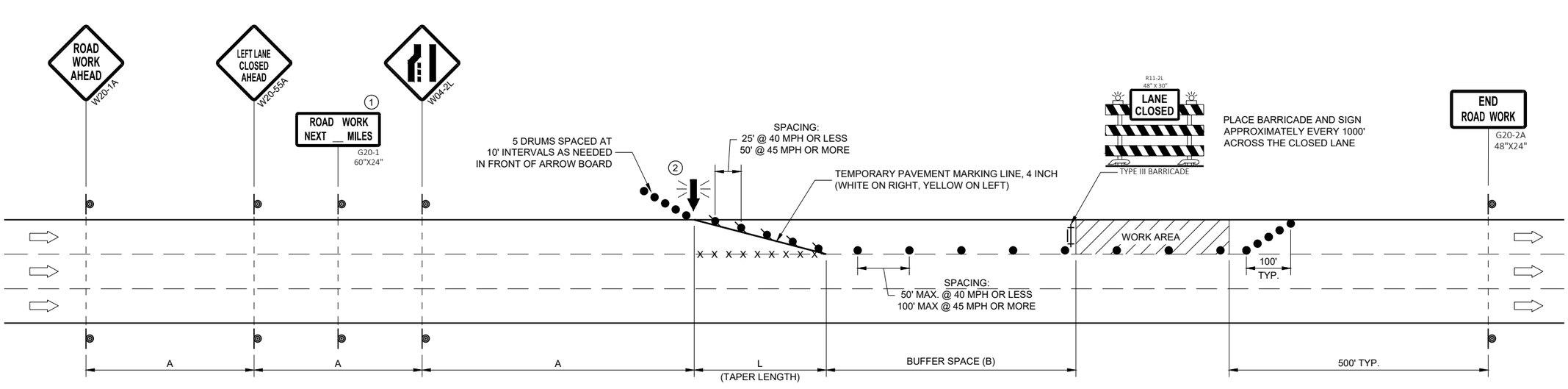
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD15D20 - 06a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

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 REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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

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

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

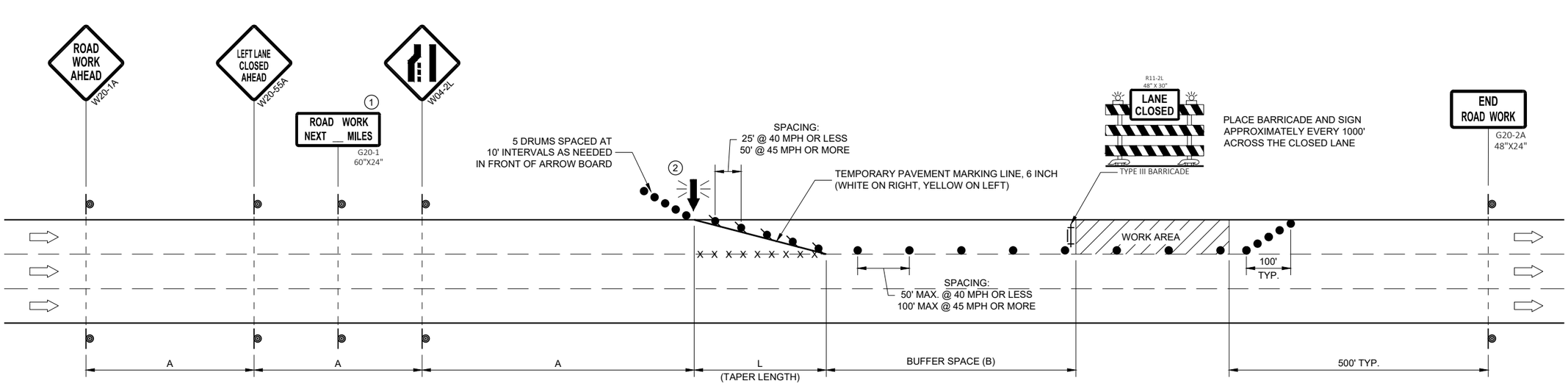
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

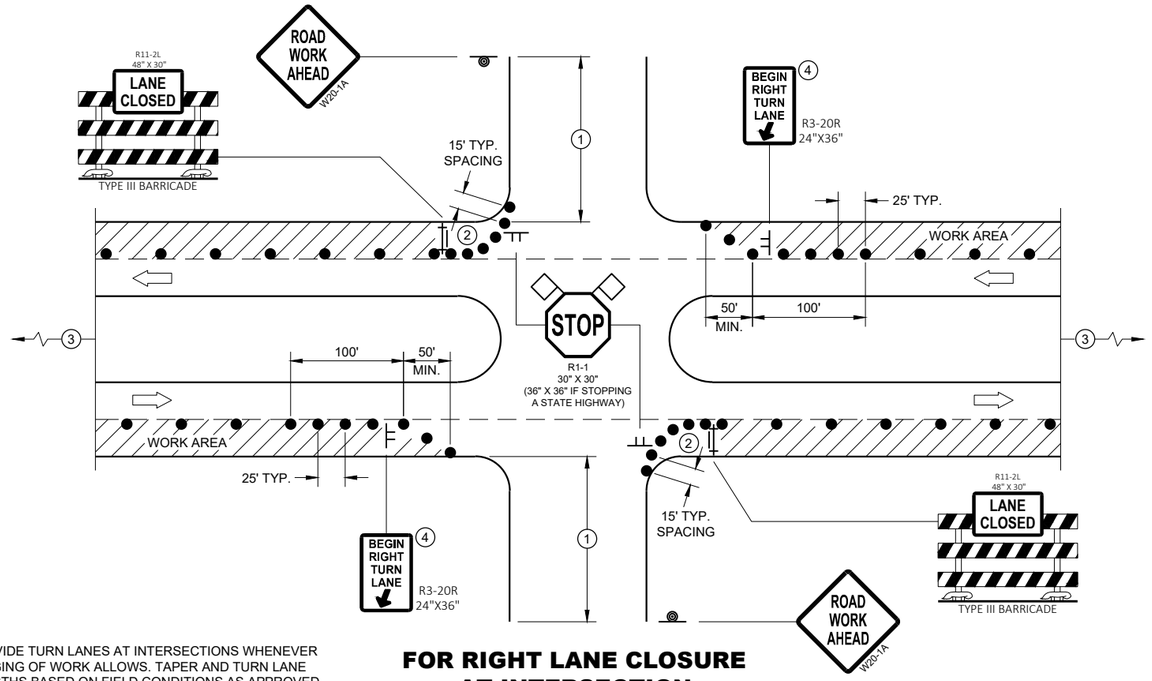
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D20-07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

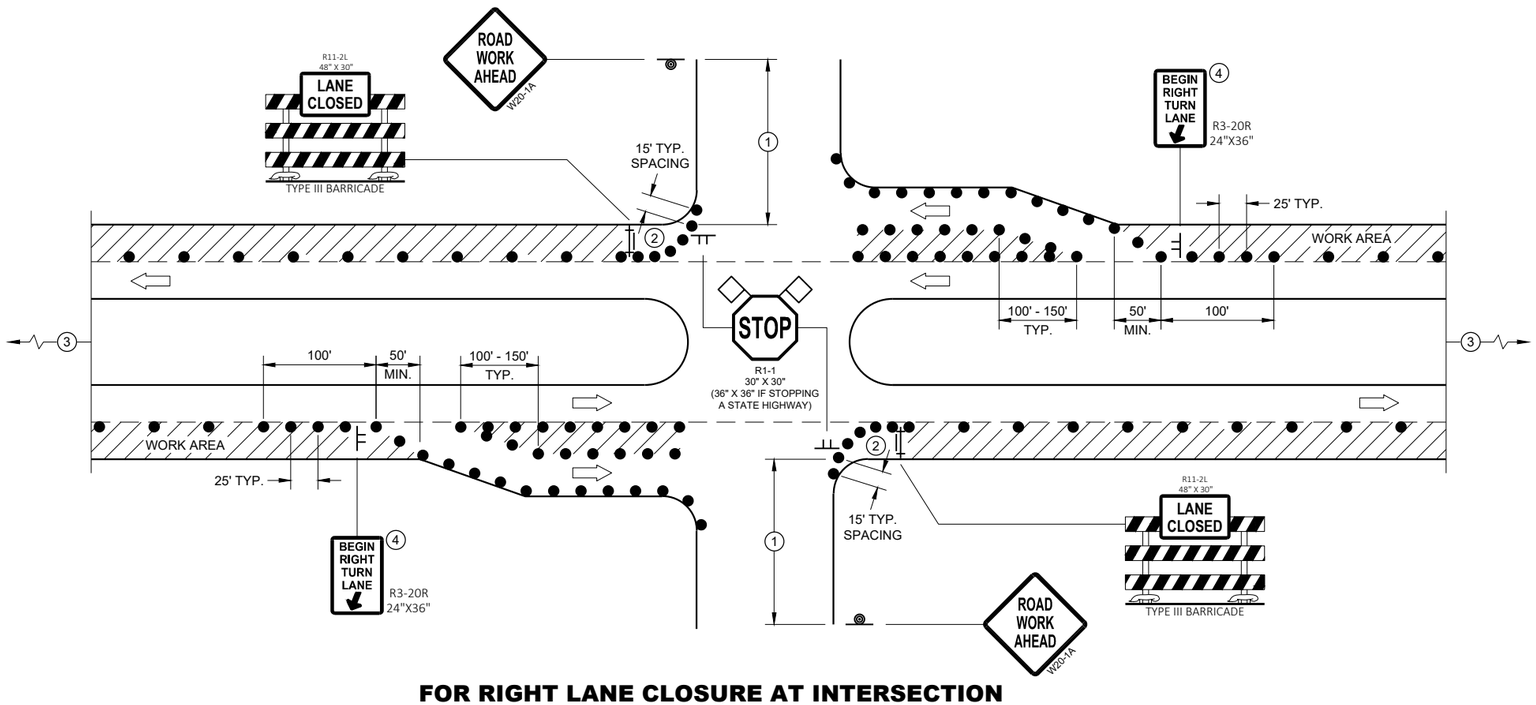
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

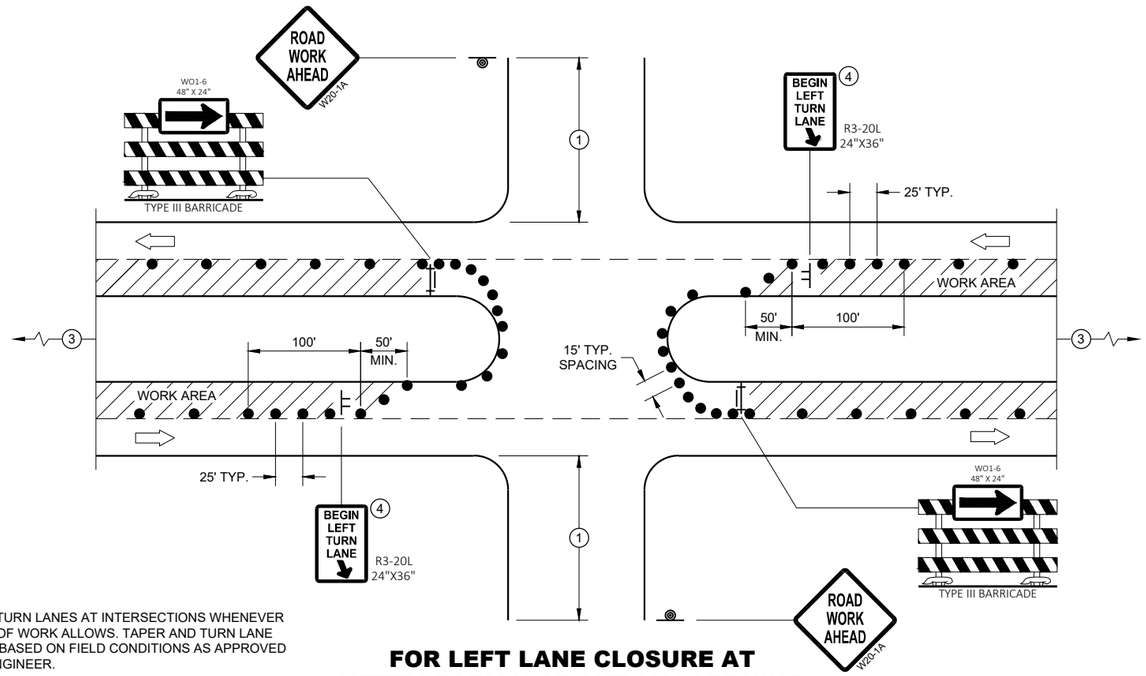
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

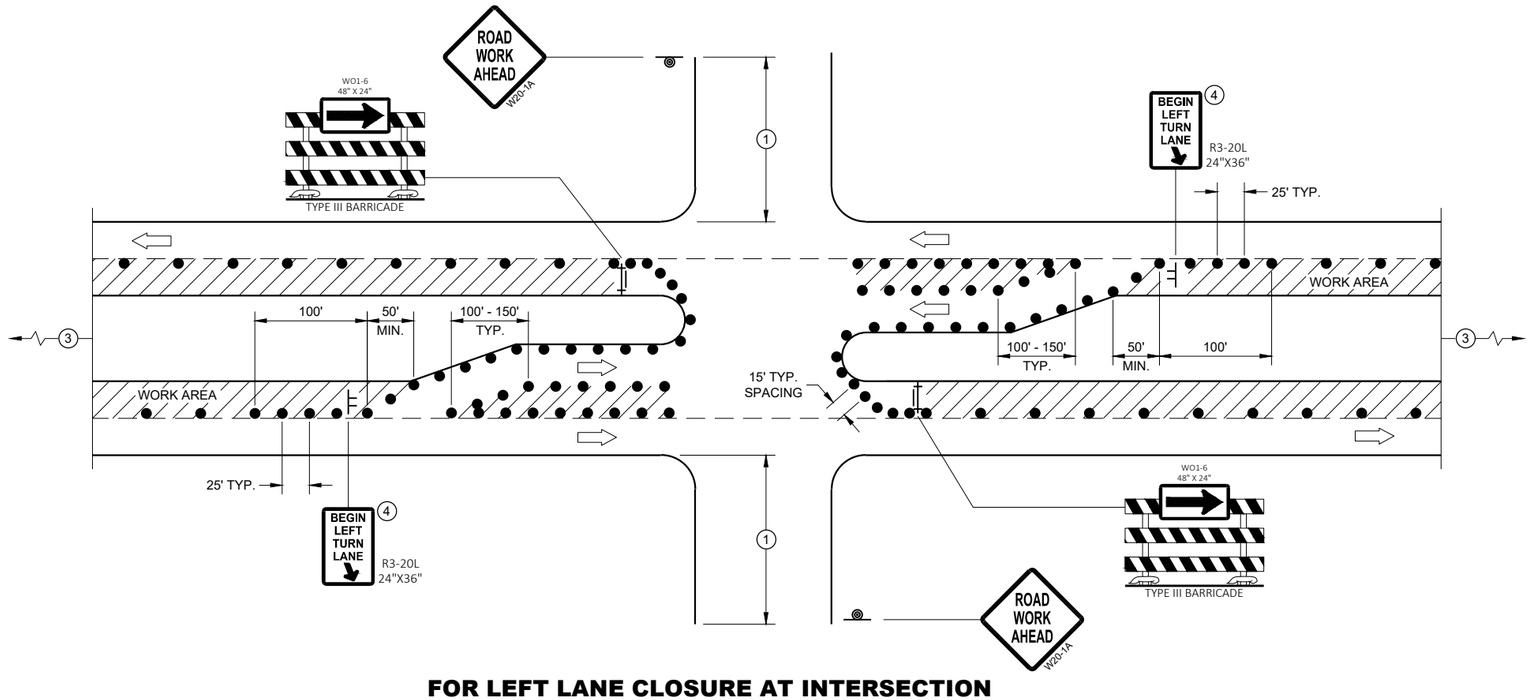
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

GENERAL NOTES

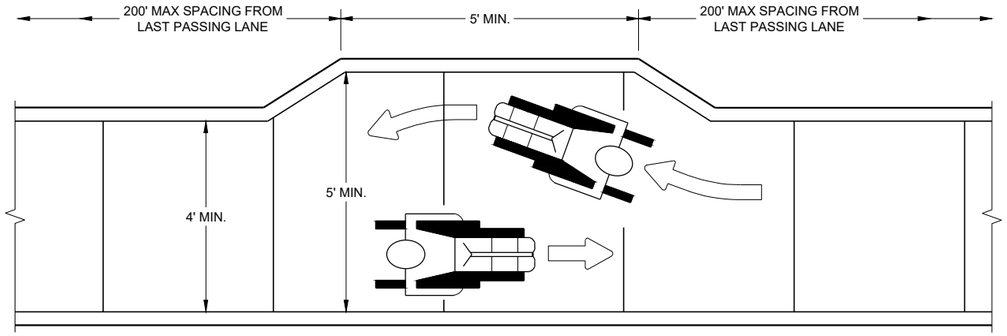
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

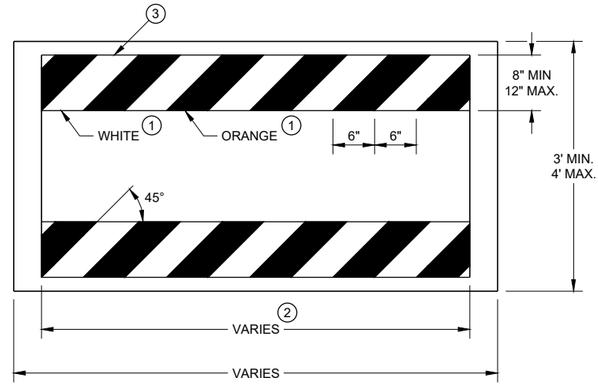
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

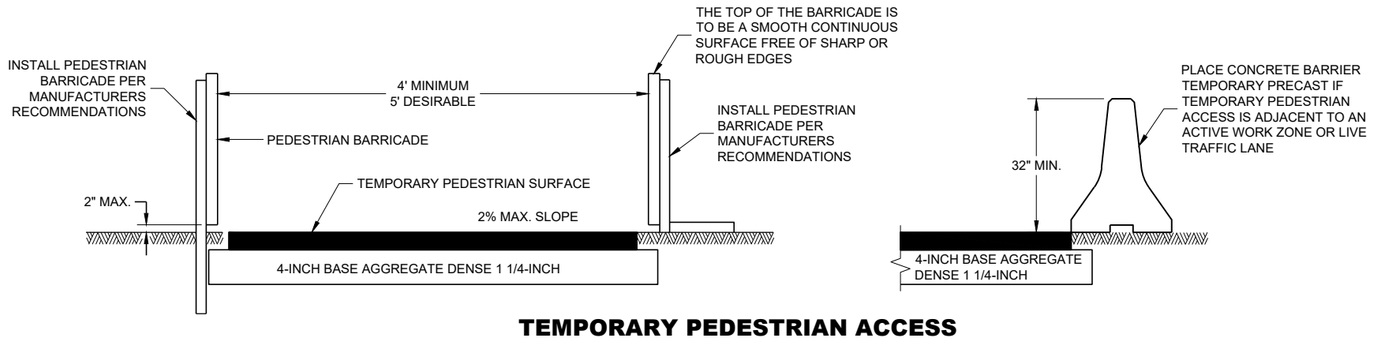
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

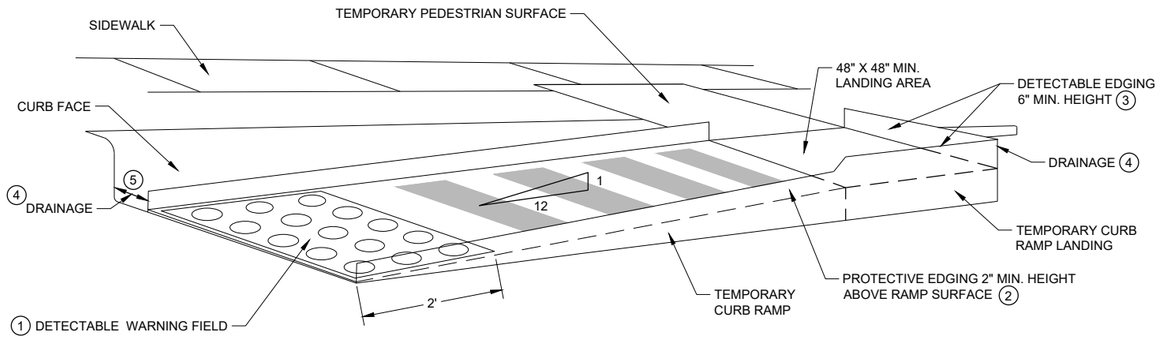
6

6

SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

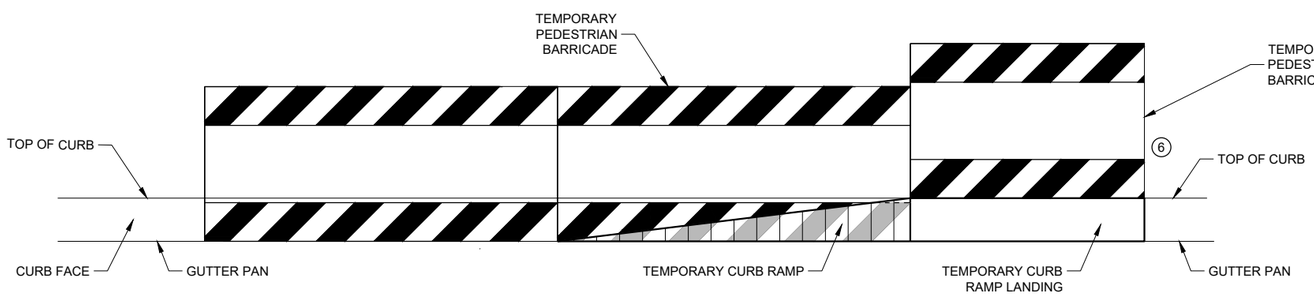
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

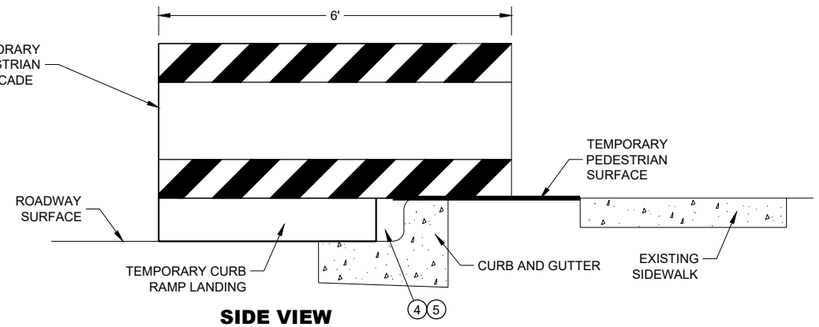
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

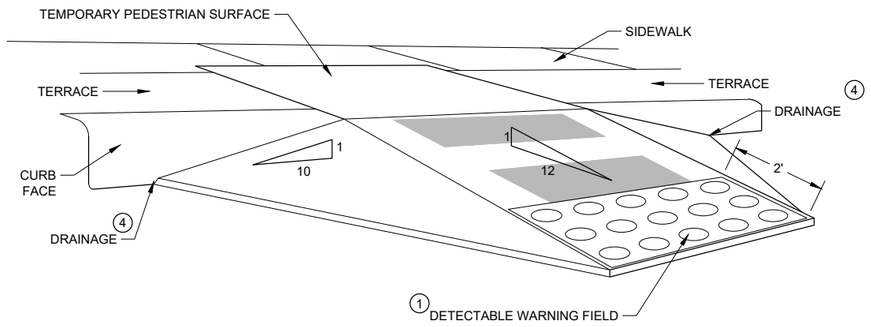
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

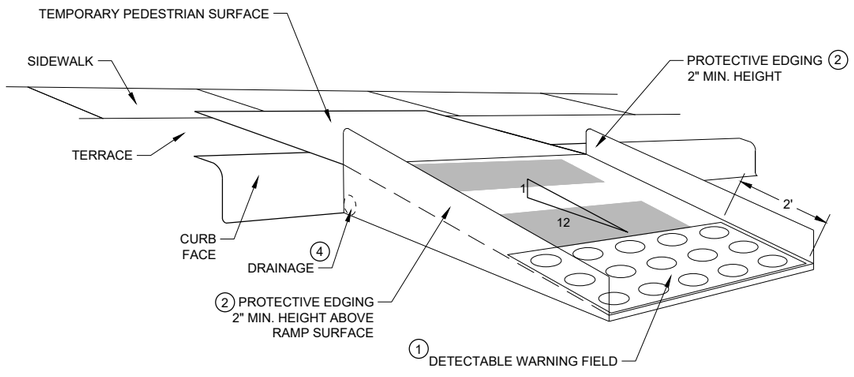
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

6

SDD 15D30 - 09c

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

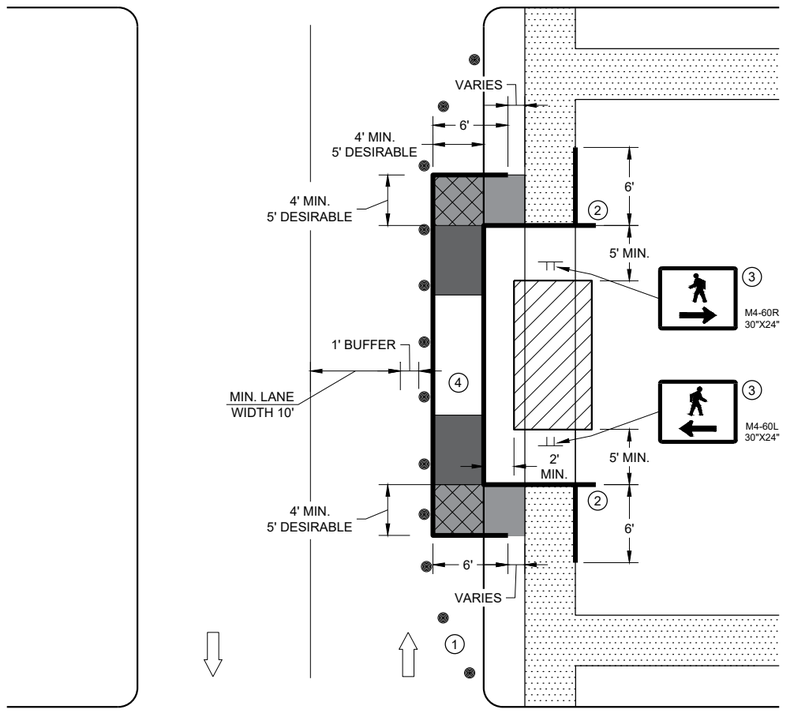
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

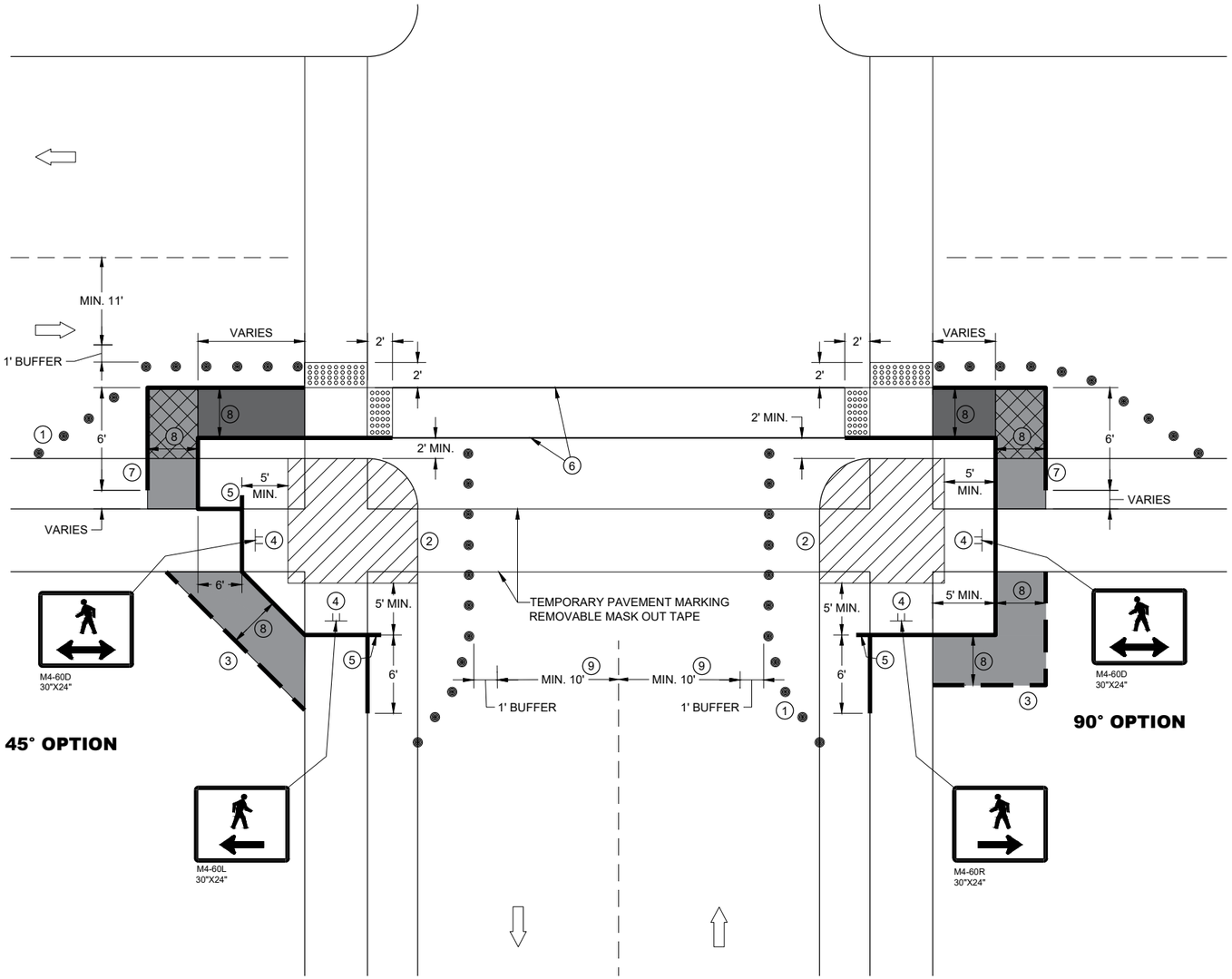
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09h

6

SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

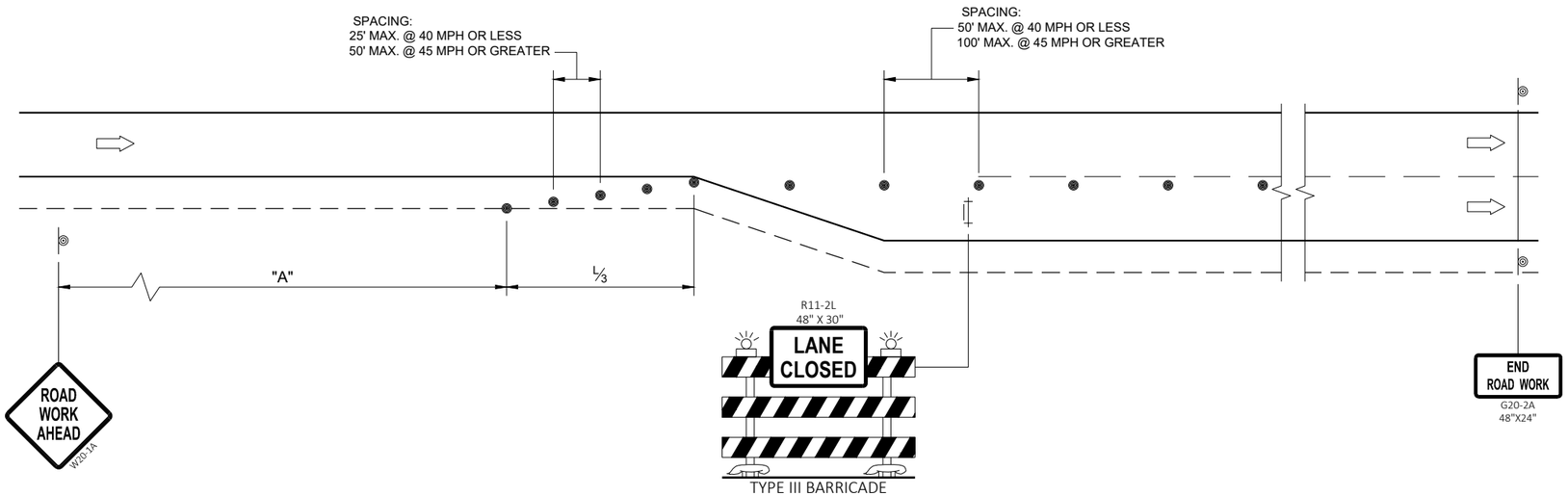
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1 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 WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D50-03a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

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"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

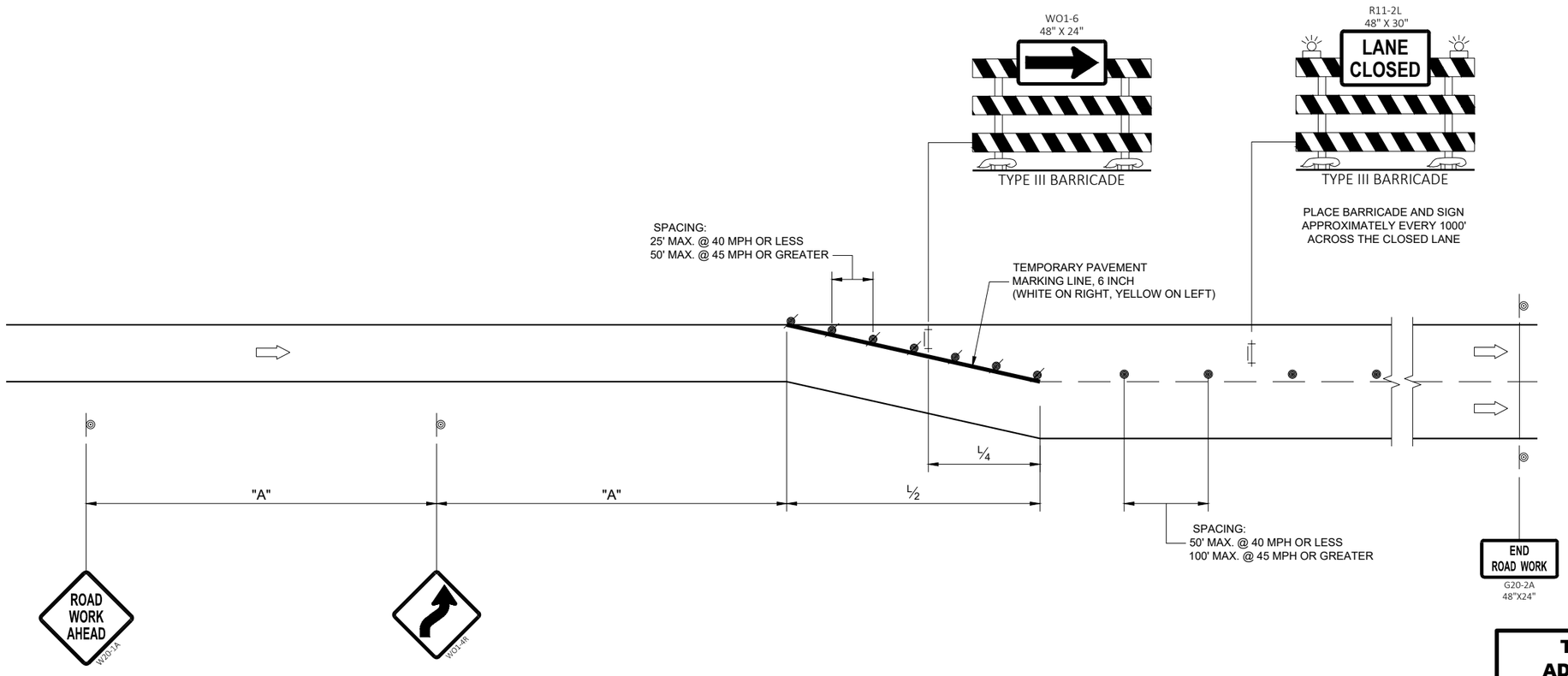
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1 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 WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.



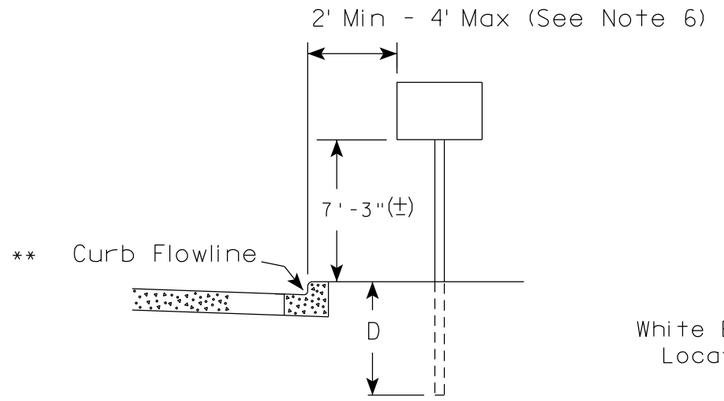
TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

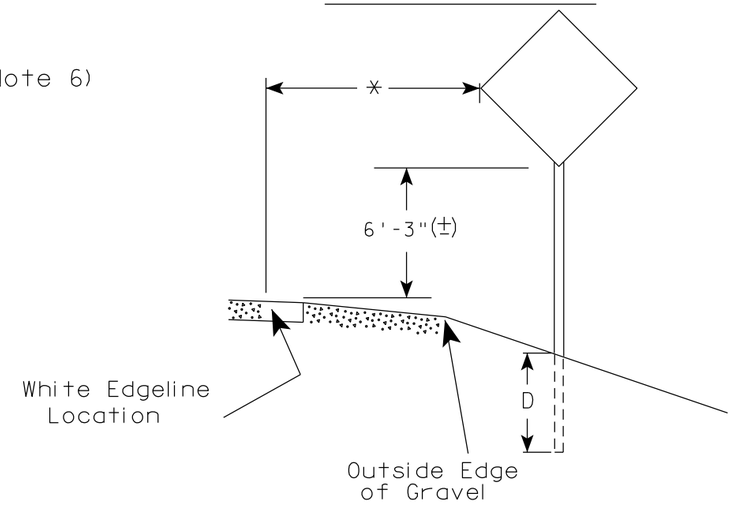
APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

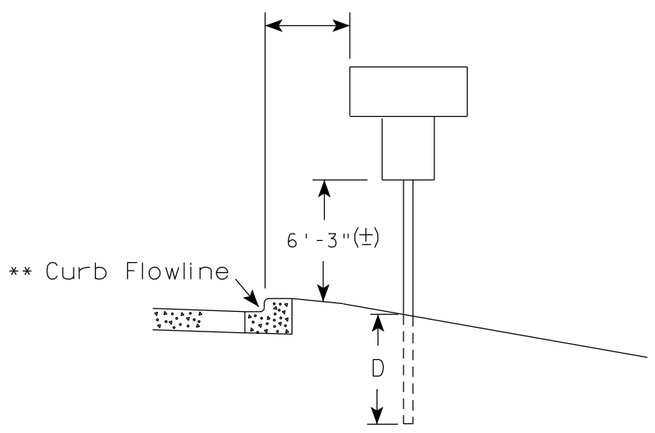
6
SDD 15D50-03b

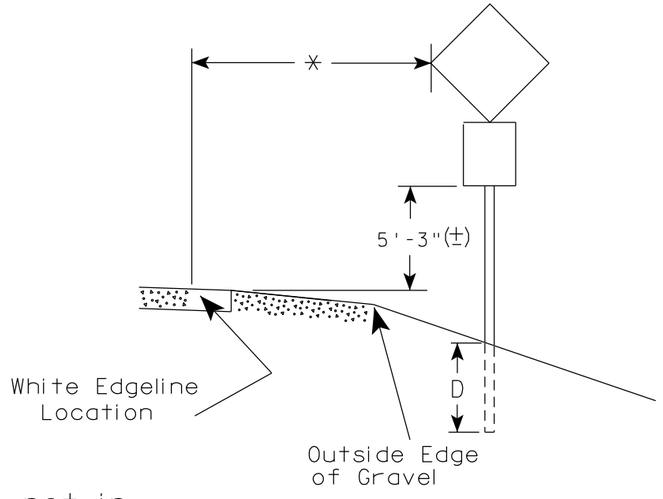
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

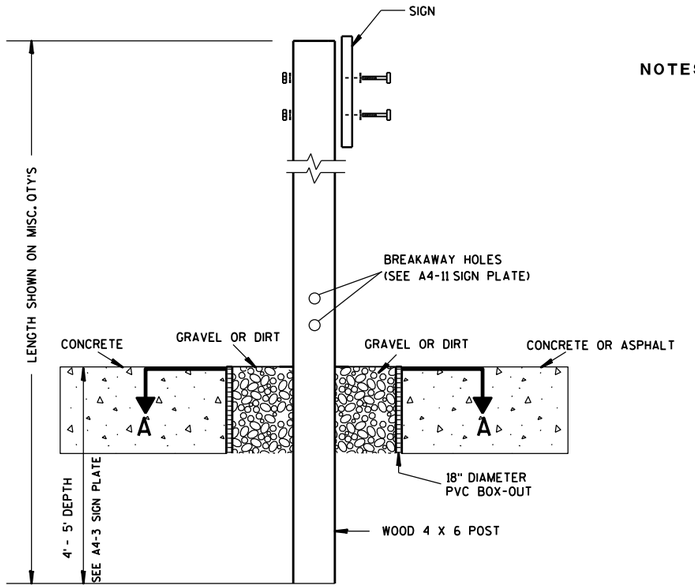
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

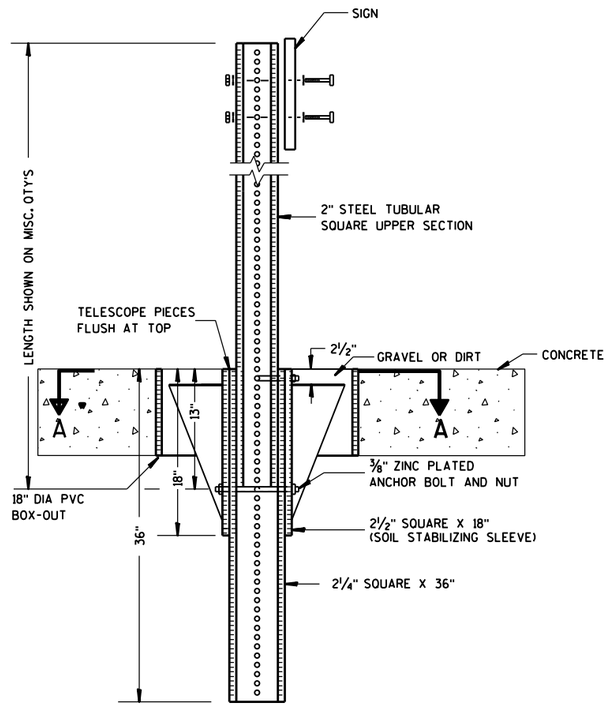
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 119	E



ELEVATION VIEW

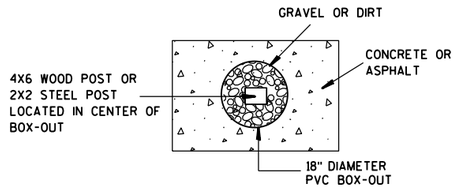
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

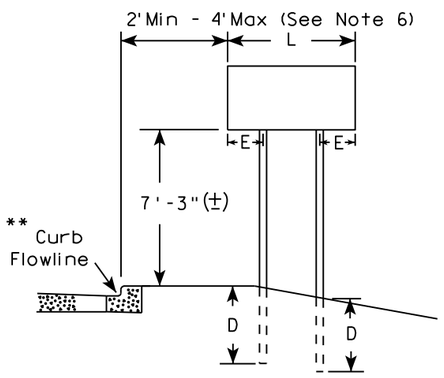
APPROVED Matthew R Rauch
for State Traffic Engineer

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

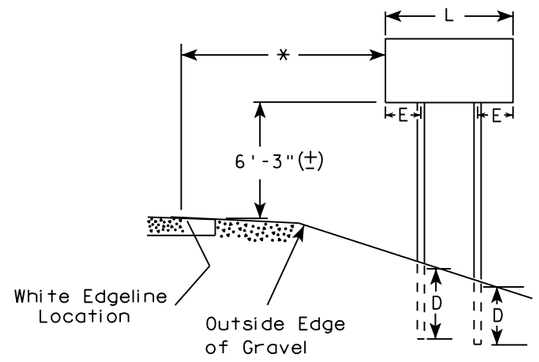
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

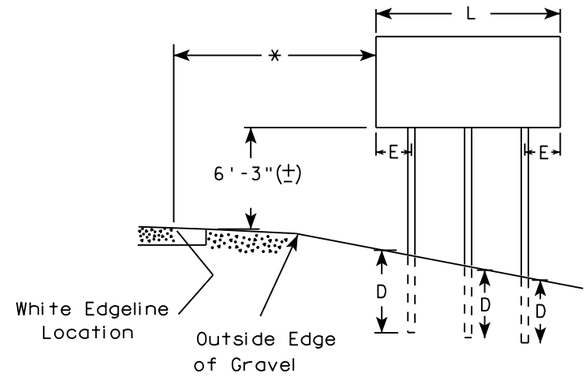
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

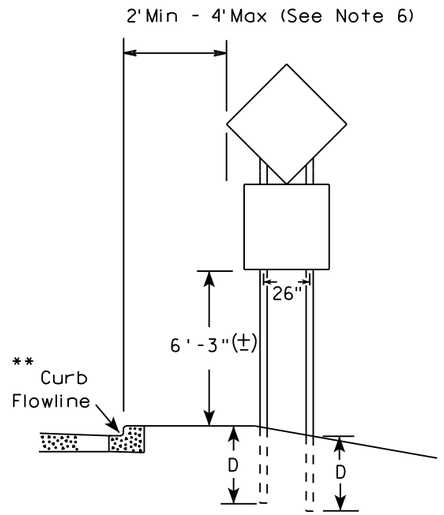
URBAN AREA



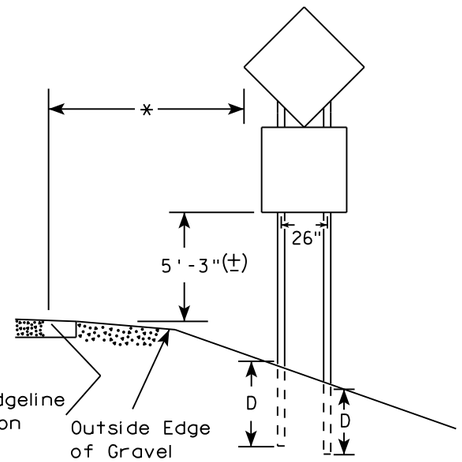
RURAL AREA (See Note 3)







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'

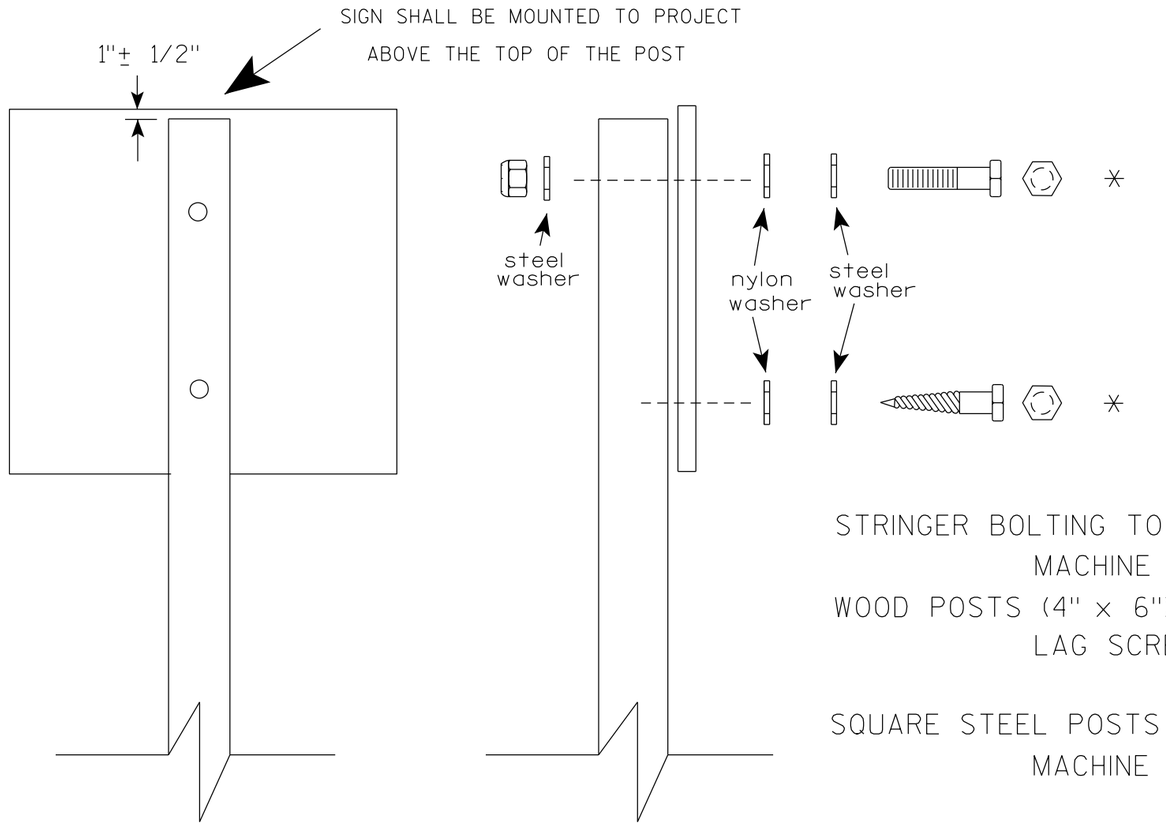
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 121	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

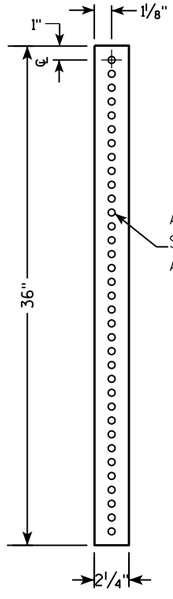
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

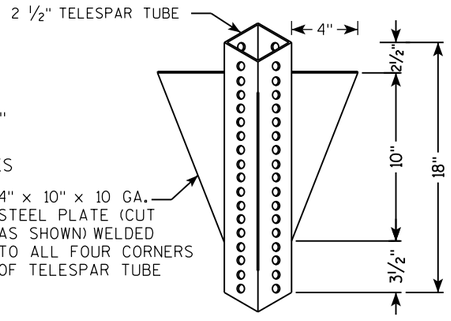
SHEET NO: 122 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

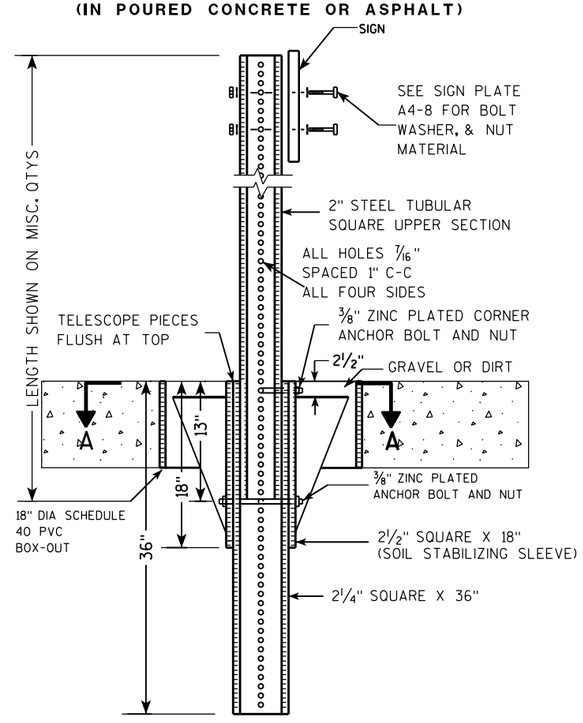
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



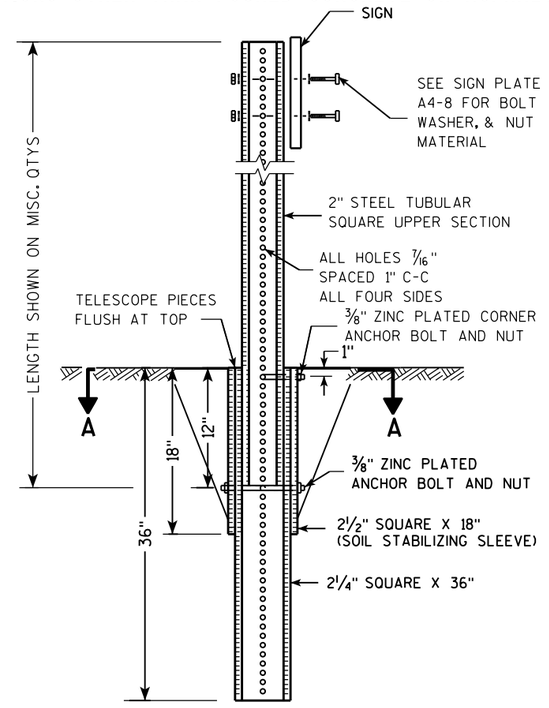
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

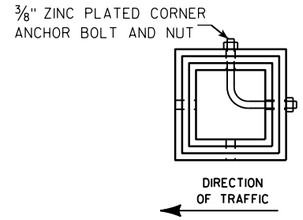


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

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

TUBULAR STEEL
SIGN POST
A4-9

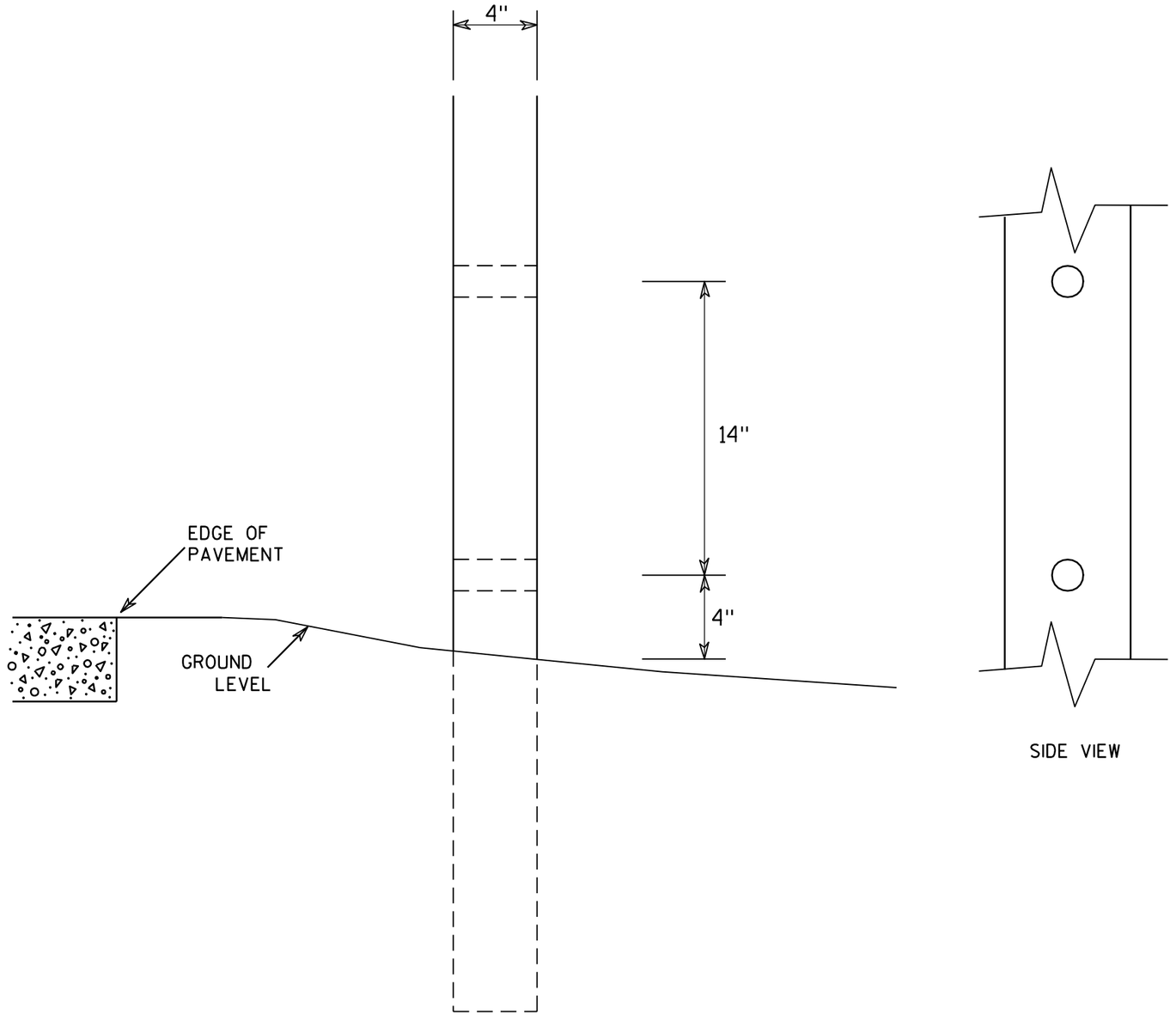
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

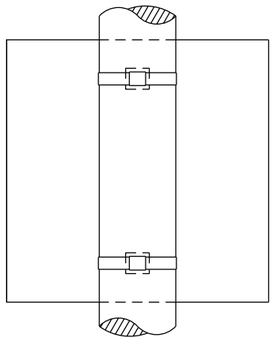
APPROVED Chester J Spang for State Traffic Engineer

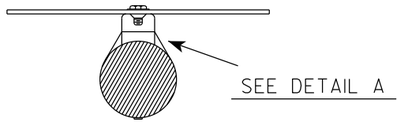
DATE 3/27/97 PLATE NO. A4-11.2

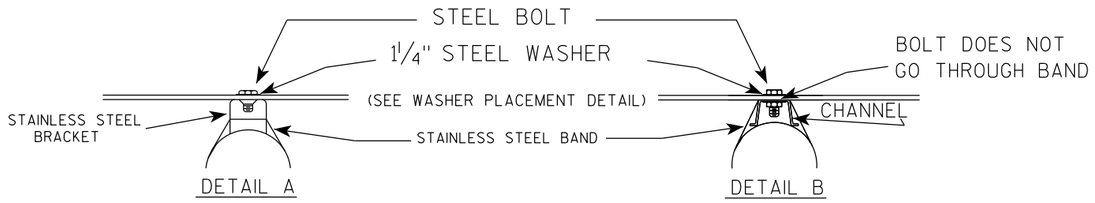
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 124	E

BANDING

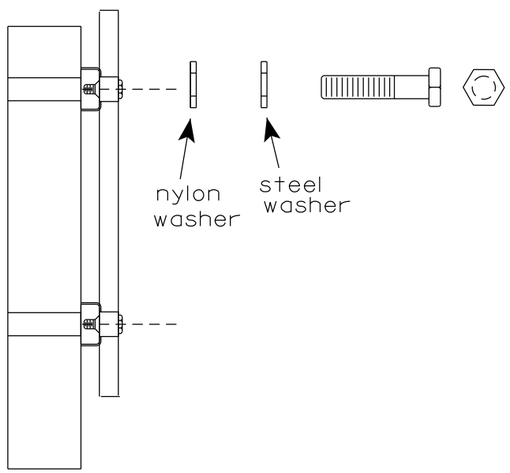
SINGLE SIGN







WASHER PLACEMENT

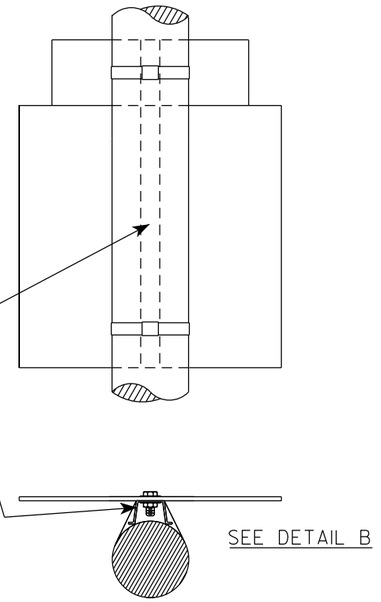


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

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

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

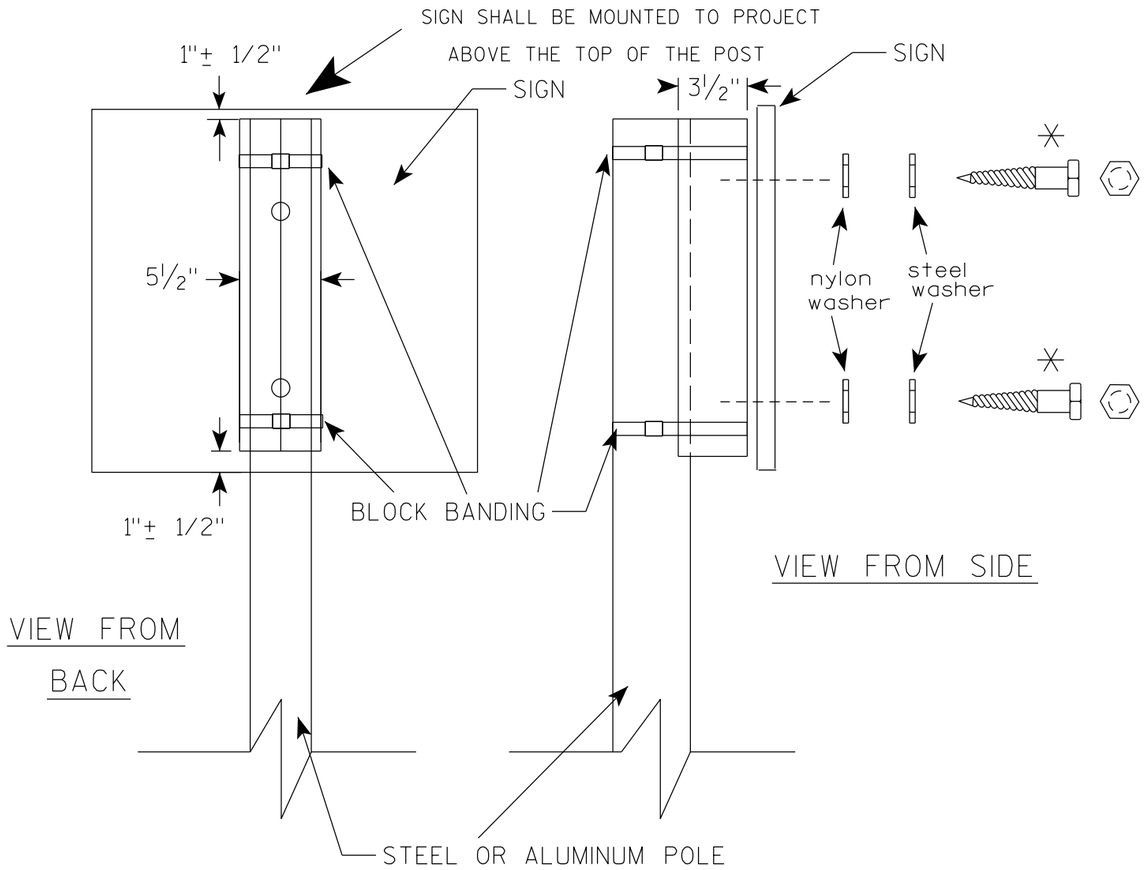
DATE 6/10/19 PLATE NO. A5-9.4

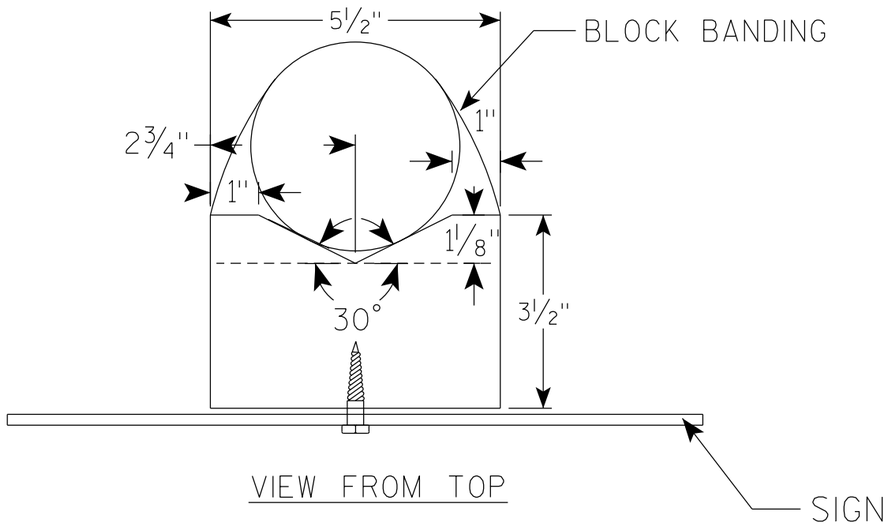
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 125	E

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

7

7





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

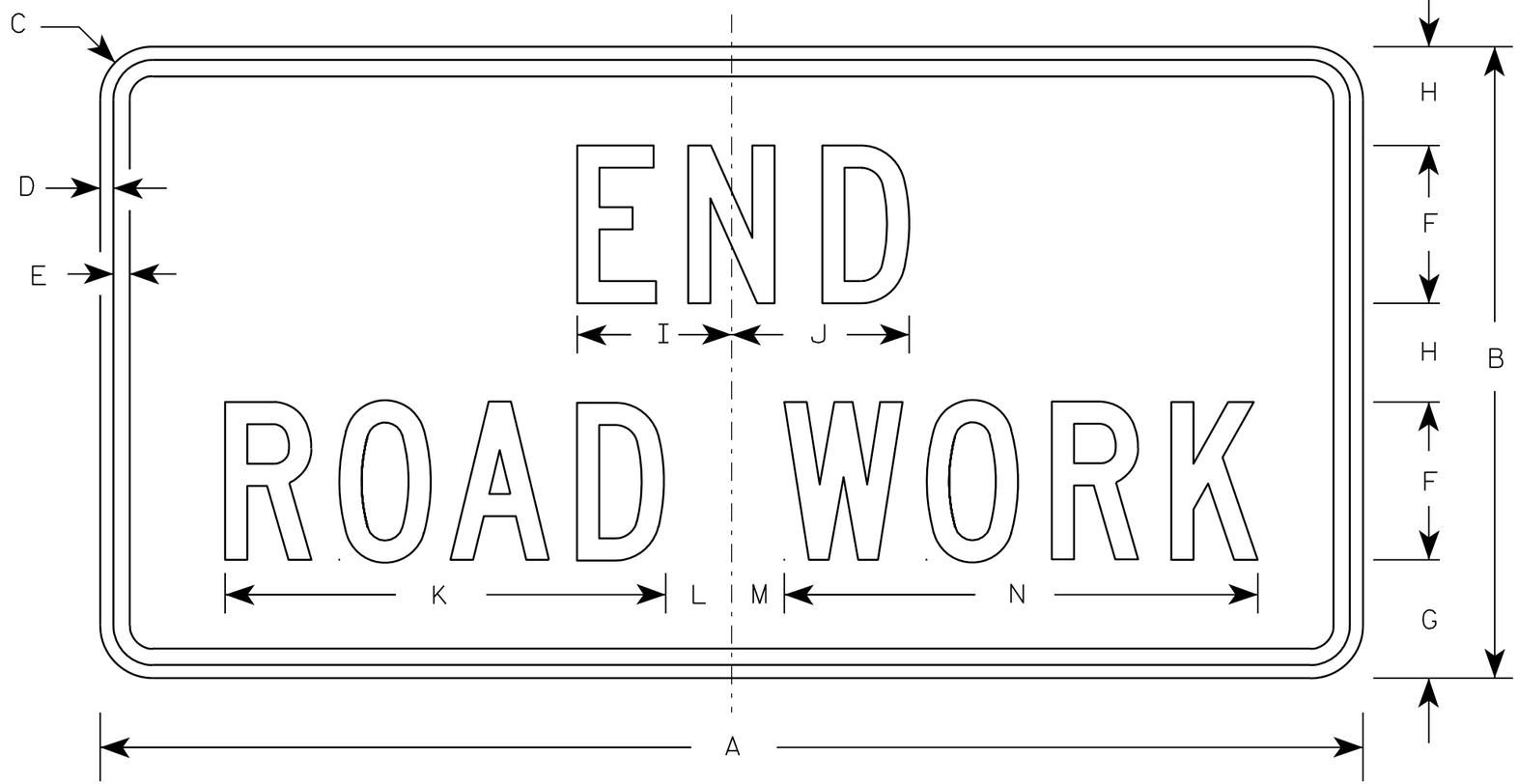
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 126 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

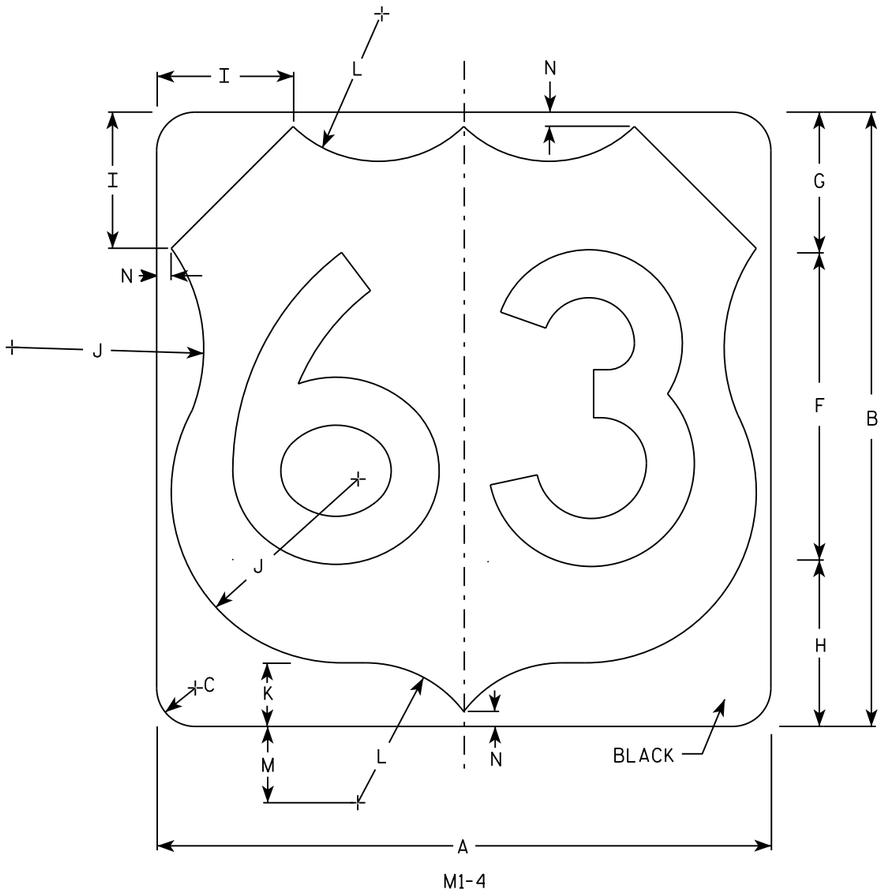
APPROVED Matthew R Rauch
for State Traffic Engineer

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

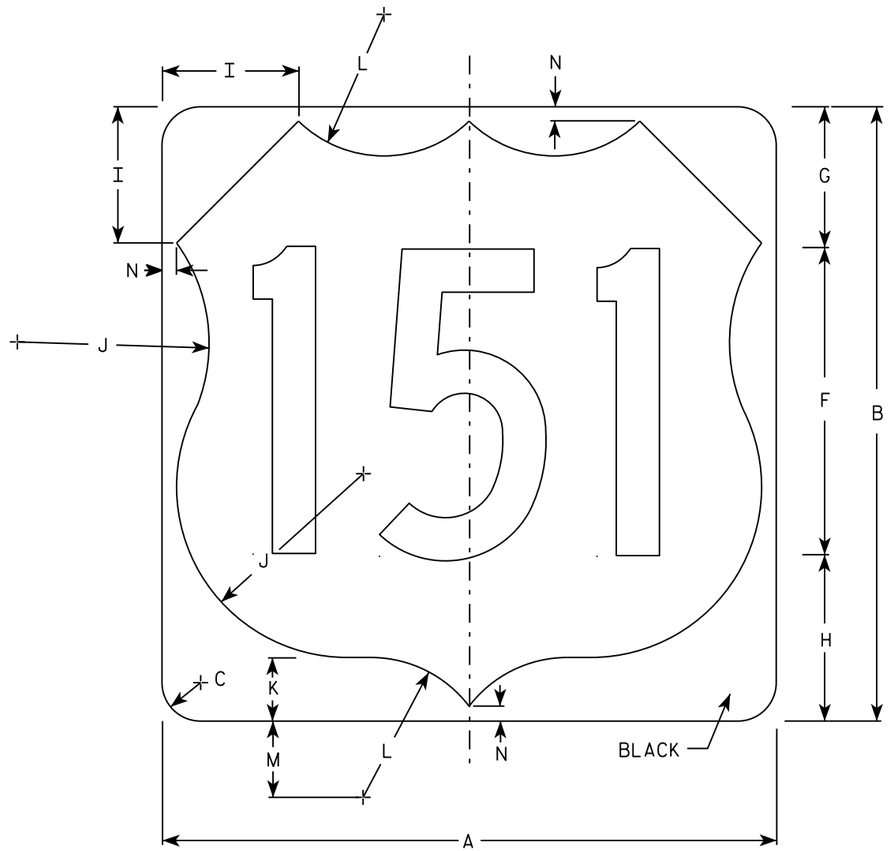
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 127	E

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

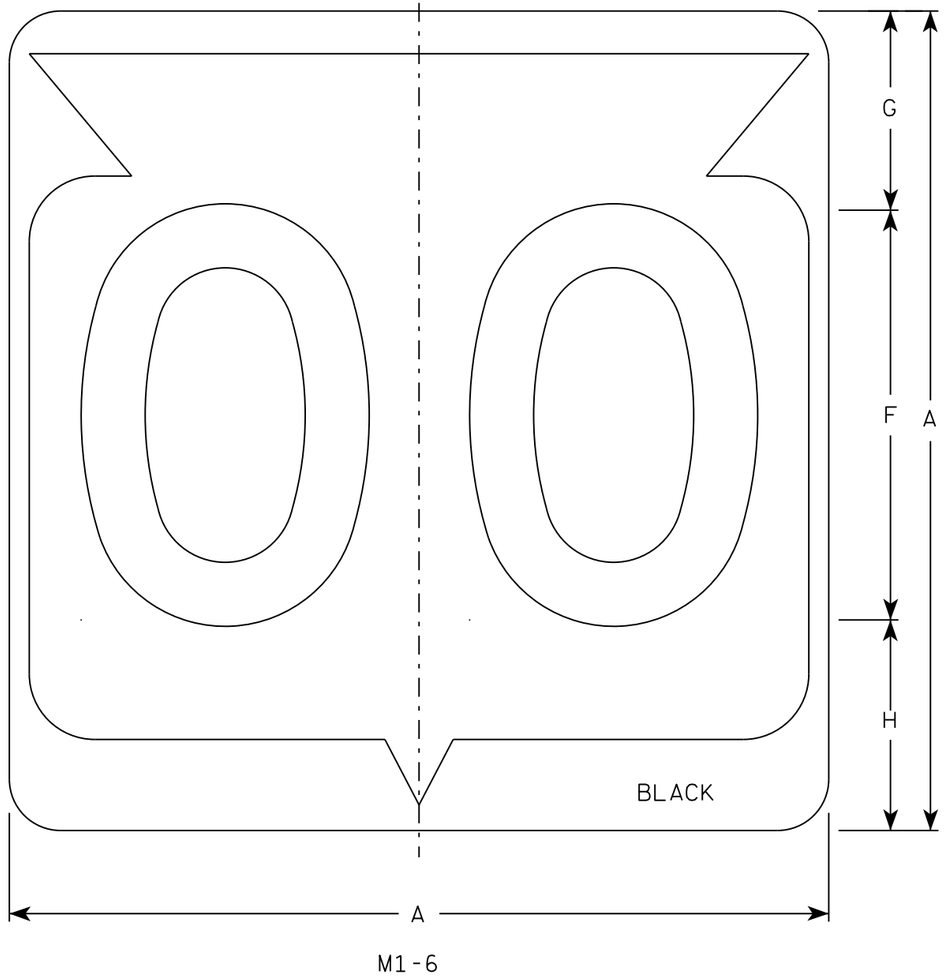
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

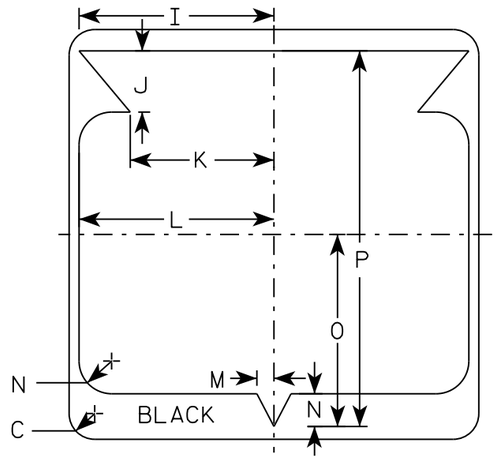
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128	E



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

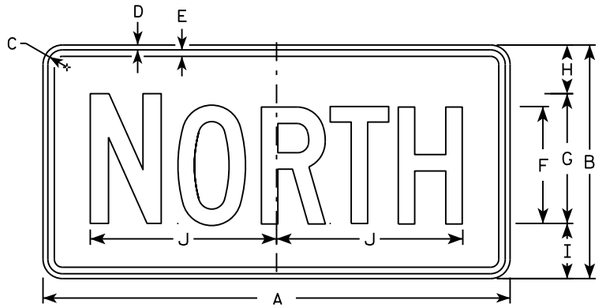
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

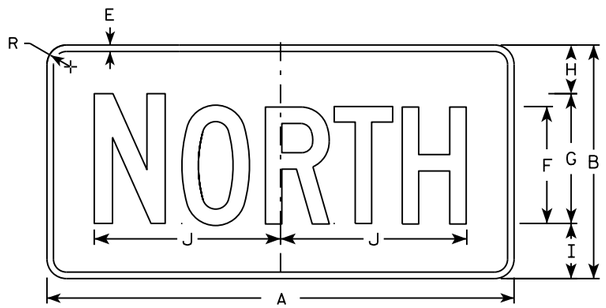
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 129	E



M3-1
MM3-1
MP3-1



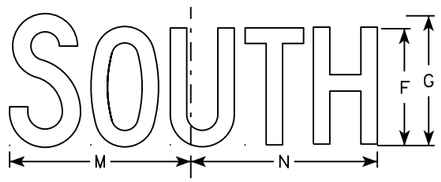
MB3-1
MK3-1
MN3-1



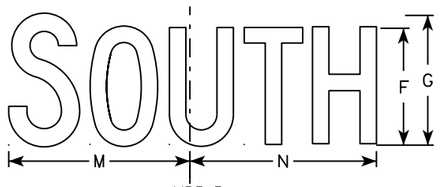
M3-2
MM3-2
MP3-2



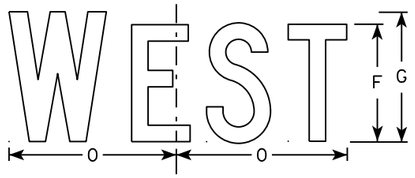
MB3-2
MK3-2
MN3-2



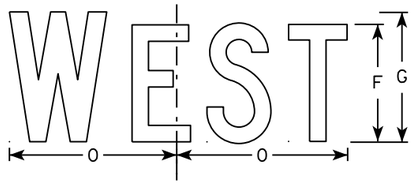
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

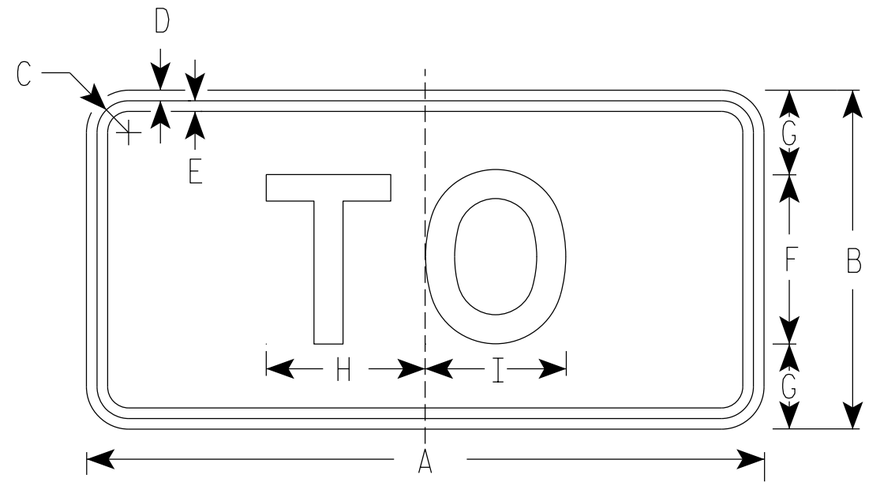
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

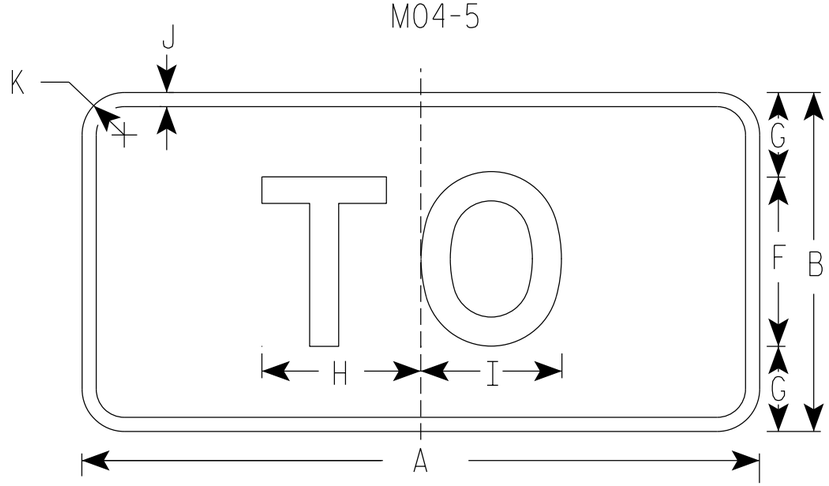
DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

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	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

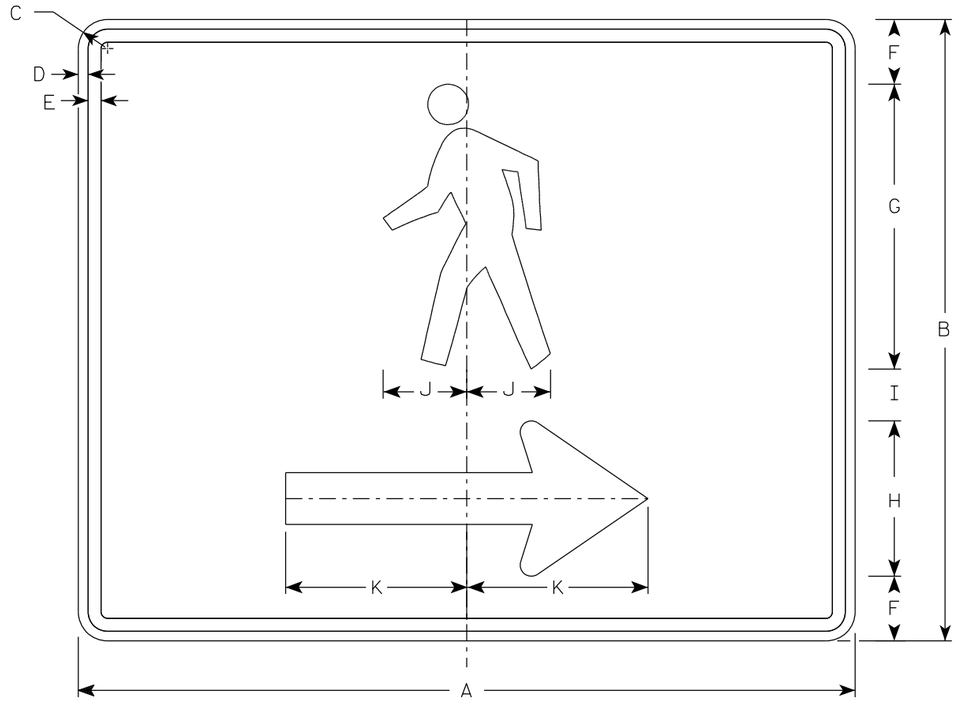
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

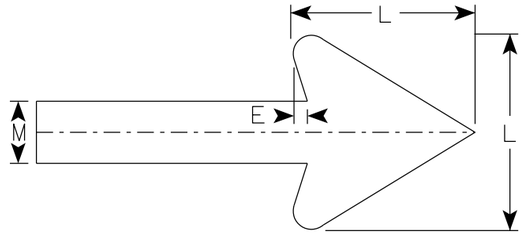
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 131 | E



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R 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	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

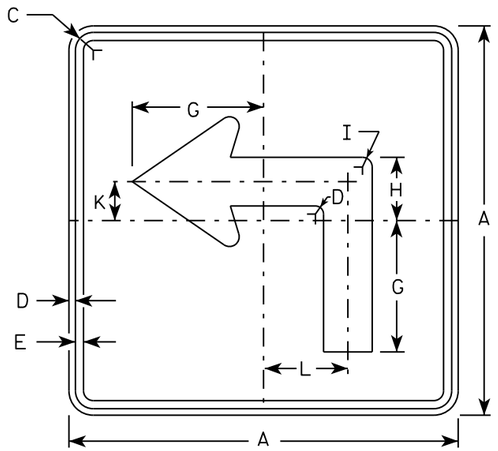
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

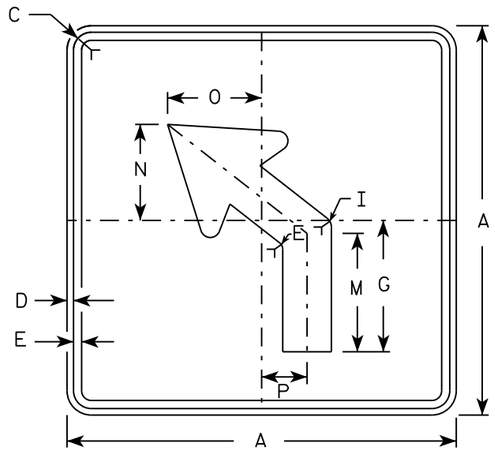
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/16/2021 PLATE NO. M4-60.1

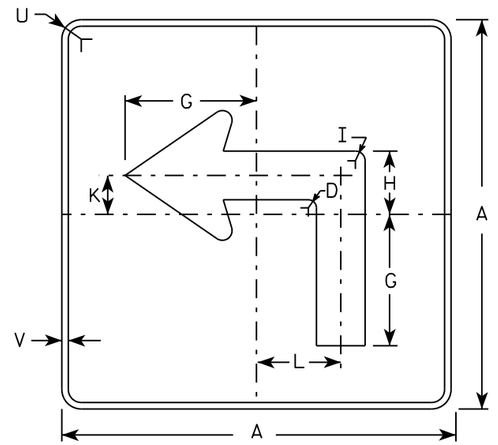
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 132 | E



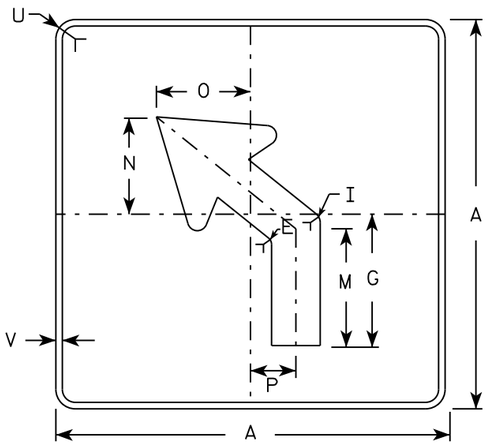
M5-1L
MM5-1L
MO5-1L
MP5-1L



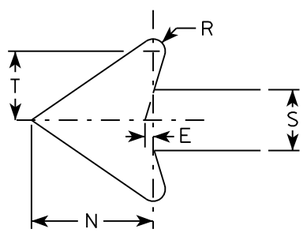
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

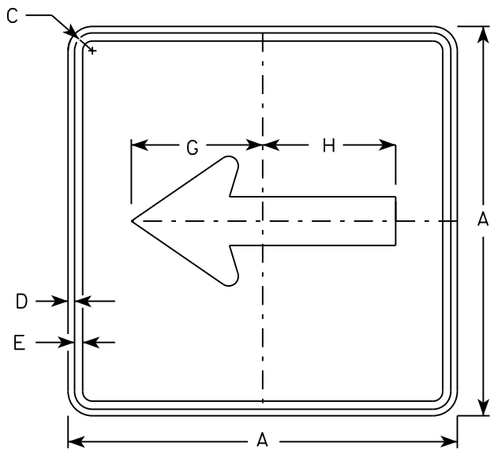
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

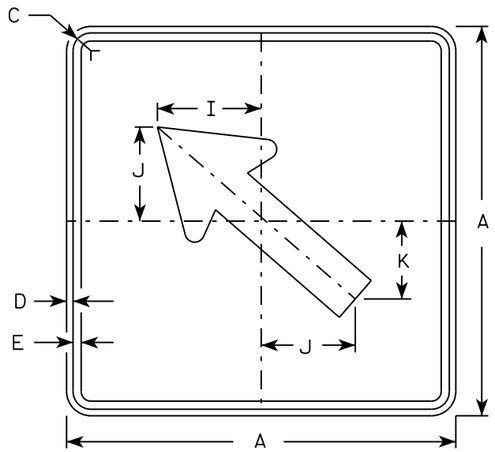
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



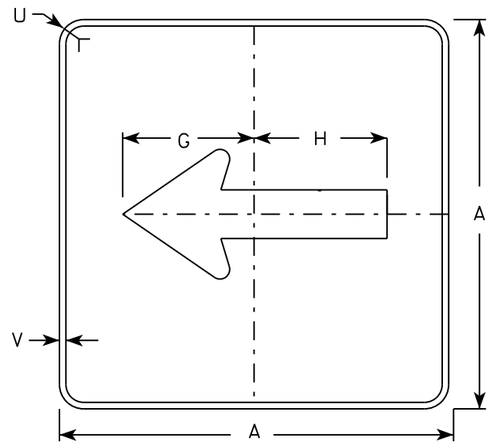
M6-1
MM6-1
MO6-1
MP6-1



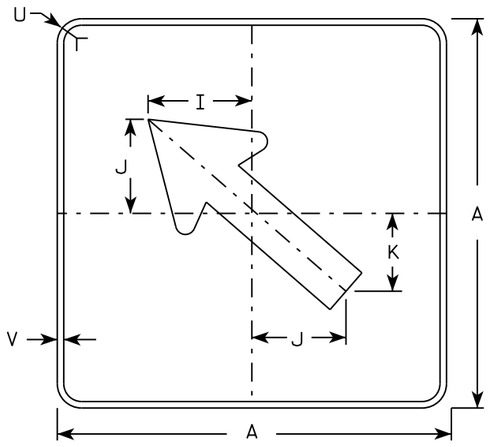
M6-2
MM6-2
MO6-2
MP6-2

NOTES

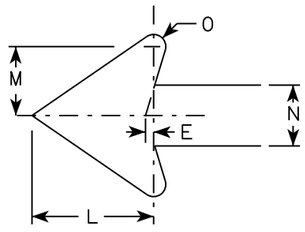
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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

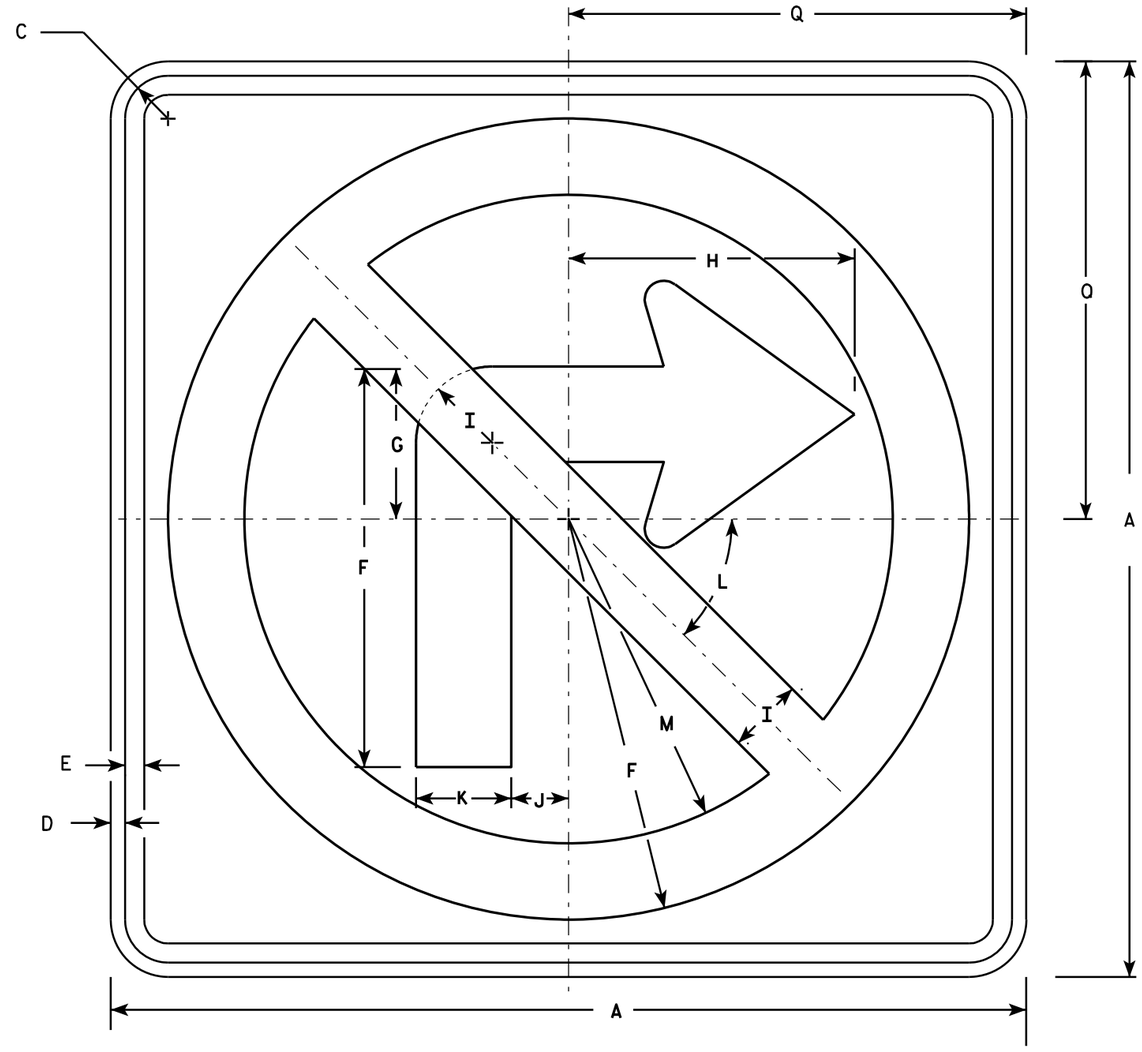
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 134 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

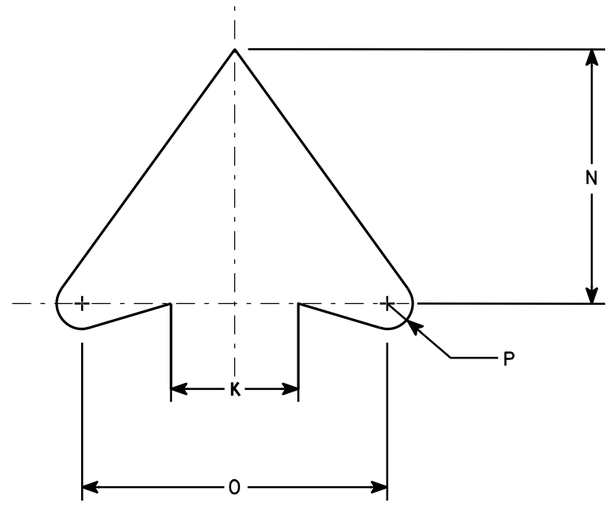
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

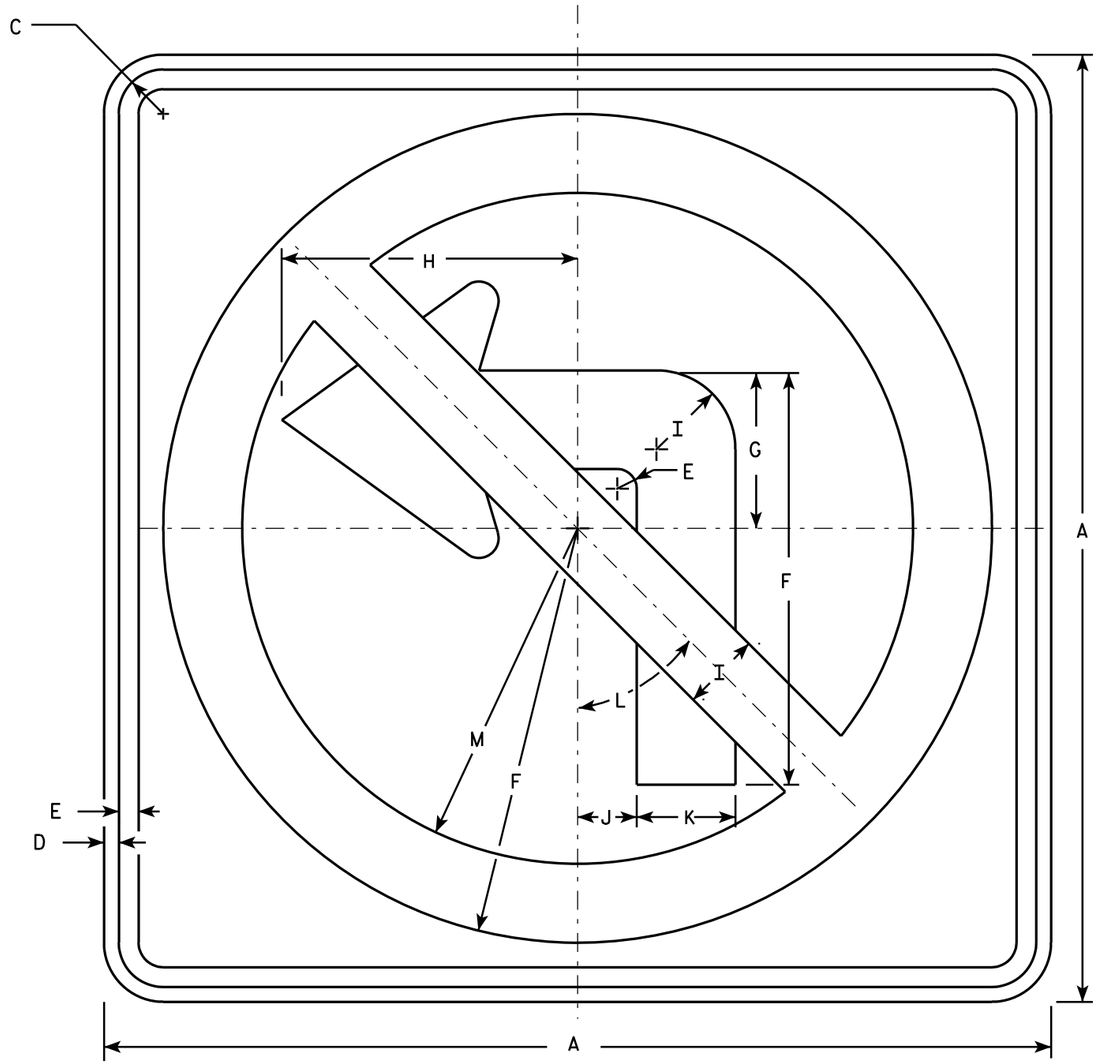
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

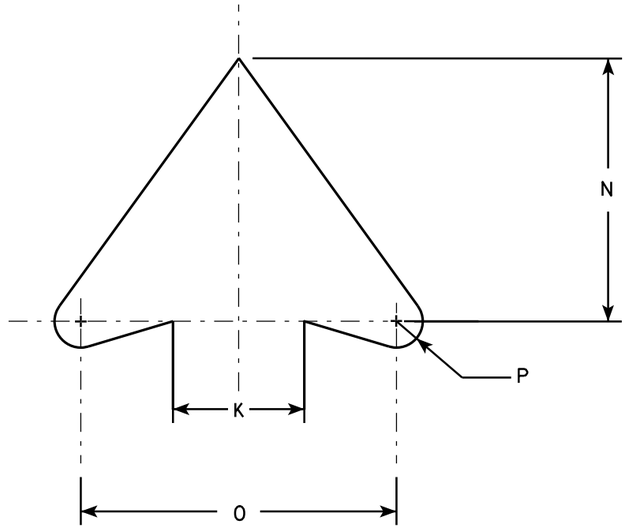
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 135	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

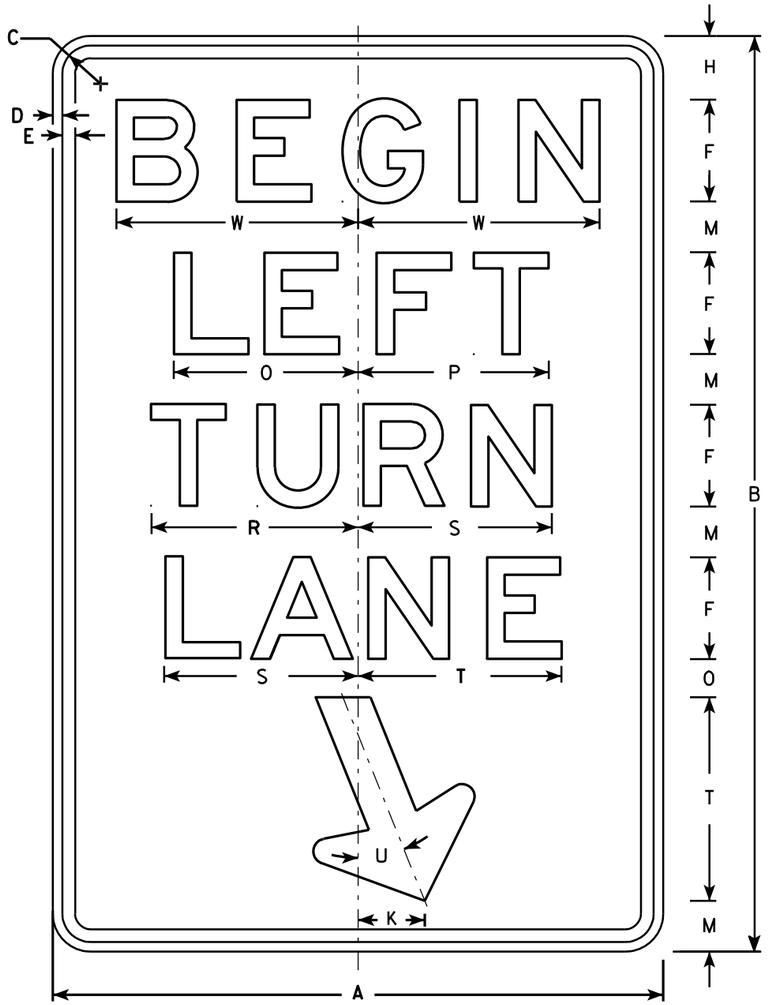
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

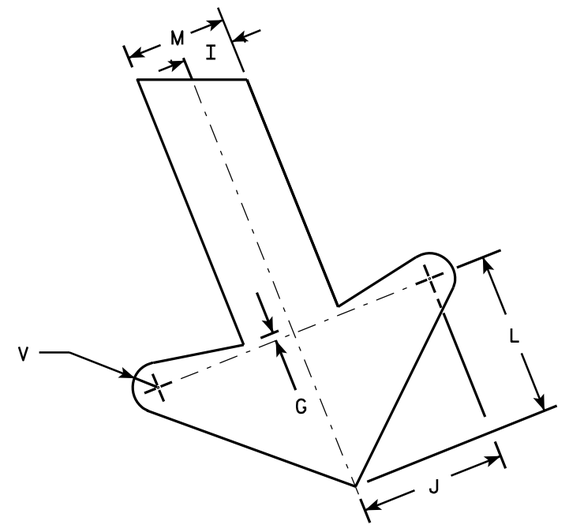
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 136	E



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																											

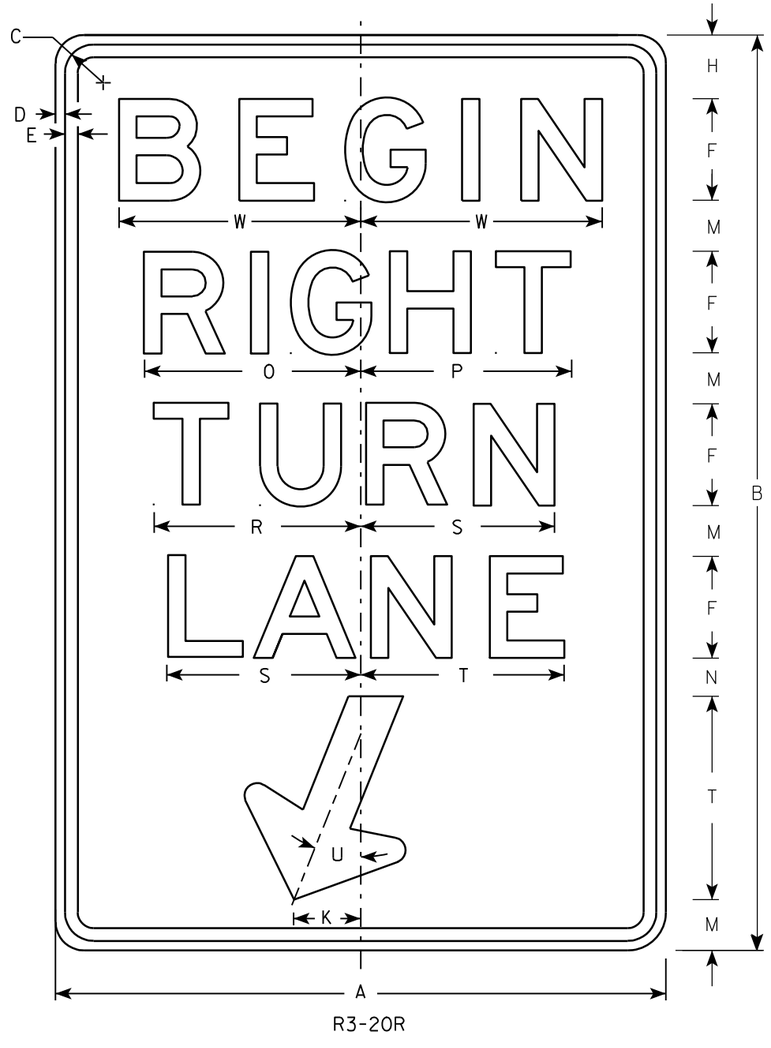
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

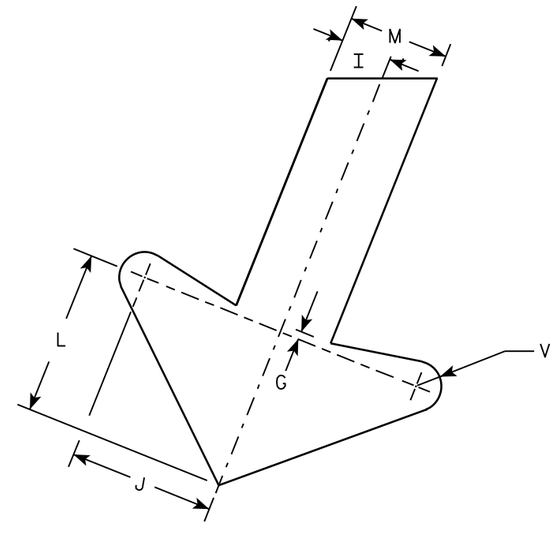
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 137 | E



R3-20R

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	8 1/2	8 1/4		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	8 1/2	8 1/4		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	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

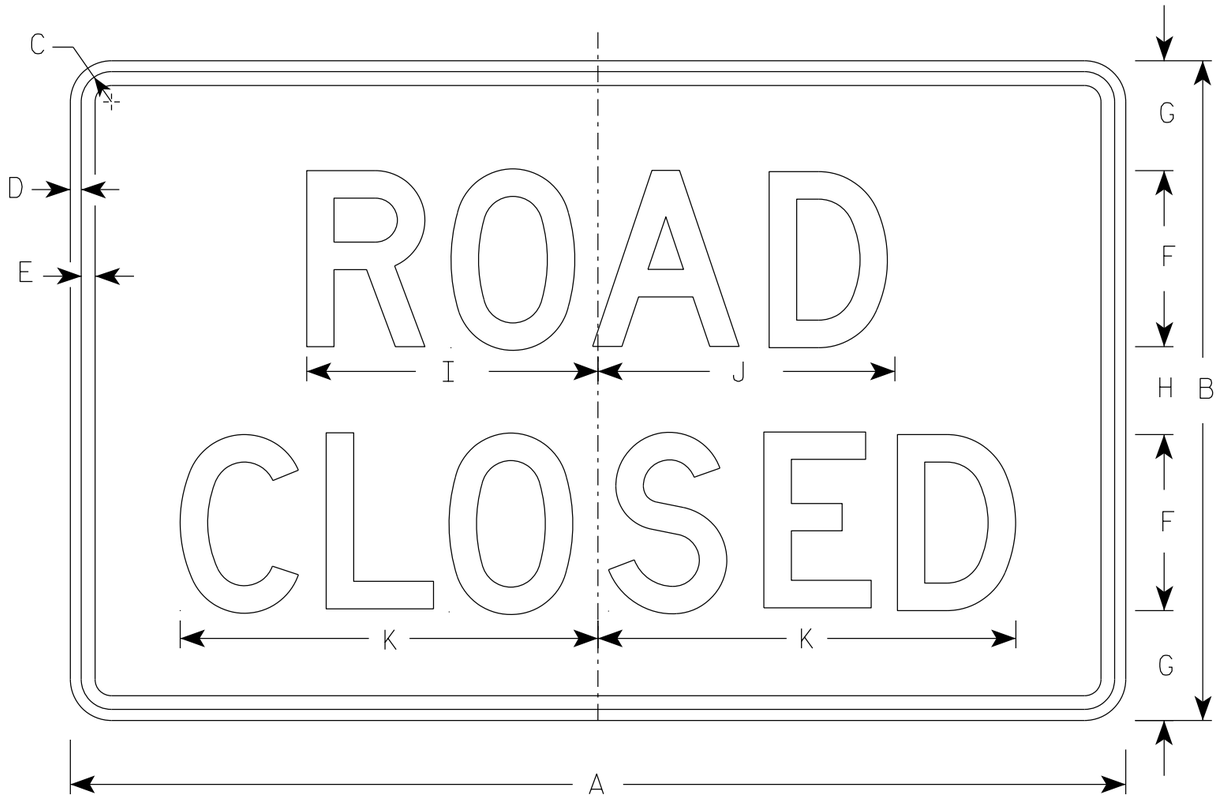
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

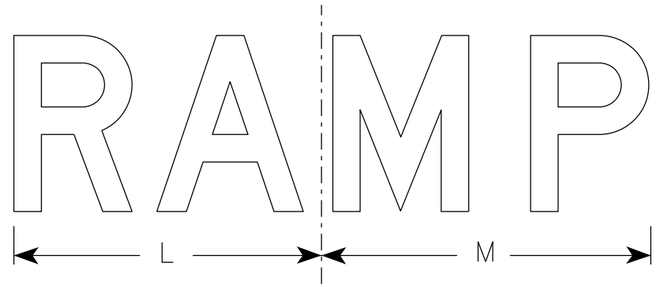
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 138 | E



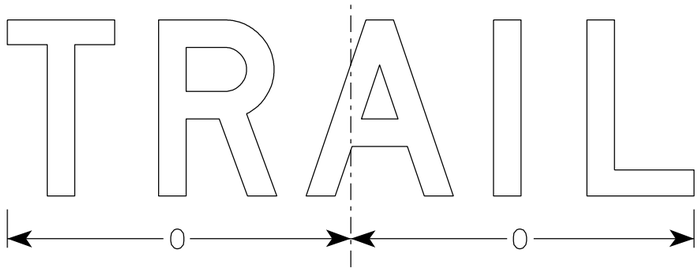
R11-2

NOTES

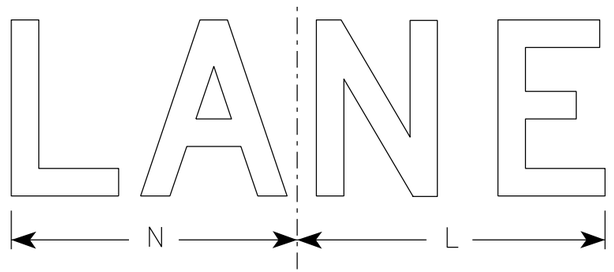
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

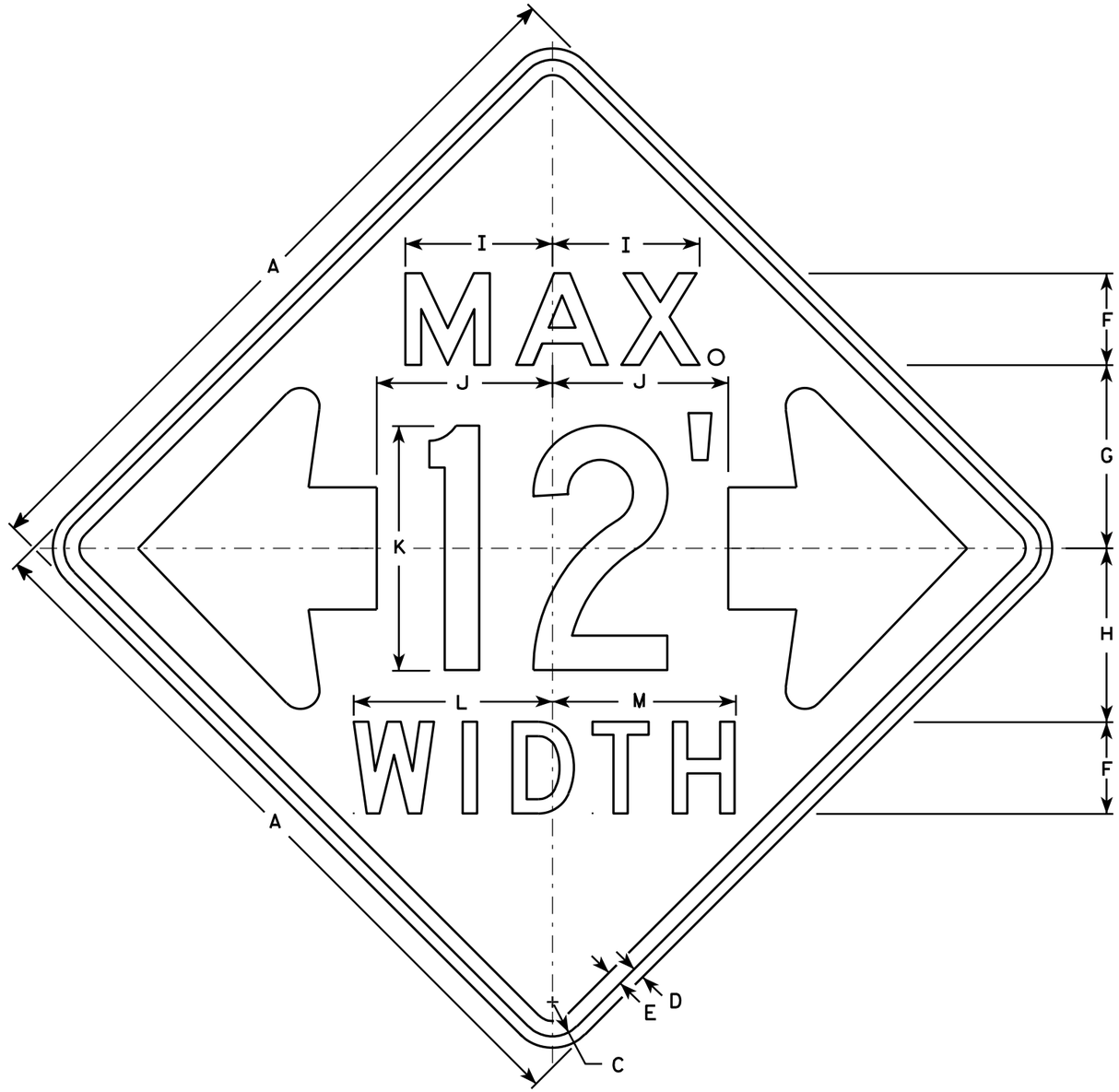
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

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

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

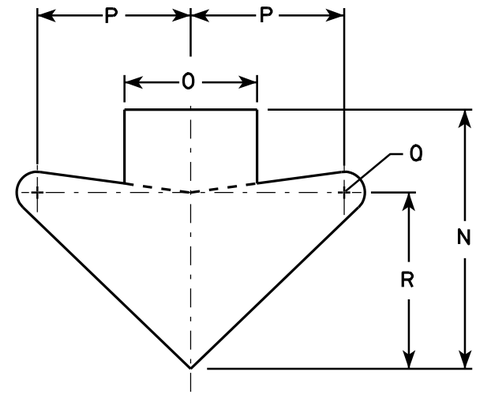
7



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

STANDARD SIGN
W12-52

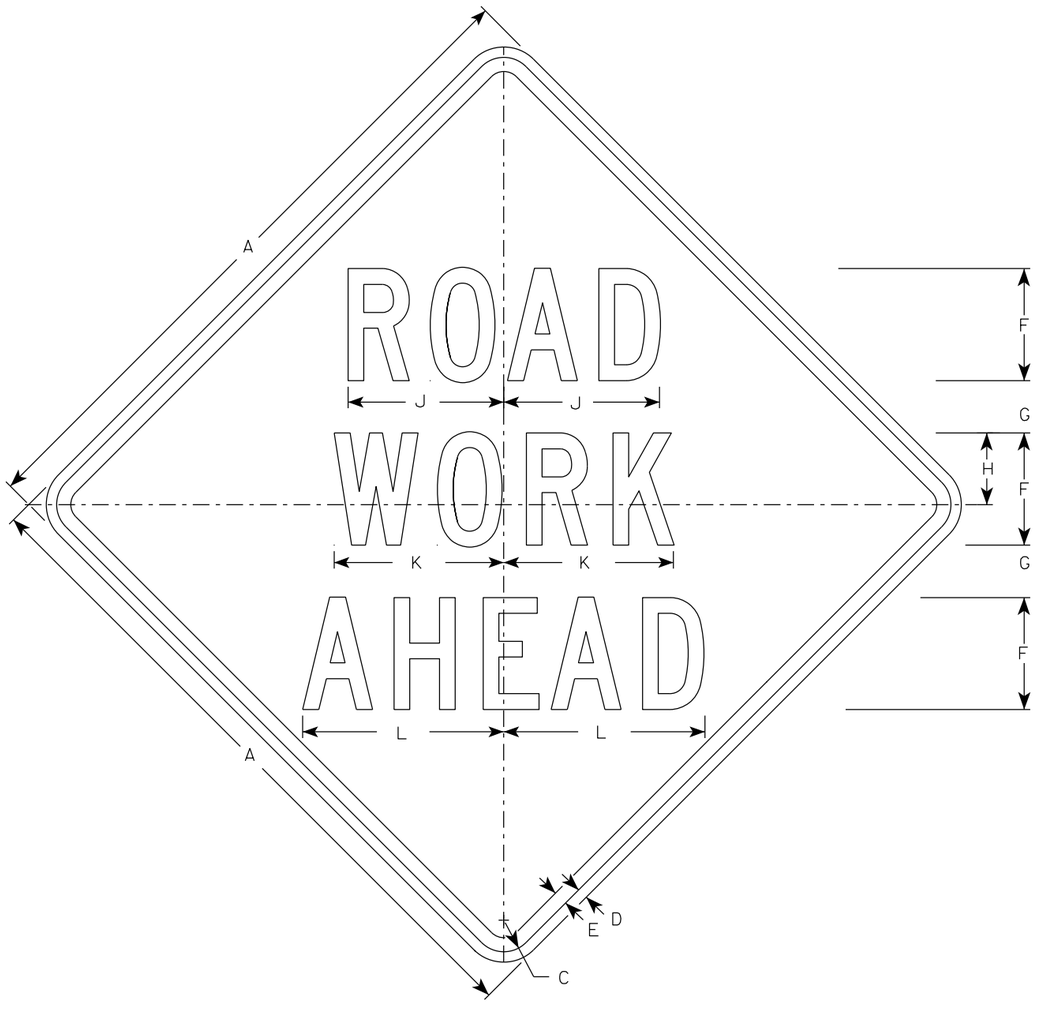
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

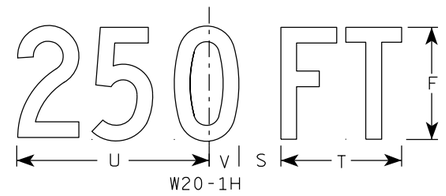
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 140 | E

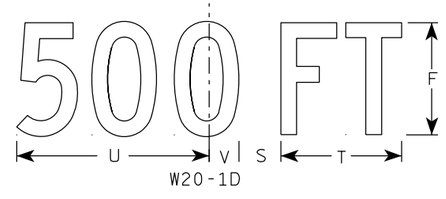
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000



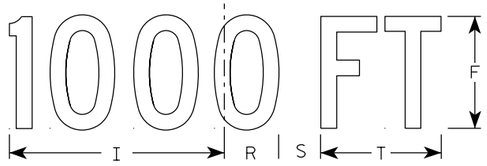
W20-1A



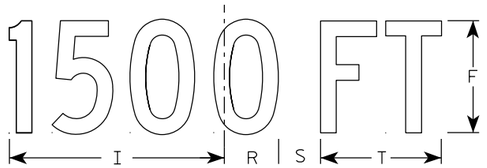
W20-1H



W20-1D



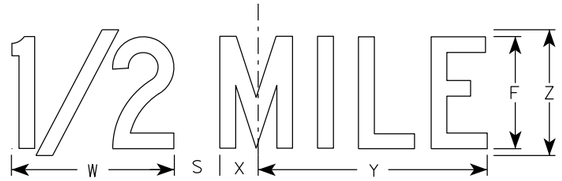
W20-1C



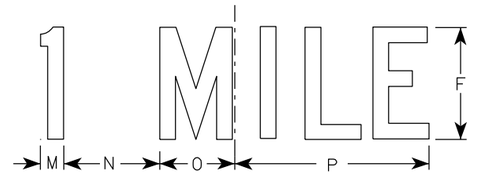
W20-1B

NOTES

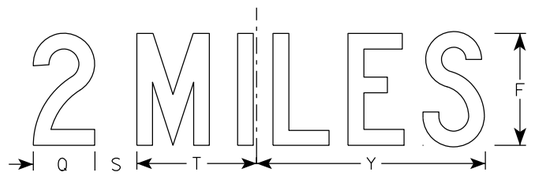
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: E

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

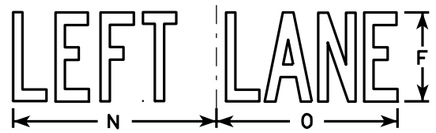
WISDOT/CADDS SHEET 42

7

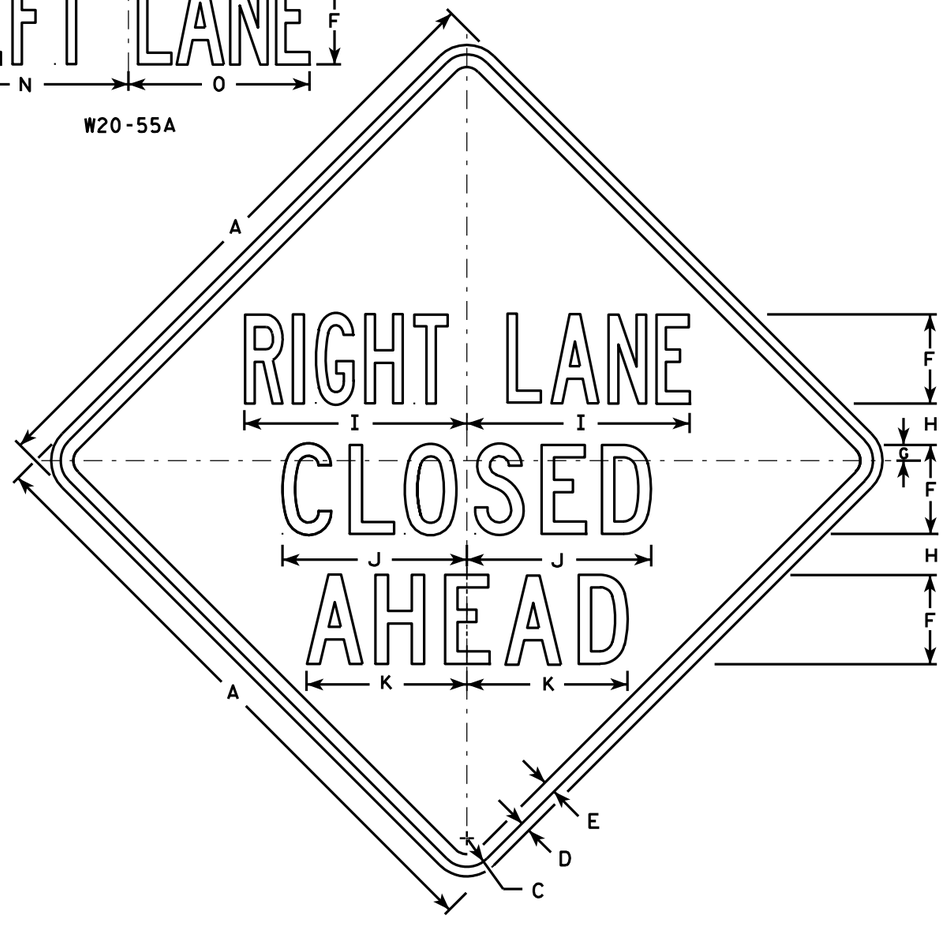
7



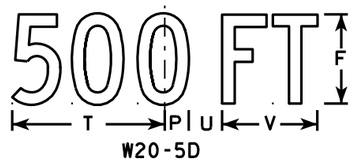
W20-56A



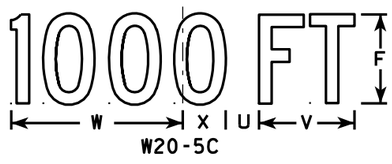
W20-55A



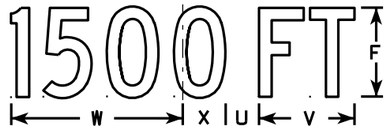
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

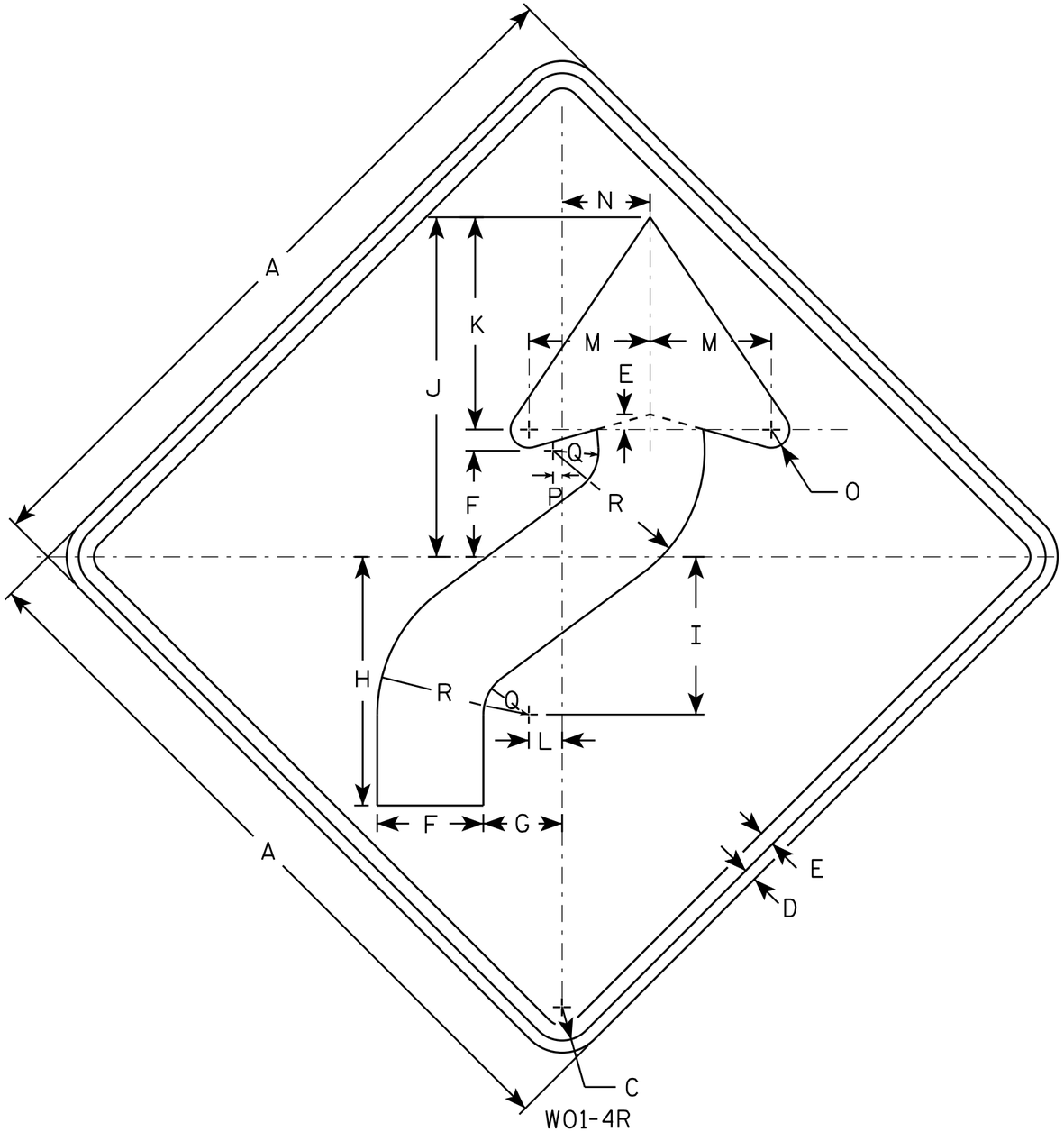
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 142 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

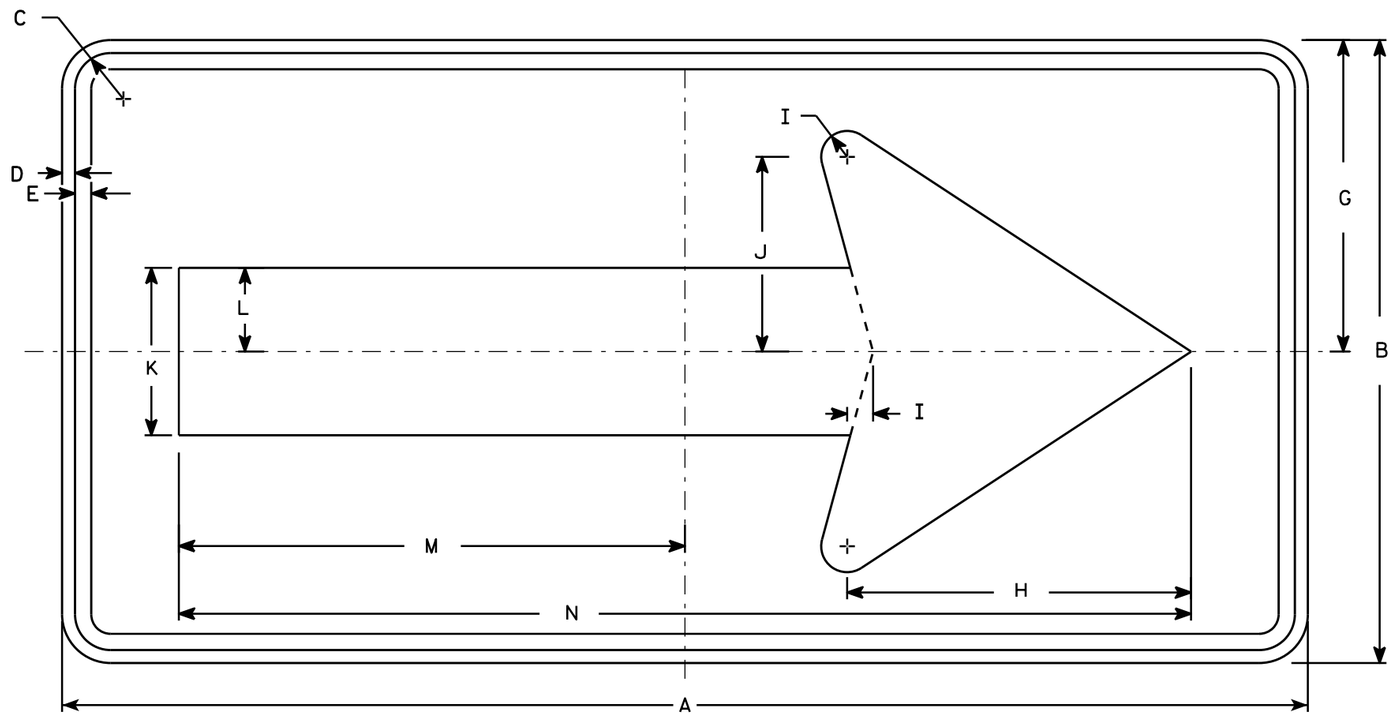
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

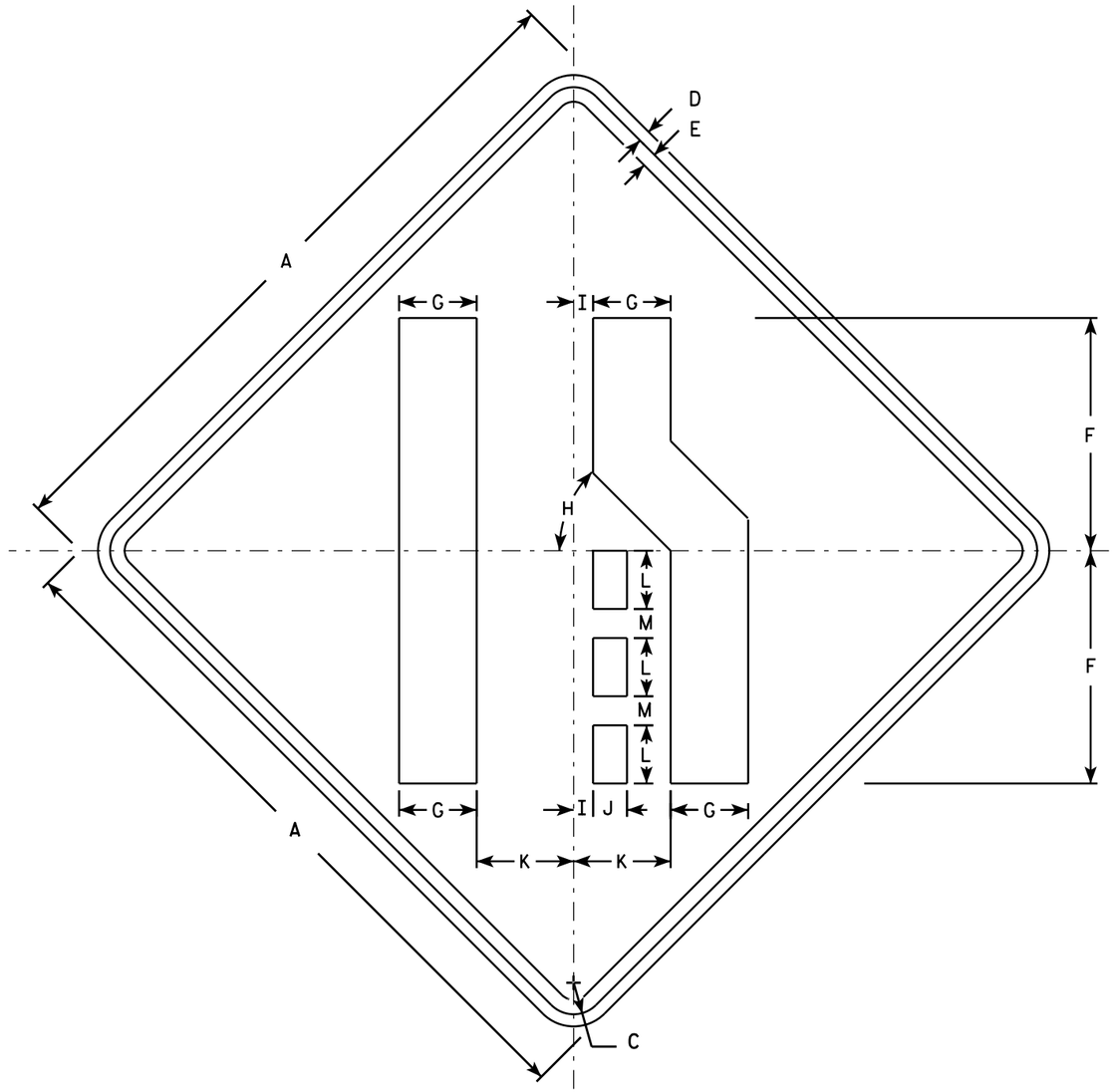
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE 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



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

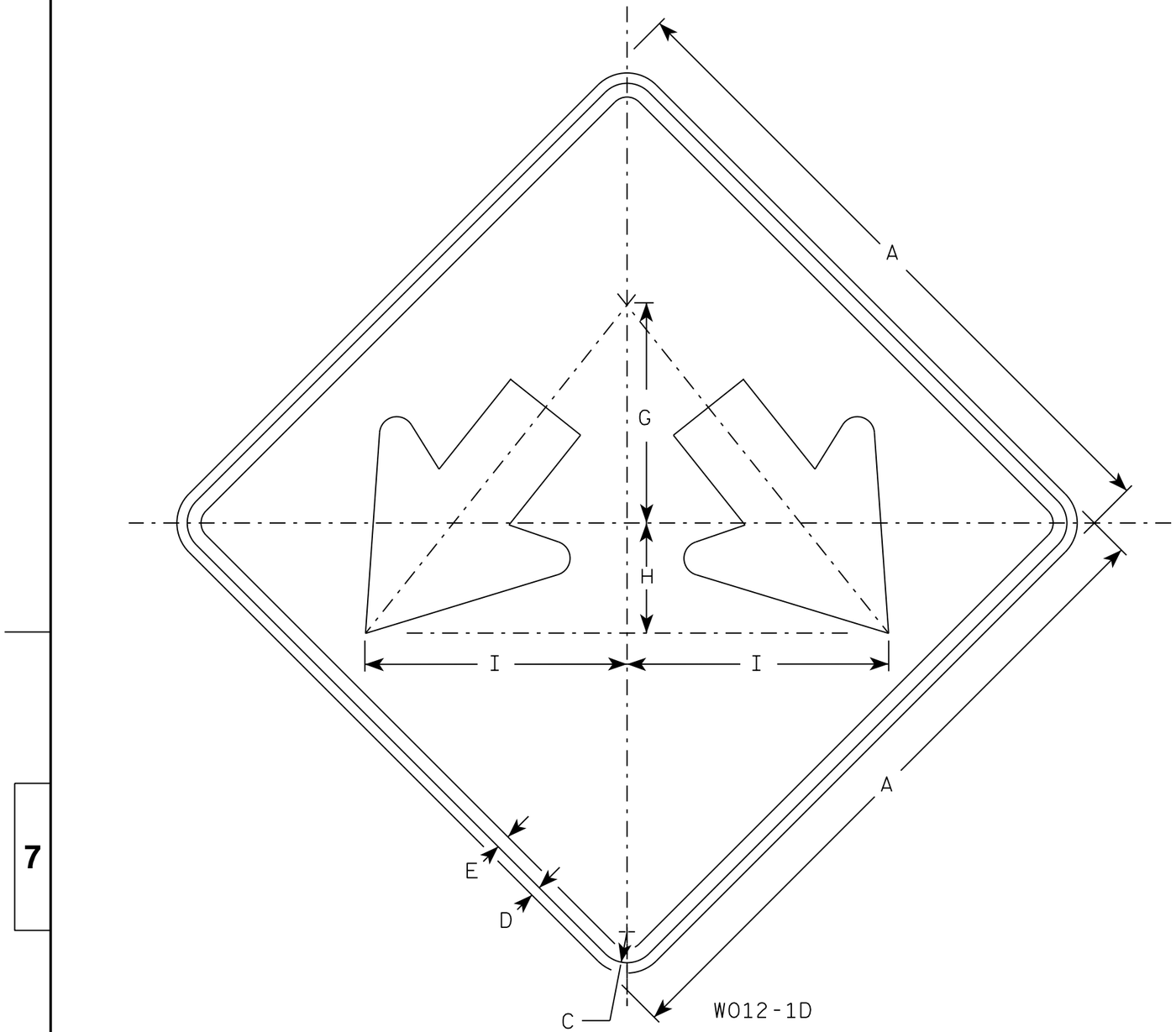
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 145 W04-2.1

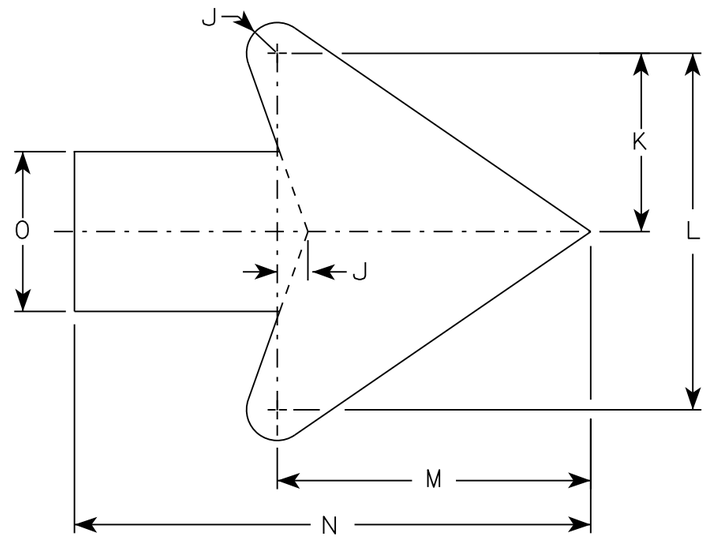
PROJECT NO: | SHEET NO: E



W012-1D

NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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
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	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

STANDARD SIGN
W012-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

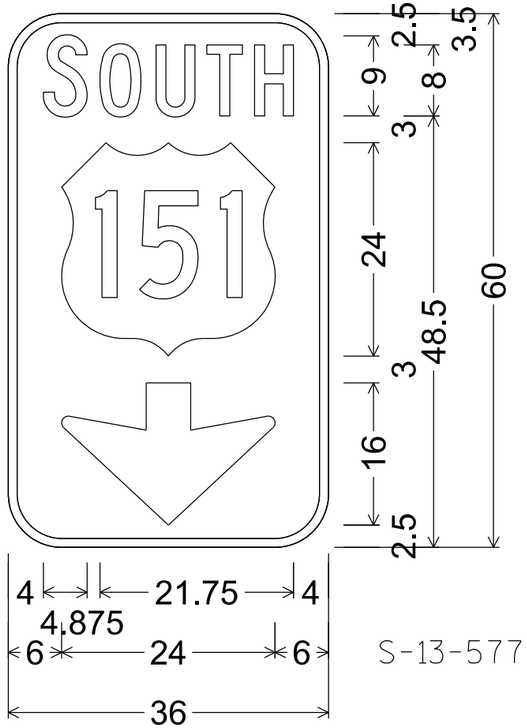
DATE 7/28/16 PLATE NO W012-1D.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CADfiles\Projects\tr_stdplate\W0121D.DGN PLOT DATE : 11-AUG-2016 11:28 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.621375:1.000000

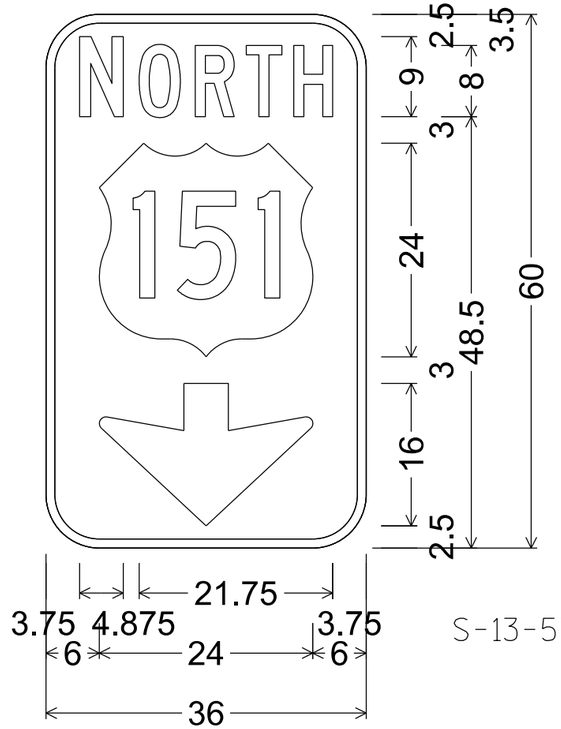
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C



S-13-577

D16-1; 6.000" Radius, 1.000" Border



S-13-578

D16-1; 6.000" Radius, 1.000" Border

7

7

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 147	E

DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONs DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS (700 YEAR MEAN RECURRENCE INTERVAL)

WIND COMPONENTS	NORMAL	TRANSVERSE
LOAD CASE 1:	1.00	0.00
LOAD CASE 2:	0.00	1.00
LOAD CASE 3:	0.75	0.75

LOAD COMBINATIONS

STRENGTH I:	1.25 DC + 1.6 LL
EXTREME I (MAX DC):	1.1 DC + 1.0 W + 1.0 ICE
EXTREME I (MIN DC):	0.9 DC + 1.0 W
SERVICE I:	1.0 DC + 1.0 W
FATIGUE:	1.0 NW (NATURAL WIND GUST)
	1.0 TrG (TRUCK INDUCED GUST)
	1.0 GVW (GALLOPING - CANTILEVER ONLY)

MATERIAL PROPERTIES

CONCRETE MASONRY ——— f'_c = 3,500 PSI

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60 ——— f_y = 60,000 PSI

STRUCTURAL ANGLES, PLATES & BARS - ASTM A709 GRADE 36 ——— f_y = 36,000 PSI

HIGH STRENGTH BOLTS - ASTM A3125 GRADE A325 ——— f_y = 92,000 PSI

ANCHOR RODS - ASTM F1554 GRADE 55 ——— f_y = 55,000 PSI

HEAVY HEX NUTS - ASTM A563 GRADE DH OR ASTM A194 GRADE 2H

WASHERS - ASTM F436

DTI WASHERS - ASTM F959 TYPE 325

FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGN FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING THE DRILLING OF THE SHAFT HOLE TO CONFRIM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

TOTAL ESTIMATED QUANTITES

BID ITEM NO.	BID ITEM	UNIT	S-13-0577	S-13-0578
531.2030	DRILLING SHAFT 30-INCH	LF	17	17
531.5110	FOUNDATION SINGLE-SHAFT TYPE MC-I	EA	1	1
532.5110	MONOTUBE CANTILEVER TYPE I	EA	1	[1]

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DANE COUNTY ZONE, NAD 83 (2007). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA. A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

STRUCTURE DATA

STRUCTURE ID	SIGN AREA	SIGN DEPTH	FOUNDATION TYPE	TRUSS TYPE
S-13-0577	15 SF	5'-0"	TYPE MC-I	
S-13-0578	15 SF	5'-0"	TYPE MC-I	

LIST OF DRAWINGS:

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-13-0577
3. LAYOUT S-13-0578

LIST OF STANDARD DESIGN DRAWINGS

4. I. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1
5. II. MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2
6. III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
7. IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

STATE PROJECT NUMBER

6085-02-75

TRAFFIC VOLUME

A.D.T. (2025) = 15,800
R.D.S. = 40 MPH

STRUCTURE DESIGN CONTACTS:

AARON BONK 608-261-0261
KYLE CORNELIUS 608-287-3858

NO.	DATE	REVISION	BY

THESE ARE STANDARD DESIGN PLANS DEVELOPED AND MAINTAINED BY THE WISDOT. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISDOT BRIDGE MANUAL CHAPTER 39.

WISCONSIN
KYLE CORNELIUS
46106-6
MADISON, WI
8/9/2023
PROFESSIONAL ENGINEER

ONEIDA Engineering Solutions

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 08/21/23
CHIEF STRUCTURES DESIGN ENGINEER DATE

MONOTUBE & 2-CHORD

STH 19

COUNTY	TOWN/CITY/VILLAGE
DANE	CITY OF SUN PRAIRIE

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
KGC	BAP	KGC	BAP

GENERAL NOTES & DESIGN DATA

SHEET 1 OF 3
148

SCALE = NTS

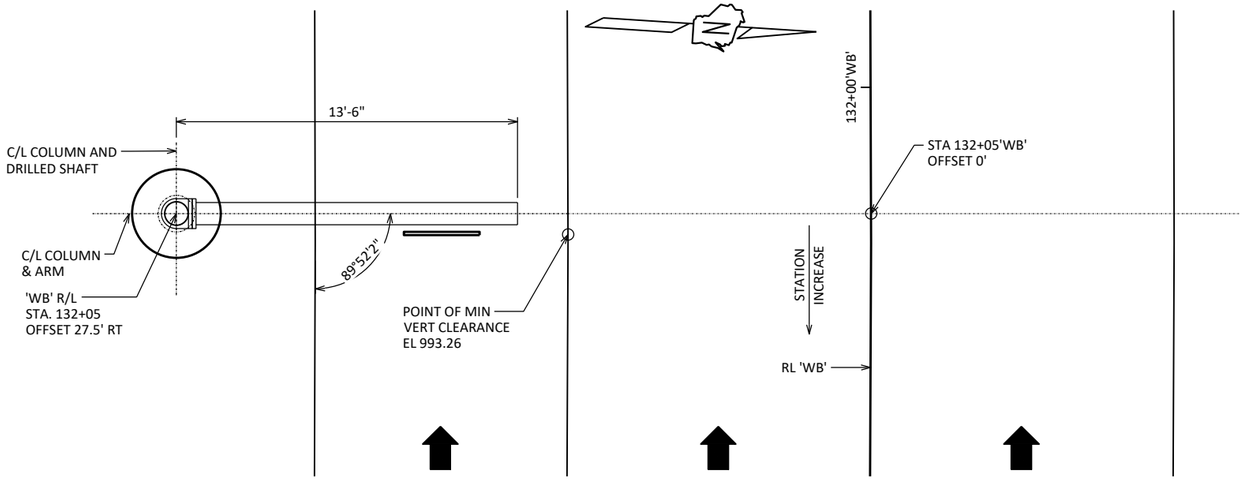
I.D. 6085-02-05 DATE: 08/10/2023

8

8

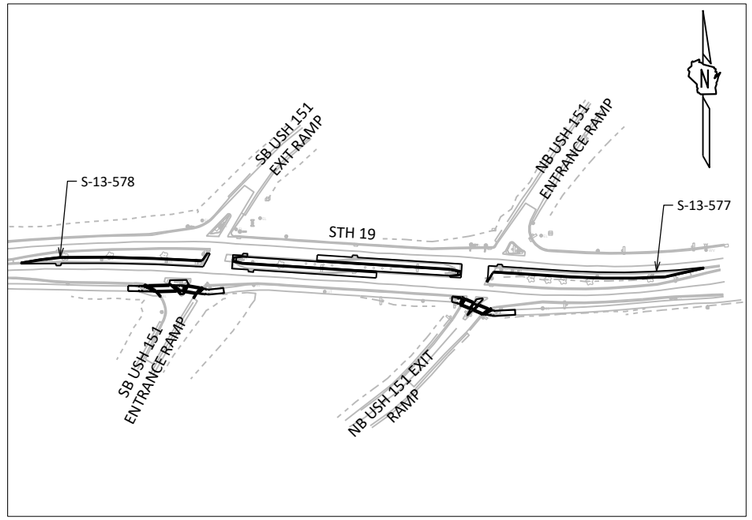
STATE PROJECT NUMBER

6085-02-75

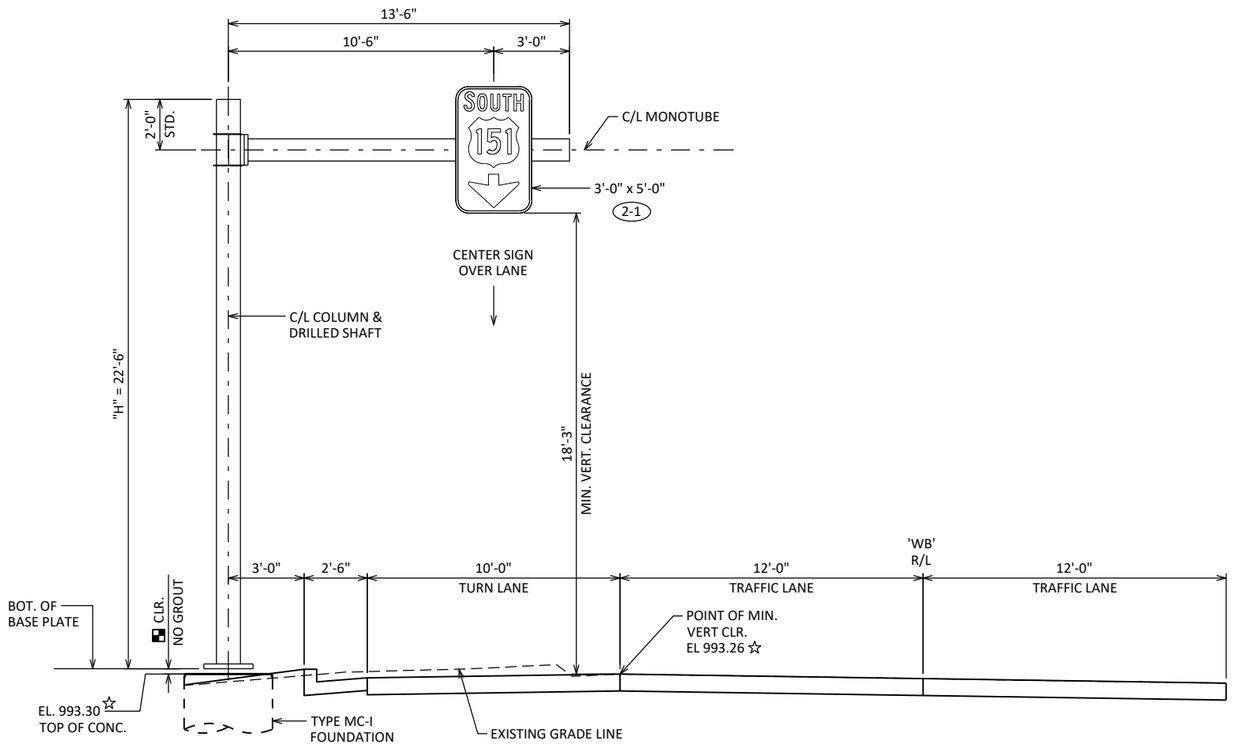


PLAN

STA. 132+05 (WB STH 19)
WB LEFT TURN LANE TO SB USH 151



LOCATION MAP



ELEVATION

LOOKING DOWNSTATION AT F.F. OF SIGN

LEGEND

☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

■ STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-0577

DRAWN BY	KGC	PLANS CK'D	BAP

LAYOUT

SHEET 2 OF 3
149

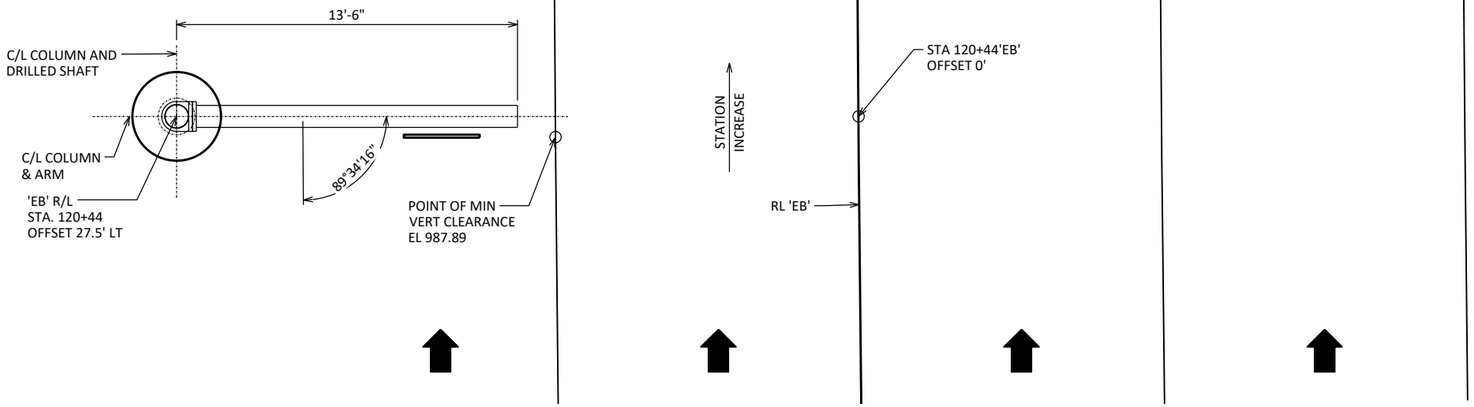
SCALE = NTS

8

8

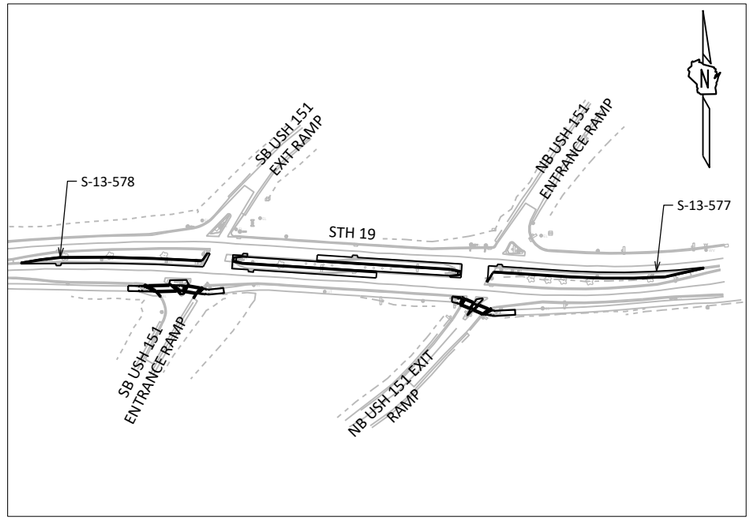
STATE PROJECT NUMBER

6085-02-75

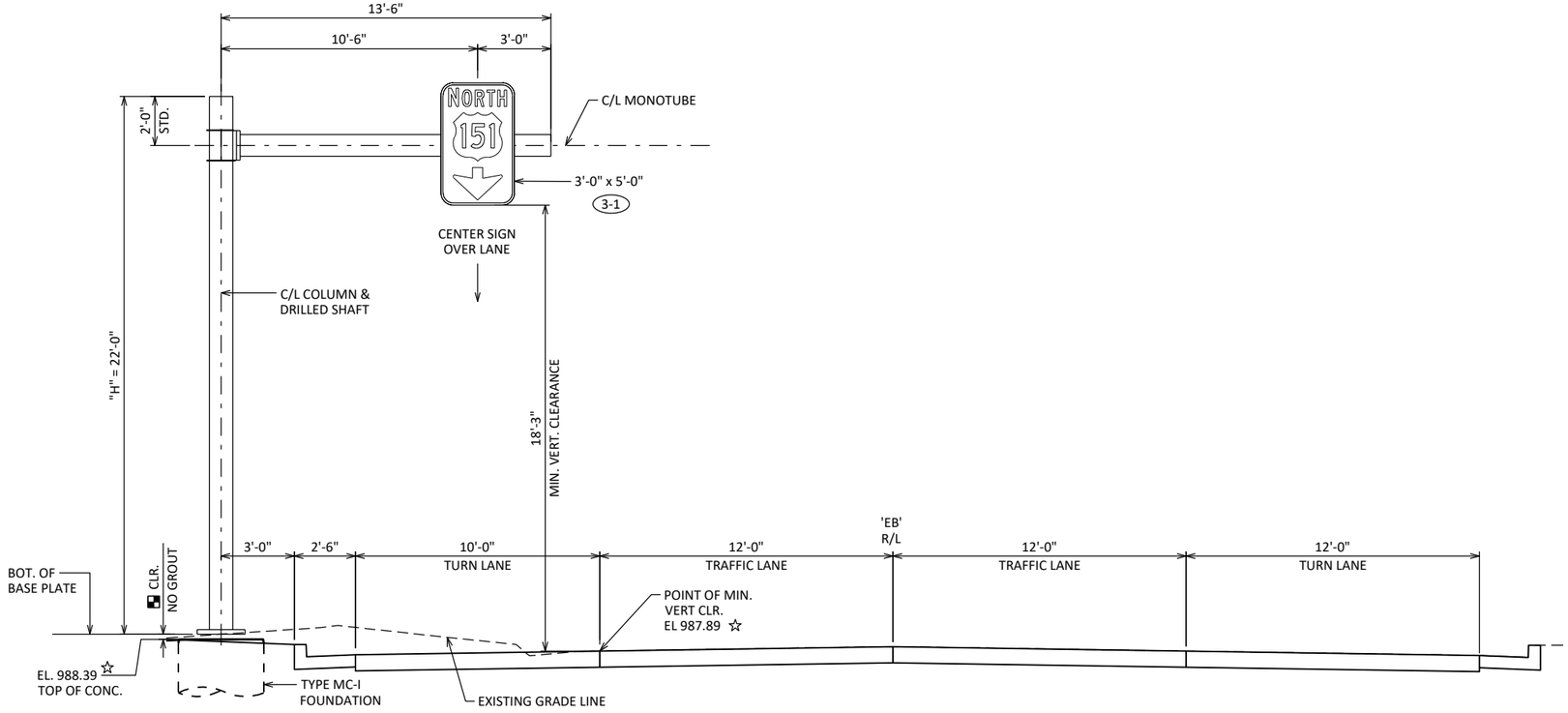


PLAN

STA. 120+44 (EB STH 19)
EB LEFT TURN LANE TO NB USH 151



LOCATION MAP



ELEVATION

LOOKING UPSTATION AT F.F. OF SIGN

LEGEND

☆ ELEVATIONS GIVEN ALONG C/L STRUCTURE

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN

▪ STANDOFF DIMENSION IS ASSUMED TO BE 2½", BUT IS A MAX. OF 2 x ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-0578

DRAWN BY	KGC	PLANS CK'D	BAP

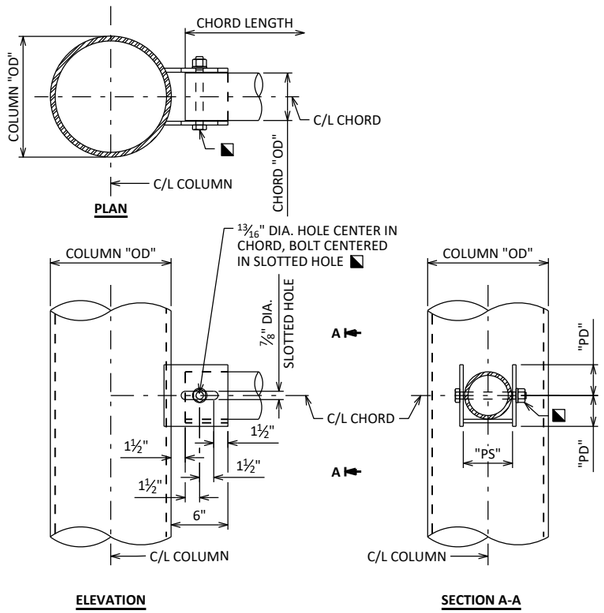
LAYOUT

SHEET 3 OF 3
150

SCALE = NTS

8

8



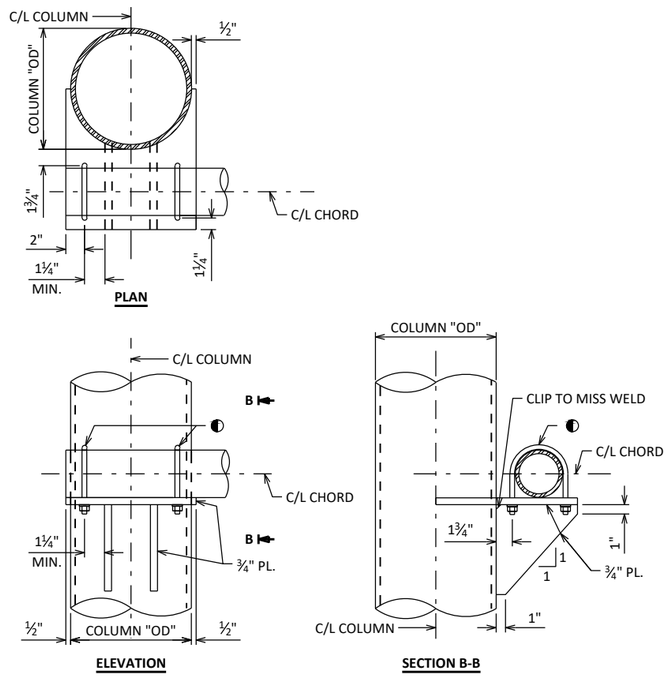
FULL SPAN SADDLE CONNECTION

PREFERRED OPTION

◪ ¾" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT AND WASHER SNUG TIGHT ONLY, DO NOT OVER TIGHTEN

"PD" = CHORD "OD"/2 + ¾"

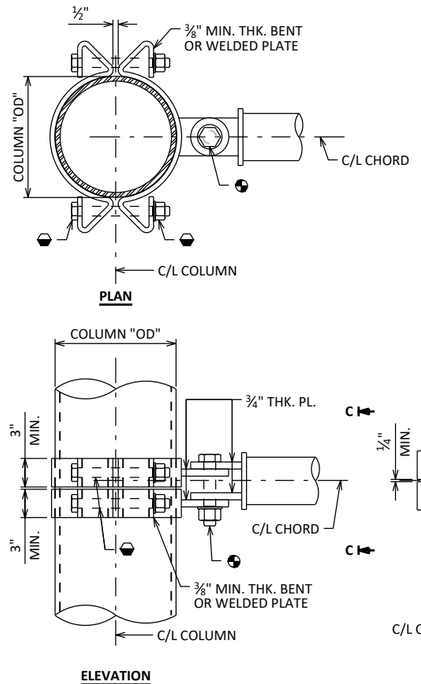
"PS" = CHORD "OD" + 1/16"



FULL SPAN STIFFENED BEARING CONNECTION

ALTERNATE 1

◐ MIN. (2) ½" MIN. GALVANIZED OR STAINLESS U-BOLT, LOCK NUT AND WASHER

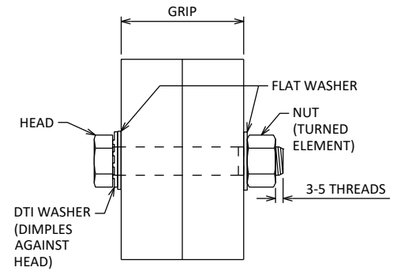


FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY

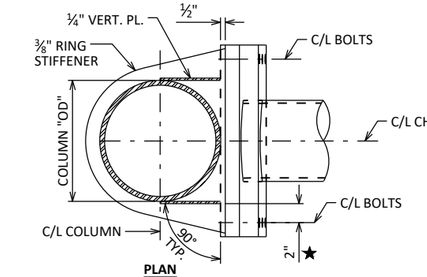
◓ 1¼" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

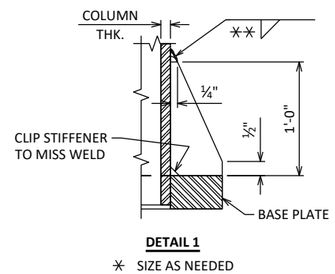
◒ 1" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER

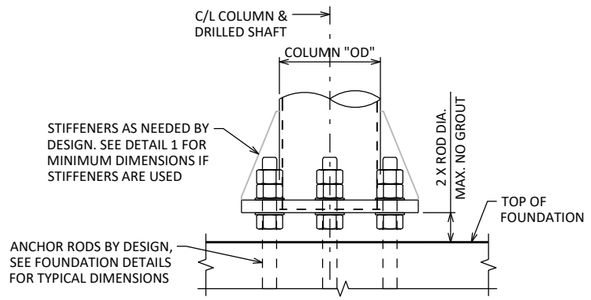


RECOMMENDED BOLT DETAIL WITH DTI WASHER

NUT IS TURNED ELEMENT

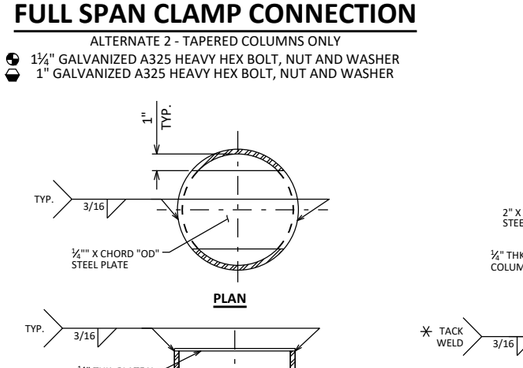






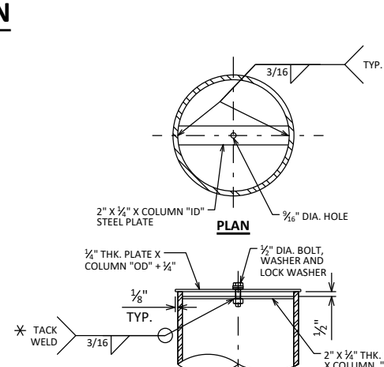
PREFERRED BASE PLATE CONNECTION

LOOKING AT F.F. OF STRUCTURE.
ALTERNATE BASE PLATE DESIGNS ALLOWED.



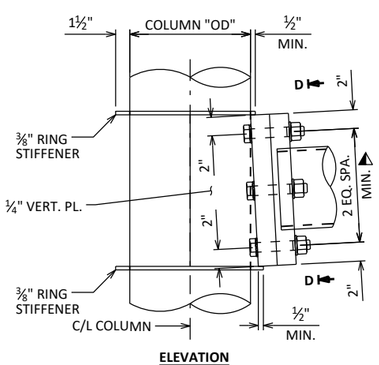
CHORD CAP DETAIL

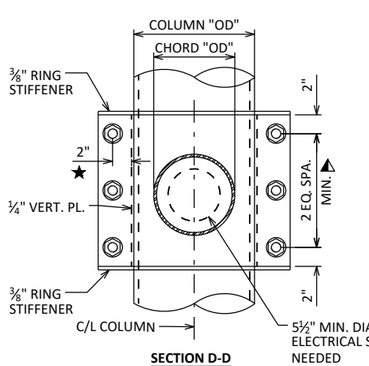
CANTILEVERS ONLY



TOWER CAP DETAIL

✳ PLACE TACK WELD EVERY OTHER FLAT TO SECURE NUT.
ALTERNATE: USE ½" THK. PL. AND DRILL AND TAP HOLE FOR BOLT.

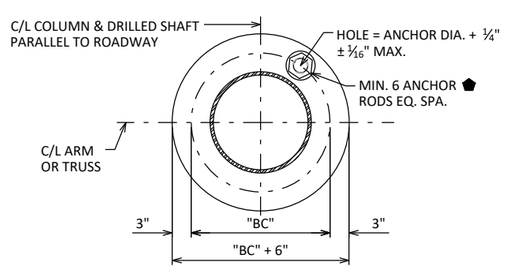




CANTILEVER POST TO CHORD CONNECTION

◭ MIN. (6) 1" GALVANIZED A325 HEAVY HEX BOLT, NUT, DTI WASHER AND WASHER

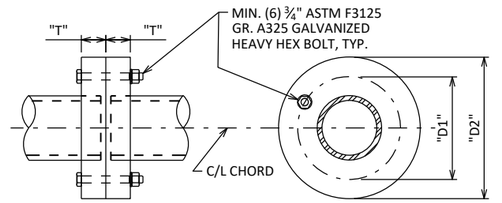
★ MIN. DIMENSIONS MEASURED FROM EXT. FACE OF VERTICAL PLATE.



BASE PLATE

"BC" = COLUMN "OD" + 6"

⬟ ANCHOR SIZE AND ORIENTATION TO BE VERIFIED WITH SHOP DRAWINGS.



CHORD SPLICE DETAIL

"D1" = COLUMN "OD" + (1.5 x DB)
"D2" = COLUMN "OD" + (3 x DB)
"T" = (BY DESIGN)
DB = BOLT DIAMETER (BY DESIGN)

NOTES:

MINIMUM VALUES SHOWN. ALL CONNECTIONS ARE TO BE DESIGNED FOR ACTUAL STRUCTURAL LOADS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 1

SHEET 151

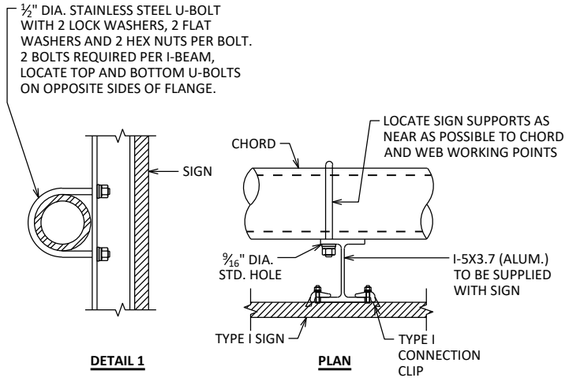
SCALE = 2.0

8

8

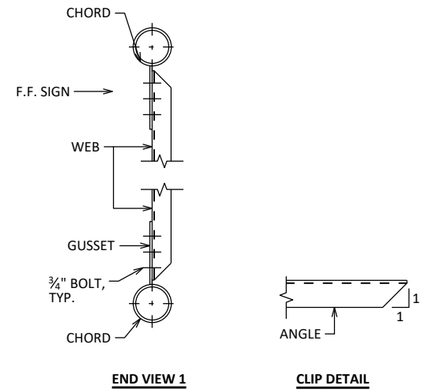
STATE PROJECT NUMBER

STANDARD



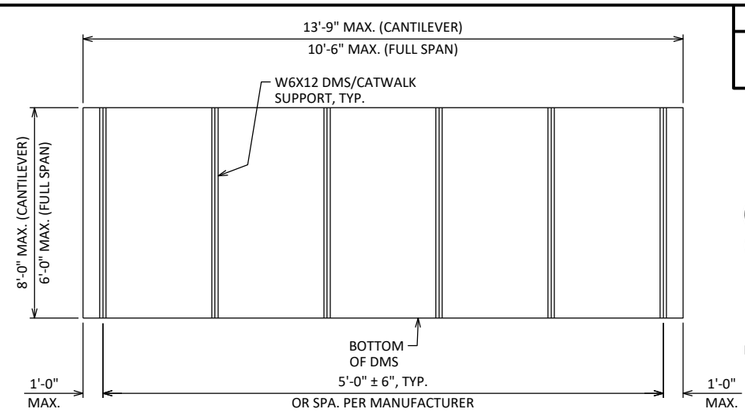
2-CHORD TRUSS SIGN CONNECTION

TYPE I SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7BFOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



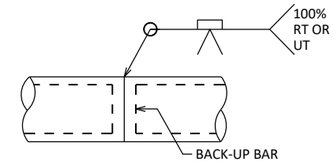
TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR



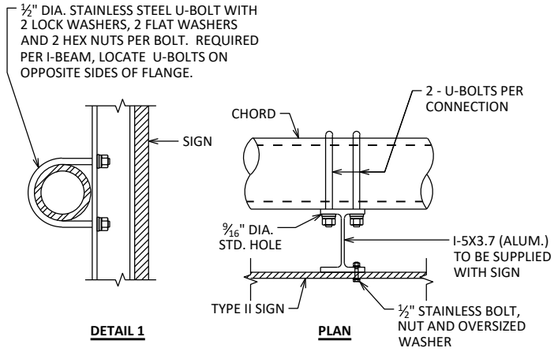
DMS MOUNTING POST DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.



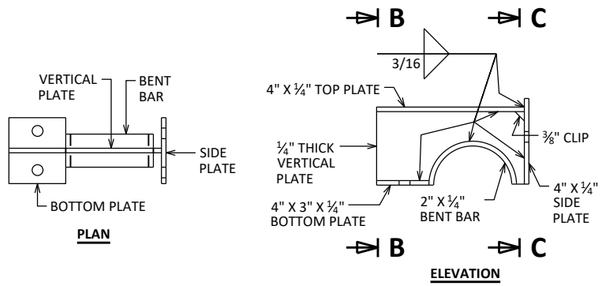
CHORD SPLICE

SEPARATE OPTIONAL SPLICE FROM GUSSET PLATES BY 6" MIN.



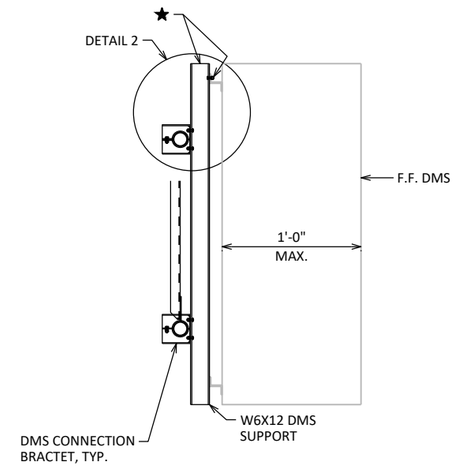
MONOTUBE SIGN CONNECTION

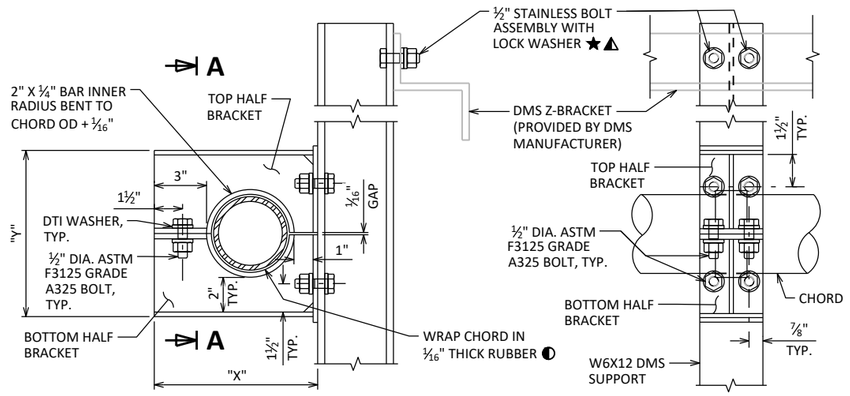
TYPE II SIGN PANEL SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH SIGN PANEL, HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



DMS WELDED PLATE CONNECTION DETAILS

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.





CHORD "OD"	"X"	"Y"
"OD"	"OD" + $4\frac{13}{16}$"	"OD" + $5\frac{5}{16}$"

SECTION THRU TRUSS - DMS

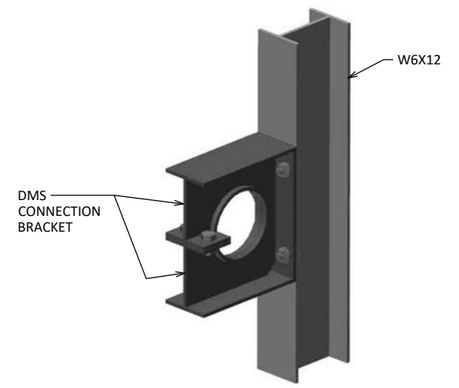
FOR DMS/CATWALK CONNECTIONS

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12

TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1

⚠ IF DMS CONNECTION BRACKET IS USED WITH A TYPE II SIGN PANEL, THE BOLT HOLE MUST BE GALVANIZED AND A STAINLESS WASHER USED BETWEEN THE I-BEAM AND SIGN PANEL.



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

MONOTUBE & 2-CHORD TRUSS CONNECTIONS 2

SHEET II
152

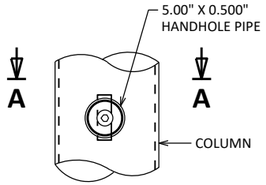
SCALE = 4.0

8

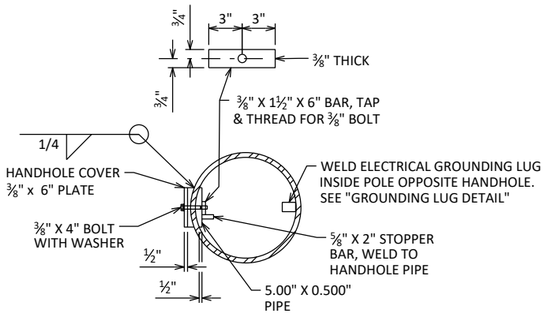
8

STATE PROJECT NUMBER

STANDARD



ELEVATION

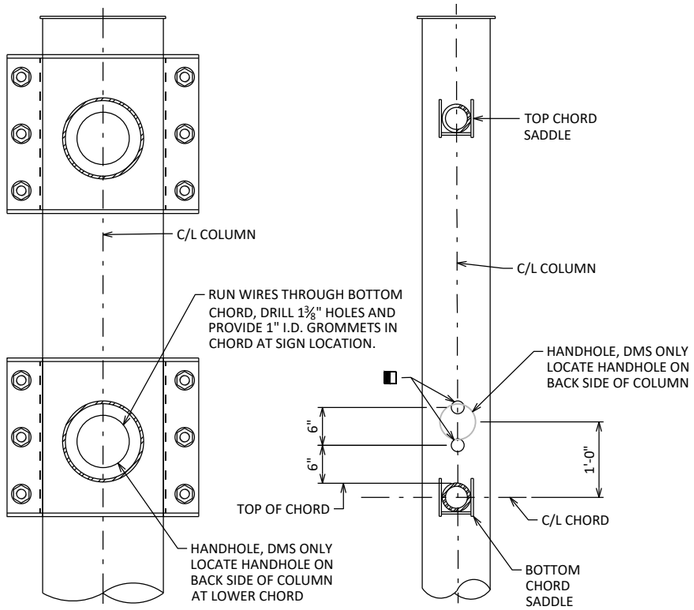


SECTION A-A

HANDHOLE DETAILS

HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



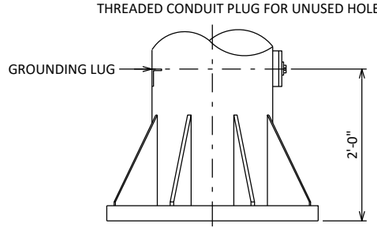
2-CHORD CANTILEVER

2-CHORD FULL SPAN

SADDLE CONNECTION SHOWN, OTHERS SIMILAR

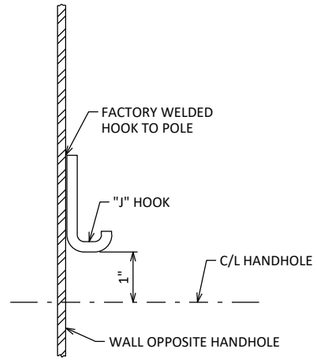
CONDUIT HOLE LOCATIONS

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



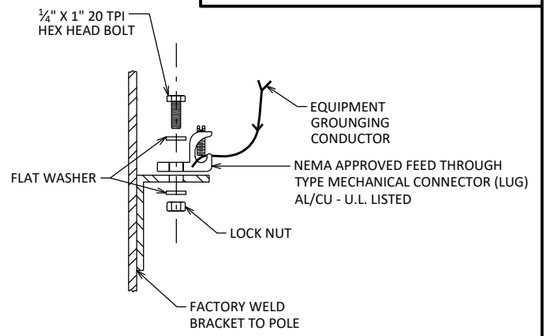
GROUNDING LUG LOCATION

LOOKING AT THE F.F. OF STRUCTURE



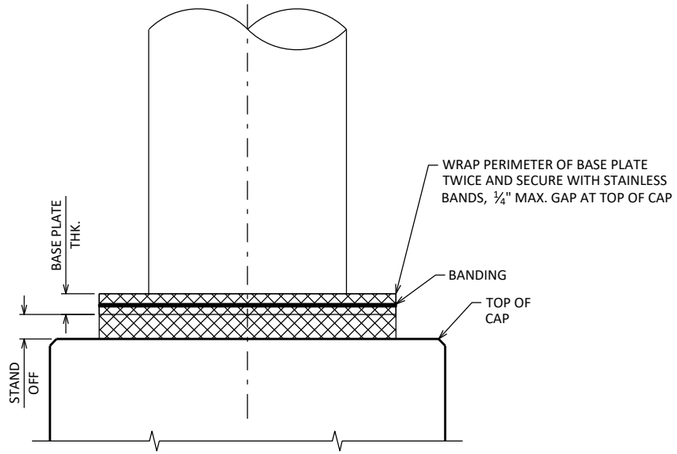
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF THE COLUMN CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



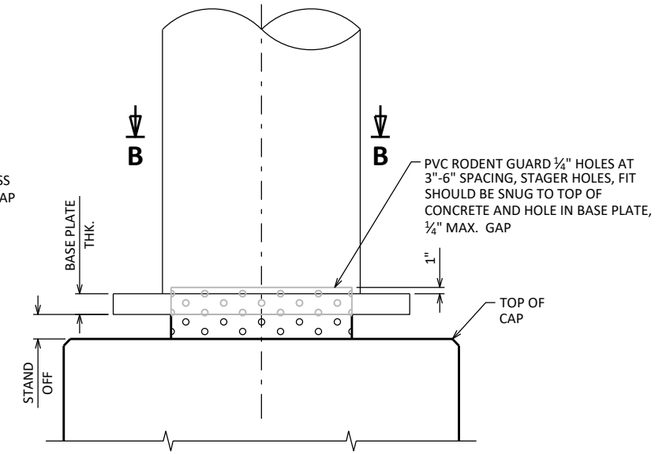
GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



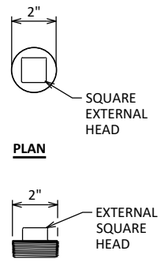
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



RODENT SCREEN - ALTERNATE

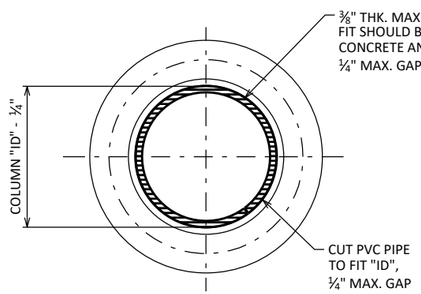
ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



PLAN

ELEVATION

CONDUIT PLUG DETAILS



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

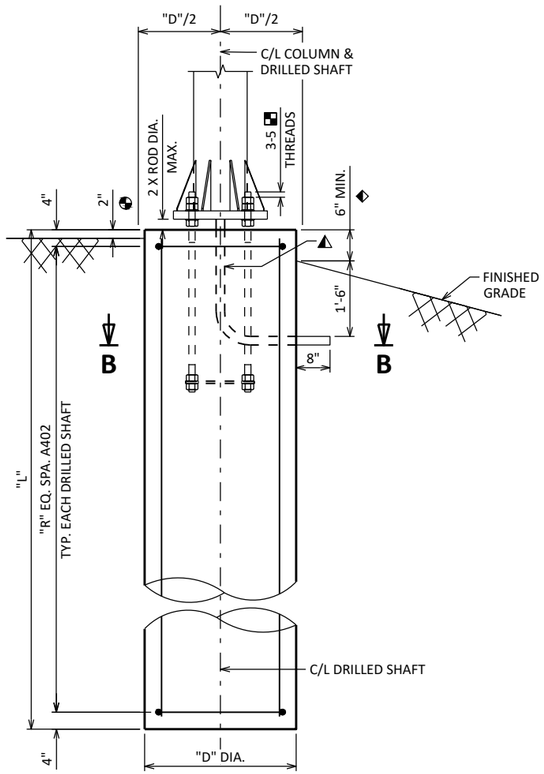
MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS

SHEET III
153

SCALE = 2.0

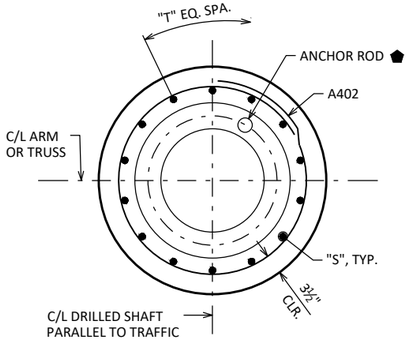
8

8



ELEVATION

- TYPICAL FOR DRILLED SHAFT FOOTINGS INSTALLED ADJACENT TO SIDEWALKS OR BEHIND CURB AND GUTTER ON LOW SPEED ROADS. TOP OF SHAFT SHALL BE FLUSH IF SURROUNDED BY CONCRETE AND 2" ABOVE FINISHED GRADE FOR ALL OTHER SURFACES.
- TYPICAL FOR EACH DRILLED SHAFT FOOTING INSTALLED ADJACENT TO ROADWAY FACILITIES OR ON SIDE SLOPES WITHIN CLEAR ZONE. BARRIER OR BEAMGUARD MAY BE REQUIRED.



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

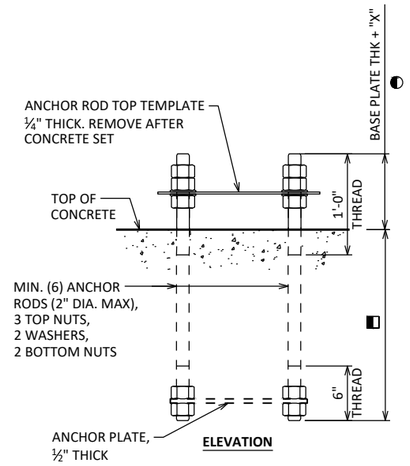
FOUNDATION DIMENSION DATA

STANDARD DESIGN TYPE	FOUNDATION DIMENSIONS					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX.
MFI	2'-0"	12'-0"	12	A801	6	1'-0"
MFII	2'-6"	13'-0"	13	A801	10	1'-5"
MCI/MCII/TFI	2'-6"	17'-0"	17	A801	10	1'-5"
TCI	3'-0"	18'-0"	18	A801	14	1'-10"
TFII	3'-0"	20'-0"	20	A801	14	1'-10"
MCIII/TCII/TFIII	3'-6"	18'-0"	18	A901	14	2'-4"
MCIV/TFIV	3'-6"	23'-0"	23	A901	14	2'-4"
TCIII	4'-0"	23'-0"	23	A1001	14	2'-10"
TCIV	4'-0"	28'-0"	28	A1001	14	2'-10"

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	FOUNDATION DRILLING (DIA.) (LF)				
	(CY)	(LBS)	24"	30"	36"	42"	48
MFI	2	240	12	---	---	---	---
MFII	3	410	88	13	---	---	---
MCI/MCII/TFI	4	540	---	17	---	---	---
TCI	5	780	---	---	18	---	---
TFII	6	860	---	---	20	---	---
MCIII/TCII/TFIII	7	970	---	---	---	18	---
MCIV/TFIV	9	1,250	---	---	---	23	---
TCIII	11	1,560	---	---	---	---	23
TCIV	13	1,900	---	---	---	---	28

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON A SINGLE DRILLED SHAFT. MULTIPLY BY 2 FOR FULL SPAN STRUCTURES.



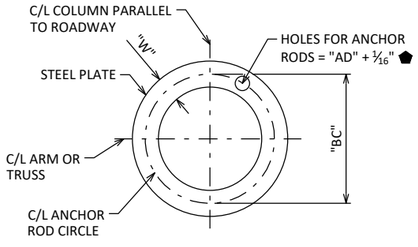
ANCHOR ROD ASSEMBLY DETAILS

◧ ANCHOR RODS PER ASSEMBLY TO BE DESIGNED BY CONTRACTOR AND SHOWN ON SHOP DRAWINGS. SHOW DIAMETER, NUMBER, ORIENTATION AND EMBEDMENT OF ANCHOR RODS.

CENTER ANCHOR ROD ASSEMBLY AND ENSURE ASSEMBLY IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

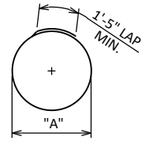
ANCHOR DIAMETER	MAX. STICK OUT ◐
	"X"
1"	5"
1¼"	6"
1½"	7"
1¾"	8"
2"	9"

◐ ADD BASE PLATE THICKNESS TO VALUE SHOWN FOR MAX. STICK OUT DIMENSION. CONTRACTOR TO COORDINATE WITH FABRICATOR FOR PROPER ANCHOR PLACEMENT.



ANCHOR PLATE & TOP TEMPLATE

⬟ ANCHOR SIZE AND POSITION TO BE VERIFIED WITH SHOP DRAWINGS.



A402

LEGEND

◩ ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

◭ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BILL OF BARS

STATE PROJECT NUMBER

STANDARD

STANDARD TYPE MFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		6	11'-8"			DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE MFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	12'-8"			DRILLED SHAFT - VERTICAL
A402		14	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCI/MCII/TFI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		10	16'-8"			DRILLED SHAFT - VERTICAL
A402		18	9'-4"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCI

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TFII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	19'-8"			DRILLED SHAFT - VERTICAL
A402		21	10'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIII/TCII/TFIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	17'-8"			DRILLED SHAFT - VERTICAL
A402		19	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPES MCIV/TFIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	12'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIII

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-8"			DRILLED SHAFT - VERTICAL
A402		24	14'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD TYPE TCIV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	27'-8"			DRILLED SHAFT - VERTICAL
A402		29	14'-0"	X		DRILLED SHAFT - HORIZONTAL

✶✶ VALUES IN BAR TABLES ARE FOR A SINGLE FOUNDATION ONLY. MULTIPLY BY 2 FOR FULL ✶✶ SPAN STRUCTURES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JUNE 2023

DRAWN BY BOS | PLANS CK'D BOS

MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

SHEET IV
154

SCALE = 3.0

8

8

DIVISION 1 - STH 19 EB

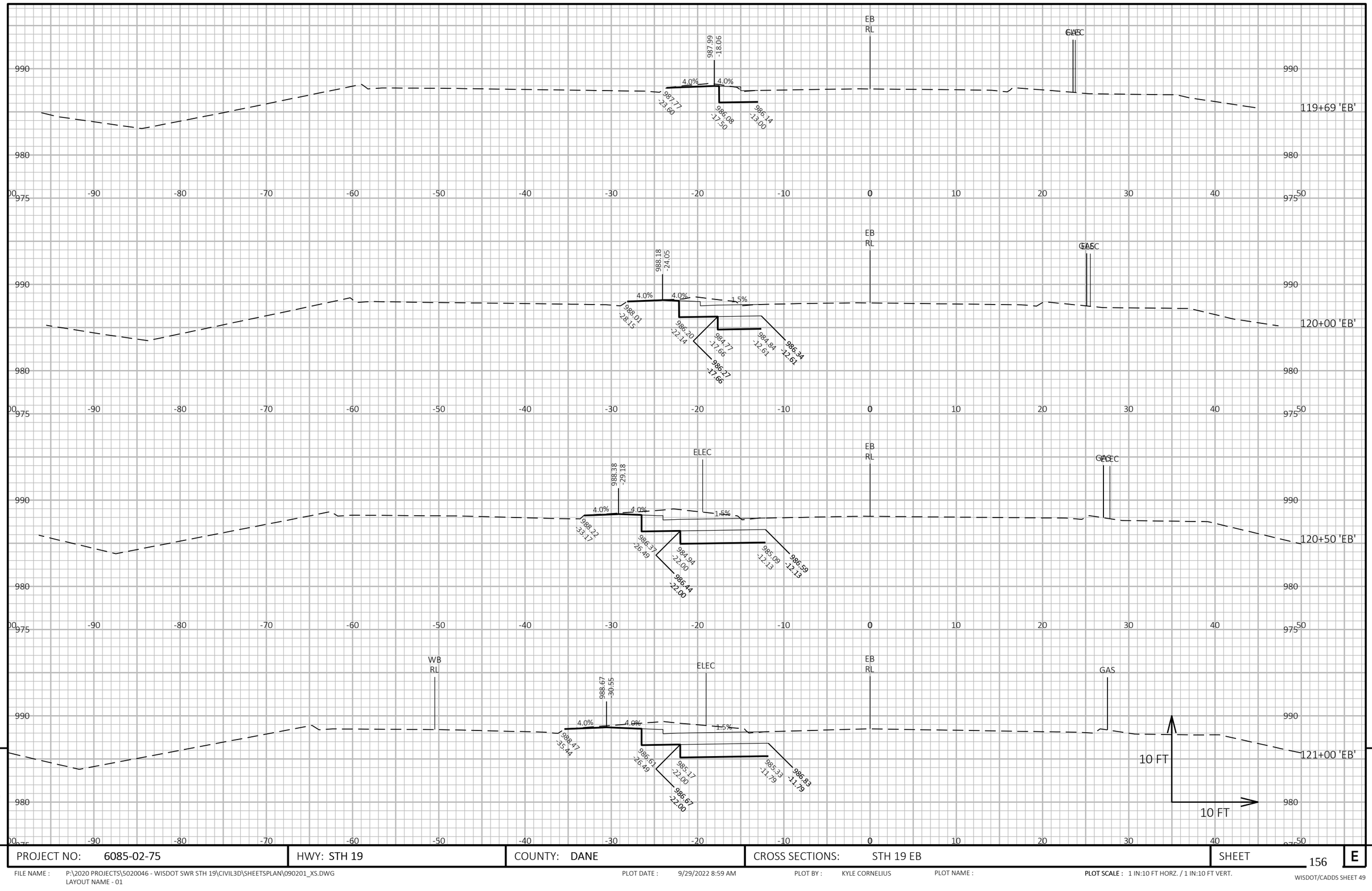
STATION	REAL STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
119+68.85	11968.84	2.71	0.02	0	0	0	0	0
120+00	12000.00	17.98	0.00	12	0	12	0	12
120+50	12050.00	29.82	0.00	44	0	56	0	56
121+00	12100.00	33.19	0.00	58	0	114	0	114
121+50	12150.00	33.80	0.00	62	0	176	0	176
122+00	12200.00	36.19	0.00	65	0	241	0	241
122+50	12250.00	38.54	0.00	69	0	310	0	310
123+00	12300.00	33.87	0.30	67	0	377	0	377
123+14.78	12314.78	24.78	1.33	16	0	393	0	393
123+93.29	12393.29	36.97	0.00	90	2	483	3	481
124+00	12400.00	31.70	0.00	9	0	492	3	490
124+50	12450.00	32.54	0.00	59	0	551	3	549
125+00	12500.00	30.55	0.00	58	0	609	3	607
125+36.73	12536.73	47.41	0.08	53	0	662	3	660
125+50	12550.00	47.54	0.00	23	0	685	3	683
126+00	12600.00	48.47	0.00	89	0	774	3	772
126+50	12650.00	47.68	0.18	89	0	863	3	861

DIVISION 1 - STH 19 WB

STATION	REAL STATION	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT NOTE 1	FILL NOTE 3	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
126+50	12650.00	47.68	0.18	0	0	0	0	0
127+00	12700.00	30.69	0.00	73	0	73	0	73
127+50	12750.00	34.62	0.00	60	0	133	0	133
128+00	12800.00	38.02	0.00	67	0	200	0	200
128+08.26	12808.26	33.67	0.66	11	0	211	0	211
128+80.01	12880.01	24.48	1.57	77	3	288	4	284
129+00	12900.00	28.46	0.88	20	1	308	5	303
129+50	12950.00	27.89	1.74	52	2	360	8	353
130+00	13000.00	27.59	2.29	51	4	411	13	399
130+50	13050.00	24.70	5.72	48	7	459	21	438
131+00	13100.00	23.42	6.71	45	12	504	36	468
131+50	13150.00	24.10	3.76	44	10	548	49	499
132+00	13200.00	23.04	2.61	44	6	592	56	536
132+50	13250.00	12.66	0.98	33	3	625	60	565
132+75.94	13275.94	7.53	0.76	10	1	635	61	574

9

9



9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 156	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 01

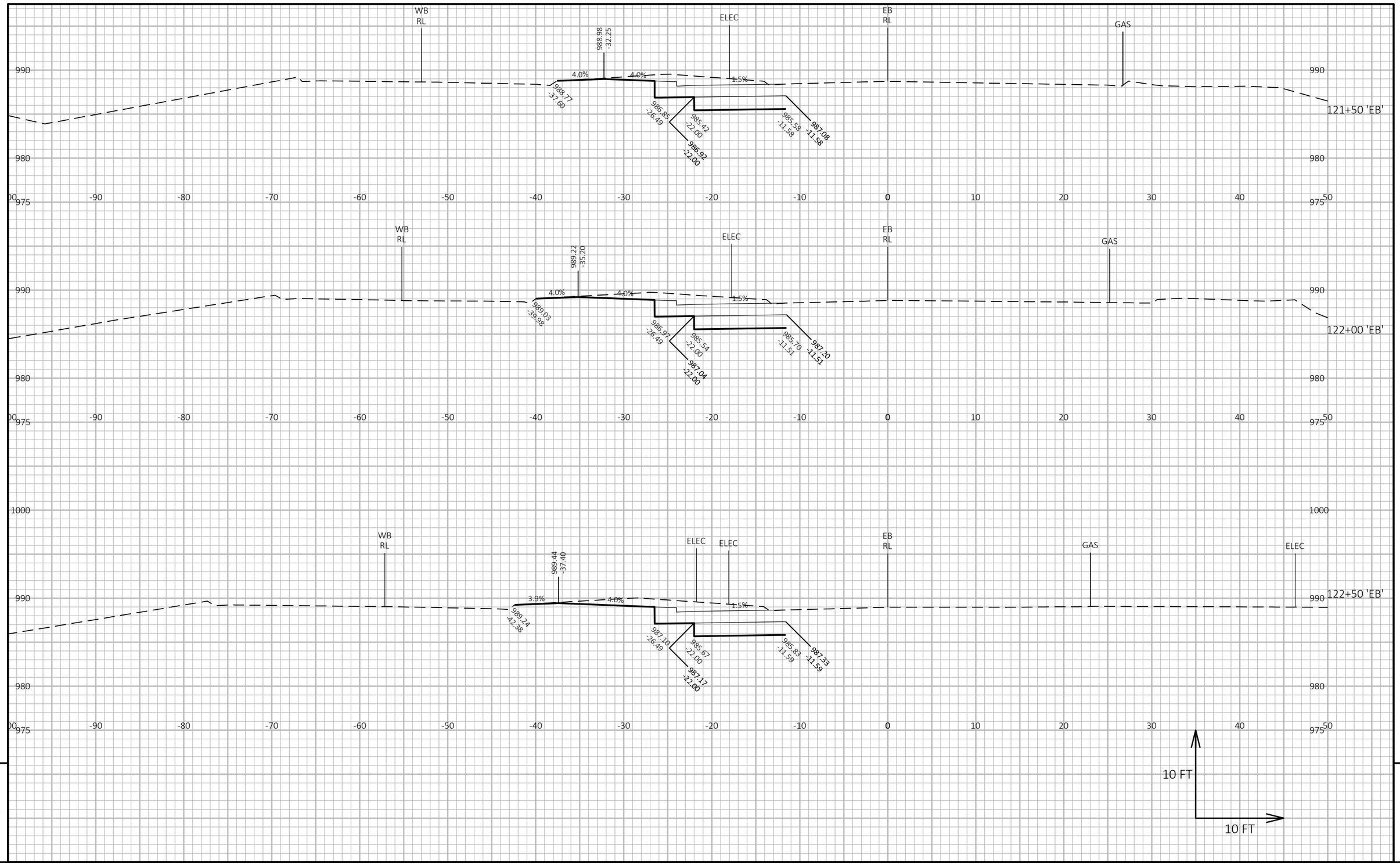
PLOT DATE : 9/29/2022 8:59 AM

PLOT BY : KYLE CORNELIUS

PLOT NAME :

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

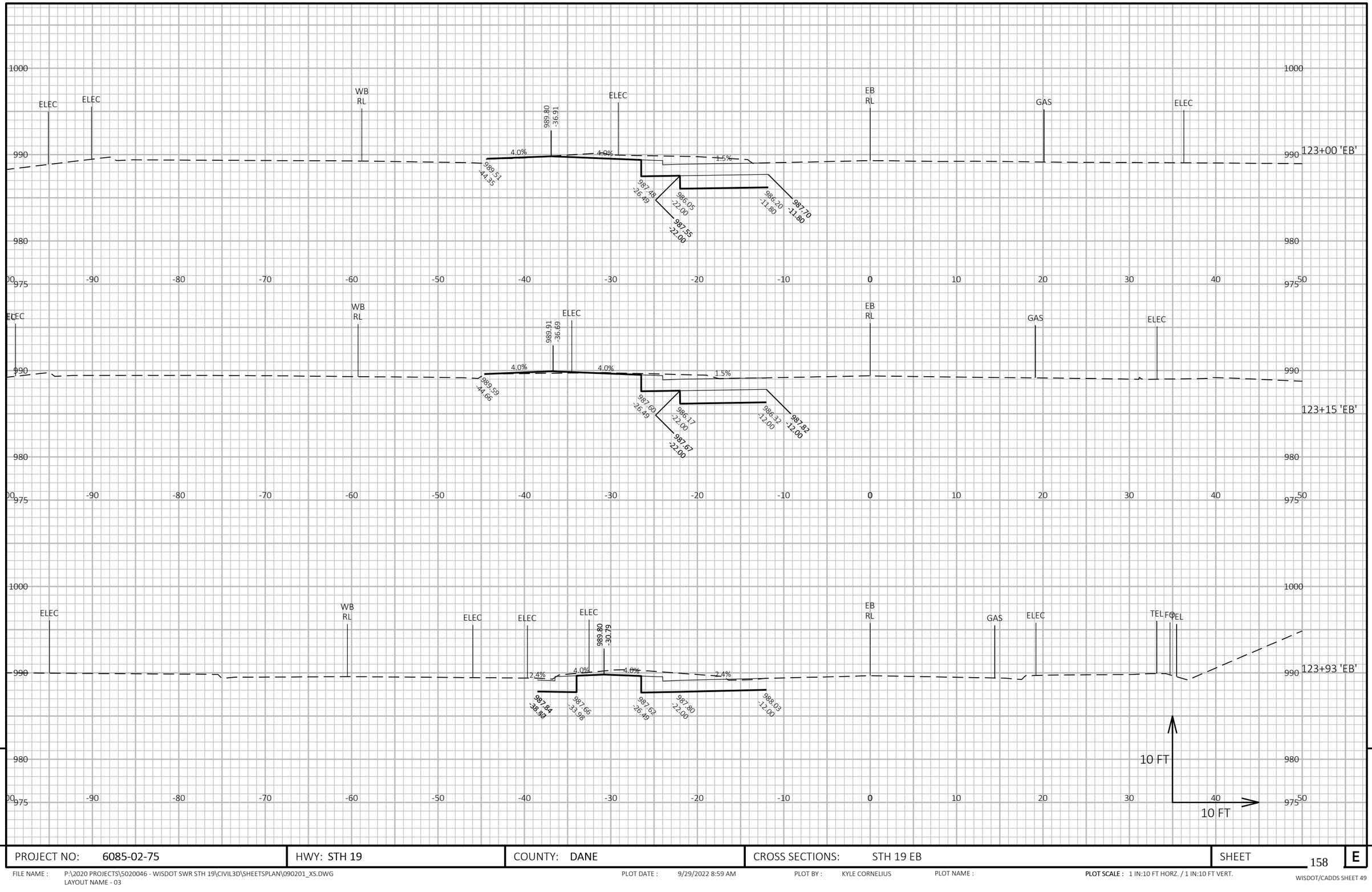
WISDOT/CADDS SHEET 49



PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 157 E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 02

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 158	E

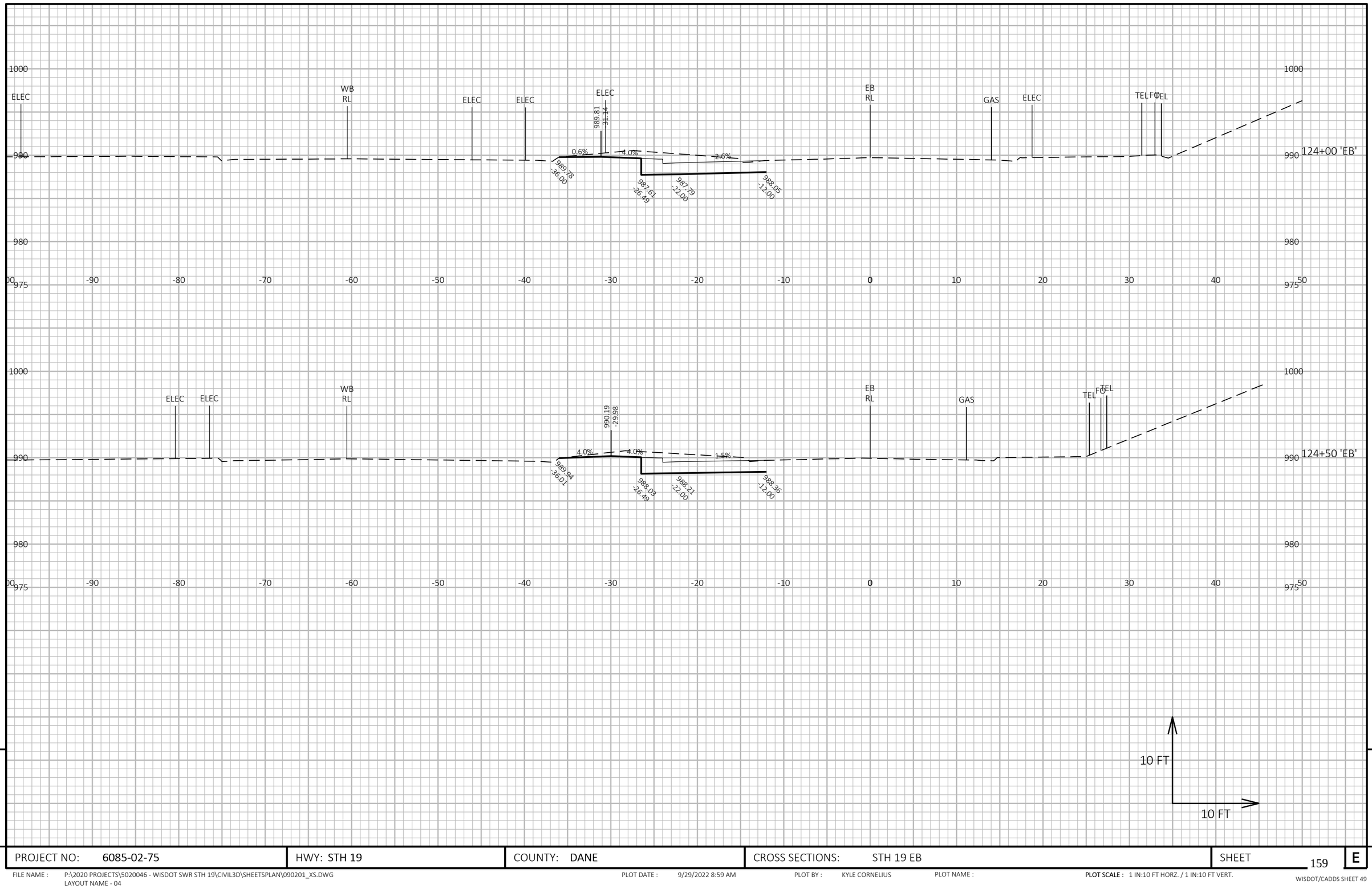
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 03

PLOT DATE : 9/29/2022 8:59 AM

PLOT BY : KYLE CORNELIUS

PLOT NAME :

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



9

9

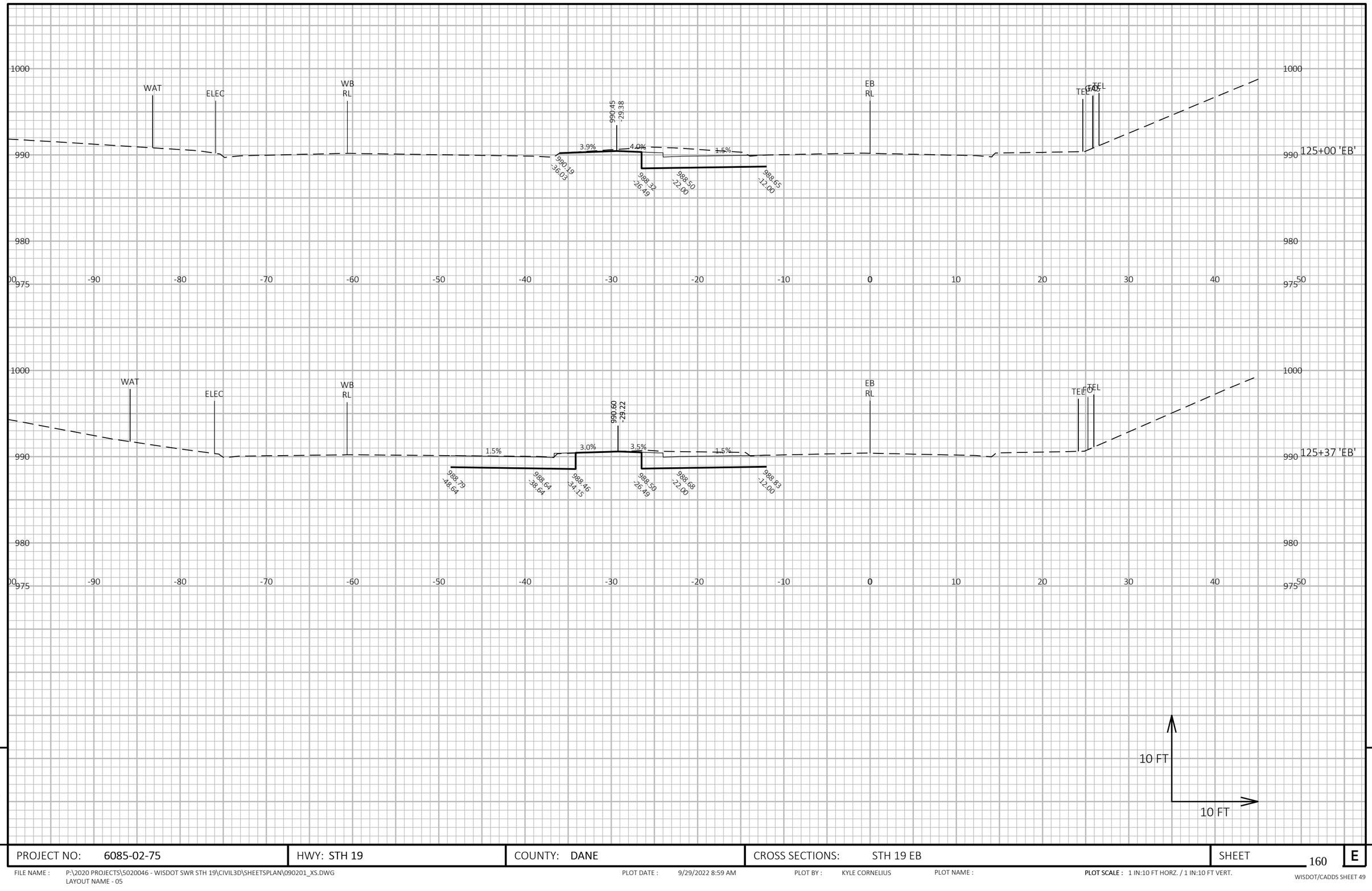
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 159	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME :

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

WISDOT/CADDS SHEET 49



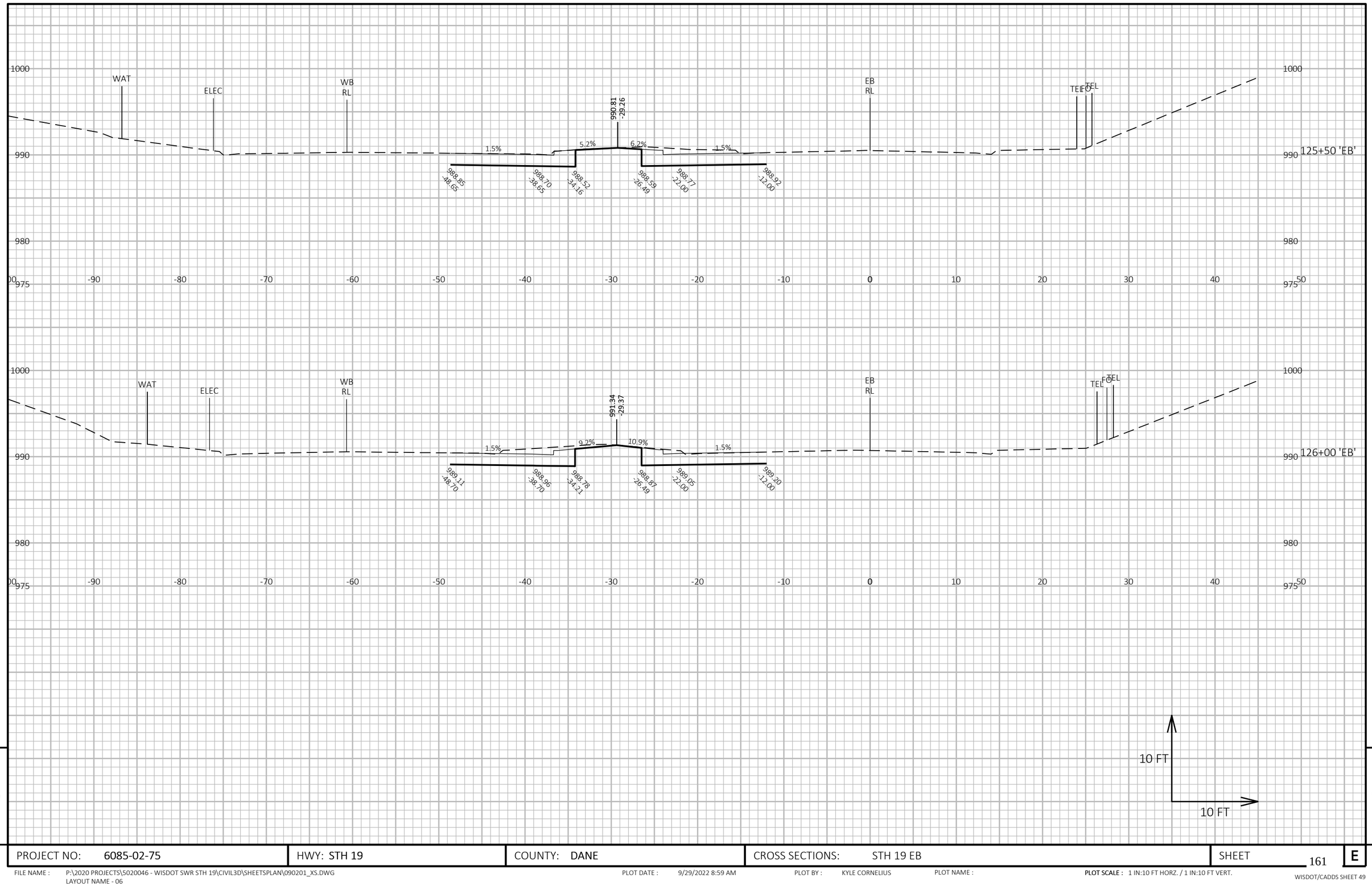
9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 160	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 05

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

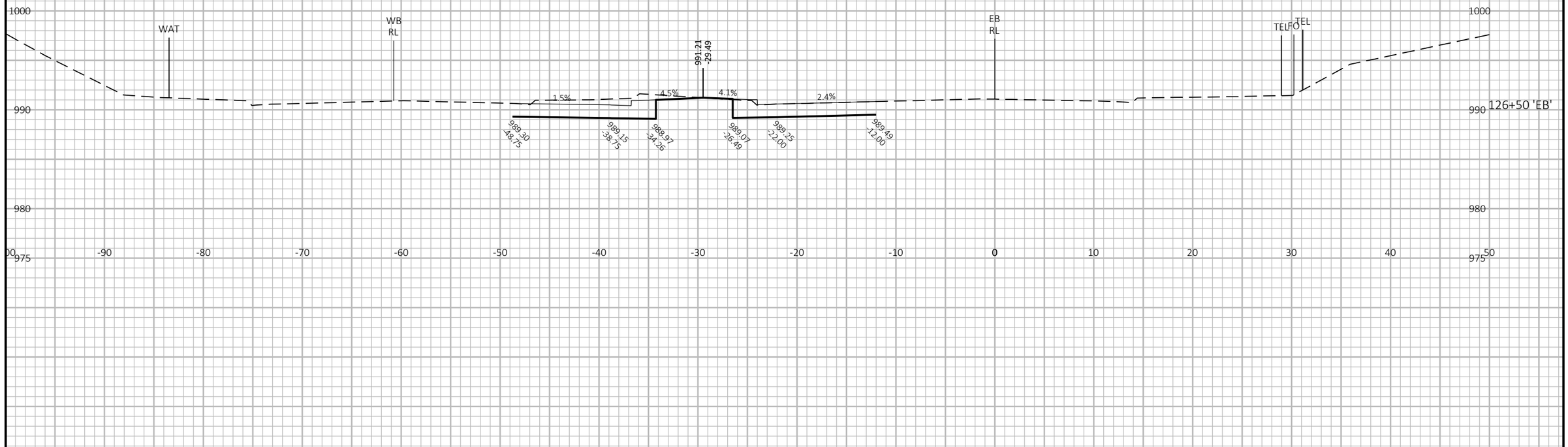
9

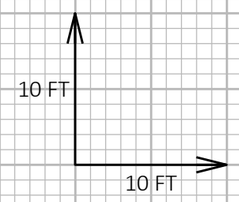
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 161	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 06

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME :

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





9

9

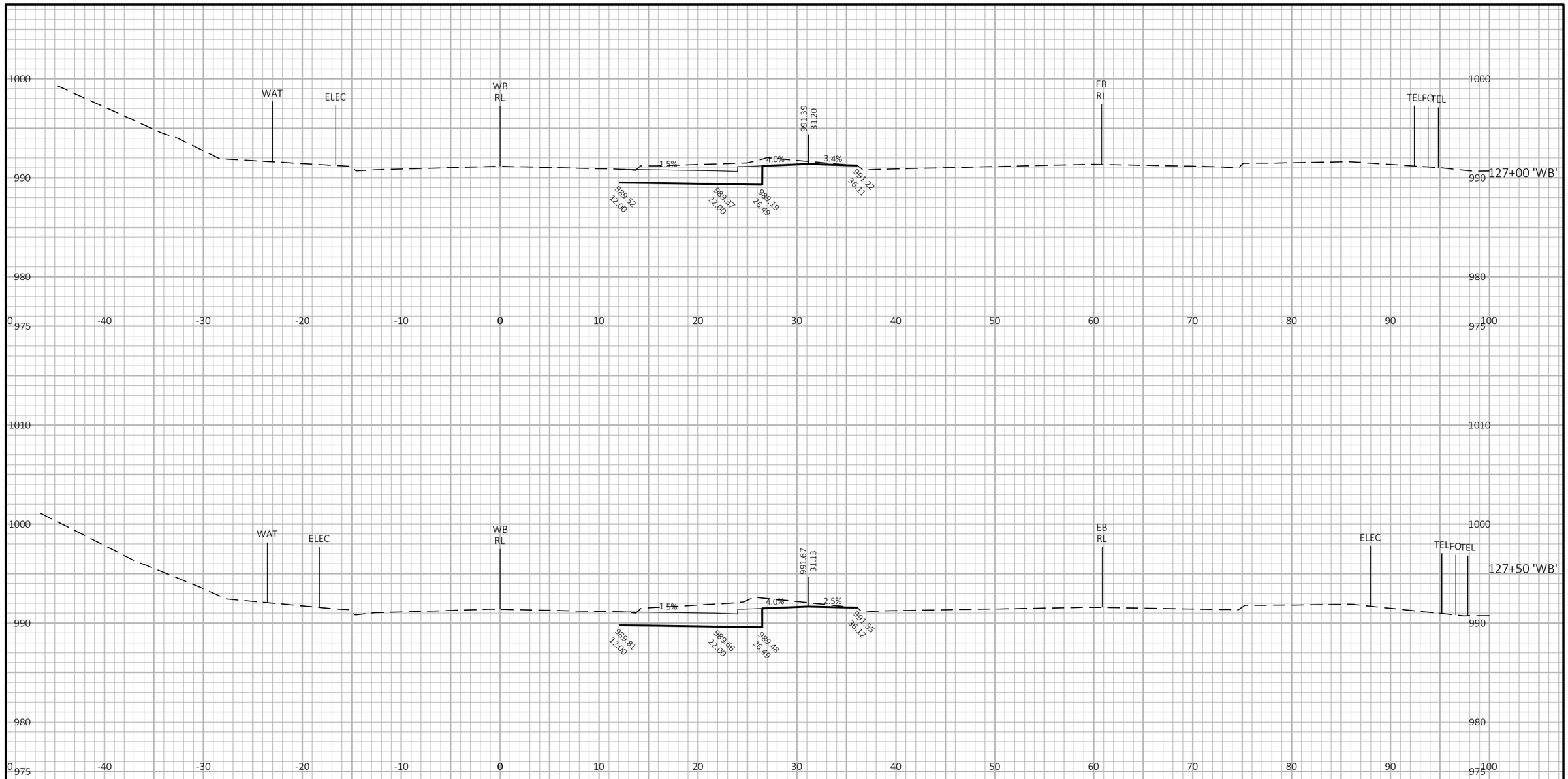
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 EB	SHEET 162	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 07

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 WB	SHEET 163	E

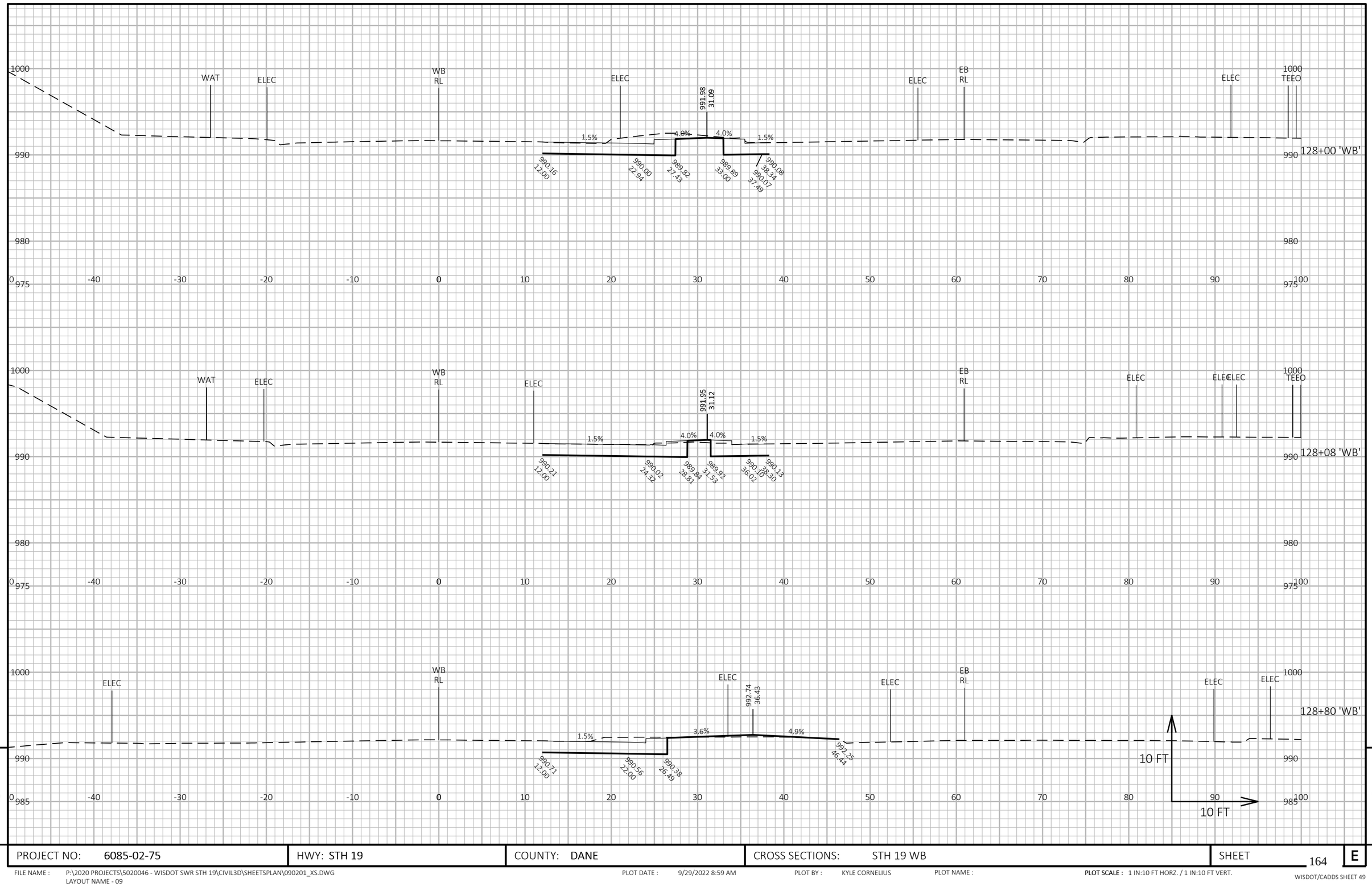
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 9/29/2022 8:59 AM

PLOT BY : KYLE CORNELIUS

PLOT NAME :

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



9

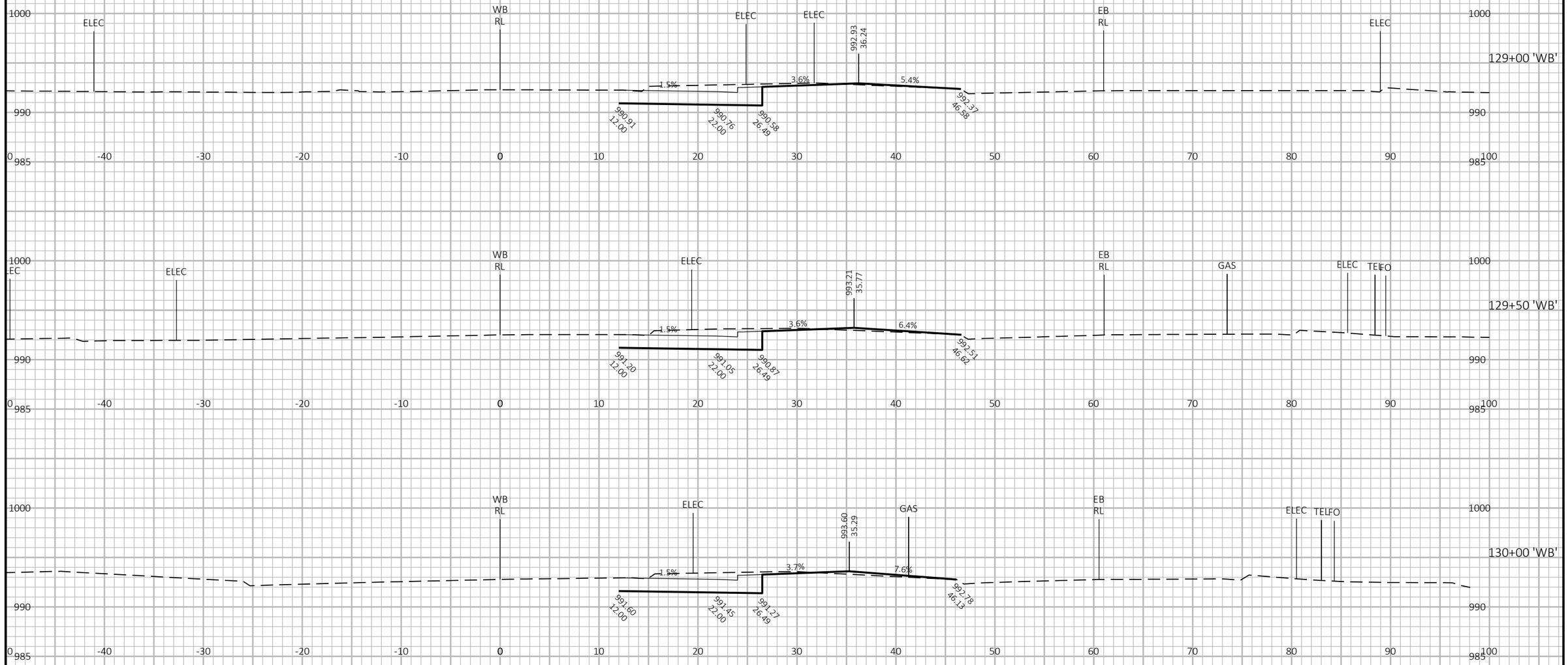
9

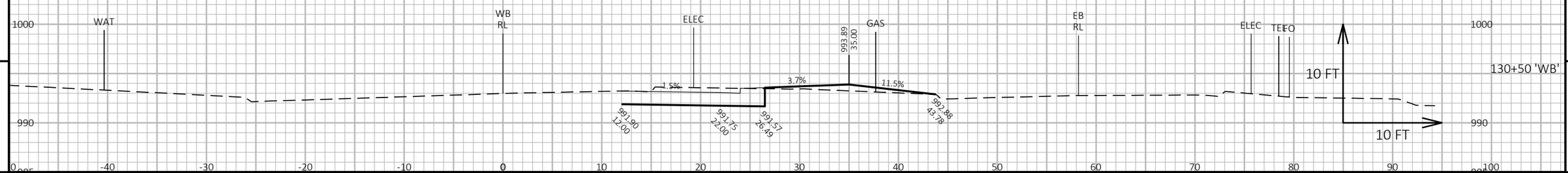
PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 WB	SHEET 164	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 WB	SHEET 165	E

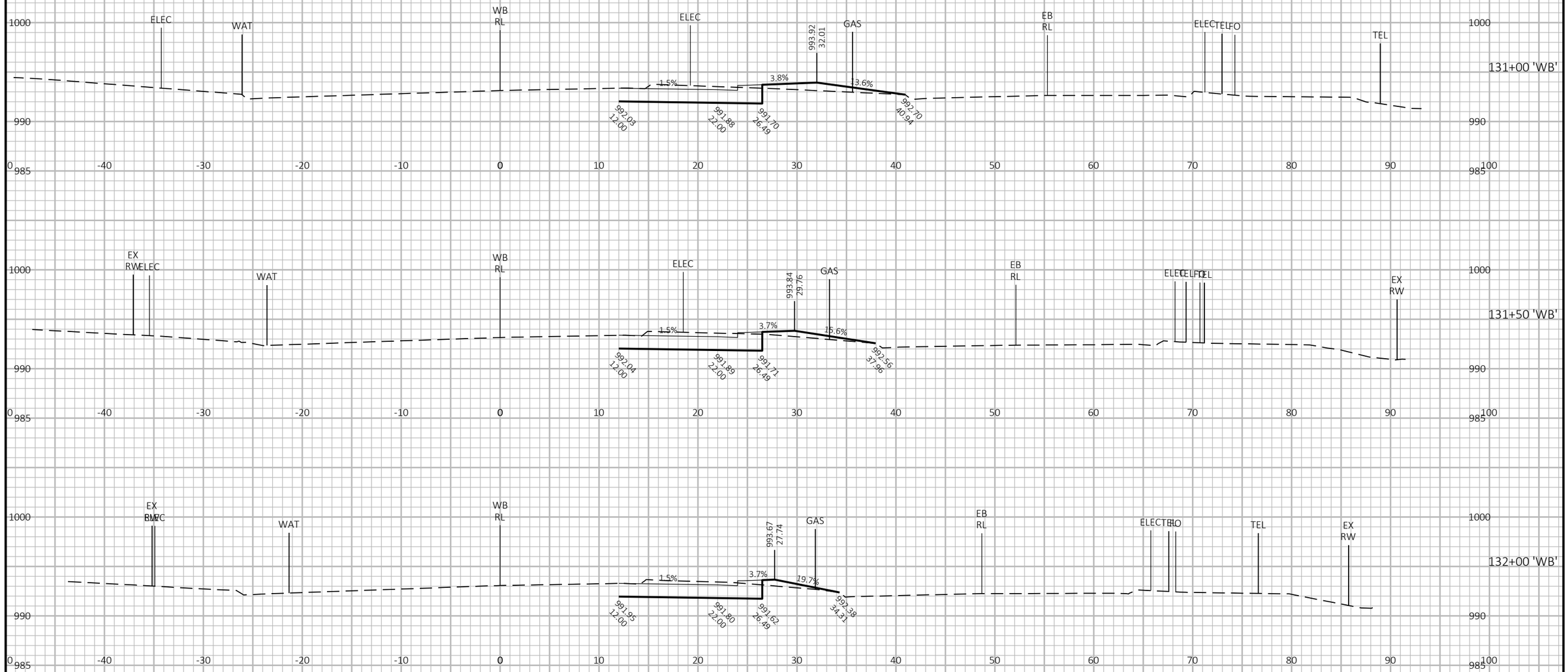
FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 9/29/2022 8:59 AM

PLOT BY : KYLE CORNELIUS

PLOT NAME :

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



9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 WB	SHEET 166	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 11

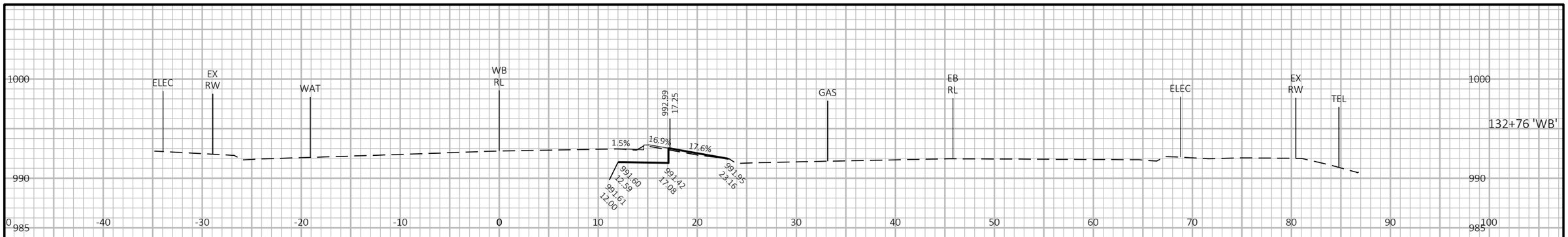
PLOT DATE : 9/29/2022 8:59 AM

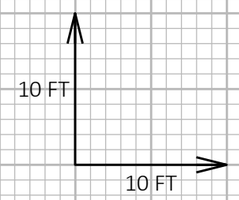
PLOT BY : KYLE CORNELIUS

PLOT NAME :

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

WISDOT/CADDS SHEET 49





9

9

PROJECT NO: 6085-02-75	HWY: STH 19	COUNTY: DANE	CROSS SECTIONS: STH 19 WB	SHEET 167	E

FILE NAME : P:\2020 PROJECTS\5020046 - WISDOT SWR STH 19\CIVIL3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 9/29/2022 8:59 AM PLOT BY : KYLE CORNELIUS PLOT NAME :

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

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

MAD NOVEMBER 2023

PROJECT ID: 6085-02-77

WITH: 6085-02-75

COUNTY: DANE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (INCLUDES EROSION CONTROL)
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 = 184



14

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C SUN PRAIRIE, WINDSOR STREET

N THOMPSON RD INTR; DAVISON DR INTR

STH 19

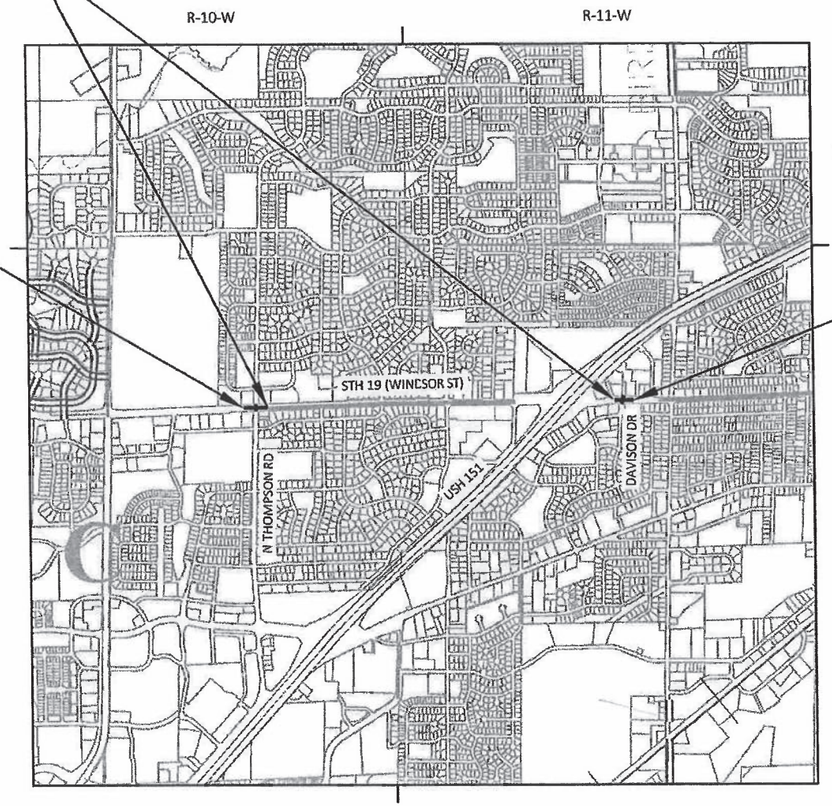
DANE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6085-02-77	WISC 2023359	1

STATE PROJECT NUMBER

6085-02-77

EXCEPTION TO NET CL LENGTH
STA. 112+36.63 TO STA. 206+16.58



TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

DESIGN DESIGNATION

A.A.D.T.	(2018)	=	16,800
A.A.D.T.	(2043)	=	18,900
D.H.V.		=	1,512
D.D.		=	55/45
T.		=	9.9%
DESIGN SPEED		=	40 MPH
ESALS		=	NA

CONVENTIONAL SYMBOLS

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

ACCEPTED FOR
CITY OF SUN PRAIRIE

SIGNATURE:

TITLE: Director of Public Services

DATE: 7-18-23

ORIGINAL PLANS PREPARED BY

STRAND ASSOCIATES®
910 WEST WINGRA DRIVE
MADISON, WISCONSIN 53715
(608) 251-4843

WISCONSIN
KYLE R. HENDERSON
E-42361
MADISON
WI
PROFESSIONAL ENGINEER

7-18-23

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	STRAND ASSOCIATES, INC.
Designer	STRAND ASSOCIATES, INC.
Project Manager	DAVID SCHMIDT, P.E.
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	JENNIFER KOBRYN, P.E.

APPROVED FOR THE DEPARTMENT

David Schmidt Digitally signed by David Schmidt Date: 2023.07.24 13:39:07-05'00'

DATE: (Signature)

E

GENERAL NOTES

SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS PRIOR TO CONSTRUCTION.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS.

THE LOCATION OF PROPOSED SIGNS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT NUMBER OF SIGNS AND SIGN LOCATIONS ARE TO BE APPROVED BY THE ENGINEER IN THE FIELD.

ANY CONFLICTING SIGN SHALL BE COVERED OR REMOVED.

EXISTING PIPE CULVERT SIZES ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

PIPE ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS.

CONTRACTOR SHALL MAINTAIN STORM SEWER CAPACITY EQUIVALENT TO THE EXISTING STORM SEWER SYSTEM WITHIN THE PROJECT LIMITS DURING RAIN EVENTS AND AT THE END OF THE DAY.

A SAWED JOINT SHALL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE UNLESS EXISTING CONCRETE OR ASPHALT CAN BE REMOVED WITHOUT DAMAGING PAVEMENT TO REMAIN IN PLACE.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

CONTRACTOR SHALL CHECK BETWEEN ALL BENCHMARKS AND CONTROL POINTS TO CONFIRM ELEVATIONS PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL ESTABLISH ADDITIONAL BENCHMARKS AND CONTROL POINTS AS NECESSARY TO COMPLETE THE WORK. CONTRACTOR IS ENCOURAGED TO CHECK BENCHMARKS AND CONTROL POINTS PERIODICALLY FOR MOVEMENT.

CONTRACTOR SHALL PROTECT ALL CONTROL POINTS NOT DIRECTLY IN THE CONSTRUCTION AREA.

CONTRACTOR SHALL PROTECT ALL PROPERTY IRONS.

SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING
PLAN DETAILS
TRAFFIC CONTROL
ALIGNMENT DATA
CONTROL POINT

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

*DENOTES DIGGERS HOTLINE MEMBER

UTILITY CONTACTS

* ATC - ELECTRICITY-TRANSMISSION

DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PH: (608) 877-7650
DVOSBERG@ATCLLC.COM

* ALLIANT ENERGY - ELECTRICITY

ADAM KROHN
6462 BLANCHAR'S CROSSING
WINDSOR, WI 53598
PH: (920) 290-5284
ADAMKROHN@ALLIANTENERGY.COM

* CITY OF SUN PRAIRIE - SEWER

JEREMY CRAMER
3040 BAILEY ROAD
SUN PRAIRIE, WI 53590
PH: (608) 235-9280
JCRAMER@CITYOFSUNPRAIRIE.COM

* EVERSTREAM UTILITY - COMMUNICATION LINE

SHAD GARCIA
734 EAST WISCONSIN AVENUE, SUITE 730
MILWAUKEE, WI 53202
PH: (414)-522-6685
SGARCIA@EVERSTREAM.NET

* FRONTIER - COMMUNICATION LINE

RUSS RYAN
315 OAK STREET
OAKFIELD, WI 53065
PH: (920) 737-9662
RUSSELL.W.RYAN@FTR.COM

* MCI - COMMUNICATION LINE

RJ CICATELLO
15725 WEST RYERSON ROAD
NEW BERLIN, WI 53151
PH: (262) 232-1323
RANDY.CICATELLO@VERIZON.COM

* SPECTRUM COMMUNICATIONS - COMMUNICATION LINE

JOSEPH MCCLEARN
2701 DANIELS STREET
MADISON, WI 53718
PH: (920)-979-2603
JOE.MCCLEARN2@CHARTER.COM

* SUN PRAIRIE UTILITIES - ELECTRICITY AND WATER

ANDY HIRVELA
125 W. MAIN STREET
SUN PRAIRIE, WI 53590
PH: (608) 445-7035
AHIRVELA@MYSPU.ORG

* TDS METROCOM - COMMUNICATION LINE

COREY WIDERGREN
216 WEST WALWORTH STREET
ELKHORN, WI 53121
PH: (262) 725-2262
COREY.WIDERGREN@TDSTELECOM.COM

* WE ENERGIES - GAS/PETROLEUM

KELLY JAECK
S13W33800 US-18
WAUKESHA, WI 53018
PH: (262) 968-5721
KELLY.JAECK@WE-ENERGIES.COM

OTHER CONTACTS

WISDOT REGION CONTACT

DAVID SCHMIDT, P.E.
2101 WRIGHT STREET
MADISON, WISCONSIN 53704
PH: (608) 246-3867
DAVID2.SCHMIDT@DOT.WI.GOV

WDNR CONTACT

ERIC HEGGELUND
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
3911 FISH HATCHERY ROAD
FITCHBURG, WI
PH: (608) 275-3301
ERIC.HEGGELUND@WISCONSIN.GOV

DESIGN CONSULTANT

KYLE R. HENDERSON, P.E.
STRAND ASSOCIATES, INC.
910 WEST WINGRA DRIVE
MADISON, WI 53715
PH: (608) 251-4843
KYLE.HENDERSON@STRAND.COM

CITY OF SUN PRAIRIE

ADAM SCHLEICHER, P.E.
DIRECTOR OF PUBLIC SERVICES
300 EAST MAIN STREET
SUN PRAIRIE, WI 53590
PH: (608) 825-1170
ASCHLEICHER@CITYOFSUNPRAIRIE.COM

2

2

BEGIN PROJECT
STA. 106+48.66
X = 855,391.92
Y = 523,847.41

END CONSTRUCTION
STA. 55+84.74 T

END CONSTRUCTION
STA. 112+36.63

BEGIN CONSTRUCTION
STA. 54+20.77 T

STH 19 (WINDSOR ST)

N THOMPSON RD

103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00

57+00 T 56+00 T 55+00 T 54+00 T 53+00 T

N

END CONSTRUCTION
STA. 64+07.79 D

BEGIN CONSTRUCTION
STA. 206+16.58

STH 19 (WINDSOR ST)

DAVISON DR

202+00 203+00 204+00 205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+00 214+00 215+00 216+00 217+00

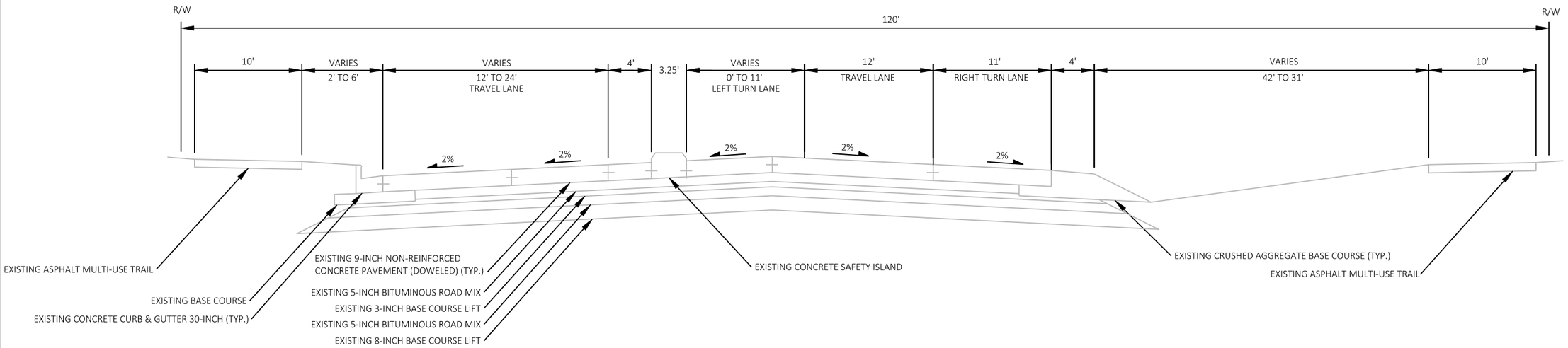
65+00 D 64+00 D 63+00 D 62+00 D 61+00 D

END PROJECT
STA. 212+86.85

BEGIN CONSTRUCTION
STA. 61+90.82 D

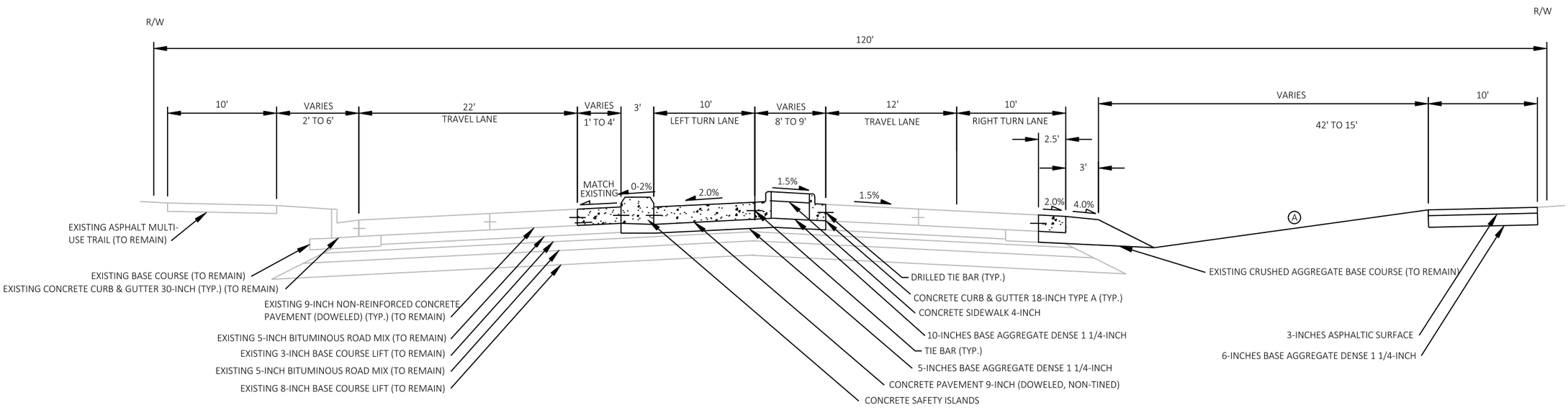
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 1/25/2023 1:09 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION

STH 19 (WINDSOR ST) & THOMPSON RD
(WEST SIDE OF INTERSECTION)



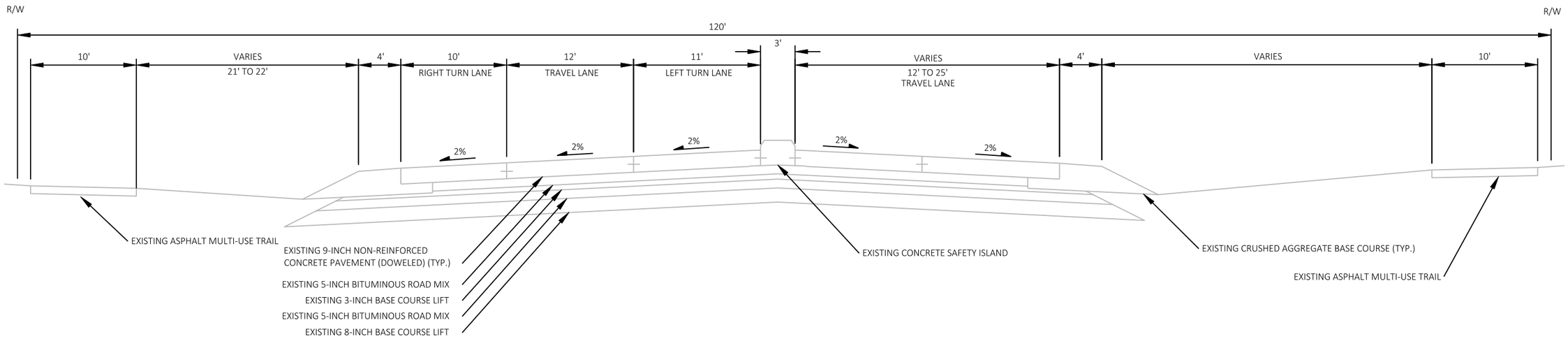
TYPICAL FINISHED SECTION

STH 19 (WINDSOR ST) & THOMPSON RD
(WEST SIDE OF INTERSECTION)

(A) SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, TOPSOIL

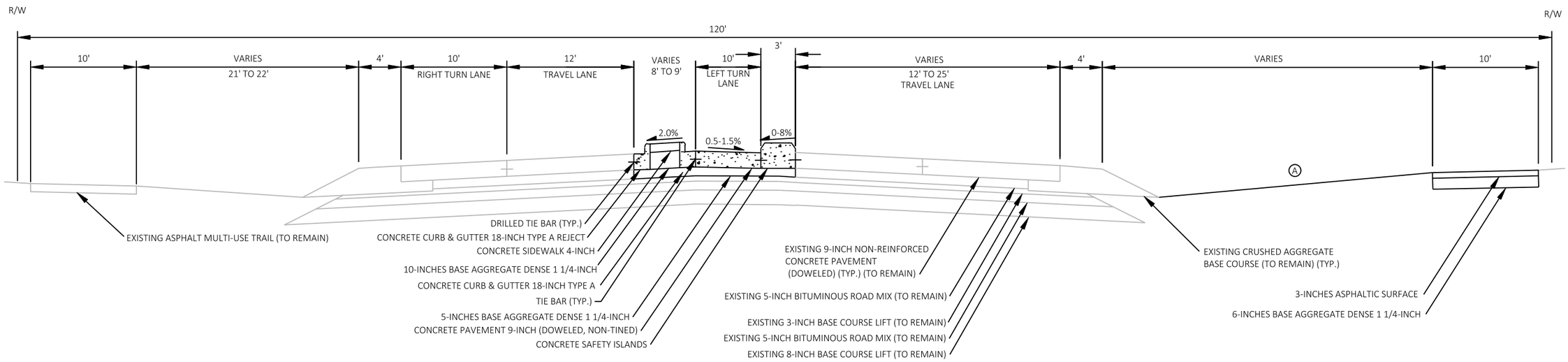
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts
PLOT DATE : 1/25/2023 1:10 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:10 FT



TYPICAL EXISTING SECTION

STH 19 (WINDSOR ST) & THOMPSON RD
(EAST SIDE OF INTERSECTION)



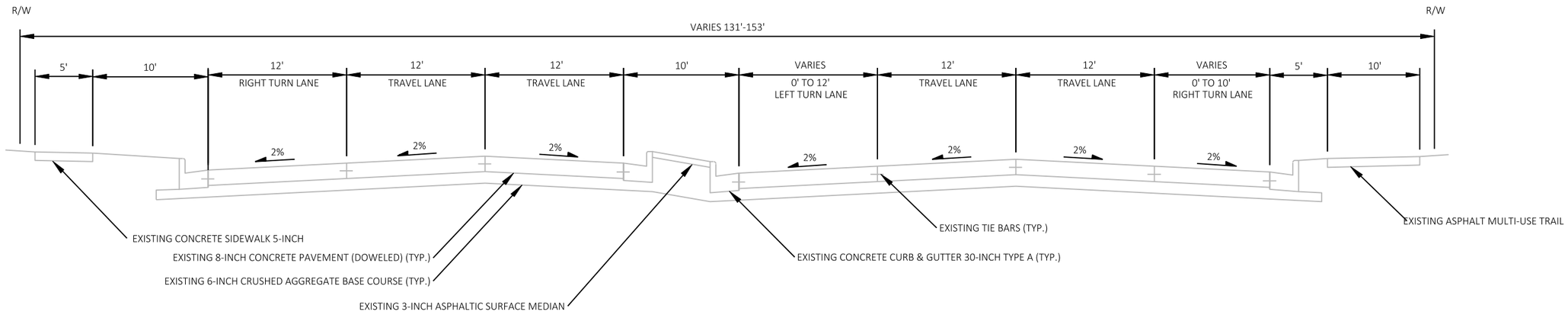
TYPICAL FINISHED SECTION

STH 19 (WINDSOR ST) & THOMPSON RD
(EAST SIDE OF INTERSECTION)

Ⓐ SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, TOPSOIL

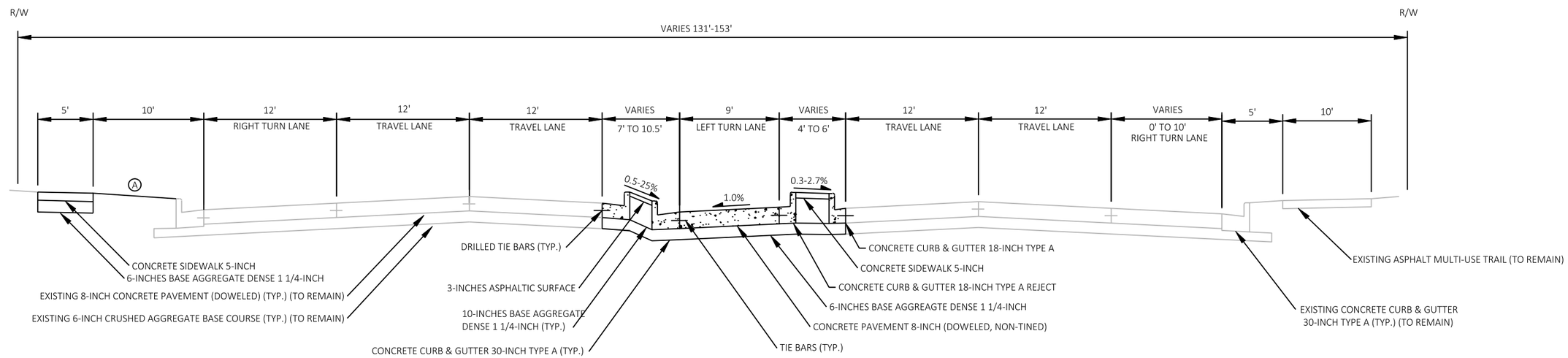
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 5	E

2



TYPICAL EXISTING SECTION

STH 19 (WINDSOR ST) & DAVISON DR
(WEST SIDE OF INTERSECTION)

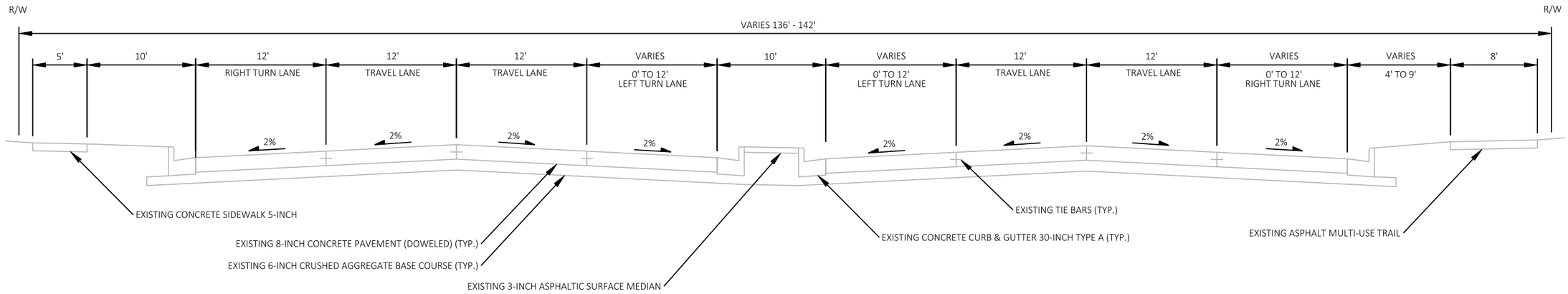


TYPICAL FINISHED SECTION

STH 19 (WINDSOR ST) & DAVISON DR
(WEST SIDE OF INTERSECTION)

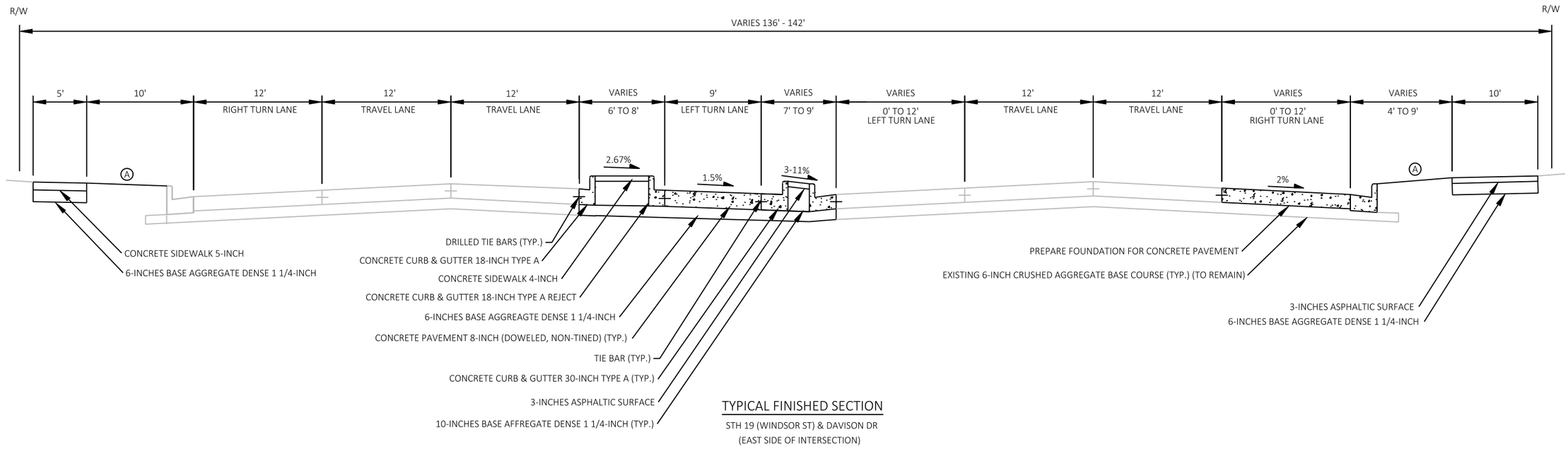
Ⓐ SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, TOPSOIL

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 6	E



TYPICAL EXISTING SECTION

STH 19 (WINDSOR ST) & DAVISON DR
(EAST SIDE OF INTERSECTION)

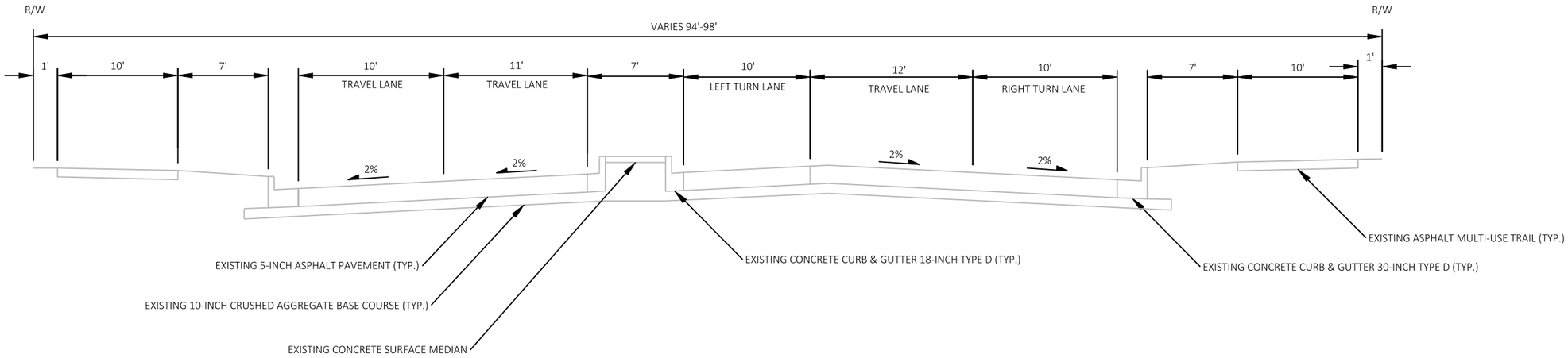


TYPICAL FINISHED SECTION

STH 19 (WINDSOR ST) & DAVISON DR
(EAST SIDE OF INTERSECTION)

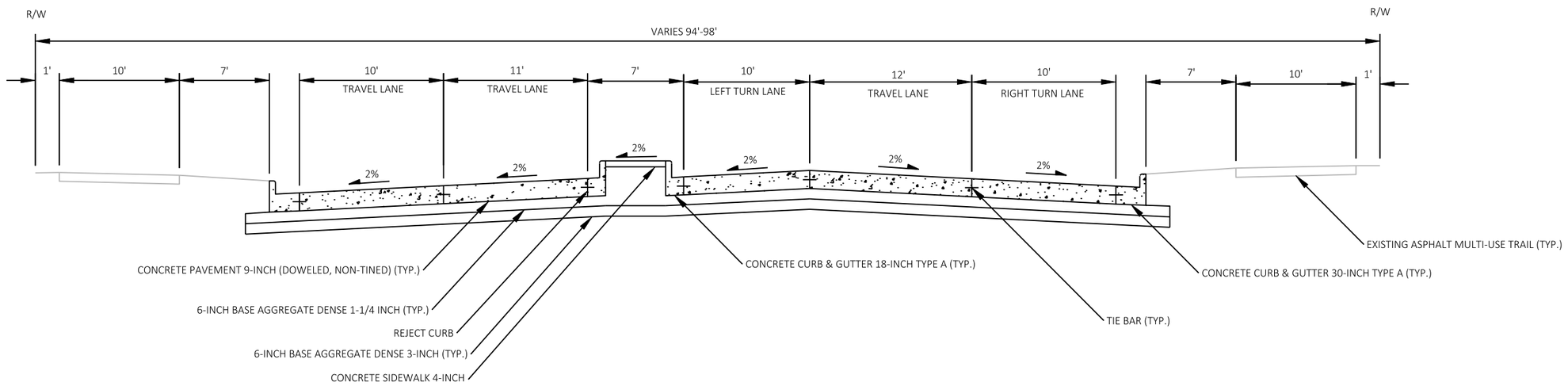
(A) SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, TOPSOIL

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 7	E



TYPICAL EXISTING SECTION

THOMSPON DRIVE



TYPICAL FINISHED SECTION

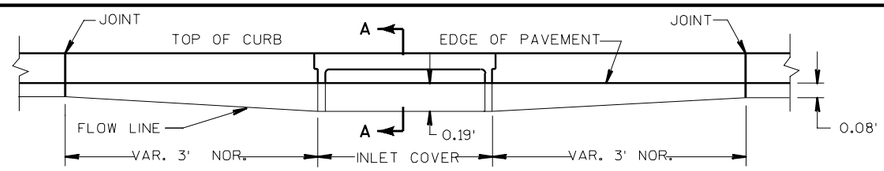
THOMPSON DRIVE

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 8	E

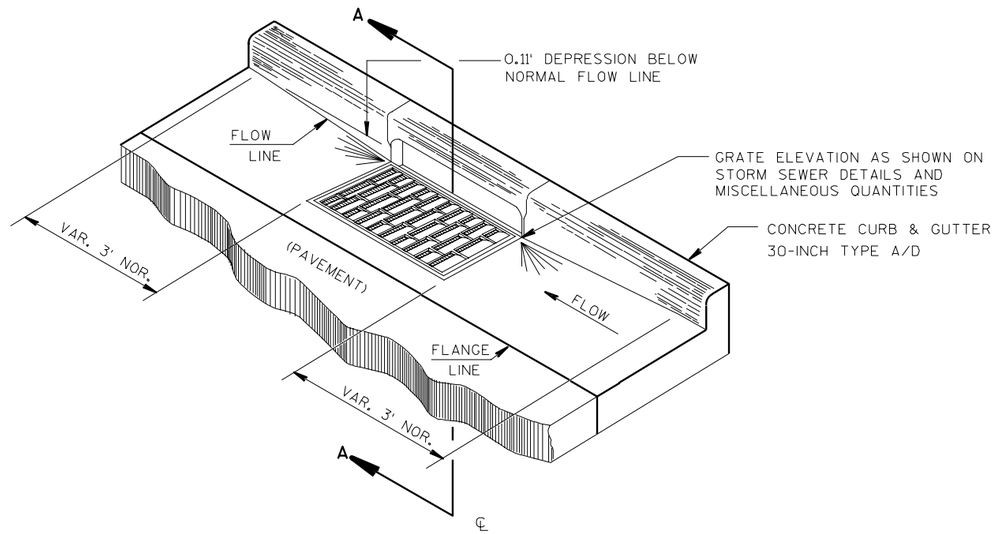
RUNOFF COEFFICIENT TABLE

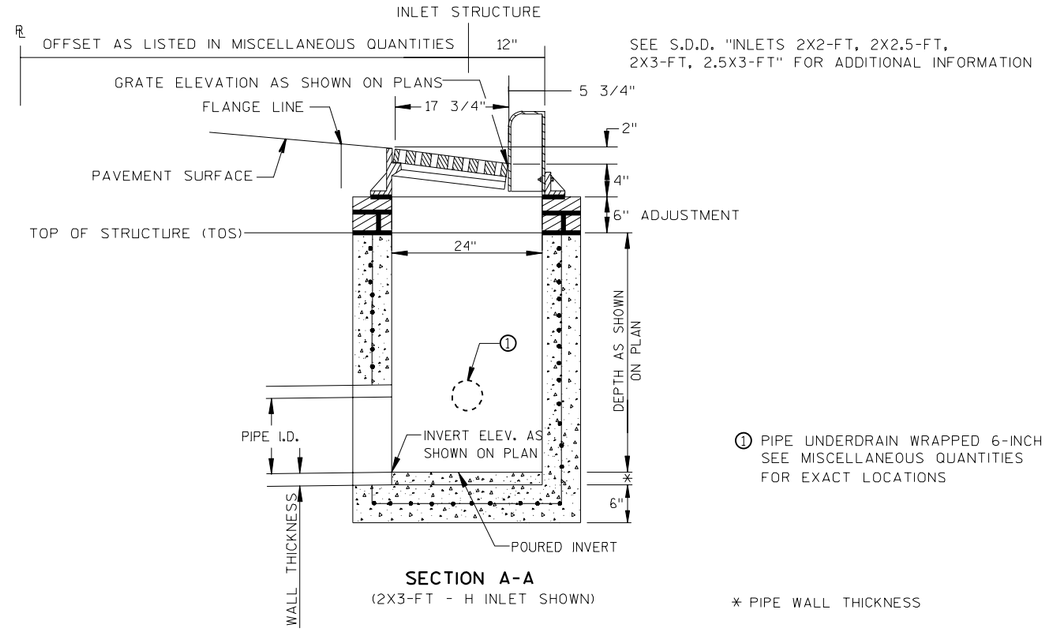
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33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

TOTAL PROJECT AREA = 18.59 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.79 ACRES

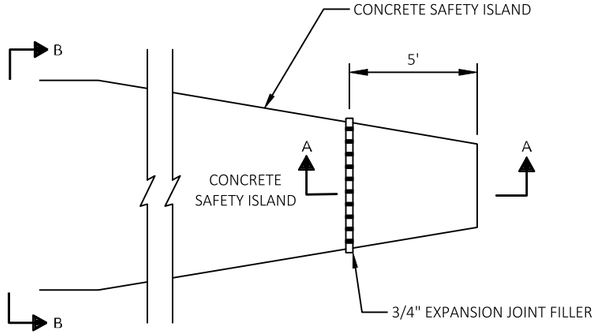


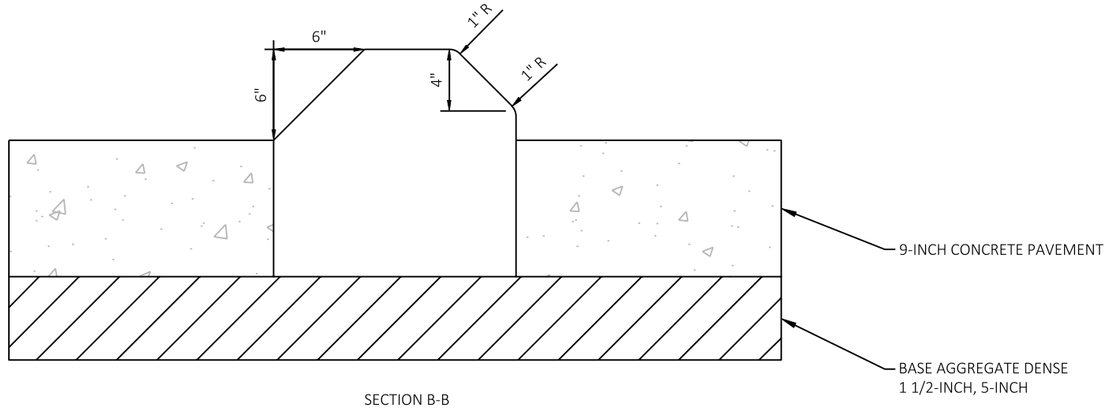
ELEVATION



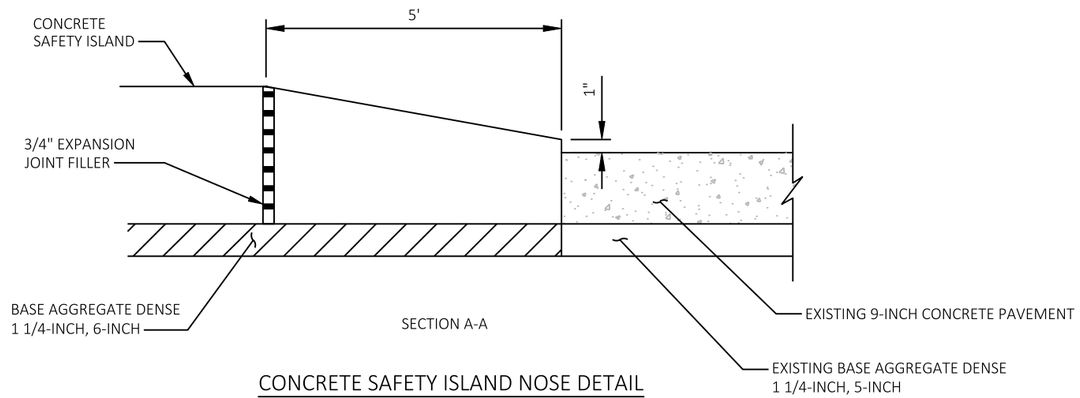


DETAIL OF CONCRETE CURB & GUTTER 30-INCH TYPE A/D AT INLETS





SECTION B-B



SECTION A-A

CONCRETE SAFETY ISLAND NOSE DETAIL

THOMPSON RD (STH 19) INTERSECTION ISLANDS

2

LEGEND

MARKING REMOVAL LINE

N

STH 19 (WINDSOR ST)

N THOMPSON RD

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CONSTRUCTION DETAILS - PAVEMENT MARKING REMOVALS	SHEET 11	E

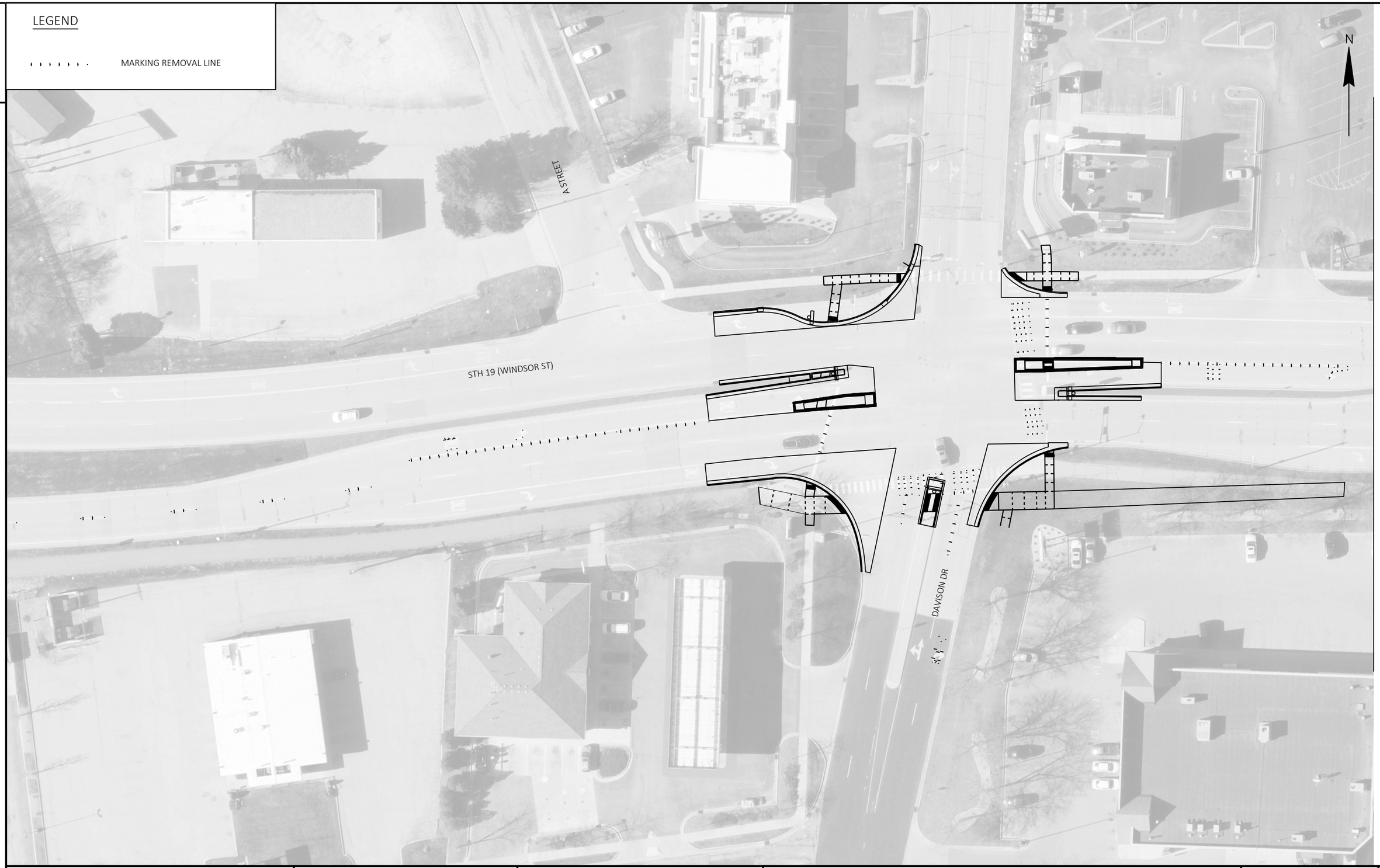
FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021004-CD.DWG
LAYOUT NAME - 021003_cd

PLOT DATE : 1/25/2023 6:04 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

2

LEGEND

MARKING REMOVAL LINE



2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CONSTRUCTION DETAILS - PAVEMENT MARKING REMOVALS	SHEET 12	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021004-CD.DWG
LAYOUT NAME - 021004_cd

PLOT DATE : 1/25/2023 6:04 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

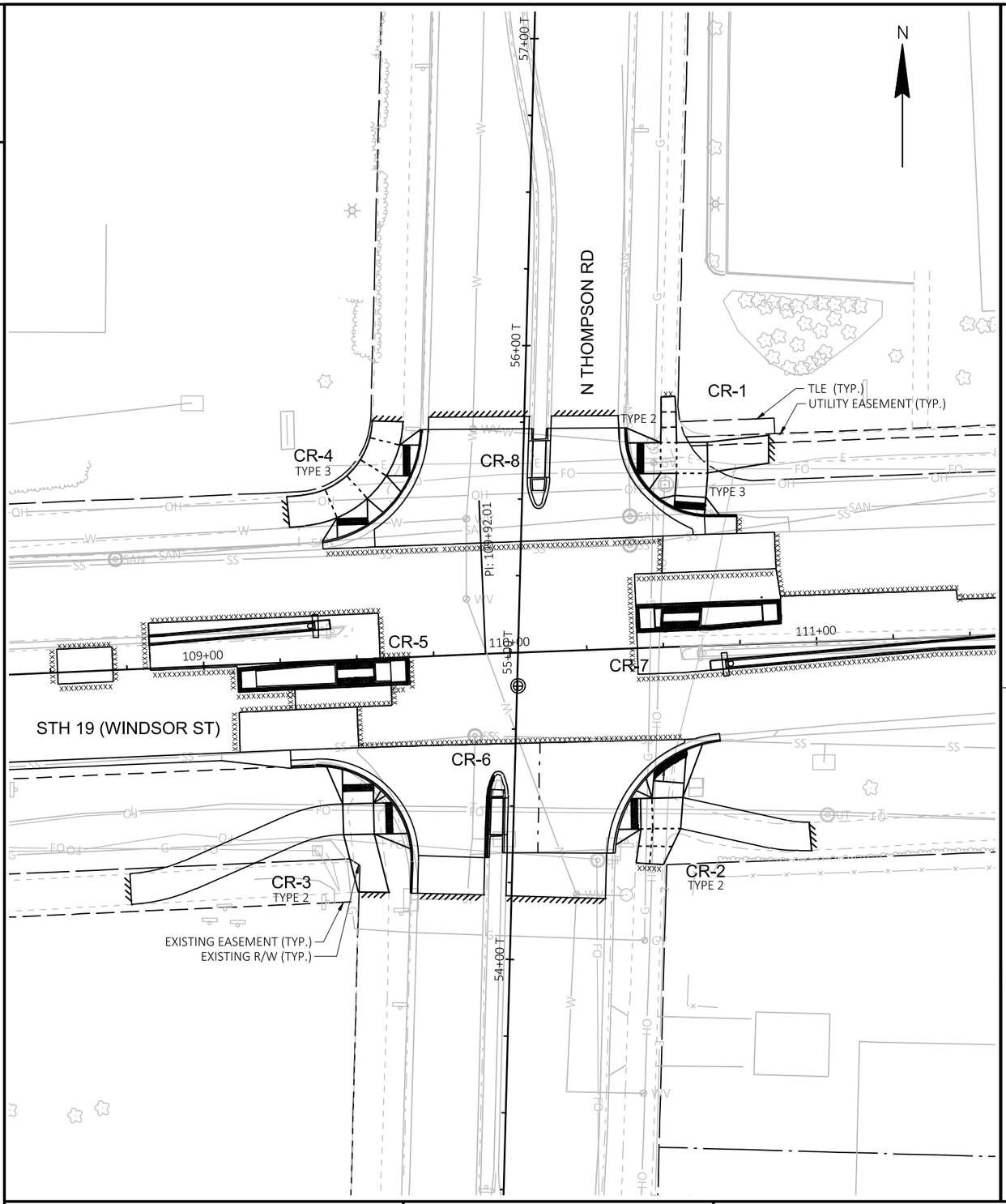
LEGEND

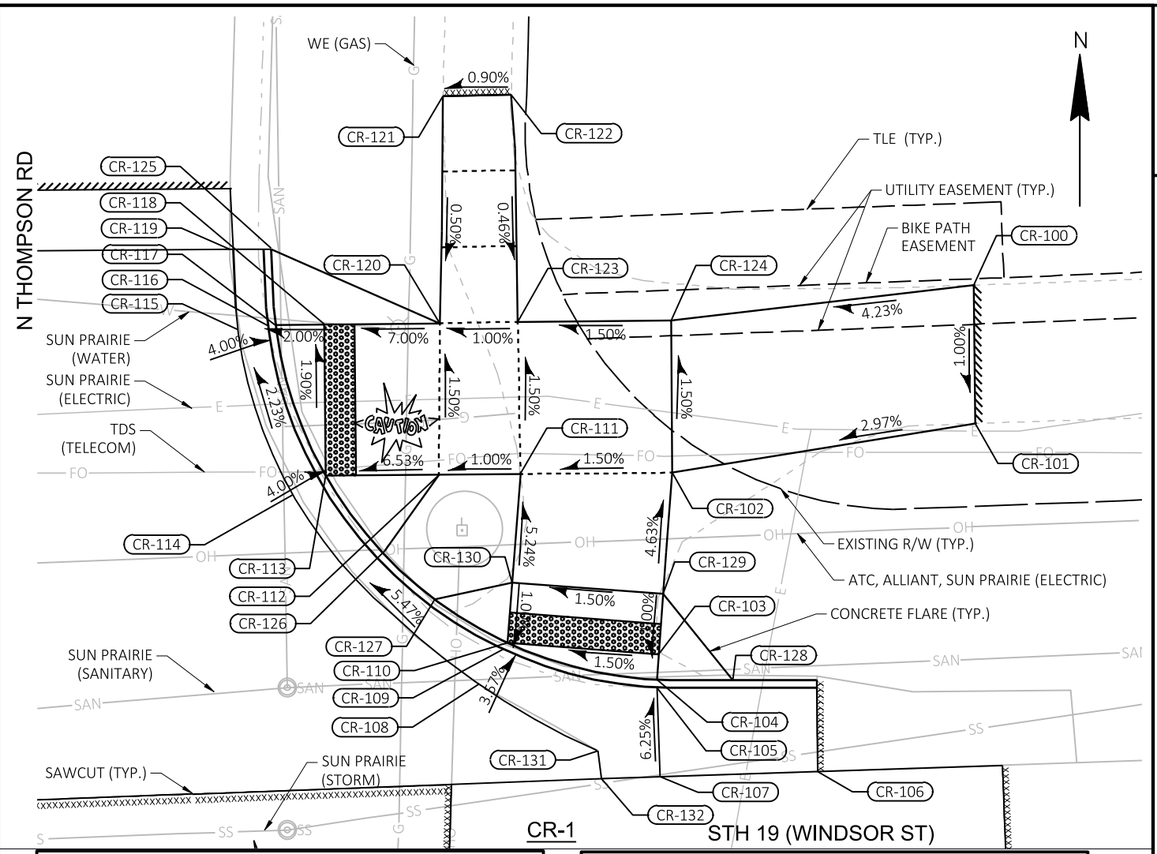
MARKING REMOVAL LINE



PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CONSTRUCTION DETAILS - PAVEMENT MARKING REMOVALS	SHEET 13	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021004-CD.DWG
LAYOUT NAME - 021005_cd
PLOT DATE : 1/25/2023 6:05 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



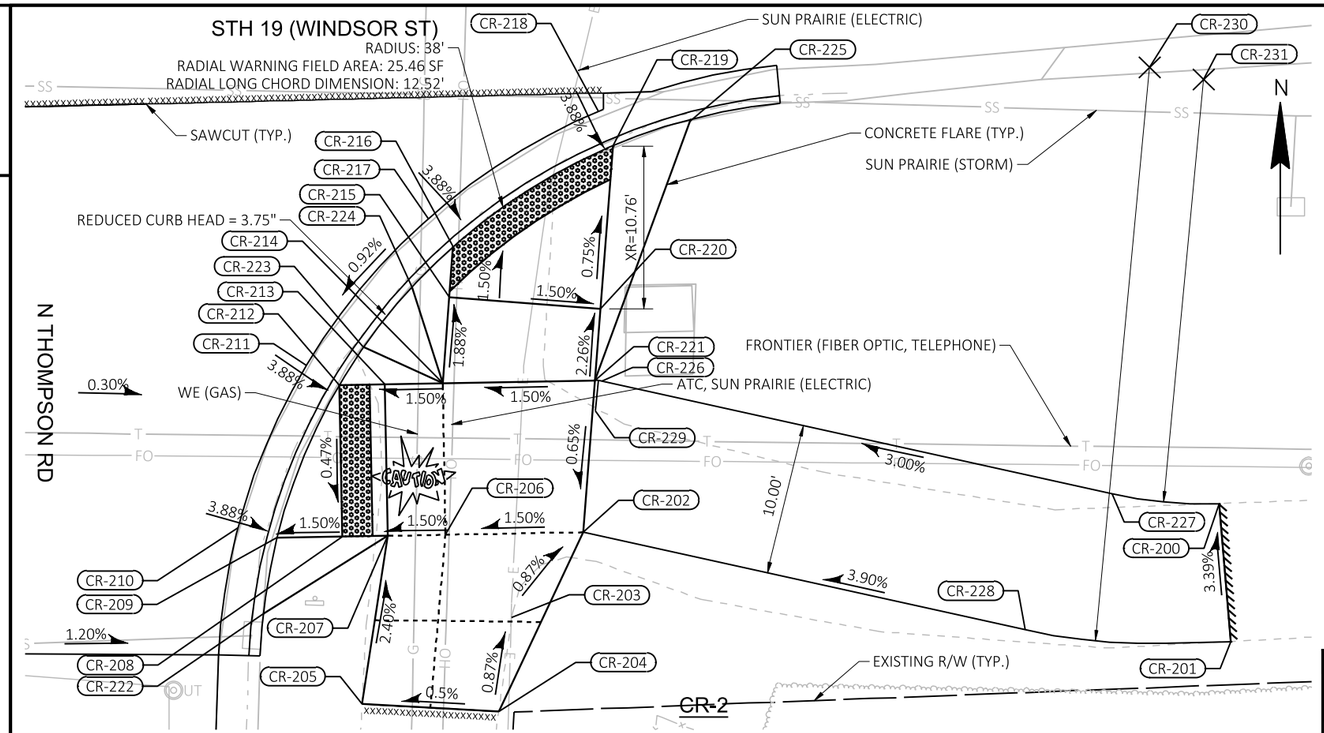


STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-100	55+73.0 T	79.8' RT	523954.93	855826.28	MATCH
CR-101	55+63.8 T	80.1' RT	523945.80	855826.36	MATCH
CR-102	55+60.1 T	60.2' RT	523942.56	855806.39	979.67
CR-103	55+48.1 T	59.6' RT	523930.58	855805.47	980.03
CR-104	55+46.4 T	59.5' RT	523928.90	855805.34	980.02
CR-105	55+45.9 T	59.5' RT	523928.40	855805.32	980.01
CR-106	55+40.6 T	70.3' RT	523922.84	855815.94	MATCH
CR-107	55+40.0 T	59.9' RT	523922.49	855805.56	MATCH
CR-108	55+45.8 T	47.8' RT	523928.60	855793.60	979.98
CR-109	55+48.1 T	49.4' RT	523930.91	855795.20	979.88
CR-110	55+48.6 T	49.6' RT	523931.34	855795.50	979.89
CR-111	55+59.7 T	50.2' RT	523942.47	855796.34	979.52
CR-112	55+59.5 T	44.8' RT	523942.42	855790.98	979.47
CR-113	55+59.3 T	37.4' RT	523942.35	855783.50	978.98
CR-114	55+58.0 T	35.2' RT	523941.11	855781.33	979.05
CR-115	55+68.8 T	31.3' RT	523952.02	855777.70	978.80
CR-116	55+69.1 T	33.3' RT	523952.26	855779.69	978.72

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-117	55+69.1 T	33.8' RT	523952.31	855780.18	978.73
CR-118	55+69.3 T	37.0' RT	523952.35	855783.41	978.79
CR-119	55+74.0 T	30.6' RT	523957.29	855777.16	MATCH
CR-120	55+69.5 T	44.6' RT	523952.42	855791.03	979.32
CR-121	55+84.5 T	44.4' RT	523967.40	855791.23	MATCH
CR-122	55+84.7 T	48.9' RT	523967.50	855795.74	MATCH
CR-123	55+69.8 T	49.8' RT	523952.51	855796.18	979.37
CR-124	55+70.1 T	59.9' RT	523952.59	855806.30	979.52
CR-125	55+74.2 T	33.4' RT	523957.35	855779.90	MATCH
CR-126	55+54.4 T	41.4' RT	523937.39	855787.40	979.61
CR-127	55+51.3 T	44.8' RT	523934.20	855790.70	980.45
CR-128	55+46.5 T	64.6' RT	523928.88	855810.36	980.52
CR-129	55+52.1 T	59.8' RT	523934.57	855805.78	980.07
CR-130	55+52.6 T	49.8' RT	523935.33	855795.81	979.92
CR-131	55+41.6 T	55.8' RT	523924.22	855801.44	980.24
CR-132	55+39.8 T	56.1' RT	523922.36	855801.71	980.32

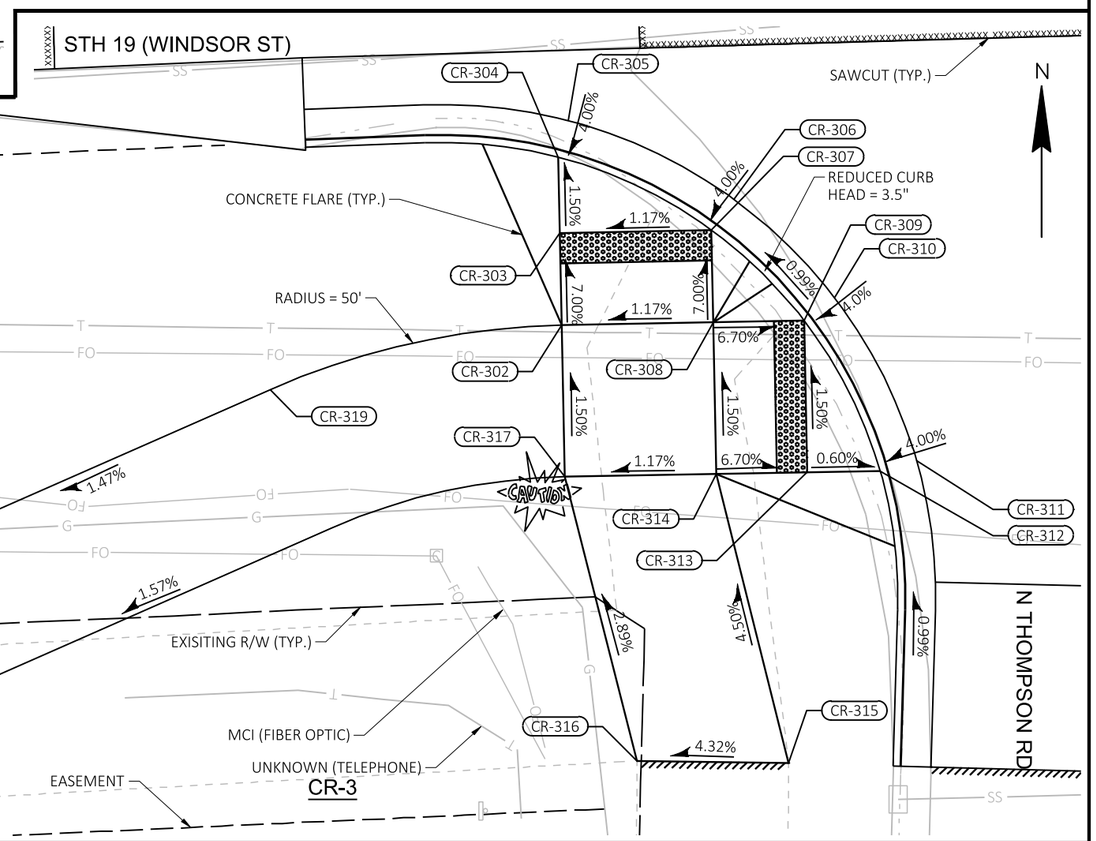
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 14	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021301_cr
PLOT DATE : 1/25/2023 1:11 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-200	54+47.2 T	96.3' RT	523828.74	855839.48	MATCH
CR-201	54+38.1 T	97.3' RT	523819.64	855840.26	MATCH
CR-202	54+44.2 T	54.5' RT	523826.85	855797.56	980.68
CR-203	54+38.4 T	49.9' RT	523821.21	855792.83	MATCH
CR-204	54+32.2 T	49.2' RT	523815.02	855791.98	MATCH
CR-205	54+32.4 T	40.2' RT	523815.51	855782.96	MATCH
CR-206	54+43.8 T	45.4' RT	523826.68	855788.46	980.55
CR-207	54+43.6 T	41.6' RT	523826.61	855784.65	980.49
CR-208	54+43.5 T	38.6' RT	523826.55	855781.65	980.28
CR-209	54+43.3 T	34.3' RT	523826.47	855777.34	980.22
CR-210	54+43.9 T	31.7' RT	523827.15	855774.78	980.29
CR-211	54+54.7 T	35.9' RT	523837.86	855779.28	980.40
CR-212	54+53.4 T	38.1' RT	523836.55	855781.46	980.33
CR-213	54+53.6 T	41.1' RT	523836.61	855784.46	980.54
CR-214	54+53.8 T	44.9' RT	523836.68	855788.28	980.60
CR-215	54+59.4 T	45.2' RT	523842.34	855788.71	980.49

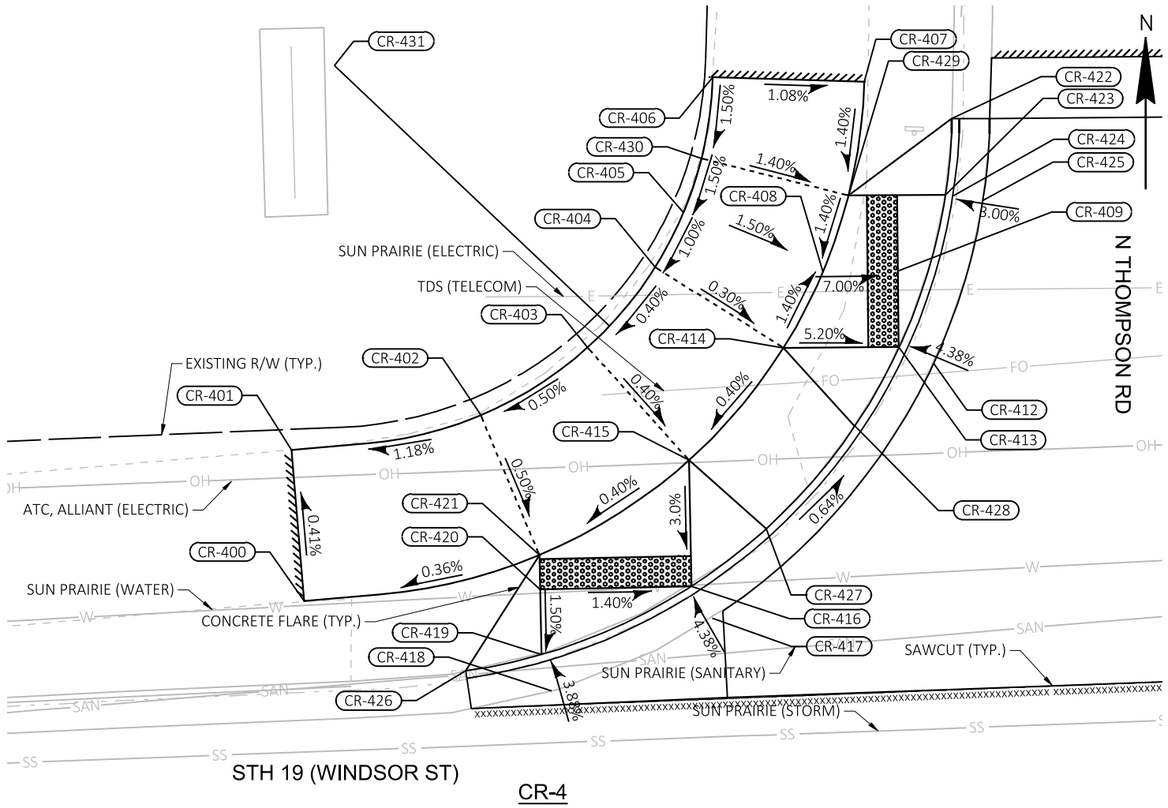
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-216	54+62.8 T	45.4' RT	523845.69	855788.97	980.44
CR-217	54+64.6 T	43.7' RT	523847.54	855787.33	980.51
CR-218	54+72.0 T	54.7' RT	523854.61	855798.55	980.63
CR-219	54+69.7 T	55.7' RT	523852.34	855799.50	980.56
CR-220	54+58.9 T	55.2' RT	523841.58	855798.68	980.64
CR-221	54+54.2 T	55.0' RT	523836.86	855798.32	980.75
CR-222	54+38.2 T	33.5' RT	523821.46	855776.44	MATCH
CR-223	54+56.0 T	39.6' RT	523839.08	855783.00	980.66
CR-224	54+60.0 T	42.7' RT	523843.02	855786.26	980.71
CR-225	54+71.5 T	60.8' RT	523853.98	855804.61	MATCH
CR-226	54+54.2 T	55.4' RT	523836.82	855798.79	980.79
CR-227	54+47.6 T	89.3' RT	523829.38	855832.43	981.82
CR-228	54+38.5 T	83.8' RT	523820.40	855826.73	981.85
CR-229	54+52.2 T	55.1' RT	523834.86	855798.36	RADIUS
CR-230	54+75.8 T	91.0' RT	523857.50	855834.93	RADIUS
CR-231	54+75.1 T	94.6' RT	523856.72	855838.48	RADIUS



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-300	54+14.6 T	123.8' LT	523801.98	855618.59	MATCH
CR-301	54+24.5 T	124.6' LT	523811.96	855618.04	MATCH
CR-302	54+49.2 T	55.8' LT	523834.82	855687.47	979.58
CR-303	54+55.3 T	56.1' LT	523840.90	855687.34	979.16
CR-304	54+60.3 T	56.3' LT	523845.90	855687.24	979.09
CR-305	54+62.7 T	55.7' LT	523848.32	855687.88	979.16
CR-306	54+57.8 T	44.7' LT	523843.12	855698.82	979.28
CR-307	54+55.8 T	46.1' LT	523841.10	855697.34	979.21
CR-308	54+49.7 T	45.8' LT	523835.00	855697.47	979.70
CR-309	54+50.0 T	39.8' LT	523835.11	855703.47	979.30
CR-310	54+51.5 T	37.9' LT	523836.63	855705.45	979.37
CR-311	54+40.9 T	32.2' LT	523825.90	855710.87	979.49
CR-312	54+40.2 T	34.5' LT	523825.20	855708.46	979.42
CR-313	54+40.0 T	39.4' LT	523825.11	855703.65	979.45
CR-314	54+39.7 T	45.4' LT	523825.00	855697.65	979.85
CR-315	54+20.8 T	40.1' LT	523805.95	855702.44	MATCH
CR-316	54+20.6 T	50.1' LT	523806.08	855692.44	MATCH
CR-317	54+39.2 T	55.3' LT	523824.82	855687.65	979.73
CR-318	54+29.2 T	107.3' LT	523816.13	855635.42	978.76
CR-319	54+44.5 T	74.9' LT	523830.58	855668.23	979.29

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 15	E

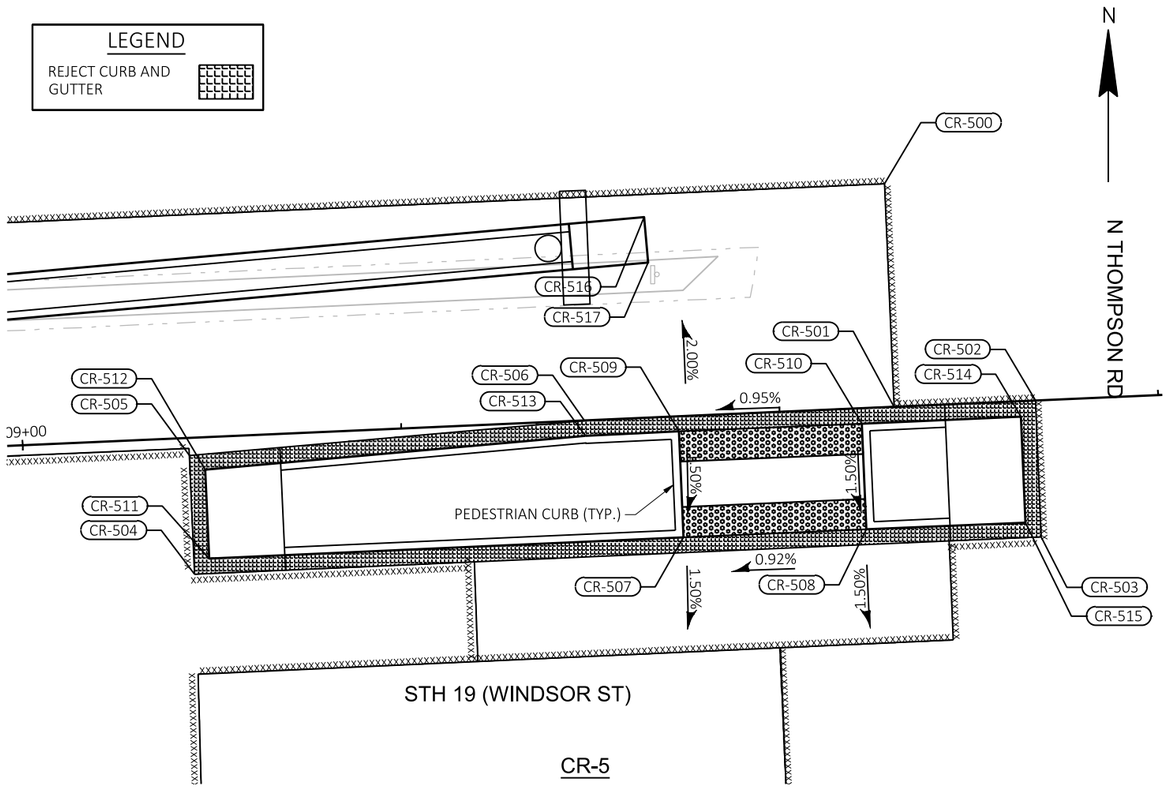
FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021302_cr
PLOT DATE : 1/25/2023 1:12 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



CR-4

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-400	55+38.8 T	75.6' LT	523924.91	855670.07	MATCH
CR-401	55+48.8 T	76.7' LT	523934.88	855669.21	MATCH
CR-402	55+51.4 T	64.3' LT	523937.16	855681.71	979.06
CR-403	55+56.0 T	57.3' LT	523941.63	855688.77	979.10
CR-404	55+61.4 T	53.0' LT	523946.93	855693.22	979.13
CR-405	55+65.1 T	51.2' LT	523950.52	855695.09	979.17
CR-406	55+74.1 T	49.5' LT	523959.47	855697.03	MATCH
CR-407	55+74.1 T	39.5' LT	523959.17	855707.03	MATCH
CR-408	55+61.5 T	41.9' LT	523946.64	855704.30	979.02
CR-409	55+61.6 T	37.0' LT	523946.68	855709.24	978.67
CR-412	55+55.6 T	34.5' LT	523940.61	855711.61	978.75
CR-413	55+56.6 T	36.8' LT	523941.68	855709.28	978.67
CR-414	55+56.4 T	44.4' LT	523941.61	855701.69	979.10
CR-415	55+48.8 T	50.4' LT	523934.20	855695.46	979.06
CR-416	55+40.5 T	50.1' LT	523925.88	855695.62	978.81

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-417	55+38.4 T	48.6' LT	523923.77	855696.98	978.89
CR-418	55+33.3 T	59.1' LT	523918.97	855686.41	978.96
CR-419	55+35.7 T	59.8' LT	523921.37	855685.71	978.89
CR-420	55+40.0 T	60.0' LT	523925.67	855685.63	978.95
CR-421	55+42.3 T	60.1' LT	523927.94	855685.58	979.01
CR-422	55+71.8 T	33.7' LT	523956.71	855712.80	MATCH
CR-423	55+66.7 T	34.0' LT	523951.71	855712.38	978.61
CR-424	55+66.7 T	33.5' LT	523951.63	855712.87	978.58
CR-425	55+66.4 T	31.5' LT	523951.33	855714.85	978.64
CR-426	55+34.5 T	64.8' LT	523920.30	855680.73	MATCH
CR-427	55+44.4 T	45.2' LT	523929.66	855700.55	979.24
CR-428	55+51.4 T	39.6' LT	523936.47	855706.39	979.18
CR-429	55+66.5 T	40.4' LT	523951.65	855705.98	979.09
CR-430	55+68.7 T	50.1' LT	523954.10	855696.28	979.23
CR-431	55+74.2 T	74.5' LT	523960.21	855672.04	RADIUS



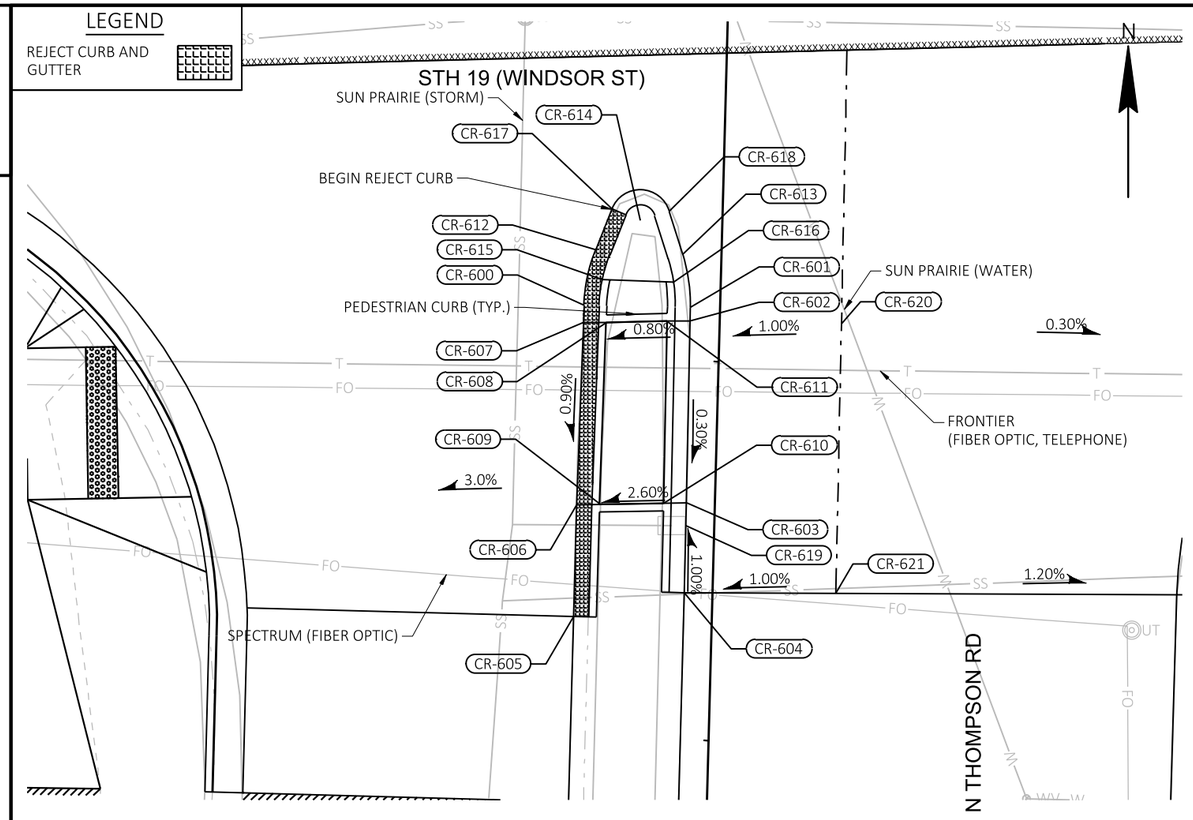
CR-5

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-500	109+57.6	14.7' LT	523896.95	855698.95	979.56
CR-501	109+57.6	0.0'	523882.25	855699.60	979.82
CR-502	109+66.9	0.0'	523882.66	855708.90	979.93
CR-503	109+66.9	9.0' RT	523873.67	855709.30	979.82
CR-504	109+11.0	9.0' RT	523871.21	855653.43	979.21
CR-505	109+11.0	1.2' RT	523879.03	855653.09	979.36
CR-506	109+37.1	0.0'	523881.35	855679.15	979.66
CR-507	109+43.3	8.0' RT	523873.63	855685.68	979.60
CR-508	109+55.4	8.0' RT	523874.16	855697.77	979.71

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-509	109+43.3	1.0' RT	523880.62	855685.37	979.706
CR-510	109+55.4	1.0' RT	523881.15	855697.46	979.82
CR-511	109+12.0	8.0' RT	523872.25	855654.39	979.17
CR-512	109+12.0	2.1' RT	523878.12	855654.13	979.32
CR-513	109+37.1	1.0' RT	523880.35	855679.22	979.62
CR-514	109+65.9	1.0' RT	523881.61	855707.95	979.89
CR-515	109+65.9	8.0' RT	523874.62	855708.26	979.78
CR-516	109+41.6	13.2' LT	523894.75	855683.10	979.41
CR-517	109+41.8	10.2' LT	523891.76	855683.37	979.42

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 16	E

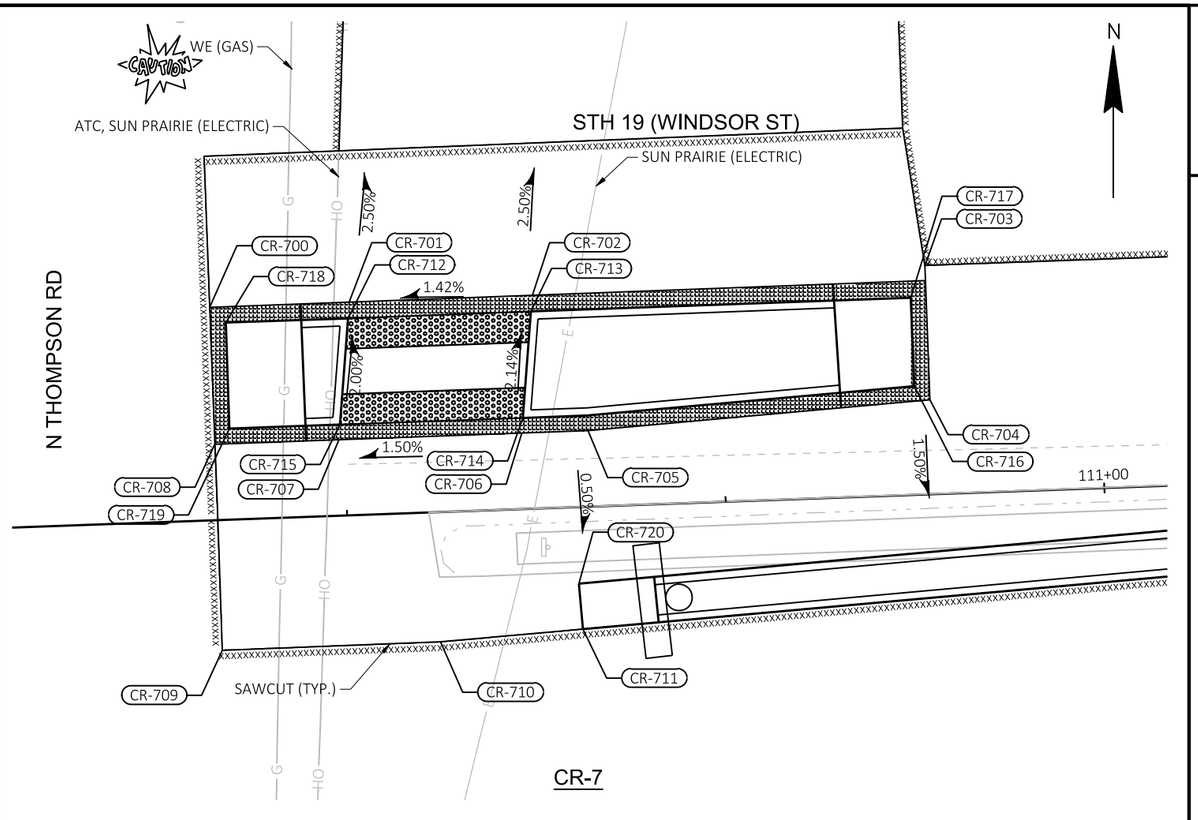
FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021303_cr
PLOT DATE : 1/25/2023 3:32 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



CR-6

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-600	54+53.5 T	9.0' LT	523837.84	855734.37	980.30
CR-601	54+53.5 T	2.0' LT	523837.69	855741.37	980.38
CR-602	54+52.6 T	2.0' LT	523836.81	855741.36	980.38
CR-603	54+40.6 T	1.9' LT	523824.81	855741.14	980.34
CR-604	54+34.7 T	1.9' LT	523818.88	855740.99	980.38
CR-605	54+33.0 T	9.1' LT	523817.31	855733.67	980.22
CR-606	54+40.3 T	9.1' LT	523824.67	855733.88	980.18
CR-607	54+52.3 T	9.0' LT	523836.68	855734.33	980.29
CR-608	54+52.4 T	7.5' LT	523836.71	855735.85	980.31
CR-609	54+40.4 T	7.6' LT	523824.70	855735.44	980.20
CR-610	54+40.6 T	3.4' LT	523824.78	855739.63	980.31
CR-611	54+52.6 T	3.5' LT	523836.78	855739.83	980.34

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-612	54+57.2 T	8.3' LT	523841.51	855735.14	980.33
CR-613	54+57.0 T	2.6' LT	523841.21	855740.87	980.39
CR-614	54+59.2 T	5.4' LT	523843.44	855738.07	980.86
CR-615	54+55.2 T	7.8' LT	523839.53	855735.58	980.82
CR-616	54+55.2 T	3.1' LT	523839.35	855740.27	980.84
CR-617	54+59.9 T	7.3' LT	523844.18	855736.21	980.35
CR-618	54+59.8 T	3.5' LT	523844.04	855739.97	980.40
CR-619	54+39.1 T	1.9' LT	523823.30	855741.09	980.33
CR-620	54+52.7 T	8.0' RT	523836.60	855751.35	980.48
CR-621	54+34.9 T	8.1' RT	523818.84	855750.99	980.48

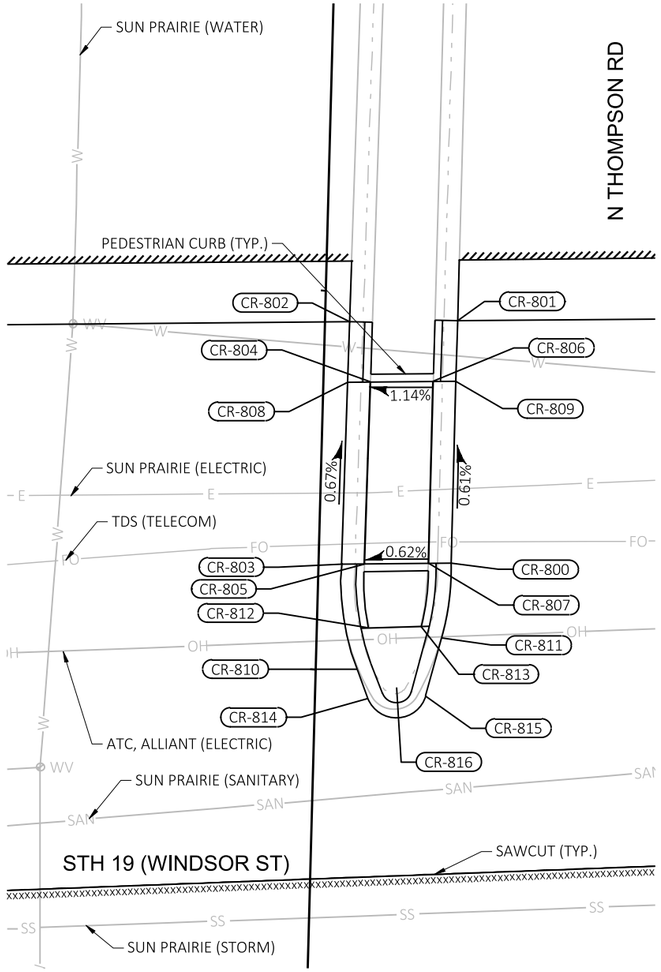


CR-7

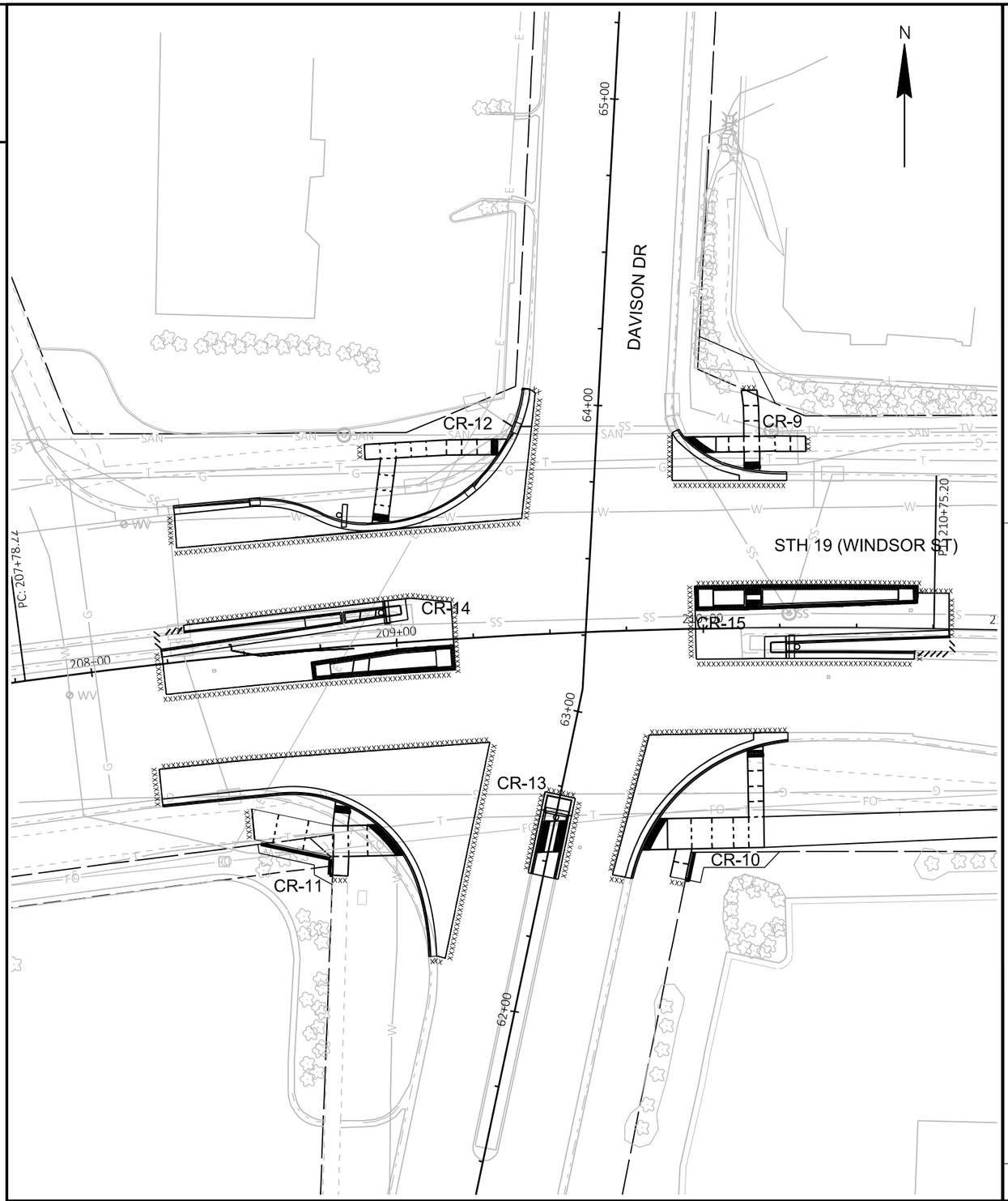
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-700	110+41.5	14.0' LT	523899.60	855782.91	980.52
CR-701	110+50.7	14.0' LT	523899.94	855792.10	980.68
CR-702	110+62.7	14.1' LT	523900.39	855804.17	980.85
CR-703	110+88.7	15.1' LT	523902.34	855830.09	981.14
CR-704	110+88.7	6.2' LT	523893.49	855830.41	981.33
CR-705	110+66.1	5.0' LT	523891.46	855807.85	981.07
CR-706	110+61.7	5.0' LT	523891.30	855803.48	981.01
CR-707	110+49.6	5.0' LT	523890.86	855791.41	980.83
CR-708	110+41.5	5.0' LT	523890.56	855783.24	980.70
CR-709	110+41.5	8.6' RT	523876.99	855783.74	980.75
CR-710	110+55.8	8.6' RT	523877.53	855798.11	980.89
CR-711	110+65.3	8.1' RT	523878.38	855807.52	981.00

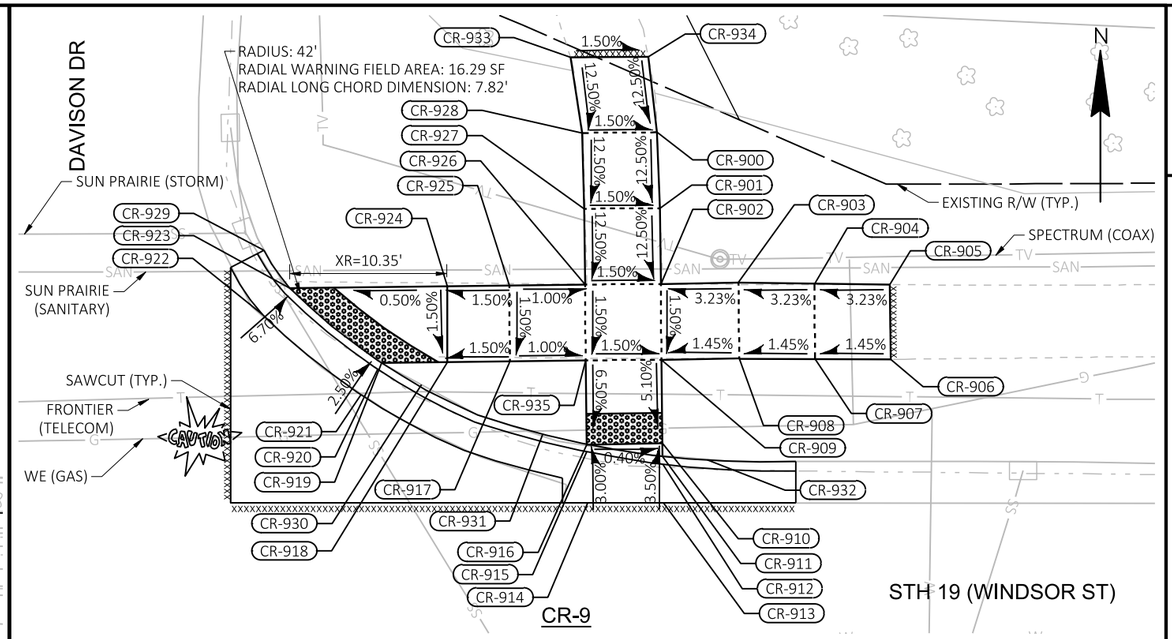
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-712	110+50.5	13.0' LT	523898.89	855792.02	980.70
CR-713	110+62.6	13.0' LT	523899.33	855804.09	980.87
CR-714	110+61.8	6.0' LT	523892.31	855803.56	981.02
CR-715	110+49.8	6.0' LT	523891.87	855791.49	980.84
CR-716	110+87.7	7.2' LT	523894.40	855829.37	981.29
CR-717	110+87.7	13.0' LT	523900.24	855829.16	981.06
CR-718	110+42.5	13.0' LT	523898.60	855783.94	980.44
CR-719	110+42.5	6.0' LT	523891.60	855784.20	980.66
CR-720	110+65.1	5.1' RT	523881.37	855807.25	981.02

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-800	55+57.2 T	8.7' RT	523941.09	855754.83	979.25
CR-801	55+73.3 T	8.7' RT	523957.10	855755.27	979.18
CR-802	55+73.0 T	1.6' RT	523957.03	855748.13	979.12
CR-803	55+57.0 T	1.5' RT	523941.03	855747.61	979.23
CR-804	55+69.1 T	3.1' RT	523953.05	855749.50	979.13
CR-805	55+57.0 T	3.0' RT	523941.04	855749.11	979.21
CR-806	55+69.2 T	7.2' RT	523953.08	855753.66	979.18
CR-807	55+57.2 T	7.2' RT	523941.08	855753.33	979.24
CR-808	55+69.0 T	1.6' RT	523953.03	855748.00	979.15
CR-809	55+69.3 T	8.7' RT	523953.10	855755.16	979.20
CR-810	55+50.1 T	2.7' RT	523934.09	855748.62	979.30
CR-811	55+52.3 T	8.2' RT	523936.16	855754.20	979.34
CR-812	55+52.8 T	3.4' RT	523936.83	855749.37	979.71
CR-813	55+53.0 T	6.9' RT	523936.93	855752.86	979.80
CR-814	55+48.2 T	3.5' RT	523932.17	855749.36	979.34
CR-815	55+48.5 T	7.3' RT	523932.35	855753.16	979.38
CR-816	55+49.0 T	5.3' RT	523932.88	855751.23	979.84



CR-8





STATION & OFFSET TABLE

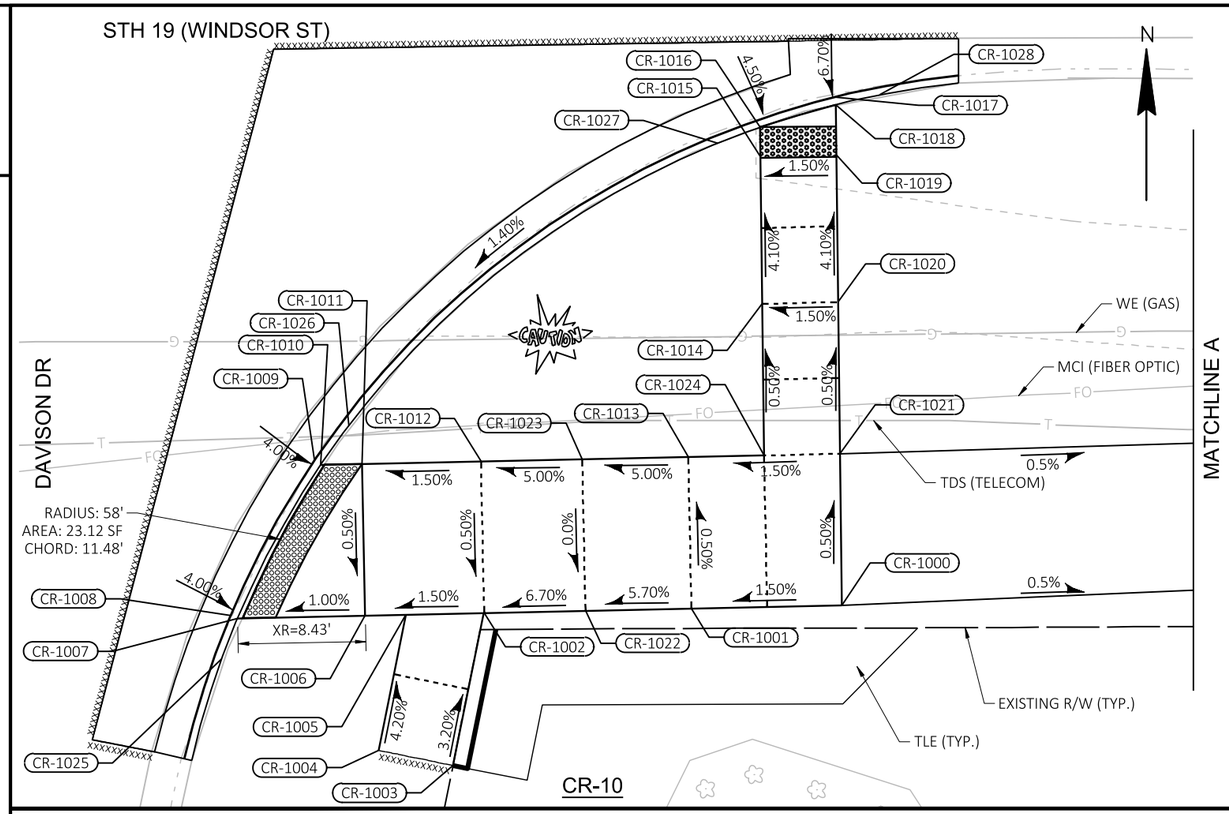
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-900	64+02.8 D	52.2' RT	524081.09	862453.69	991.91
CR-901	63+97.8 D	52.7' RT	524076.09	862453.88	991.29
CR-902	63+92.9 D	53.0' RT	524071.09	862453.94	990.67
CR-903	63+93.2 D	58.2' RT	524071.15	862459.08	991.19
CR-904	63+93.4 D	63.2' RT	524071.09	862464.08	991.16
CR-905	63+93.6 D	68.2' RT	524071.03	862469.07	MATCH
CR-906	63+88.7 D	68.5' RT	524066.12	862469.12	MATCH
CR-907	63+88.5 D	63.5' RT	524066.13	862464.12	991.06
CR-908	63+88.2 D	58.5' RT	524066.15	862459.12	991.06
CR-909	63+87.9 D	53.4' RT	524066.09	862454.00	990.59
CR-910	63+82.4 D	53.7' RT	524060.56	862454.06	990.29
CR-911	63+81.5 D	53.8' RT	524059.72	862454.07	990.27
CR-912	63+81.0 D	53.8' RT	524059.20	862454.08	990.26
CR-913	63+78.4 D	54.0' RT	524056.65	862454.11	MATCH
CR-914	63+78.2 D	49.0' RT	524056.65	862449.11	MATCH
CR-915	63+81.5 D	48.8' RT	524060.01	862449.07	990.28
CR-916	63+82.0 D	48.7' RT	524060.50	862449.06	990.31
CR-917	63+87.2 D	43.4' RT	524065.97	862444.00	990.72
CR-918	63+86.9 D	39.3' RT	524065.92	862439.88	990.66

STATION & OFFSET TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-919	63+86.6 D	34.9' RT	524065.87	862435.53	990.64
CR-920	63+86.2 D	34.7' RT	524065.44	862435.24	990.63
CR-921	63+84.5 D	33.7' RT	524063.79	862434.14	990.68
CR-922	63+89.4 D	26.9' RT	524069.07	862427.67	990.81
CR-923	63+91.2 D	28.6' RT	524070.80	862429.48	990.68
CR-924	63+91.9 D	39.0' RT	524070.92	862439.83	990.73
CR-925	63+92.2 D	43.1' RT	524070.97	862443.94	990.80
CR-926	63+92.5 D	48.0' RT	524071.03	862448.94	990.75
CR-927	63+97.5 D	47.7' RT	524076.03	862448.88	991.38
CR-928	64+02.5 D	47.3' RT	524081.03	862448.78	992.00
CR-929	63+93.7 D	26.8' RT	524073.30	862427.78	MATCH
CR-930	63+85.4 D	37.6' RT	524064.43	862438.16	991.07
CR-931	63+82.5 D	45.8' RT	524061.16	862446.14	990.92
CR-932	63+81.4 D	56.7' RT	524059.50	862457.03	990.74
CR-933	64+07.4 D	46.3' RT	524086.02	862448.00	MATCH
CR-934	64+07.8 D	51.4' RT	524086.08	862453.12	MATCH
CR-935	63+87.5 D	48.4' RT	524066.03	862449.00	990.67

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 19	E

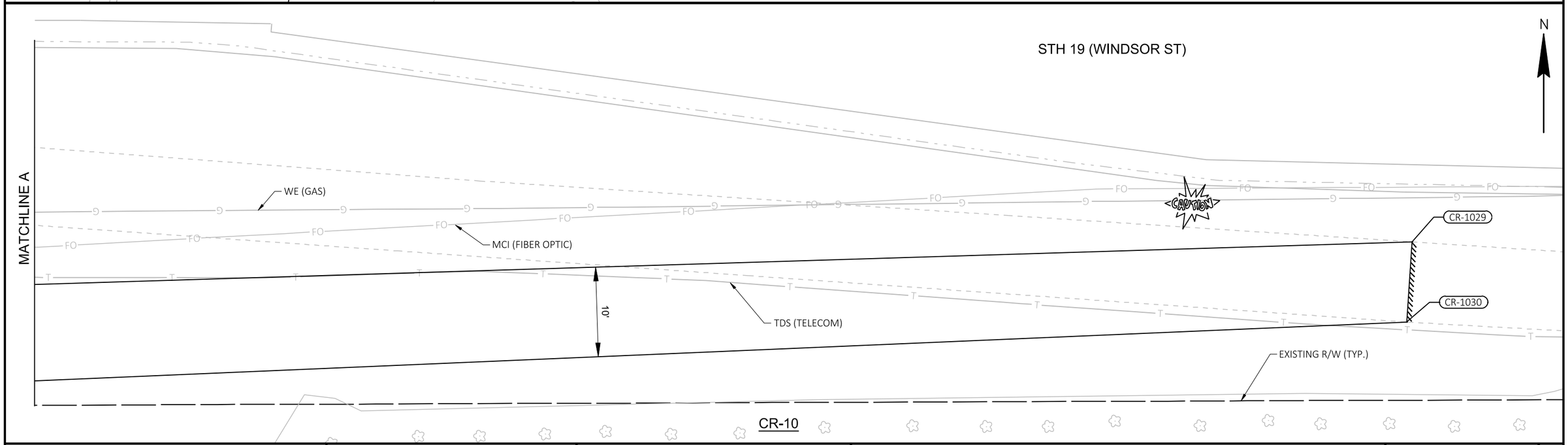
FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021306_cr
PLOT DATE : 1/25/2023 1:14 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1000	62+69.2 D	68.6' RT	523937.10	862455.53	990.18
CR-1001	62+67.0 D	58.9' RT	523936.89	862445.63	990.03
CR-1002	62+63.9 D	45.6' RT	523936.60	862431.95	989.24
CR-1003	62+53.6 D	45.7' RT	523926.55	862429.89	989.57
CR-1004	62+53.6 D	40.7' RT	523927.54	862424.99	989.54
CR-1005	62+62.7 D	40.6' RT	523936.49	862426.79	989.16
CR-1006	62+62.1 D	38.0' RT	523936.43	862424.11	989.12
CR-1007	62+60.2 D	29.7' RT	523936.25	862415.67	989.04
CR-1008	62+60.3 D	29.3' RT	523936.45	862415.21	989.03
CR-1009	62+71.4 D	32.5' RT	523946.65	862420.74	989.12
CR-1010	62+71.2 D	33.0' RT	523946.37	862421.16	989.13
CR-1011	62+71.8 D	35.7' RT	523946.43	862423.89	989.17
CR-1012	62+73.6 D	43.3' RT	523946.59	862431.73	989.29
CR-1013	62+76.7 D	56.6' RT	523946.88	862445.42	989.98
CR-1014	62+87.6 D	59.3' RT	523956.99	862450.30	990.01
CR-1015	62+97.1 D	57.2' RT	523966.70	862450.18	989.57

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1016	62+99.0 D	56.8' RT	523968.63	862450.16	989.56
CR-1017	63+02.0 D	61.2' RT	523970.63	862455.13	989.61
CR-1018	63+01.5 D	61.3' RT	523970.12	862455.14	989.62
CR-1019	62+98.2 D	62.1' RT	523966.82	862455.18	989.67
CR-1020	62+88.8 D	64.2' RT	523957.10	862455.30	990.08
CR-1021	62+79.0 D	66.4' RT	523947.10	862455.41	990.13
CR-1022	62+65.4 D	52.1' RT	523936.74	862438.63	989.63
CR-1023	62+75.1 D	49.8' RT	523946.74	862438.42	989.63
CR-1024	62+77.9 D	61.5' RT	523947.00	862450.42	990.05
CR-1025	62+57.3 D	29.3' RT	523933.57	862414.63	989.49
CR-1026	62+74.1 D	34.3' RT	523948.96	862423.02	989.60
CR-1027	62+97.4 D	54.2' RT	523967.58	862447.35	989.67
CR-1028	63+02.7 D	64.1' RT	523970.77	862458.07	990.08
CR-1029	0+00.0 D	0.0'	523952.19	862619.46	989.32
CR-1030	0+00.0 D	0.0'	523944.09	862618.89	989.40

2



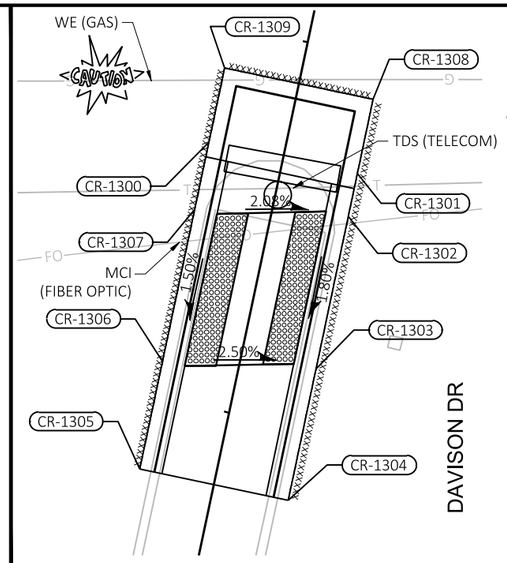
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 20	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021307_cr
PLOT DATE : 1/25/2023 1:15 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

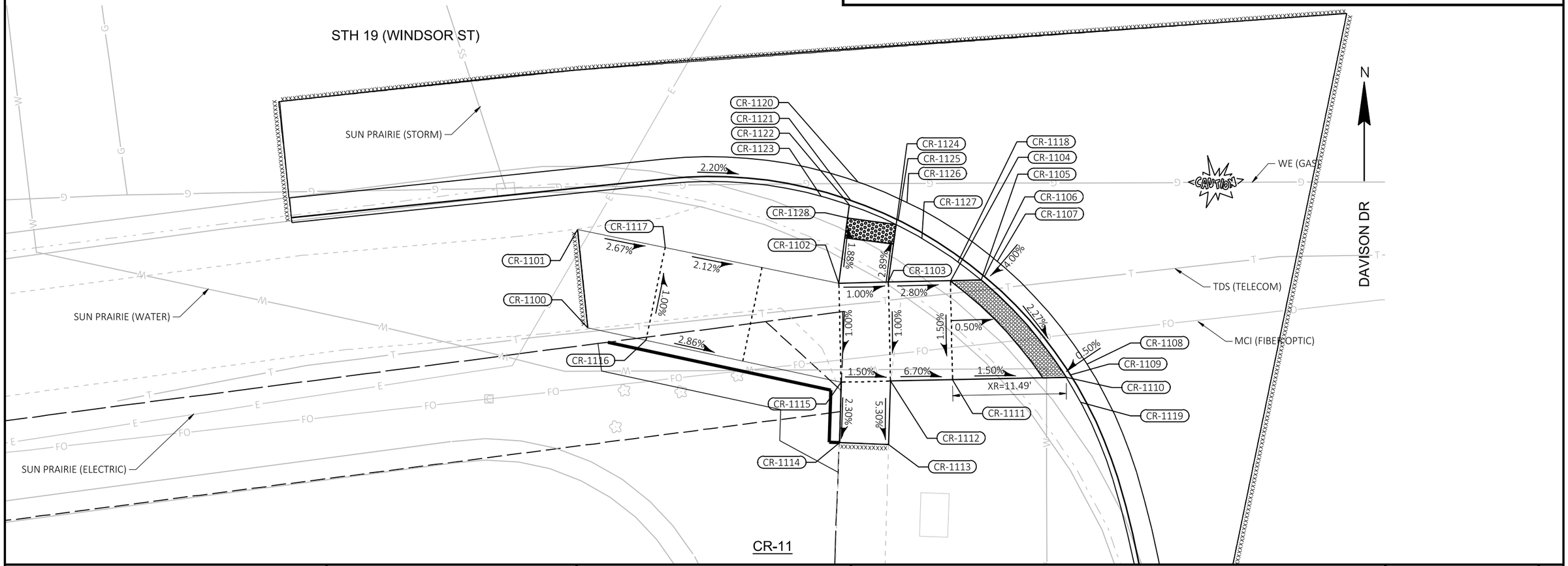
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1100	62+37.3 D	94.5' LT	523939.61	862289.43	MATCH
CR-1101	62+46.8 D	97.5' LT	523949.56	862288.40	MATCH
CR-1102	62+47.0 D	70.6' LT	523944.12	862314.80	990.11
CR-1103	62+48.1 D	65.7' LT	523944.22	862319.80	990.06
CR-1104	62+49.5 D	59.6' LT	523944.36	862326.06	989.69
CR-1105	62+50.3 D	56.6' LT	523944.42	862329.19	989.67
CR-1106	62+50.7 D	56.3' LT	523944.80	862329.51	989.66
CR-1107	62+52.5 D	55.4' LT	523946.33	862330.80	889.74
CR-1108	62+44.2 D	44.4' LT	523935.94	862339.87	989.37
CR-1109	62+42.8 D	45.8' LT	523934.87	862338.18	989.36
CR-1110	62+42.4 D	46.1' LT	523934.60	862337.76	989.37
CR-1111	62+39.8 D	57.3' LT	523934.36	862326.27	989.54
CR-1112	62+38.4 D	63.4' LT	523934.22	862320.01	989.94
CR-1113	62+32.1 D	62.3' LT	523927.83	862319.81	MATCH
CR-1114	62+31.2 D	67.2' LT	523928.01	862314.89	MATCH

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1115	62+37.2 D	68.3' LT	523934.12	862315.01	990.01
CR-1116	62+37.3 D	88.5' LT	523938.35	862295.30	990.59
CR-1117	62+46.9 D	88.5' LT	523947.74	862297.23	990.49
CR-1118	62+51.6 D	59.3' LT	523946.25	862326.81	990.15
CR-1119	62+40.3 D	44.2' LT	523932.08	862339.23	989.76
CR-1120	62+57.4 D	70.9' LT	523954.39	862316.65	990.03
CR-1121	62+55.4 D	71.1' LT	523952.50	862316.00	989.95
CR-1122	62+54.9 D	71.2' LT	523952.03	862315.83	989.96
CR-1123	62+55.2 D	74.2' LT	523952.92	862312.98	990.49
CR-1124	62+54.0 D	66.2' LT	523950.05	862320.56	989.89
CR-1125	62+54.5 D	66.0' LT	523950.50	862320.78	989.88
CR-1126	62+56.4 D	65.6' LT	523952.30	862321.66	989.93
CR-1127	62+53.2 D	63.3' LT	523948.65	862323.19	990.25
CR-1128	62+53.6 D	71.1' LT	523950.70	862315.66	989.99



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1300	62+67.2 D	5.0' LT	523950.31	862383.14	990.02
CR-1301	62+67.2 D	5.0' RT	523948.24	862392.92	989.87
CR-1302	62+64.3 D	5.0' RT	523945.42	862392.32	989.83
CR-1303	62+54.0 D	5.0' RT	523935.37	862390.20	989.65
CR-1304	62+45.2 D	5.0' RT	523926.69	862388.36	989.52
CR-1305	62+45.2 D	5.0' LT	523928.76	862378.58	989.71
CR-1306	62+52.4 D	5.0' LT	523935.84	862380.08	989.83
CR-1307	62+62.7 D	5.0' LT	523945.89	862382.20	989.98
CR-1308	62+72.2 D	5.0' RT	523953.14	862393.96	989.91
CR-1309	62+72.2 D	5.0' LT	523955.20	862384.17	990.07

2

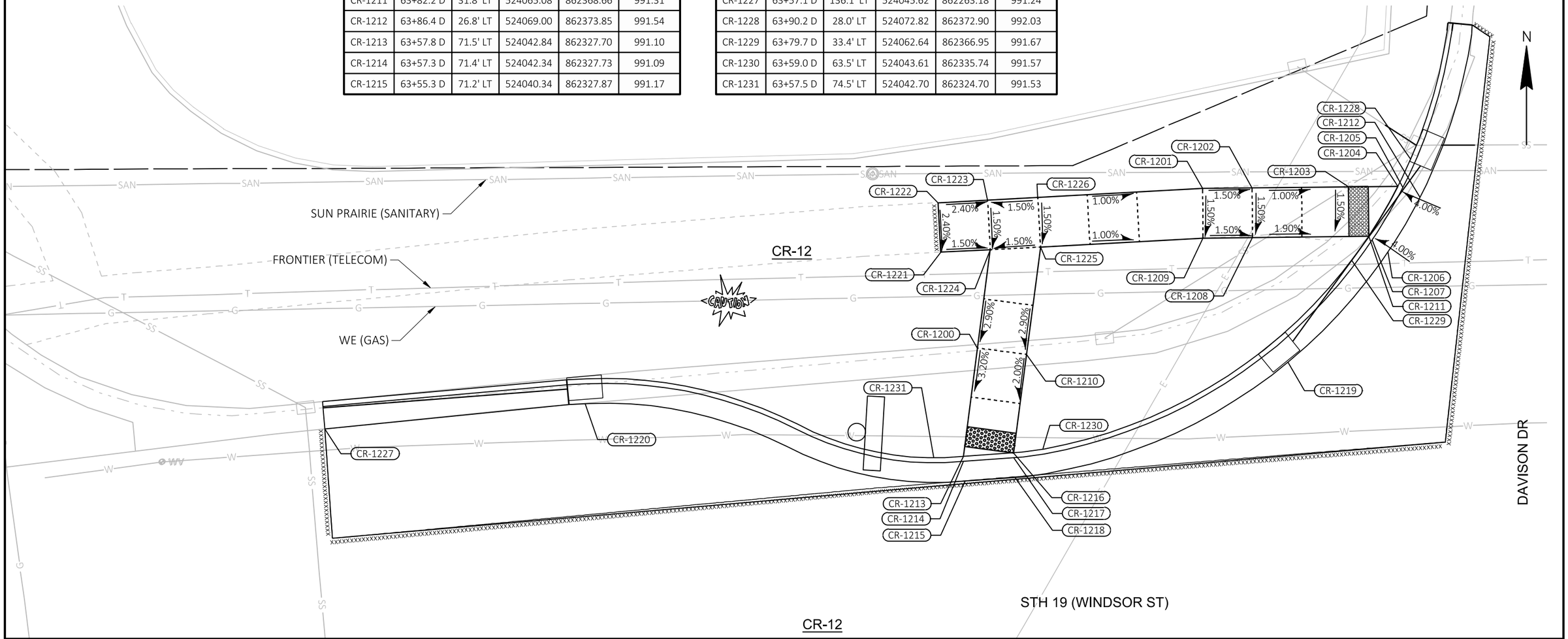


PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 21	E

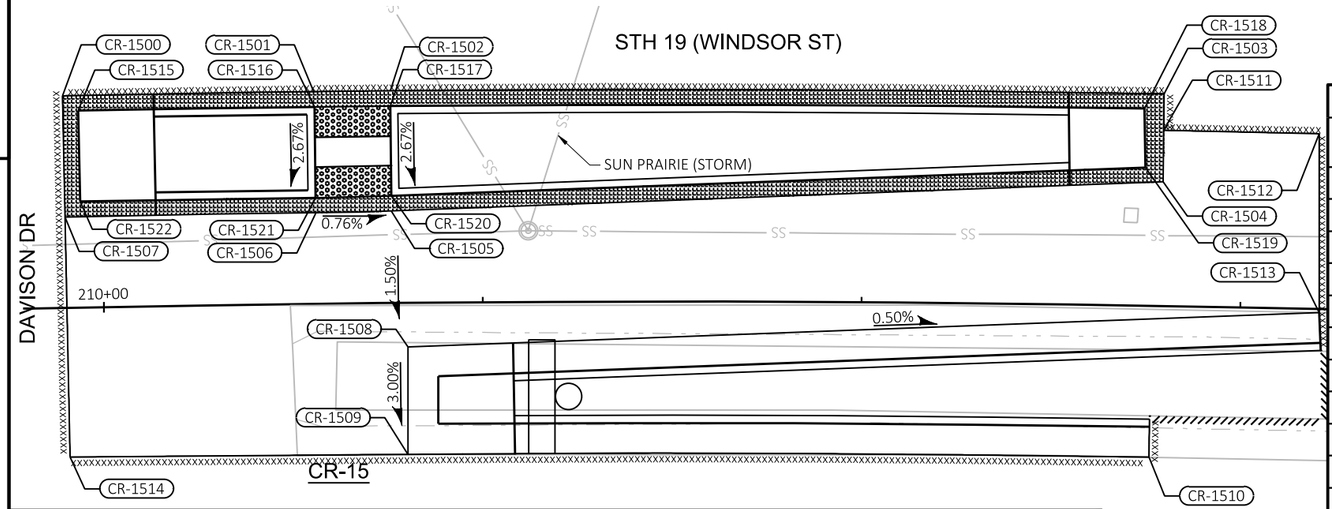
FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021308_cr
PLOT DATE : 1/25/2023 1:15 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1200	63+68.8 D	70.7' LT	524053.79	862329.13	991.42
CR-1201	63+86.1 D	48.8' LT	524069.88	862351.87	991.70
CR-1202	63+86.5 D	43.8' LT	524069.94	862356.87	991.62
CR-1203	63+87.1 D	34.1' LT	524070.05	862366.60	991.50
CR-1204	63+87.4 D	29.1' LT	524070.11	862371.61	991.47
CR-1205	63+87.3 D	28.6' LT	524069.98	862372.11	991.46
CR-1206	63+80.8 D	29.8' LT	524063.49	862370.61	991.38
CR-1207	63+81.9 D	31.4' LT	524064.70	862369.01	991.30
CR-1208	63+81.5 D	43.5' LT	524064.94	862356.93	991.54
CR-1209	63+81.1 D	48.5' LT	524064.88	862351.93	991.62
CR-1210	63+68.4 D	65.7' LT	524053.14	862334.08	991.50
CR-1211	63+82.2 D	31.8' LT	524065.08	862368.66	991.31
CR-1212	63+86.4 D	26.8' LT	524069.00	862373.85	991.54
CR-1213	63+57.8 D	71.5' LT	524042.84	862327.70	991.10
CR-1214	63+57.3 D	71.4' LT	524042.34	862327.73	991.09
CR-1215	63+55.3 D	71.2' LT	524040.34	862327.87	991.17

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1216	63+58.4 D	66.4' LT	524043.19	862332.77	991.07
CR-1217	63+58.0 D	66.4' LT	524042.69	862332.81	991.06
CR-1218	63+56.0 D	66.1' LT	524040.70	862332.95	991.14
CR-1219	63+69.1 D	39.3' LT	524052.34	862360.49	990.85
CR-1220	63+61.1 D	109.9' LT	524048.17	862289.49	990.71
CR-1221	63+78.3 D	74.9' LT	524063.43	862325.43	991.81
CR-1222	63+83.2 D	75.4' LT	524068.43	862325.16	991.93
CR-1223	63+83.8 D	70.4' LT	524068.70	862330.15	991.79
CR-1224	63+78.8 D	69.9' LT	524063.69	862330.42	991.71
CR-1225	63+79.3 D	64.8' LT	524063.96	862335.50	991.79
CR-1226	63+84.3 D	65.4' LT	524068.96	862335.23	991.87
CR-1227	63+57.1 D	136.1' LT	524045.62	862263.18	991.24
CR-1228	63+90.2 D	28.0' LT	524072.82	862372.90	992.03
CR-1229	63+79.7 D	33.4' LT	524062.64	862366.95	991.67
CR-1230	63+59.0 D	63.5' LT	524043.61	862335.74	991.57
CR-1231	63+57.5 D	74.5' LT	524042.70	862324.70	991.53



PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 22	E



N

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1500	209+97.6	14.0' LT	524022.26	862432.91	990.69
CR-1501	210+14.0	14.0' LT	524022.53	862449.48	990.59
CR-1502	210+19.0	14.0' LT	524022.58	862454.52	990.55
CR-1503	210+69.8	14.0' LT	524022.39	862505.61	990.25
CR-1504	210+69.8	8.2' LT	524016.56	862505.54	990.17
CR-1505	210+19.0	6.1' LT	524014.64	862454.61	990.39
CR-1506	210+14.1	6.0' LT	524014.53	862449.63	990.43
CR-1507	209+97.6	6.0' LT	524014.26	862433.07	990.57
CR-1508	210+20.0	2.9' RT	524005.68	862455.70	990.26
CR-1509	210+20.0	10.0' RT	523998.59	862455.70	990.07
CR-1510	210+69.1	10.0' RT	523998.41	862504.59	989.57
CR-1511	210+69.8	11.6' LT	524019.96	862505.58	990.21
CR-1512	210+80.0	11.6' LT	524019.76	862515.83	990.15

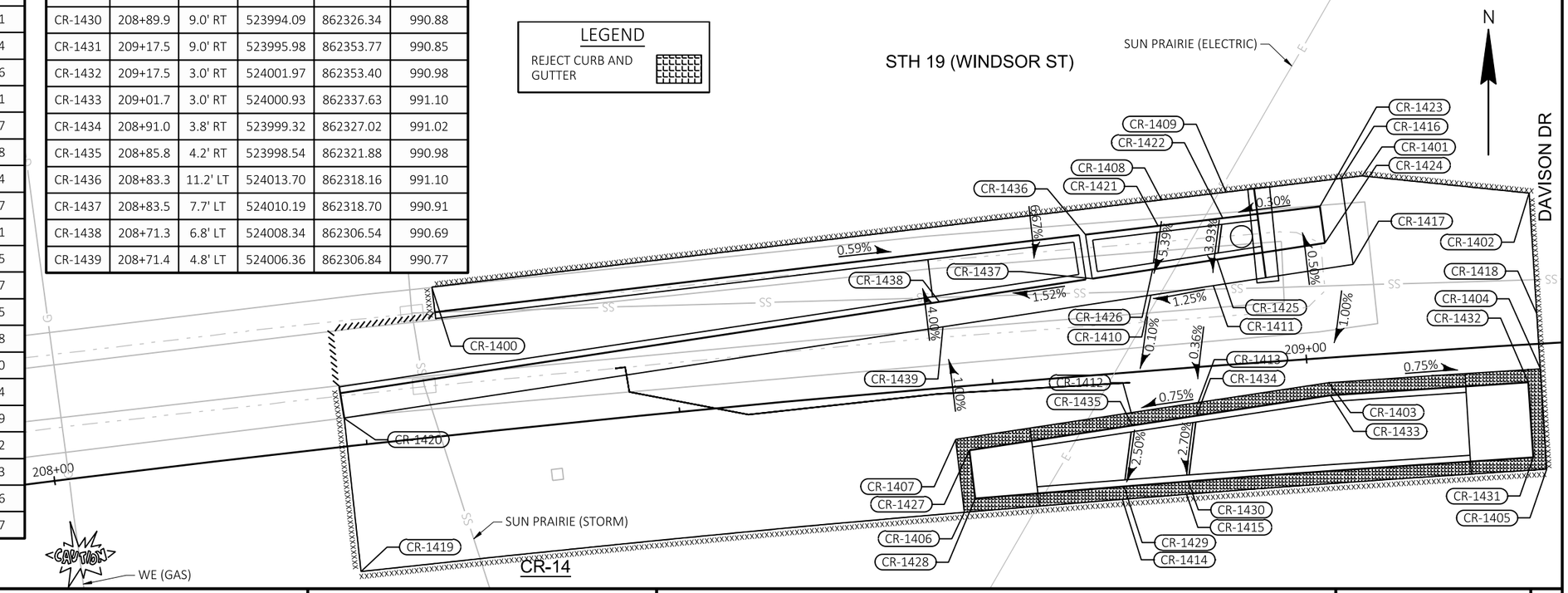
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1513	210+80.2	0.3' RT	524007.95	862515.83	989.96
CR-1514	209+97.6	9.8' RT	523998.42	862433.40	990.35
CR-1515	209+98.6	13.0' LT	524021.28	862433.93	990.69
CR-1516	210+14.1	13.0' LT	524021.52	862449.53	990.60
CR-1517	210+19.0	13.0' LT	524021.59	862454.53	990.56
CR-1518	210+68.5	13.0' LT	524021.41	862504.30	990.26
CR-1519	210+68.6	9.1' LT	524017.52	862504.35	990.19
CR-1520	210+19.0	7.1' LT	524015.64	862454.60	990.40
CR-1521	210+14.1	7.0' LT	524015.52	862449.60	990.44
CR-1522	209+98.6	7.0' LT	524015.28	862434.05	990.57

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1400	208+31.5	11.8' LT	524009.49	862266.23	991.44
CR-1401	209+05.4	14.2' LT	524018.35	862340.16	991.14
CR-1402	209+18.5	12.0' LT	524016.97	862353.45	991.059
CR-1403	209+01.6	2.0' RT	524001.93	862337.52	991.09
CR-1404	209+18.5	2.0' RT	524003.03	862354.33	990.96
CR-1405	209+18.5	10.0' RT	523995.05	862354.83	990.91
CR-1406	208+71.9	10.0' RT	523991.64	862308.54	990.84
CR-1407	208+71.7	4.2' RT	523997.40	862307.86	990.86
CR-1408	208+89.5	13.5' LT	524016.44	862324.22	991.21
CR-1409	208+94.6	13.7' LT	524017.05	862329.35	991.17
CR-1410	208+88.1	6.0' LT	524008.88	862323.39	990.98
CR-1411	208+93.1	6.4' LT	524009.64	862328.36	991.04
CR-1412	208+85.8	3.2' RT	523999.54	862321.82	990.97
CR-1413	208+91.2	2.8' RT	524000.35	862327.16	991.01
CR-1414	208+84.5	10.0' RT	523992.67	862321.11	990.85
CR-1415	208+89.7	10.0' RT	523993.07	862326.20	990.87
CR-1416	209+03.8	14.1' LT	524018.15	862338.52	991.15
CR-1417	209+04.2	7.2' LT	524011.32	862339.45	991.18
CR-1418	209+18.5	2.4' LT	524007.42	862354.05	991.00
CR-1419	208+23.4	10.0' RT	523986.92	862260.58	990.84
CR-1420	208+23.4	2.3' LT	523999.10	862259.23	990.59
CR-1421	208+89.1	11.4' LT	524014.40	862323.96	991.12
CR-1422	208+94.2	11.7' LT	524015.01	862329.08	991.13
CR-1423	209+01.9	12.0' LT	524015.93	862336.80	991.16
CR-1424	209+02.1	9.1' LT	524013.01	862337.20	991.17

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CR-1425	208+93.5	8.4' LT	524011.70	862328.64	991.03
CR-1426	208+88.3	8.0' LT	524010.92	862323.50	990.96
CR-1427	208+72.7	5.1' RT	523996.57	862308.96	990.87
CR-1428	208+72.8	9.0' RT	523992.73	862309.42	990.85
CR-1429	208+84.8	9.0' RT	523993.70	862321.24	990.86
CR-1430	208+89.9	9.0' RT	523994.09	862326.34	990.88
CR-1431	209+17.5	9.0' RT	523995.98	862353.77	990.85
CR-1432	209+17.5	3.0' RT	524001.97	862353.40	990.98
CR-1433	209+01.7	3.0' RT	524000.93	862337.63	991.10
CR-1434	208+91.0	3.8' RT	523999.32	862327.02	991.02
CR-1435	208+85.8	4.2' RT	523998.54	862321.88	990.98
CR-1436	208+83.3	11.2' LT	524013.70	862318.16	991.10
CR-1437	208+83.5	7.7' LT	524010.19	862318.70	990.91
CR-1438	208+71.3	6.8' LT	524008.34	862306.54	990.69
CR-1439	208+71.4	4.8' LT	524006.36	862306.84	990.77

LEGEND

REJECT CURB AND GUTTER



PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 23	E

LEGEND

INLET PROTECTION (TYPE)

TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS URBAN 1 TYPE A

SILT FENCE

N

RW EXISTING

RW EXISTING

RW EXISTING

PLE

RW EXISTING

56+00 T

55+00 T

54+00 T

107+00

108+00

109+00

110+00

111+00

112+00

STH 19 (WINDSOR ST)

RW EXISTING

PLE

RW EXISITING

RW EXISTING

RW EXISTING

N THOMPSON RD

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	EROSION CONTROL	SHEET 24	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 1/25/2023 1:17 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

INLET PROTECTION (TYPE)

TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, AND EROSION MAT CLASS URBAN 1 TYPE A

SILT FENCE

N

RW EXISTING

RW EXISTING

RW EXISTING

RW EXISTING

RW EXISTING

RW EXISTING

RW EXISTING

RW EXISTING

207+00

208+00

209+00

210+00

211+00

212+00

63+00 D

64+00 D

65+00 D

62+00 D

DAVISON DR

STH 19 (WINDSOR ST)

C

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	EROSION CONTROL	SHEET 25	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 1/25/2023 1:17 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 19 (WINDSOR ST)

N THOMPSON RD

107+00 108+00 109+00 110+00 111+00 112+00 113+00

57+00 T

56+00 T

55+00 T

54+00 T

EXPB6 EXSB6 EXPB7 EXSB9 EXPB8 EXSB11 EXPB9 EXSB8 EXSB5 EXPB5 EXPB11 EXPB12 EXPB10 EXCB1 EXSB12 EXSB1 EXPB13 EXPB4 EXSB4 EXSB3 EXPB3 EXSB2 EXPB2 EXPB1

20'

LEGEND

- PULL BOX
- LUMINAIRE
- SIGNAL HEAD
- SIGNAL CABINET
- (XX) TRAFFIC SIGNAL HEAD WITH MAST ARM
- (EXPBX) REMOVING PULL BOX REQ'D
- (EXSBX) REMOVING CONCRETE BASES REQ'D

*BASE REMOVAL WILL BE PAID AS "REMOVING CONCRETE BASES". PULL BOX REMOVAL WILL BE PAID AS "REMOVING PULL BOXES". ABOVE GROUND SIGNAL EQUIPMENT REMOVALS AT EACH LOCATION WILL BE PAID AS "REMOVE AND TRANSPORT TRAFFIC SIGNALS (INTERSECTION)".

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL REMOVAL PLAN - N THOMPSON ROAD	SHEET 26	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024001-SR.DWG
LAYOUT NAME - 024001-sr

PLOT DATE : 1/25/2023 1:20 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 19 (WINDSOR ST)

65+00 D

64+00 D

63+00 D

62+00 D

DAVISON DR

207+00

208+00

209+00

210+00

211+00

212+00

EXPB1

EXPB2

EXPB3

EXPB4

EXPB5

EXPB6

EXPB7

EXPB8

EXPB9

EXPB10

EXPB11

EXPB14

EXPB15

EXSB2

EXSB3

EXSB5

EXSB6

EXSB8

EXSB9

EXSB11

EXSB12

EXSB13

EXSB14

EXSB15

EXCB1

20'

LEGEND

- PULL BOX
- LUMINAIRE
- SIGNAL HEAD
- SIGNAL CABINET
- (XX) TRAFFIC SIGNAL HEAD WITH MAST ARM
- (EXPBX) REMOVING PULL BOX REQ'D
- (EXSBX) REMOVING CONCRETE BASES REQ'D

*BASE REMOVAL WILL BE PAID AS "REMOVING CONCRETE BASES". PULL BOX REMOVAL WILL BE PAID AS "REMOVING PULL BOXES". ABOVE GROUND SIGNAL EQUIPMENT REMOVALS AT EACH LOCATION WILL BE PAID AS "REMOVE AND TRANSPORT TRAFFIC SIGNALS (INTERSECTION)".

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL REMOVAL PLAN - DAVISON DRIVE	SHEET 27	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024001-SR.DWG
LAYOUT NAME - 024002-sr

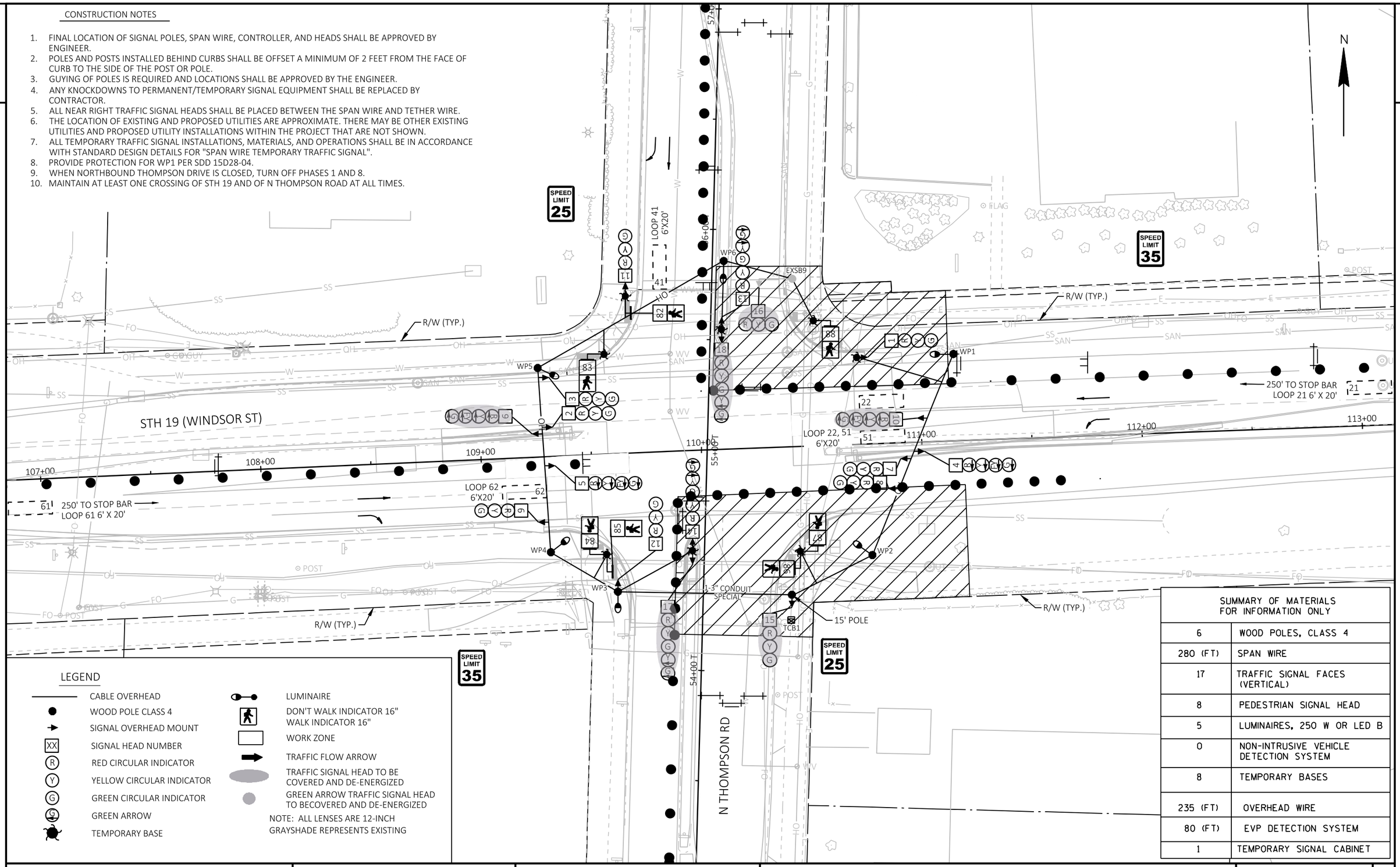
PLOT DATE : 1/25/2023 1:20 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
8. PROVIDE PROTECTION FOR WP1 PER SDD 15D28-04.
9. WHEN NORTHBOUND THOMPSON DRIVE IS CLOSED, TURN OFF PHASES 1 AND 8.
10. MAINTAIN AT LEAST ONE CROSSING OF STH 19 AND OF N THOMPSON ROAD AT ALL TIMES.



LEGEND

- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

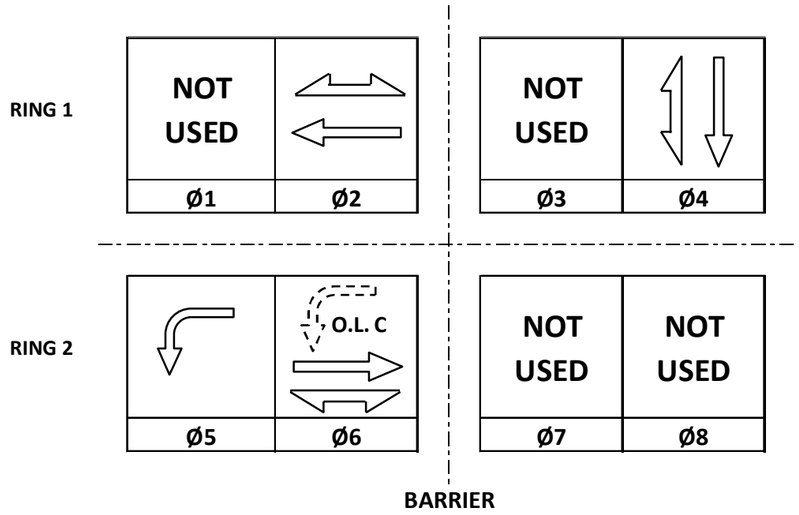
NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SUMMARY OF MATERIALS FOR INFORMATION ONLY	
6	WOOD POLES, CLASS 4
280 (FT)	SPAN WIRE
17	TRAFFIC SIGNAL FACES (VERTICAL)
8	PEDESTRIAN SIGNAL HEAD
5	LUMINAIRES, 250 W OR LED B
0	NON-INTRUSIVE VEHICLE DETECTION SYSTEM
8	TEMPORARY BASES
235 (FT)	OVERHEAD WIRE
80 (FT)	EVP DETECTION SYSTEM
1	TEMPORARY SIGNAL CABINET

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - N THOMPSON ROAD STAGE 1A	SHEET 28	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - 024101-st
PLOT DATE : 1/25/2023 1:17 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1		
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13,14	R
Ø5	4,5	R ←
Ø6	6,7,8	R
Ø7		
Ø8		
Ø2P	81,82	
Ø4P	83,84	
Ø6P	85,86	
Ø8P	87,88	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	41	61					
CALLED PHASE	2	4	6					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME	X		X					
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	51	62					
CALLED PHASE	2	5	6					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

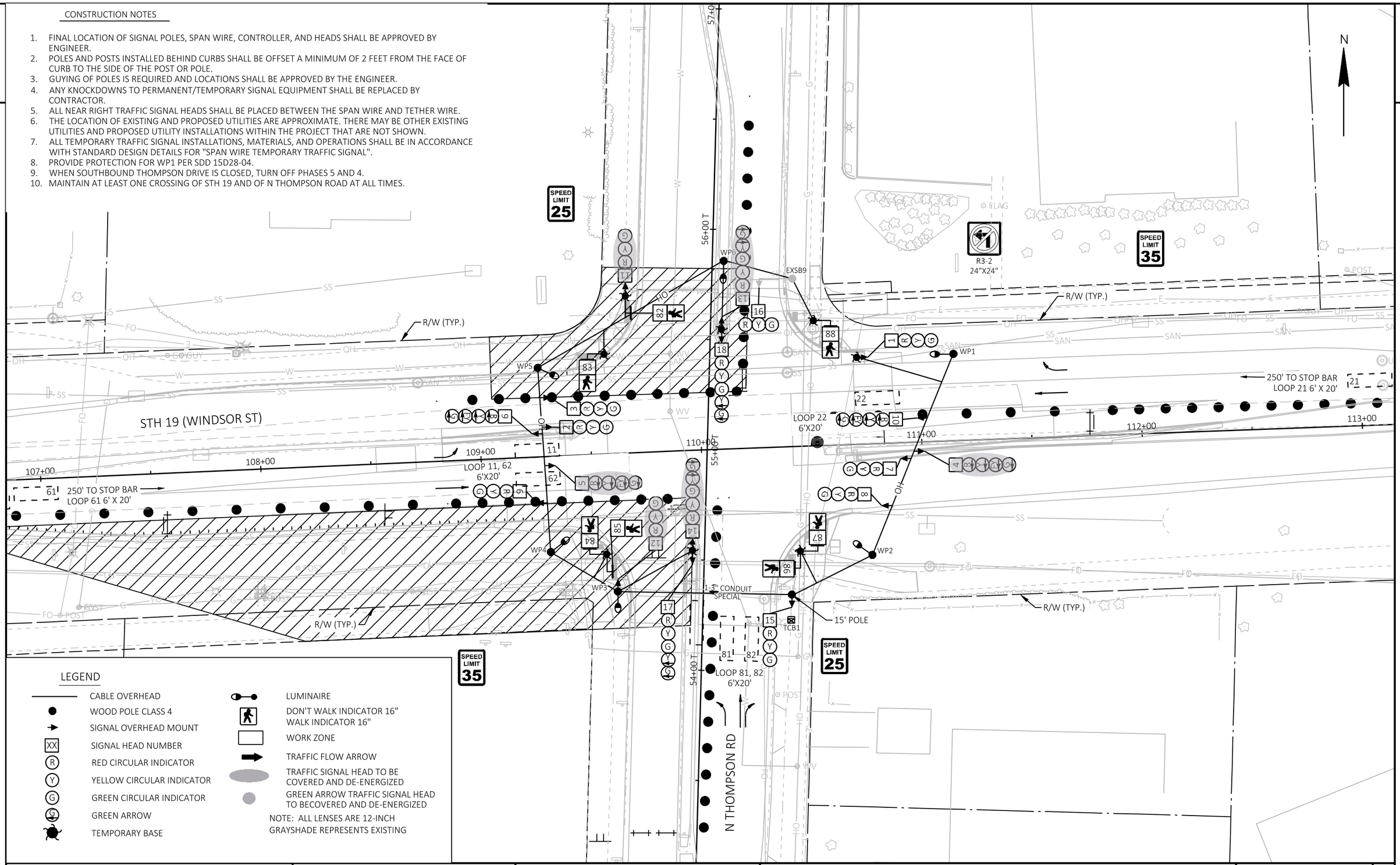
1. PHASES 1 AND 8 ARE INACTIVE DURING STAGE 1A.
2. PHASES 4 AND 5 ARE INACTIVE DURING STAGE 1B.
3. PHASES 1 AND 5 ARE INACTIVE DURING STAGE 2.
4. PHASES 3 AND 7 ARE INACTIVE DURING STAGE 1 AND STAGE 2.

STH 19 and N THOMPSON ROAD
CITY OF SUN PRAIRIE
DANE COUNTY
SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
8. PROVIDE PROTECTION FOR WP1 PER SDD 15D28-04.
9. WHEN SOUTHBOUND THOMPSON DRIVE IS CLOSED, TURN OFF PHASES 5 AND 4.
10. MAINTAIN AT LEAST ONE CROSSING OF STH 19 AND OF N THOMPSON ROAD AT ALL TIMES.



LEGEND

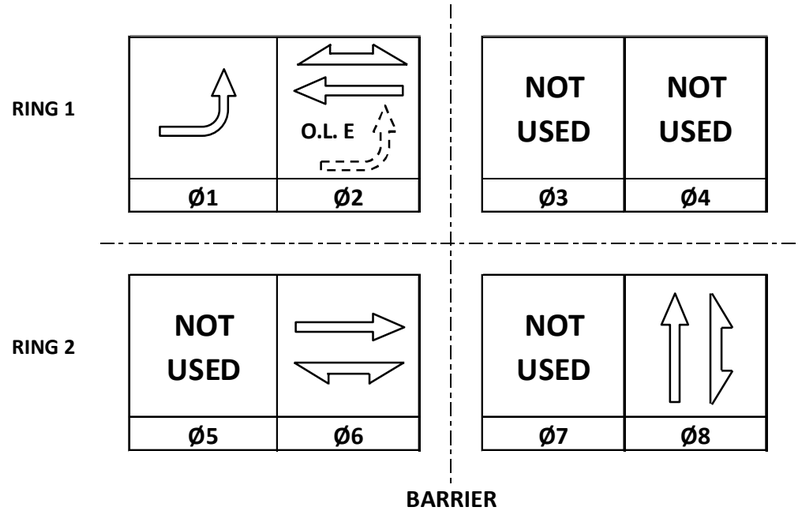
- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - N THOMPSON ROAD STAGE 1B	SHEET 30	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - 024102-st
PLOT DATE : 1/25/2023 1:18 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	9,10	R ←
Ø2	1,2,3	R
Ø3		
Ø4		
Ø5		
Ø6	6,7,8	R
Ø7		
Ø8	15,16,17,18	R
Ø2P	81,82	
Ø4P		
Ø6P	85,86	
Ø8P	87,88	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	62	82				
CALLED PHASE	1	2	6	8				
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	61	81					
CALLED PHASE	2	6	8					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X	X						
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

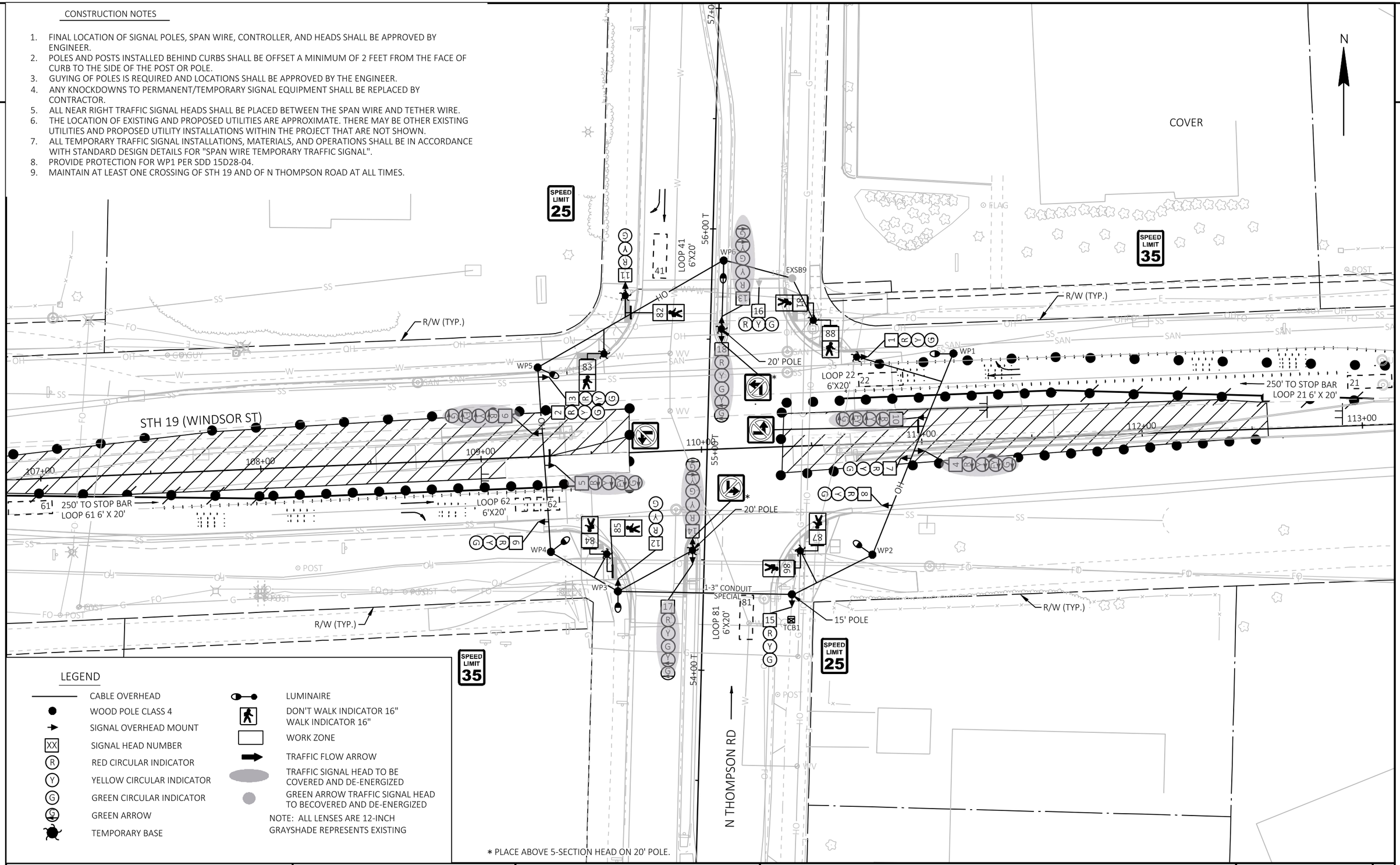
1. PHASES 1 AND 8 ARE INACTIVE DURING STAGE 1A.
2. PHASES 4 AND 5 ARE INACTIVE DURING STAGE 1B.
3. PHASES 1 AND 5 ARE INACTIVE DURING STAGE 2.
4. PHASES 3 AND 7 ARE INACTIVE DURING STAGE 1 AND STAGE 2.

STH 19 and N THOMPSON ROAD
CITY OF SUN PRAIRIE
DANE COUNTY
SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
8. PROVIDE PROTECTION FOR WP1 PER SDD 15D28-04.
9. MAINTAIN AT LEAST ONE CROSSING OF STH 19 AND OF N THOMPSON ROAD AT ALL TIMES.



LEGEND

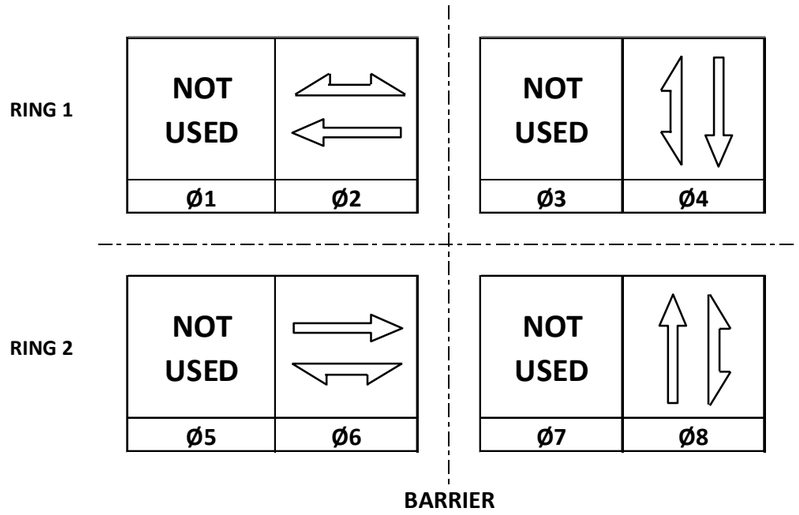
- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

* PLACE ABOVE 5-SECTION HEAD ON 20' POLE.

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - N THOMPSON ROAD STAGE 2	SHEET 32	E

	HEAD NUMBERS	FLASH
Ø1		
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13,14	R
Ø5		
Ø6	6,7,8	R
Ø7		
Ø8	15,16,17,18	R
Ø2P	81,82	
Ø4P	83,84	
Ø6P	85,86	
Ø8P	87,88	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	41	62					
CALLED PHASE	2	4	6					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X							
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	61	81					
CALLED PHASE	2	6	8					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION		X						
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

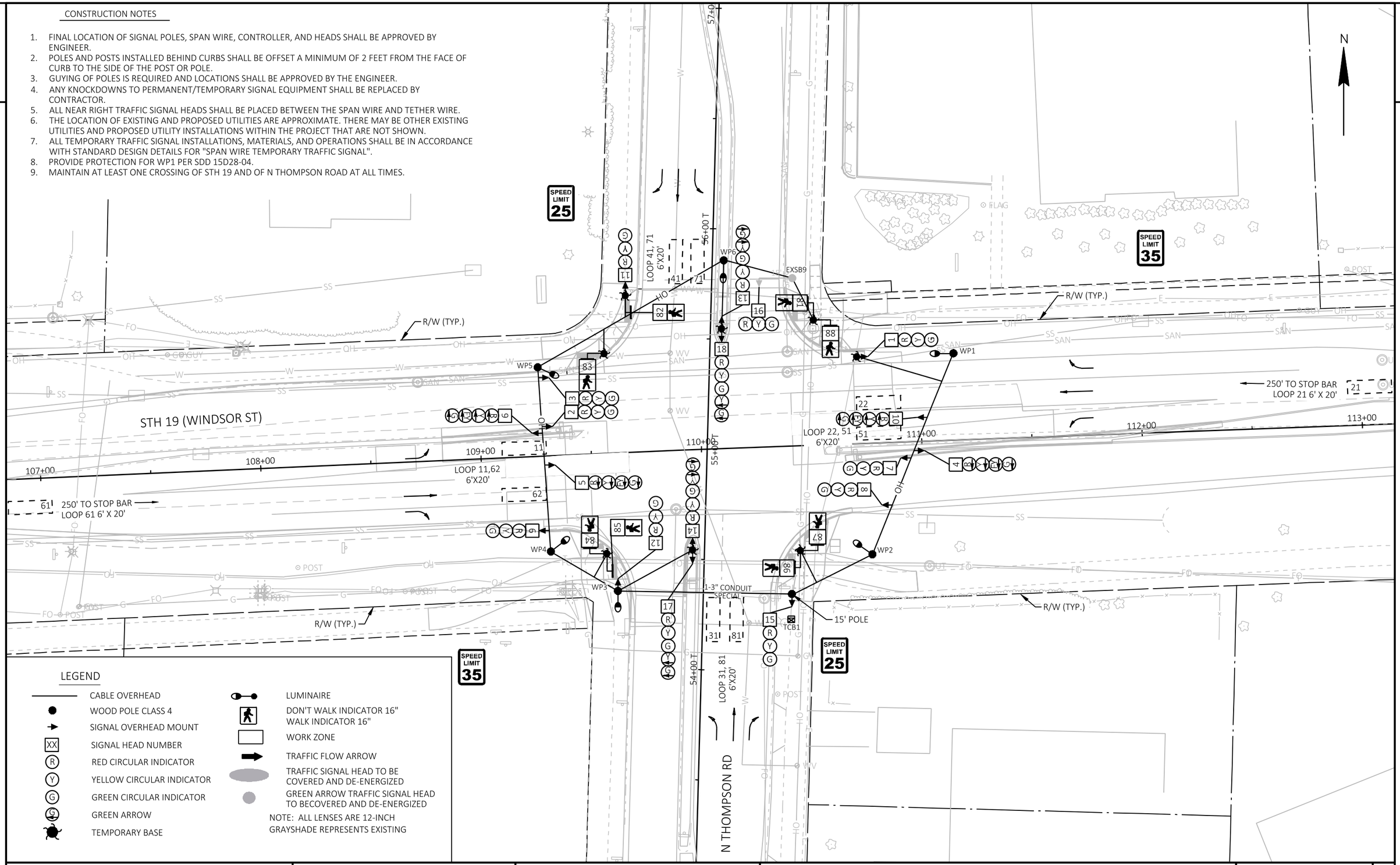
1. PHASES 1 AND 8 ARE INACTIVE DURING STAGE 1A.
2. PHASES 4 AND 5 ARE INACTIVE DURING STAGE 1B.
3. PHASES 1 AND 5 ARE INACTIVE DURING STAGE 2.
4. PHASES 3 AND 7 ARE INACTIVE DURING STAGE 1 AND STAGE 2.

STH 19 and N THOMPSON ROAD
CITY OF SUN PRAIRIE
DANE COUNTY
SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

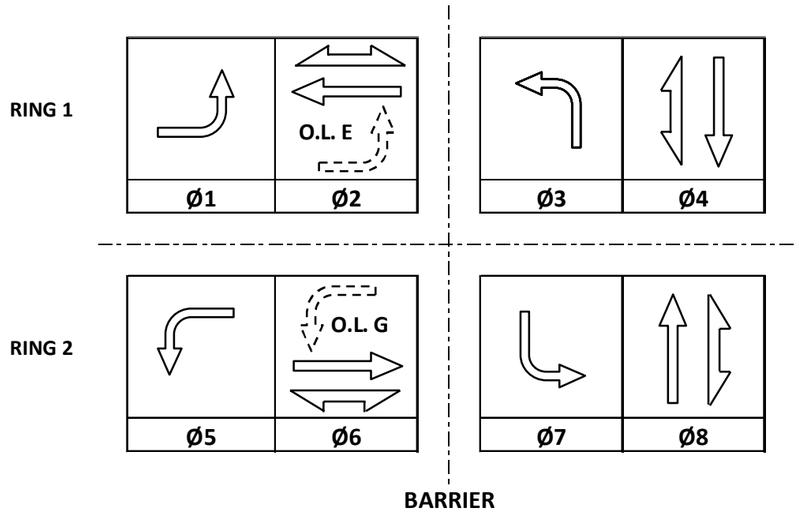
1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".
8. PROVIDE PROTECTION FOR WP1 PER SDD 15D28-04.
9. MAINTAIN AT LEAST ONE CROSSING OF STH 19 AND OF N THOMPSON ROAD AT ALL TIMES.



PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - N THOMPSON ROAD STAGE 3	SHEET 34	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024101-ST.DWG
LAYOUT NAME - 024104-st
PLOT DATE : 1/25/2023 1:18 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	9,10	R
Ø2	1,2,3	R
Ø3	17,18	R
Ø4	11,12,13,14	R
Ø5	4,5	R
Ø6	6,7,8	R
Ø7	13,14	R
Ø8	15,16,17,18	R
Ø2P	81,82	
Ø4P	83,84	
Ø6P	85,86	
Ø8P	87,88	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	41	61	71			
CALLED PHASE	1	2	4	6	7			
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME				X				
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	31	51	62	81			
CALLED PHASE	2	3	5	6	8			
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X							
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

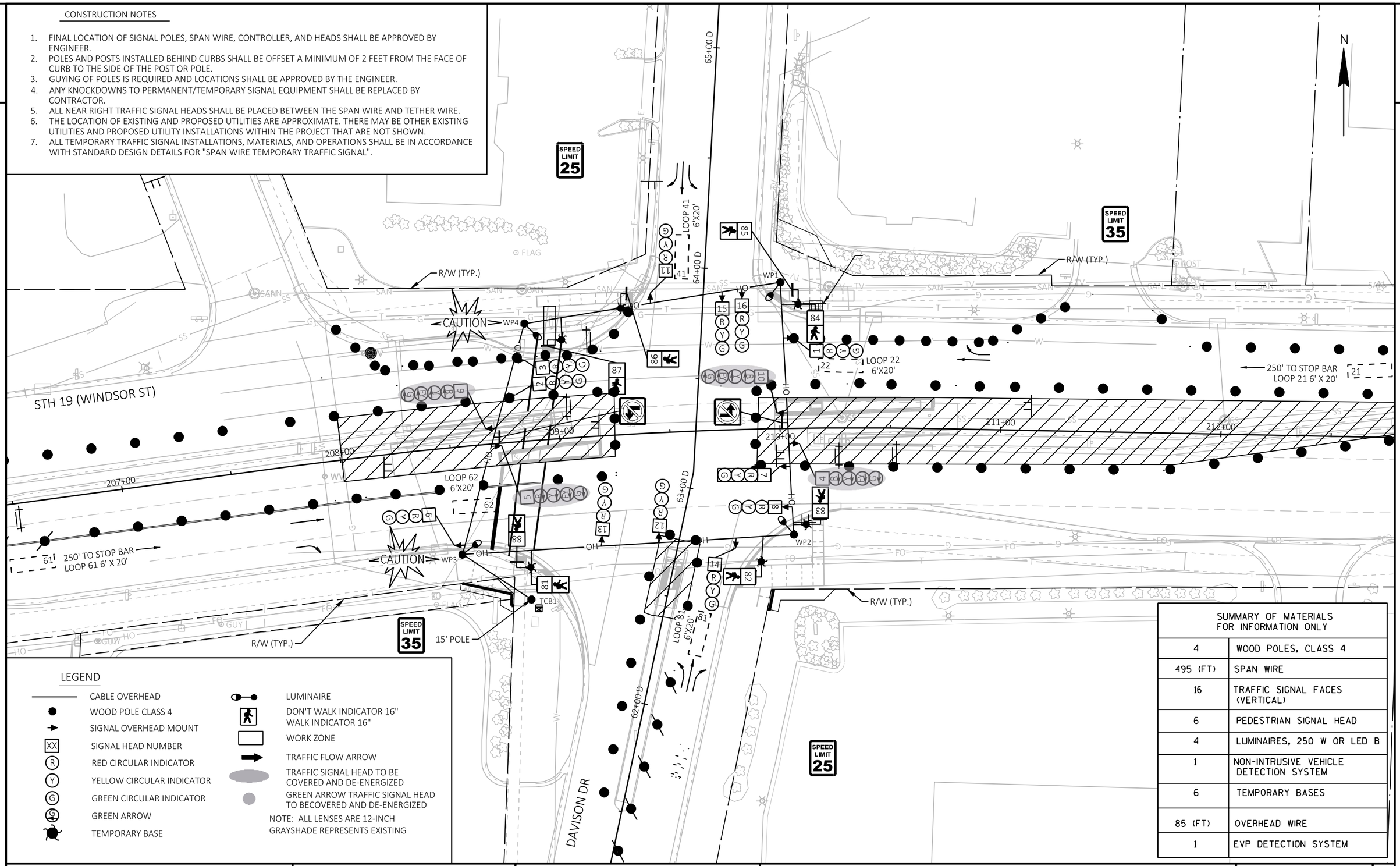
1. PHASES 1 AND 8 ARE INACTIVE DURING STAGE 1A.
2. PHASES 4 AND 5 ARE INACTIVE DURING STAGE 1B.
3. PHASES 1 AND 5 ARE INACTIVE DURING STAGE 2.
4. PHASES 3 AND 7 ARE INACTIVE DURING STAGE 1 AND STAGE 2.

STH 19 and N THOMPSON ROAD
CITY OF SUN PRAIRIE
DANE COUNTY
SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".



LEGEND

- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

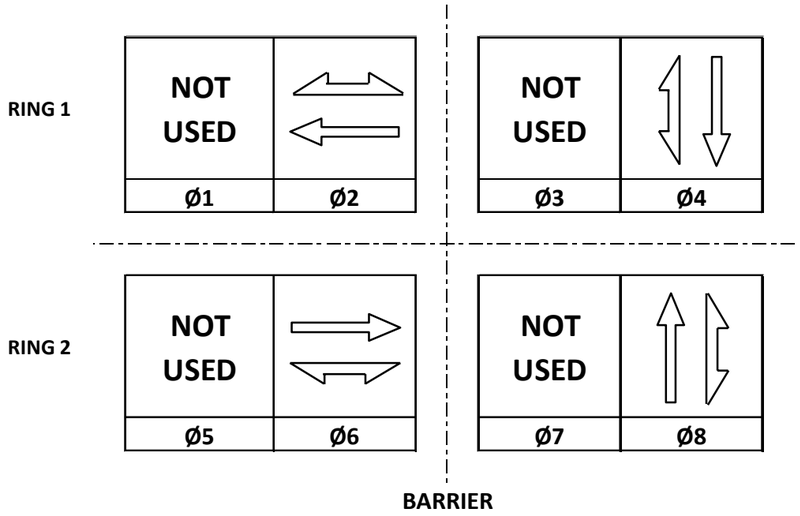
NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

SUMMARY OF MATERIALS FOR INFORMATION ONLY	
4	WOOD POLES, CLASS 4
495 (FT)	SPAN WIRE
16	TRAFFIC SIGNAL FACES (VERTICAL)
6	PEDESTRIAN SIGNAL HEAD
4	LUMINAIRES, 250 W OR LED B
1	NON-INTRUSIVE VEHICLE DETECTION SYSTEM
6	TEMPORARY BASES
85 (FT)	OVERHEAD WIRE
1	EVP DETECTION SYSTEM

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - DAVISON DRIVE STAGE 1	SHEET 36	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024102-ST.DWG
LAYOUT NAME - 024106-st
PLOT DATE : 1/25/2023 1:19 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1		←
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13	R
Ø5		
Ø6	6,7,8	R
Ø7		
Ø8	14,15,16	R
Ø2P	85,86	
Ø4P	87,88	
Ø6P	81,82	
Ø8P	83,84	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	41	62					
CALLED PHASE	2	4	6					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X							
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22	61	81					
PHASE CALLED	2	6	8					
CALL OPTION								
DELAY TIME								
EXTENSION OPTION		X						
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								PHASE CALLED
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. PHASE 1 AND 5 ARE INACTIVE DURING STAGE 1
2. DURING STAGE 2 THE RIGHT-TURN ADJACENT TO THE WORK ZONE SHALL BE RESTRICTED.
3.
4.

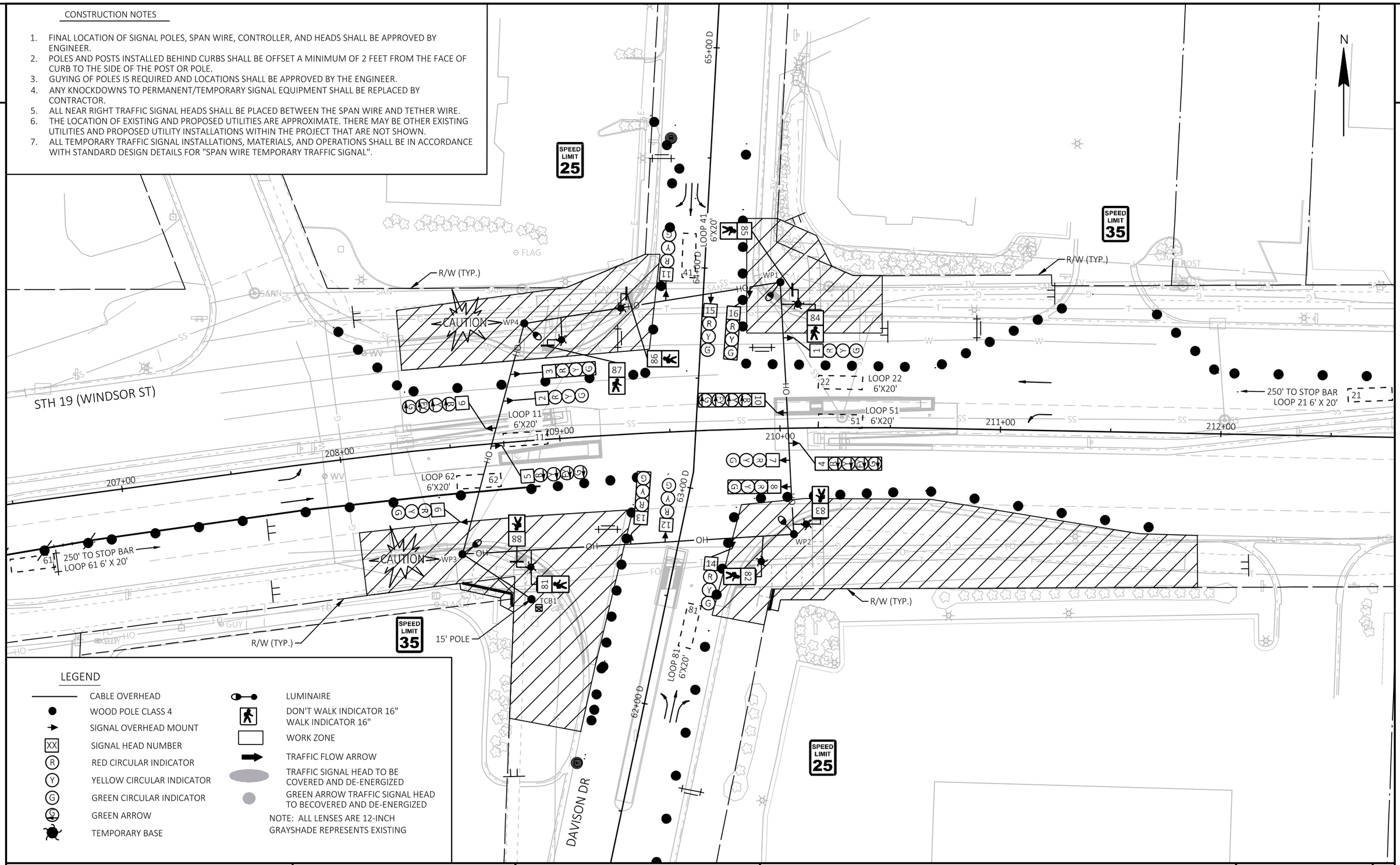
STH 19 AND DAVISON DRIVE
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".



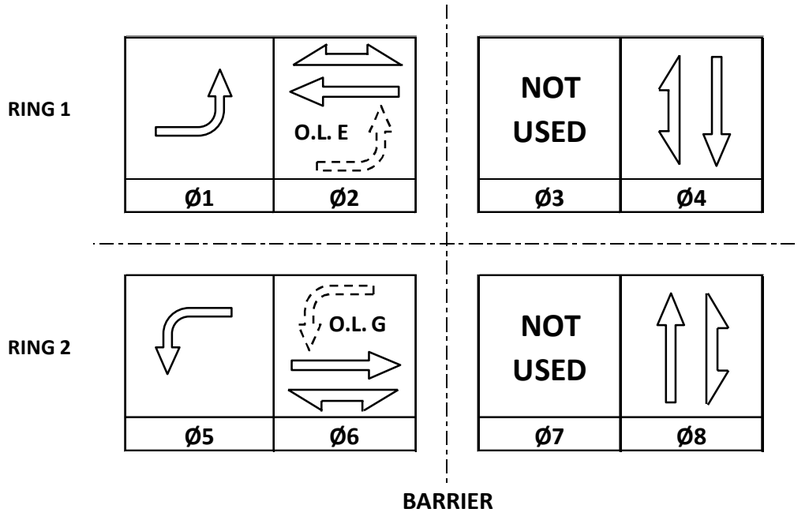
LEGEND

- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - DAVISON DRIVE STAGE 2B	SHEET 38	E

	HEAD NUMBERS	FLASH
Ø1	9,10	R ←
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13	R
Ø5	4,5	R ←
Ø6	6,7,8	R
Ø7		
Ø8	14,15,16	R
Ø2P	85,86	
Ø4P	87,88	
Ø6P	81,82	
Ø8P	83,84	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	51	62				
CALLED PHASE	1	2	5	6				
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	41	61	81				
PHASE CALLED	2	4	6	8				
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X		X					
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								PHASE CALLED
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. PHASE 1 AND 5 ARE INACTIVE DURING STAGE 1
2. DURING STAGE 2 THE RIGHT-TURN ADJACENT TO THE WORK ZONE SHALL BE RESTRICTED.
3.
4.

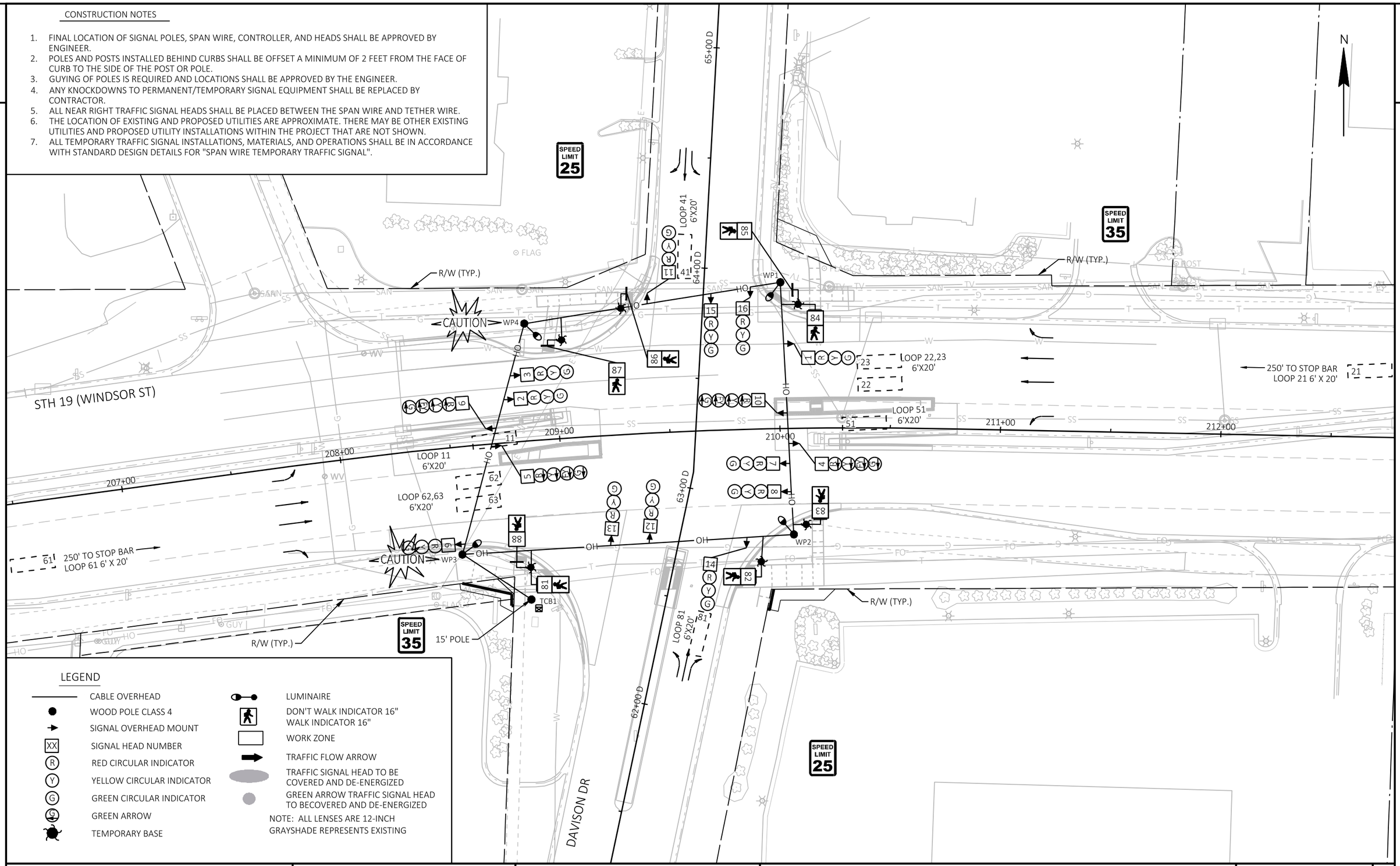
STH 19 AND DAVISON DRIVE
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

CONSTRUCTION NOTES

1. FINAL LOCATION OF SIGNAL POLES, SPAN WIRE, CONTROLLER, AND HEADS SHALL BE APPROVED BY ENGINEER.
2. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POST OR POLE.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
4. ANY KNOCKDOWNS TO PERMANENT/TEMPORARY SIGNAL EQUIPMENT SHALL BE REPLACED BY CONTRACTOR.
5. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
6. THE LOCATION OF EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER EXISTING UTILITIES AND PROPOSED UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.
7. ALL TEMPORARY TRAFFIC SIGNAL INSTALLATIONS, MATERIALS, AND OPERATIONS SHALL BE IN ACCORDANCE WITH STANDARD DESIGN DETAILS FOR "SPAN WIRE TEMPORARY TRAFFIC SIGNAL".



LEGEND

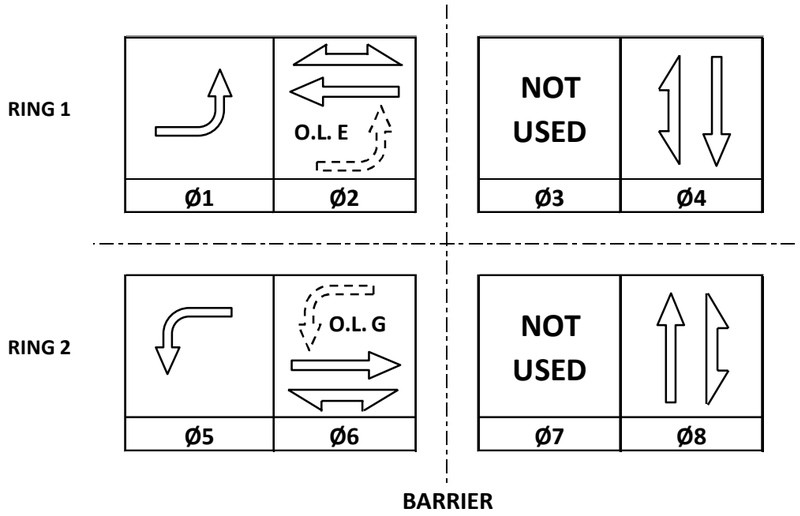
- CABLE OVERHEAD
- WOOD POLE CLASS 4
- SIGNAL OVERHEAD MOUNT
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- G GREEN ARROW
- TEMPORARY BASE
- LUMINAIRE
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- WORK ZONE
- TRAFFIC FLOW ARROW
- TRAFFIC SIGNAL HEAD TO BE COVERED AND DE-ENERGIZED
- GREEN ARROW TRAFFIC SIGNAL HEAD TO BECOVERED AND DE-ENERGIZED

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TEMPORARY TRAFFIC SIGNAL PLAN - DAVISON DRIVE STAGE 3	SHEET 40	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024102-ST.DWG
LAYOUT NAME - 024107-st
PLOT DATE : 1/25/2023 1:19 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1	9,10	R ←
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13	R
Ø5	4,5	R ←
Ø6	6,7,8	R
Ø7		
Ø8	14,15,16	R
Ø2P	85,86	
Ø4P	87,88	
Ø6P	81,82	
Ø8P	83,84	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE				

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	41	61	63			
CALLED PHASE	1	2	4	6	6			
CALL OPTION								
DELAY TIME								
EXTENSION OPTION				X				
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	23	51	62	81			
PHASE CALLED	2	3	5	6	8			
CALL OPTION								
DELAY TIME								
EXTENSION OPTION	X							
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								PHASE CALLED
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. PHASE 1 AND 5 ARE INACTIVE DURING STAGE 1
2. DURING STAGE 2 THE RIGHT-TURN ADJACENT TO THE WORK ZONE SHALL BE RESTRICTED.
3.
4.

STH 19 AND DAVISON DRIVE
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: TEMP
DATE: 11/1/2022

2

LEGEND

- TRAFFIC SIGNAL CONTROLLER, CABINET, & CONCRETE BASE
- CONDUIT RIGID NONMETALLIC ONE 2-INCH, UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, & CONCRETE BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, & CONCRETE BASE
- (XX) SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE
- XX MICROWAVE DETECTION
- PULL BOXES STEEL, 24X36-INCH
- PULL BOXES NON CONDUCTIVE, 24X42-INCH
- PULL BOXES STEEL, 12X24-INCH
- EVP DETECTOR HEAD AND DESIGNATOR
- PTZX PTZ CAMERA
- VIDEO DETECTION ZONE
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- QUANTITY POINT (NON-PHYSICAL ITEM)
- PEDESTRIAN SIGNAL FACE 16-INCH
- NOTE: ALL LENSES ARE 12-INCH

N

SPEED LIMIT 25

SPEED LIMIT 35

STH 19 (WINDSOR ST)

N THOMPSON RD

INSTALL CONDUIT INTO EXISTING ITEM (2)

INSTALL CONDUIT INTO EXISTING ITEM

R/W (TYP.)

LOOP 11, 62, 6'X20'

LOOP 41, 42, 71 6'X20'

LOOP 22, 51 6'X20'

LOOP 31, 81, 82 6'X20'

250' TO STOP BAR LOOP 41 6' X 6'

250' TO STOP BAR LOOP 61 6' X 6'

SALVAGE AND REINSTALL EXISTING METER BREAKER PEDESTAL

2-3" CONDUIT SPECIAL

2-3"

45'

107+00 108+00 109+00 110+00 111+00 112+00 113+00

54+00T 55+00T 56+00T 57+00

PB4 PB6 PB8 PB9

SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB10 SB11 SB12 SB13

EXPB1 EXPB2 EXPB3 EXPB5 EXPB7 EXPB10 EXSB8 EXSB9

LB1 CB1

QP1 QP2 QP3 QP4

PTZ1

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.
5. ALL TRAFFIC SIGNAL HEADS WILL HAVE REFLECTIVE BACK PLATES.
6. GRAYSCALE REPRESENTS EXISTING CONDITIONS UNLESS OTHERWISE NOTED.
7. ALL CONDUIT UNDER EXISTING OR PROPOSED ROADWAYS SHALL BE SCHEDULE 80.

STRUCTURE NUMBER	BASE NUMBER
S-13-3119-0005	SB5
S-13-3119-0012	SB12

STH 19 and N THOMPSON ROAD

CITY OF SUN PRAIRIE

DANE COUNTY

SIGNAL NO: **CABINET TYPE: TS2**

CONTROLLER TYPE: COBALT

DATE: 11/1/2022

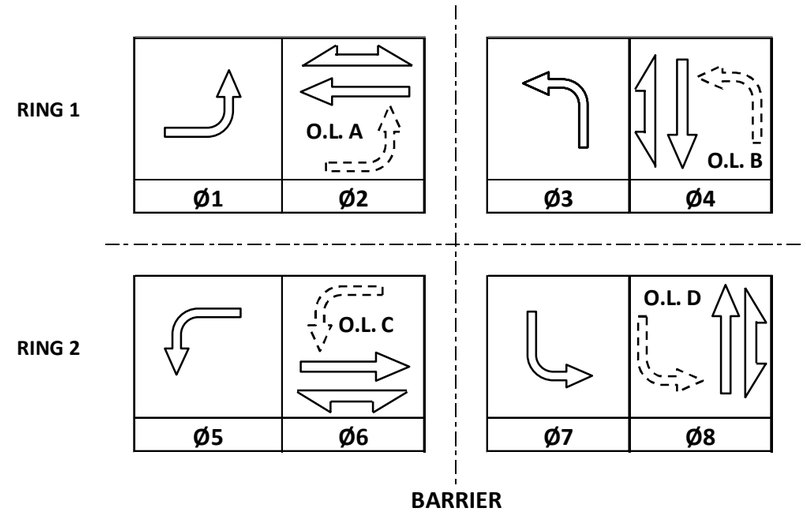
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL PLAN - N THOMPSON ROAD	SHEET 42	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024201-sp

PLOT DATE : 1/25/2023 1:20 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	9,10	R ←
Ø2	1,2,3	R
Ø3	19,20	R ←
Ø4	11,12,13	R
Ø5	4,5	R ←
Ø6	6,7,8	R
Ø7	14,15	R ←
Ø8	16,17,18	R
Ø2P	81,82	
Ø4P	83,84	
Ø6P	85,86	
Ø8P	87,88	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	41	51	62	81		
CALLED PHASE	1	2	4	5	6	8		
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	31	42	61	71	82		
CALLED PHASE	2	3	4	6	7	8		
CALL OPTION								
DELAY TIME								
EXTENSION OPTION								
EXTEND TIME	X			X				
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1.

2.

3.

4.

STH 19 and N THOMPSON ROAD
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: COBALT
DATE: 11/1/2022

PROJECT ID:	6085-02-77
INTERSECTION:	STH 19 & NORTH THOMPSON ROAD

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	7	16	RED	ORG	GRN								
		86								BLK	BLU		
		B										WHT/BLK	
SB2	12	15				RED	ORG	GRN	BLU/BLK				
		19				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		B										WHT/BLK	
SB3	12	12	RED	ORG	GRN								
		13	RED	ORG	GRN								
		85								BLK	BLU		
		B										WHT/BLK	
SB4	12	4				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		6	RED	ORG	GRN								
		84								BLK	BLU		
		B										WHT/BLK	
SB5	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB6	7	83								BLK	BLU		
		B										WHT/BLK	
SB7	7	11	RED	ORG	GRN								
		82								BLK	BLU		
		B										WHT/BLK	
EXSB8	12	14				RED	ORG	GRN	BLU/BLK				
		20				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		B										WHT/BLK	
EXSB9	5	17	RED	ORG	GRN								
		18	RED	ORG	GRN								
SB10	7	81								BLK	BLU		
		B										WHT/BLK	
SB11	12	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		88								BLK	BLU		
		B										WHT/BLK	
SB12	12	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB13	7	87								BLK	BLU		
		B										WHT/BLK	

Equipment grounding conductor 10 AWG Green XLP	
From	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	LB1
LB1	SB6
SB6	SB7
SB7	EXSB8
EXSB8	EXSB9
EXSB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
EXPB1	SB1
EXPB2	SB2
EXPB3	SB3
EXPB5	SB5
EXPB7	EXSB8
EXPB10	SB12

Lighting UF 2-10 AWG Grounded	
From	To
CB1	SB3
SB3	LB1
CB1	SB12
SB12	EXSB9

VIDEO DETECTION CABLE	
From	To
CB1	SB3 (V3)
CB1	SB5 (V4)
CB1	EXSB9 (V1)
CB1	SB12 (V2)

EVP CABLE	
From	To
CB1	SB5 (HEAD A)
CB1	SB12 (HEAD B)

***Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications**
***Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.**
***At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.**
***Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.**

2

LEGEND

- TRAFFIC SIGNAL CONTROLLER, CABINET, & CONCRETE BASE
- CONDUIT RIGID NONMETALLIC ONE 2-INCH, UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE, & CONCRETE BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE, & CONCRETE BASE
- (XX) SPECIAL MONOTUBE BASE, POLE, 35'-45' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE
- XX MICROWAVE DETECTION
- PULL BOXES STEEL, 24X36-INCH
- PULL BOXES NON CONDUCTIVE, 24X42-INCH
- PULL BOXES STEEL, 12X24-INCH
- EVP DETECTOR HEAD AND DESIGNATOR
- PTZX PTZ CAMERA
- VIDEO DETECTION ZONE
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- QUANTITY POINT (NON-PHYSICAL ITEM)
- PEDESTRIAN SIGNAL FACE 16-INCH
- NOTE: ALL LENSES ARE 12-INCH

N

STH 19 (WINDSOR ST)

DAVISON DR

SPEED LIMIT 25

SPEED LIMIT 35

SPEED LIMIT 35

SPEED LIMIT 25

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL CONDUIT INTO EXISTING ITEM (2)

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL CONDUIT INTO EXISTING ITEM (2)

INSTALL CONDUIT INTO EXISTING ITEM

INSTALL CONDUIT INTO EXISTING ITEM

R/W (TYP.)

R/W (TYP.)

R/W (TYP.)

2-3" CONDUIT SPECIAL

2-3" CONDUIT SPECIAL

250' TO STOP BAR
LOOP 21 6' X 20'

250' TO STOP BAR
LOOP 61 6' X 20'

LOOP 11, 62
6'X20'

LOOP 41, 42
6'X20'

LOOP 22, 51
6'X20'

LOOP 81, 82
6'X20'

EXPB2 EXPB3 EXPB4 EXPB5 EXPB6 EXPB7 EXPB10 EXPB11 EXPB12

EXCB1

EXSB5 EXSB6 EXSB7 EXSB8 EXSB12 EXSB13

SB1 SB2 SB3 SB4 SB9 SB10 SB11

PB1 PB8 PB9

PTZ1

QP1 QP2 QP3 QP4

65+00 D 64+00 D 63+00 D 62+00 D

207+00 208+00 209+00 210+00 211+00 212+00

45' 2-3"

STRUCTURE NUMBER	BASE NUMBER
S-13-3120-0003	SB3
S-13-3120-0009	SB9

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 3 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER SHALL ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. THE CONTRACTOR MAY CHOOSE TO USE DIRECTIONAL BORING METHODS FOR NON-ROADWAY CROSSING SEGMENTS, BUT WILL BE PAID FOR UNDER STANDARD TRENCH BID ITEMS.
5. ALL TRAFFIC SIGNAL HEADS WILL HAVE REFLECTIVE BACK PLATES.
6. GRAYSCALE REPRESENTS EXISTING CONDITIONS UNLESS OTHERWISE NOTED.
7. ALL CONDUIT UNDER EXISTING OR PROPOSED ROADWAYS SHALL BE SCHEDULE 80.

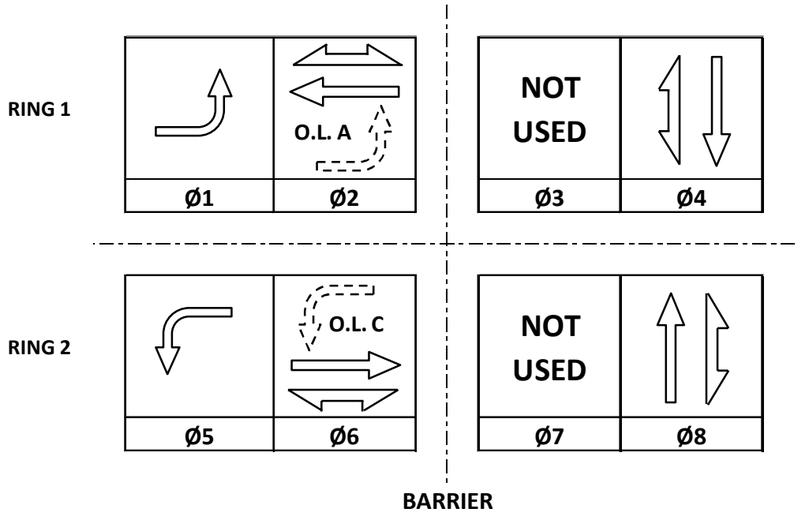
STH 19 AND DAVISON DRIVE
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO:	**CABINET TYPE: TS2**
	CONTROLLER TYPE: COBALT
DATE: 11/1/2022	

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC SIGNAL PLAN - DAVISON DRIVE	SHEET 45	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 024202-sp
PLOT DATE : 1/25/2023 1:21 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	9,10	R ←
Ø2	1,2,3	R
Ø3		
Ø4	11,12,13	R
Ø5	4,5	R ←
Ø6	6,7,8	R
Ø7		
Ø8	14,15,16	R
Ø2P	85,86	
Ø4P	87,88	
Ø6P	81,82	
Ø8P	83,84	





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

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

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

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

CONTROLLER LOGIC

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT	←	→		
PHASE	2+5	6+1		

AFTER PREEMPTION SEQUENCE A, CONTROLLER SHALL RETURN TO PHASES 2+5.
AFTER PREEMPTION SEQUENCE B, CONTROLLER SHALL RETURN TO PHASES 6+1.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	22	42	61	81			
CALLED PHASE	1	2	4	6	8			
CALL OPTION								
DELAY TIME					X			
EXTENSION OPTION								
EXTEND TIME				X				
USE ADDED INITIAL								
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	21	41	51	62	82			
PHASE CALLED	2	4	5	6	8			
CALL OPTION								
DELAY TIME		X						
EXTENSION OPTION								
EXTEND TIME	X							
USE ADDED INITIAL								
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								PHASE CALLED
								CALL OPTION
								DELAY TIME
								EXTENSION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1.
2.
3.
4.

STH 19 AND DAVISON DRIVE
CITY OF SUN PRAIRIE
DANE COUNTY

SIGNAL NO: CABINET TYPE: TS2
CONTROLLER TYPE: COBALT
DATE: 11/1/2022

PROJECT ID:	6085-02-77
INTERSECTION:	STH 19 & DAVISON DRIVE

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

EXCB1 TO	NO. OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	7	81								BLK	BLU		
		B										WHT/BLK	
SB2	12	4				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		6	RED	ORG	GRN								
		88								BLK	BLU		
		B										WHT/BLK	
SB3	15	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		87								BLK	BLU		
		B										WHT/BLK	
SB4	7	86								BLK	BLU		
		B										WHT/BLK	
EXSB5	12	11	RED	ORG	GRN								
		15	RED/BLK	ORG/BLK	GRN/BLK								
EXSB6	7	16	RED	ORG	GRN								
SB7	7	85								BLK	BLU		
		B										WHT/BLK	
EXSB8	12	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		84								BLK	BLU		
		B										WHT/BLK	
SB9	12	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB10	7	83								BLK	BLU		
		B										WHT/BLK	
SB11	12	14	RED	ORG	GRN								
		82								BLK	BLU		
		B										WHT/BLK	
EXSB12	7	12	RED	ORG	GRN								
EXSB13	5	13	RED	ORG	GRN								

Equipment grounding conductor 10 AWG Green XLP

From	TO
EXCB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	EXSB5
EXSB5	EXSB6
EXSB6	SB7
EXCB1	EXSB13
EXSB13	EXSB12
EXSB12	SB11
SB11	SB10
SB10	SB9
SB9	EXSB8

Pull Box Bonding Jumper 10 AWG Green XLP

From	To
EXPB2	SB1
EXPB3	SB4
EXPB4	EXSB5
EXPB5	EXSB6
EXPB6	EXSB8
EXPB7	SB9
EXPB10	EXSB13

Lighting UF 2-10 AWG Grounded

From	To
EXCB1	SB3
SB3	EXSB6
EXCB1	EXSB13
EXSB13	SB9

VIDEO DETECTION CABLE

From	To
EXCB1	SB3 (V4)
EXCB1	EXSB6 (V1)
EXCB1	SB9 (V2)
EXCB1	EXSB13 (V1)

EVP CABLE

From	To
EXCB1	SB3 (HEAD A)
EXCB1	SB9 (HEAD B)

***Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications**
***Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.**
***At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.**
***Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.**

PAVEMENT MARKING LEGEND

W4	MARKING LINE EPOXY 4-INCH (WHITE)
Y4	MARKING LINE EPOXY 4-INCH (YELLOW)
WL4	MARKING LINE EPOXY 4-INCH (WHITE SKIP, 12.5' SEG., 37.5' GAP)
W8	MARKING LINE EPOXY 8-INCH (WHITE)
W12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
W18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WC	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH
INY	MARKING ISLAND NOSE EPOXY (YELLOW)
INW	MARKING ISLAND NOSE EPOXY (YELLOW)
C	MARKING CURB EPOXY (YELLOW)
ARW	MARKING ARROW EPOXY
WRD	MARKING WORD EPOXY

N. THOMPSON ROAD

STH 19 (WINDSOR STREET)

MOVING SIGNS TYPE II
S1-1 36"X36" 1-3
S16-7L 30"X18" 1-4
R10-11T 24"X36" 1-5

REMOVE AND REPLACE SIGNS TYPE II
1-1 REMOVE R4-7C 18"X30"

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-2 R1-1F 30"X30"

1-6 R4-7 24"X30" MOUNTED ON SIGNAL POLE

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-7 S1-1 36"X36"
1-8 S16-7L 30"X18"
1-9 24"X36"

REMOVE AND REPLACE SIGNS TYPE II
1-20 R4-7C 18"X30" REMOVE

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-19 R1-1F 30"X30"

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-16 S1-1 36"X36"
1-17 S16-7L 30"X18"
1-18 24"X36"

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-15 R4-7 24"X30"

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-10 S1-1 36"X36"
1-11 S16-7L 30"X18"
1-12 24"X36"

MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE
1-13 24"X36"

REMOVING SIGNS TYPE II
1-14 REMOVE

107+00 108+00 109+00 110+00 111+00 112+00 113+00
25' TYP. 45° TYP.

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PAVEMENT MARKINGS AND PERMANENT SIGNING	SHEET 48	E	

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024501 - PM.DWG
LAYOUT NAME - 024501-pm
PLOT DATE : 1/25/2023 1:21 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

2

2

PAVEMENT MARKING LEGEND

W4	MARKING LINE EPOXY 4-INCH (WHITE)
Y4	MARKING LINE EPOXY 4-INCH (YELLOW)
WL4	MARKING LINE EPOXY 4-INCH (WHITE SKIP, 12.5' SEG., 37.5' GAP)
W8	MARKING LINE EPOXY 8-INCH (WHITE)
W12	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
W18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
WC	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH
INY	MARKING ISLAND NOSE EPOXY (YELLOW)
INW	MARKING ISLAND NOSE EPOXY (YELLOW)
C	MARKING CURB EPOXY (YELLOW)
ARW	MARKING ARROW EPOXY
WRD	MARKING WORD EPOXY

N

STH 19 (WINDSOR STREET)

MATCHLINE 206+00

MATCHLINE 213+00

2-1 NO PARKING ANY TIME R7-1D 18"X24" MOVING SIGNS TYPE II

2-2 ONE WAY R6-2R 24"X30" MOVING SIGNS TYPE II

2-3 LEFT TURN LANE R3-5L 24"X30" MOVING SIGNS TYPE II

2-4 REMOVE R4-7C 18"X30" REMOVE AND REPLACE SIGNS TYPE II

2-5 R4-7 24"X30" MOVING SIGNS TYPE II MOUNTED ON SIGNAL POLE

2-6 R3-4 24"X24"

2-7 R4-7 24"X30" MOVING SIGNS TYPE II

2-8 ONE WAY R6-2R 24"X30" MOVING SIGNS TYPE II

DAVISON DRIVE

SCHILLER STREET

N

STH 19 (WINDSOR STREET)

204+00 205+00 206

MATCHLINE 206+00

WL4

N

MATCHLINE 213+00

214+00 215+00 216+00

STH 19 (WINDSOR STREET)

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PAVEMENT MARKINGS AND PERMANENT SIGNING	SHEET 49	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\024501 - PM.DWG
LAYOUT NAME - 024502-pm

PLOT DATE : 1/25/2023 1:21 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

2

MATCHLINE A

LANE CLOSED
R11-2L
48"X30"

DO NOT ENTER
R5-1
30"X30"

R4-7
24"X30"
COVER

RIGHT LANE MUST TURN RIGHT
COVER

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

R3-1
24"X24"

ROAD CLOSED
R11-2
48"X30"

R3-2
24"X24"

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

15' (TYP.)

25' (TYP.)

10' (TYP.)

STH 19 (WINDSOR ST)

SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL INFORMATION

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

RW

PLE

ROAD CLOSED
R11-2
48"X30"

25' (TYP.)

N THOMPSON RD

MATCHLINE B

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 50	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026001 - s1

PLOT DATE : 1/25/2023 6:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

N THOMPSON RD

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

ROAD WORK AHEAD
W20-3A

EFFINGHAM WAY

8WT

S1-1
36"X36"

S16-7L
24"X12"

PEDESTRIAN CROSSWALK
R9-8
24"X12"

MATCHLINE A

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 51	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026002 - s1

PLOT DATE : 1/25/2023 6:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

MATCHLINE B

N

N THOMPSON RD

R3-2
24"X24"

MONTANA AVE

ROAD CLOSED
TO
THRU TRAFFIC
R11-4
60"X30"

R3-1
24"X24"

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL INFORMATION

ROAD
CLOSED
AHEAD
W20-3A

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 52	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026003 - s1

PLOT DATE : 1/25/2023 6:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

MATCHLINE A

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

STH 19 (WINDSOR ST)

54'
118'
350'
10' (TYP.)
25' (TYP.)
15' (TYP.)
15' (TYP.)
16.0'

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

RIGHT LANE MUST TURN RIGHT
COVER

R3-1
24"X24"

R5-1
30"X30"
DO NOT ENTER

R4-7
24"X30"
COVER

R3-2
24"X24"

SIDEWALK CLOSED
R9-9
24"X12"

AT

N THOMPSON RD

SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL INFORMATION

SEE S.D.D. "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

RW
PLE
SS
OH
W
FO
POST
WV
FD
SAN
CATV
GAS

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 53	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026004 - s1
PLOT DATE : 1/25/2023 6:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

N THOMPSON RD

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL INFORMATION

EFFINGHAM WAY

R3-1
24"X24"

ROAD CLOSED
R11-2
48"X30"

R3-2
24"X24"

S1-1
36"X36"

S16-7L
24"X12"

PEDESTRIAN CROSSWALK
R9-8
24"X12"

MATCHLINE A

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 54	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026005 - s1
PLOT DATE : 1/25/2023 6:25 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

MAINLINE LOOP REMOVAL AND PAVEMENT REPLACEMENT TO BE COMPLETED UNDER NIGHT TIME CLOSURE. SEE S.D.D. TRAFFIC CONTROL, BARRICADES AND SIGNS FOR MAINLINE CLOSURE, MAINLINE CLOSURE, NO POSTED DETOUR FOR ADDITIONAL DETAILS

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

STH 19 (WINDSOR ST)

R3-2
24"X24"

25' (TYP.)

16'

33'

4YT

WO1-6
48"X24"

WO1-4R
36"X36"

LANE CLOSED
R11-2L
48"X30"

RW

PLE

RIGHT LANE MUST TURN RIGHT
COVER

R3-7R
30"X30"

AT

ONLY

110+64
21' LT

111+62
21' LT

113+06
12' LT

WO16
48"X24"

WO1-4R
36"X36"

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" AND "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADDITIONAL INFORMATION

N

N THOMPSON RD

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

NOTE: ALTERNATE WORK AREA TO ALWAYS PROVIDE A PEDESTRIAN CROSSING ACROSS STH 19.

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET 55	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026101 - S2.DWG
LAYOUT NAME - 026101 - s2

PLOT DATE : 1/25/2023 6:26 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

ROAD WORK AHEAD W20-1A

A STREET

RW

ROAD WORK AHEAD W20-1A

LANE CLOSED R11-2L 48"X30"

R3-2 24"X24"

R3-2 24"X24"

R3-2 24"X24"

STH 19 (WINDSOR ST)

LANE CLOSED R11-2L 48"X30"

BEGIN LEFT TURN LANE R3-20L COVER

25' (TYP.)

16'

87'

37'

36'

28'

17'

16'

10'

4YT

139'

225'

LANE CLOSED R11-2L 48"X30"

MATCHLINE C

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

DAVISON DR

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

NOTE: MAINTAIN PEDESTRIAN CROSSING OF STH 19 DURING CONSTRUCTION OPERATIONS

N

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 56	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026007 - s1

PLOT DATE : 1/25/2023 6:26 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

N

SCHILLER ST

BIRD ST

RW

LANE CLOSED
R11-2L
48"X30"

STH 19 (WINDSOR ST)

MATCHLINE C

215+14
29' LT

4WT

25' (TYP.)

109'

4YT

216+70
0' RT

WO1-6
48"X24"

COVER

STOP
R1-1
30"X30"

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

NOTE: MAINTAIN PEDESTRIAN CROSSING OF STH 19 DURING CONSTRUCTION OPERATIONS

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 57	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026008 - s1
PLOT DATE : 1/25/2023 6:26 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

ROAD WORK AHEAD W20-1A

ROAD WORK AHEAD W20-1A

A STREET

RW

LANE CLOSED R11-2L 48"X30"

R3-2 24"X24"

STH 19 (WINDSOR ST)

LANE CLOSED R11-2L 48"X30"

R3-2 24"X24"

BEGIN LEFT TURN LANE R3-20L COVER

25' (TYP.)

16'

87'

8WT

8WT

16'

10'

8WT

SBT

139'

225'

37'

R3-2 24"X24"

SIDEWALK CLOSED R9-9 24"X12"

DETOUR M4-9BR 30"X24"

28'

36'

R3-2 24"X24"

17'

LANE CLOSED R11-2L 48"X30"

SIDEWALK CLOSED R9-9 24"X12"

DETOUR M4-9BL 30"X24"

MATCHLINE C

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

DAVISON DR

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

NOTE: MAINTAIN PEDESTRIAN CROSSING OF STH 19 DURING CONSTRUCTION OPERATIONS

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 58	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 026009 - s1
PLOT DATE : 1/25/2023 6:26 PM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

SCHILLER ST

BIRD ST

RW

LANE CLOSED
R11-2L
48"X30"

STOP
R1-1
30"X30"

25' (TYP.)

109'

MATCHLINE C

STH 19 (WINDSOR ST)

WO1-6
48"X24"

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

N

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 59	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026001 - S1.DWG
LAYOUT NAME - 0260010 - s1

PLOT DATE : 1/25/2023 6:26 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

TEMPORARY PEDESTRIAN MAT AND TEMPORARY CURB RAMP REQ'D. SEE S.D.D FOR MORE INFORMATION. (TYP.)

A STREET

RW

25' (TYP.)

LANE CLOSED
R11-2L
48"X30"

15' (TYP.)

8WT

SBT

STH 19 (WINDSOR ST)

4WT

LANE CLOSED
R11-2L
48"X30"

25' (TYP.)

LANE CLOSED
R11-2L
48"X30"

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

N

LANE CLOSED
R11-2L
48"X30"

20'

16'

SIDEWALK CLOSED
R9-9
24"X12"

DETOUR
M4-9BL
30"X24"

RW

PLE

25' (TYP.)

16'

DAVISON DR

SIDEWALK CLOSED
R9-9
24"X32"

DETOUR
M4-9BR
30"X24"

RW

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

ONLY

COVER

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2A	SHEET 60	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026101 - S2.DWG
LAYOUT NAME - 026102 - s2
PLOT DATE : 1/25/2023 6:27 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL INFORMATION

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

INSTALL SIGN AT BROADWAY DRIVE

NOTE: ALTERNATE WORK AREA TO ALWAYS PROVIDE A PEDESTRIAN CROSSING ACROSS STH 19. SEE SPECIAL PROVISIONS FOR CONSTRUCTION SEQUENCING. IF NORTHWEST AND/OR NORTHEAST QUADRANTS ARE NOT YET CONSTRUCTED, SEE STAGE 2A FOR TRAFFIC CONTROL LAYOUT WITH TEMPORARY PEDESTRIAN RAMPS.

MATCHLINE C

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 61	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026101 - S2.DWG
LAYOUT NAME - 026103 - s2
PLOT DATE : 1/25/2023 6:27 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

SCHILLER ST

BIRD ST

KING

RW

SAN

WV

SS

OH

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

R11-2

COVER

STOP
R1-1
30"X30"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

MATCHLINE C

STH 19 (WINDSOR ST)

SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION

2

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2B	SHEET 62	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\026101 - S2.DWG
LAYOUT NAME - 026104 - s2

PLOT DATE : 1/25/2023 6:27 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
	MARKING REMOVAL LINE
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

STEVEN ST
INNSBROOKE DR
EFFINGHAM WAY
EDDINGTON DR
STH 19 (WINDSOR ST)
WALMAR DR
MONTANA AVE
N THOMPSON RD
PENNSYLVANIA AVE

DETOUR M4-9BL 30"X24"
DETOUR M4-9BR 30"X24"
SIDEWALK CLOSED AHEAD R9-9A 30"X18"
SIDEWALK CLOSED R9-9 24"X12"

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A PEDESTRIAN DETOUR	SHEET 63 E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\027001 - DT.DWG
LAYOUT NAME - 027001 - dt
PLOT DATE : 1/25/2023 1:24 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
	MARKING REMOVAL LINE
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

STEVEN ST

INNSBROOKE DR

EFFINGHAM WAY

STH 19 (WINDSOR ST)

N GRAND AVE

IRONWOOD DR

MONTANA AVE

N THOMPSON RD

PENNSYLVANIA AVE

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

NB THOMPSON
M1-94
VARIESX15"

WB STH 19
M1-94
VARIESX15"

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B PEDESTRIAN DETOUR	SHEET 64	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\027001 - DT.DWG
LAYOUT NAME - 027002 - dt

PLOT DATE : 1/25/2023 1:24 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
	MARKING REMOVAL LINE
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

N

STEVENS ST
INNSBROOKE DR
EFFINGHAM WAY
EDDINGTON DR
STH 19 (WINDSOR ST)
MONTANA AVE
N THOMPSON RD
PENNSYLVANIA AVE
WALMAR DR

THOMPSON RD M1-94 VARIESX15" / END DETOUR M4-8A 24"X18"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9L 30"X24"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-59L 30"X30" / SECOND LEFT M4-22L 24"X21"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9R 30"X24"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-59R 30"X30"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9RA 30"X24"
19 M1-6 24"X24" / M6-4 21"X21"
THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9R 30"X24"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-59L 30"X30"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9L 30"X24"
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR AHEAD W20-2A
THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9R 30"X24"
THOMPSON RD M1-94 VARIESX15" / DETOUR M4-59R 30"X30"
THOMPSON RD M1-94 VARIESX15" / DETOUR M4-9L 30"X24"
THOMPSON RD M1-94 VARIESX15" / DETOUR AHEAD W20-2A
NORTH M3-1 24"X12" / THOMPSON RD M1-94 VARIESX15" / DETOUR AHEAD W20-2A

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A DETOUR	SHEET 65 E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\027002 - DT.DWG
LAYOUT NAME - 027003 - dt
PLOT DATE : 1/25/2023 1:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

2

2

LEGEND

	WORK ZONE
	DIRECTION OF TRAFFIC
	TRAFFIC CONTROL BARRICADES TYPE III (WITH/WITHOUT SIGNS)
	TRAFFIC CONTROL SIGNS (MOUNTED ON TEMPORARY SUPPORT)
	TRAFFIC CONTROL DRUMS (WITH/WITHOUT LIGHT, TYPE C)
	TRAFFIC CONTROL ARROW BOARDS
	MARKING REMOVAL LINE
SBT	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH
4WT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
4YT	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
8WT	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
AT	TEMPORARY MARKING ARROW REMOVABLE TAPE

NOTE:
-SEE PROJECT 6085-02-75 FOR ADDITIONAL TRAFFIC CONTROL DETAILS.

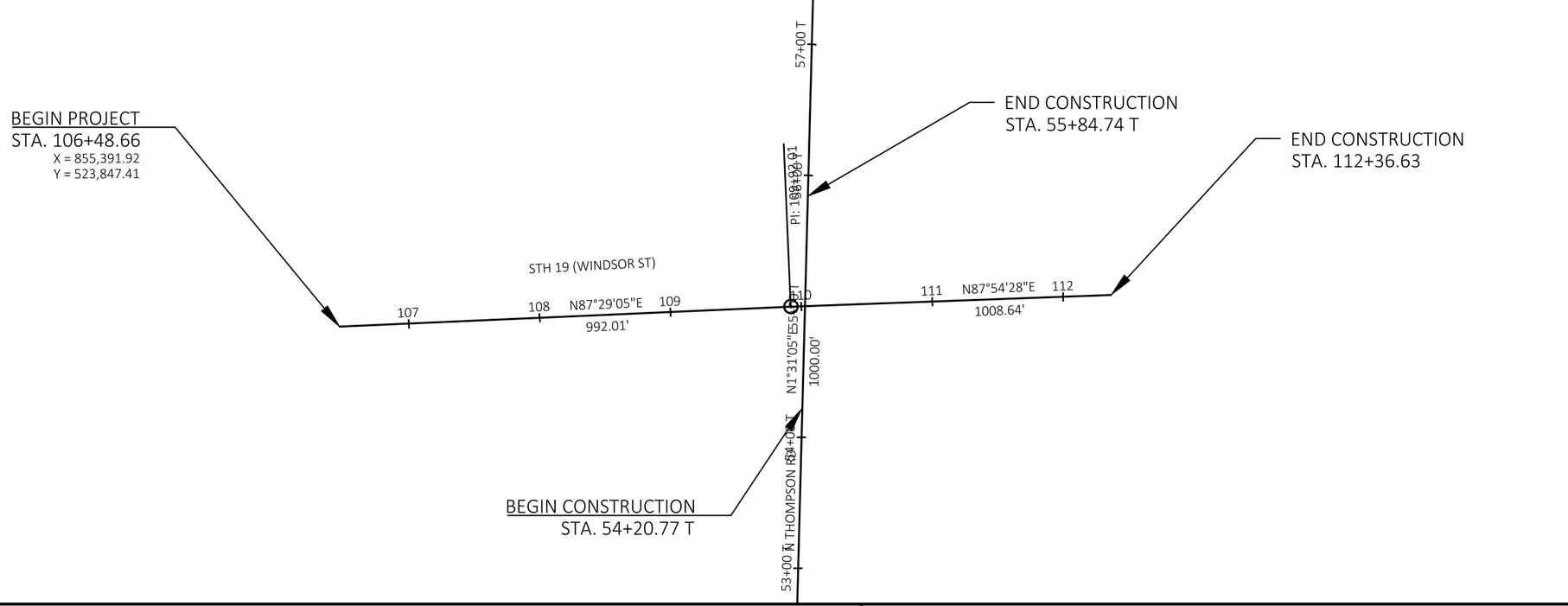
N

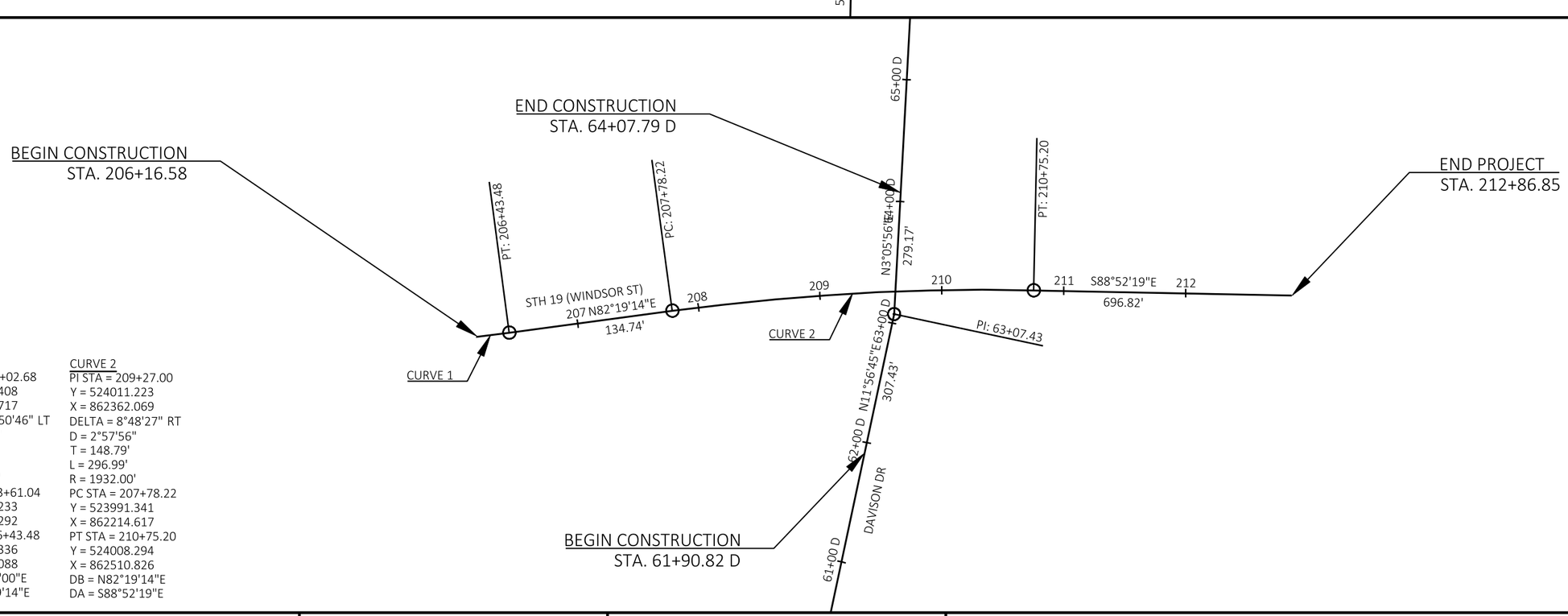
THOMPSON RD M1-94 VARIESX15"
DETOUR AHEAD W20-2A
THOMPSON RD M1-94 VARIESX15" DETOUR M4-59L 30"X30"
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-59R 30"X30"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9L 30"X24"
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9R 30"X24"
STEVENS ST
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-59R 30"X30"
EDDINGTON DR
INNSBROOKE DR
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9RA 30"X24"
EFFINGHAM WAY
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9L 30"X24"
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-59L 30"X30"
STH 19 (WINDSOR ST)
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15"
DETOUR AHEAD W20-2A
MONTANA AVE
THOMPSON RD M1-94 VARIESX15" END DETOUR M4-8A 24"X18"
N THOMPSON RD
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-59R 30"X30"
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9R 30"X24"
THOMPSON RD M1-94 VARIESX15" DETOUR M4-9R 30"X24"
19 M1-6 24"X24" M6-4 21"X21"
SOUTH M3-3 24"X12"
THOMPSON RD M1-94 VARIESX15"
DETOUR AHEAD W20-2A
PENNSYLVANIA AVE
WALMAR DR

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B DETOUR	SHEET 66 E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\027003 - DT.DWG
LAYOUT NAME - 027004 - dt
PLOT DATE : 1/25/2023 1:25 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42





CURVE 1	CURVE 2
PI STA = 205+02.68	PI STA = 209+27.00
Y = 523954.408	Y = 524011.223
X = 861940.717	X = 862362.069
DELTA = 10°50'46" LT	DELTA = 8°48'27" RT
D = 3°50'25"	D = 2°57'56"
T = 141.64'	T = 148.79'
L = 282.44'	L = 296.99'
R = 1492.00'	R = 1932.00'
PC STA = 203+61.04	PC STA = 207+78.22
Y = 523962.233	Y = 523991.341
X = 861799.292	X = 862214.617
PT STA = 206+43.48	PT STA = 210+75.20
Y = 523973.336	Y = 524008.294
X = 862081.088	X = 862510.826
DB = S86°50'00"E	DB = N82°19'14"E
DA = N82°19'14"E	DA = S88°52'19"E

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	ALIGNMENT DETAILS	SHEET 67	E

6085-02-77

Line	Item	Item Description	Unit	Total	Qty
0006	204.0100	Removing Concrete Pavement	SY	926.000	926.000
0010	204.0150	Removing Curb & Gutter	LF	1,556.000	1,556.000
0012	204.0155	Removing Concrete Sidewalk	SY	180.000	180.000
0014	204.0195	Removing Concrete Bases	EACH	14.000	14.000
0016	204.0220	Removing Inlets	EACH	2.000	2.000
0018	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	37.000	37.000
0020	205.0100	Excavation Common	CY	835.000	835.000
0022	211.0201	Prepare Foundation for Concrete Pavement (project) 01. 6085-02-77	EACH	1.000	1.000
0026	213.0100	Finishing Roadway (project) 02. 6085-02-77	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	31.000	31.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,080.000	2,080.000
0032	305.0130	Base Aggregate Dense 3-Inch	TON	260.000	260.000
0036	415.0080	Concrete Pavement 8-Inch	SY	663.000	663.000
0038	415.0090	Concrete Pavement 9-Inch	SY	1,176.000	1,176.000
0040	416.0610	Drilled Tie Bars	EACH	899.000	899.000
0042	416.0620	Drilled Dowel Bars	EACH	209.000	209.000
0048	455.0605	Tack Coat	GAL	7.300	7.300
0050	460.2000	Incentive Density HMA Pavement	DOL	20.000	20.000
0052	460.6223	HMA Pavement 3 MT 58-28 S	TON	29.000	29.000
0054	465.0105	Asphaltic Surface	TON	61.000	61.000
0056	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0070	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	474.000	474.000
0072	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	869.000	869.000
0074	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	12.000	12.000
0076	601.0600	Concrete Curb Pedestrian	LF	96.000	96.000
0078	602.0405	Concrete Sidewalk 4-Inch	SF	686.000	686.000
0080	602.0410	Concrete Sidewalk 5-Inch	SF	4,077.000	4,077.000
0082	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	348.000	348.000
0086	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	102.000	102.000
0090	602.2400	Concrete Safety Islands	SF	734.000	734.000
0096	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	64.000	64.000
0100	611.0624	Inlet Covers Type H	EACH	3.000	3.000
0104	611.3230	Inlets 2x3-FT	EACH	3.000	3.000
0106	611.8110	Adjusting Manhole Covers	EACH	2.000	2.000
0108	611.8115	Adjusting Inlet Covers	EACH	6.000	6.000
0112	619.1000	Mobilization	EACH	0.500	0.500
0114	620.0200	Concrete Median Blunt Nose	SF	58.000	58.000
0116	620.0300	Concrete Median Sloped Nose	SF	344.000	344.000
0118	624.0100	Water	MGAL	50.400	50.400
0120	625.0100	Topsoil	SY	940.000	940.000
0124	628.1504	Silt Fence	LF	371.000	371.000
0126	628.1520	Silt Fence Maintenance	LF	371.000	371.000
0128	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0130	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0132	628.2006	Erosion Mat Urban Class I Type A	SY	940.000	940.000
0134	628.7015	Inlet Protection Type C	EACH	13.000	13.000
0136	629.0210	Fertilizer Type B	CWT	0.500	0.500
0138	630.0130	Seeding Mixture No. 30	LB	17.000	17.000
0144	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	10.000	10.000

6085-02-77

Line	Item	Item Description	Unit	Total	Qty
0146	637.2210	Signs Type II Reflective H	SF	16.000	16.000
0148	638.2102	Moving Signs Type II	EACH	24.000	24.000
0152	638.2602	Removing Signs Type II	EACH	4.000	4.000
0156	642.5201	Field Office Type C	EACH	0.500	0.500
0158	643.0300	Traffic Control Drums	DAY	15,657.000	15,657.000
0160	643.0420	Traffic Control Barricades Type III	DAY	1,388.000	1,388.000
0162	643.0705	Traffic Control Warning Lights Type A	DAY	2,776.000	2,776.000
0164	643.0715	Traffic Control Warning Lights Type C	DAY	1,673.000	1,673.000
0166	643.0800	Traffic Control Arrow Boards	DAY	96.000	96.000
0168	643.0900	Traffic Control Signs	DAY	8,710.000	8,710.000
0170	643.0910	Traffic Control Covering Signs Type I	EACH	14.000	14.000
0174	643.1050	Traffic Control Signs PCMS	DAY	96.000	96.000
0176	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	2,339.000	2,339.000
0178	643.3250	Temporary Marking Line Removable Tape 8-Inch	LF	474.000	474.000
0180	643.3550	Temporary Marking Arrow Removable Tape	EACH	4.000	4.000
0182	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	77.000	77.000
0186	643.5000	Traffic Control	EACH	0.500	0.500
0190	644.1440	Temporary Pedestrian Surface Matting	SF	85.000	85.000
0192	644.1601	Temporary Pedestrian Curb Ramp	DAY	53.000	53.000
0198	646.1020	Marking Line Epoxy 4-Inch	LF	2,598.000	2,598.000
0200	646.3020	Marking Line Epoxy 8-Inch	LF	2,296.000	2,296.000
0204	646.5020	Marking Arrow Epoxy	EACH	18.000	18.000
0206	646.5120	Marking Word Epoxy	EACH	8.000	8.000
0208	646.6120	Marking Stop Line Epoxy 18-Inch	LF	269.000	269.000
0212	646.7120	Marking Diagonal Epoxy 12-Inch	LF	128.000	128.000
0216	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	1,068.000	1,068.000
0218	646.8120	Marking Curb Epoxy	LF	50.000	50.000
0220	646.8220	Marking Island Nose Epoxy	EACH	9.000	9.000
0222	646.9000	Marking Removal Line 4-Inch	LF	437.000	437.000
0224	646.9100	Marking Removal Line 8-Inch	LF	841.000	841.000
0226	646.9200	Marking Removal Line Wide	LF	285.000	285.000
0228	646.9300	Marking Removal Special Marking	EACH	16.000	16.000
0230	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
0232	650.4500	Construction Staking Subgrade	LF	1,500.000	1,500.000
0234	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,453.000	1,453.000
0236	650.7000	Construction Staking Concrete Pavement	LF	1,500.000	1,500.000
0240	650.8501	Construction Staking Electrical Installations (project) 02. 6085-02-77	EACH	1.000	1.000
0242	650.9000	Construction Staking Curb Ramps	EACH	24.000	24.000
0246	650.9500	Construction Staking Sidewalk (project) 02. 6085-02-77	EACH	1.000	1.000
0250	650.9911	Construction Staking Supplemental Control (project) 02. 6085-02-77	EACH	1.000	1.000
0252	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	272.000	272.000
0254	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	662.000	662.000
0256	652.0335	Conduit Rigid Nonmetallic Schedule 80 3-Inch	LF	48.000	48.000
0258	652.0615	Conduit Special 3-Inch	LF	321.000	321.000
0260	652.0700.S	Install Conduit into Existing Item	EACH	24.000	24.000
0262	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	7.000	7.000
0266	653.0905	Removing Pull Boxes	EACH	10.000	10.000
0268	654.0101	Concrete Bases Type 1	EACH	14.000	14.000
0270	654.0102	Concrete Bases Type 2	EACH	1.000	1.000

6085-02-77

Line	Item	Item Description	Unit	Total	Qty
0274	654.0120	Concrete Bases Type 10-Special	EACH	4.000	4.000
0276	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0280	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,504.000	1,504.000
0282	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,976.000	1,976.000
0286	655.0260	Cable Traffic Signal 12-14 AWG	LF	2,226.000	2,226.000
0288	655.0270	Cable Traffic Signal 15-14 AWG	LF	270.000	270.000
0292	655.0320	Cable Type UF 2-10 AWG Grounded	LF	1,345.000	1,345.000
0294	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	3,156.000	3,156.000
0296	655.0610	Electrical Wire Lighting 12 AWG	LF	903.000	903.000
0300	657.0100	Pedestal Bases	EACH	15.000	15.000
0302	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000	2.000
0304	657.0310	Poles Type 3	EACH	1.000	1.000
0308	657.0352	Poles Type 10-Special	EACH	4.000	4.000
0310	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	10.000	10.000
0312	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	5.000	5.000
0322	657.0546	Monotube Arms 45-FT-Special	EACH	4.000	4.000
0324	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000
0326	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	2.000	2.000
0328	657.0806	Luminaire Arms Steel 6-FT	EACH	3.000	3.000
0332	658.0173	Traffic Signal Face 3S 12-Inch	EACH	17.000	17.000
0334	658.0174	Traffic Signal Face 4S 12-Inch	EACH	12.000	12.000
0336	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000
0338	658.0500	Pedestrian Push Buttons	EACH	18.000	18.000
0342	658.5070	Signal Mounting Hardware (location) 02. STH 19 & Davison Drive	EACH	1.000	1.000
0344	658.5070	Signal Mounting Hardware (location) 03. STH 19 & N Thompson Road	EACH	1.000	1.000
0346	659.1125	Luminaires Utility LED C	EACH	5.000	5.000
0350	661.0201	Temporary Traffic Signals for Intersections (location) 01. STH 19 and Thompson Road	EACH	1.000	1.000
0352	661.0201	Temporary Traffic Signals for Intersections (location) 02. STH 19 and Davison Drive	EACH	1.000	1.000
0354	690.0150	Sawing Asphalt	LF	193.000	193.000
0356	690.0250	Sawing Concrete	LF	2,582.000	2,582.000
0358	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	82,772.000	82,772.000
0364	SPV.0060	Special 01. Connect Storm Sewer to Existing Manhole	EACH	1.000	1.000
0366	SPV.0060	Special 02. Traffic Signal Controller and Cabinet	EACH	1.000	1.000
0368	SPV.0060	Special 03. Remove and Transport Traffic Signals, STH 19 & Thompson Road	EACH	1.000	1.000
0370	SPV.0060	Special 04. Remove and Transport Traffic Signals, STH 19 & Davison Drive	EACH	1.000	1.000
0372	SPV.0060	Special 05. Microwave Vehicle Detection, STH 19 and Thompson Road	EACH	1.000	1.000
0374	SPV.0060	Special 06. Microwave Vehicle Detection, STH 19 and Davison Drive	EACH	1.000	1.000
0376	SPV.0060	Special 07. EVP & Confirmation Light Unit, STH 19 and Thompson Road	EACH	1.000	1.000
0378	SPV.0060	Special 08. EVP & Confirmation Light Unit, STH 19 and Davison Drive	EACH	1.000	1.000
0382	SPV.0060	Special 10. Poles Type 4 Short	EACH	1.000	1.000
0384	SPV.0060	Special 11. Pan, Tilt, Zoom Camera, STH 19 and Thompson Road	EACH	1.000	1.000
0386	SPV.0060	Special 12. Pan, Tilt, Zoom Camera, STH 19 and Davison Drive	EACH	1.000	1.000
0388	SPV.0060	Special 13. Adjusting Valve Box	EACH	2.000	2.000
0390	SPV.0060	Special 14. Salvage and Reinstall Existing Meter Breaker Pedestal	EACH	1.000	1.000
0394	SPV.0060	Special 16. Retroreflective Backplate 3S	EACH	23.000	23.000
0396	SPV.0060	Special 17. Retroreflective Backplate 4S	EACH	13.000	13.000

3

REMOVING CONCRETE PAVEMENT

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	204.0100 SY
0010	NW CORNER	106+00	-	109+85	LT	---
	WEST MEDIAN	106+00	-	109+85	LT/RT	80
	SW CORNER	106+00	-	109+85	RT	---
	SOUTH MEDIAN	109+85	-	110+20	RT	---
	NORTH MEDIAN	109+85	-	110+20	LT	---
	NE CORNER	110+20	-	113+00	LT	---
	EAST MEDIAN	110+20	-	113+00	LT/RT	65
	SE CORNER	110+20	-	113+00	RT	---
	NW CORNER	206+00	-	209+75	LT	170
	WEST MEDIAN	206+00	-	209+35	LT/RT	60
	SW CORNER	206+00	-	209+35	RT	242
	SOUTH MEDIAN	209+35	-	209+60	LT	---
	NE CORNER	209+75	-	214+00	LT	16
	EAST MEDIAN	209+75	-	214+00	LT/RT	58
	SE CORNER	209+60	-	214+00	RT	68
			SUB-TOTAL			759
0020	WEST MEDIAN	106+00	-	109+85	RT/LT	15
	SW CORNER	106+00	-	109+85	RT	56
	EAST MEDIAN	110+20	-	113+00	LT	47
	NE CORNER	110+20	-	113+00	LT	49
			SUB-TOTAL			167
			TOTAL			925

FINISHING ROADWAY

CATEGORY	STATION	213.0100 EACH
0010	PROJECT	1
	TOTAL	1

REMOVING CURB & GUTTER

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	204.0150 LF
0010	NW CORNER	106+00	-	109+85	LT	54
	WEST MEDIAN	106+00	-	109+85	LT/RT	125
	SW CORNER	106+00	-	109+85	RT	68
	SOUTH MEDIAN	109+85	-	110+20	RT	22
	NORTH MEDIAN	109+85	-	110+20	LT	34
	NE CORNER	110+20	-	113+00	LT	53
	EAST MEDIAN	110+20	-	113+00	LT/RT	14
	SE CORNER	110+20	-	113+00	RT	55
	NW CORNER	206+00	-	209+75	LT	131
	WEST MEDIAN	206+00	-	209+35	LT/RT	398
	SW CORNER	206+00	-	209+35	RT	115
	SOUTH MEDIAN	209+35	-	209+60	LT	---
	NE CORNER	209+75	-	214+00	LT	40
	EAST MEDIAN	209+75	-	214+00	LT/RT	334
	SE CORNER	209+60	-	214+00	RT	73
			SUB-TOTAL			1,516
0020	SOUTH MEDIAN	109+85	-	110+20	RT	22
	NORTH MEDIAN	109+85	-	110+20	LT	18
			SUB-TOTAL			40
					TOTAL	1,556

REMOVING INLETS

CATEGORY	INTERSECTION	STATION	LOCATION	204.0220 EACH
0010	STH 19 & DAVISON DRIVE	209+10	50.4 'LT	1
		209+41	68 'LT	1
			TOTAL	2

REMOVING CONCRETE SIDEWALK

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	204.0155 SY
0010	NW CORNER	106+00	-	109+85	LT	53
	WEST MEDIAN	106+00	-	109+85	LT/RT	---
	SW CORNER	106+00	-	109+85	RT	---
	SOUTH MEDIAN	109+85	-	110+20	RT	---
	NORTH MEDIAN	109+85	-	110+20	LT	---
	NE CORNER	110+20	-	113+00	LT	3
	EAST MEDIAN	110+20	-	113+00	LT/RT	---
	SE CORNER	110+20	-	113+00	RT	13

	NW CORNER	206+00	-	209+75	LT	24
	WEST MEDIAN	206+00	-	209+35	LT/RT	---
	SW CORNER	206+00	-	209+35	RT	39
	SOUTH MEDIAN	209+35	-	209+60	LT	---
	NE CORNER	209+75	-	214+00	LT	28
	EAST MEDIAN	209+75	-	214+00	LT/RT	---
	SE CORNER	209+60	-	214+00	RT	19
					TOTAL	180

PAVEMENT BARS

CATEGORY	STATION - STATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	106+50 - 112+37	306	55
	206+15 - 212+87	505	82
	SUB-TOTAL	811	137
0020	106+50 - 112+37	88	72
	SUB-TOTAL	88	72
	TOTAL	899	209

REMOVING CONCRETE BASES

CATEGORY	INTERSECTION	BASE NO.	STATION	LOCATION	204.0195 EACH
0010	STH 19 & N THOMPSON ROAD	EXSB1	110+38.9	52.0 'RT	1
		EXSB2	109+93.9	49.5 'RT	1
		EXSB3	109+57.5	53.4 'RT	1
		EXSB4	109+43.7	39.3 'RT	1
		EXSB5	109+31.3	40.0 'LT	1
		EXSB6	109+64.0	54.3 'LT	1
		EXSB11	110+66.9	45.7 'LT	1
		EXSB12	110+62.8	37.2 'RT	1
		SUBTOTAL (STH 19 & N THOMPSON RD.)			8
	STH 19 & DAVISON DRIVE	EXSB2	208+53.9	48.7 'RT	1
		EXSB3	209+13.7	53.9 'LT	1
		EXSB9	210+17.2	41.9 'RT	1
		EXSB11	209+92.6	57.0 'RT	1
		EXSB14	208+79.3	7.0 'LT	1
		EXSB15	210+30.9	5.0 'RT	1
		SUBTOTAL (STH 19 & DAVISON DR.)			6
				TOTAL	14

REMOVING STORM SEWER 12-INCH

CATEGORY	INTERSECTION	STATION	LOCATION	204.0245.01 LF
0010	STH 19 & DAVISON DRIVE	209+10 - 209+41	LT	37
			TOTAL	37

BASE AGGREGATE DENSE

CATEGORY	LOCATION	STATION - STATION	OFFSET	211.0201 PREPARE FOUNDATION FOR CONCRETE PAVEMENT (PROJECT) EACH	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	305.0130 3-INCH TON	624.0100 WATER MGAL
0010	NW CORNER	106+00 - 109+85	LT	---	--	70	--	1.4
	WEST MEDIAN	106+00 - 109+85	LT/RT	---	--	80	--	1.6
	SW CORNER	106+00 - 109+85	RT	---	20	130	---	3.0
	SOUTH MEDIAN	109+85 - 110+20	RT	---	--	--	--	--
	NORTH MEDIAN	109+85 - 110+20	LT	---	--	--	--	--
	NE CORNER	110+20 - 113+00	LT	---	--	70	--	1.4
	EAST MEDIAN	110+20 - 113+00	LT/RT	---	--	140	--	2.8
	SE CORNER	110+20 - 113+00	RT	---	--	65	--	1.3
	NW CORNER	206+00 - 209+75	LT	---	--	75	--	1.5
	WEST MEDIAN	206+00 - 209+35	LT/RT	---	--	100	--	2.0
	SW CORNER	206+00 - 209+35	RT	---	--	150	--	3.0
	SOUTH MEDIAN	209+35 - 209+60	LT	---	--	10	--	0.2
	NE CORNER	209+75 - 214+00	LT	---	--	25	--	0.5
	EAST MEDIAN	209+75 - 214+00	LT/RT	---	--	100	--	2.0
	SE CORNER	209+60 - 214+00	RT	---	--	120	--	2.4
		50% EBS		---	7	560	--	11.3
		15% UNDISTRIBUTED		---	4	254	--	5.2
		PROJECT		1	---	---	---	---
		SUB-TOTAL		1	31	1,949	--	39.6
0020	NORTH MEDIAN	109+85 - 110+20	LT	---	--	130	130	5.2
	SOUTH MEDIAN	109+85 - 110+20	RT	---	--	150	130	5.6
		SUB-TOTAL		--	--	280	260	10.8
		TOTAL		1	31	2,229	260	50.4

EXCAVATION COMMON

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	205.0100 CY
0010	NW CORNER	106+00	-	109+85	LT	27
	WEST MEDIAN	106+00	-	109+85	LT/RT	14
	SW CORNER	106+00	-	109+85	RT	43
	SOUTH MEDIAN	109+85	-	110+20	RT	2
	NORTH MEDIAN	109+85	-	110+20	LT	4
	NE CORNER	110+20	-	113+00	LT	27
	EAST MEDIAN	110+20	-	113+00	LT/RT	2
	SE CORNER	110+20	-	113+00	RT	32
	NW CORNER	206+00	-	209+75	LT	23
	WEST MEDIAN	206+00	-	209+35	LT/RT	43
	SW CORNER	206+00	-	209+35	RT	27
	SOUTH MEDIAN	209+35	-	209+60	LT	--
	NE CORNER	209+75	-	214+00	LT	12
	EAST MEDIAN	209+75	-	214+00	LT/RT	36
	SE CORNER	209+60	-	214+00	RT	64
	UNDISTRIBUTED					36
		SUB-TOTAL				391
0020	SOUTH MEDIAN	109+85	-	110+20		222
	NORTH MEDIAN	109+85	-	110+20		222
		SUB-TOTAL				444
		TOTAL				835

CONCRETE PAVEMENT

CATEGORY	STATION - STATION	LOCATION	415.0080 8-INCH SY	415.0090 9-INCH SY
0010	106+45 - 109+30	RT	--	82
	108+80 - 109+60	MEDIAN	--	106
	110+40 - 111+60	MEDIAN	--	192
	208+00 - 209+60	LT	105	--
	208+20 - 209+10	MEDIAN	130	--
	208+00 - 209+30	RT	242	--
	209+85 - 210+15	LT	16	--
	209+95 - 210+85	MEDIAN	104	--
	209+65 - 210+20	RT	66	--
	UNDISTRIBUTED		--	--
	SUB-TOTAL		663	380
0020	106+45 - 109+30	RT	--	102
	109+27 - 110+56	RT	--	299
	109+58 - 110+61	LT	--	294
	110+40 - 111+60	LT	--	101
	SUB-TOTAL		--	796
	TOTAL		663	1,177

3

CONCRETE CURB & GUTTER ITEMS

CATEGORY	LOCATION		STATION	-	STATION	OFFSET	601.0405 18-INCH TYPE A LF	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0200 CONCRETE MEDIAN BLUNT NOSE SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	THOMPSON ST	NW CORNER	106+00	-	109+85	LT	---	53	---	---	---	---
	THOMPSON ST	WEST MEDIAN	106+00	-	109+85	LT/RT	88	---	---	14	---	65
	THOMPSON ST	SW CORNER	106+00	-	109+85	RT	---	56	12	---	---	---
	THOMPSON ST	SOUTH MEDIAN	109+85	-	110+20	RT	34	---	---	14	---	---
	THOMPSON ST	NORTH MEDIAN	109+85	-	110+20	LT	34	---	---	14	---	---
	THOMPSON ST	NE CORNER	110+20	-	113+00	LT	---	54	---	---	---	---
	THOMPSON ST	EAST MEDIAN	110+20	-	113+00	LT/RT	70	---	---	14	---	107
	THOMPSON ST	SE CORNER	110+20	-	113+00	RT	---	55	---	---	---	---
	DAVISON ST	NW CORNER	206+00	-	209+75	LT	---	138	---	---	---	---
	DAVISON ST	WEST MEDIAN	206+00	-	209+35	LT/RT	69	140	---	13	---	65
	DAVISON ST	SW CORNER	206+00	-	209+35	RT	---	121	---	---	---	---
	DAVISON ST	SOUTH MEDIAN	209+35	-	209+60	LT	42	44	---	14	---	40
	DAVISON ST	NE CORNER	209+75	-	214+00	LT	---	40	---	---	---	---
	DAVISON ST	EAST MEDIAN	209+75	-	214+00	LT/RT	121	95	---	12	---	67
	DAVISON ST	SE CORNER	209+60	-	214+00	RT	---	73	---	---	---	---
			SUB-TOTAL				458	869	12	96	---	344
0020	THOMPSON ST	NORTH MEDIAN	109+85	-	110+20		6	---	---	---	29	---
	THOMPSON ST	SOUTH MEDIAN	109+85	-	110+20		9	---	---	---	29	---
			SUB-TOTAL				16	---	---	---	58	---
			TOTALS				473	869	12	96	58	344

SIDEWALK ITEMS

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	650.9000 CONSTRUCTION STAKING CURB RAMPS EA
0010	NW CORNER	106+00	-	109+85	LT	---	770	40	---	2
	WEST MEDIAN	106+00	-	109+85	LT/RT	176	---	48	---	1
	SW CORNER	106+00	-	109+85	RT	---	543	40	---	2
	SOUTH MEDIAN	109+85	-	110+20	RT	---	---	---	---	1
	NORTH MEDIAN	109+85	-	110+20	LT	---	---	---	---	1
	NE CORNER	110+20	-	113+00	LT	---	577	40	---	2
	EAST MEDIAN	110+20	-	113+00	LT/RT	125	---	48	---	1
	SE CORNER	110+20	-	113+00	RT	---	522	20	26	2
	NW CORNER	206+00	-	209+75	LT	---	330	20	---	2
	WEST MEDIAN	206+00	-	209+35	LT/RT	151	---	---	---	2
	SW CORNER	206+00	-	209+35	RT	---	512	10	32	2
	SOUTH MEDIAN	209+35	-	209+60	LT	---	---	41	---	1
	NE CORNER	209+75	-	214+00	LT	---	289	10	17	2
	EAST MEDIAN	209+75	-	214+00	LT/RT	234	---	20	---	1
	SE CORNER	209+60	-	214+00	RT	---	534	10	28	2
	TOTALS					686	4,077	348	102	24

SILT FENCE

CATEGORY	STATION - STATION	628.1504 LF	628.1520 MAINTENACE LF
0010	106+48 - 212+87	371	371
	TOTAL	371	371

UTILITY STRUCTURE SUMMARY

CATEGORY	INTERSECTION	STRUCTURE NUMBER	STATION	LOCATION	611.0624 INLET COVERS TYPE H EACH	611.3230 INLETS 2X3-FT EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	SPV.0060.13 ADJUSTING VALVE BOXES EACH
0010	STH 19 & THOMPSON ROAD	---	109+64	81.6 'RT	---	---	---	1	---
	STH 19 & DAVISON DRIVE	---	208+30	4.1 'LT	---	---	---	1	---
		---	208+30	10.0 'LT	---	---	---	1	---
		---	208+41	45.8 'RT	---	---	---	1	---
		10	208+58	50.0 'LT	1	1	---	0	---
		30	209+26	48.5 'LT	1	1	---	0	---
		40	209+42	67.8 'LT	1	1	---	0	---
			SUB-TOTAL		3	3	---	4	---
0020	STH 19 & THOMPSON ROAD	---	54+19	32.8 'LT	---	---	---	1	---
		---	54+39	1.9 'RT	---	---	---	1	---
		---	55+43	18.0 'LT	---	---	---	---	1
		---	55+45	35.2 'RT	---	---	1	---	---
		---	55+72	16.4 'LT	---	---	---	---	1
	STH 19 & DAVISON DRIVE	---	63+36	65.9 'RT	---	---	1	---	---
			SUB-TOTAL		---	---	2	2	2
			TOTAL		3	3	2	6	2

HMA PAVEMENT

CATEGORY	STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON
0010	109+50 - 109+80	LT	1.0	4
	109+25 - 109+75	RT	2.0	8
	110+30 - 110+65	LT	0.7	3
	110+25 - 110+60	RT	3.6	14
	TOTAL		7.3	29

CONCRETE COLLARS FOR PIPE

CATEGORY	INTERSECTION	STATION	LOCATION	520.8000 EACH
0010	STH 19 & DAVISON DRIVE	209+38	70.2 'LT	1
		209+47	67.8 'LT	1
		TOTAL		2

STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH

CATEGORY	FROM STRUCTURE	TO STRUCTURE	608.0412 LF
0010	10	20	28
	30	40	26
	40	45	5
	40	55	5
	TOTAL		64

CONNECT STORM SEWER INTO EXISTING MANHOLE

CATEGORY	INTERSECTION	STATION	LOCATION	SPV.0060.001 EACH
0010	STH 19 & DAVISON DRIVE	208+31	50.4 'LT	1
	TOTAL			1

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION - STATION	628.1905 EACH
0010	106+48 - 212+87	3
	TOTAL	3

CONCRETE SAFETY ISLANDS

CATEGORY	STATION - STATION		602.2400 SF
0010	108+80	- 109+45	164
	110+60	- 112+40	570
	TOTALS		734

INLET PROTECTION

CATEGORY	LOCATION	628.7015 INLET PROTECTION TYPE C EACH
0010	LT/RT	13
	TOTALS	13

ASPHALTIC SURFACE

CATEGORY	LOCATION	STATION	-	STATION	OFFSET	465.0105 TON
0010	NW CORNER	106+00	-	109+85	LT	0
	WEST MEDIAN	106+00	-	109+85	LT/RT	0
	SW CORNER	106+00	-	109+85	RT	13
	SOUTH MEDIAN	109+85	-	110+20	RT	0
	NORTH MEDIAN	109+85	-	110+20	LT	0
	NE CORNER	110+20	-	113+00	LT	4
	EAST MEDIAN	110+20	-	113+00	LT/RT	0
	SE CORNER	110+20	-	113+00	RT	7
	NW CORNER	206+00	-	209+75	LT	0
	WEST MEDIAN	206+00	-	209+35	LT/RT	5
	SW CORNER	206+00	-	209+35	RT	0
	SOUTH MEDIAN	209+35	-	209+60	LT	0
	NE CORNER	209+75	-	214+00	LT	0
	EAST MEDIAN	209+75	-	214+00	LT/RT	4
	SE CORNER	209+60	-	214+00	RT	27
					TOTAL	61

3

TRAFFIC CONTROL AND DETOUR ITEMS

CATEGORY		Stage	Days	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE 1 EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY
0010	Thompson	Stage 1A	21	1,491	315	630	5	---	630	2	---
	Thompson	Stage 1A - DETOUR	21	---	---	---	5	---	1,449	---	---
	Thompson	Stage 1B	19	1,216	190	380	---	---	589	2	---
	Thompson	Stage 1B - DETOUR	19	---	---	---	---	---	1,387	---	---
	Thompson	Stage 2	17	1,411	34	68	255	---	442	2	---
	Davison	Stage 1A	21	2,100	105	210	357	21	714	2	21
	Davison	Stage 1B	19	2,033	114	228	323	19	741	2	19
	Davison	Stage 2A	14	686	70	140	56	---	294	1	---
	Davison	Stage 2B	56	6,720	560	1,120	672	56	2,464	3	56
				15,657	1,388	2,776	1,673	96	8,710	14	96

NOTE: EACH TRAFFIC CONTROL COVERING SIGNS TYPE 1 IS PAID FOR ONE CYCLE EQUAL TO THE LENGTH OF THE STAGE IT IS QUANTIFIED FOR.

TEMPORARY PEDESTRIAN

CATEGORY	Stage	Days	644.1440 TEMPORARY PEDESTRAIN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY
0010	Stage 1B	19	50	19
	Stage 2A	14	35	14
	Stage 2B	20	---	20
	TOTALS		85	53

SIGNING

CATEGORY	SIGN	634.0814 POSTS TUBULAR STEEL 2X2-INCH X 14 FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH
0010	1-1	1	4	--	1
	1-2	--	--	1	--
	1-3	1	--	1	--
	1-4	--	--	1	--
	1-5	--	--	1	--
	1-6	--	5	--	--
	1-7	--	--	1	--
	1-8	--	--	1	--
	1-9	--	--	1	--
	1-10	--	--	1	--
	1-11	--	--	1	--
	1-12	--	--	1	--
	1-13	--	--	1	--
	1-14	--	--	--	1
	1-15	--	--	1	--
	1-15	--	--	1	--
	1-16	1	--	1	--
	1-17	--	--	1	--
	1-18	--	--	1	--
	1-19	--	--	1	--
	1-20	1	4	--	1
	2-1	1	--	1	--
	2-2	1	--	1	--
	2-3	1	--	1	--
	2-4	1	--	1	--
	2-5	--	--	1	--
	2-6	1	--	1	--
	2-7	--	4	--	1
	2-8	1	--	1	--
	TOTALS	10	16	24	4

REMOVING PAVEMENT MARKING ITEMS

CATEGORY	INTERSECTION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
0010	N THOMPSON RD	299	530	66	11
	DAVISON DR	138	311	219	5
		437	841	285	16

TEMPORARY PAVEMENT MARKING ITEMS

CATEGORY	INTERSECTION	STAGE	STATION		STATION	OFFSET	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	643.3250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH
0010	N THOMPSON RD	1A	106+00	-	113+05	LT	---	---	144	---	---
		1B	106+00	-	113+05	RT	---	---	---	---	2
		2	106+00	-	113+05	RT/LT	589	---	---	---	2
	DAVISON DR	1A	204+45	-	217+72	RT/LT	612	238	---	12	---
		1B	204+45	-	217+73	RT/LT	---	---	171	29	---
		2A	204+45	-	217+74	RT/LT	450	---	159	24	---
		2B	204+35	-	217+50	RT/LT	450	---	---	12	---
						TOTALS	2,339		474	77	4

PERMANENT PAVEMENT MARKING ITEMS

CATEGORY	INTERSECTION	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH WHITE SKIP 12.5-FOOT SEG. 37.5-FOOT GAP LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
0010	STH 19 & N THOMPSON ROAD	1,614	510	---	1,015	8	4	131	78	630	28	4
	STH 19 & DAVISON DRIVE	224	---	250	1,281	10	4	138	50	438	22	5
	TOTALS		2,598		2,296	18	8	269	128	1,068	50	9

CONSTRUCTION STAKING SUMMARY

CATEGORY		STATION		STATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5500 CONSTRUCTION STAKING CURB AND GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8501 CONSTRUCTION STAKING ELECTRICAL INSTALATIONS (PROJECT) EACH	650.9500 CONSTRUCTION STAKING SIDEWALK (PROJECT) EACH	650.9911 CONSTRUCTION STAKING SUPPLIMENTAL CONTROL (PROJECT) EACH
0010	THOMPSON	106+00	-	113+00	---	700	511	700	---	---	---
	DAVISON	206+00	-	214+00	3	800	942	800	---	---	---
	PROJECT	106+00	-	214+00	---	---	---	---	1	1	1
				TOTALS	3	1,500	1,453	1,500	1	1	1

RESTORATION

CATEGORY	INTERSECTION	STATION		STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS 1 TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB
0010	STH 19 & THOMPSON ROAD	106+40	-	109+70	RT	330	330	0.2	6
		109+25	-	109+75	LT	20	20	0.0	0
		110+30	-	111+00	RT	60	60	0.0	1
		110+35	-	110+90	LT	30	30	0.0	1
					SUB-TOTAL	440	440	0.2	8
	STH 19 & DAVISON DRIVE	208+15	-	209+50	RT	70	70	0.0	1
		208+30	-	209+50	LT	110	110	0.1	2
		209+70	-	211+90	RT	290	290	0.2	5
		209+90	-	210+45	LT	30	30	0.0	1
					SUB-TOTAL	500	500	0.3	9
					TOTALS	940	940	0.5	17

3

TRAFFIC SIGNAL CONDUIT SUMMARY

CATEGORY	INTERSECTION	FROM	TO	652.0225* CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235* CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0335* CONDUIT RIGID NONMETALLIC SCHEDULE 80 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF
0010	STH 19 & N THOMPSON ROAD	CB1	EXPB1	--	125	--	--
		EXPB3	PB4	--	83	--	--
		QP1	QP2	--	--	12	--
		EXPB5	PB6	--	100	--	--
		PB6	EXPB7	--	--	--	85
		EXPB7	PB8	--	--	--	74
		PB8	PB9	--	78	--	--
		QP3	QP4	--	--	12	--
		EXPB10	CB1	--	34	--	--
		EXPB1	SB1	11	--	--	--
		EXPB2	SB2	25	--	--	--
		EXPB3	SB3	12	--	--	--
		PB4	SB4	11	--	--	--
		EXPB5	SB5	14	--	--	--
		EXPB5	SB6	22	--	--	--
		PB6	SB7	6	--	--	--
		PB8	EXSB9	7	--	--	--
		PB8	SB10	4	--	--	--
		PB9	SB11	12	--	--	--
		EXPB10	SB12	7	--	--	--
		EXPB10	SB13	18	--	--	--
		SUBTOTAL (STH 19 & THOMPSON RD.)		149	420	24	159
	STH 19 & DAVISON DRIVE	PB1	EXPB2	--	93	--	--
		QP1	QP2	--	12	12	--
		QP3	QP4	--	12	12	--
		EXPB7	PB8	--	125	--	--
		PB8	PB9	--	--	--	69
		PB9	EXPB10	--	--	--	93
		PB1	SB1	5	--	--	--
		PB1	SB2	21	--	--	--
		EXPB3	SB3	25	--	--	--
		EXPB3	SB4	11	--	--	--
		EXPB5	SB7	20	--	--	--
		EXPB6	EXSB8	4	--	--	--
		EXPB7	SB9	6	--	--	--
		EXPB7	SB10	18	--	--	--
		PB8	SB11	9	--	--	--
		PB9	EXSB12	4	--	--	--
		SUBTOTAL (STH 19 & DAVISON DR.)		123	242	24	162
			TOTALS	272	662	48	321

INSTALL CONDUIT INTO EXISTING ITEM

CATEGORY	INTERSECTION	LOCATION	STATION	OFFSET	652.0700.S EACH
0010	STH 19 & N THOMPSON ROAD	EXPB1	110+32.6	70.6 'RT	1
		EXPB2	109+92.6	70.6 'RT	1
		EXPB3	109+59.5	70.0 'RT	1
		QP1	109+36.5	6.3 'LT	1
		QP2	109+36.8	12.3 'LT	1
		EXPB5	109+36.8	40.8 'LT	2
		EXPB7	110+12.5	70.2 'LT	2
		EXSB9	110+44.0	76.1 'LT	1
		QP3	110+72.6	0.3 'LT	1
		QP4	110+71.9	5.7 'RT	1
		EXPB10	110+68.7	36.9 'RT	1
		SUBTOTAL (STH 19 & THOMPSON RD.)			13
	STH 19 & DAVISON DRIVE	EXPB2	208+43.6	48.0 'RT	1
		QP1	208+63.3	3.6 'LT	1
		QP2	208+66.6	8.4 'LT	1
		EXPB3	209+16.6	54.3 'LT	2
		EXPB5	209+95.5	81.6 'LT	1
		QP3	210+38.7	2.1 'RT	1
		QP4	210+38.6	7.9 'RT	1
		EXPB7	210+29.8	40.3 'RT	1
		EXSB12	209+46.4	75.4 'RT	1
		EXPB10	208+95.6	83.3 'RT	1
		SUBTOTAL (STH 19 & DAVISON DR.)			11
				TOTAL	24

TRAFFIC SIGNAL PULL BOX SUMMARY

CATEGORY	INTERSECTION	PULL BOX NO.	LOCATION* STATION	LOCATION* OFFSET	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
0010	STH 19 & N THOMPSON ROAD	PB4	109+33.5	37.9 'RT	1
		PB6	109+70.9	77.1 'LT	1
		PB8	110+49.6	71.9 'LT	1
		PB9	110+78.7	45.8 'LT	1
		SUBTOTAL (STH 19 & N THOMPSON RD.)			4
	STH 19 & DAVISON DRIVE	PB1	208+82.8	75.1 'RT	1
		PB8	209+79.8	77.2 'RT	1
		PB9	209+44.1	78.8 'RT	1
		SUBTOTAL (STH 19 & DAVISON DR.)			3
				TOTAL	7

*FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

REMOVING PULL BOXES

CATEGORY		PULL BOX NO.	STATION	LOCATION	653.0905 EACH
0010	STH 19 & N THOMPSON ROAD	EXPB4	109+33.7	35.4 'RT	1
		EXPB6	109+69.8	67.2 'LT	1
		EXPB8	110+52.4	64.3 'LT	1
		EXPB9	110+78.3	43.1 'LT	1
		EXPB11	109+36.7	9.3 'LT	1
		EXPB12	110+72.2	2.7 'RT	1
		SUBTOTAL (STH 19 & THOMPSON RD.)			6
	STH 19 & DAVISON DRIVE	EXPB1	208+83.8	64.4 'RT	1
		EXPB8	209+81.3	71.3 'RT	1
		EXPB14	208+64.3	6.4 'LT	1
		EXPB15	210+39.4	5.0 'RT	1
		SUBTOTAL (STH 19 & DAVISON DR.)			4
				TOTAL	10

TRAFFIC SIGNAL CABLE SUMMARY

CATEGORY	INTERSECTIONS	FROM	TO	SLACK PER PB & CB L.F.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF
0010	STH 19 & N THOMPSON ROAD	CB1	SB1	16	--	85	--	--
		SB1	HEAD 16	16	19	--	--	--
		SB1	HEAD 86	16	14	--	--	--
		CB1	SB2	16	--	--	155	--
		SB2	HEAD 15	16	22	--	--	--
		SB2	HEAD 19	16	22	--	--	--
		CB1	SB3	16	--	--	190	--
		SB3	HEAD 12	16	45	--	--	--
		SB3	HEAD 13	16	19	--	--	--
		SB3	HEAD 85	16	14	--	--	--
		CB1	SB4	16	--	--	245	--
		SB4	HEAD 4	16	22	--	--	--
		SB4	HEAD 6	16	19	--	--	--
		SB4	HEAD 84	16	14	--	--	--
		CB1	SB5	16	--	--	345	--
		SB5	HEAD 2	16	46	--	--	--
		SB5	HEAD 3	16	19	--	--	--
		SB5	HEAD 5	16	66	--	--	--
		CB1	SB6	16	--	355	--	--
		SB6	HEAD 83	16	14	--	--	--
		CB1	SB7	16	--	315	--	--
		SB7	HEAD 11	16	19	--	--	--
		SB7	HEAD 82	16	14	--	--	--
		CB1	EXSB8	16	--	--	265	--
		EXSB8	HEAD 14	16	22	--	--	--
		EXSB8	HEAD 20	16	22	--	--	--
		CB1	EXSB9	16	205	--	--	--
		EXSB9	HEAD 18	16	19	--	--	--
		CB1	SB10	16	--	200	--	--
		SB10	HEAD 81	16	14	--	--	--
		CB1	SB11	16	--	--	155	--
		SB11	HEAD 1	16	19	--	--	--
		SB11	HEAD 9	16	22	--	--	--
		SB11	HEAD 88	16	14	--	--	--
		CB1	SB12	16	--	--	51	--
		SB12	HEAD 7	16	50	--	--	--
		SB12	HEAD 8	16	19	--	--	--
		SB12	HEAD 10	16	69	--	--	--
		CB1	SB13	16	--	61	--	--
		SB13	HEAD 87	16	14	--	--	--
	SUBTOTAL (STH 19 & THOMPSON RD.)				877	1,016	1,406	--

CON'T ABOVE

CON'T

STH 19 & DAVISON DRIVE	EXCB1	SB1	16	--	45	--	--
	SB1	HEAD 81	16	14	--	--	--
	EXCB1	SB2	16	--	--	60	--
	SB2	HEAD 4	16	22	--	--	--
	SB2	HEAD 6	16	19	--	--	--
	SB2	HEAD 88	16	14	--	--	--
	EXCB1	SB3	16	--	--	--	270
	SB3	HEAD 2	16	51	--	--	--
	SB3	HEAD 3	16	39	--	--	--
	SB3	HEAD 5	16	68	--	--	--
	SB3	HEAD 87	16	14	--	--	--
	EXCB1	SB4	16	--	260	--	--
	SB4	HEAD 86	16	14	--	--	--
	EXCB1	SB7	16	--	400	--	--
	SB7	HEAD 85	16	14	--	--	--
	EXCB1	EXSB8	16	--	--	355	--
	EXSB8	HEAD 1	16	19	--	--	--
	EXSB8	HEAD 9	16	22	--	--	--
	EXSB8	HEAD 84	16	14	--	--	--
	EXCB1	SB9	16	--	--	240	--
	SB9	HEAD 3	16	39	--	--	--
	SB9	HEAD 7	16	51	--	--	--
	SB9	HEAD 10	16	70	--	--	--
	EXCB1	SB10	16	--	255	--	--
	SB10	HEAD 83	16	14	--	--	--
	EXCB1	SB11	16	--	--	165	--
	SB11	HEAD 14	16	19	--	--	--
	SB11	HEAD 82	16	14	--	--	--
	EXCB1	EXSB13	16	51	--	--	--
	EXSB13	HEAD 13	16	45	--	--	--
SUBTOTAL (STH 19 & DAVISON DR.)				627	960	820	270
TOTALS				1,504	1,976	2,226	270

ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG

CATEGORY	INTERSECTION	FROM	TO	655.0515 LF
0010	STH 19 & N THOMPSON ROAD	CB1	SB1	88
		SB1	SB2	115
		SB2	SB3	110
		SB3	SB4	100
		SB4	SB5	140
		SB5	LB1	60
		LB1	SB6	68
		SB6	SB7	115
		SB7	EXSB8	105
		EXSB8	EXSB9	98
		EXSB9	SB10	49
		SB10	SB11	93
		SB11	SB12	140
		SB12	SB13	63
		SB13	CB1	48
		EXPB1	SB1	31
		EXPB2	SB2	45
		EXPB3	SB3	31
		EXPB5	SB5	34
		EXPB7	EXSB8	35
		EXPB10	SB12	27
		SUBTOTAL (STH 19 & THOMPSON RD.)		1,595
	STH 19 & DAVISON DRIVE	EXCB1	SB1	48
		SB1	SB2	49
		SB2	SB3	275
		SB3	SB4	58
		SB4	EXSB5	120
		EXSB5	EXSB6	130
		EXSB6	SB7	57
		EXCB1	EXSB13	54
		EXSB13	EXSB12	95
		EXSB12	SB11	85
		SB11	SB10	125
		SB10	SB9	47
		SB9	EXSB8	145
		EXPB2	SB1	88
		EXPB3	SB4	31
		EXPB4	EXSB5	43
		EXPB5	EXSB6	35
		EXPB6	EXSB8	24
		EXPB7	SB9	26
		EXPB10	EXSB13	26
		SUBTOTAL (STH 19 & DAVISON DR.)		1,561
		TOTAL		3,156

SALVAGE AND REINSTALL EXISTING METER BREAKER PEDESTAL

CATEGORY	BASE NO.	LOCATION*	SPV.0060.14 EACH
0010	CB1	STH 19 & N THOMPSON ROAD	1

*FINAL LOCATION TO BE DETERMINED BY THE FIELD ENGINEER

CATEGORY	INTERSECTION	SB NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
0010	STH 19 & N THOMPSON ROAD	CB1	110+68.1	48.2 'RT	--	--	--	1
		SB1	110+38.6	61.3 'RT	1	--	--	--
		SB2	109+94.3	45.4 'RT	1	--	--	--
		SB3	109+55.0	59.1 'RT	--	1	--	--
		SB4	109+41.5	45.2 'RT	1	--	--	--
		SB5	109+22.6	41.5 'LT	--	--	1	--
		SB6	109+57.4	51.9 'LT	1	--	--	--
		SB7	109+68.6	71.3 'LT	1	--	--	--
		SB10	110+50.4	68.2 'LT	1	--	--	--
		SB11	110+67.3	49.3 'LT	1	--	--	--
		SB12	110+62.9	41.4 'RT	--	--	1	--
		SB13	110+56.3	48.1 'RT	1	--	--	--
	SUBTOTAL (STH 19 & THOMPSON RD.)				8	1	2	1
	STH 19 & DAVISON DRIVE	SB1	208+83.6	70.0 'RT	1	--	--	--
		SB2	208+73.2	56.2 'RT	1	--		--
		SB3	208+94.4	45.2 'LT	--	--	1	--
		SB4	209+26.9	58.0 'LT	1	--	--	--
		SB7	210+07.3	65.6 'LT	1	--	--	--
		SB9	210+23.5	41.9 'RT	--	--	1	--
		SB10	210+20.9	56.5 'RT	1	--	--	--
		SB11	209+87.6	73.0 'RT	1	--	--	--
	SUBTOTAL (STH 19 & DAVISON DR.)				6	--	2	--
	TOTALS				14	1	4	1

TRAFFIC SIGNAL BASES, POLES, MONOTUBE ARMS, PUSH BUTTONS, AND LUMINAIRES

CATEGORY	INTERSECTION	SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	SPV.0060.010 POLES TYPE 4 SHORT EACH	657.0352 POLES TYPE 10-SPECIAL EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0590 TROMBONE ARMS 20-FT EACH	657.0546 MONOTUBE ARMS 45-FT-SPECIAL EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	657.0806 LUMINAIRE ARMS STEEL 6-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.011 PAN, TILT, ZOOM CAMERA EACH	SPV.0060.012 PAN, TILT, ZOOM CAMERA EACH
0010	STH 19 & N THOMPSON ROAD	SB1	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB2	1	--	--	--	--	--	1	--	--	--	--	1	--	--	--
		SB3	--	1	1	--	--	--	--	1	--	1	--	1	1	--	--
		SB4	1	--	--	--	--	--	1	--	--	--	--	1	--	--	--
		SB5	--	--	--	--	1	--	--	--	1	--	--	--	--	--	--
		SB6	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB7	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		EXSB8	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--
		EXSB9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		SB10	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB11	1	--	--	--	--	--	1	--	--	--	--	1	--	--	--
		SB12	--	--	--	--	1	--	--	--	1	--	1	--	1	1	--
		SB13	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		LB1	--	1	--	1	--	--	--	--	--	--	1	--	1	--	--
		SUBTOTAL (STH 19 & THOMPSON RD.)	8	2	1	1	2	5	3	1	2	2	1	10	3	1	--
	STH 19 & DAVISON DRIVE	SB1	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB2	1	--	--	--	--	--	1	--	--	--	--	1	--	--	--
		SB3	--	--	--	--	1	--	--	--	1	--	1	1	1	--	1
		SB4	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB7	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		EXSB8	1	--	--	--	--		1	--	--	--	--	1	--	--	--
		SB9	--	--	--	--	1	--	--	--	1	--	1	--	1	--	--
		SB10	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SB11	1	--	--	--	--	1	--	--	--	--	--	1	--	--	--
		SUBTOTAL (STH 19 & DAVISON DR.)	7	--	--	--	2	5	2	--	2	--	2	8	2	--	1
		TOTALS	15	2	1	1	4	10	5	1	4	2	3	18	5	1	1

TRAFFIC SIGNAL LIGHTING WIRE SUMMARY

CATEGORY	INTERSECTIONS	LOCATION FROM	LOCATION TO	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
0010	STH 19 & N THOMPSON ROAD	CB1	SB3	158	--
		SB3	LUMN	--	117
		SB3	LB1	203	--
		LB1	LUMN	--	84
		CB1	SB12	67	--
		SB12	LUMN	--	117
		SB12	EXSB9	184	--
		EXSB9	LUMN	--	117
		SUBTOTAL (STH 19 & THOMPSON RD.)		612	435
	STH 19 & DAVISON DRIVE	EXCB1	SB3	272	--
		SB3	LUMN	--	117
		SB3	EXSB6	189	--
		EXSB6	LUMN	--	117
		EXCB1	EXSB13	51	--
		EXSB13	LUMN	--	117
		EXSB13	SB9	220	--
		SB9	LUMN	--	117
		SUBTOTAL (STH 19 & DAVISON DR.)		732	468
			TOTALS	1,345	903

TRAFFIC SIGNAL FACES SUMMARY

CATEGORY	INTERSECTION	SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	SPV.0060.016 RETROREFLECTIVE BACKPLATE 3S EACH	SPV.0060.017 RETROREFLECTIVE BACKPLATE 4S EACH
0010	STH 19 & N THOMPSON ROAD	1	SB11	1	--	--	1	--
		2	SB5	1	--	--	1	--
		3	SB5	1	--	--	1	--
		4	SB4	--	1	--	--	1
		5	SB5	--	1	--	--	1
		6	SB4	1	--	--	1	--
		7	SB12	1	--	--	1	--
		8	SB12	1	--	--	1	--
		9	SB11	--	1	--	--	1
		10	SB12	--	1	--	--	1
		11	SB7	1	--	--	1	--
		12	SB3	1	--	--	1	--
		13	SB3	1	--	--	1	--
		14	EXSB8	--	1	--	--	1
		15	SB2	--	1	--	--	1
		16	SB1	1	--	--	1	--
		17	EXSB9	--	--	--	1	--
		18	EXSB9	1	--	--	1	--
		19	SB2	--	1	--	--	1
		20	EXSB8	--	1	--	--	1
		81	SB10	--	--	1	--	--
		82	SB7	--	--	1	--	--
		83	SB6	--	--	1	--	--
		84	SB4	--	--	1	--	--
		85	SB3	--	--	1	--	--
		86	SB1	--	--	1	--	--
		87	SB13	--	--	1	--	--
		88	SB11	--	--	1	--	--
	SUBTOTAL (STH 19 & THOMPSON RD.)			11	8	8	12	8
	STH 19 & DAVISON DRIVE	1	EXSB8	--	--	--	--	1
		2	SB3	1	--	--	1	--
		3	SB3	1	--	--	1	--
		4	SB2	--	1	--	--	1
		5	SB3	--	1	--	--	1
		6	SB2	1	--	--	1	--
		7	SB9	1	--	--	1	--
		8	SB9	1	--	--	1	--
		9	EXSB8	--	1	--	--	1
		10	SB9	--	1	--	--	1
		11	EXSB5	--	--	--	1	--
		12	EXSB12	--	--	--	1	--
		13	EXSB13	--	--	--	1	--
		14	SB11	1	--	--	1	--
		15	EXSB5	--	--	--	1	--
		16	EXSB6	--	--	--	1	--
		81	SB1	--	--	1	--	--
		82	SB11	--	--	1	--	--
		83	SB10	--	--	1	--	--
		84	EXSB10	--	--	1	--	--
		85	SB7	--	--	1	--	--
		86	SB4	--	--	1	--	--
		87	SB3	--	--	1	--	--
		88	SB2	--	--	1	--	--
	SUBTOTAL (STH 19 & DAVISON DR.)			6	4	8	11	5
	TOTALS			17	12	16	23	13

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.01 EACH	658.5070.02 EACH
STH 19 & THOMPSON ROAD	1	--
STH 19 & DAVISON DRIVE	--	1

TRAFFIC SIGNAL CONTROLLER AND CABINET

CATEGORY	LOCATION	SPV.0060.002 EACH
0010	STH 19 & N THOMPSON ROAD	1

REMOVE AND TRANSPORT TRAFFIC SIGNALS

CATEGORY	LOCATION	SPV.0060.003 EACH	SPV.0060.004 EACH
0010	STH 19 & THOMPSON ROAD	1	--
	STH 19 & DAVISON DRIVE	--	1

MICROWAVE VEHICLE DETECTION

CATEGORY	LOCATION	SPV.0060.005 EACH	SPV.0060.006 EACH
0010	STH 19 & THOMPSON ROAD	1	--
	STH 19 & DAVISON DRIVE	--	1

EMERGENCY VEHICLE PREEMPTION & CONFIRMATION LIGHT UNIT

CATEGORY	LOCATION	SPV.0060.007 EACH	SPV.0060.008 EACH
0010	STH 19 & THOMPSON ROAD	1	--
	STH 19 & DAVISON DRIVE	--	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

CATEGORY	LOCATION	661.0201.01 EACH	661.0201.02 EACH
0010	STH 19 & THOMPSON ROAD	1	--
	STH 19 & DAVISON DRIVE	--	1

SAWING EXISTING PAVEMENT

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	106+50 - 112+30	LT & RT	167	557
	206+15 - 212+90	LT & RT	26	1,672
	SUB-TOTAL		193	2,229
0020	106+50 - 112+30	LT & RT	---	353
	SUB-TOTAL		---	353
	TOTAL		193	2,582

BEGIN PROJECT
STA. 106+48.66
X = 855,391.92
Y = 523,847.41

END CONSTRUCTION
STA. 55+84.74 T

BEGIN CONSTRUCTION
STA. 54+20.77 T

END CONSTRUCTION
STA. 112+36.63

CONTROL POINT 5
X=855,206.258
Y=523,912.393
MAG

CONTROL POINT 10
X=855,530.553
Y=523,924.654
MAG

CONTROL POINT 15
X=855,681.187
Y=523,936.647
CHSLD X

CONTROL POINT 20
X=855,795.005
Y=523,838.293
CHSLD X

CONTROL POINT 25
X=855,984.983
Y=523,836.729
MAG

CONTROL POINT 30
X=856,278.389
Y=823,849.078
MAG

SUN PRAIRIE (WATER)
PRIVATE (STORM)
MCI (FIBER OPTIC)
ADJUSTING VALVE BOX REQ'D
SAWING ASPHALT
CHSLD X
CONCRETE CURB PAN
SUN PRAIRIE (STORM)
STH 19 (WINDSOR ST)
CONCRETE SAFETY ISLAND
SAWING CONCRETE
CONCRETE MEDIAN BLUNT NOSE
SUN PRAIRIE (SANITARY)
ADJUSTING MANHOLE COVERS REQ'D
WE (GAS)
TDS (TELECOM)
SUN PRAIRIE (ELECTRIC)
ALLIANT (ELECTRIC), ATC (ELECTRIC), SUN PRAIRIE (ELECTRIC)
CAUTION
BAD
WE ENERGIES (GAS)
FRONTIER (FIBER OPTIC, TELEPHONE)
EVERSTREAM (FIBER OPTIC)
SPECTRUM, MCI (FIBER OPTIC)
UNKNOWN (TELEPHONE)
REJECT CURB
ADJUSTING INLET COVERS
ADJUSTING VALVE BOX REQ'D
N THOMPSON RD
EXISTING RW
SUN PRAIRIE (ELECTRIC)
ATC (ELECTRIC), SUN PRAIRIE (ELECTRIC)
ADJUSTING INLET COVERS REQ'D
SPECTRUM (FIBER OPTIC)

LEGEND

CS-5	CONCRETE SIDEWALK 5-INCH	CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CS-4	CONCRETE SIDEWALK 4-INCH	CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
SN	CONCRETE MEDIAN SLOPED NOSE (TYPE 1)	CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
ASPH	3-INCHES ASPHALTIC SURFACE OVER 6-INCHES 1-1/4-INCH BAD		
CP8	CONCRETE PAVEMENT 8-INCH (DOWELED)		
CP9	CONCRETE PAVEMENT 9-INCH (DOWELED)	CP	CONCRETE CURB PEDESTRIAN
BAD	4-INCHES BASE AGGREGATE DENSE 3/4-INCH	xxxxxxxxxx	SAWING CONCRETE
AP	HMA PAVEMENT 3MT 58-28S	////////	SAWING ASPHALT

BENCH MARKS

NO.	STATION	ELEV.	DESCRIPTION
5	104+65.98 LT	975.17	MAG
10	107+90.55 LT	977.46	MAG
15	109+41.57 LT	979.25	CHSLD X
20	110+51.31 RT	980.83	CHSLD X
25	112+41.11 RT	984.08	MAG
30	115+34.77 RT	984.48	MAG

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 78	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 1/25/2023 1:26 PM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

BEGIN PROJECT
STA. 106+48.66
X = 855,391.92
Y = 523,847.41

END CONSTRUCTION
STA. 55+84.74 T

BEGIN CONSTRUCTION
STA. 54+20.77 T

END CONSTRUCTION
STA. 112+36.63

CONTROL POINT 5
X=855,206.258
Y=523,912.393
MAG

CONTROL POINT 10
X=855,530.553
Y=523,924.654
MAG

CONTROL POINT 15
X=855,681.187
Y=523,936.647
CHSLD X

CONTROL POINT 20
X=855,795.005
Y=523,838.293
CHSLD X

CONTROL POINT 25
X=855,984.983
Y=523,836.729
MAG

CONTROL POINT 30
X=856,278.389
Y=823,849.078
MAG

SUN PRAIRIE (WATER)
SUN PRAIRIE (SANITARY)
PRIVATE (STORM)
ADJUSTING MANHOLE COVERS REQ'D
ADJUSTING VALVE BOX REQ'D
SAWING ASPHALT
SAWING CONCRETE
TDS (TELECOM)
SUN PRAIRIE (ELECTRIC)
ALLIANT (ELECTRIC), ATC (ELECTRIC), SUN PRAIRIE (ELECTRIC)
MCI (FIBER OPTIC)
CHSLD X
CONCRETE CURB PAN
SUN PRAIRIE (STORM)
STH 19 (WINDSOR ST)
CONCRETE SAFETY ISLAND
CONCRETE MEDIAN BLUNT NOSE
WE ENERGIES (GAS)
FRONTIER (FIBER OPTIC, TELEPHONE)
EVERSTREAM (FIBER OPTIC)
SPECTRUM, MCI (FIBER OPTIC)
UNKNOWN (TELEPHONE)
REJECT CURB
ADJUSTING INLET COVERS
ATC (ELECTRIC), SUN PRAIRIE (ELECTRIC)
ADJUSTING INLET COVERS REQ'D
SPECTRUM (FIBER OPTIC)
EXISTING RW
N THOMPSON RD

LEGEND

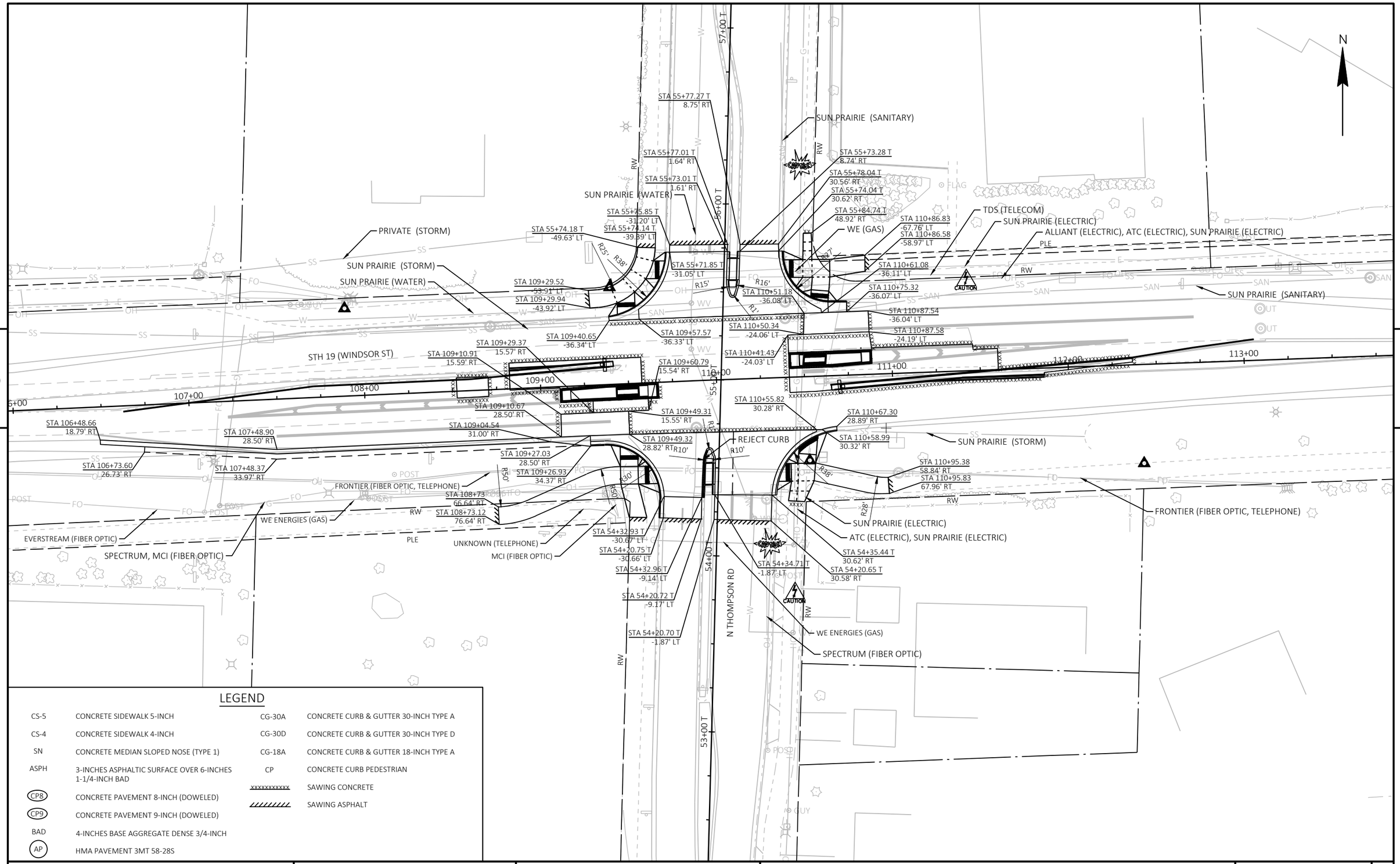
CS-5	CONCRETE SIDEWALK 5-INCH	CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CS-4	CONCRETE SIDEWALK 4-INCH	CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
SN	CONCRETE MEDIAN SLOPED NOSE (TYPE 1)	CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
ASPH	3-INCHES ASPHALTIC SURFACE OVER 6-INCHES 1-1/4-INCH BAD	CP	CONCRETE CURB PEDESTRIAN
		xxxxxxxxxx	SAWING CONCRETE
CP8	CONCRETE PAVEMENT 8-INCH (DOWELED)	//////////	SAWING ASPHALT
CP9	CONCRETE PAVEMENT 9-INCH (DOWELED)		
BAD	4-INCHES BASE AGGREGATE DENSE 3/4-INCH		
AP	HMA PAVEMENT 3MT 58-28S		

BENCH MARKS

NO.	STATION	ELEV.	DESCRIPTION
5	104+65.98 LT	975.17	MAG
10	107+90.55 LT	977.46	MAG
15	109+41.57 LT	979.25	CHSLD X
20	110+51.31 RT	980.83	CHSLD X
25	112+41.11 RT	984.08	MAG
30	115+34.77 RT	984.48	MAG

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 79	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 2/17/2023 11:47 AM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT



LEGEND

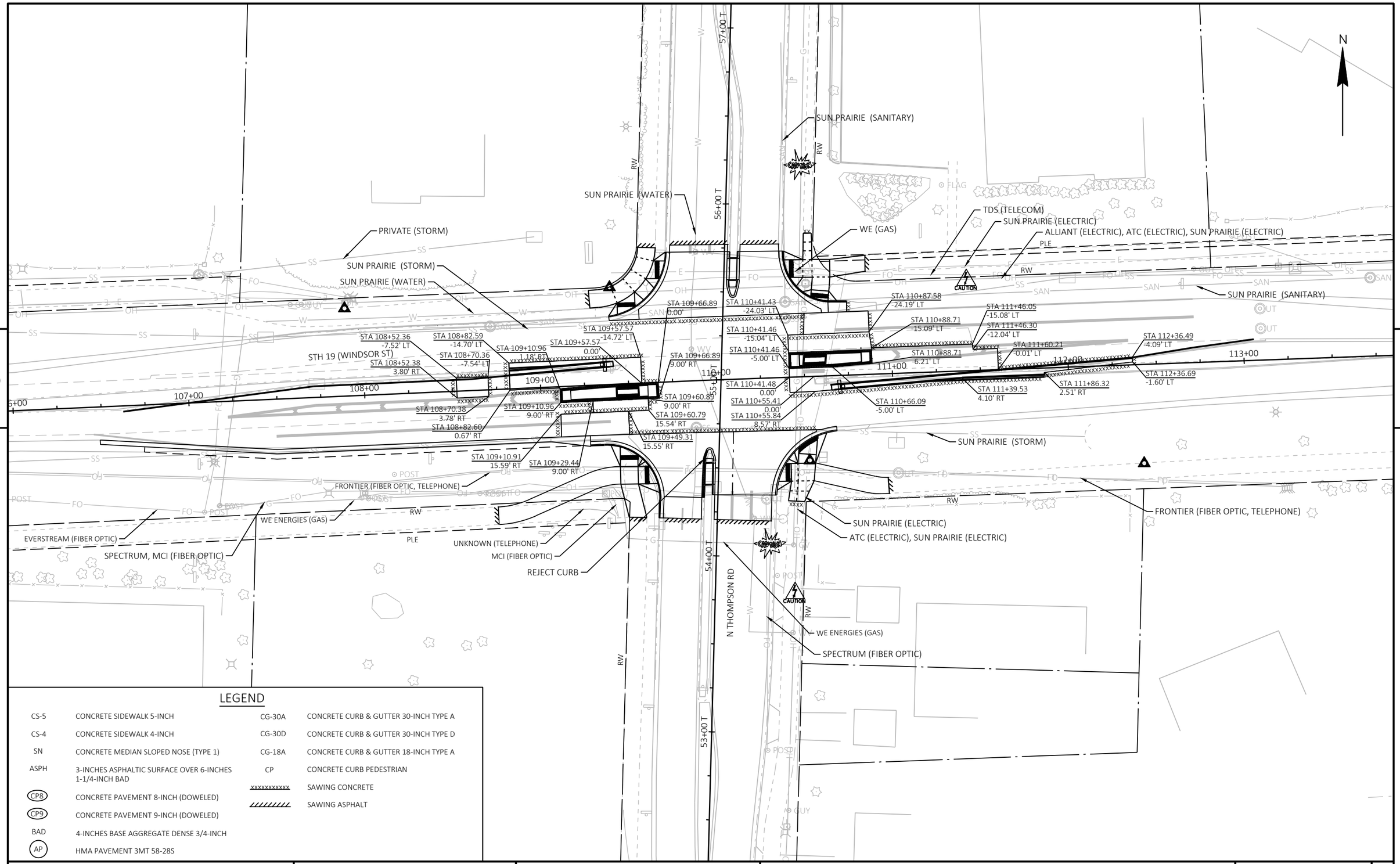
CS-5	CONCRETE SIDEWALK 5-INCH	CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CS-4	CONCRETE SIDEWALK 4-INCH	CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
SN	CONCRETE MEDIAN SLOPED NOSE (TYPE 1)	CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
ASPH	3-INCHES ASPHALTIC SURFACE OVER 6-INCHES 1-1/4-INCH BAD	CP	CONCRETE CURB PEDESTRIAN
		xxxxxxxxxx	SAWING CONCRETE
CP8	CONCRETE PAVEMENT 8-INCH (DOWELED)	//////////	SAWING ASPHALT
CP9	CONCRETE PAVEMENT 9-INCH (DOWELED)		
BAD	4-INCHES BASE AGGREGATE DENSE 3/4-INCH		
AP	HMA PAVEMENT 3MT 58-28S		

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 80 E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\050202-PN.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 2/17/2023 11:48 AM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



LEGEND

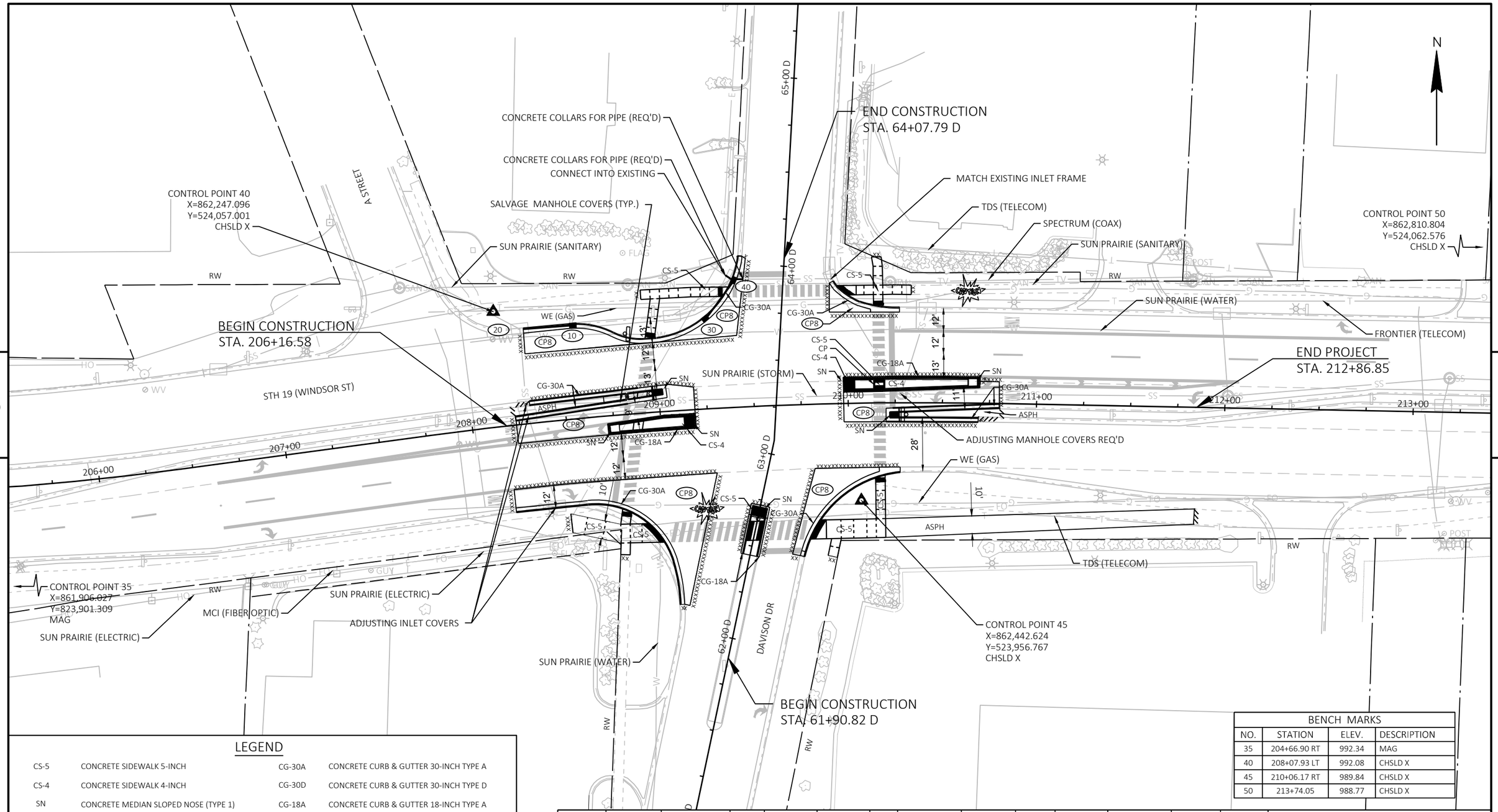
CS-5	CONCRETE SIDEWALK 5-INCH	CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CS-4	CONCRETE SIDEWALK 4-INCH	CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
SN	CONCRETE MEDIAN SLOPED NOSE (TYPE 1)	CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
ASPH	3-INCHES ASPHALTIC SURFACE OVER 6-INCHES 1-1/4-INCH BAD	CP	CONCRETE CURB PEDESTRIAN
		xxxxxxxxxx	SAWING CONCRETE
CP8	CONCRETE PAVEMENT 8-INCH (DOWELED)	//////////	SAWING ASPHALT
CP9	CONCRETE PAVEMENT 9-INCH (DOWELED)		
BAD	4-INCHES BASE AGGREGATE DENSE 3/4-INCH		
AP	HMA PAVEMENT 3MT 58-28S		

PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 81	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\050203-PN.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 2/17/2023 11:49 AM PLOT BY : LYNCH, CHRIS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



LEGEND

CS-5	CONCRETE SIDEWALK 5-INCH	CG-30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
CS-4	CONCRETE SIDEWALK 4-INCH	CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
SN	CONCRETE MEDIAN SLOPED NOSE (TYPE 1)	CG-18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
ASPH	3-INCHES ASPHALTIC SURFACE OVER 6-INCHES 1-1/4-INCH BAD	CP	CONCRETE CURB PEDESTRIAN
(CP8)	CONCRETE PAVEMENT 8-INCH (DOWELED)	xxxxxxxxxx	SAWING CONCRETE
(CP9)	CONCRETE PAVEMENT 9-INCH (DOWELED)	//////////	SAWING ASPHALT
BAD	4-INCHES BASE AGGREGATE DENSE 3/4-INCH		
(AP)	HMA PAVEMENT 3MT 58-28S		

BENCH MARKS

NO.	STATION	ELEV.	DESCRIPTION
35	204+66.90 RT	992.34	MAG
40	208+07.93 LT	992.08	CHSLD X
45	210+06.17 RT	989.84	CHSLD X
50	213+74.05	988.77	CHSLD X

STRUCT NO.	STATION	OFFSET		C-C (FT)	TO STRUCT	INLET TYPE	CO VER	RIM/GRATE ELEV	DEPTH (FT)	SIZE (IN)	INLET ELEV	DISCHARGE ELEV.	LENGTH (FT)	SLOPE (%)	REMARKS
10	208+58.16	49.6'	LT	28	20	2X3-FT	H	990.71	4.42	12	986.29	986.15	28	0.50%	CONNECT STORM SEWER TO EXISTING MANHOLE
30	209+26.67	47.9'	LT	26	40	2X3-FT	H	990.85	3.62	12	987.23	987.10	26	0.50%	
45	209+38.23	70.2'	LT	5	40	---	---	---	---	12	987.47	987.44	5	0.50%	CONCRETE COLLARS FOR PIPE REQ'D
40	209+42.23	67.5'	LT	5	55	2X3-FT	H	991.66	4.63	12	987.05	987.03	5	0.50%	CONCRETE COLLARS FOR PIPE REQ'D

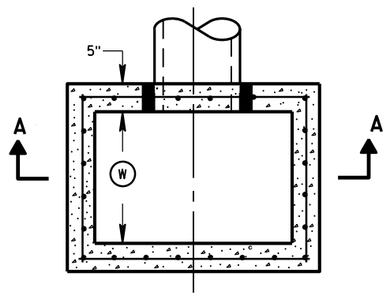
PROJECT NO: 6085-02-77	HWY: STH 19	COUNTY: DANE	PLAN DETAILS	SHEET 82	E

FILE NAME : S:\MAD\1000--1099\1041\007\DRAWINGS\CAD\CIVIL3D\60850207\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn
PLOT DATE : 2/17/2023 11:49 AM
PLOT BY : LYNCH, CHRIS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

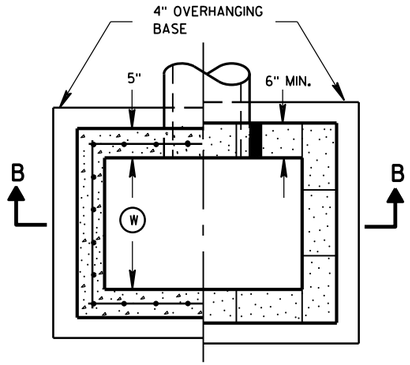
Standard Detail Drawing List

08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-15F	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

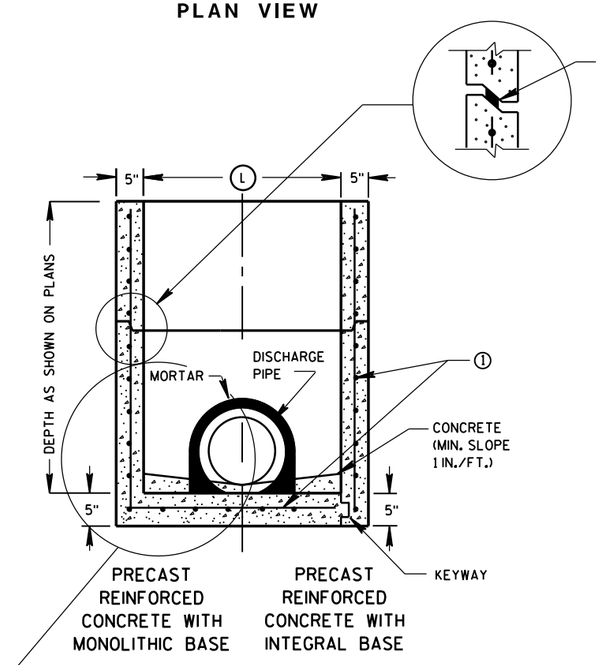
6



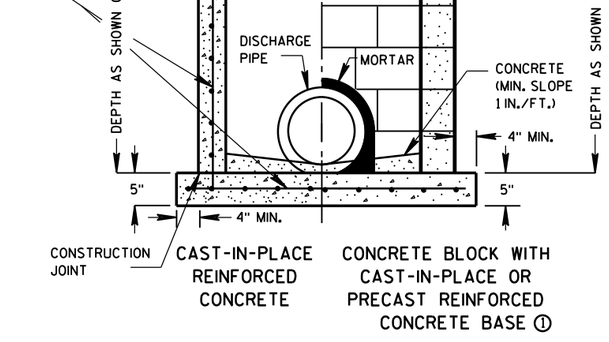
PLAN VIEW



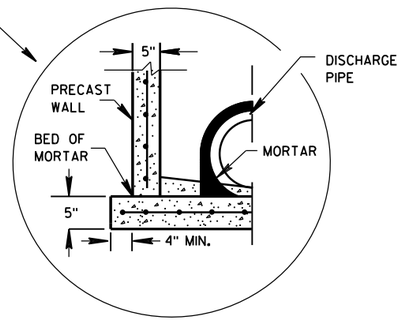
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

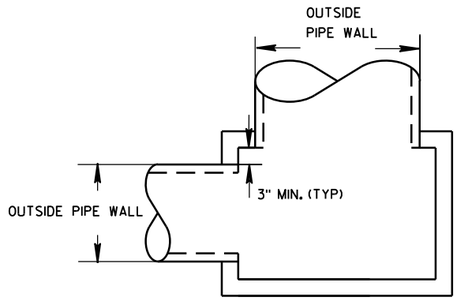
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



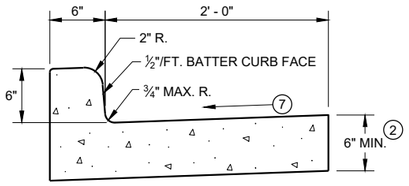
DETAIL "A"

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

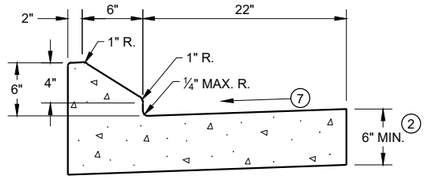
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

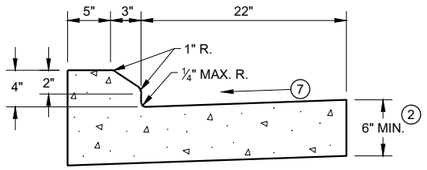
6
S.D.D. 8 C 7-2



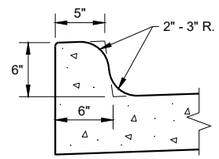
TYPES A (1) & D



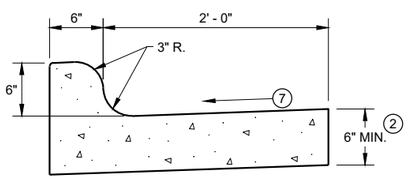
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

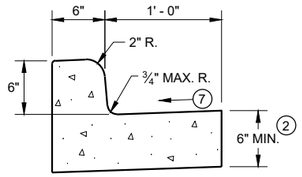


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



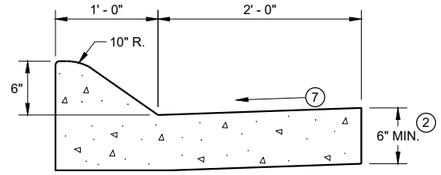
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

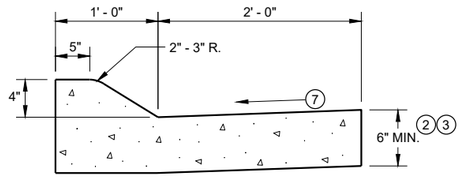


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

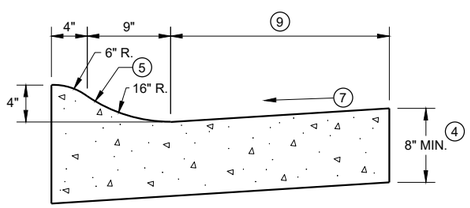


6" SLOPED CURB TYPES A (1) & D



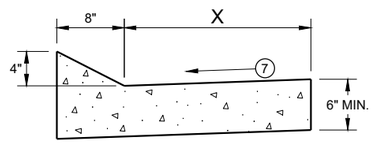
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

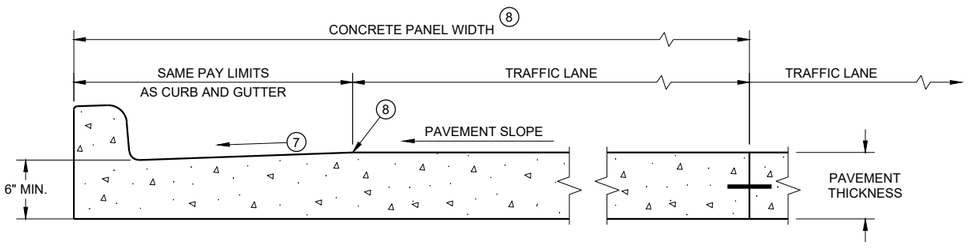


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

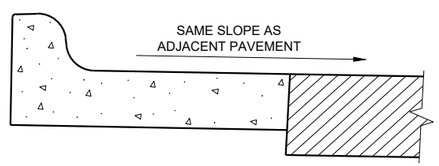
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

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

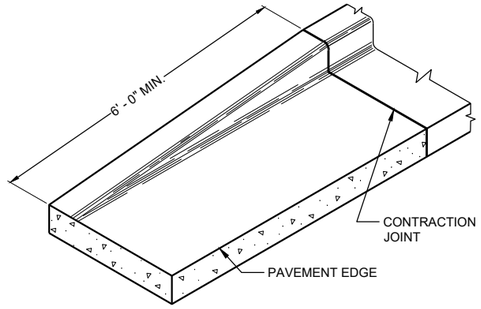
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

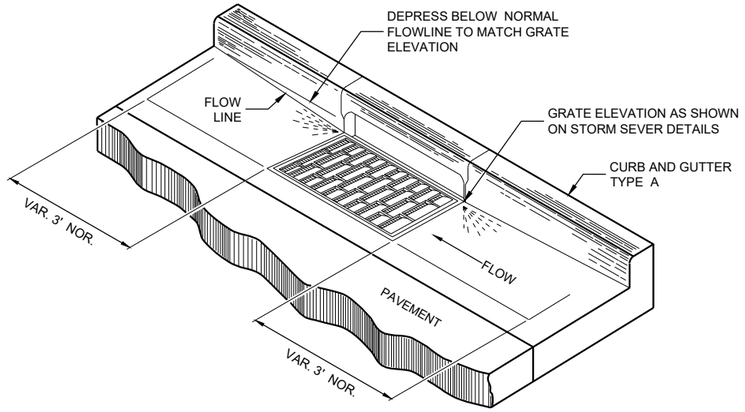
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 23a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

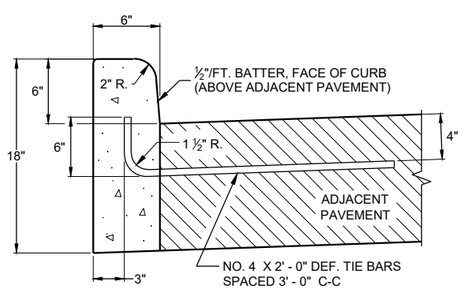
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

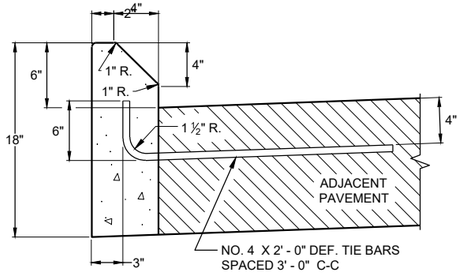
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

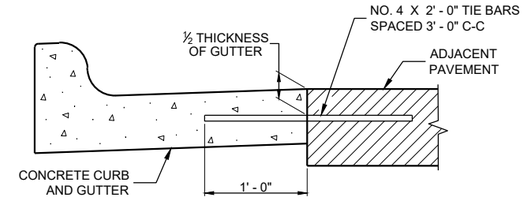


TYPES A (1) & D

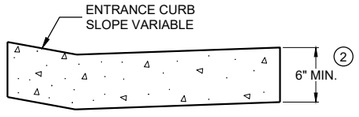


TYPES G (1) & J

CONCRETE CURB

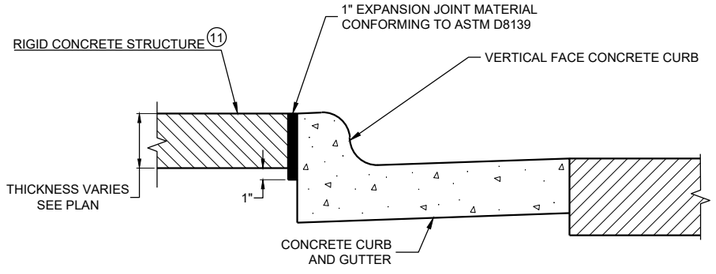


TYPICAL TIE BAR LOCATION (1)

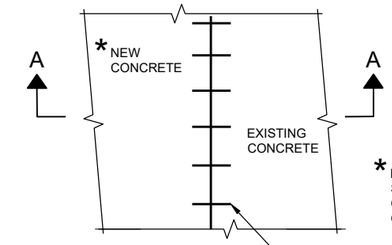


DRIVEWAY ENTRANCE CURB (10)

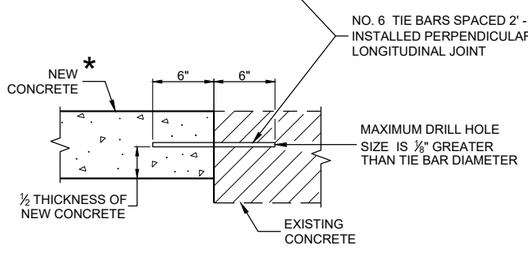
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

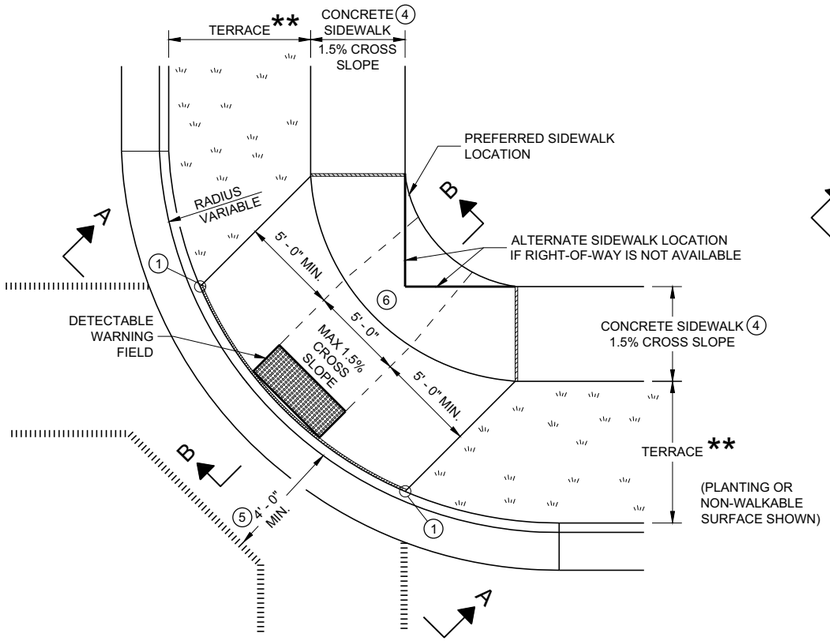
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

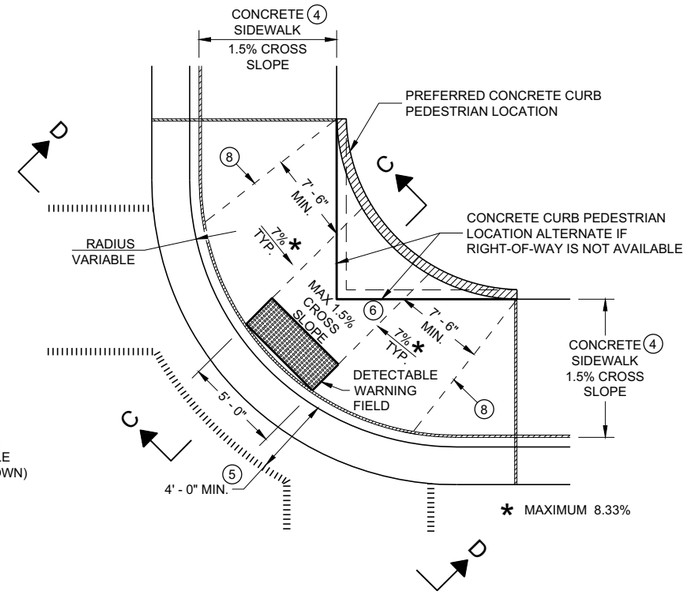
SDD08D01 - 23b



PLAN VIEW

CURB RAMP TYPE 1

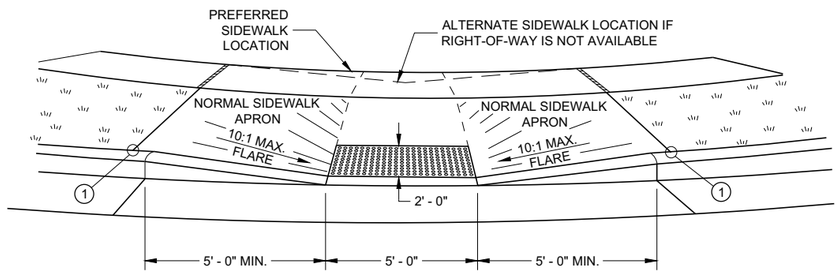
(CENTER OF CORNER RADIUS)



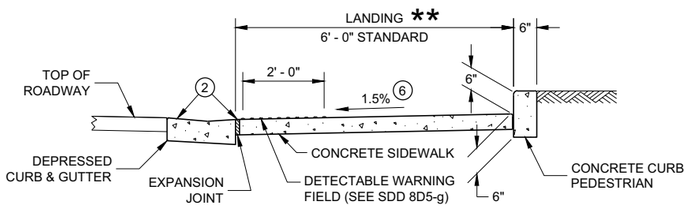
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

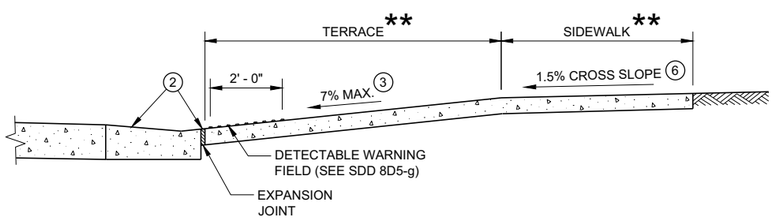


VIEW A - A FOR TYPE 1

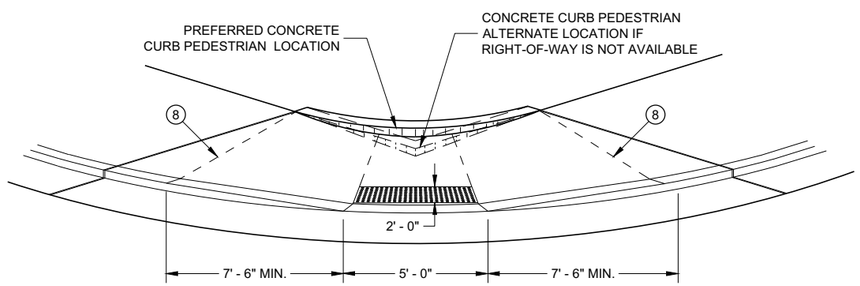


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

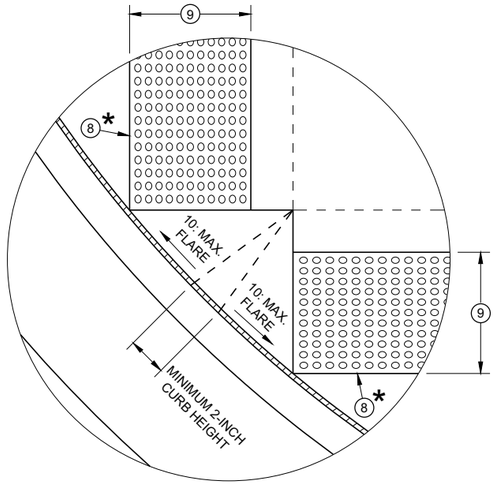
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

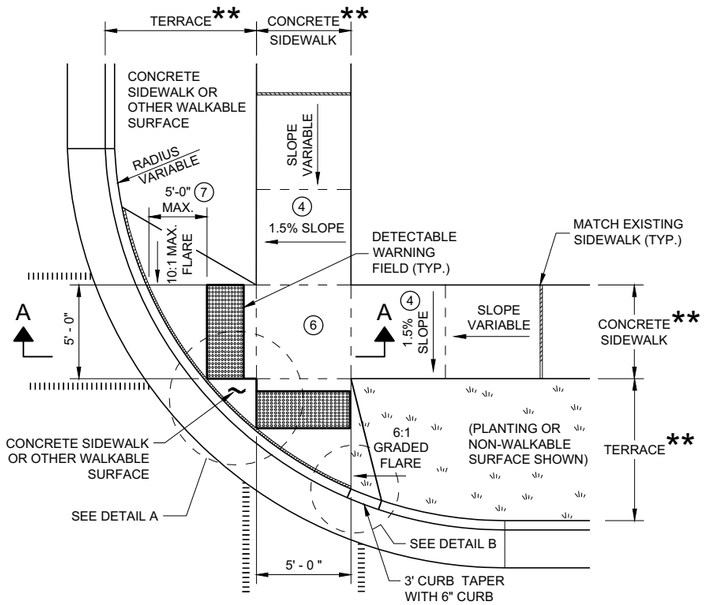
LEGEND

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

CURB RAMPS
TYPE 1 AND 1-A



DETAIL A



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

GENERAL NOTES

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

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

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

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

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

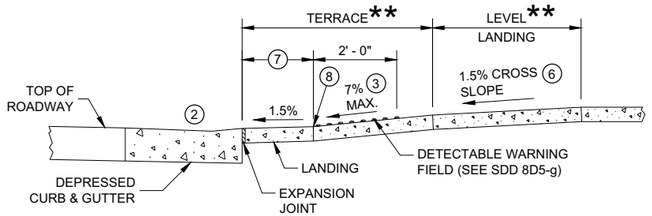
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

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

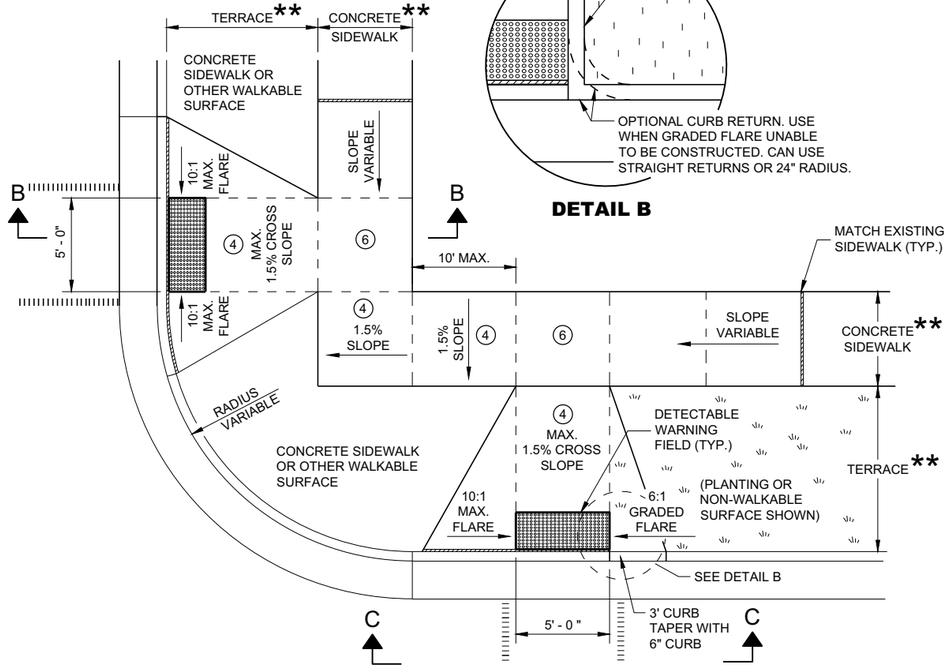
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

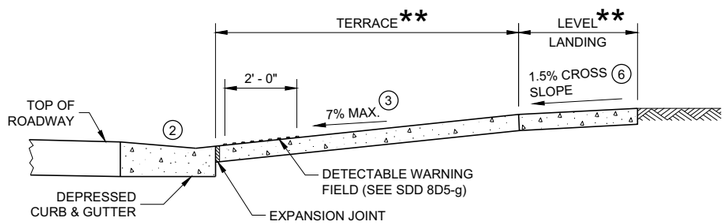
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

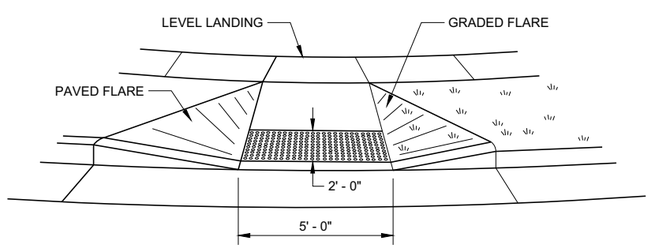
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



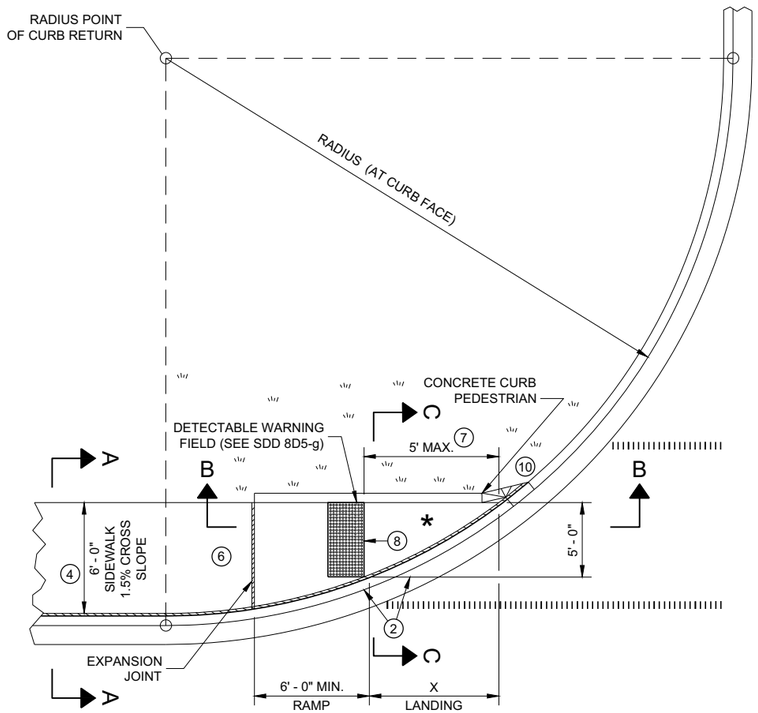
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

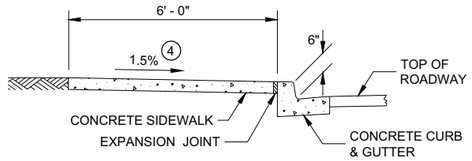


PLAN VIEW

CURB RAMP TYPE 4A

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

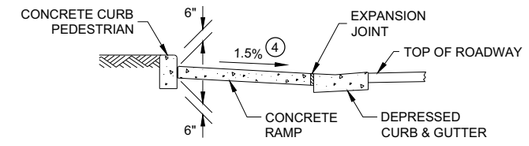
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

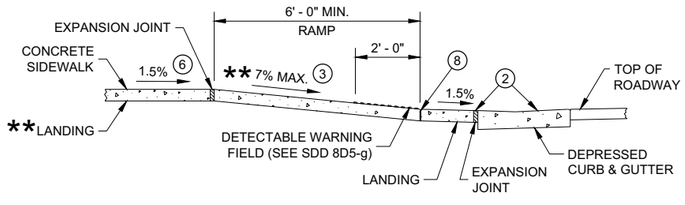
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



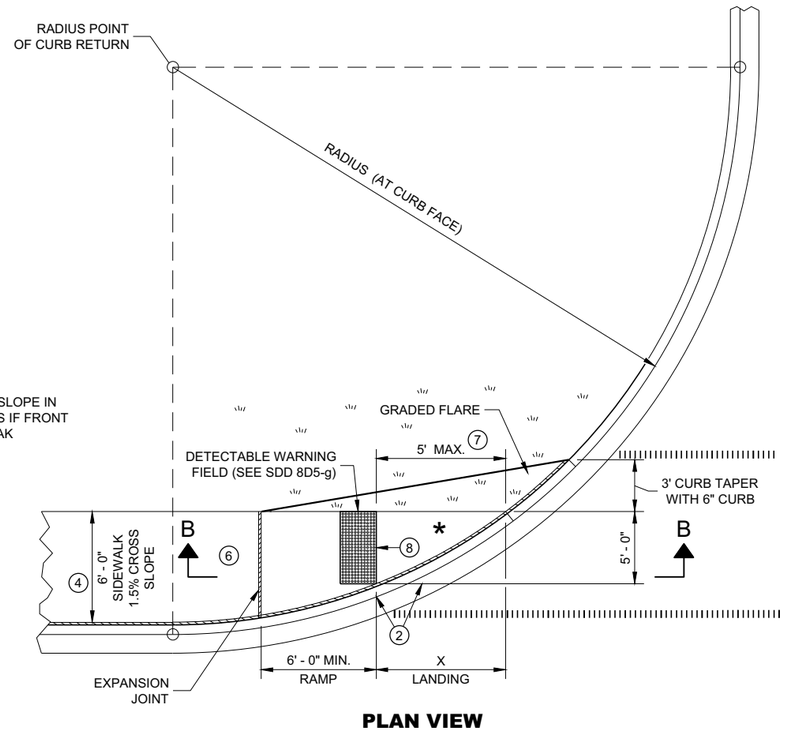
SECTION C - C FOR TYPE 4A



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

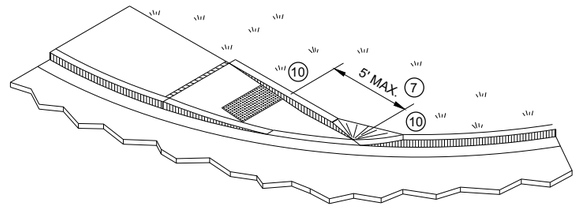
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

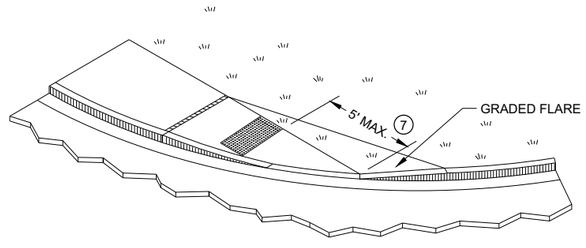


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



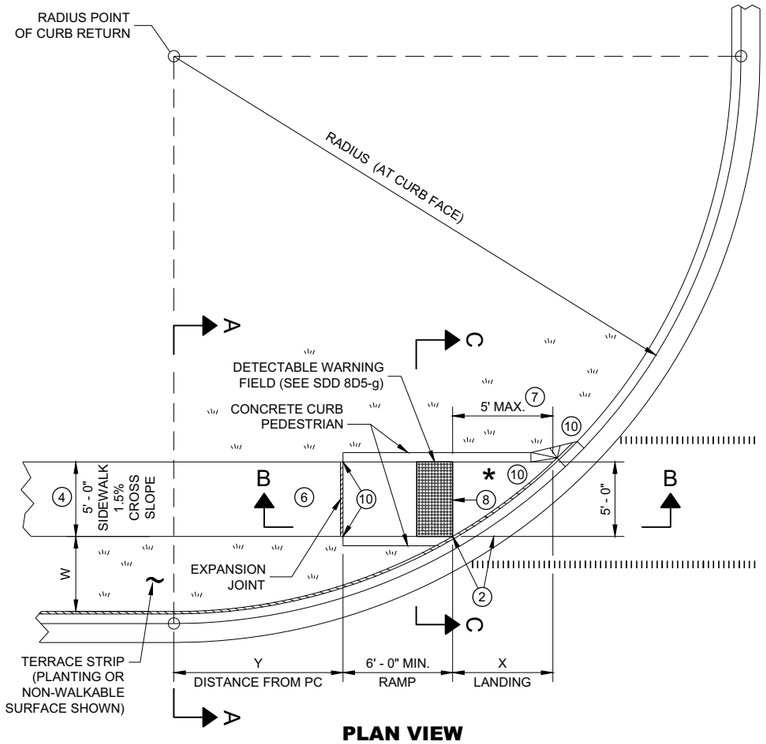
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

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

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

SECTION C - C FOR TYPE 4B

LEGEND

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

GENERAL NOTES

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

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

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

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

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

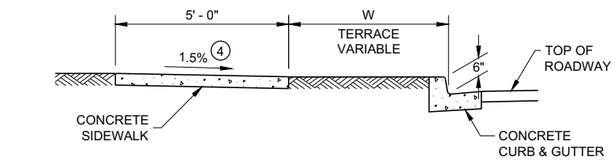
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

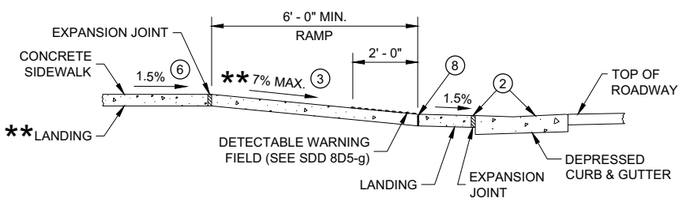
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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



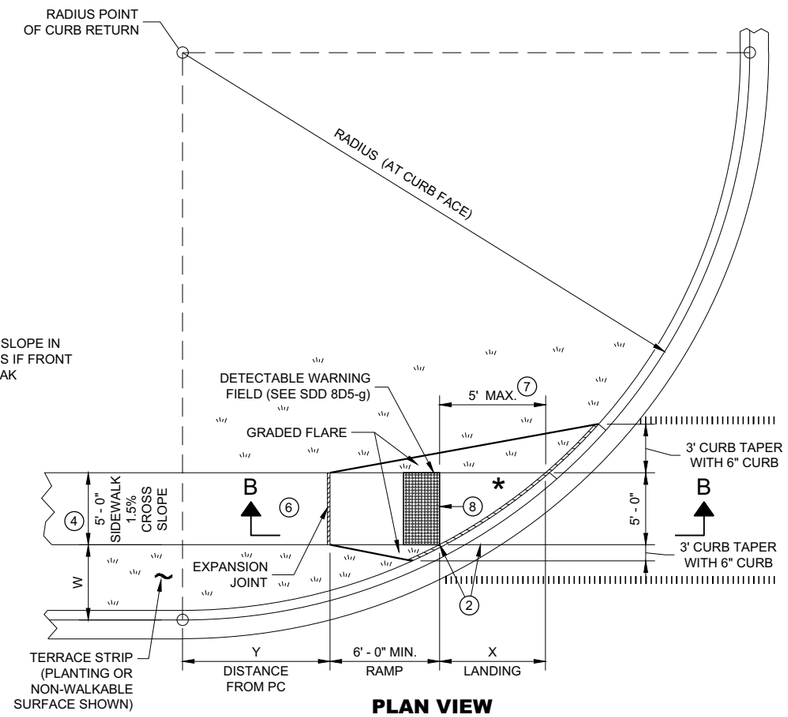
SECTION A - A FOR TYPE 4B



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

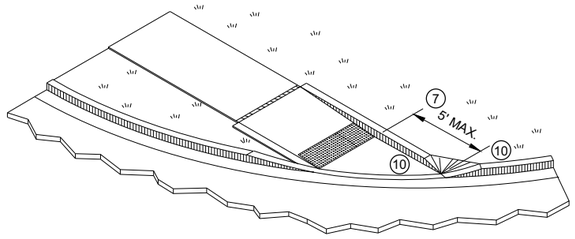
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

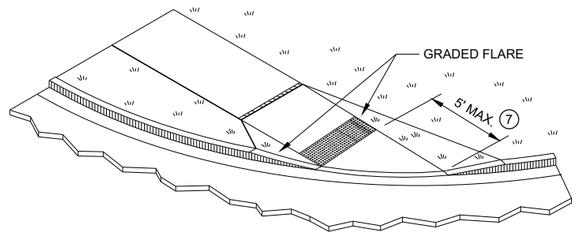


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



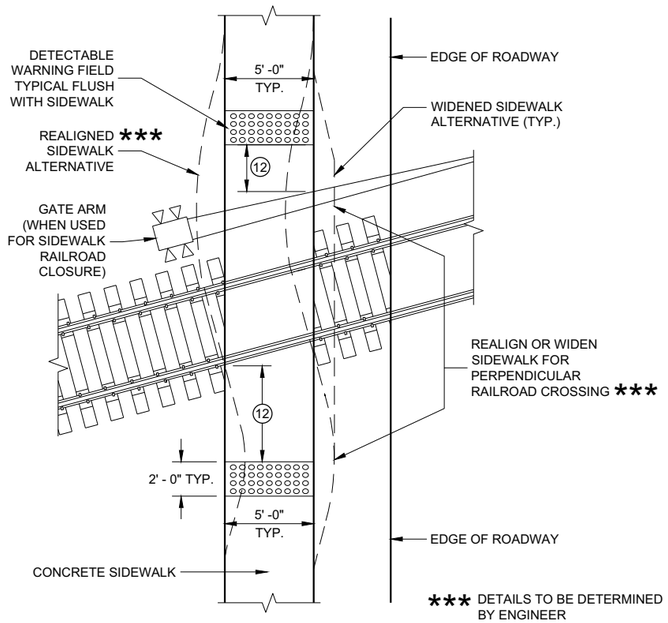
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

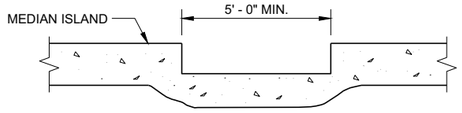
6

SDD 08D05 - 20d

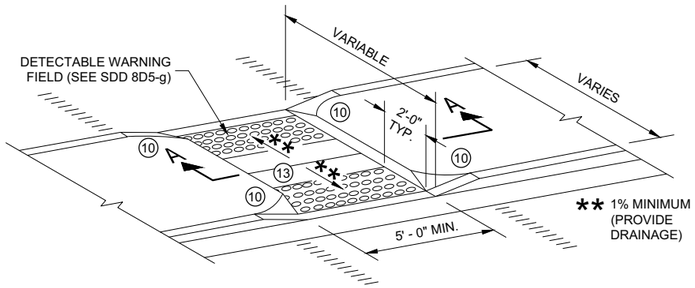


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

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

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

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

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

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

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

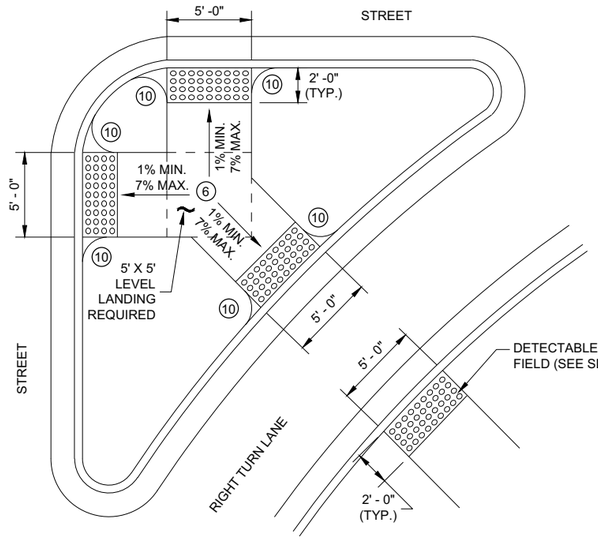
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

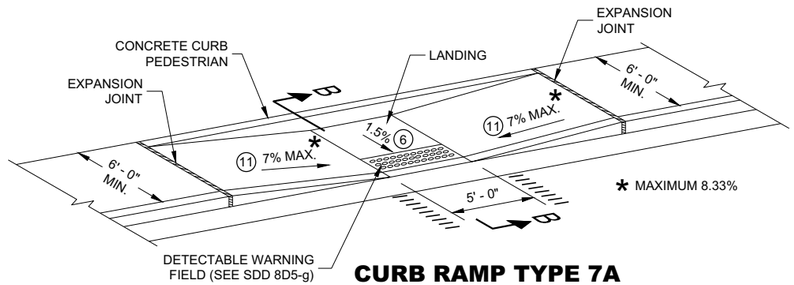
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

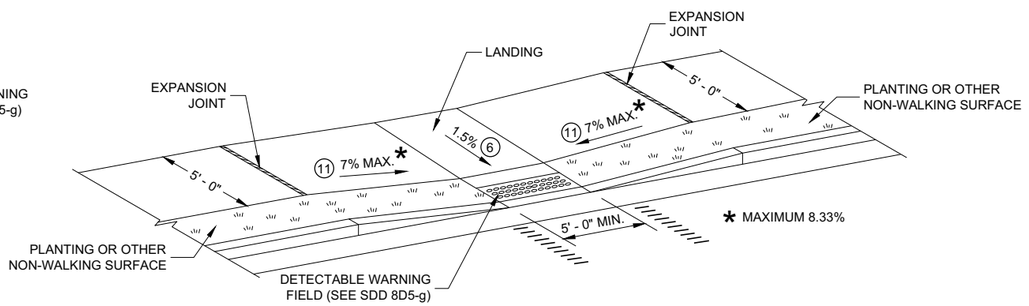
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

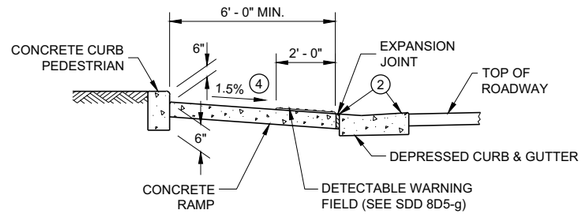
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

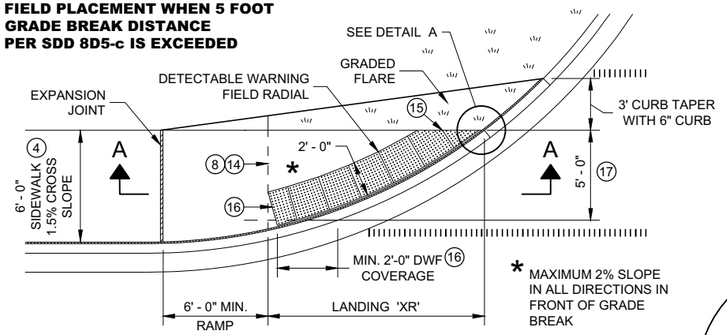
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

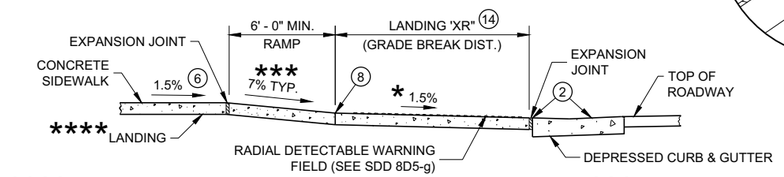
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

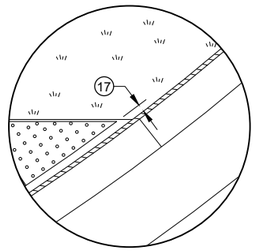
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

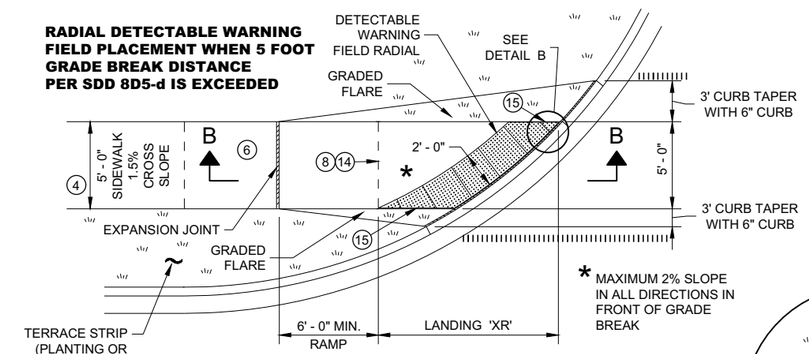
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

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

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

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

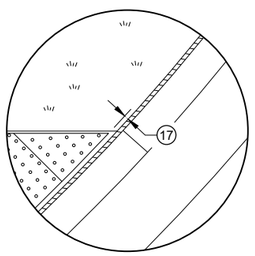
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



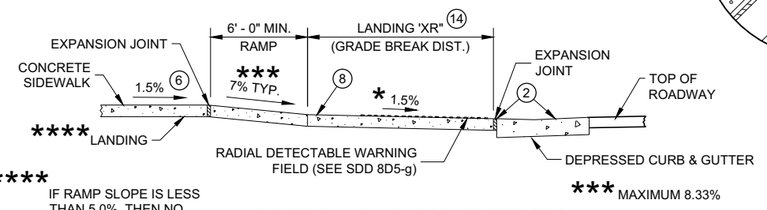
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

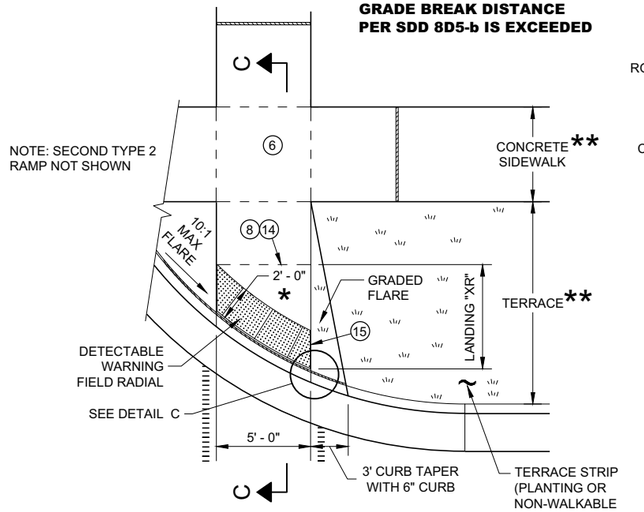


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

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

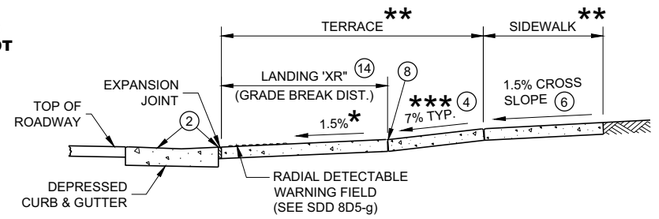


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

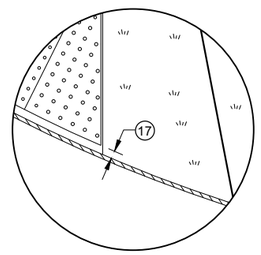


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

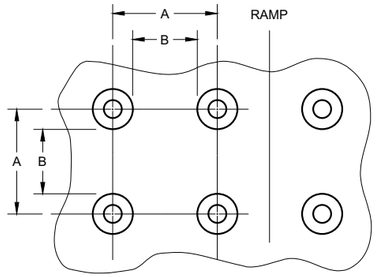
CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

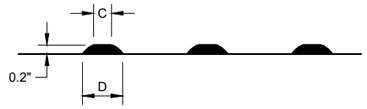
SDD 08D05 - 20f

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

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

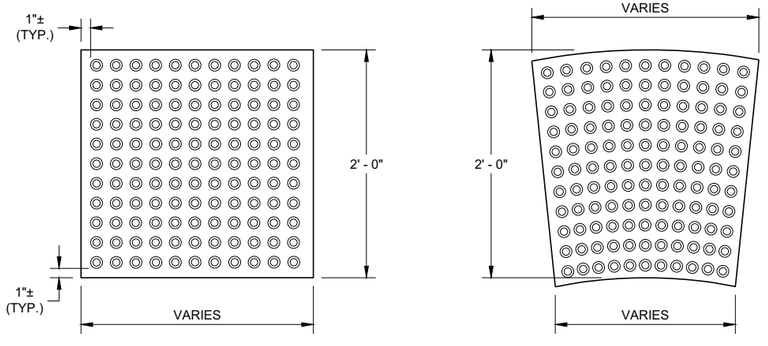


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

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

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

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

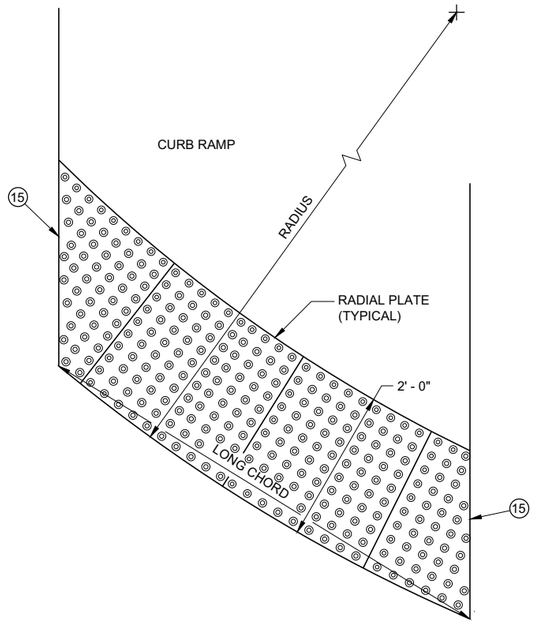
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

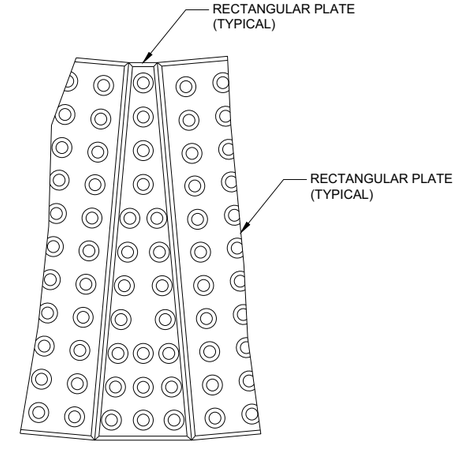
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

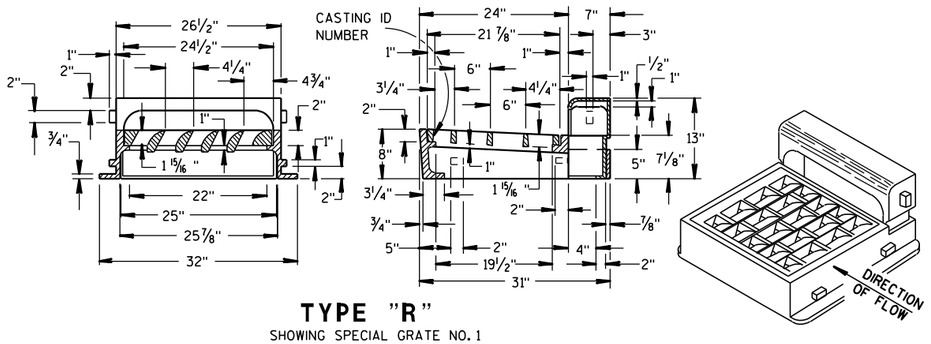
APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

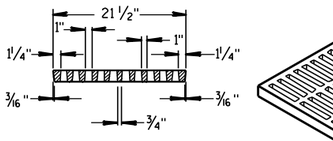
SDD 08D05 - 20g

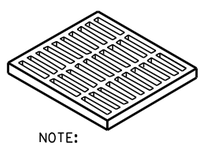
INLET COVERS



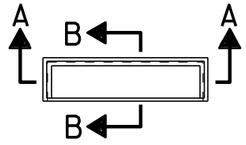
TYPE "R"

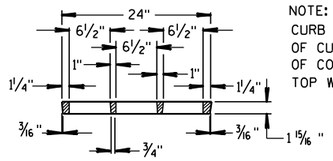
SHOWING SPECIAL GRATE NO. 1
(TO BE NOTED AS R-1 IN DRAINAGE TABLE)



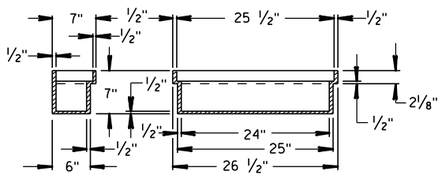


(APPROX. WEIGHT - 510 LBS.)
FRAME..... 245 LBS.
CURB..... 120 LBS.
GRATE..... 145 LBS.





NOTE:
CURB PLUG USED IN PLACE OF CURB BOX IN ABSENCE OF CONC. CURB. FILL TO TOP WITH CONCRETE.



SECTION B-B SECTION A-A

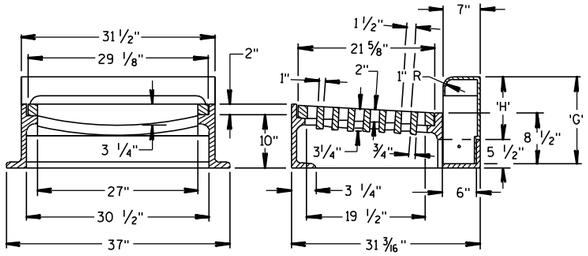
GRATE FOR TYPE "R" INLET COVER

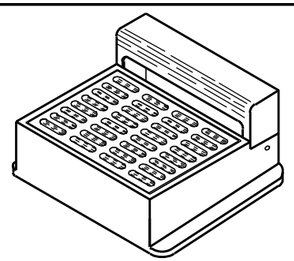
(GRATE..... 150 LBS.)
(TO BE USED UNLESS OTHERWISE NOTED IN DRAINAGE TABLE)

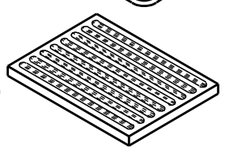
SPECIAL CURB PLUG "P"

(CURB PLUG..... 85 LBS.)
(TO BE NOTED AS R-P IN DRAINAGE TABLE)

'H' = 9" FOR 6" CURB
'H' = 11" FOR 8" CURB
'G' = 13 3/4" FOR 6" CURB
'G' = 15 3/4" FOR 8" CURB



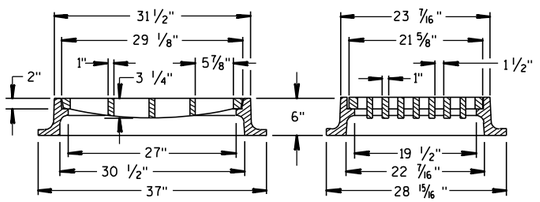


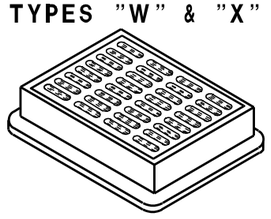


(APPROX. WEIGHT - 670 LBS.)
FRAME..... 350 LBS.
CURB BOX..... 135 LBS.
GRATE..... 185 LBS.

TYPE "W"

ALTERNATE GRATE
(FOR EXPRESSWAY RAMPS)
TYPES "W" & "X"

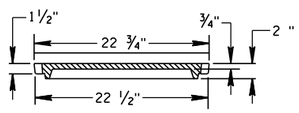




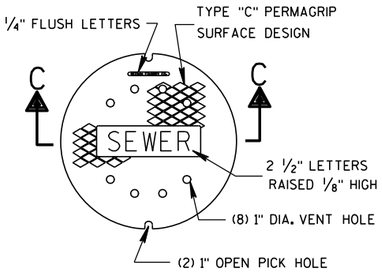
TYPE "X"

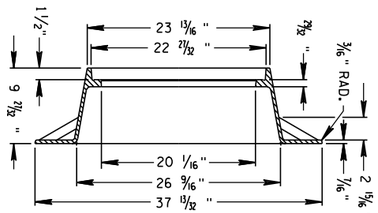
(APPROX. WEIGHT - 470 LBS.)

MANHOLE COVER



SECTION C-C





TYPE "Q"

(APPROX. WEIGHT - 290 LBS.)

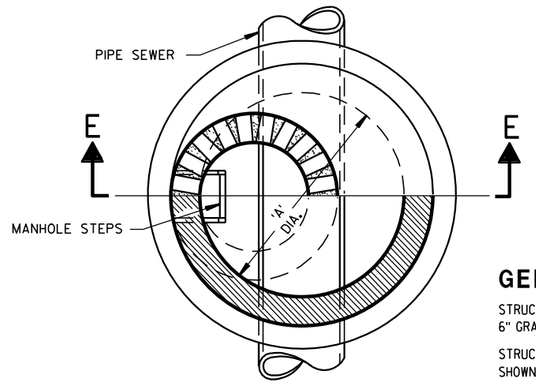
TABLE OF DIMENSIONS

TYPE	'A'	'B'	'C'
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

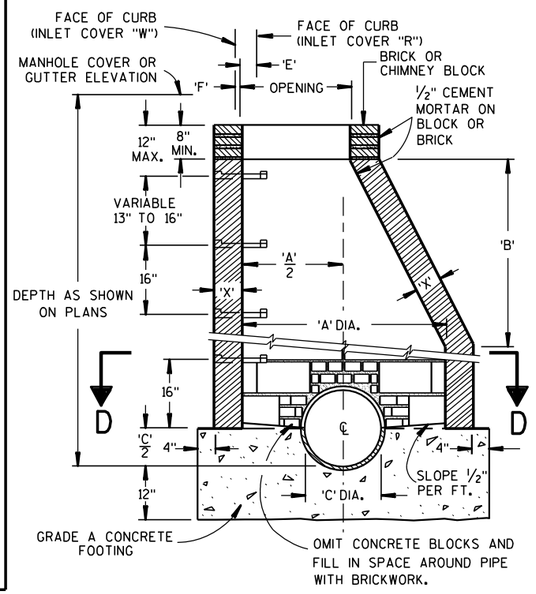
* 12" - 21" FOR PRECAST MANHOLES
** 12" - 24" FOR PRECAST MANHOLES

THE FIRST STEP SHALL BE PLACED 16" ABOVE THE BENCH.

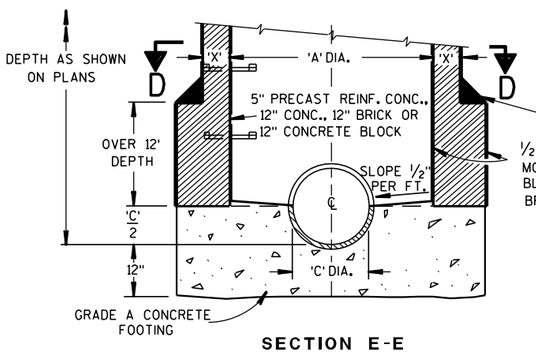
MANHOLE



HALF SECTION D-D



SECTION E-E



SECTION E-E

TYPES 11, 12, 13 & 14

TABLE OF OPENING DIMENSIONS

COVER TYPE	COVER DESCRIPTION	OPENING	'E'	'F'
"O"	ROUND	2'-2" DIA.	—	—
"W"	CURB BOX	1'-8" X 2'-6"	—	1"
"X"	INLET	1'-10" X 2'-6"	—	—
"R"	CURB BOX	2'-0" X 2'-1"	4"	—

GENERAL NOTES

STRUCTURE WALL THICKNESS 'X' TO BE 8" BRICK, 6" CONCRETE BLOCK, 6" GRADE A CONCRETE OR 5" PRECAST REINFORCED CONCRETE.

STRUCTURE FOOTINGS ARE TO BE GRADE A CONCRETE OF THE THICKNESS SHOWN IN THE DETAIL OR 5" PRECAST REINFORCED CONCRETE.

REINFORCEMENT FOR 5" PRECAST REINFORCED CONCRETE SHALL BE 6" X 6" W16 X W16 WELDED SREEL WIRE FABRIC AND SHALL BE EMBEDDED 2" CLEAR.

PRECAST INLET UNITS AND BASES SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

PRECAST CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6" IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR GRANULAR BACK-FILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

SET FRAME ELEVATION 0.03 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS.

THE CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT PROVIDED THE PIPE ENDS ARE EXTENDED INTO THE M.H. AND NOT TERMINATED WITHIN THE M.H. WALLS.

MANHOLE STEPS

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH; 16 INCH C-C MAX. SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM WALL EMBEDMENT OF 3 INCHES IN PRECAST MANHOLE AND 6 INCHES IN 8 INCH BRICK OR 6 INCH BLOCK MANHOLE; TREAD OF STEP SHALL HAVE A NON-SKID SURFACE AND BE FLANKED BY CLEATS, WITH A MINIMUM OF 10 INCHES CLEAR BETWEEN CLEATS, TO PREVENT FOOT SLIPPING OFF THE EDGE CLEATS SHALL BE A MINIMUM OF 3/4 INCH HIGH BY 3/4 INCH WIDE HAVING A MINIMUM THICKNESS OF 5/8 INCH. STEPS SHALL BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

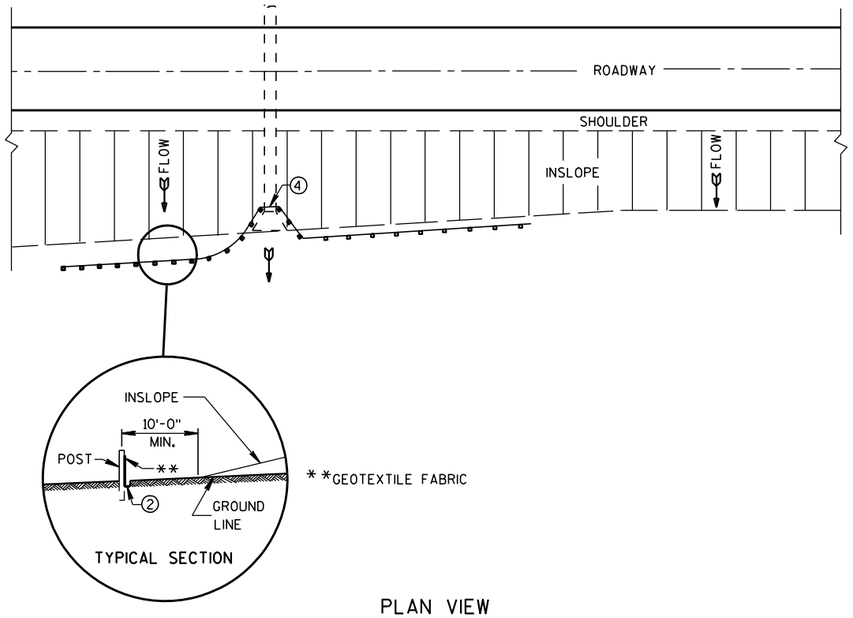
SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCING BAR WILL BE ACCEPTABLE.

MANHOLES, MANHOLE & INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

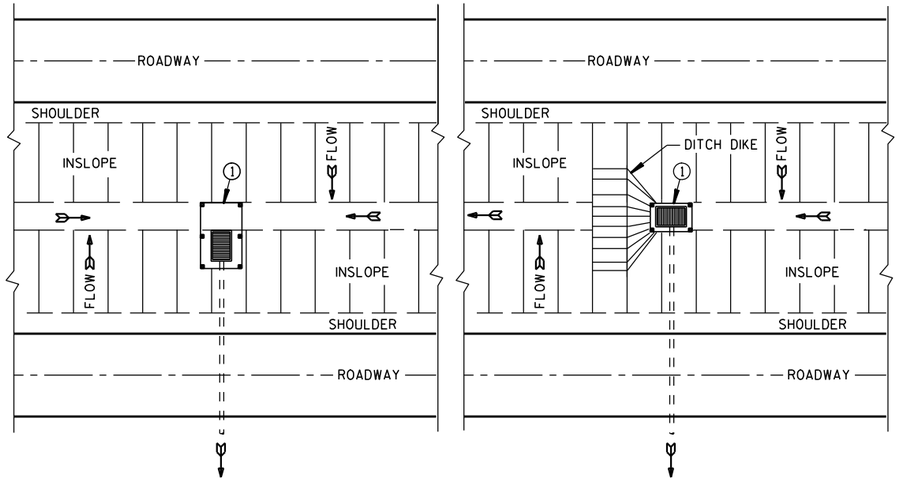
APPROVED
4/12/2011 — DATE
/S/ Jerry H. Zogg — ROADSIDE STANDARDS ENGINEER
94
FHWA

6
S.D.D. 8 D 17-6



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



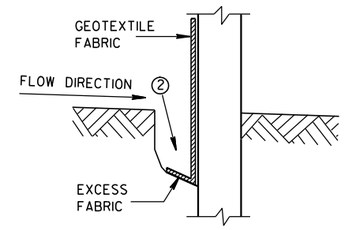
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

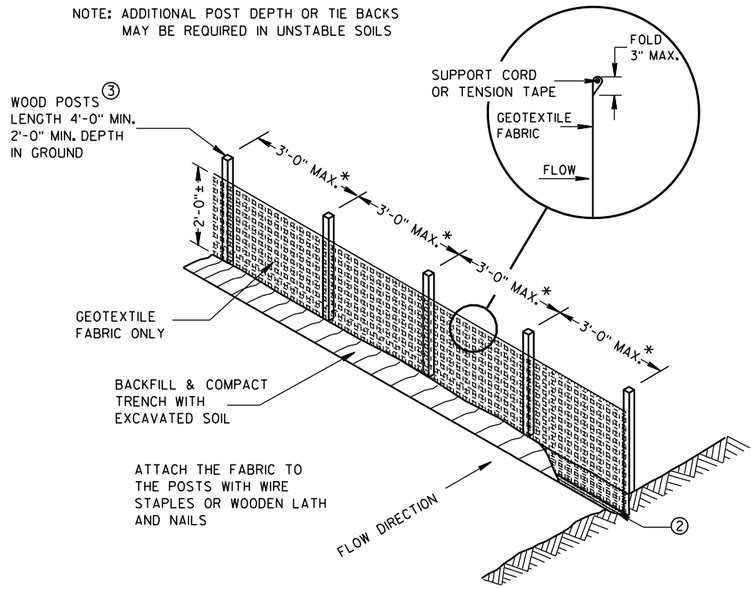
GENERAL NOTES

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

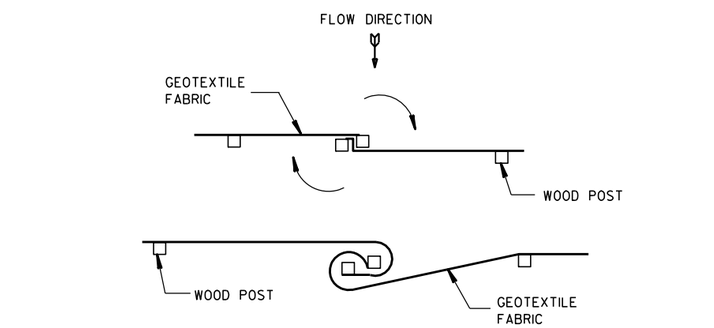
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



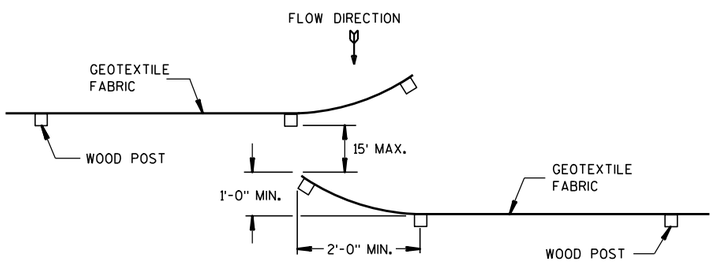
TRENCH DETAIL



SILT FENCE

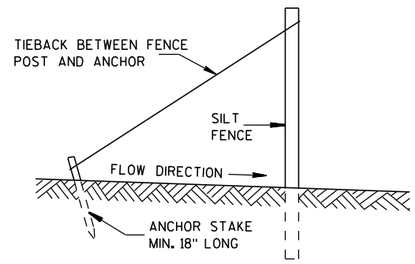


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

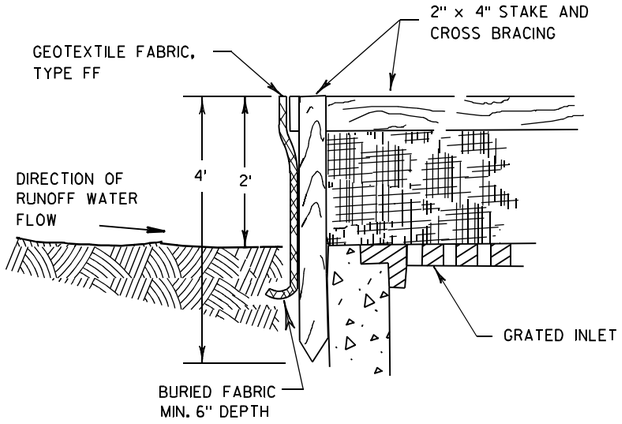
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

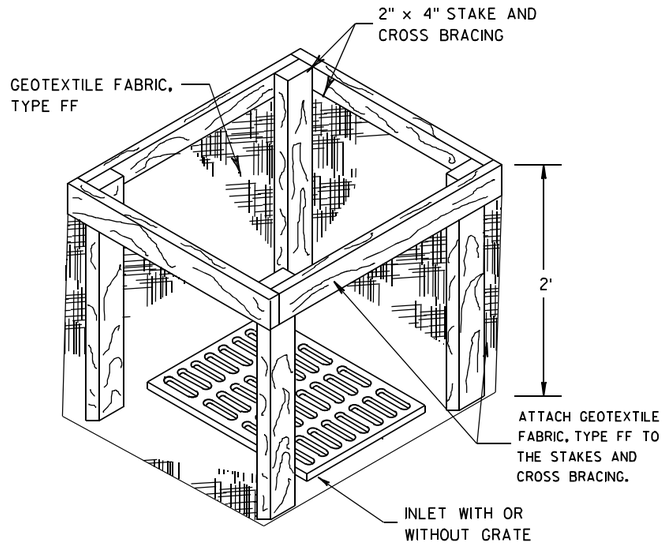
6

S.D.D. 8 E 9-6

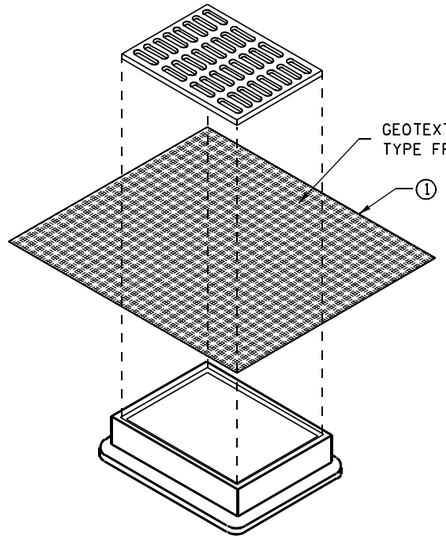
6

S.D.D. 8 E 9-6



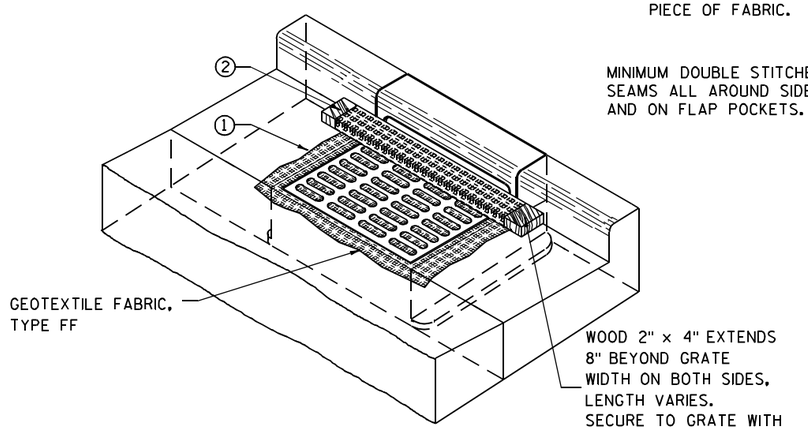


INLET PROTECTION, TYPE A

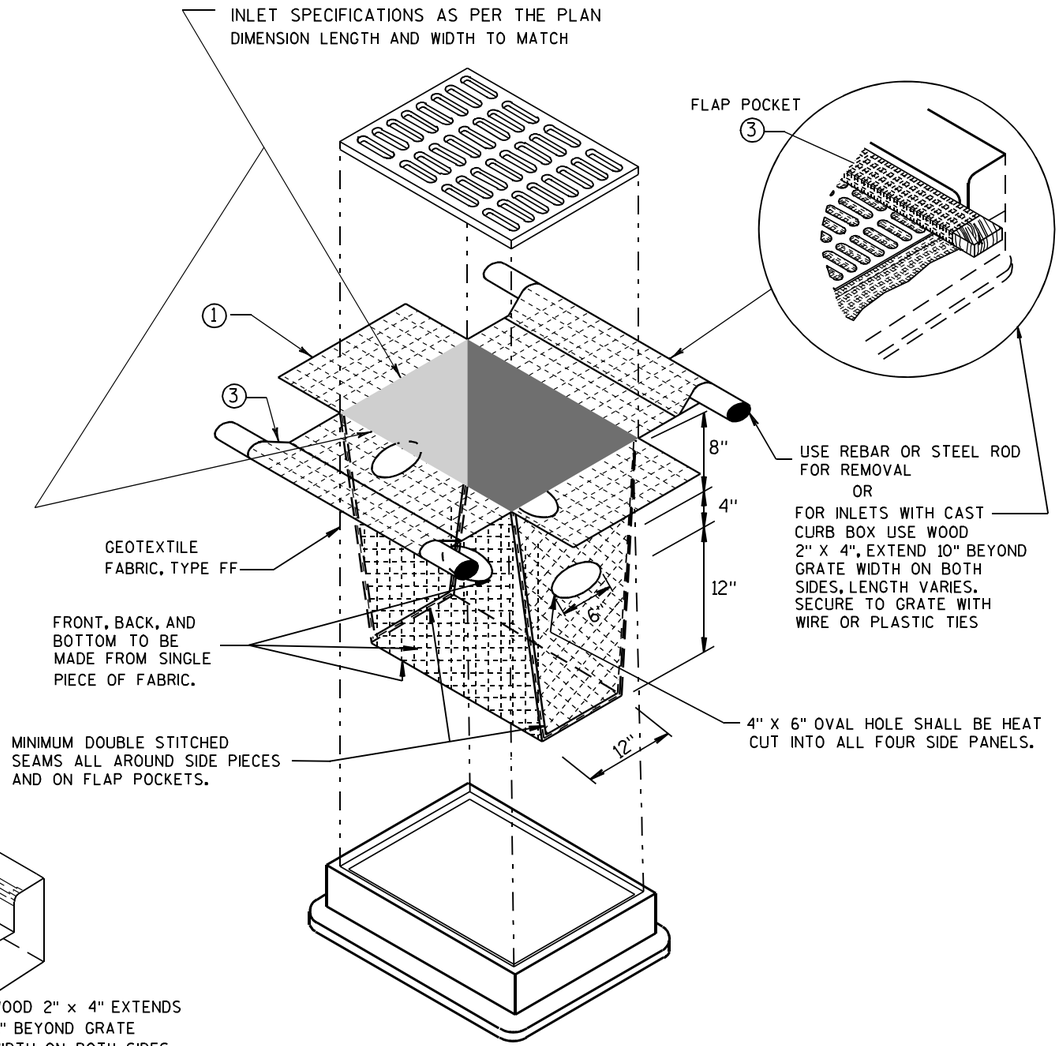


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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.

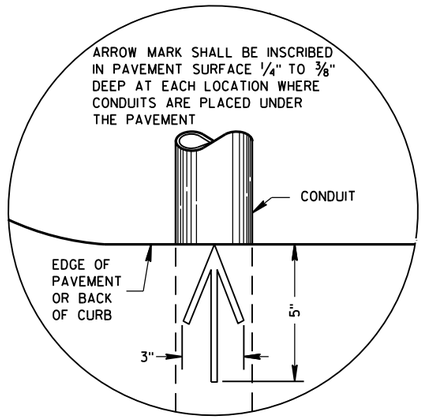
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

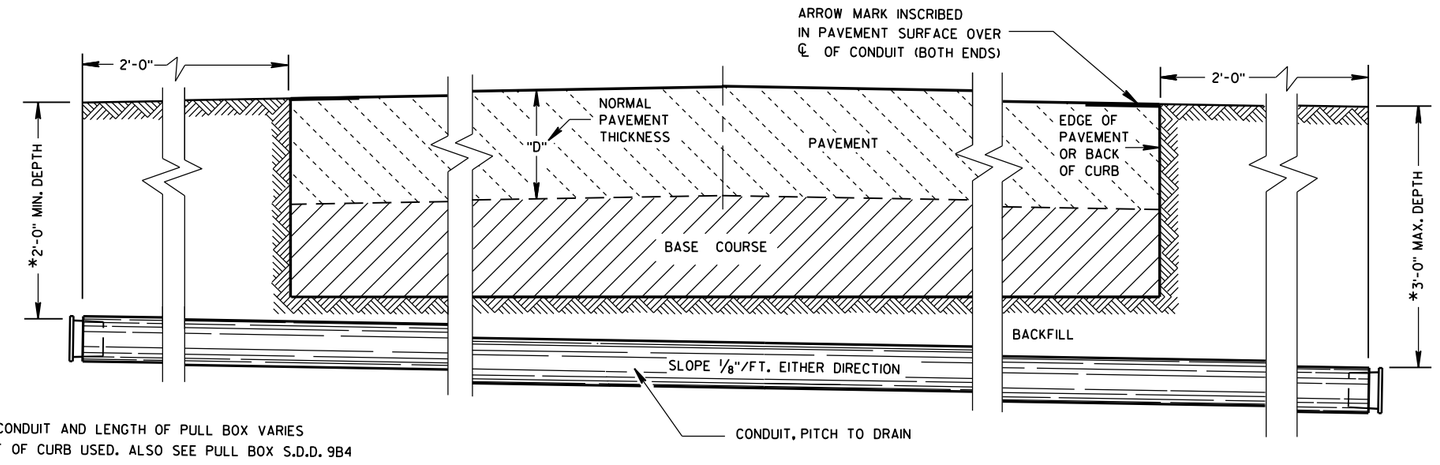
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



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 97
FHWA

6

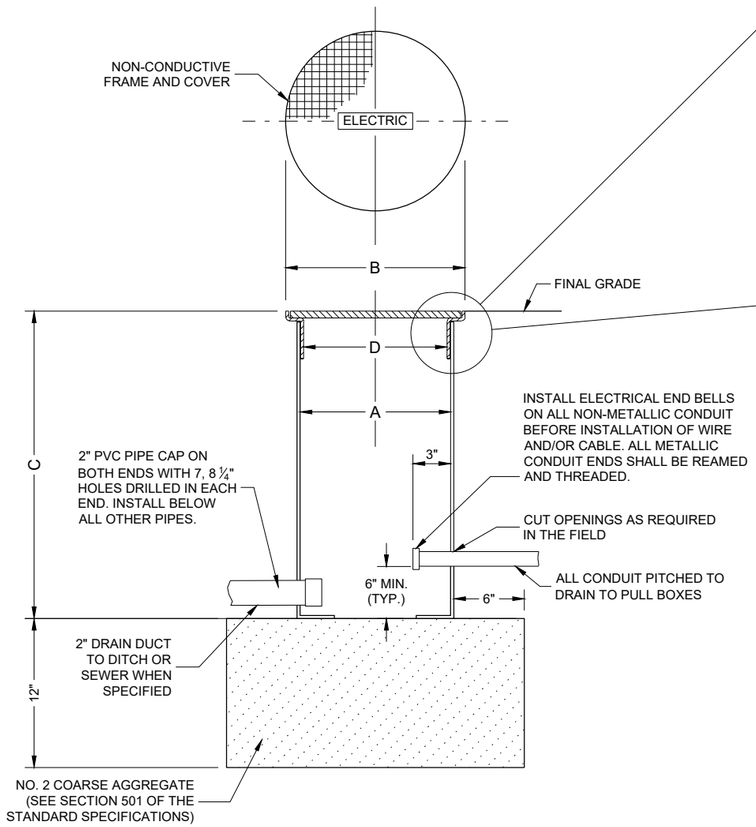
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

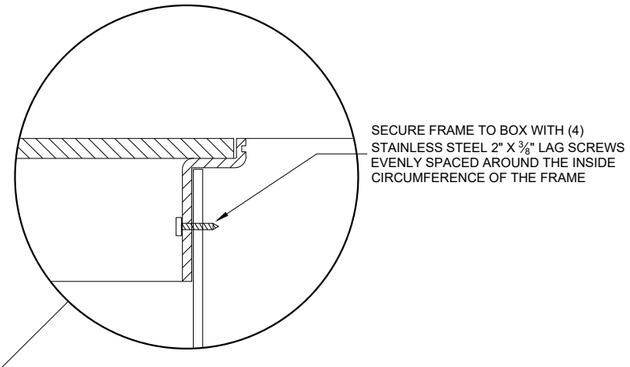
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

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

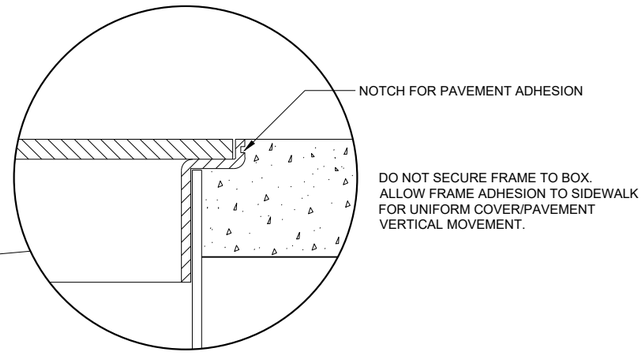
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



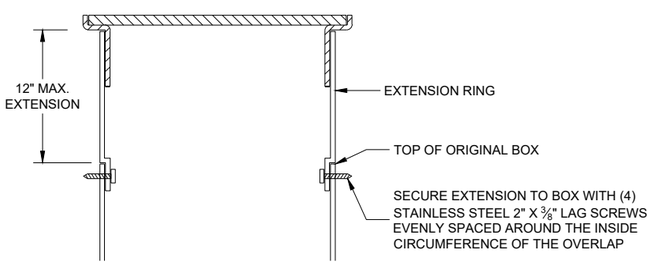
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

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

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

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

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

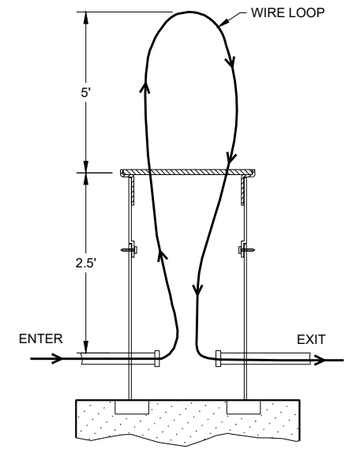
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

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

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

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



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

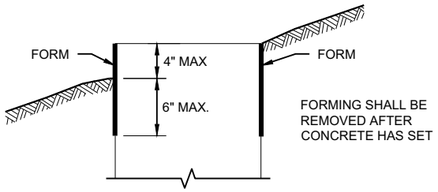
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6

SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

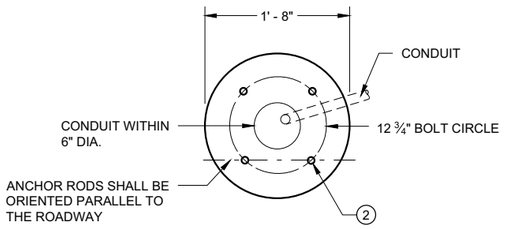
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

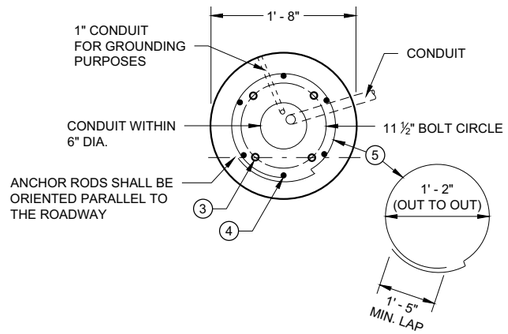
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

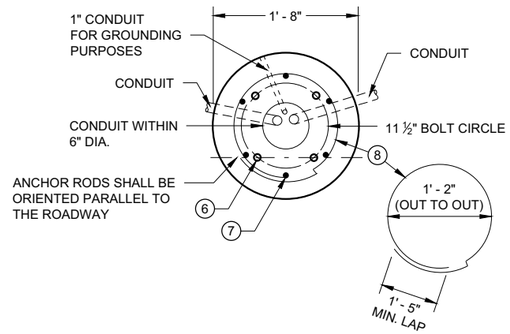
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

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

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

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

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

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

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

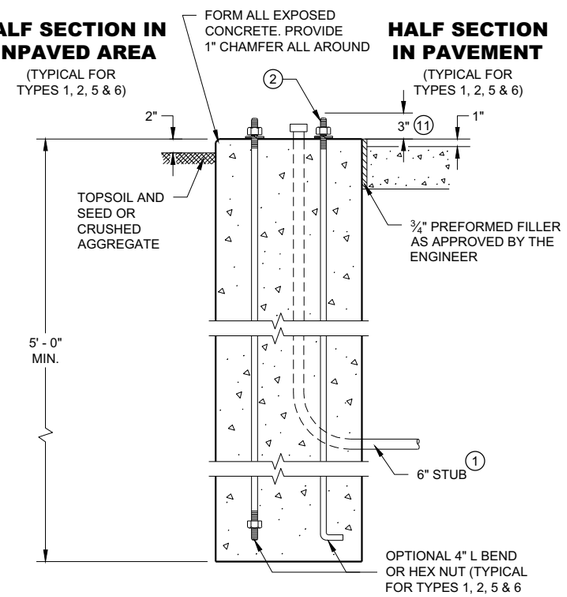
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

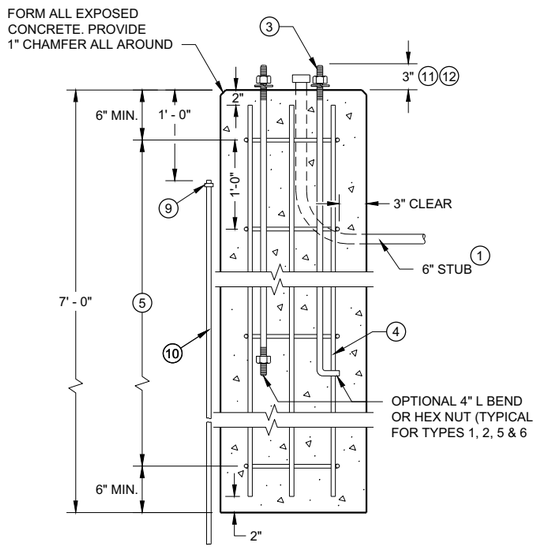
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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

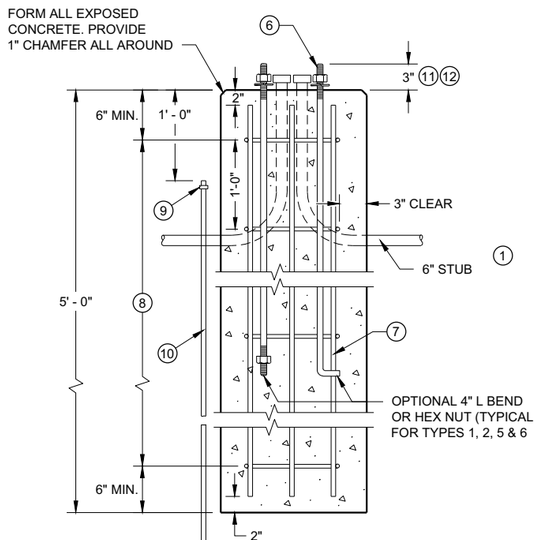
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

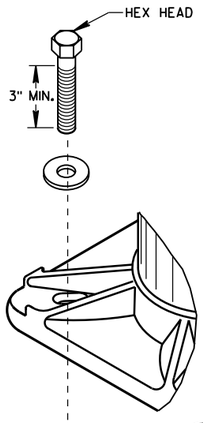
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

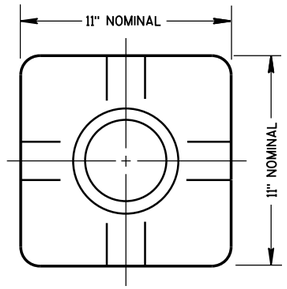
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

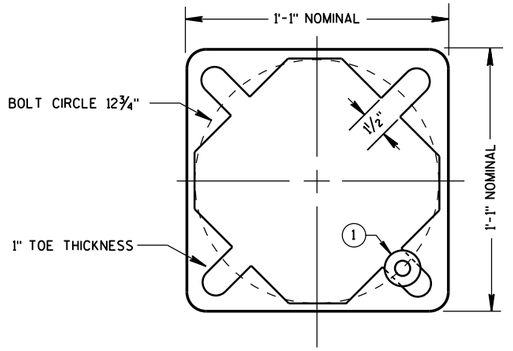
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

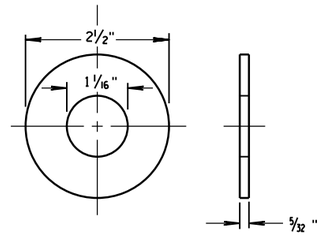




TOP VIEW
(PEDESTAL BASE)

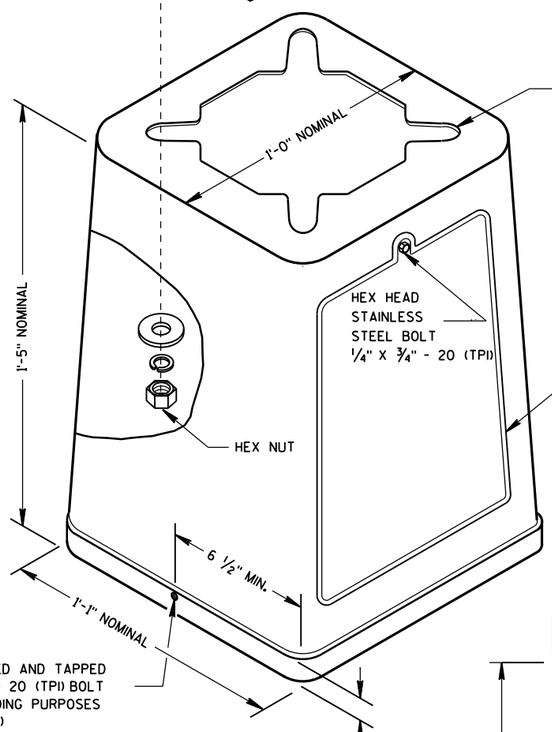


BOTTOM VIEW
(PEDESTAL BASE)

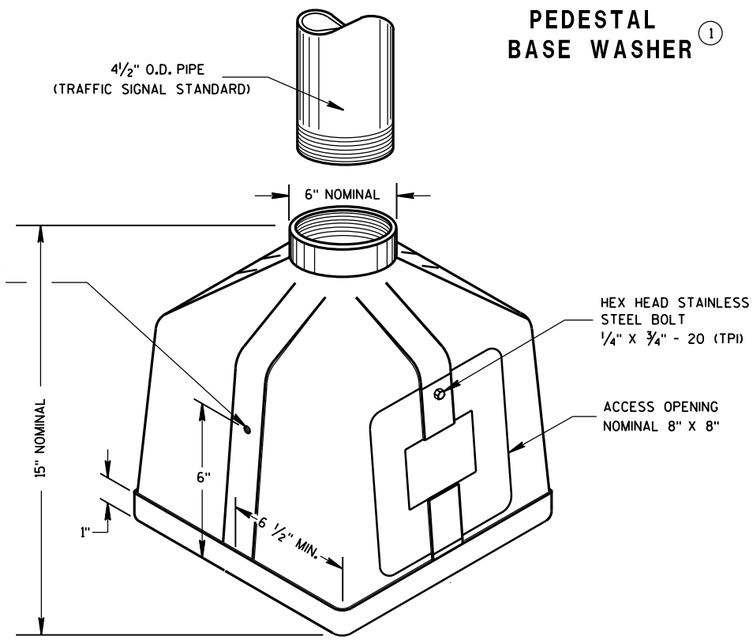


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

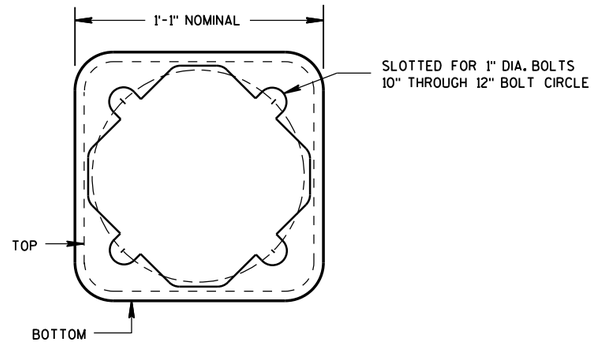


ISOMETRIC VIEW

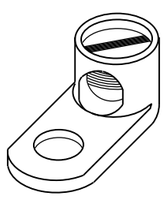


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

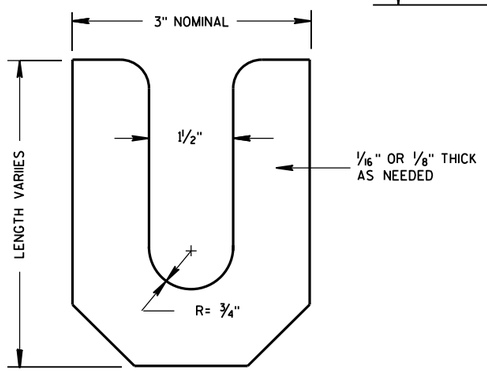


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

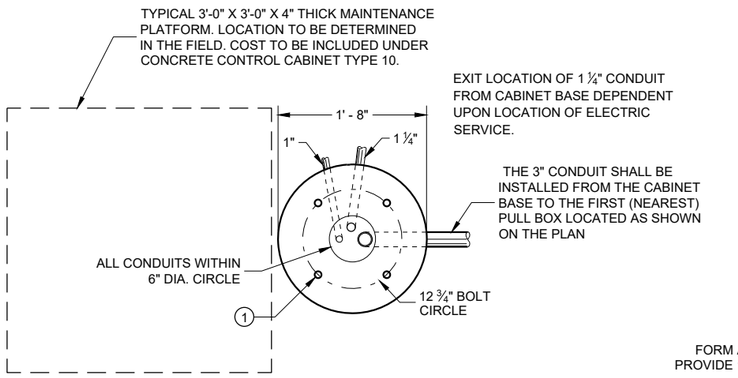
S.D.D. 9 C 3-4

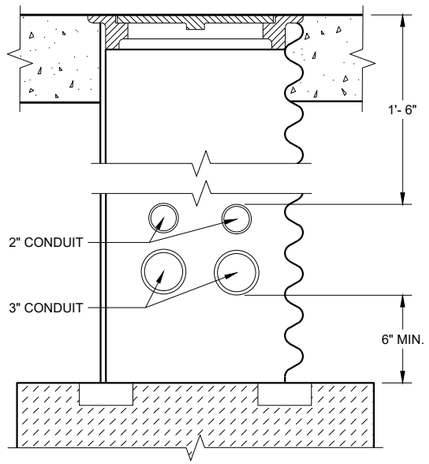
6

S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				CUBIC YARD CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65*

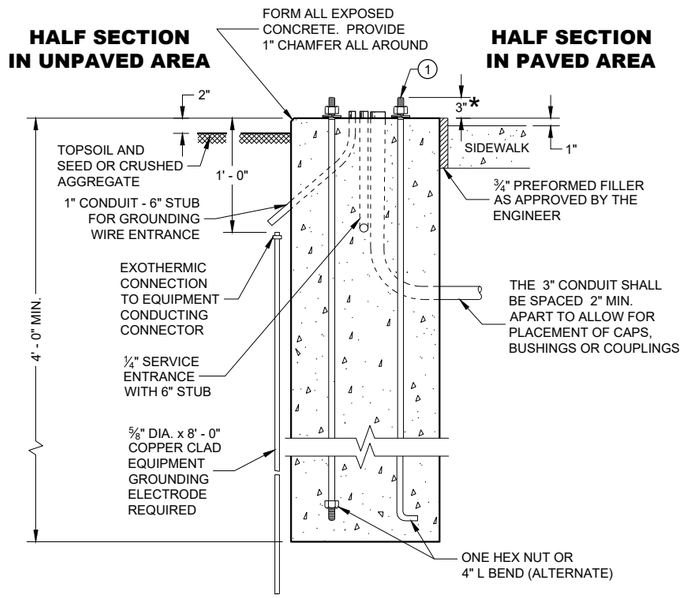
* INCLUDES MAINTENANCE PLATFORM.





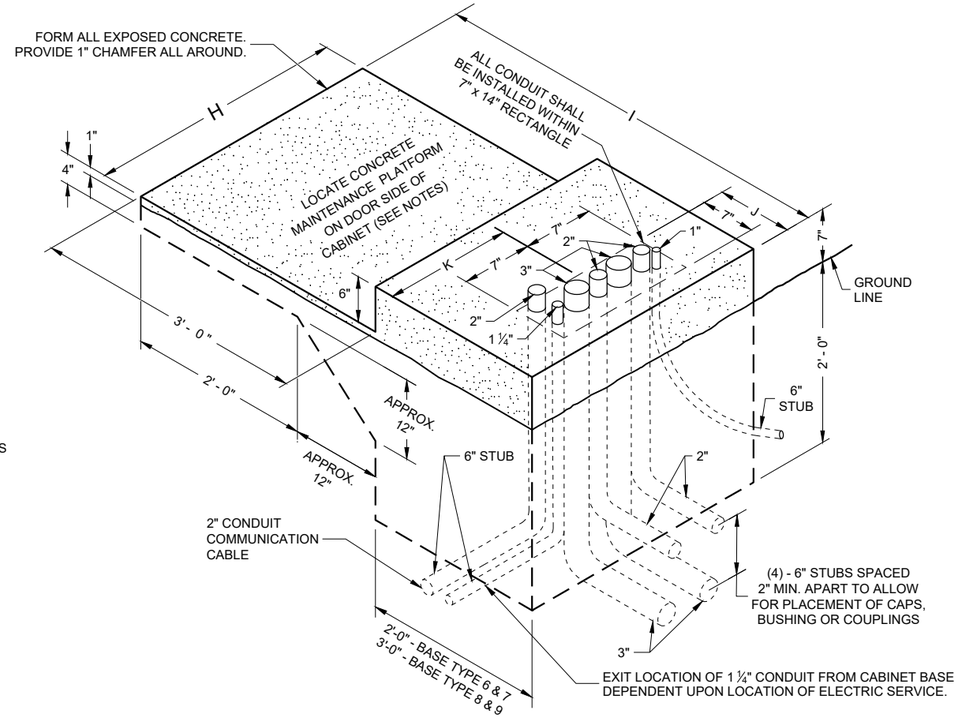
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



ISOMETRIC VIEW
TYPE 6, 7, 8 AND 9

GENERAL NOTES

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

INSTALL FOUR (4) ½" INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

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

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

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CABINET CONTROL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2016
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 101
FHWA

GENERAL NOTES

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

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOUNDATION AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

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

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

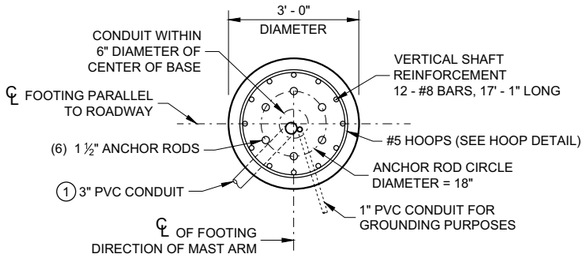
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

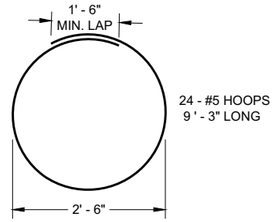
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

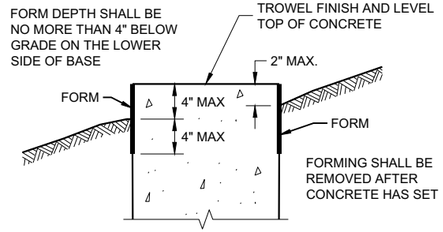
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



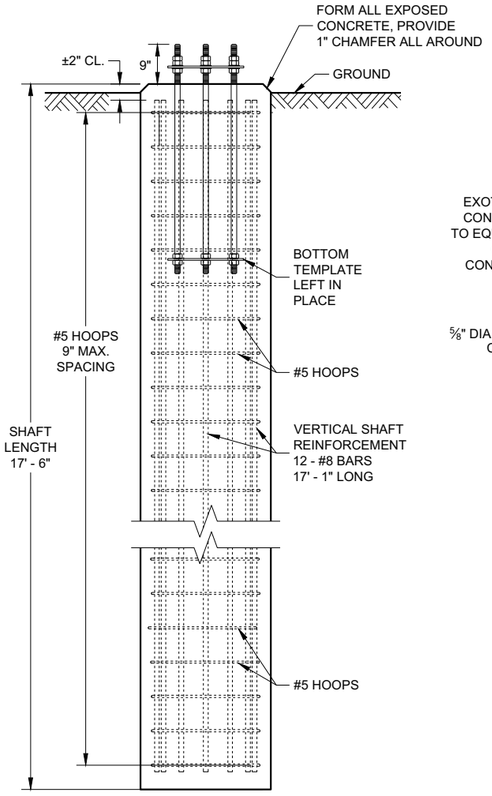
PLAN VIEW



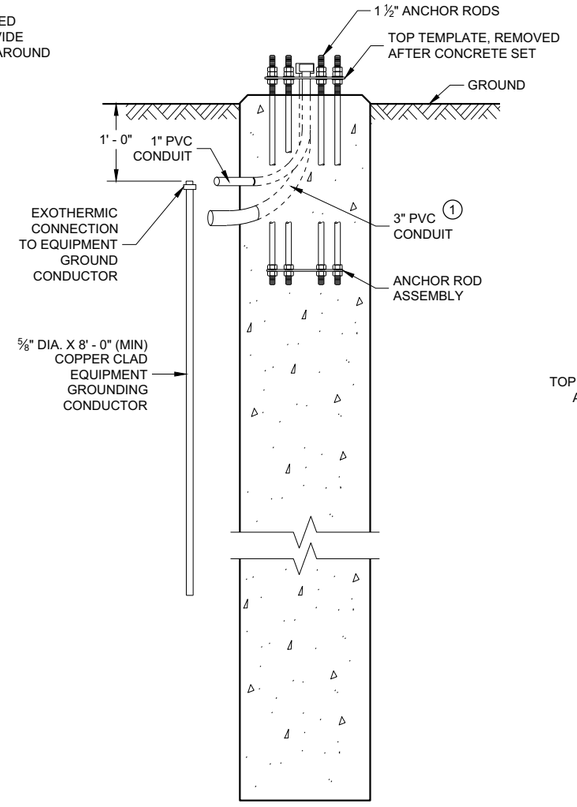
HOOP DETAIL



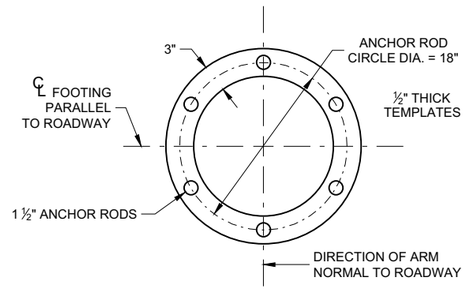
FORMING DETAIL



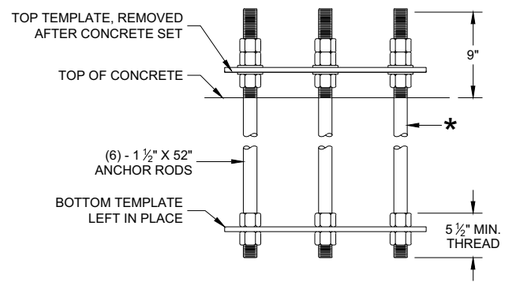
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

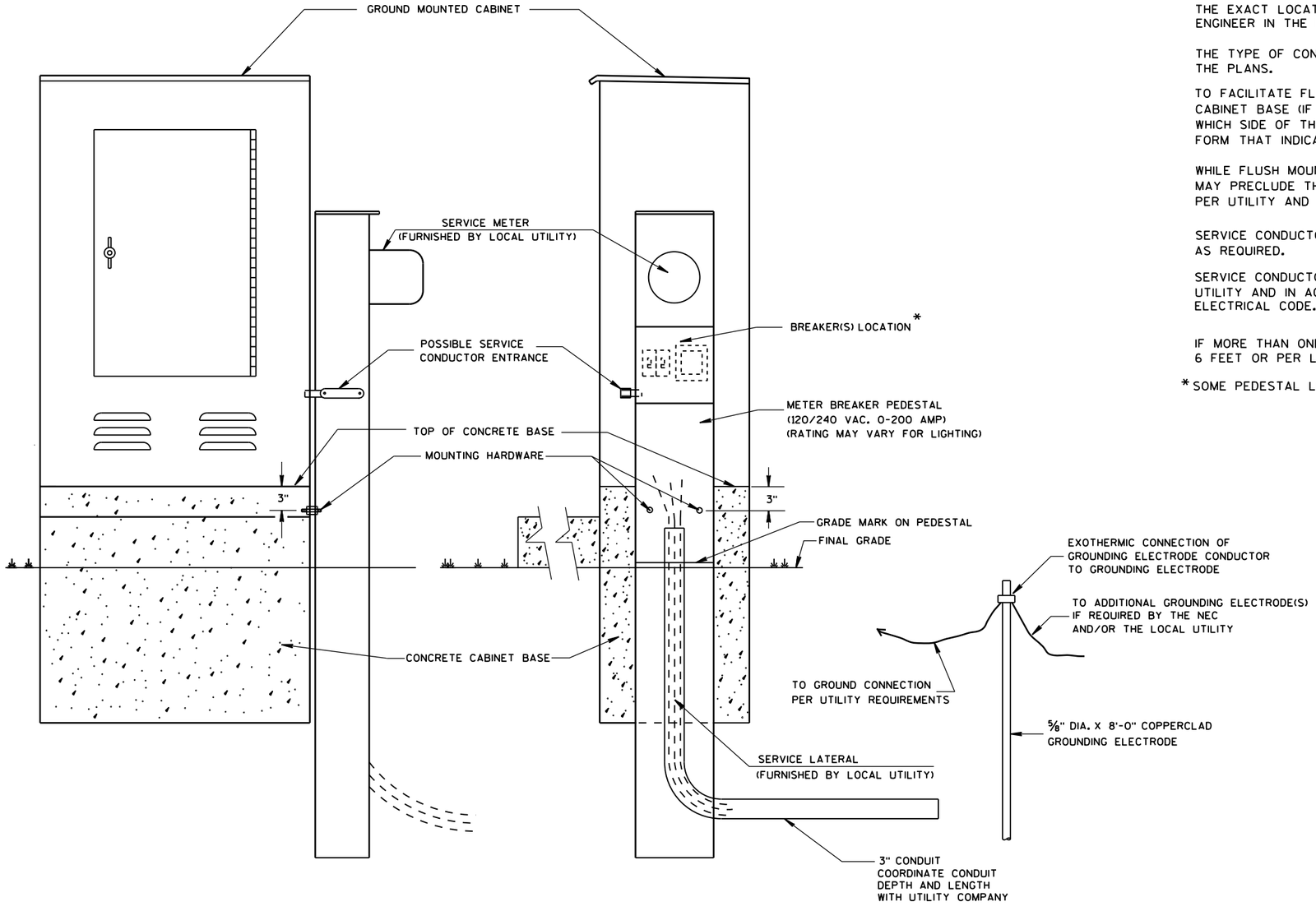
APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C15 - 01

6

SDD 09C15 - 01



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.

6

S.D.D. 9 D 1-5

6

S.D.D. 9 D 1-5

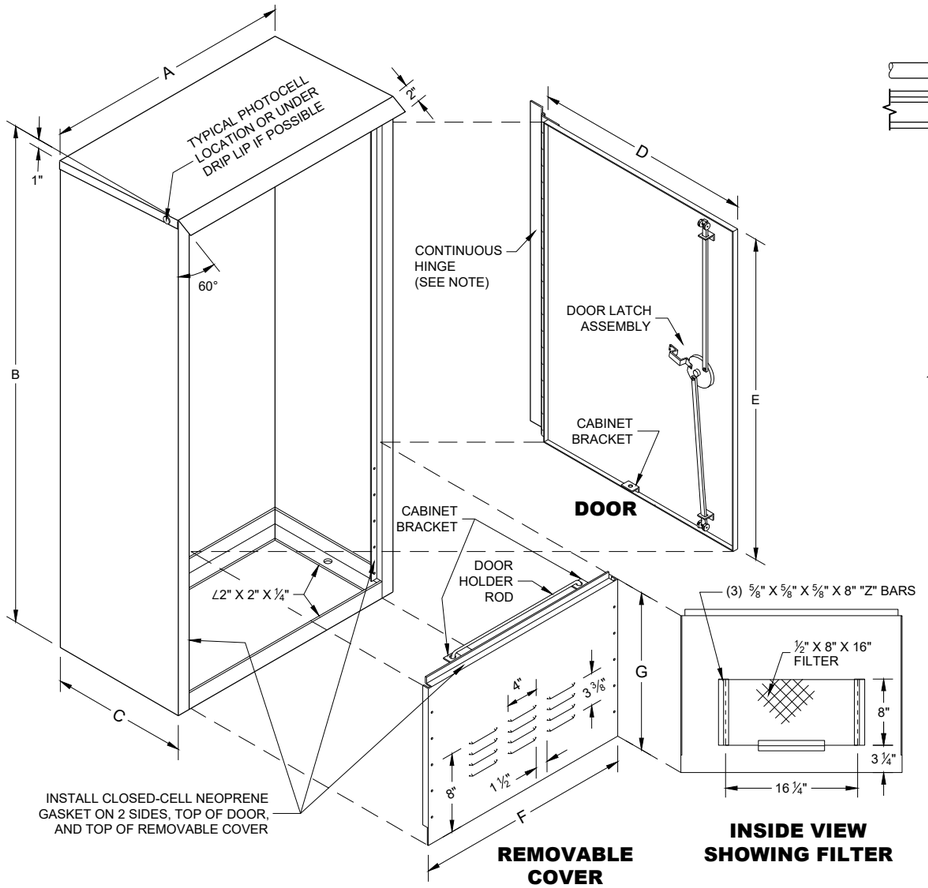
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

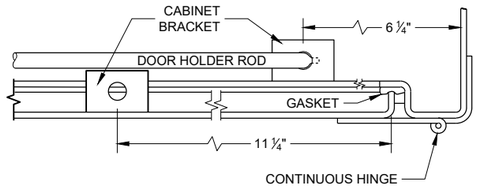
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

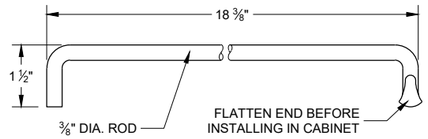
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

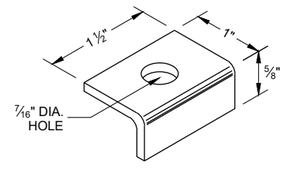




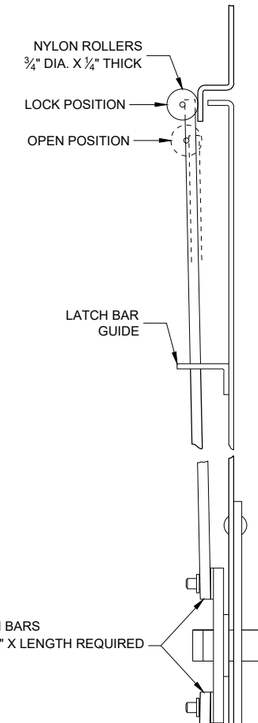
HINGE AND DOOR HOLDER



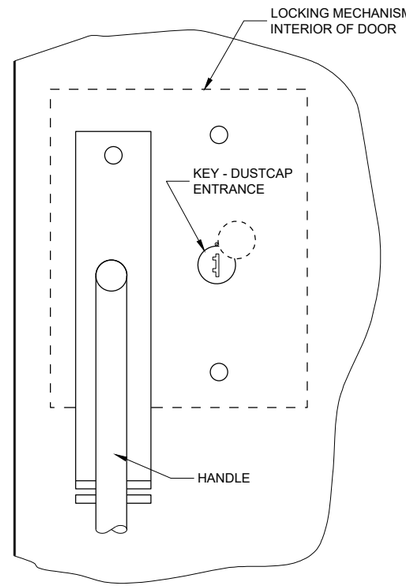
HOLDER ROD



CABINET BRACKET



SIDE VIEW



FRONT VIEW

LATCH ASSEMBLY

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.

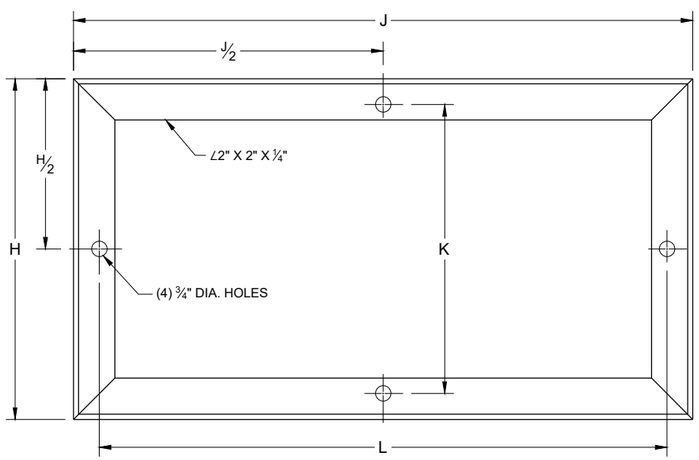
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" 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.

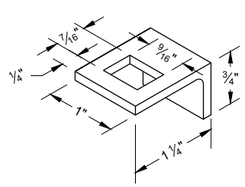
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 ½	16 ½	24
D	26 ½	34 ¾	33 ¾
E	38 ¾	38 ¾	38 ¾
F	26 ½	34 ¾	33 ¾
G	19	19	25
H	16 ½	16 ½	24
H/2	8 ¼	8 ¼	12
J	30	38	38
J/2	15	19	19
K	13 ¾	13 ¾	21 ¼
L	27 ½	35 ½	35 ½



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

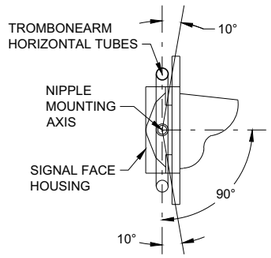
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09D02 - 03

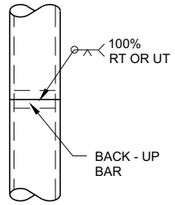


SECTION A-A

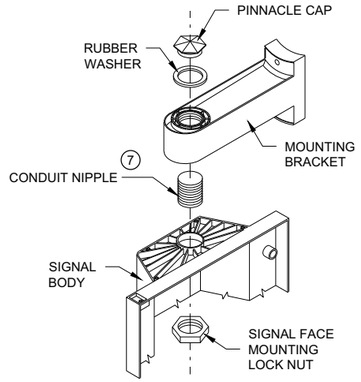
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

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



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

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

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) ASREQUIRED, TO PLUMB THE SIGNAL FACES.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

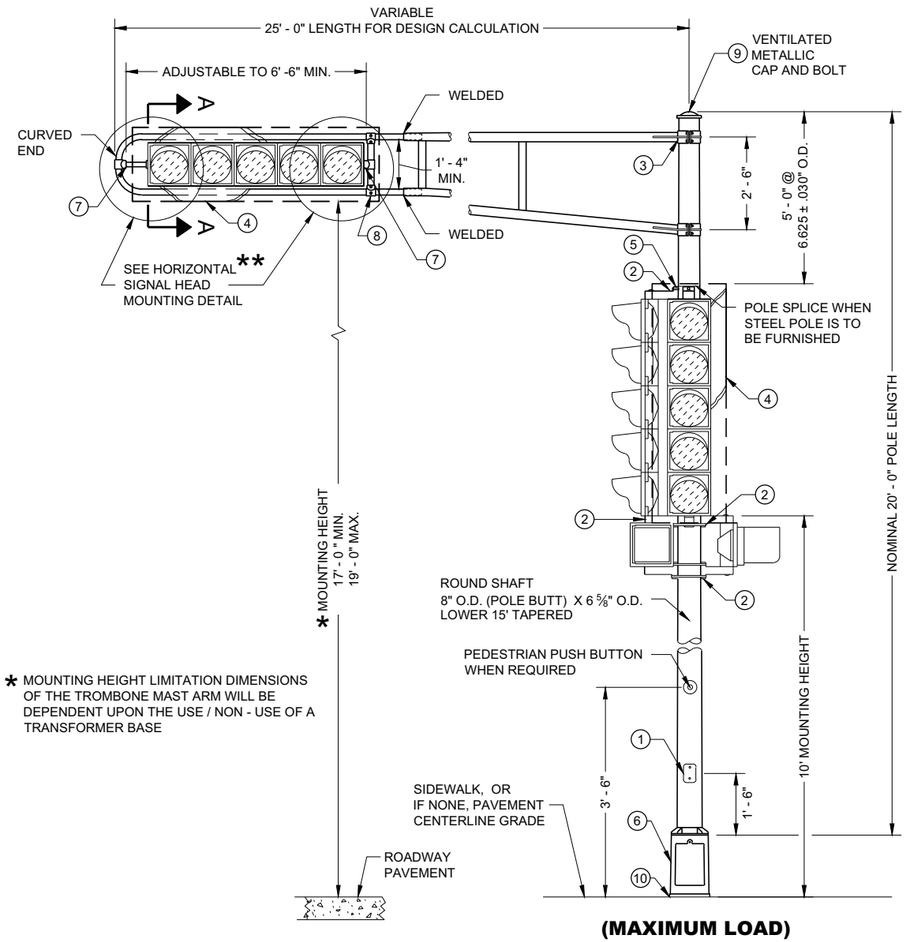
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

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

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

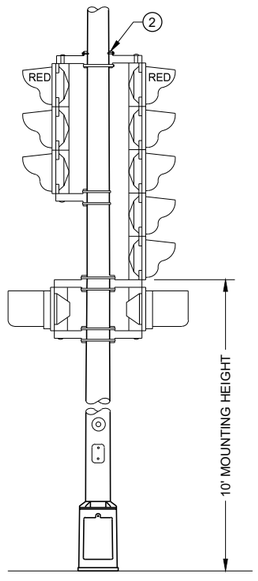
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

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

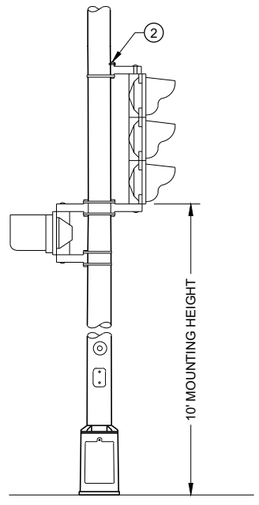


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

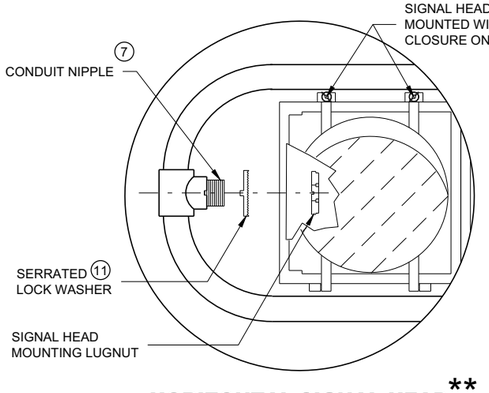
(MAXIMUM LOAD)



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

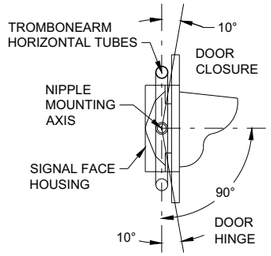
** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

TYPE 2 POLE MOUNTING CONFIGURATION

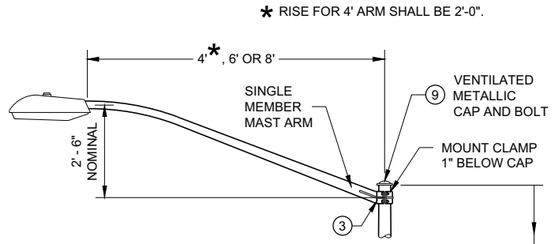
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

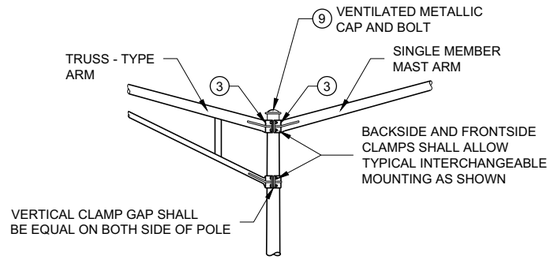
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6
SDD 09E01 - 15a

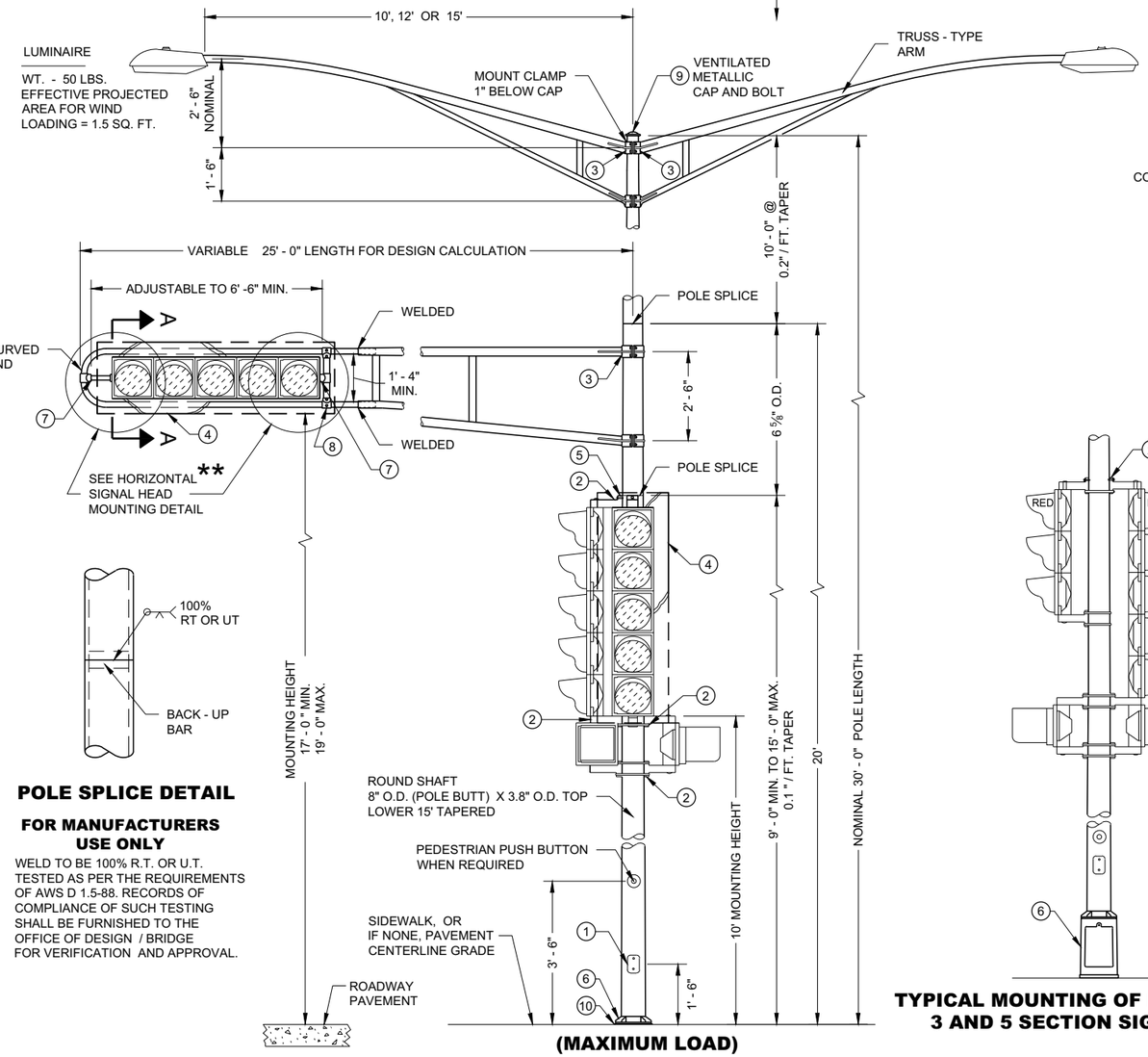


SECTION A-A

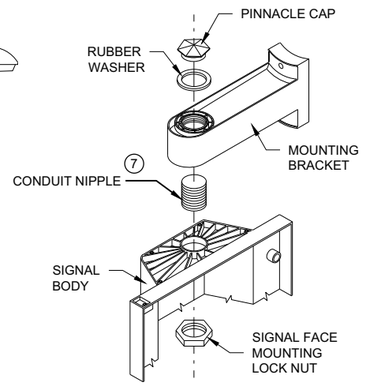




INTERCHANGEABLE MOUNTING DETAIL

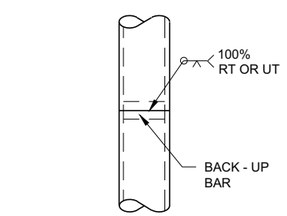


(MAXIMUM LOAD)



SIGNAL FACE MOUNTING DETAIL

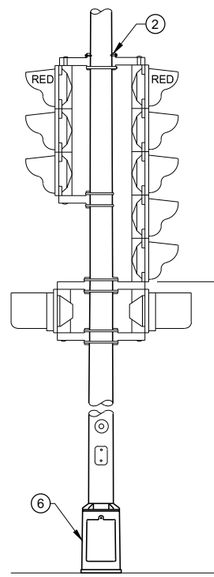
(BANDED)



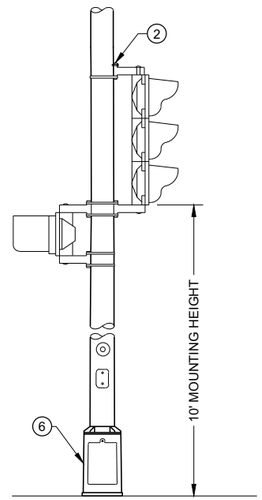
POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

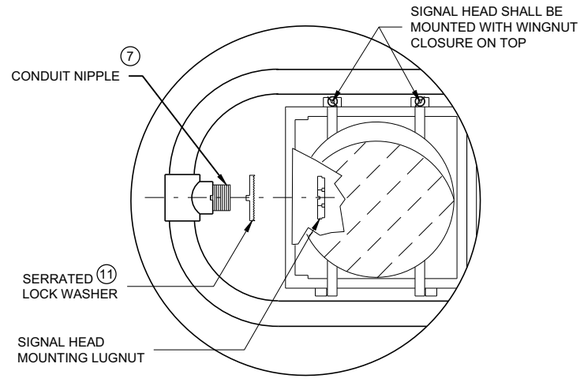
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ½" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

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

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 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 POLE.

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

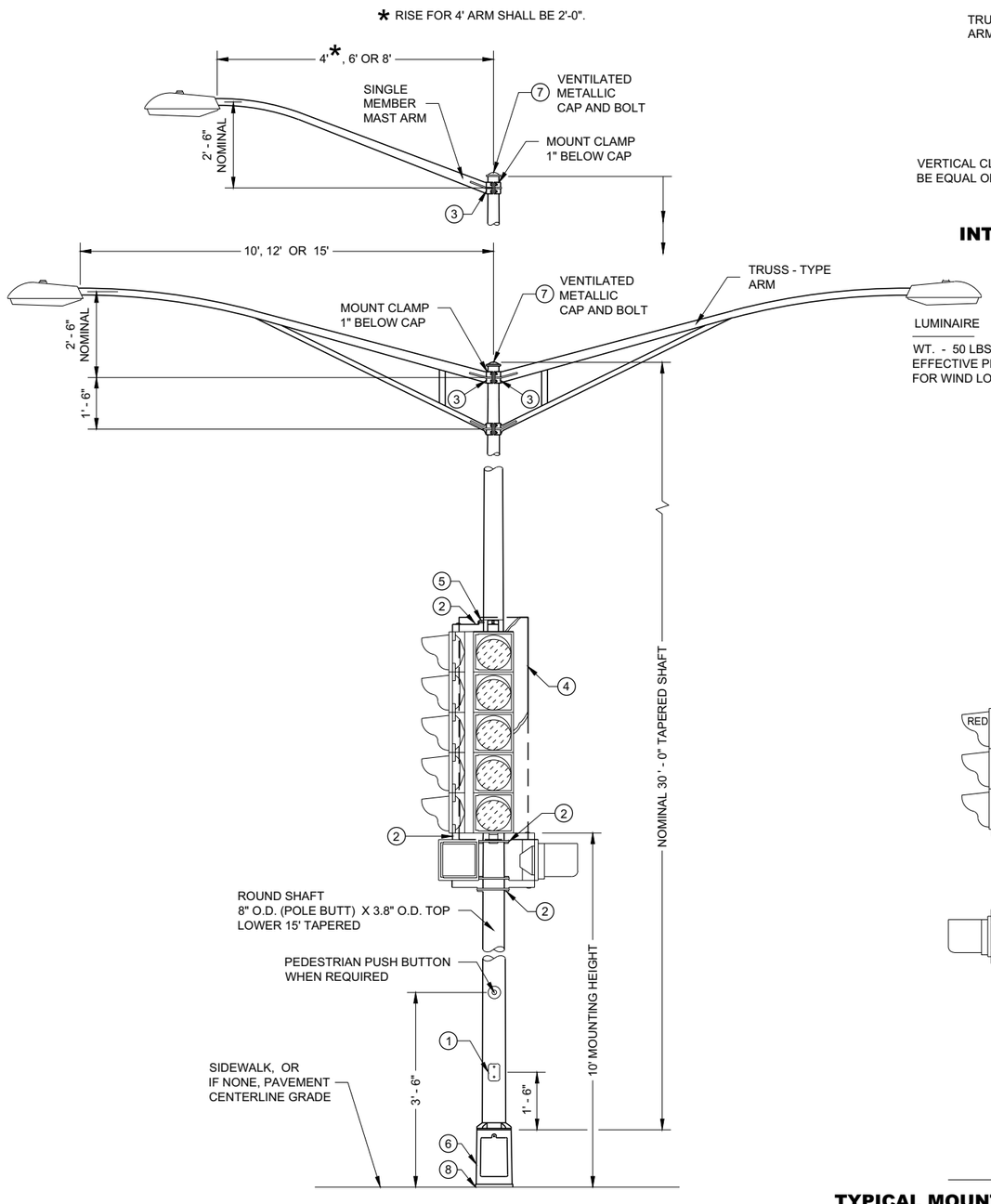
TYPE 3 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

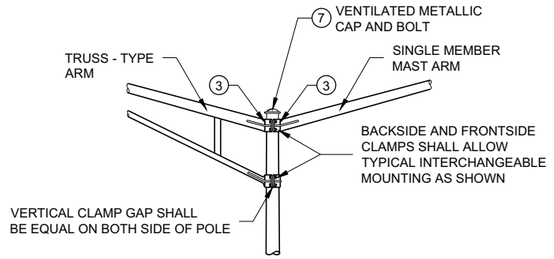
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 09E01 - 15b



(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

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

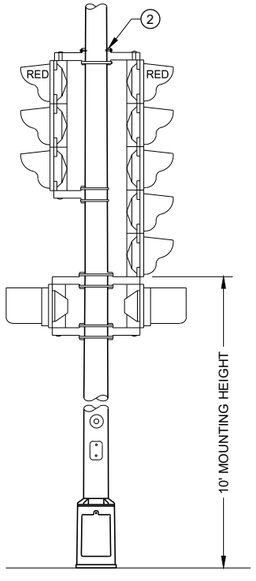
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

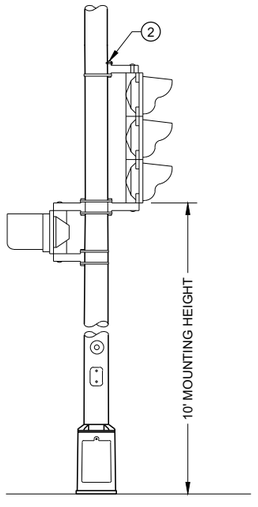
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

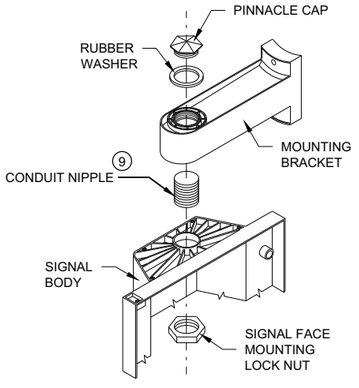
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

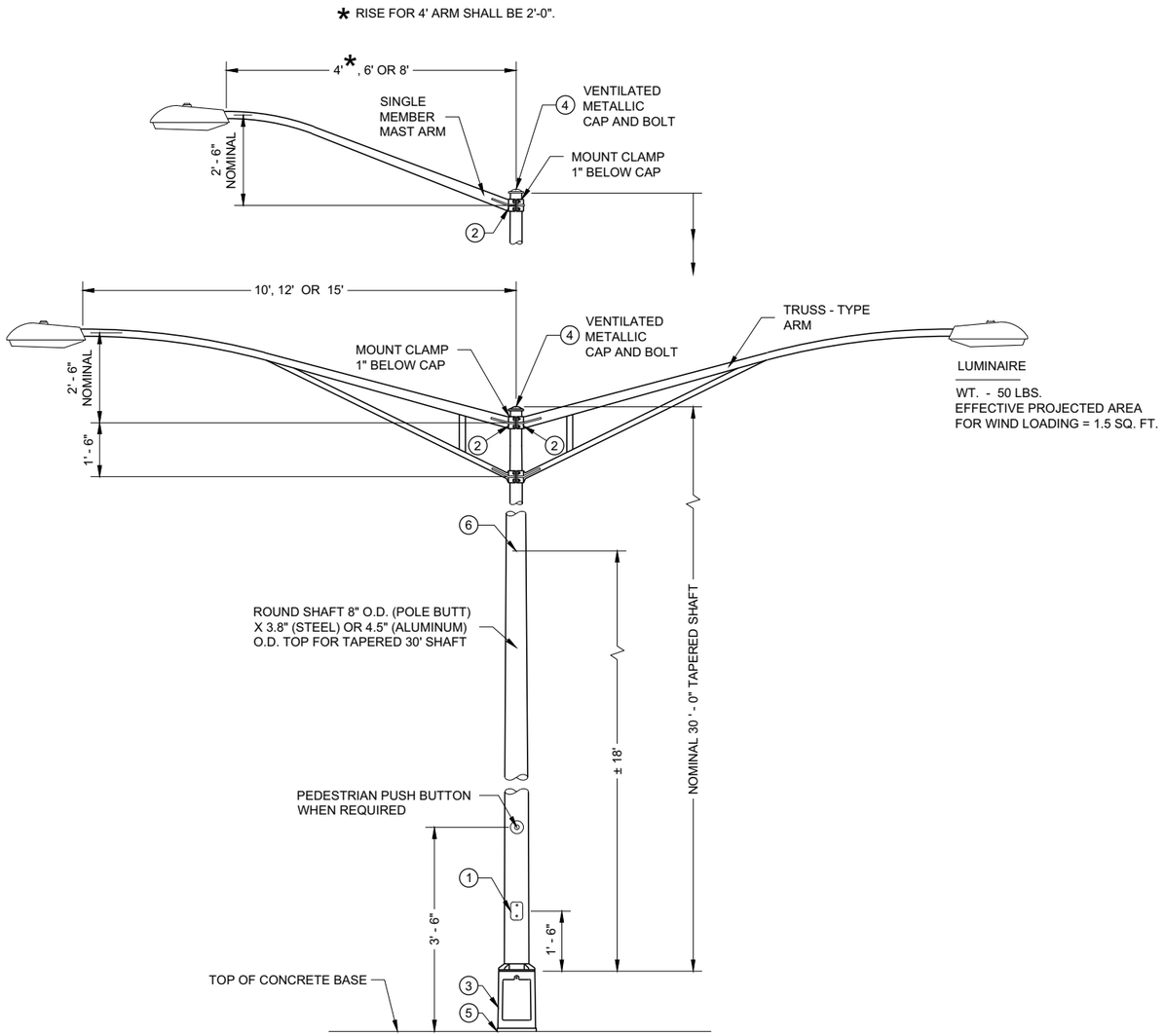
TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 09E01 - 15c



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

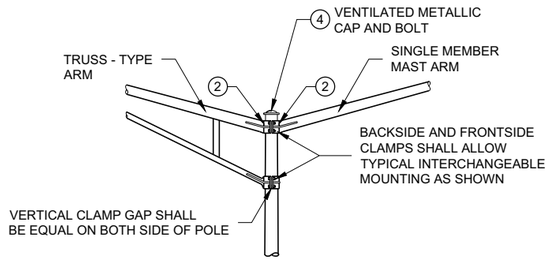
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

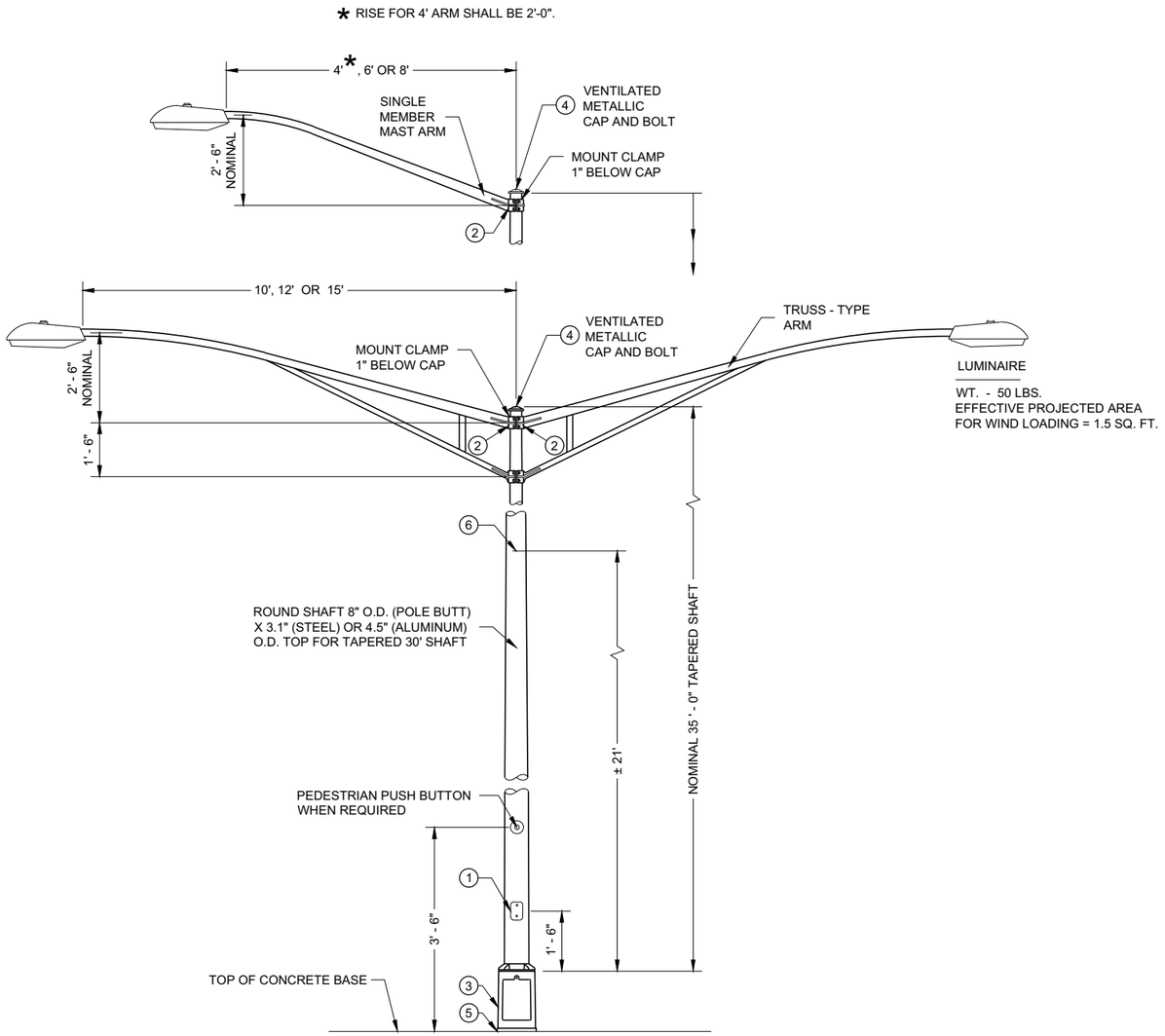
(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

6
SDD 09E01 - 15d



TYPE 6 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

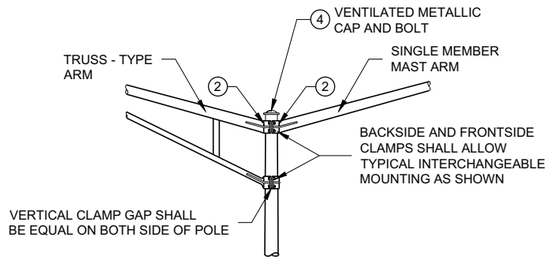
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



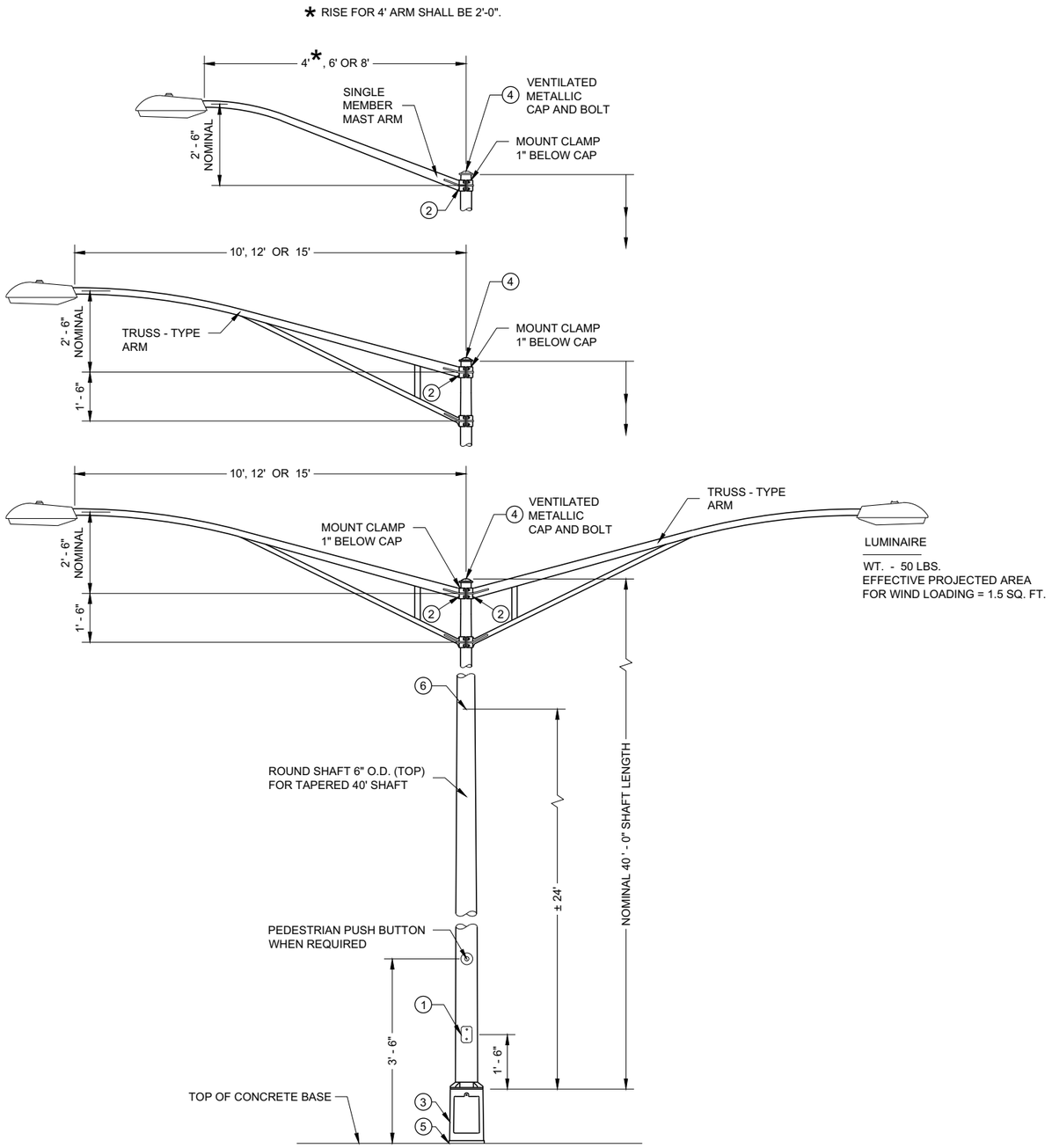
INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 09E01 - 15e



TYPE 17 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

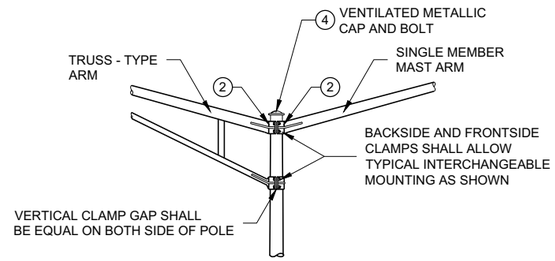
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

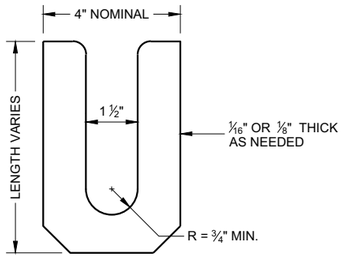
(6) INTERNAL DUMBELL - TYPE VIBRATION DAMPER.



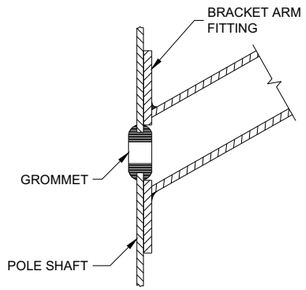
INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)

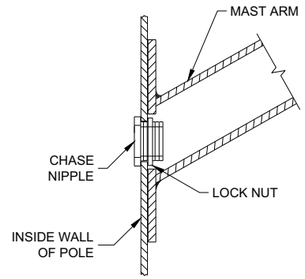
6
SDD 09E01 - 15f



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

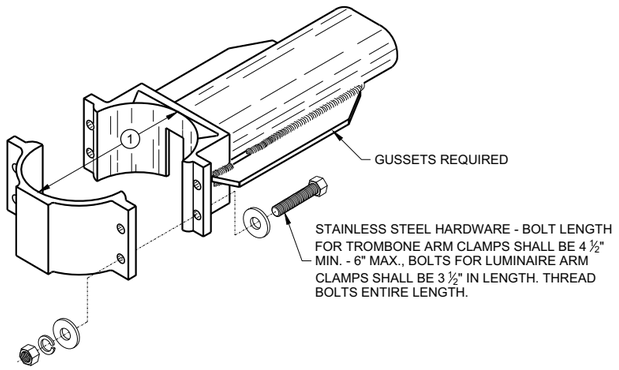
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

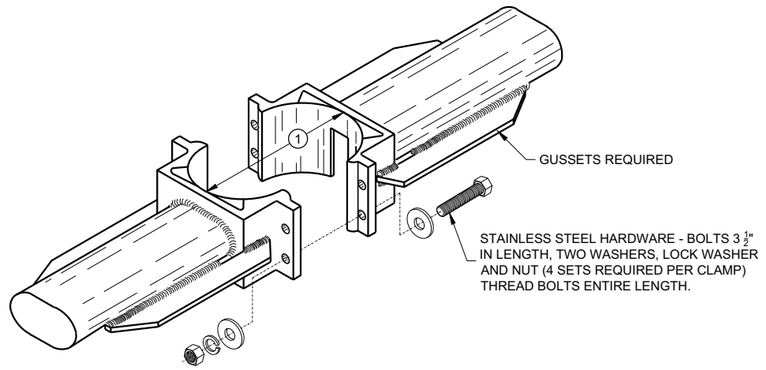
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

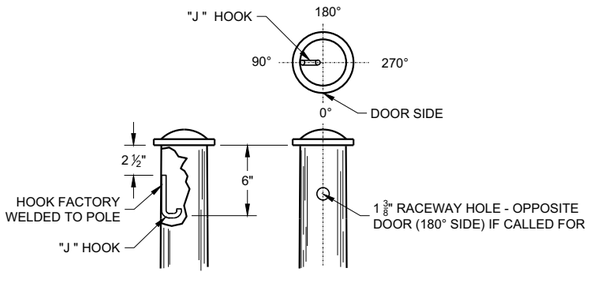
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



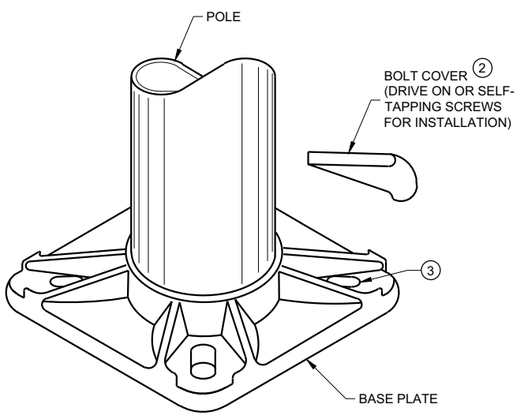
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



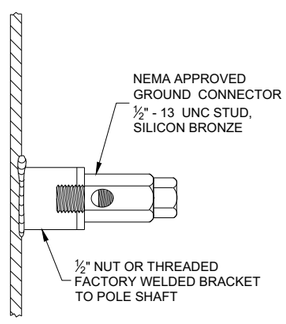
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

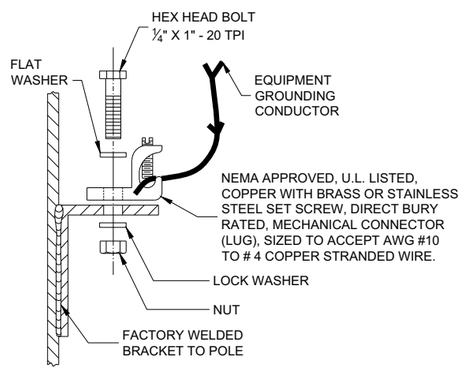


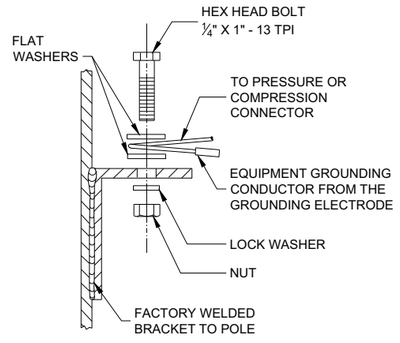
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

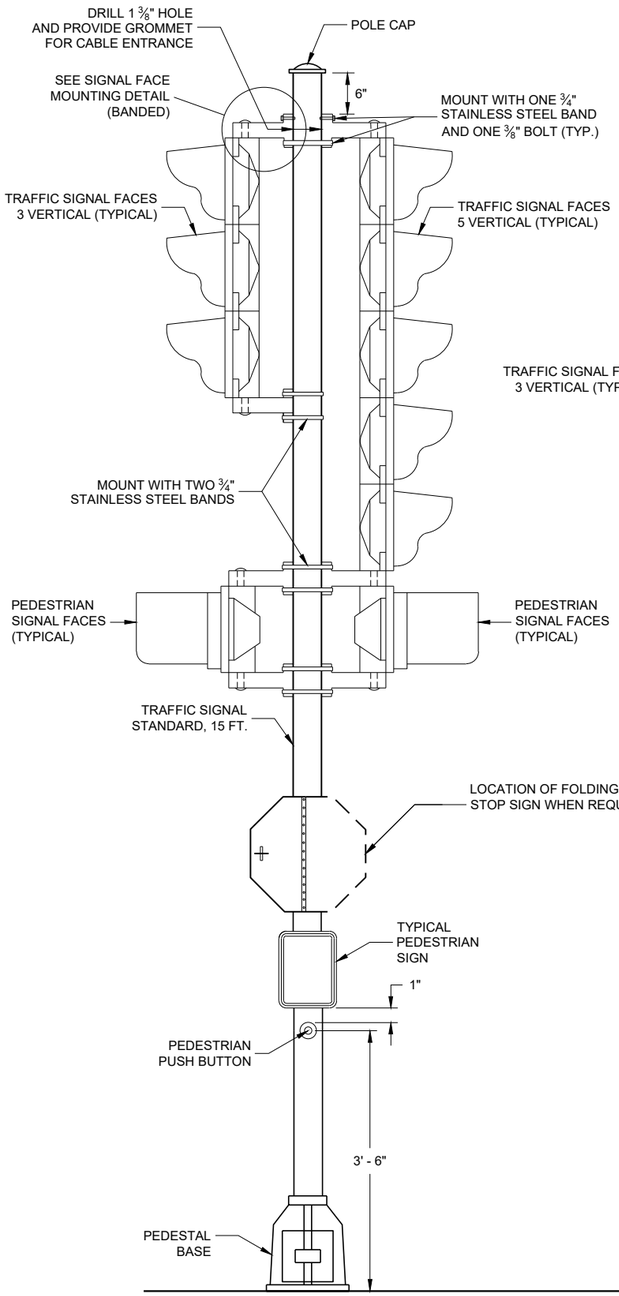
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

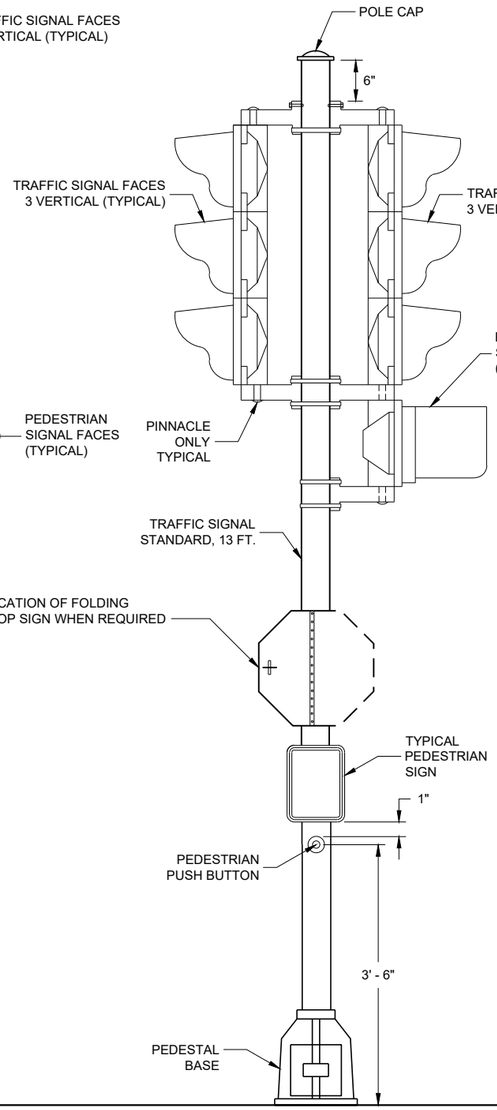
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 111

FHWA

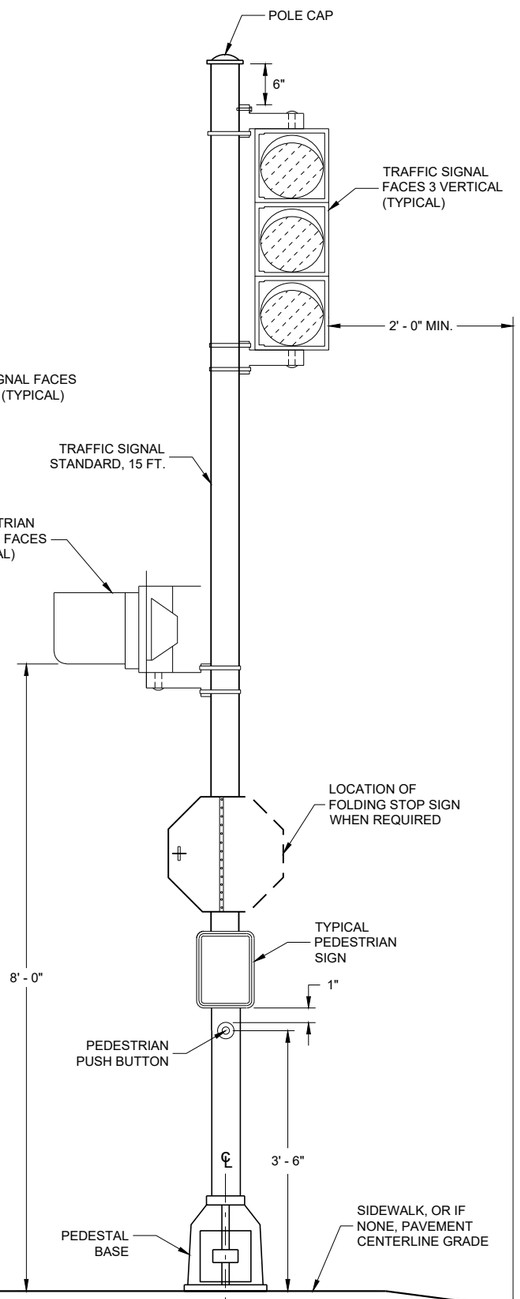
6
SDD 09E01 - 15g



TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

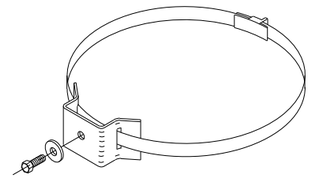
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

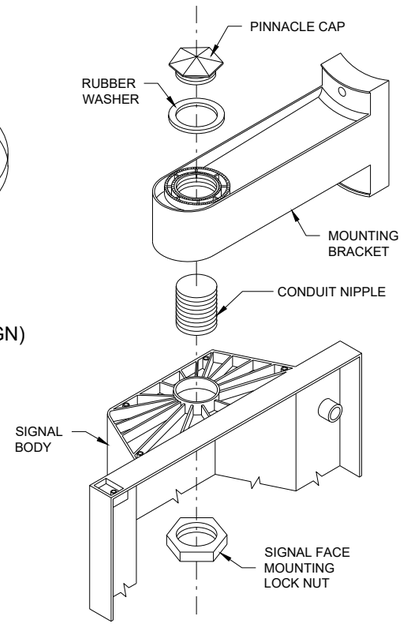
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

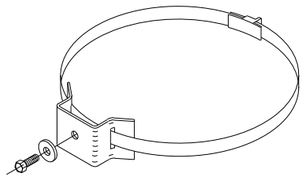
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

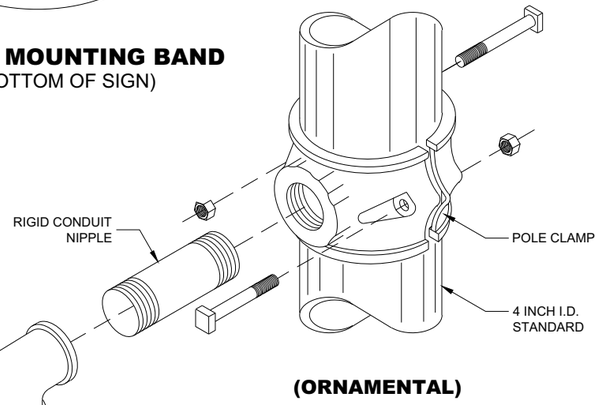
APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 112

FHWA

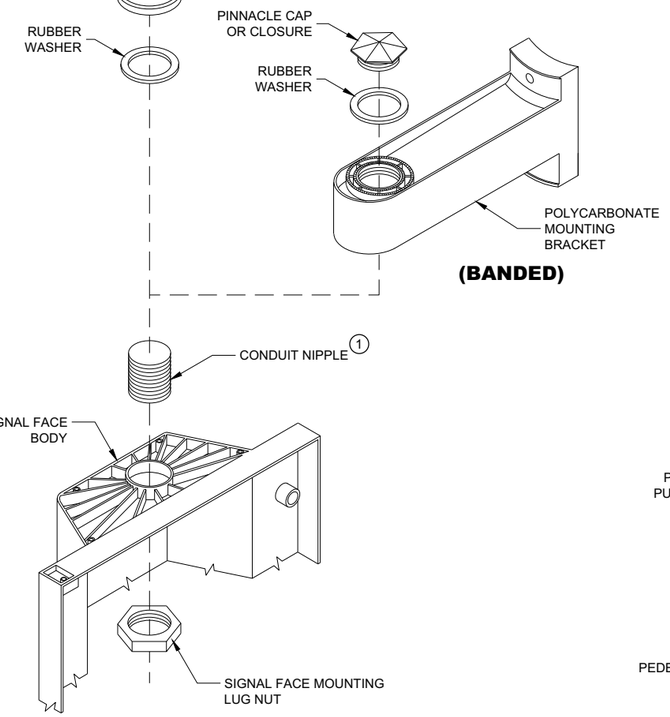
6
SDD 09E06 - 05



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

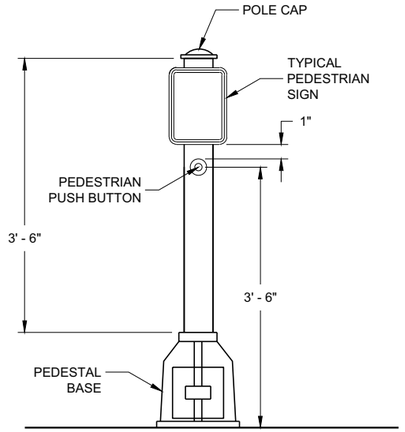


(ORNAMENTAL)



(BANDED)

SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

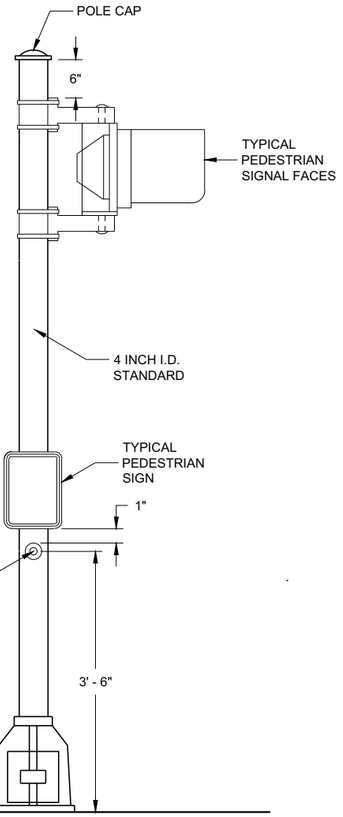
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

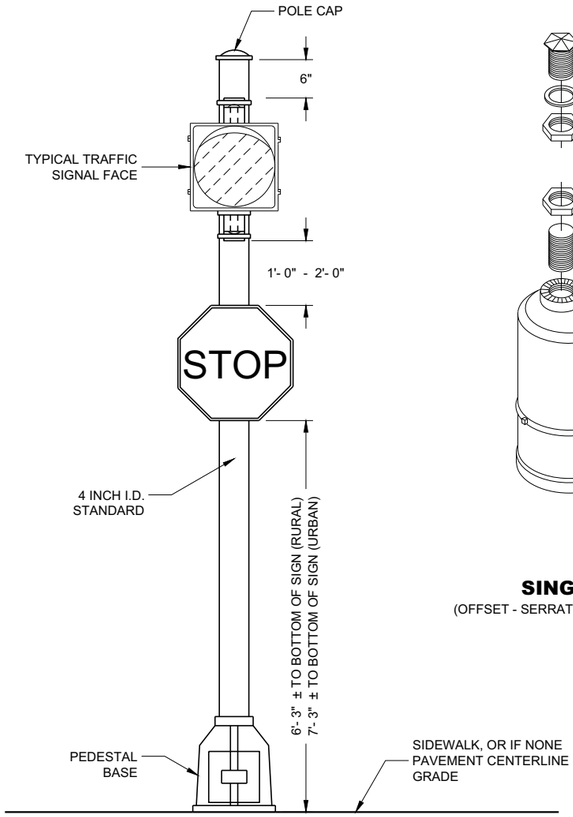
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

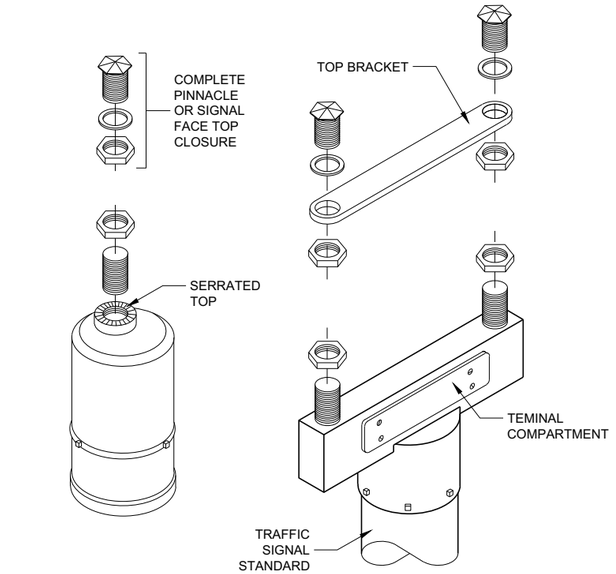
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

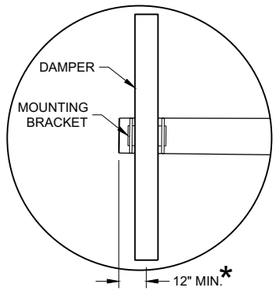
APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

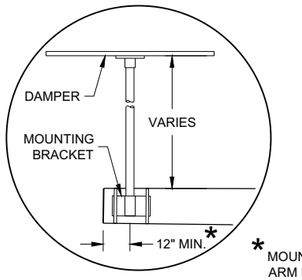
6

SDD 09E07 - 06

SDD 09E07 - 06

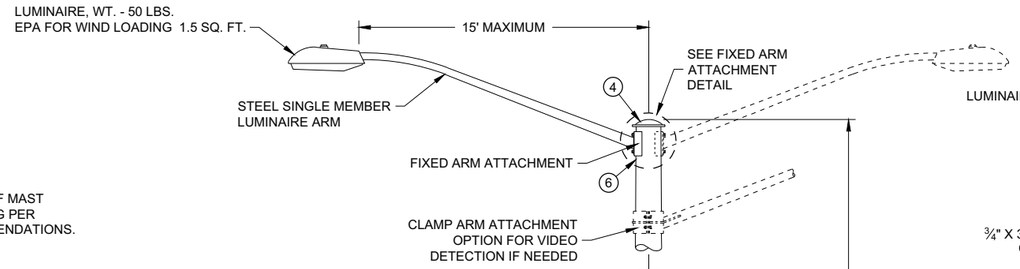


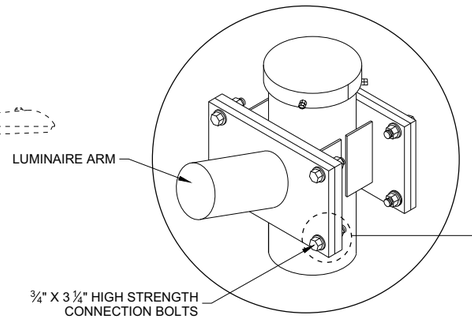
DUMBBELL VIBRATION DAMPER



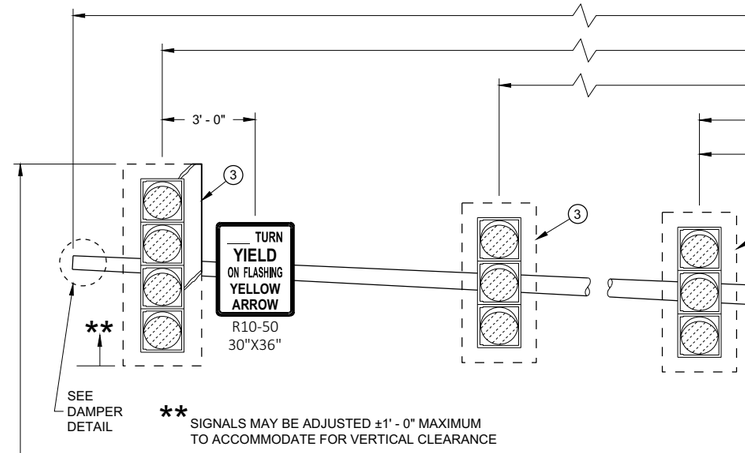
FLAT VIBRATION DAMPER

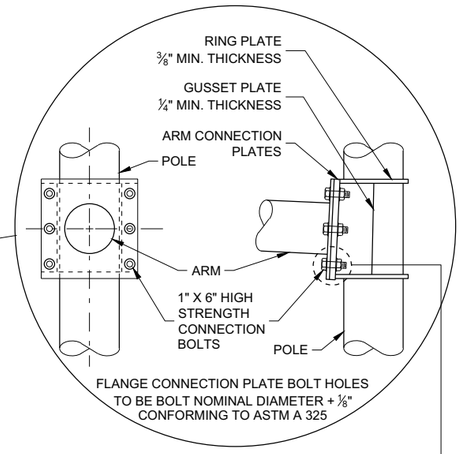
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



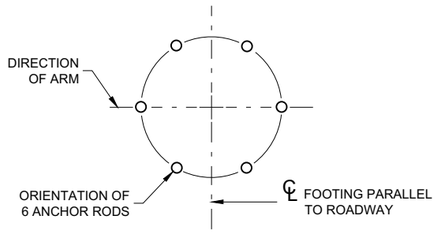


FIXED ARM ATTACHMENT DETAIL

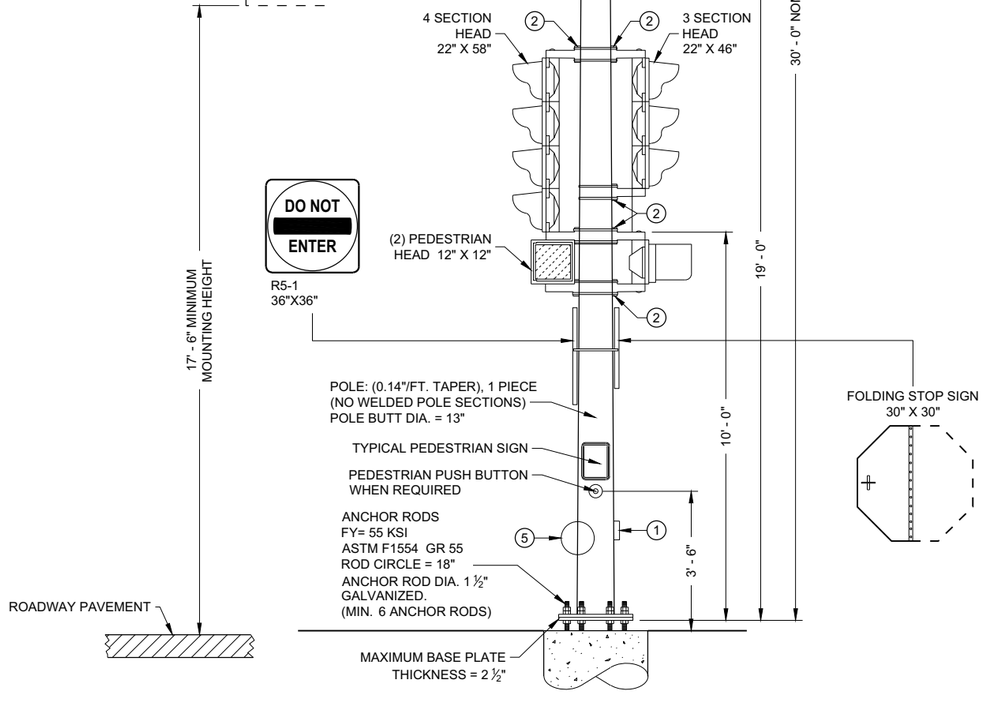


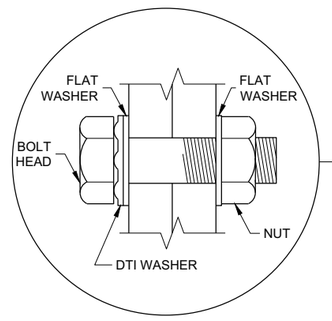


6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION





RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

SDD 09E08 - 08h

SDD 09E08 - 08h

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

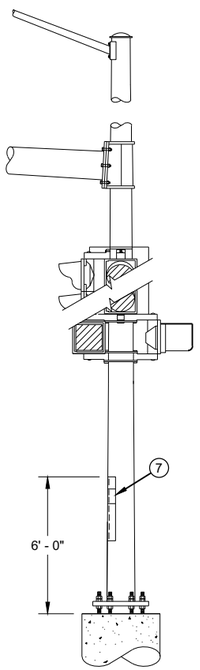
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

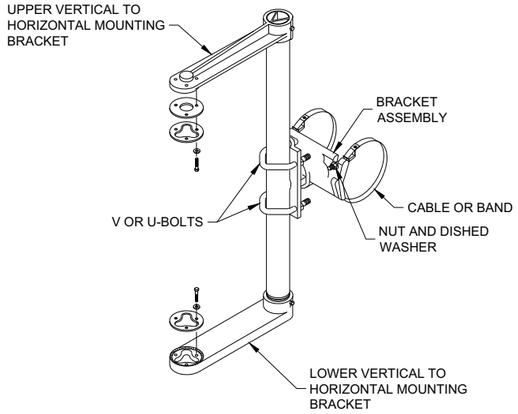
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

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

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



STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT

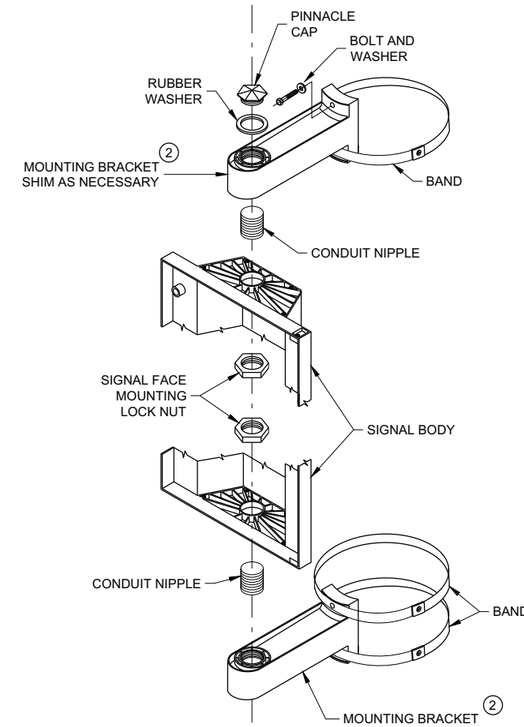


SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

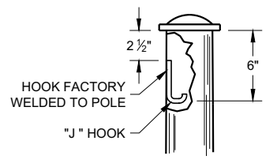
(MOUNT PER MANFACTURER'S RECOMMENDATION)

TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

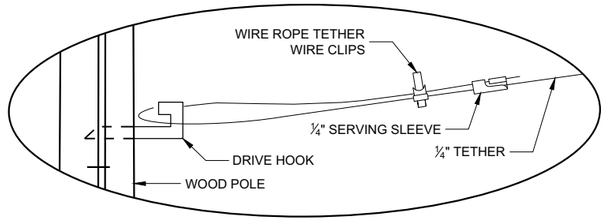
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

6

SDD 09E08 - 09k

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

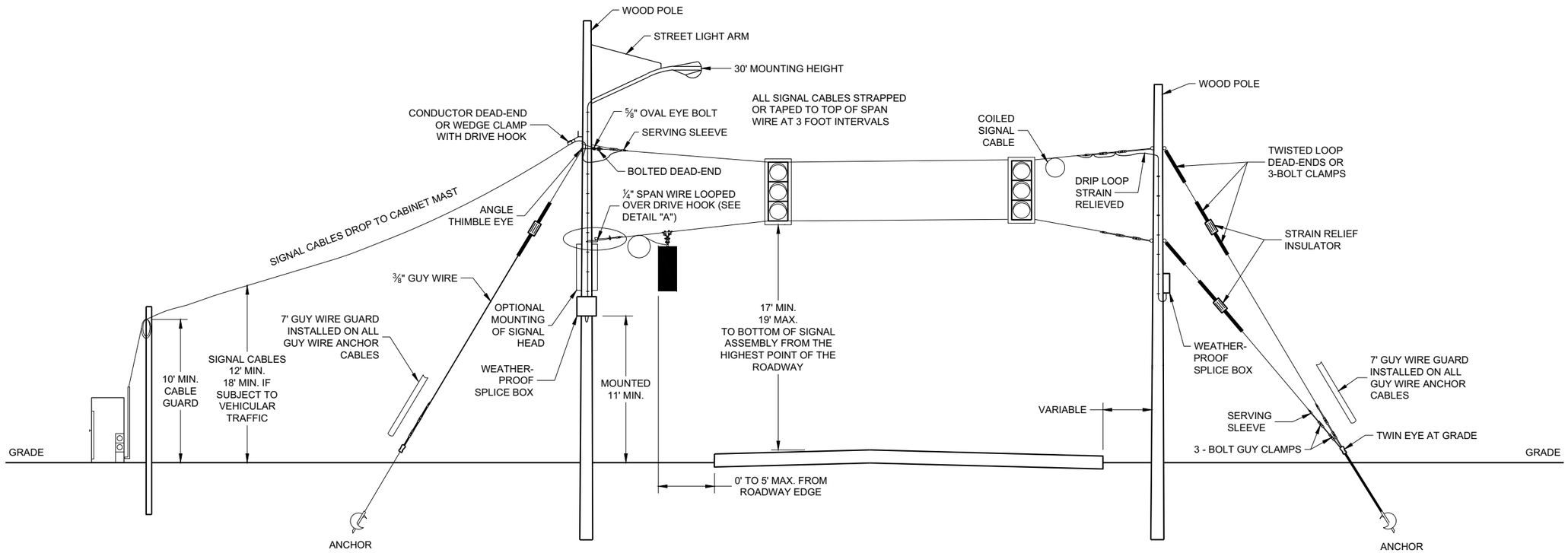


DETAIL "A"

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

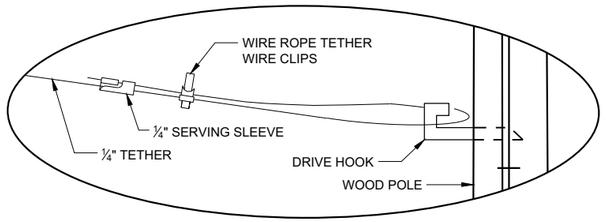
6

6

SDD09G01 - 04a

SDD09G01 - 04a

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

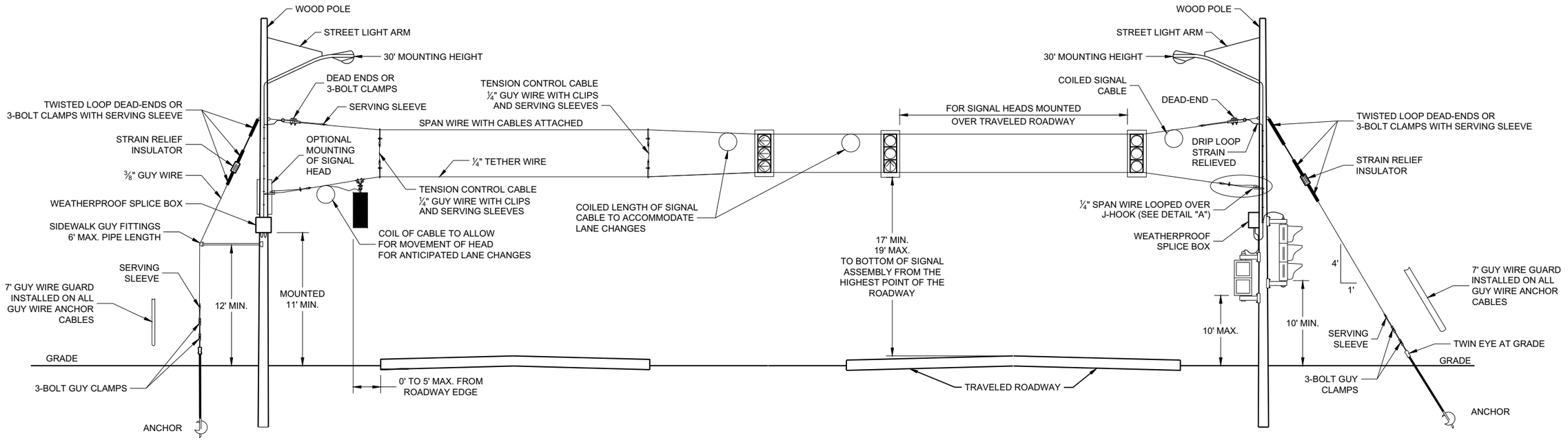


DETAIL "A"

GENERAL NOTES

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 ASSEMBLY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

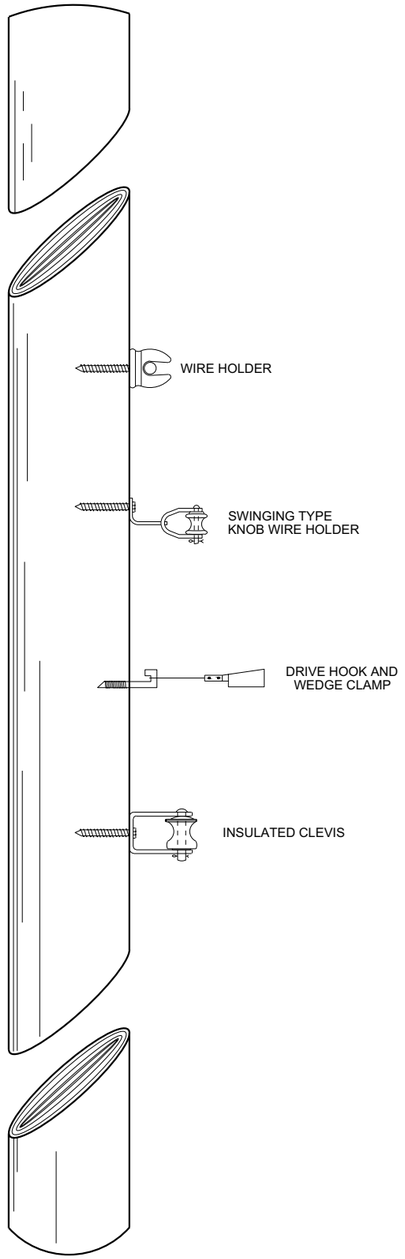
APPROVED
June 2015
DATE

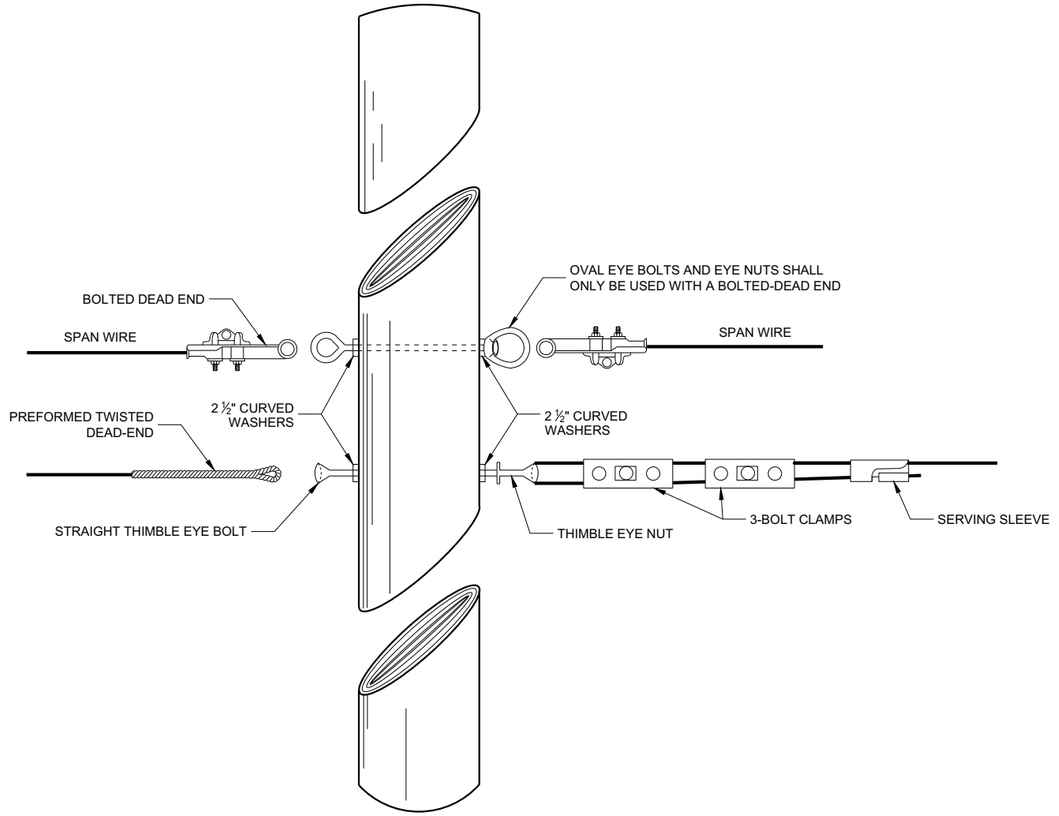
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

SDD09G01 - 04b

SDD09G01 - 04b





6

SDD 09G01 - 4d

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

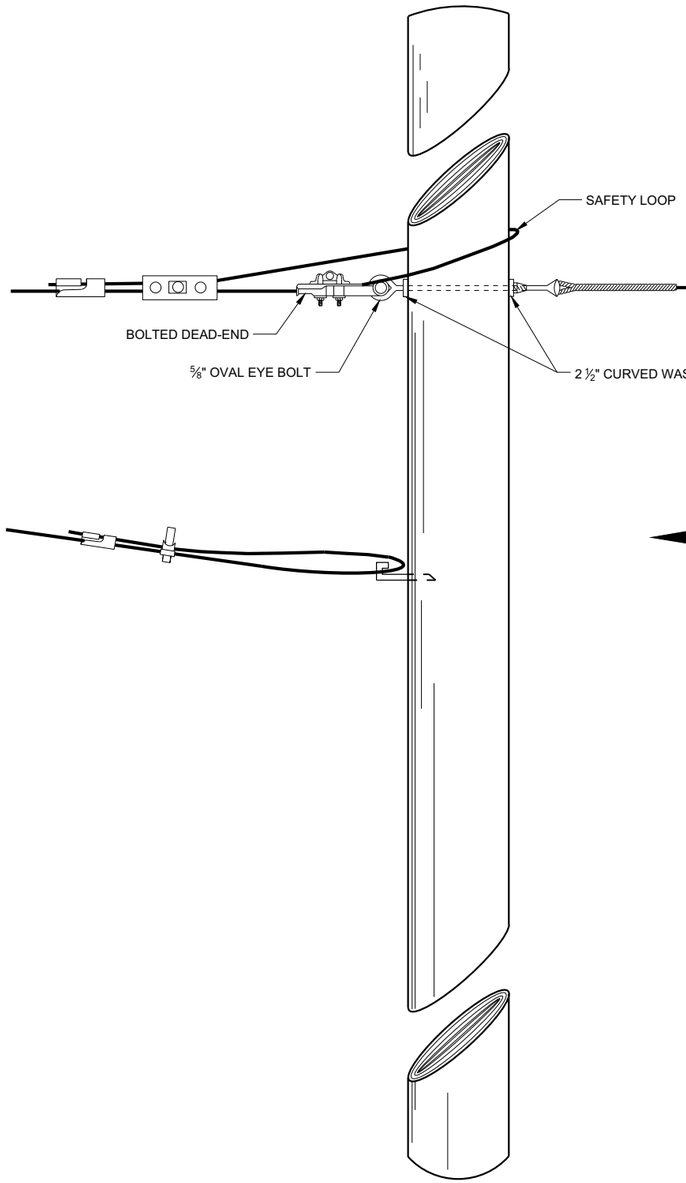
FHWA

6

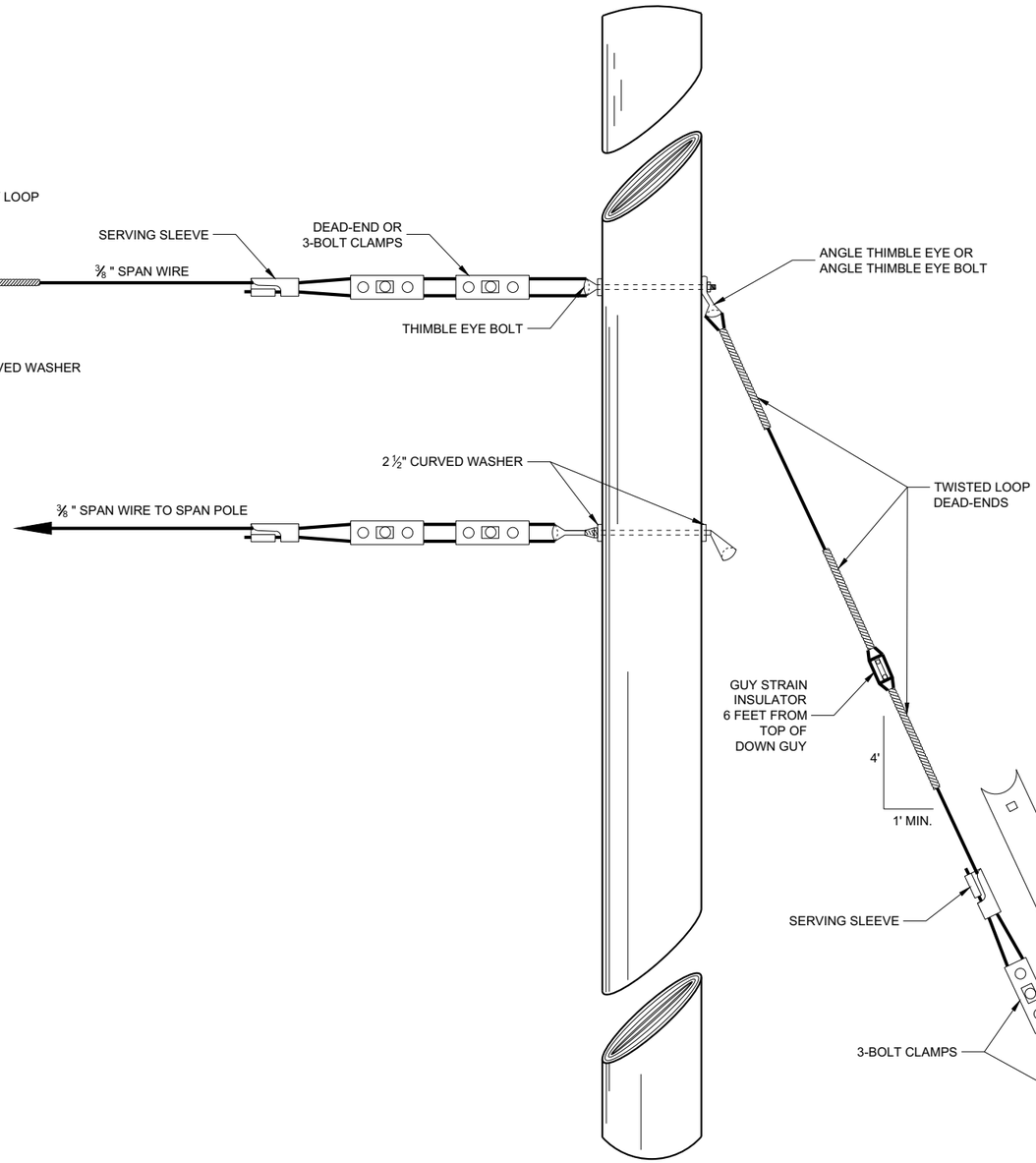
SDD 09G01 - 4d

GENERAL NOTES

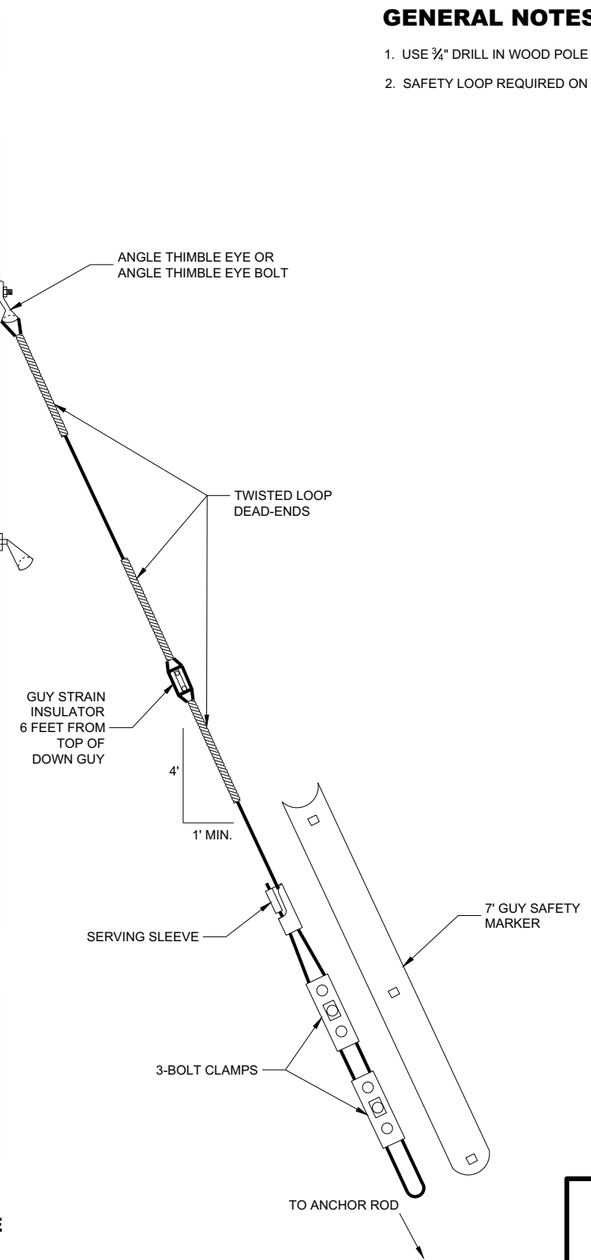
1. USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.
2. SAFETY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE



TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

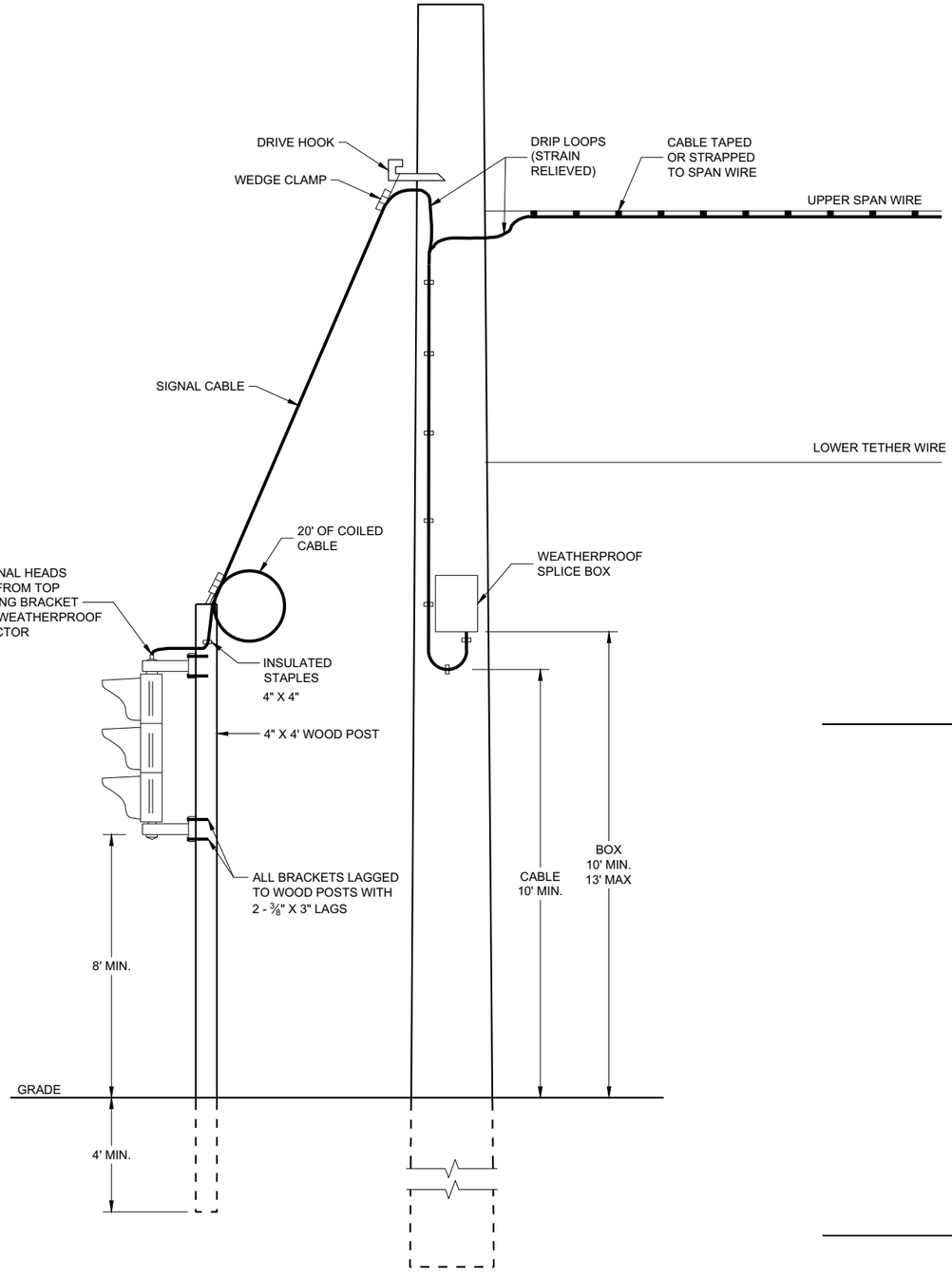
APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

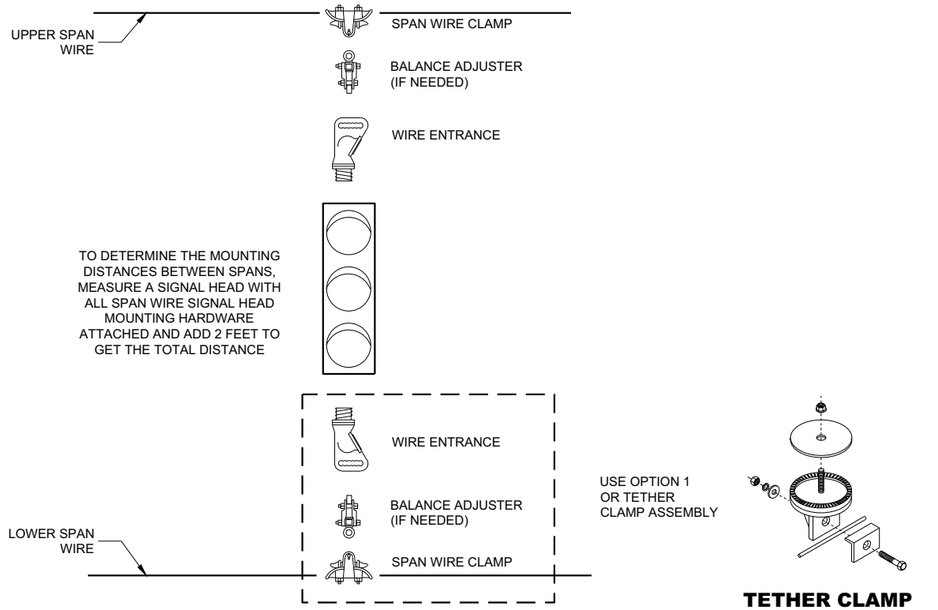
SDD 09G01 - 4e

6

SDD 09G01 - 4e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL

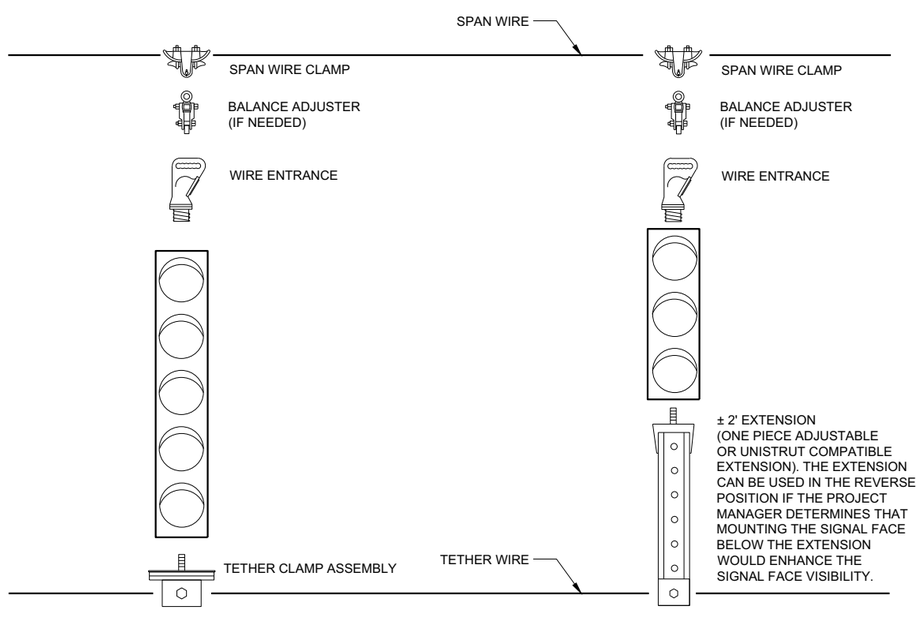


OPTION 1

USE OPTION 1 OR TETHER CLAMP ASSEMBLY

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

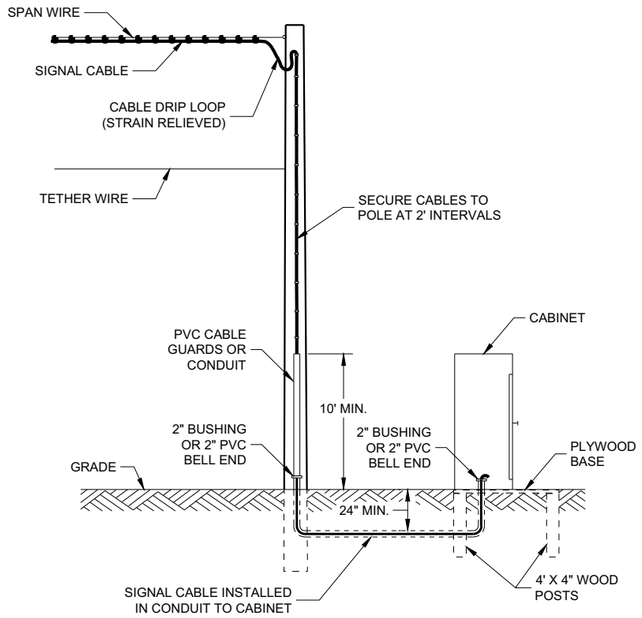
APPROVED
June 2015
DATE

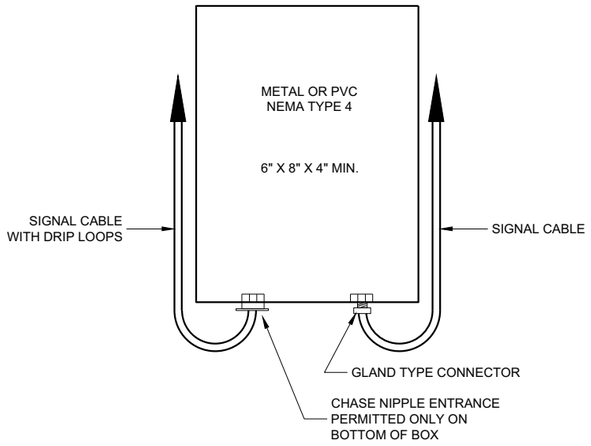
/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

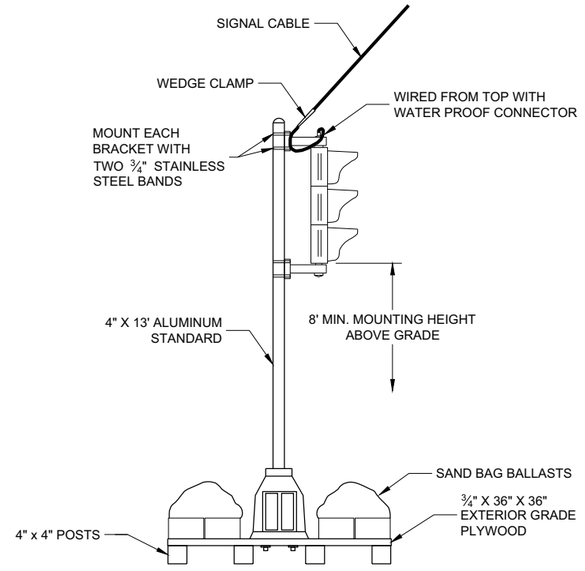
6

SDD 09G01 - 4f

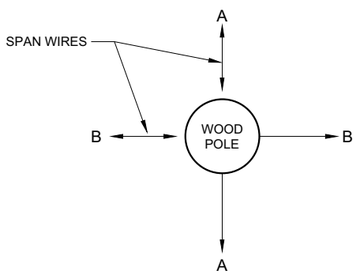




SPLICE BOX

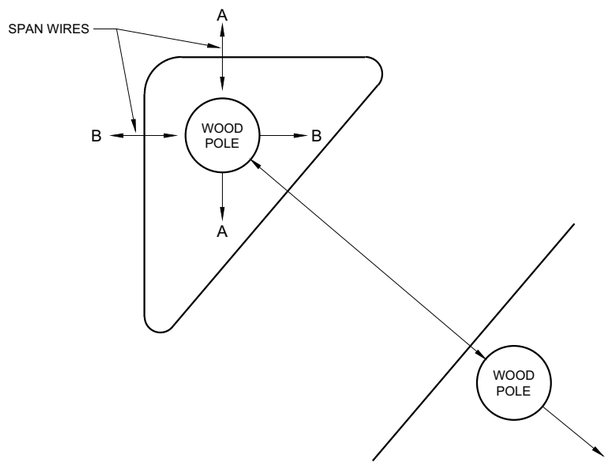


TYPICAL SKID TYPE TEMPORARY

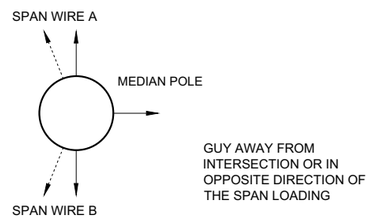


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF
THE SPAN LOADING

MEDIAN POLES

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

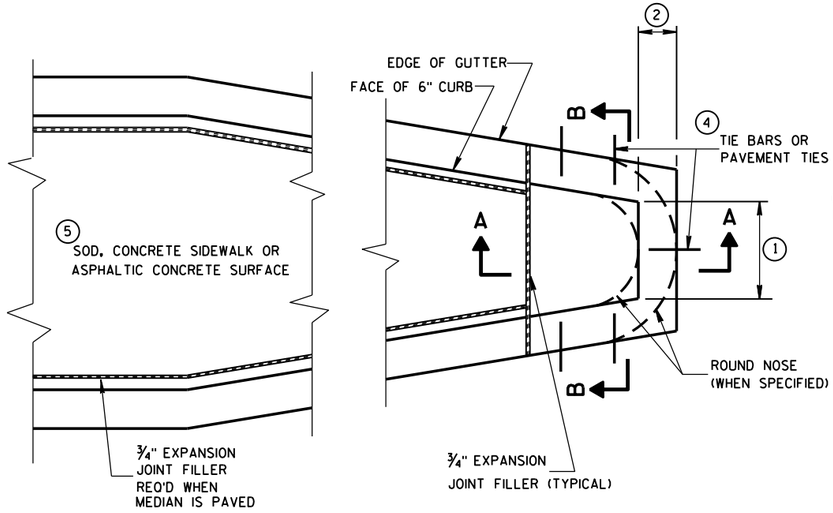
FHWA

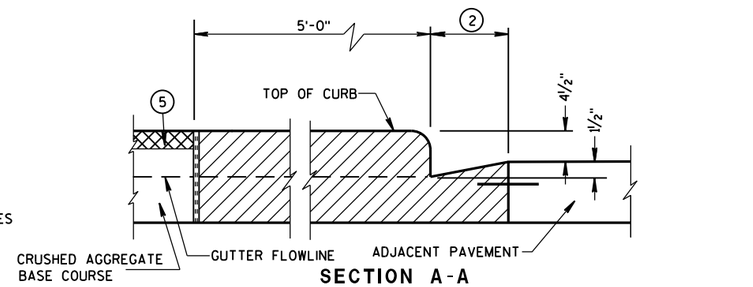
6

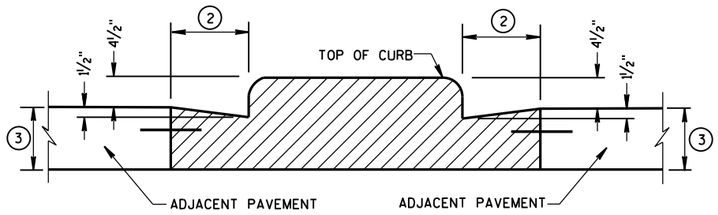
SDD 09G01 - 4g

6

SDD 09G01 - 4g







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

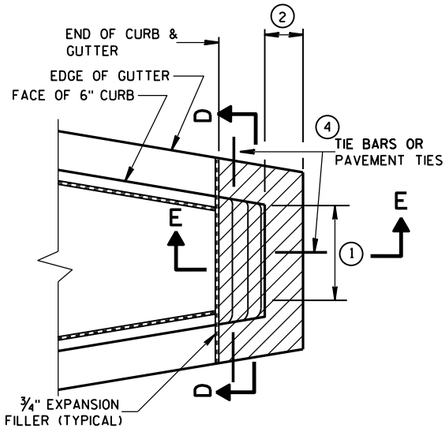
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

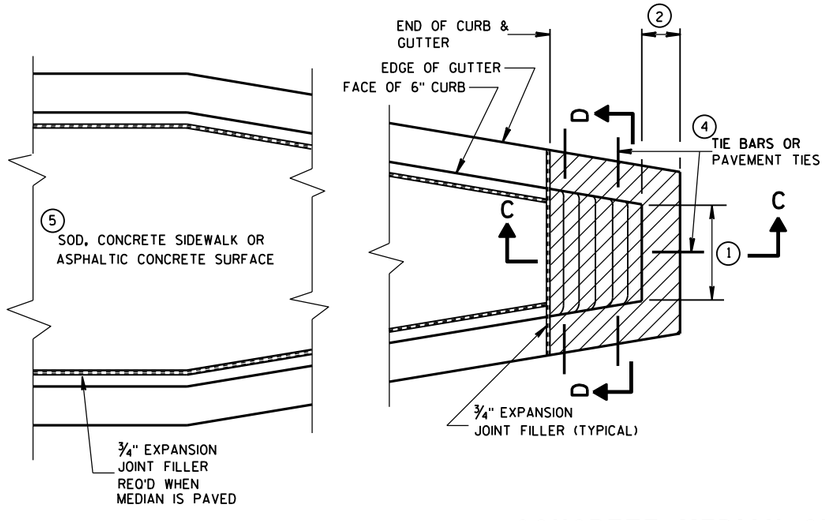
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

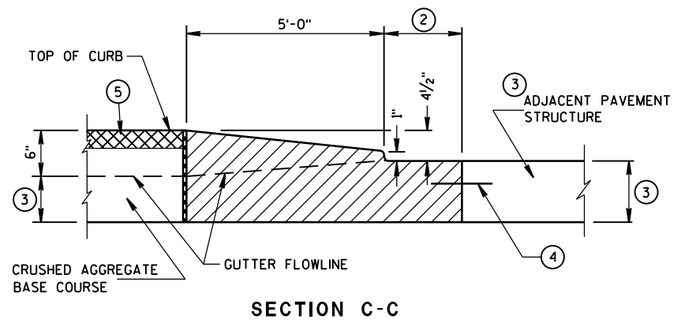
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

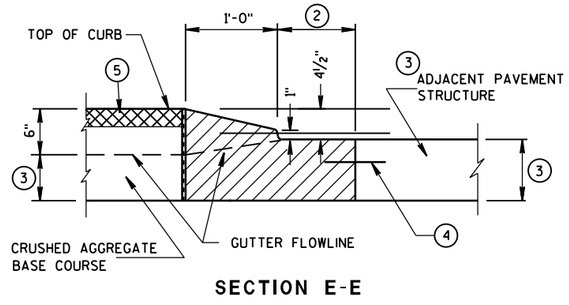
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



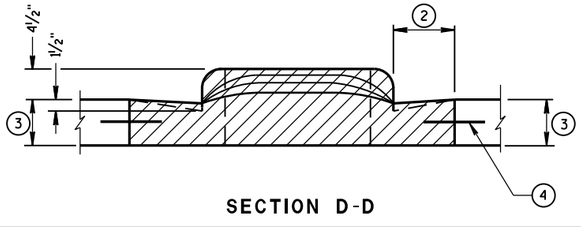






CONCRETE MEDIAN SLOPED NOSE TYPE 1

CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

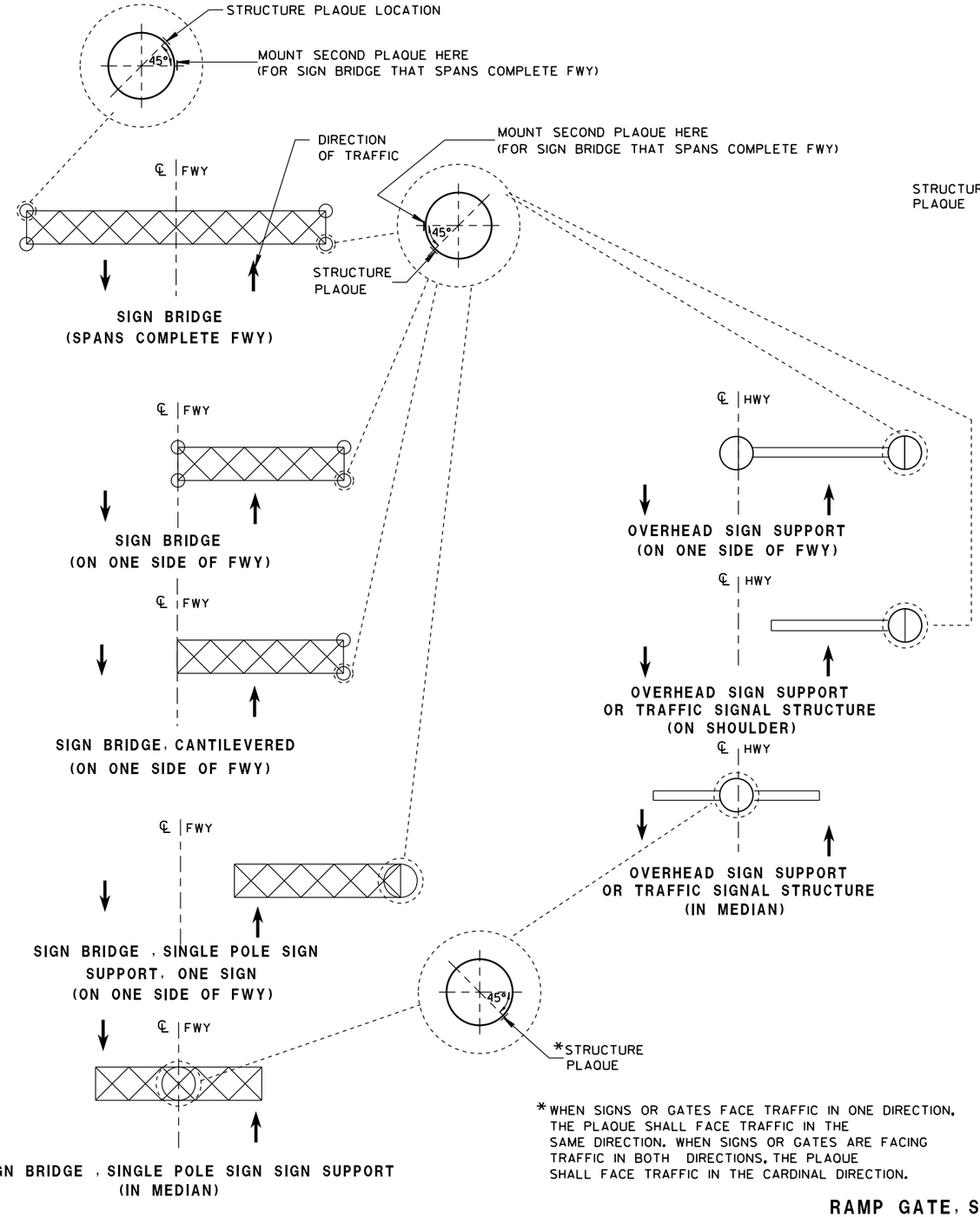
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

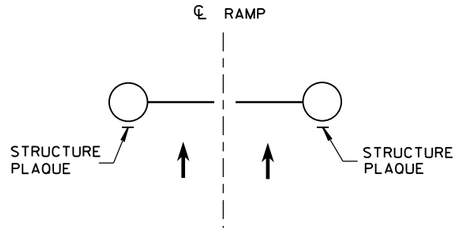
6

S.D.D. 11 B 2-2

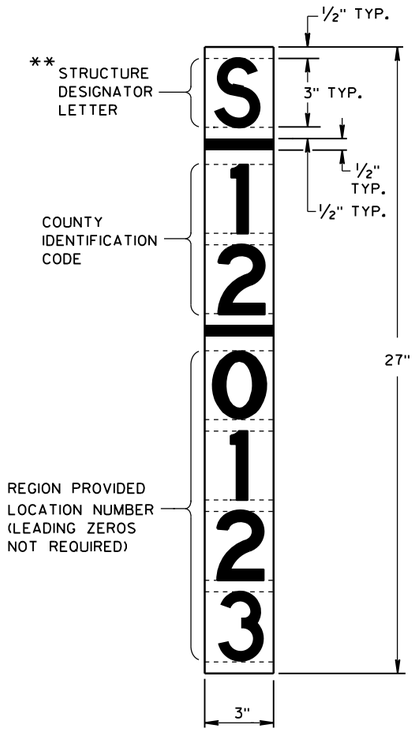


*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

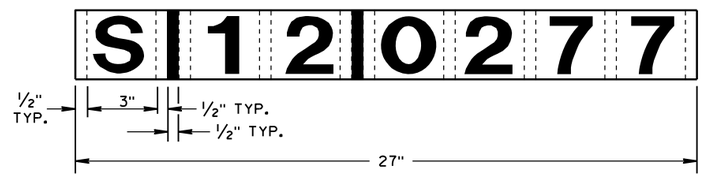
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

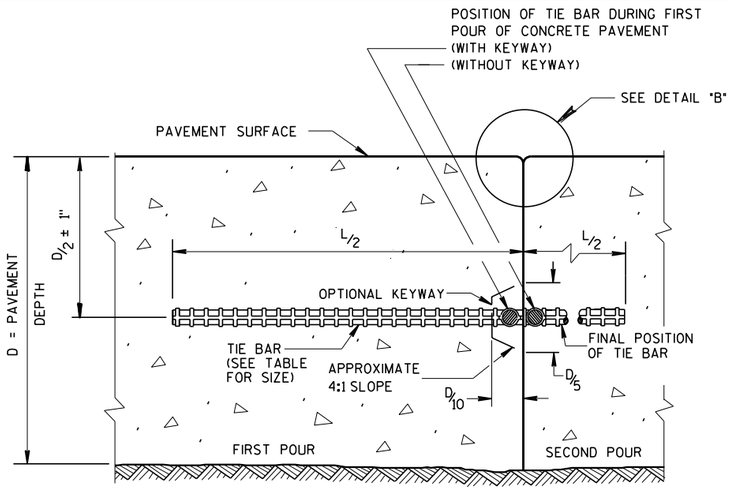
STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

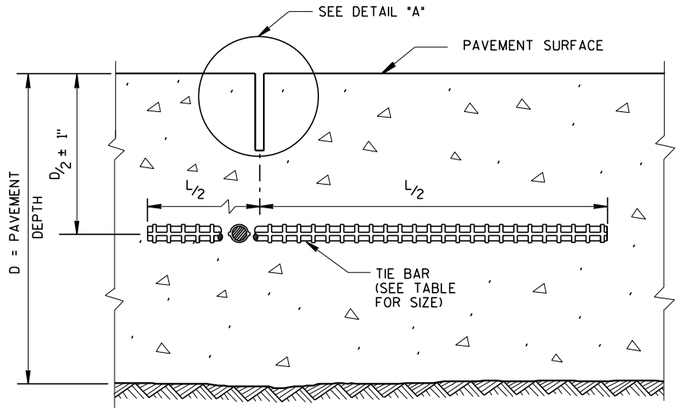
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

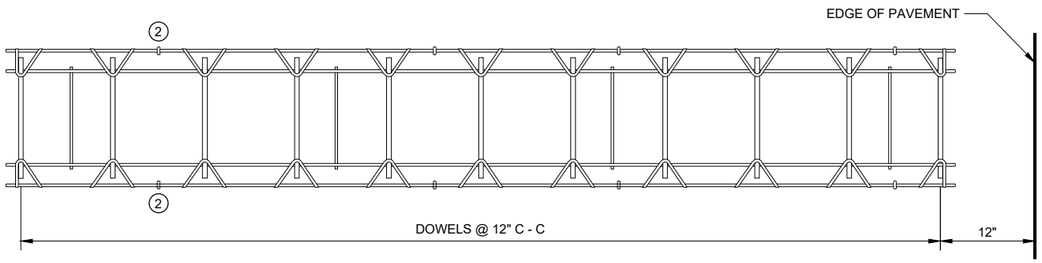
APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

6

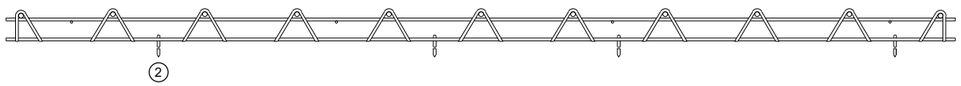
S.D.D. 13 C 1-19

6

S.D.D. 13 C 1-19

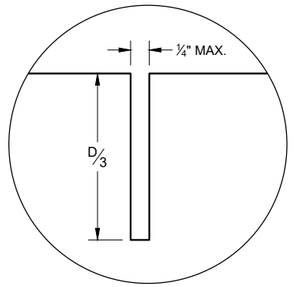


PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

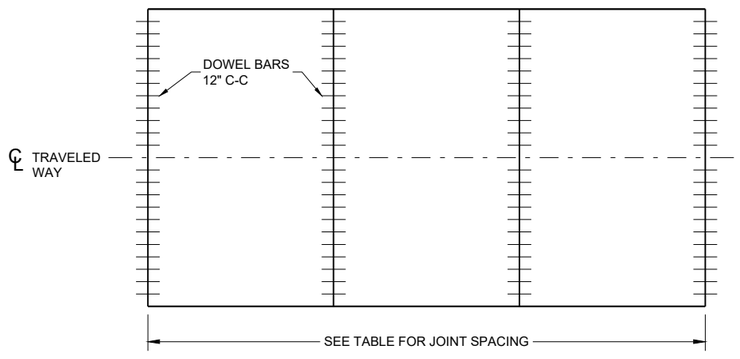
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

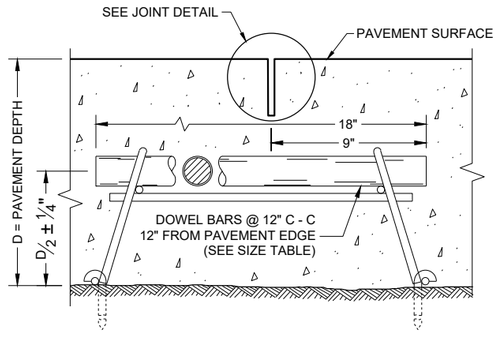
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



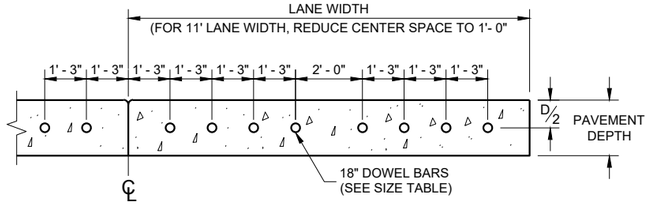
CONTRACTION JOINT LOCATIONS



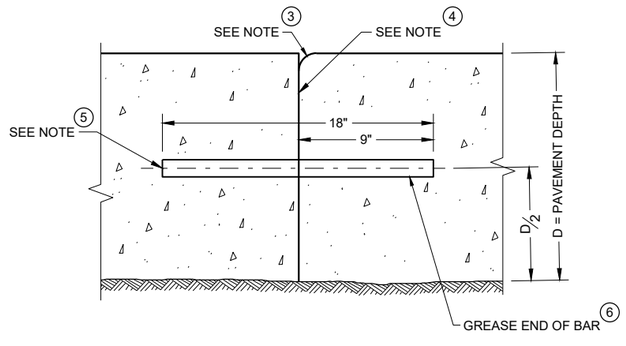
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

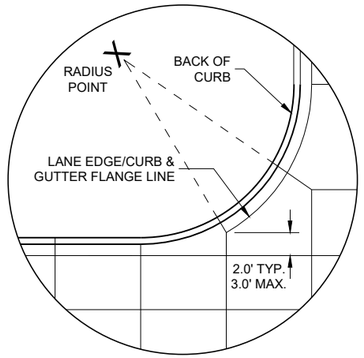
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

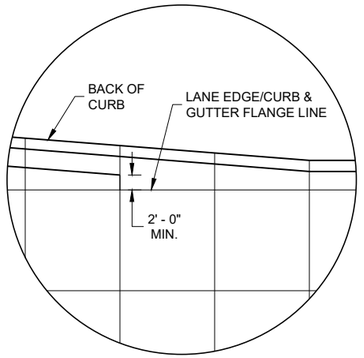
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

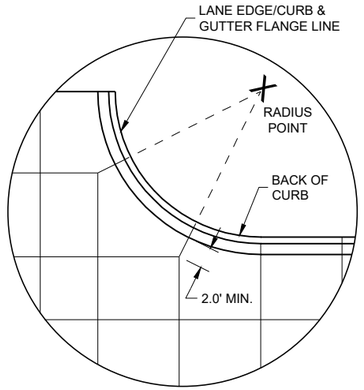
6
SDD 13C13 - 11



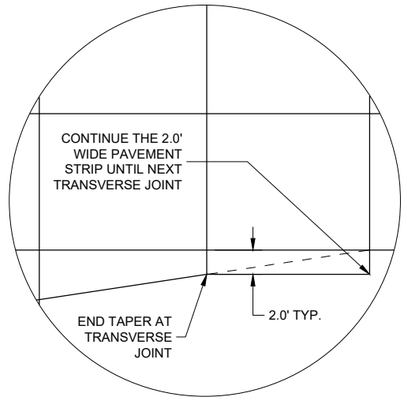
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

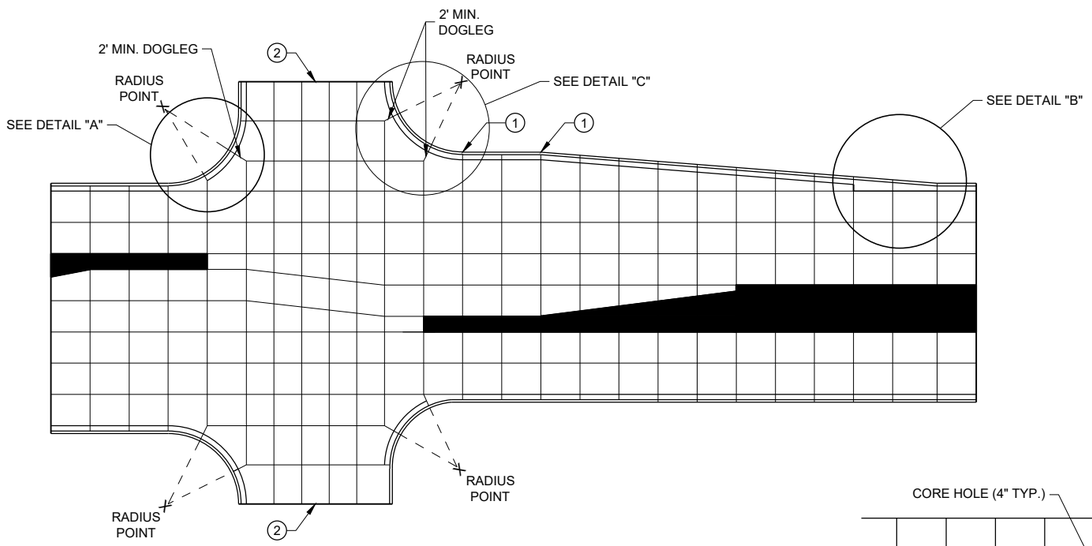
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

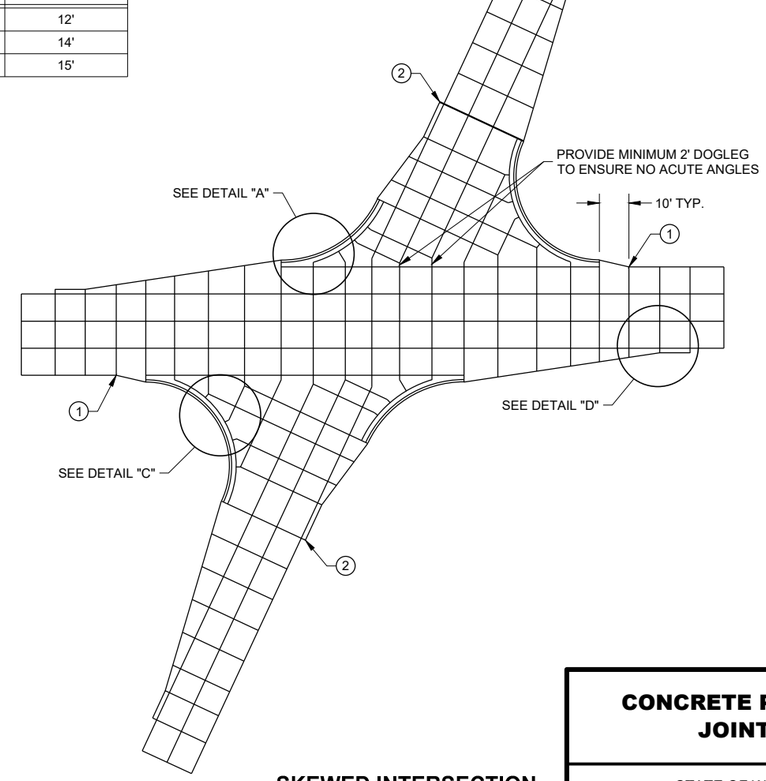
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



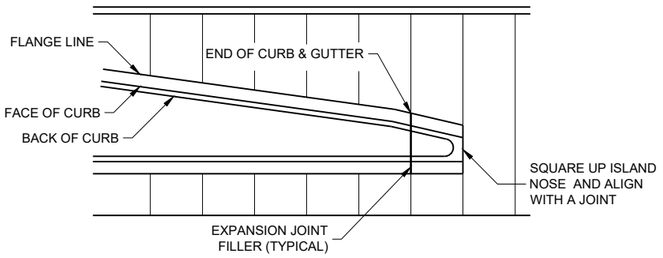
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

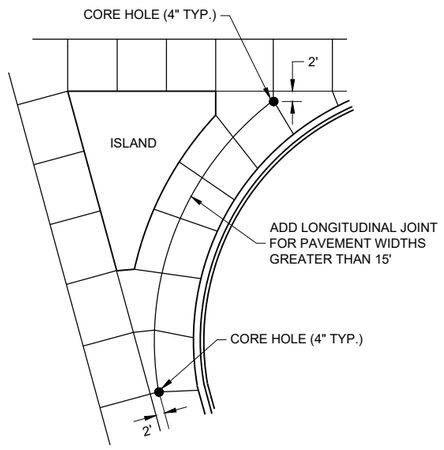
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08a

6

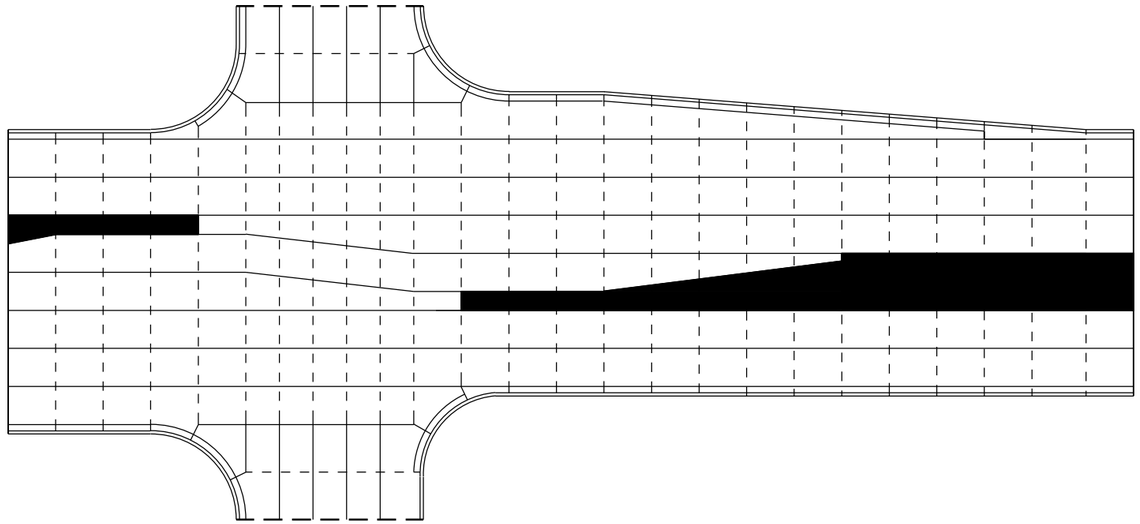
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

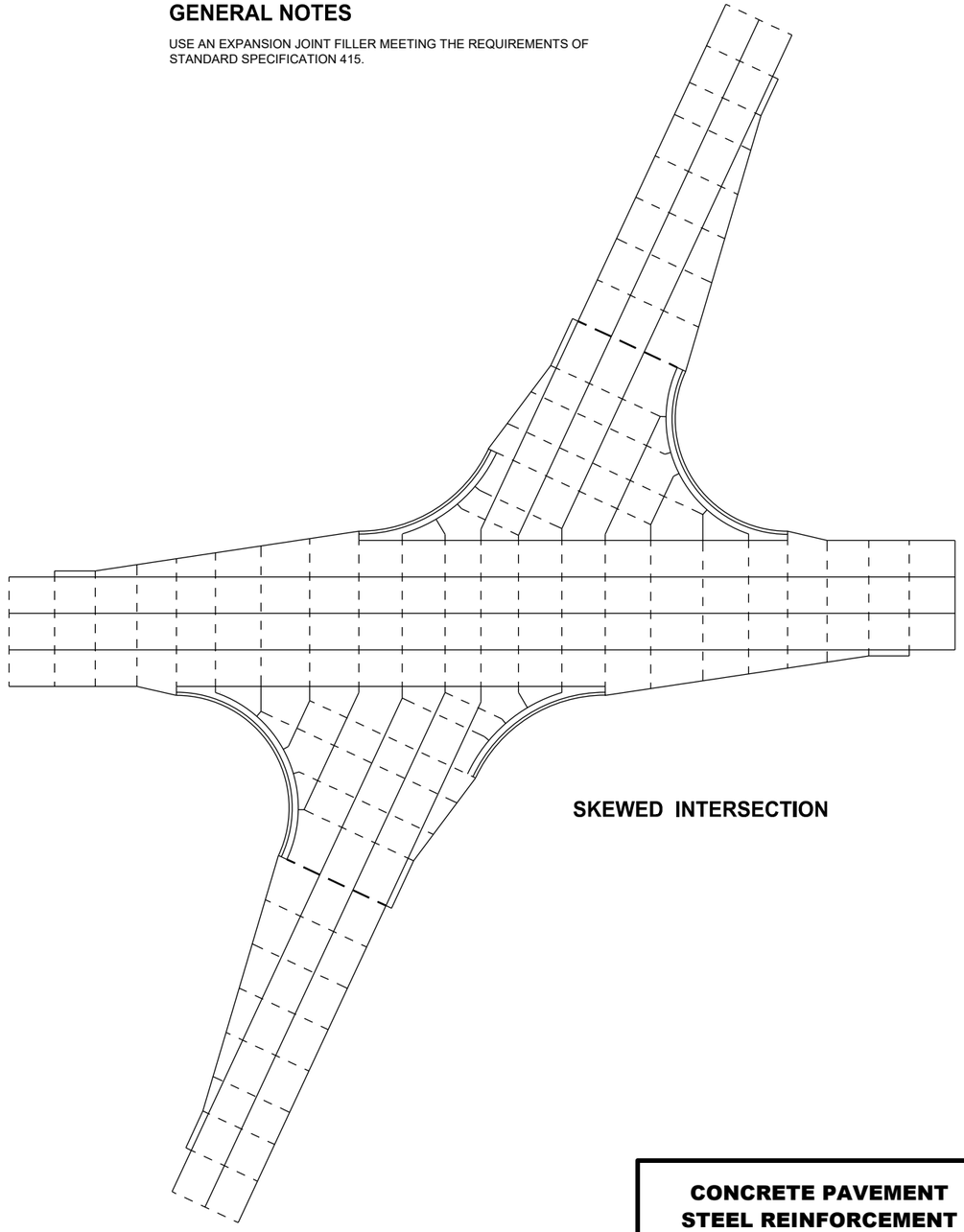
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

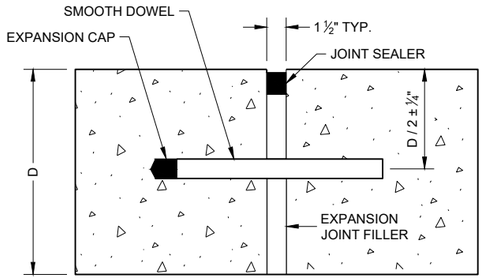
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

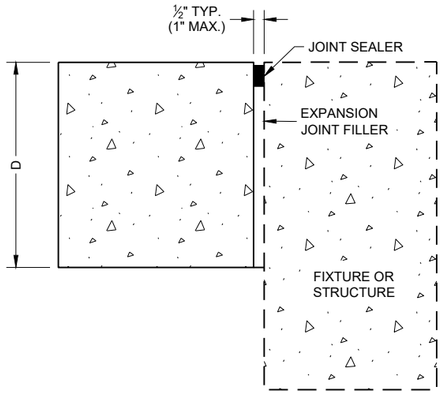
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

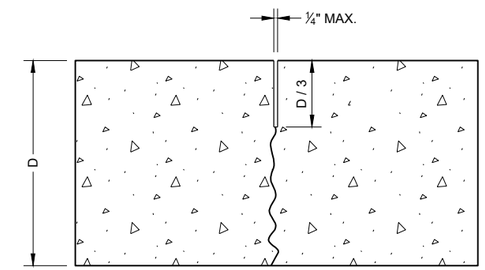
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

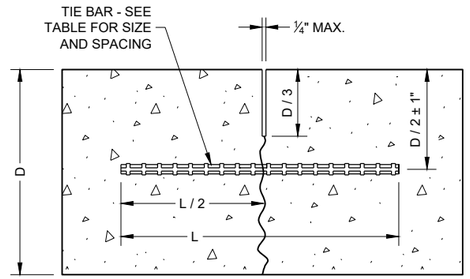
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

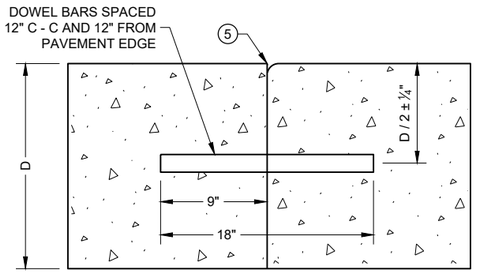
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



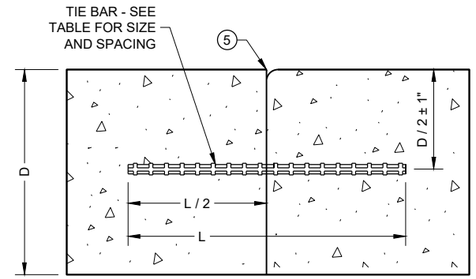
UNDOWELED TRANSVERSE



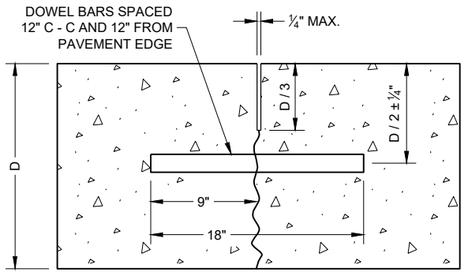
TIED LONGITUDINAL



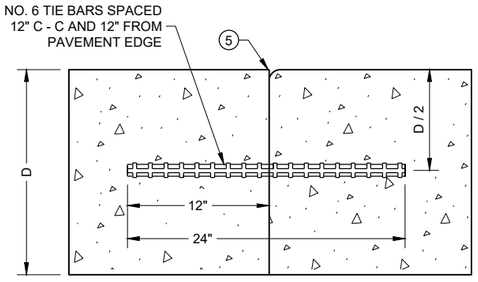
DOWELED TRANSVERSE (3)



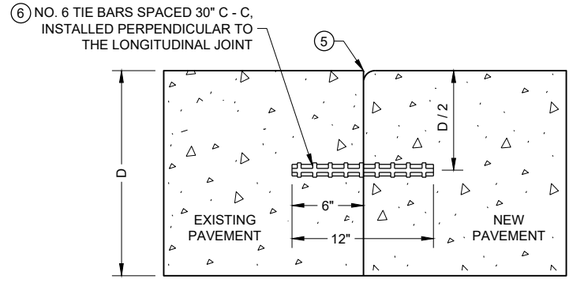
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

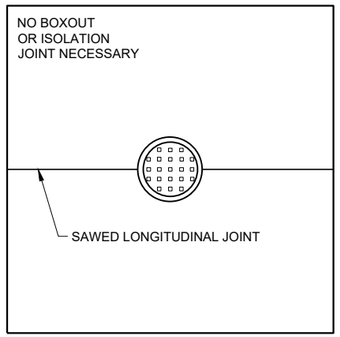


TIED LONGITUDINAL TO EXISTING

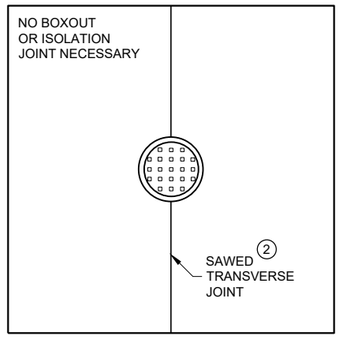
CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

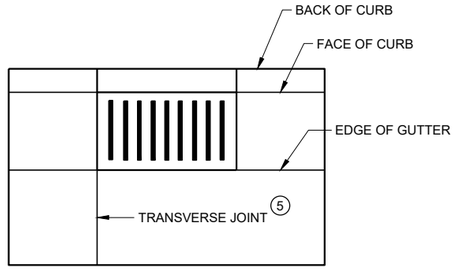
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



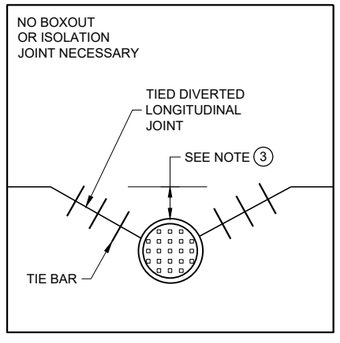
MANHOLE WITH TRANSVERSE JOINT



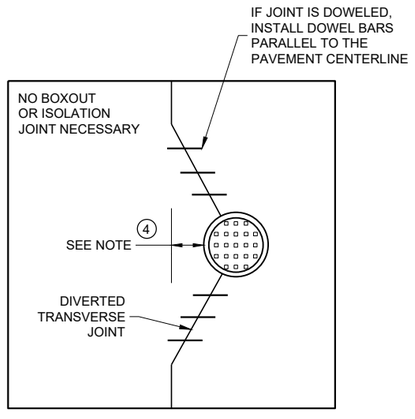
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

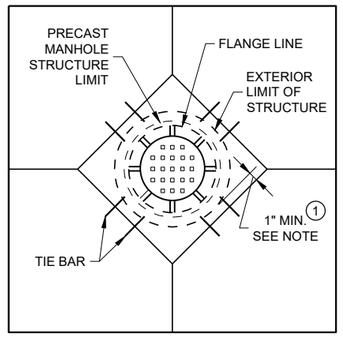
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

FHWA

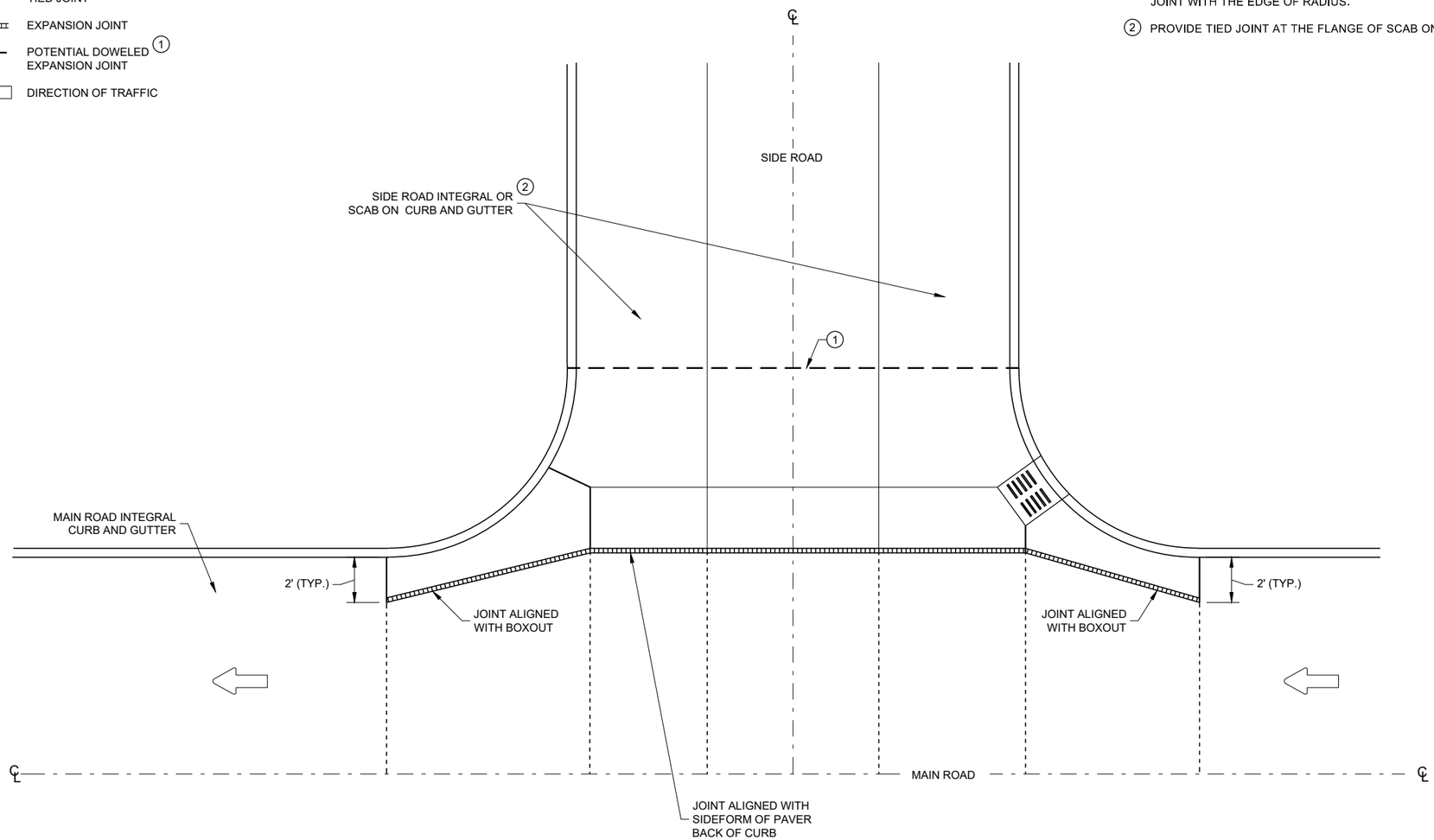
6

SDD13C18 - 08d

SDD13C18 - 08d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

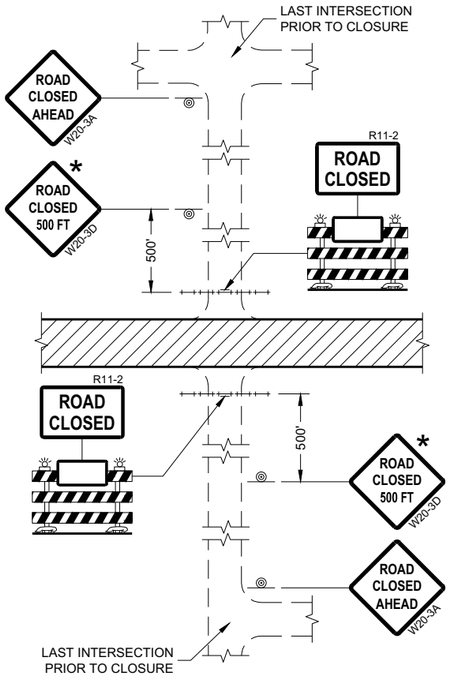
FHWA

6

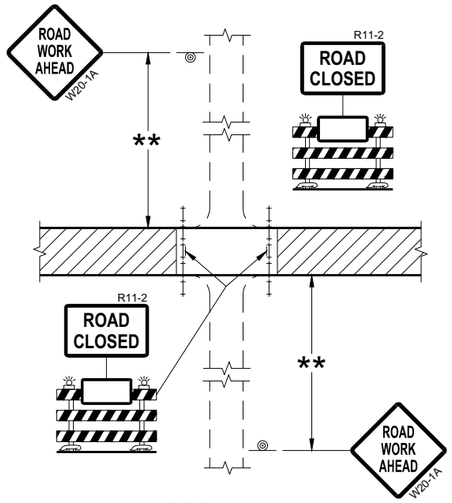
SDD 13C18 - 08f

6

SDD 13C18 - 08f



DETAIL 1
(NO ACCESS TO PROJECT)



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

GENERAL NOTES

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

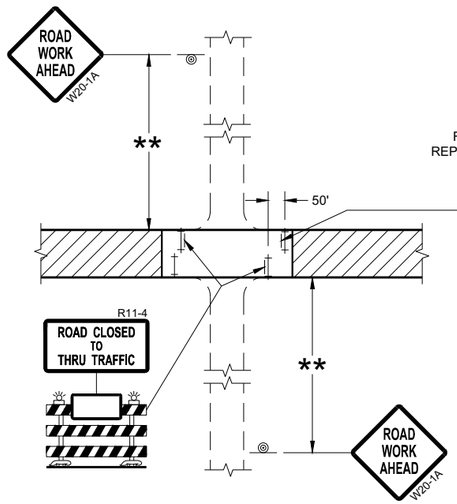
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

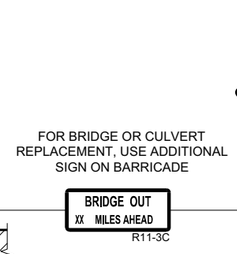
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

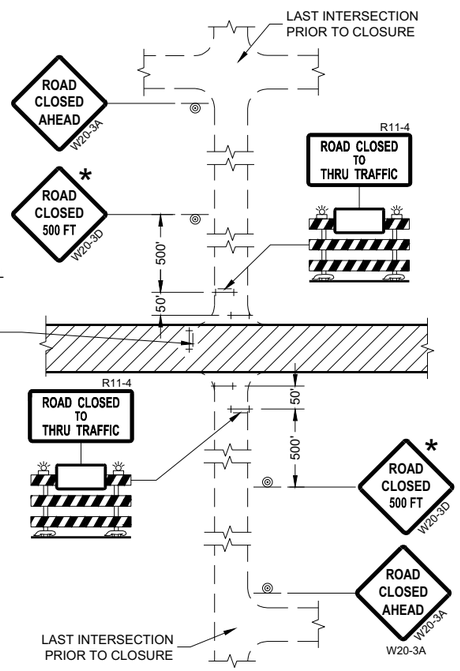
* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

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





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



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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

GENERAL NOTES

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

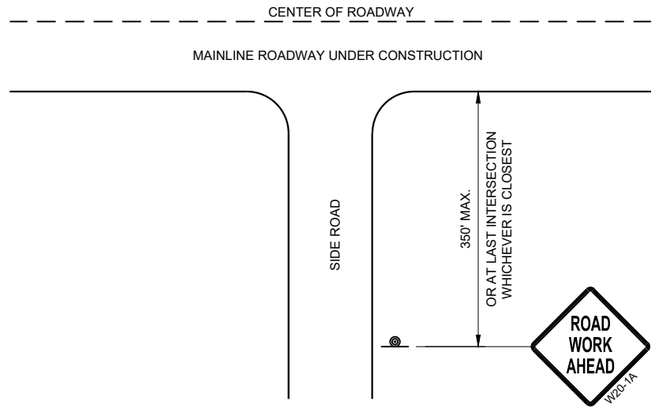
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



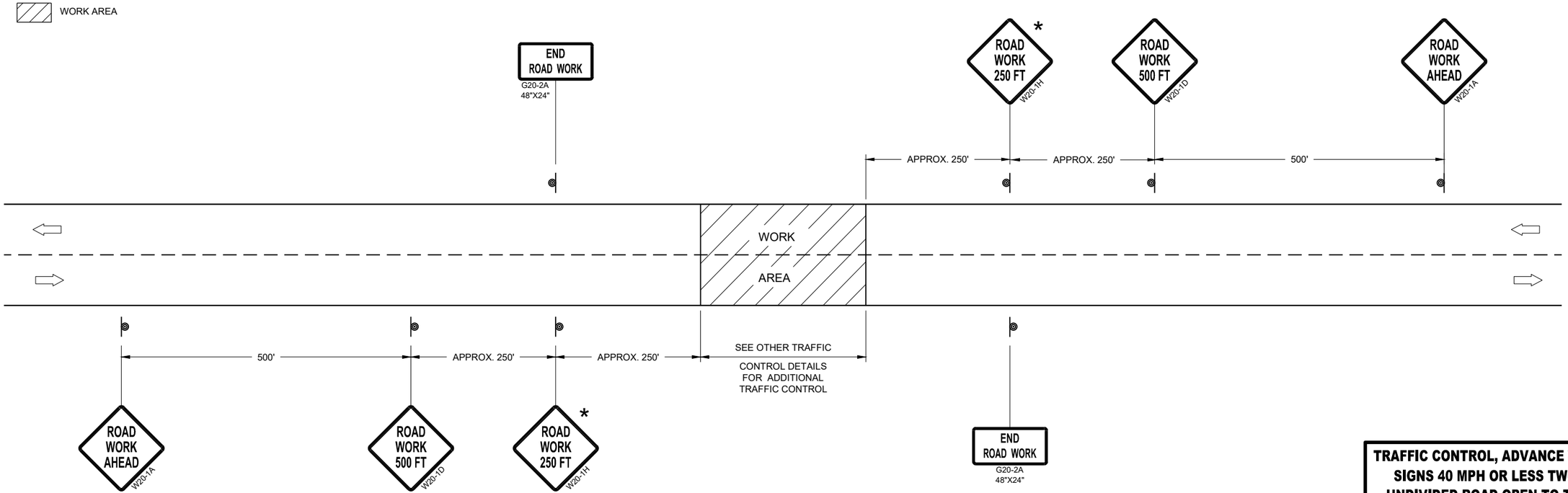
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

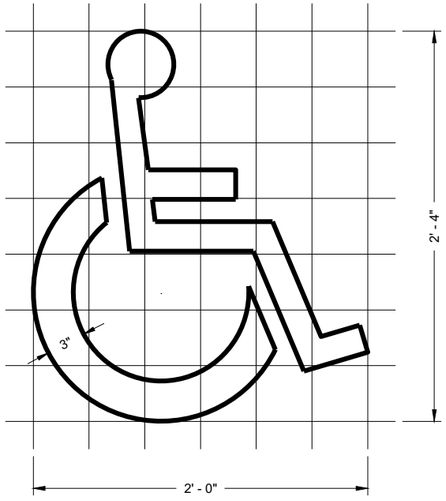
FHWA

6

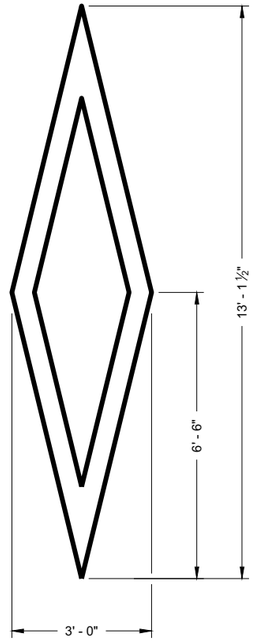
SDD 15C05 - 05

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

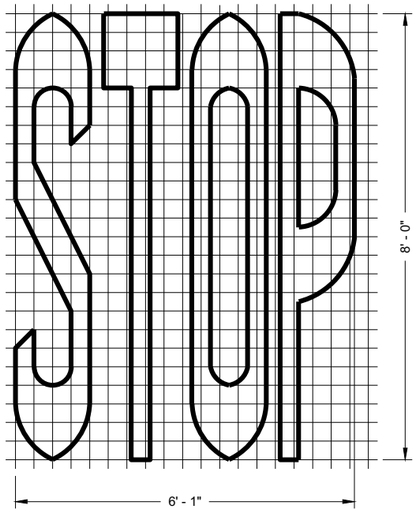
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

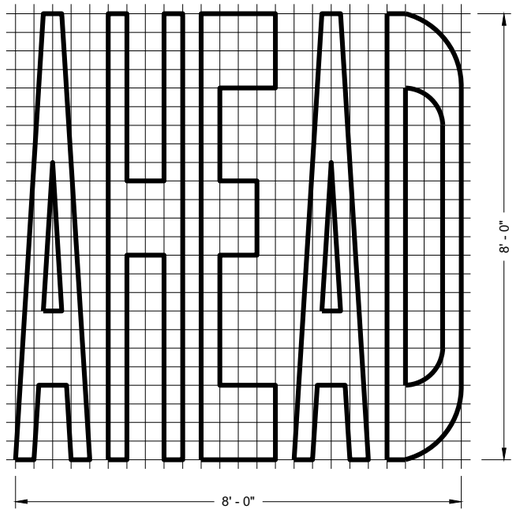
APPROVED

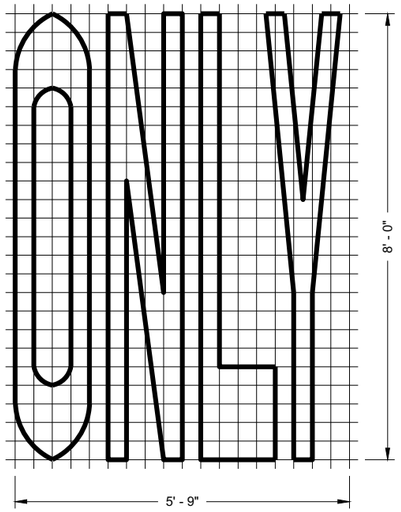
November 2019
DATE

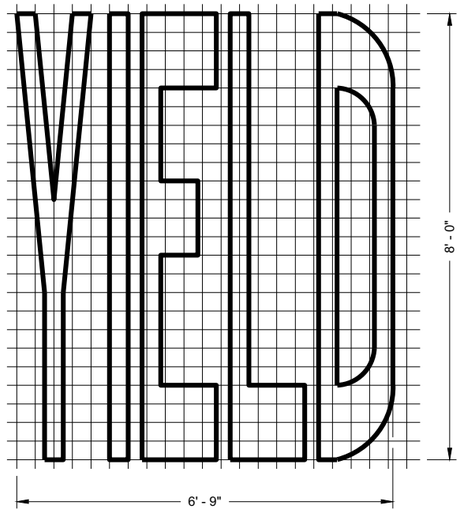
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

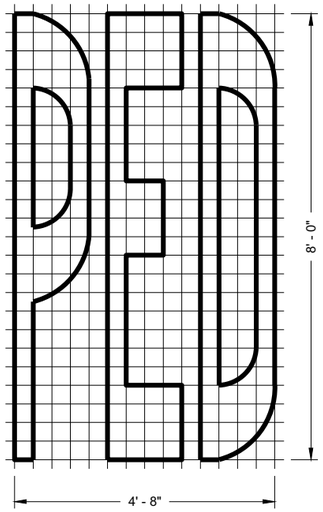
FHWA



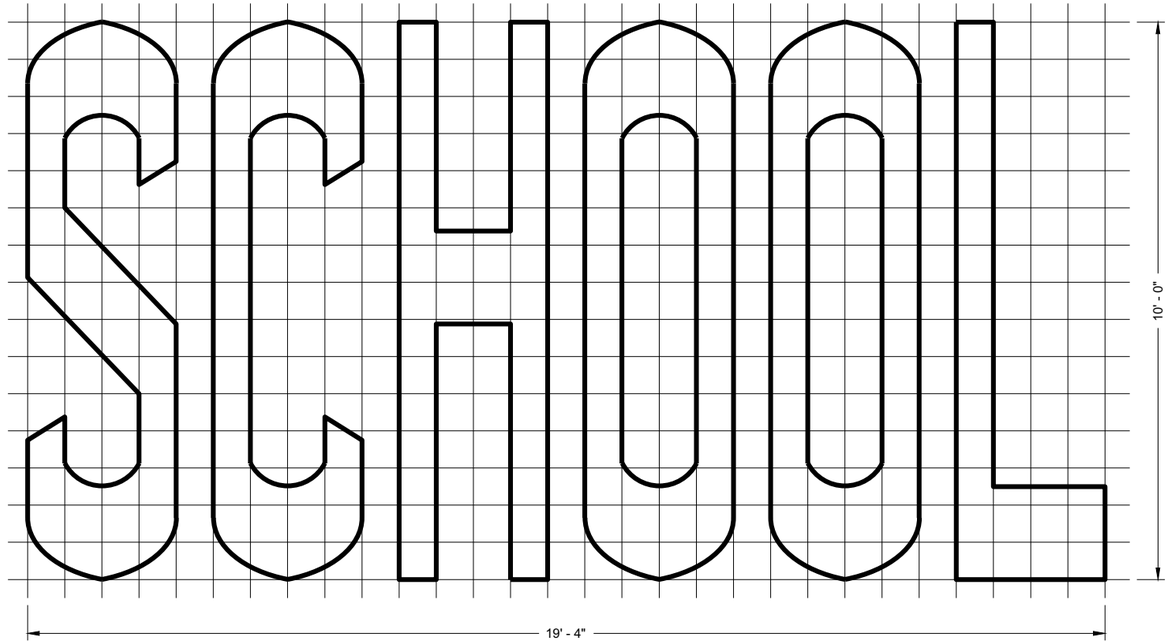








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

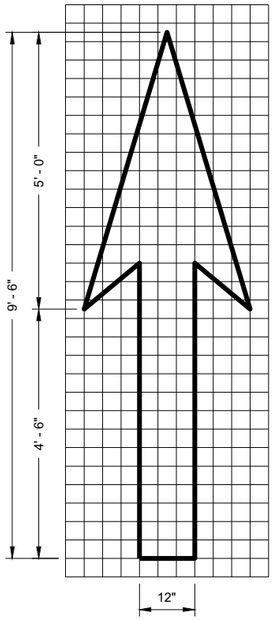
6

SDD 15C07 - 15b

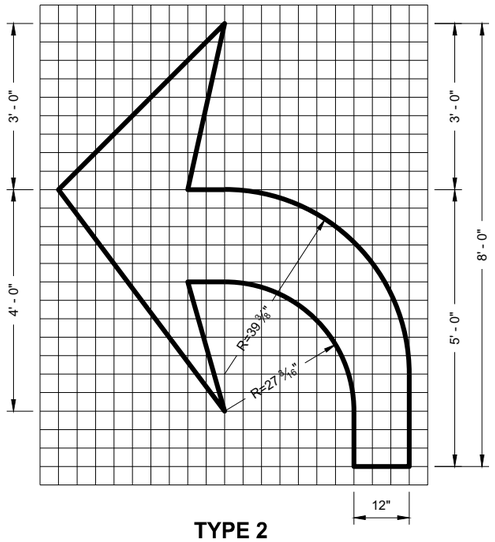
SDD 15C07 - 15b

GENERAL NOTES

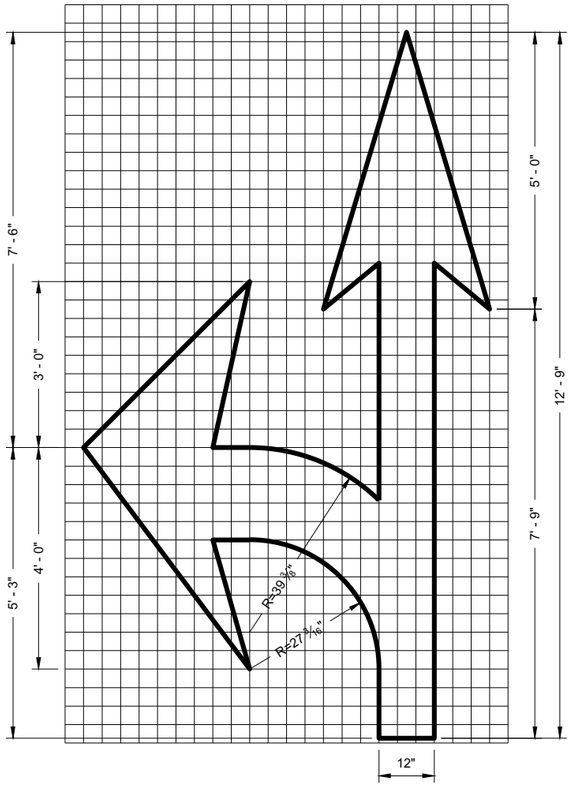
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



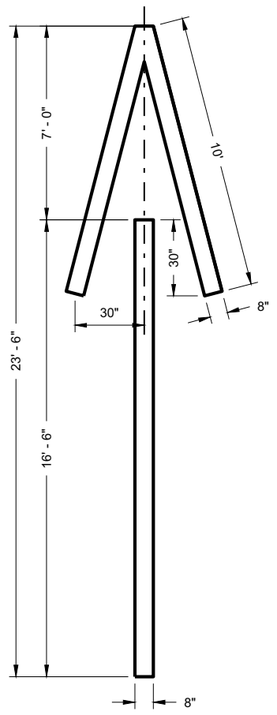
TYPE 1



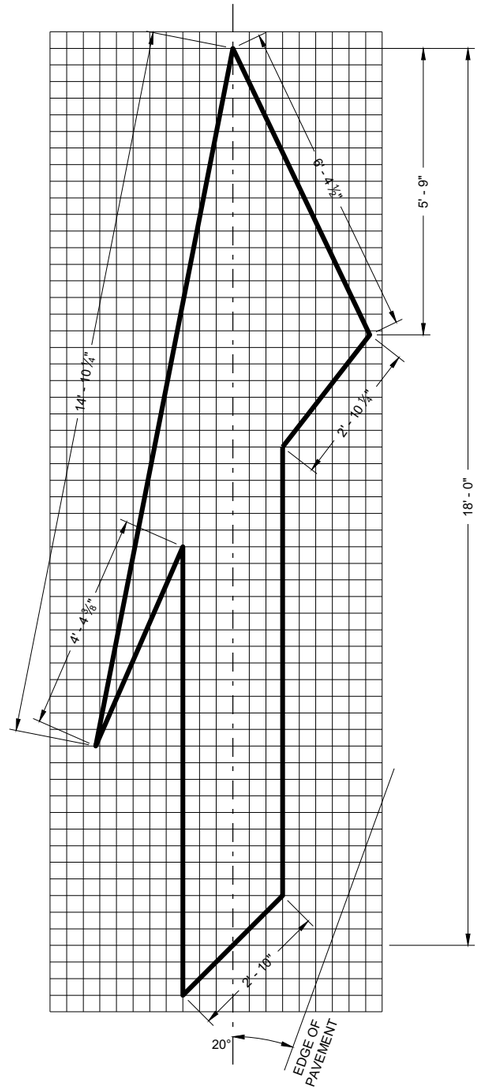
TYPE 2



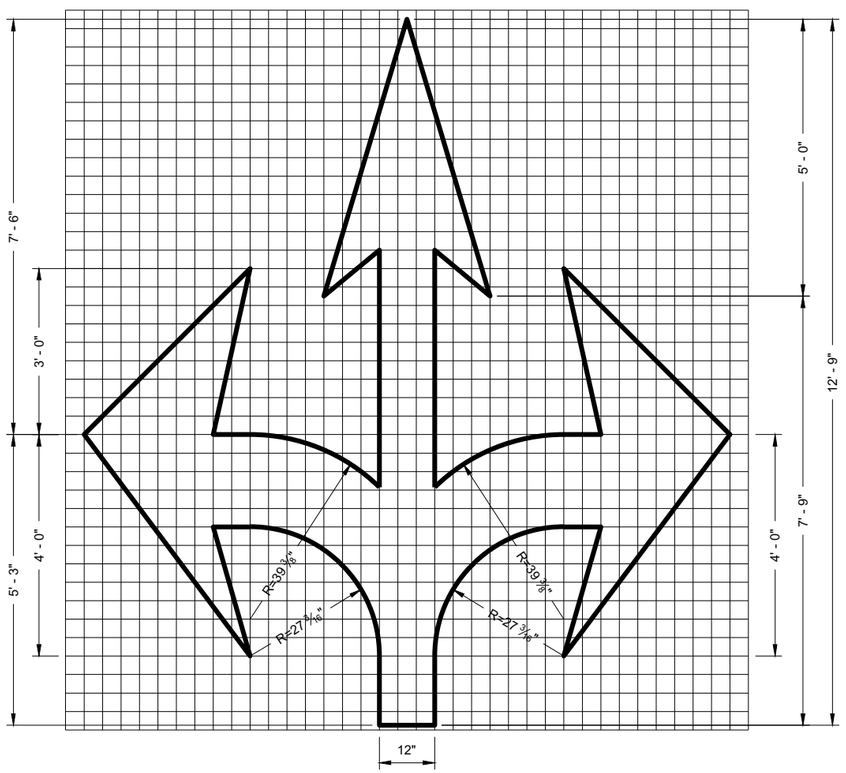
TYPE 3



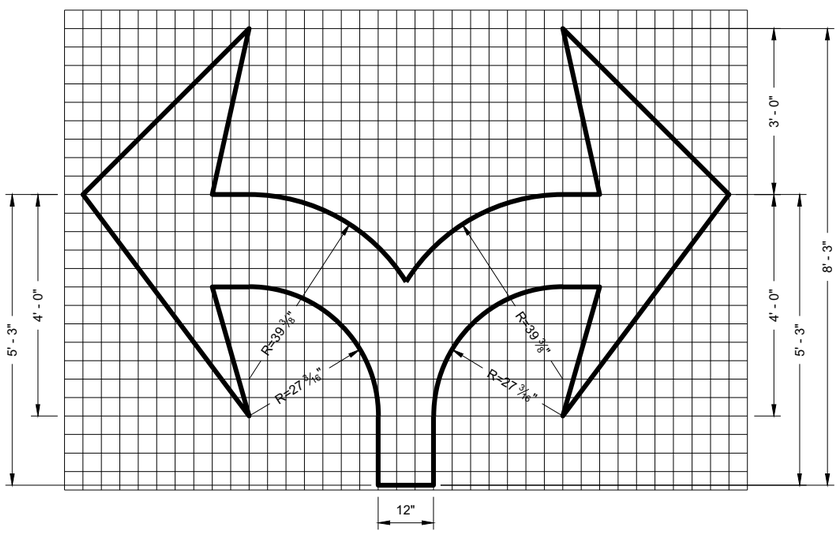
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

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

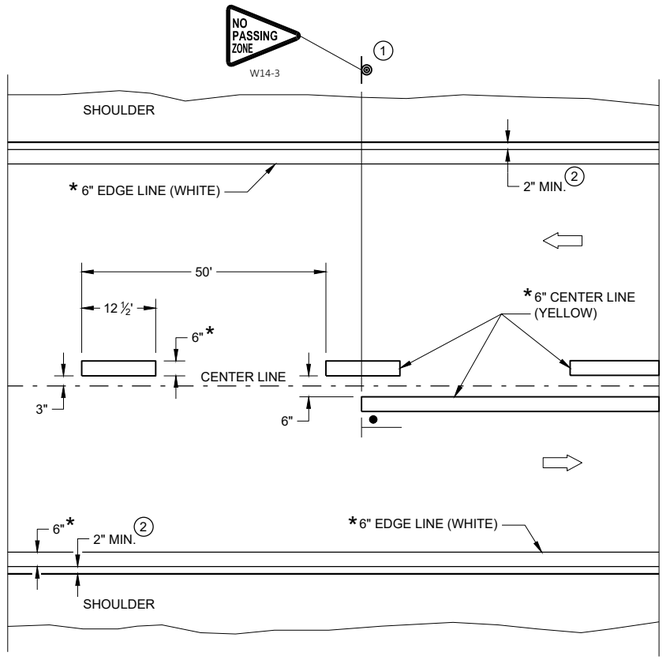
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

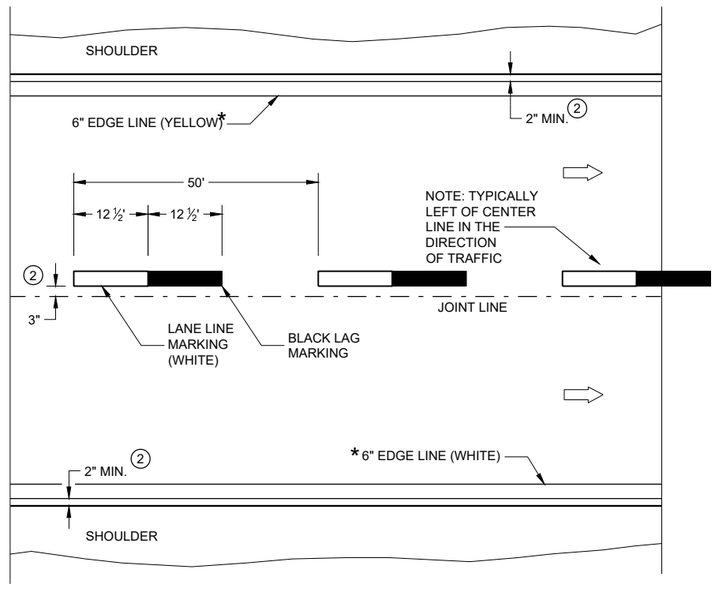
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

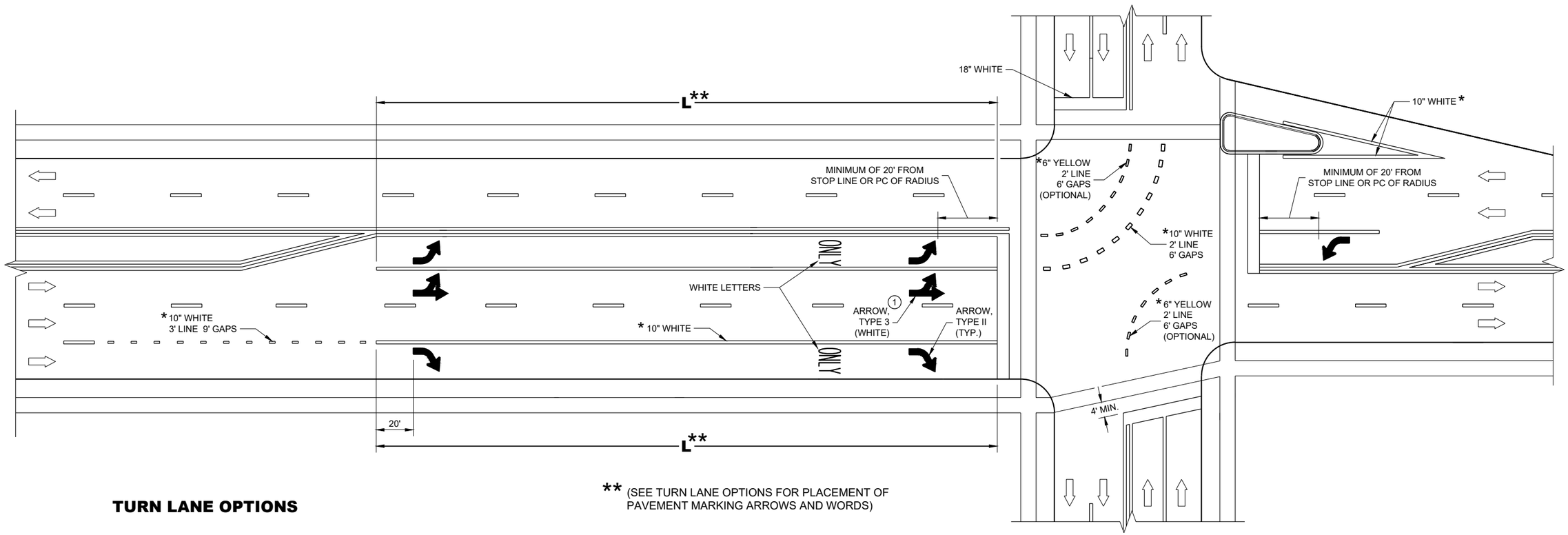
May 2023 — DATE

/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

6

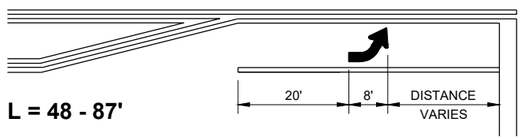
SDD 15C08-23a



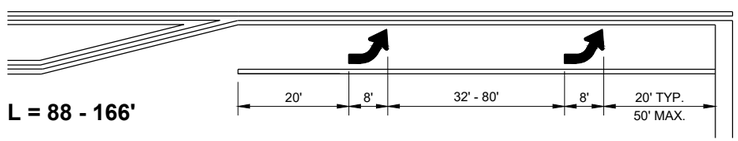
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

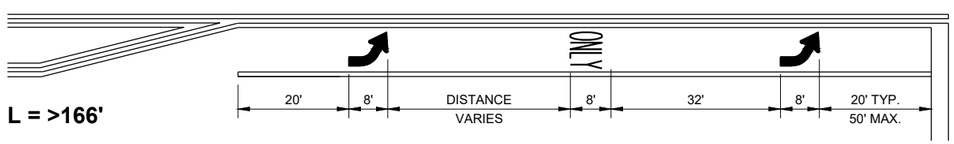
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

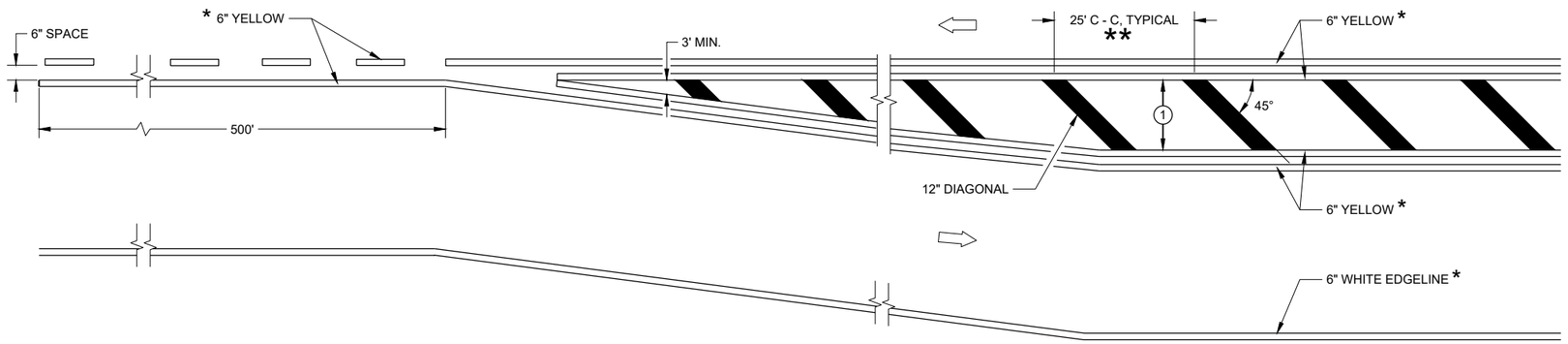
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

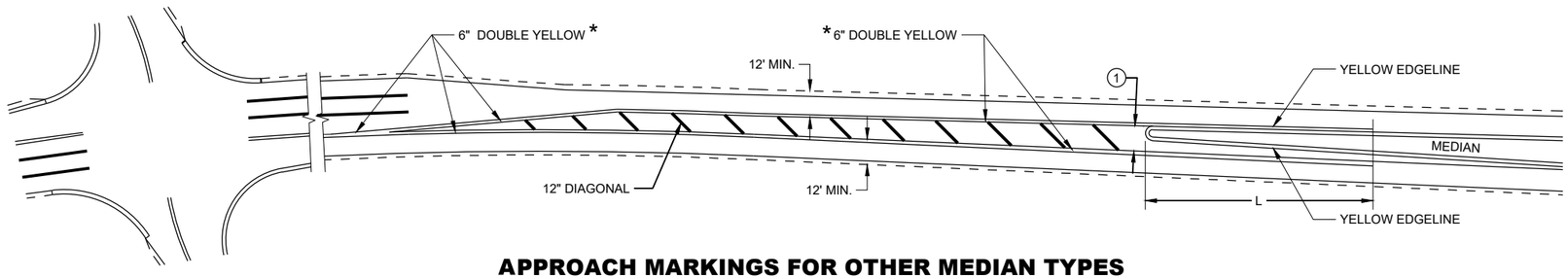
6

SDD 15C08-23d

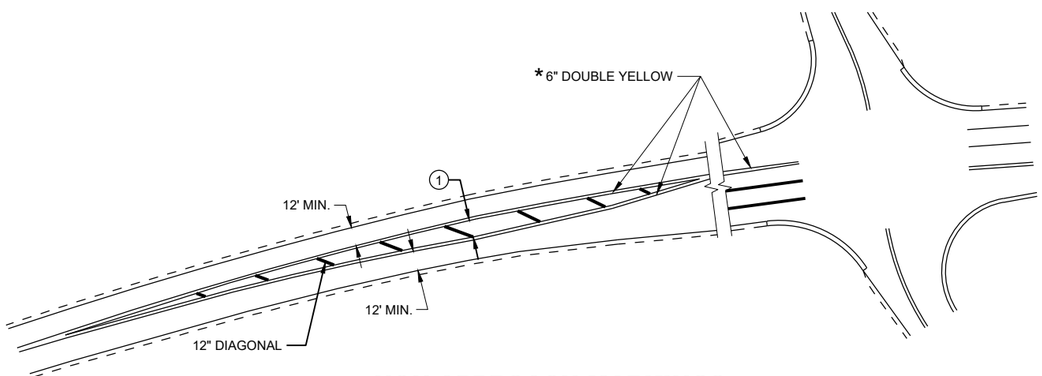
SDD 15C08-23d



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

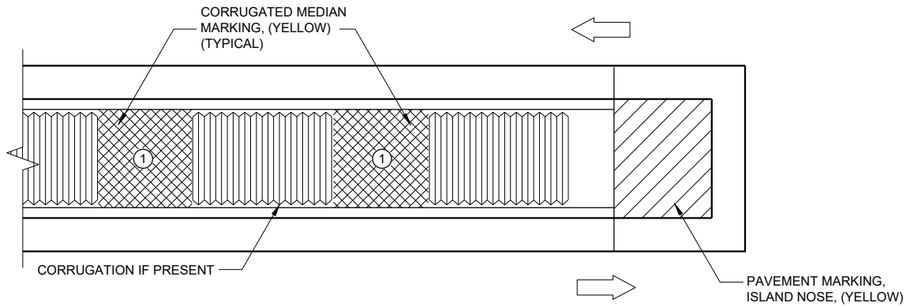
FHWA

6

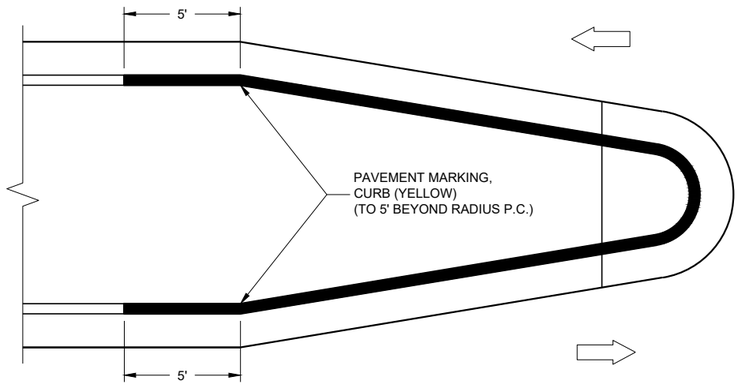
SDD 15C18-08a

6

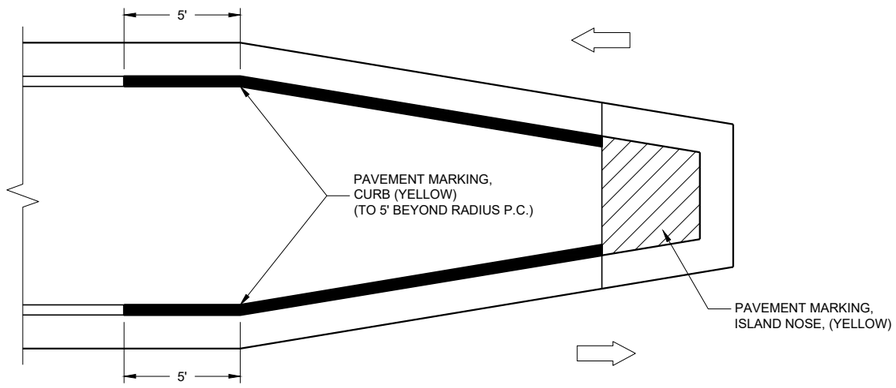
SDD 15C18-08a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

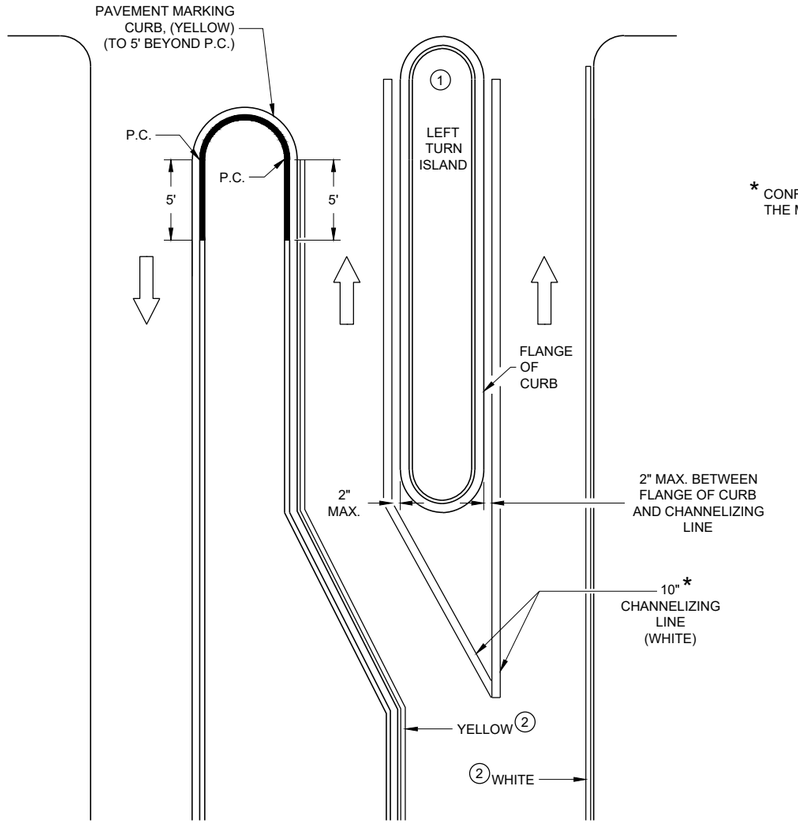
/S/ Jeannie Silver
STATE SIGNING AND MAF
ENGINEER

FHWA

6

SDD 15C18-08b

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



* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEFT TURN & MEDIAN ISLAND

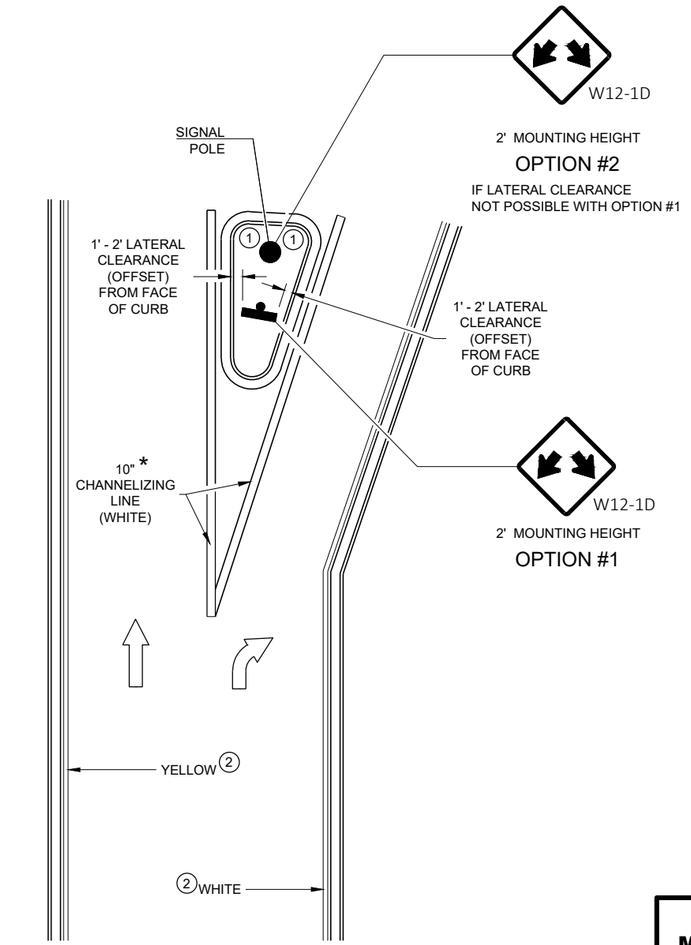
GENERAL NOTES

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

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

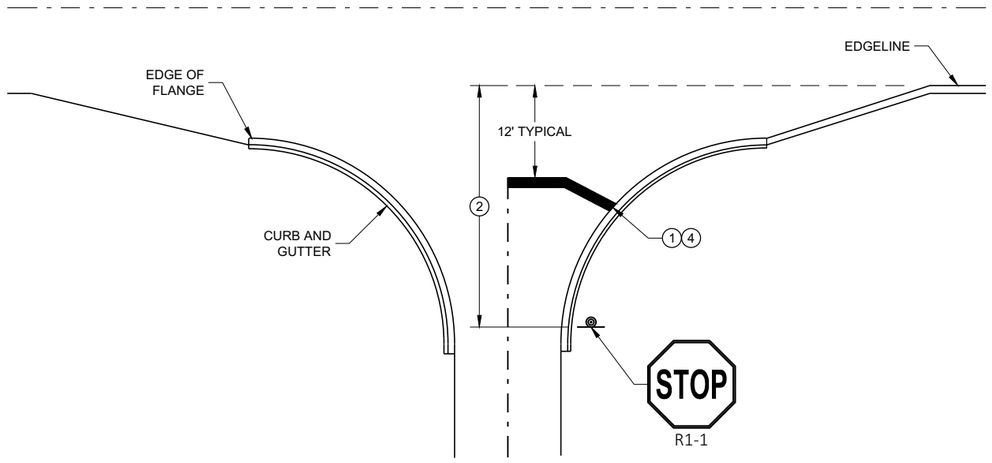
FHWA

6
SDD 15C18-08c

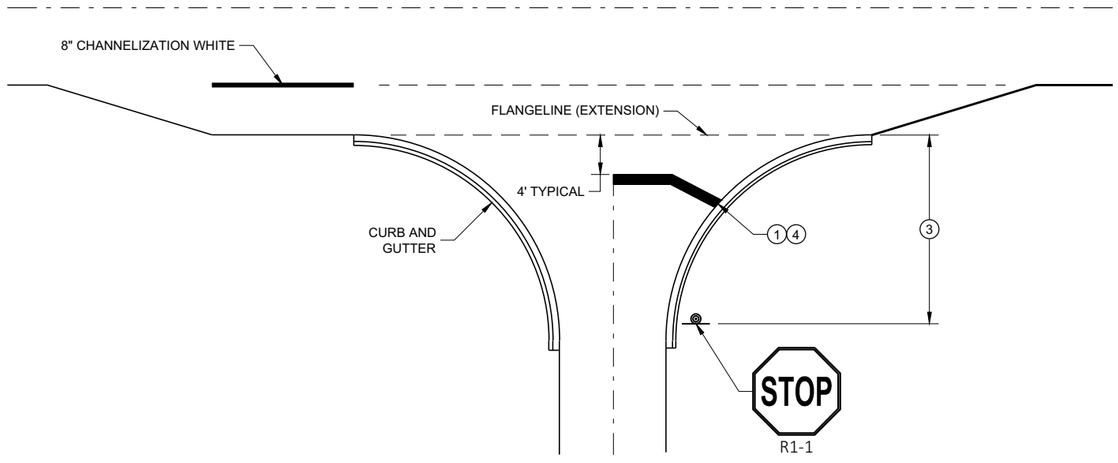
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

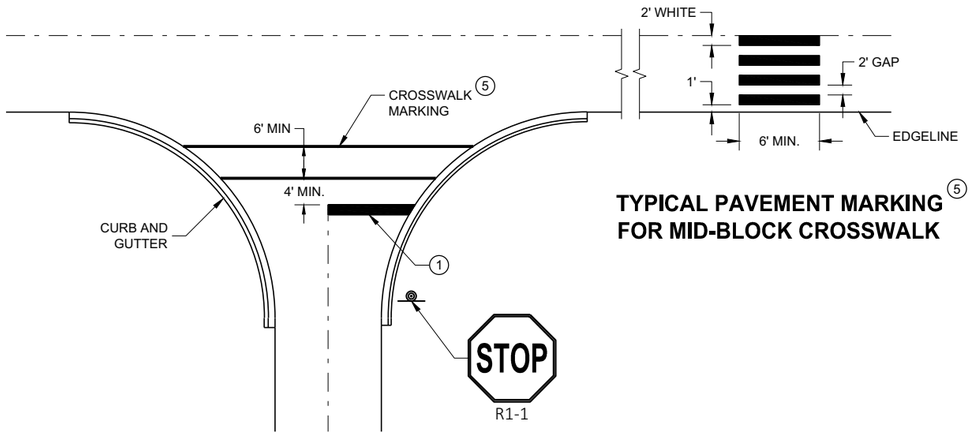
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

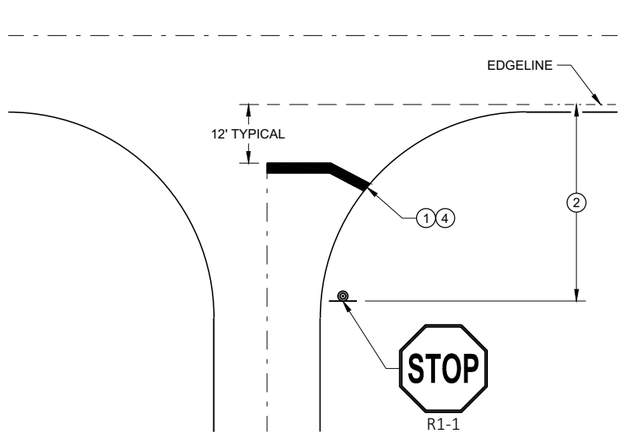


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

SDD 15C33 - 04

SDD 15C33 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

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 REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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

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

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

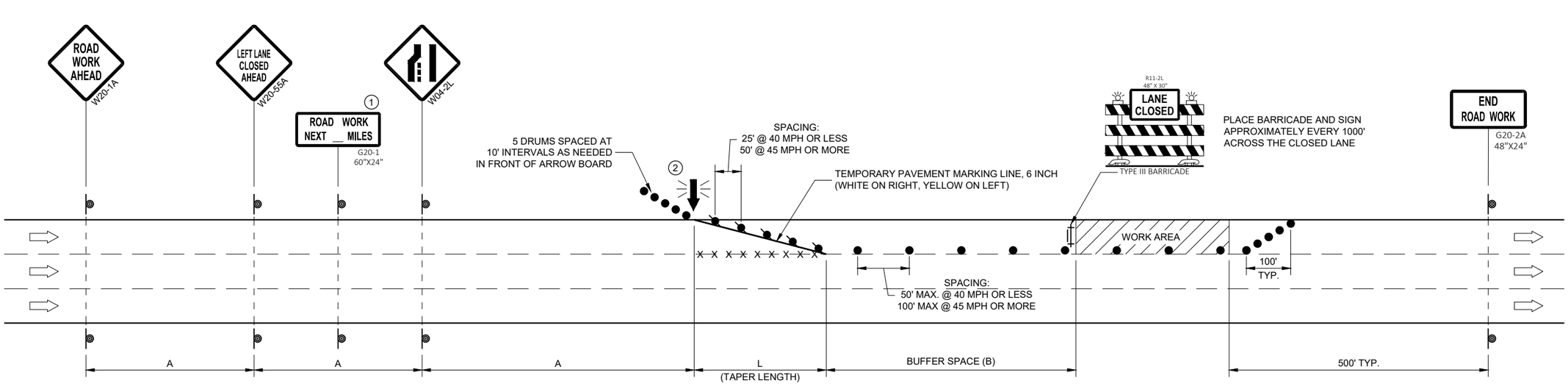
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D20-07a

6

SDD 15D20-07a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA



GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TEMPORARY SUPPORTS.

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

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

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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

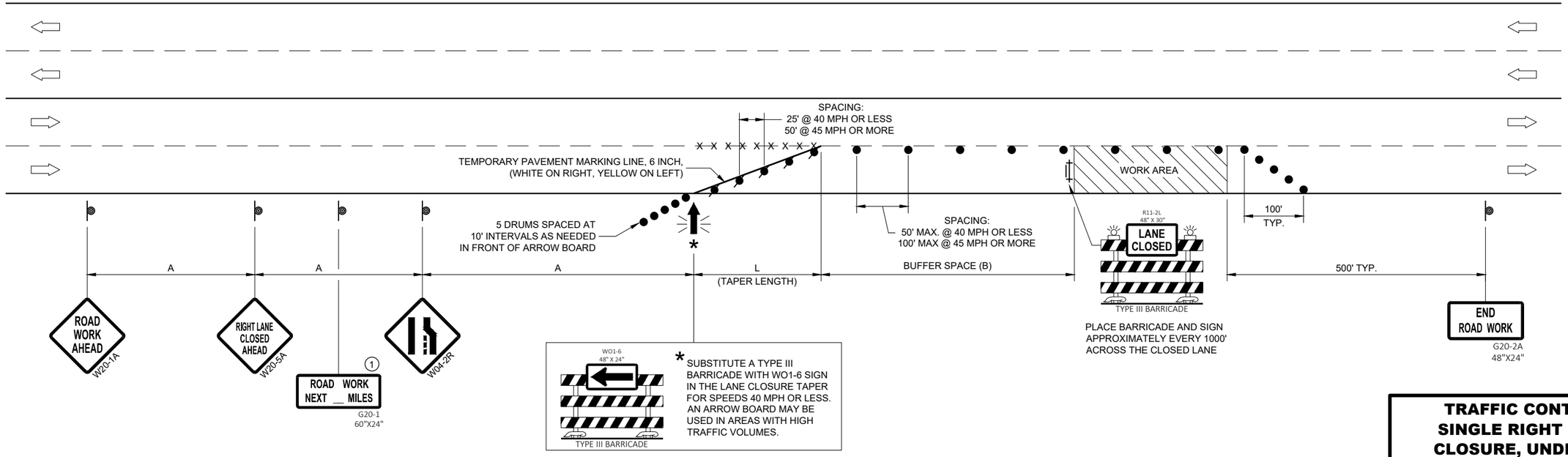
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'





* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

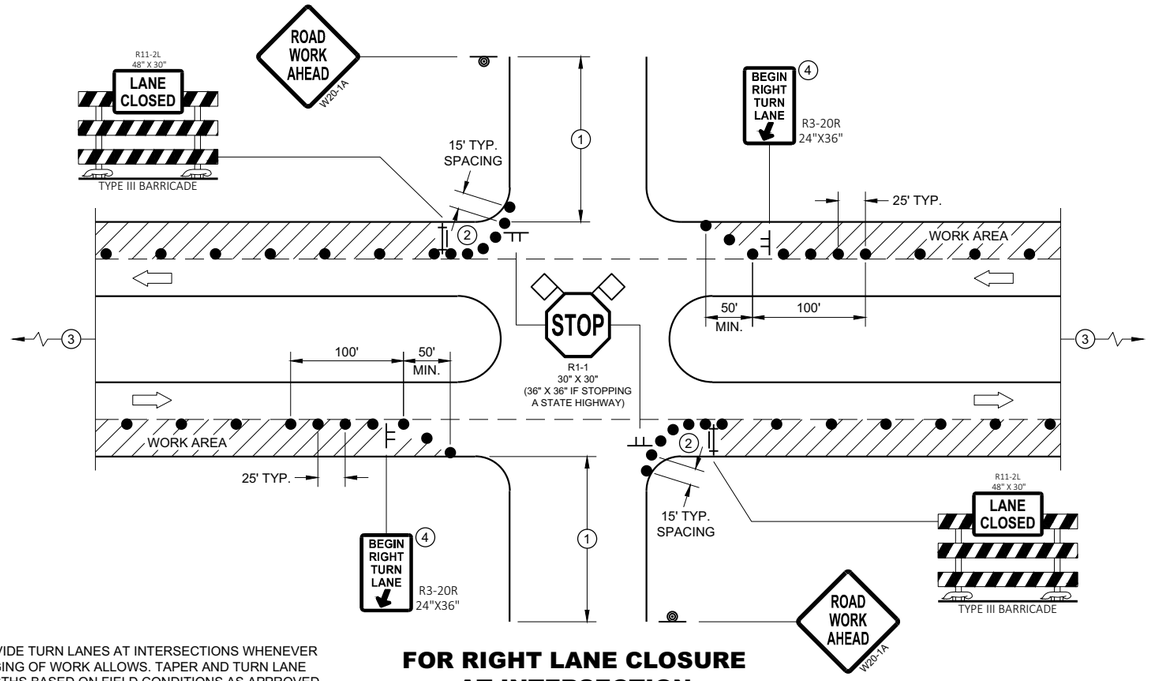
FHWA

6

SDD 15D20-07b

6

SDD 15D20-07b



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

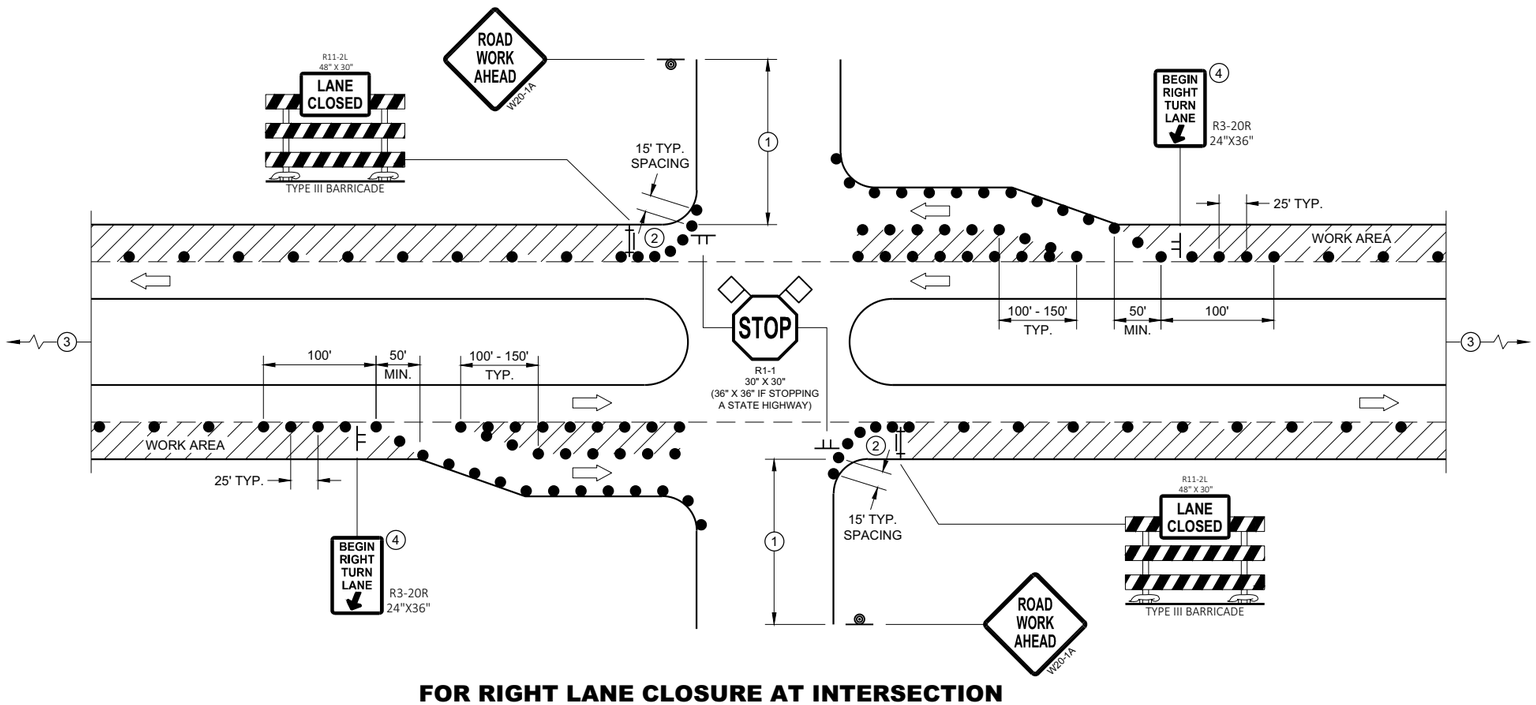
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

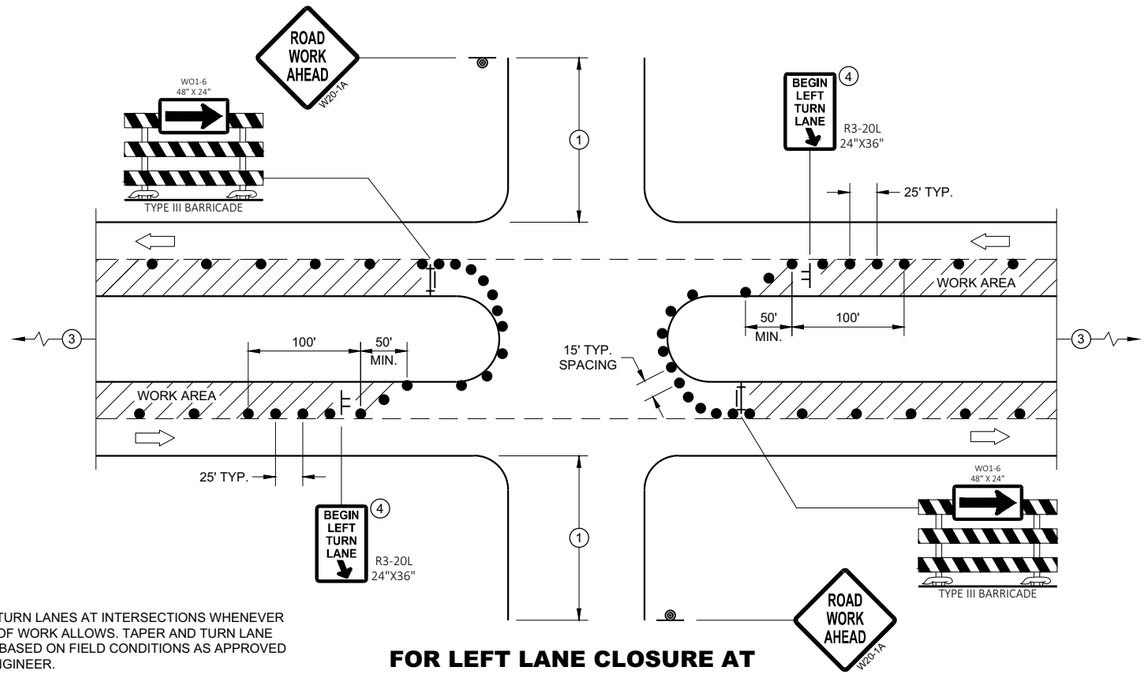


FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

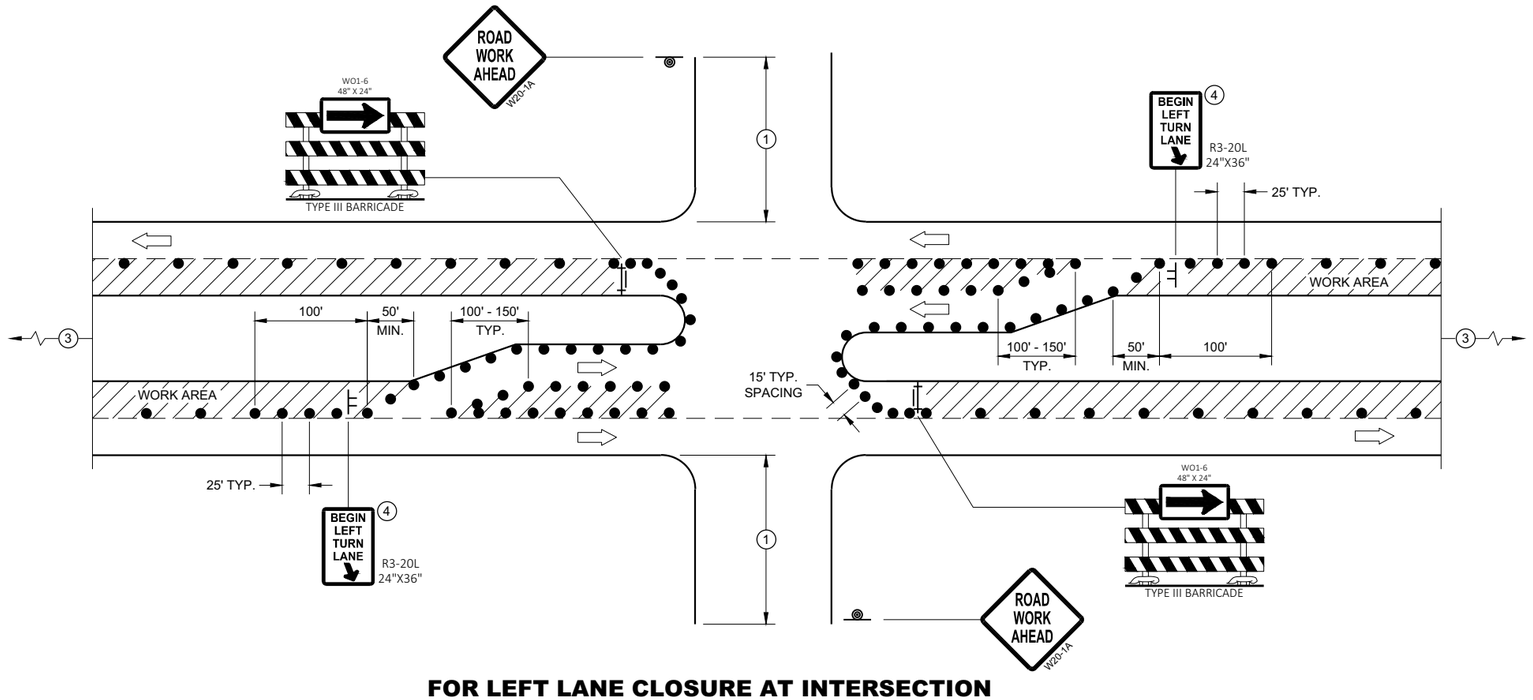
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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 REGIONAL TRAFFIC UNIT.

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

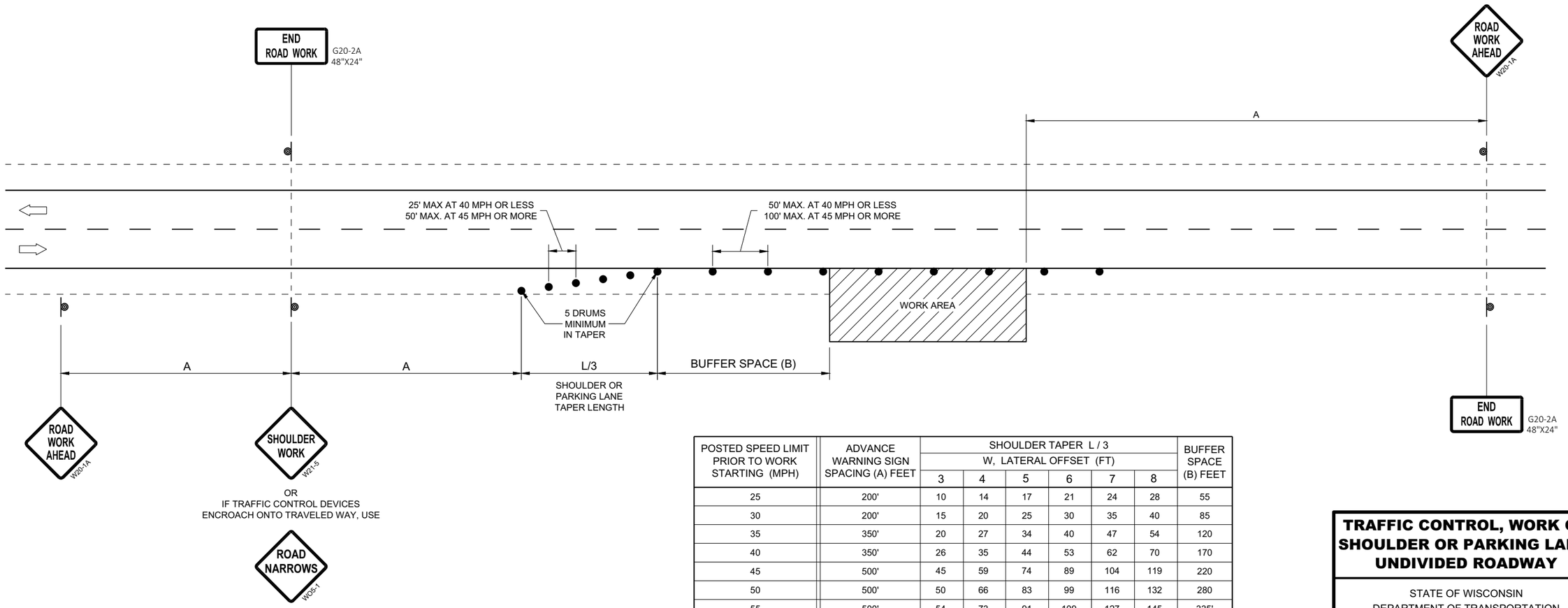
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

GENERAL NOTES

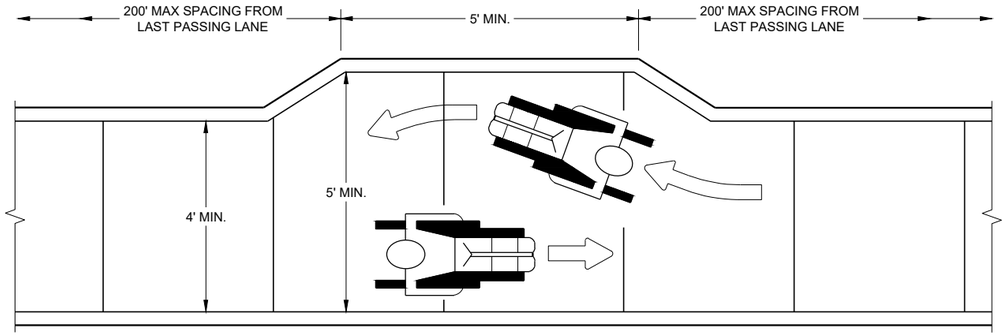
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

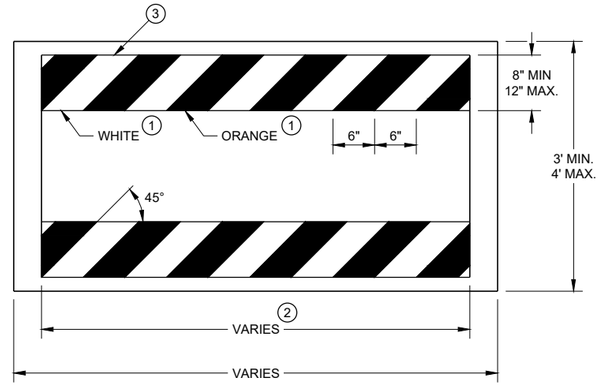
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

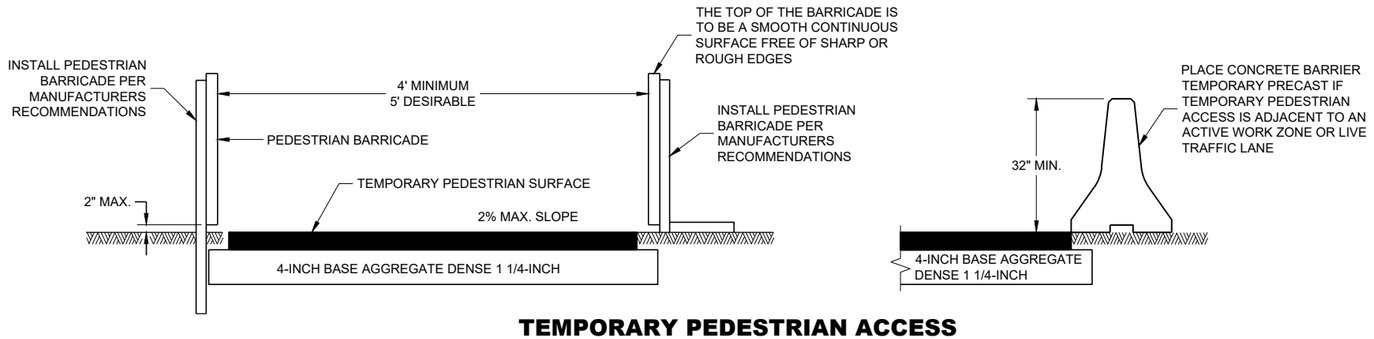
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



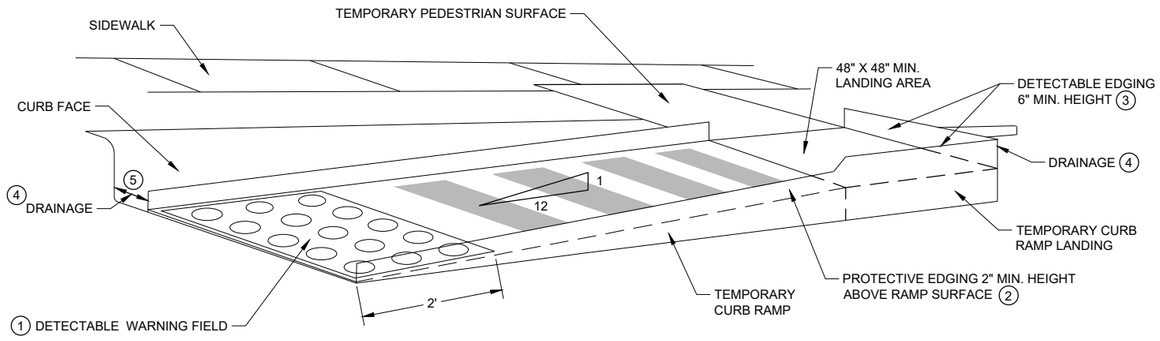
TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6
SDD 15D30 - 09a



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

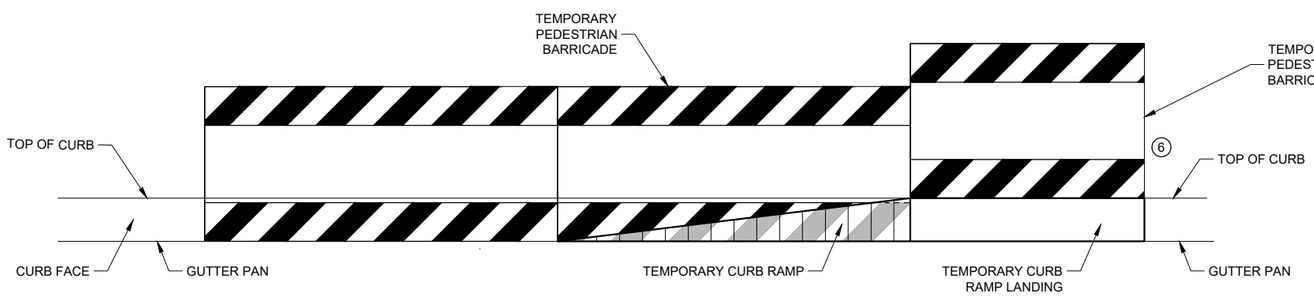
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

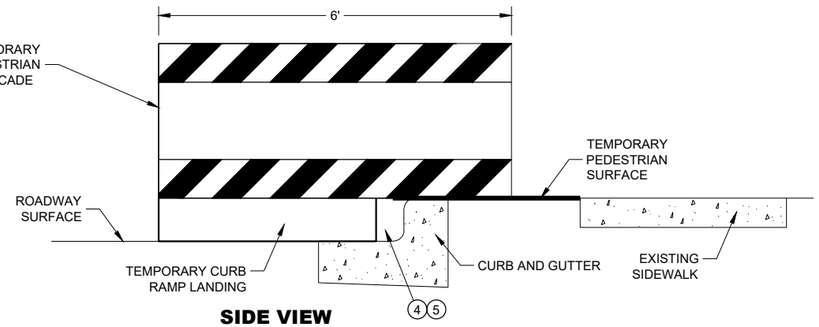
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

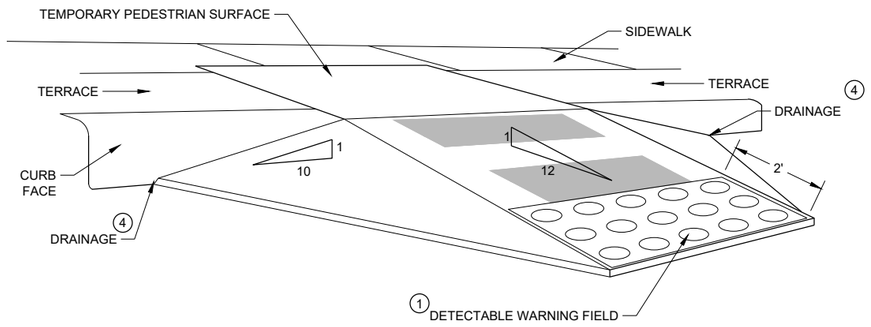
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

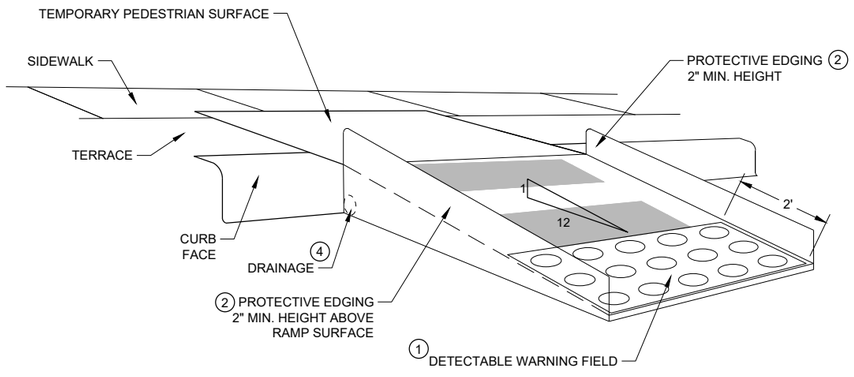
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

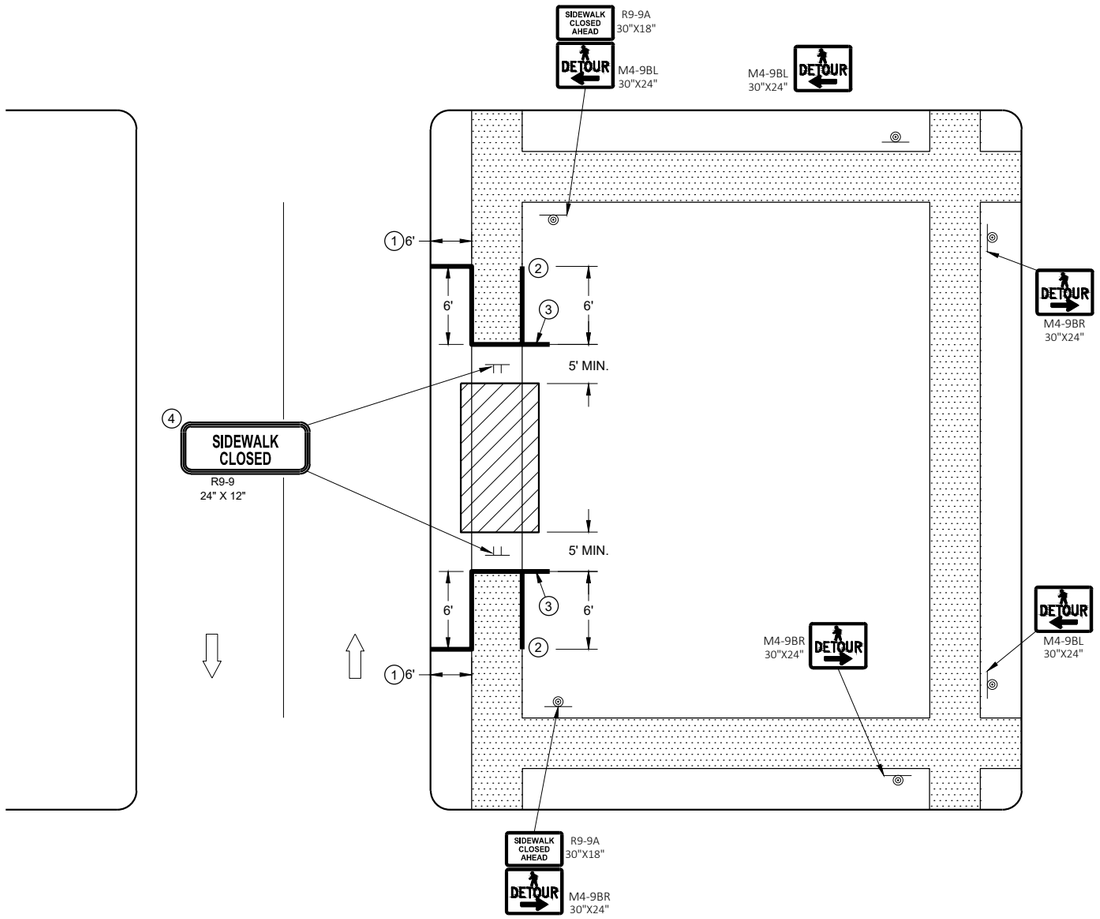
(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

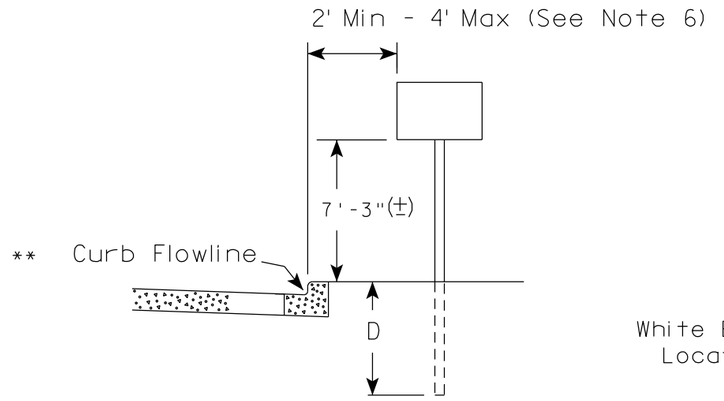
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

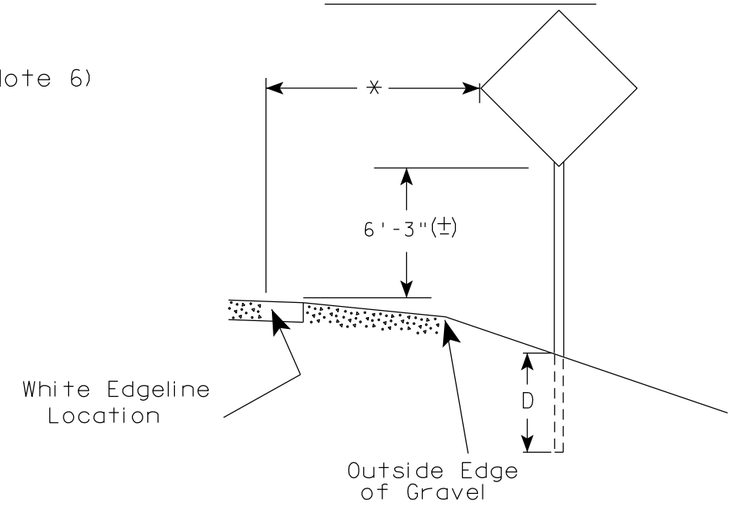
6

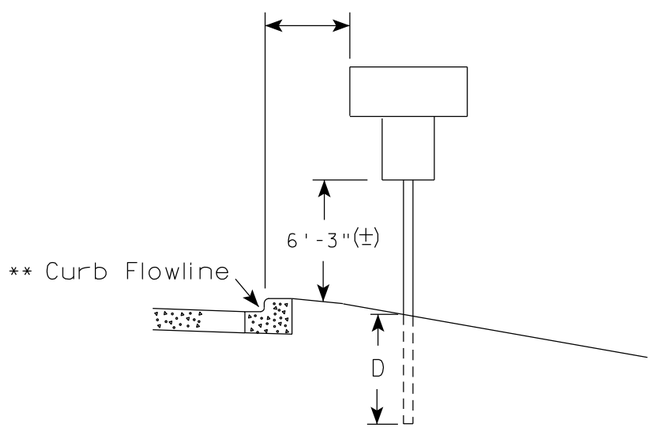
SDD 15D30 - 09f

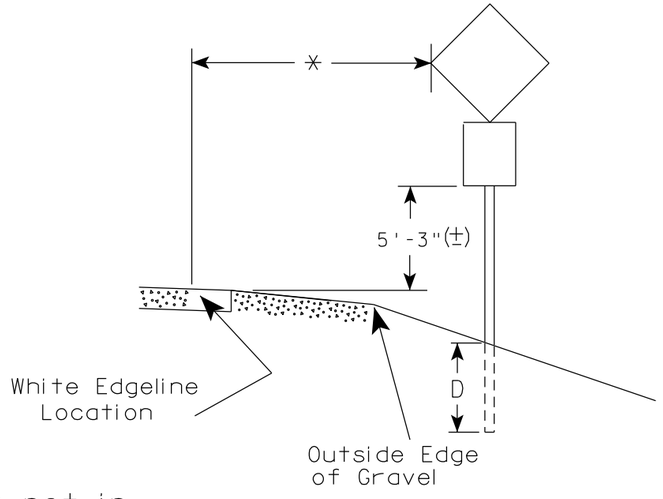
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

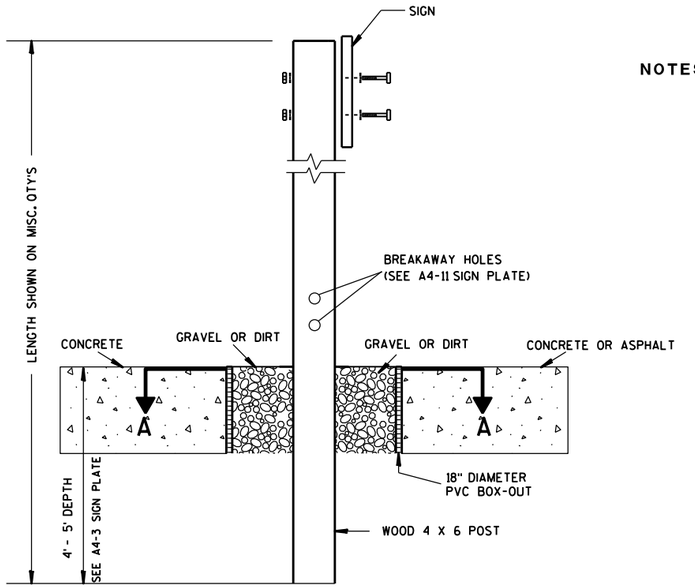
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

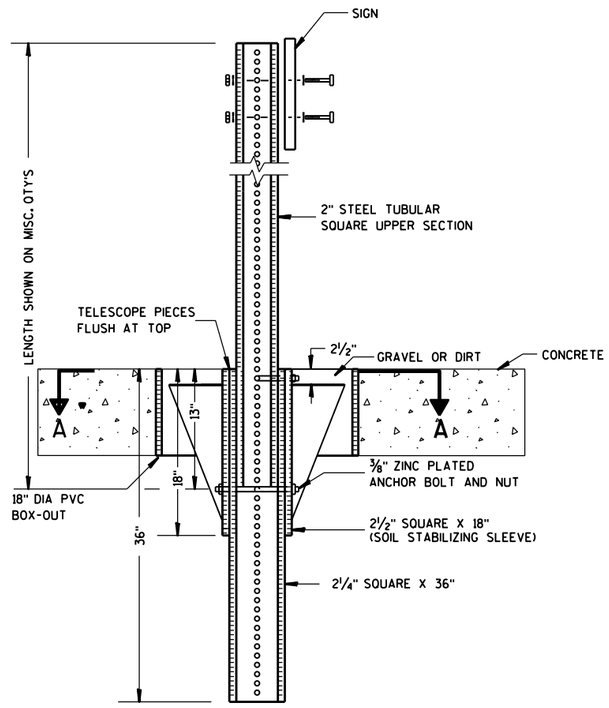
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	E



ELEVATION VIEW

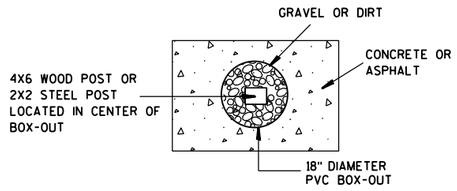
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

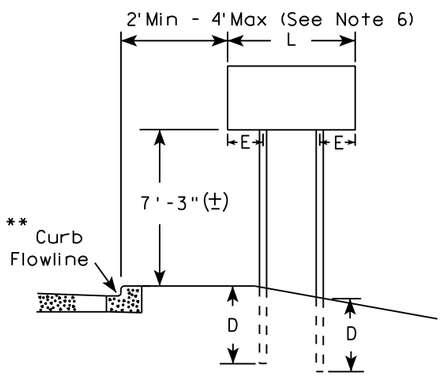
APPROVED Matthew R Rauch
for State Traffic Engineer

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

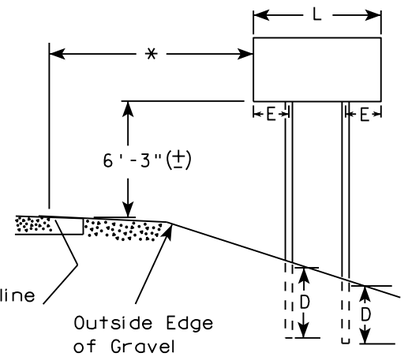
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

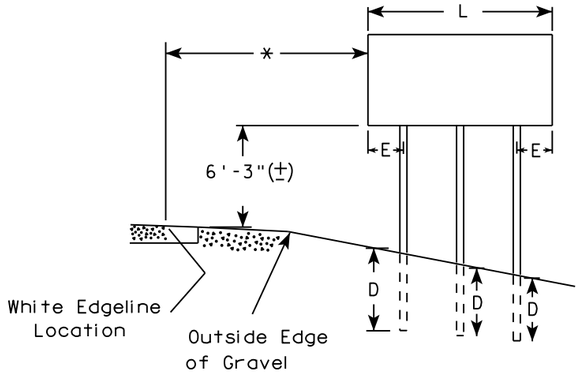
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

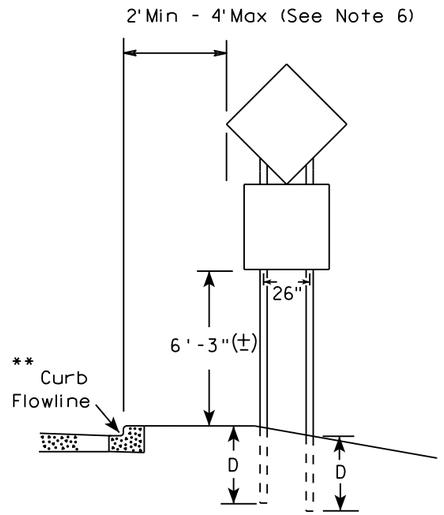
URBAN AREA



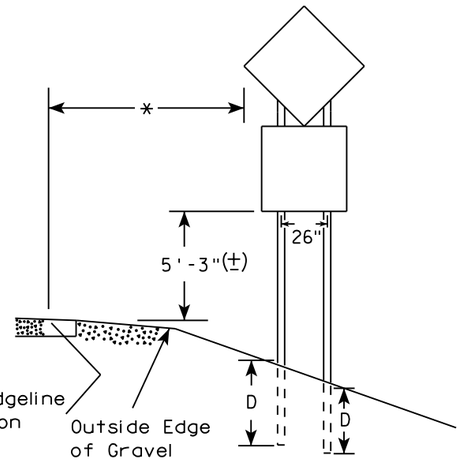
RURAL AREA (See Note 3)







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'

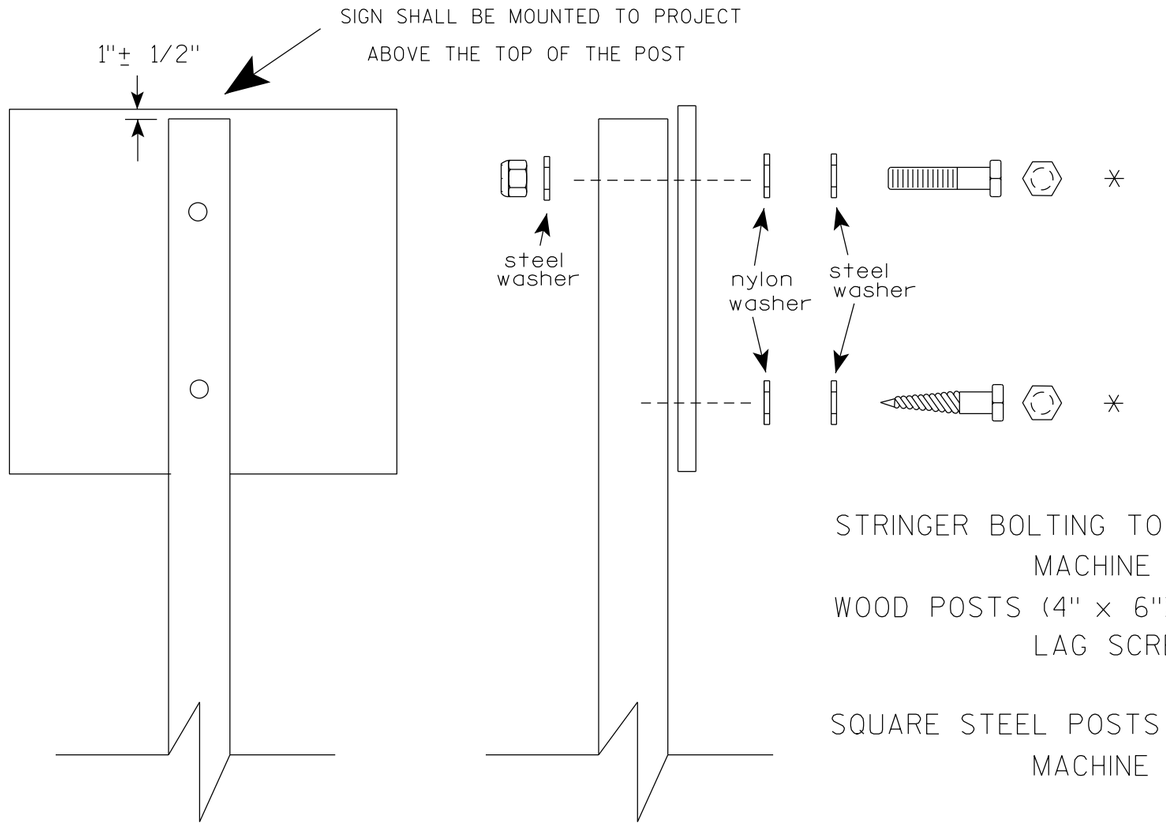
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 153	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

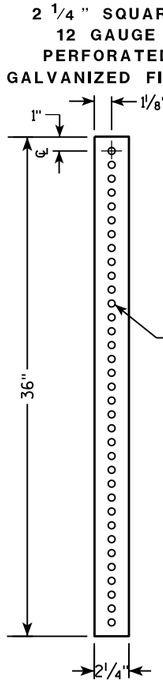
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

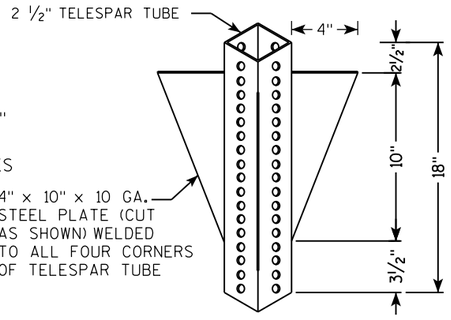
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

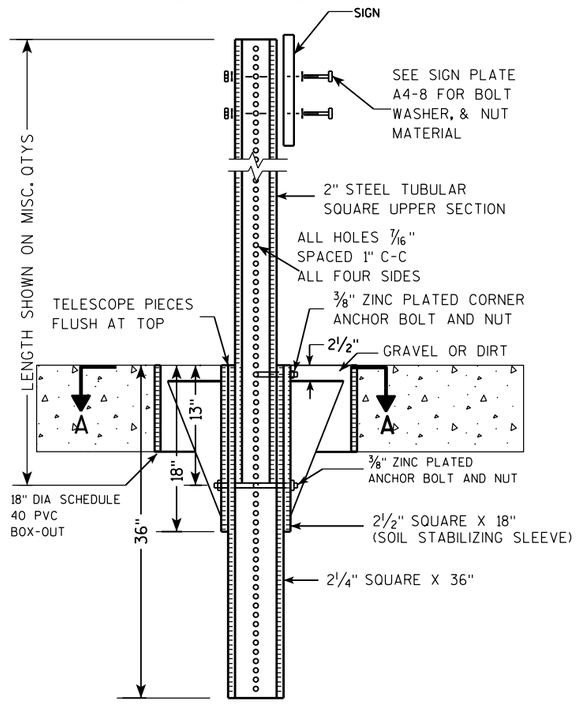
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



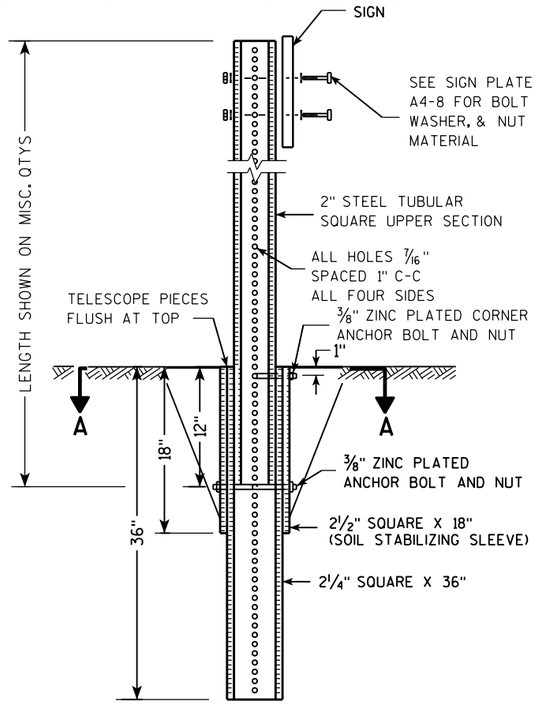
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

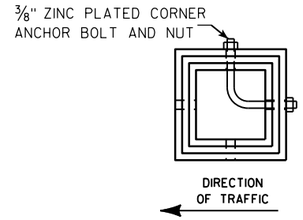


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

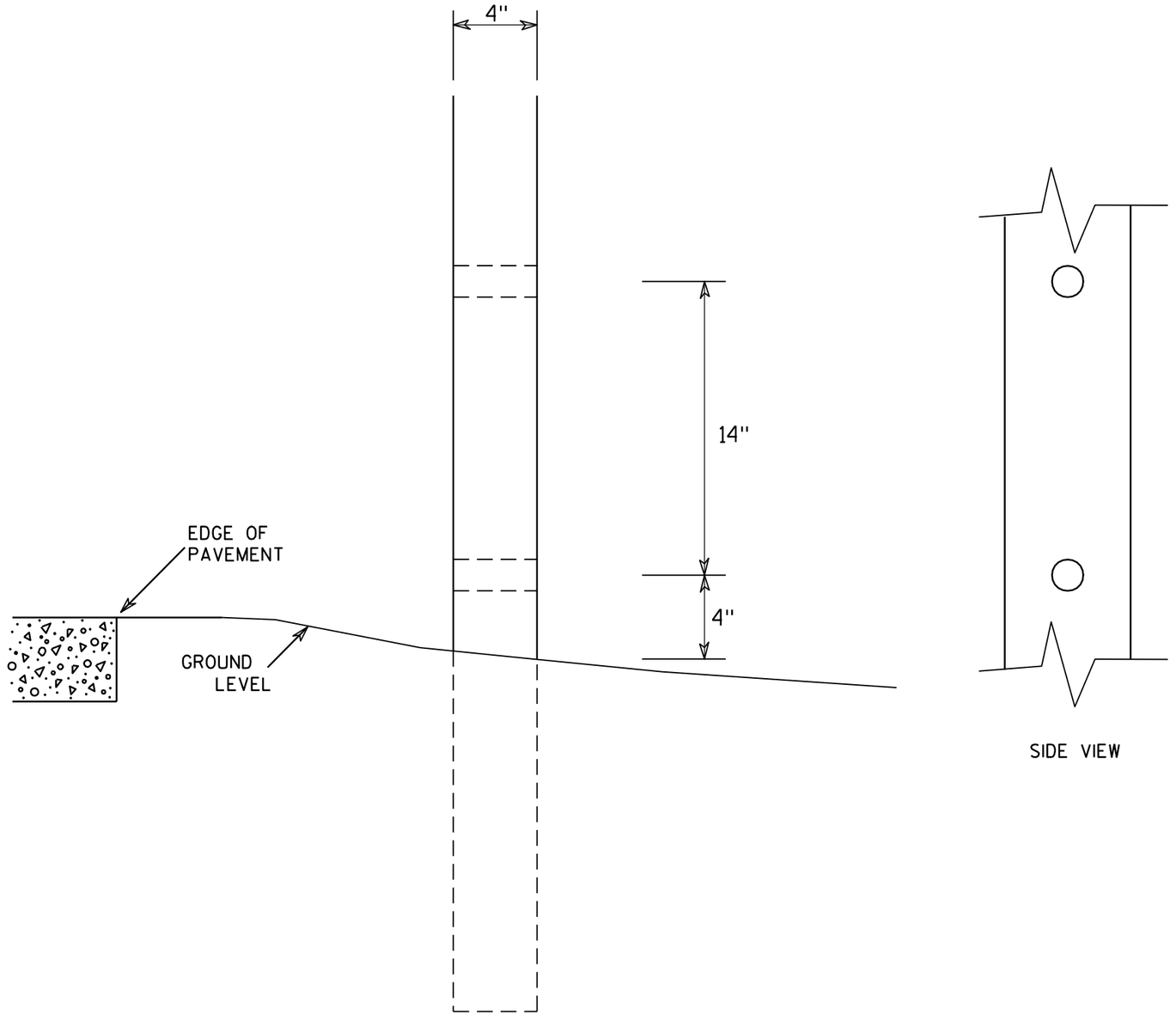
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 155 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

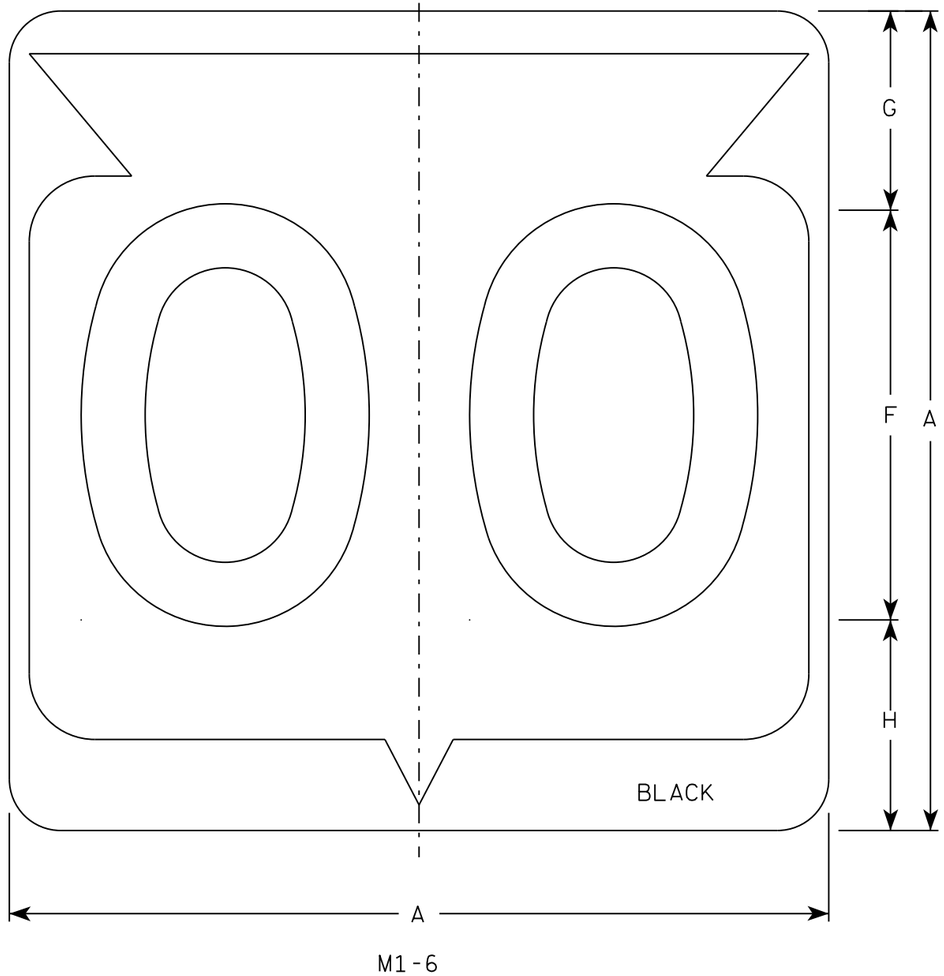
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

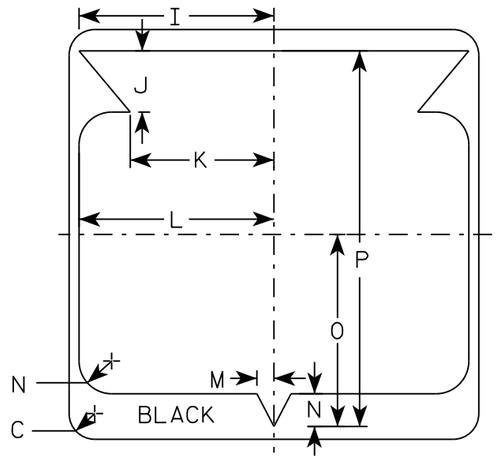
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 156	E



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

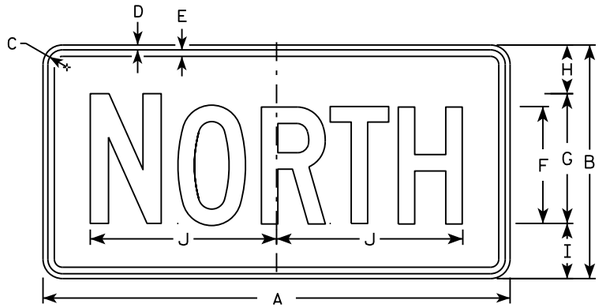
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

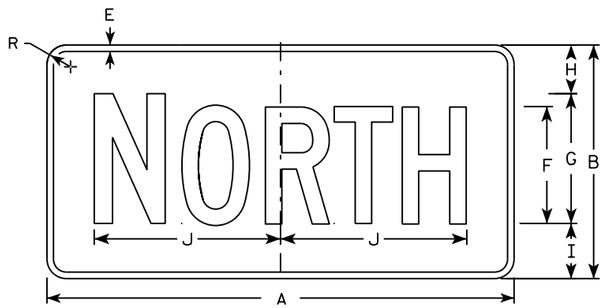
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 157 | E



M3-1
MM3-1
MP3-1



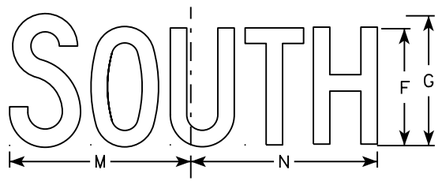
MB3-1
MK3-1
MN3-1



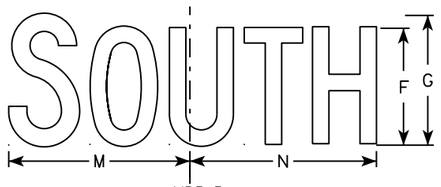
M3-2
MM3-2
MP3-2



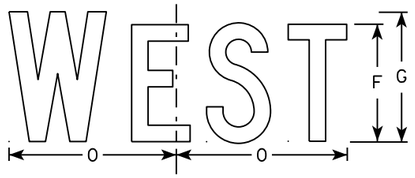
MB3-2
MK3-2
MN3-2



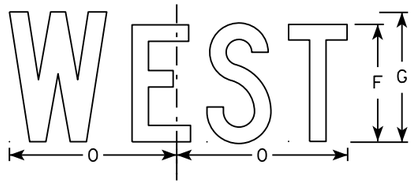
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

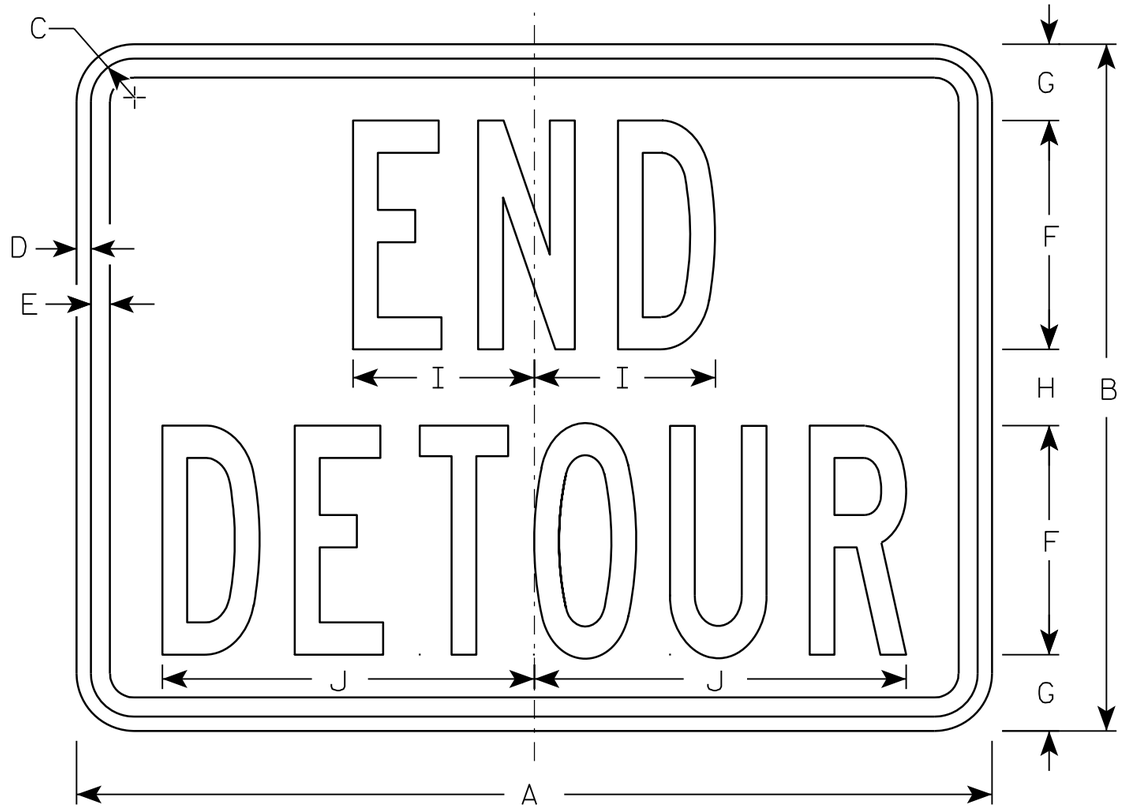
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-8A

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																											

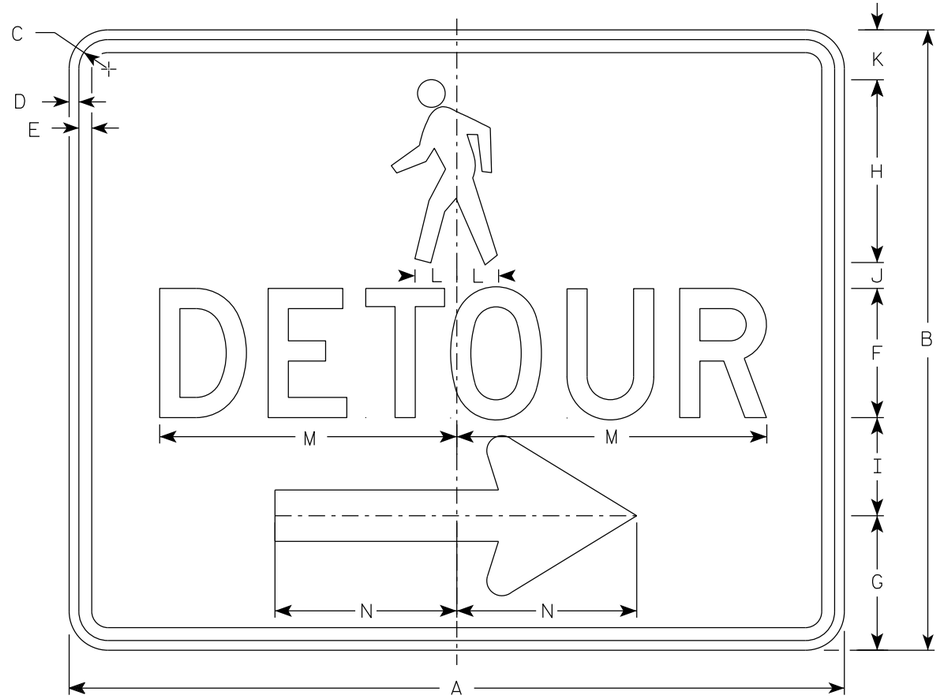
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

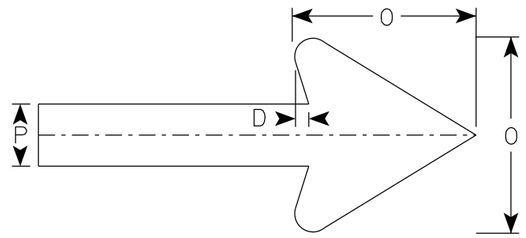
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR 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	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.00
3																											
4																											
5																											

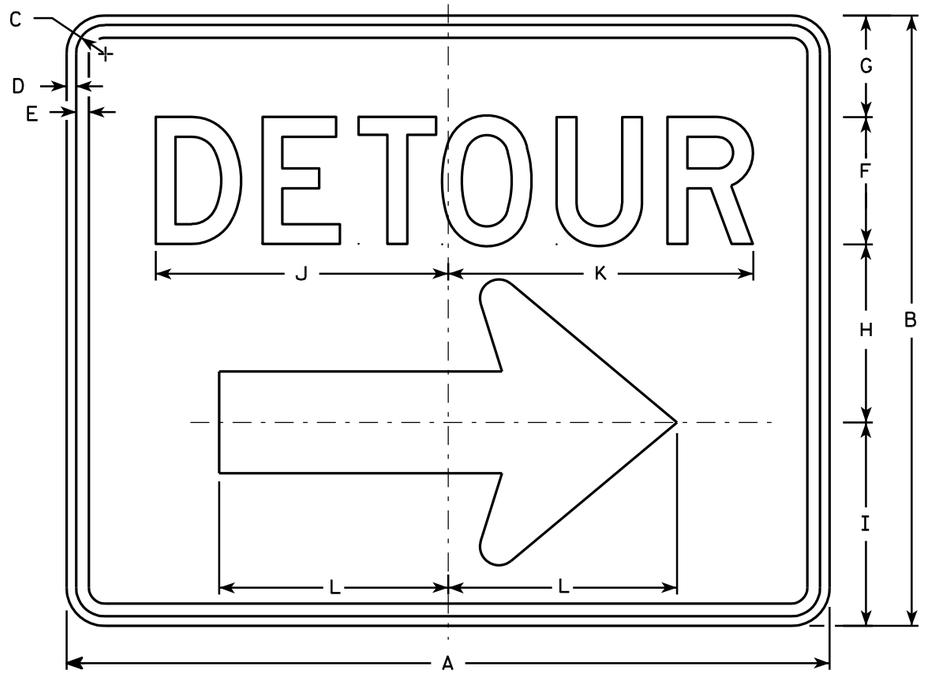
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

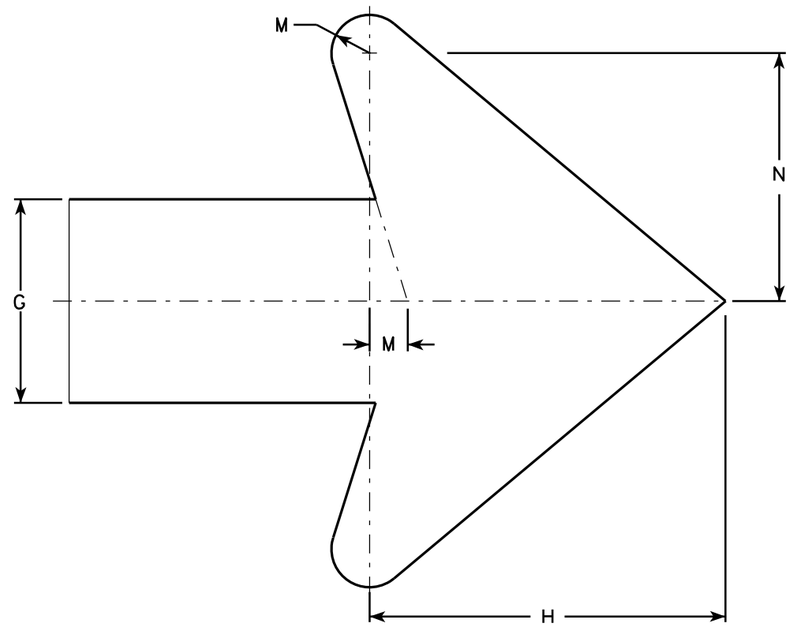
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 160 | E



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

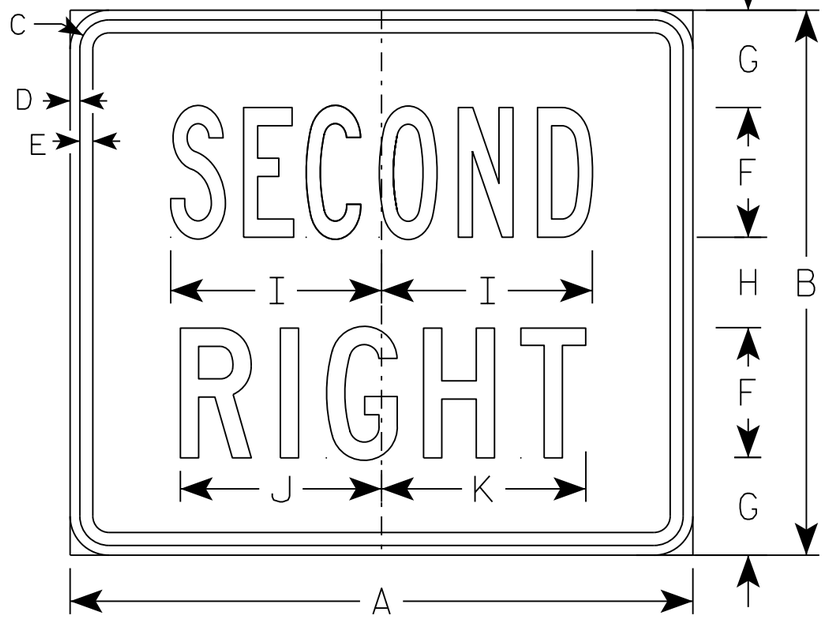
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

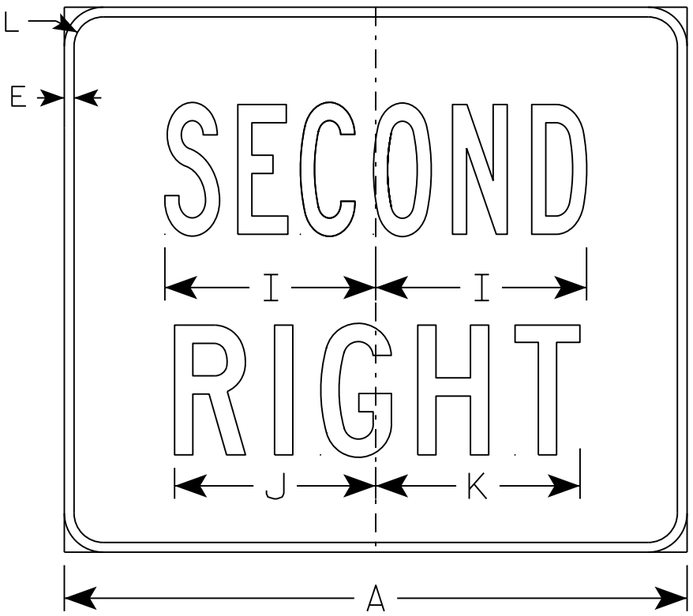
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

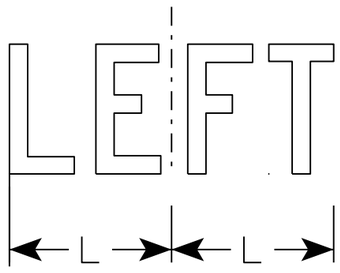
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 161 | E



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

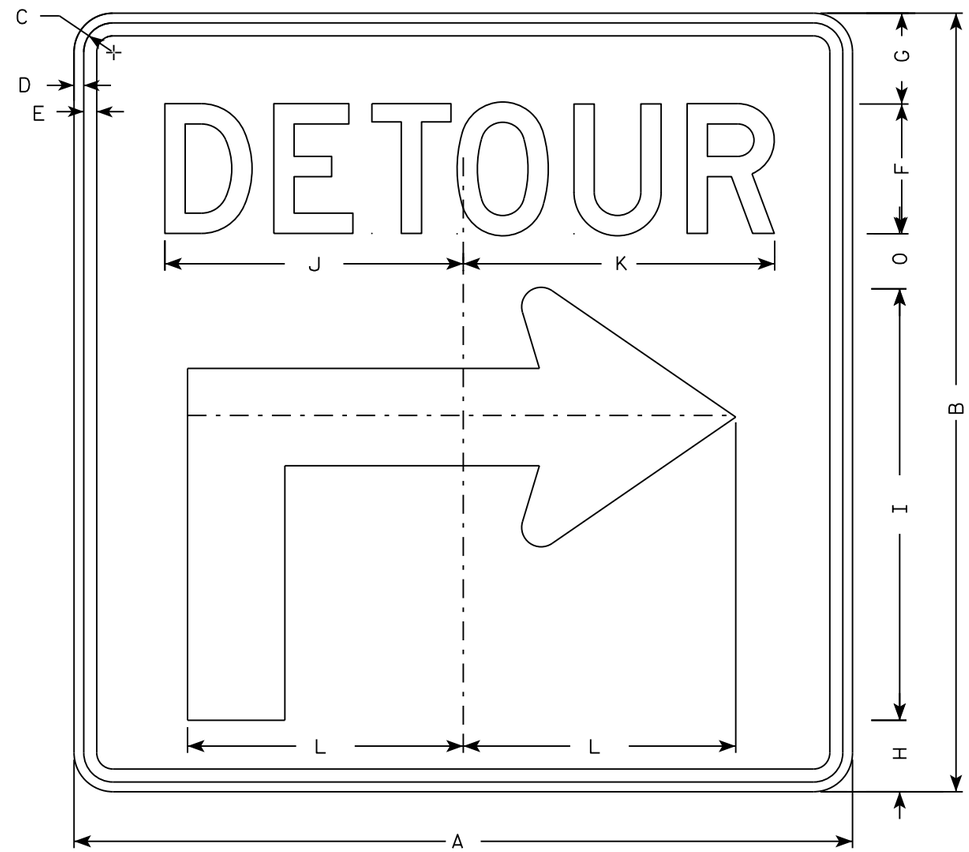
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M4-22.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

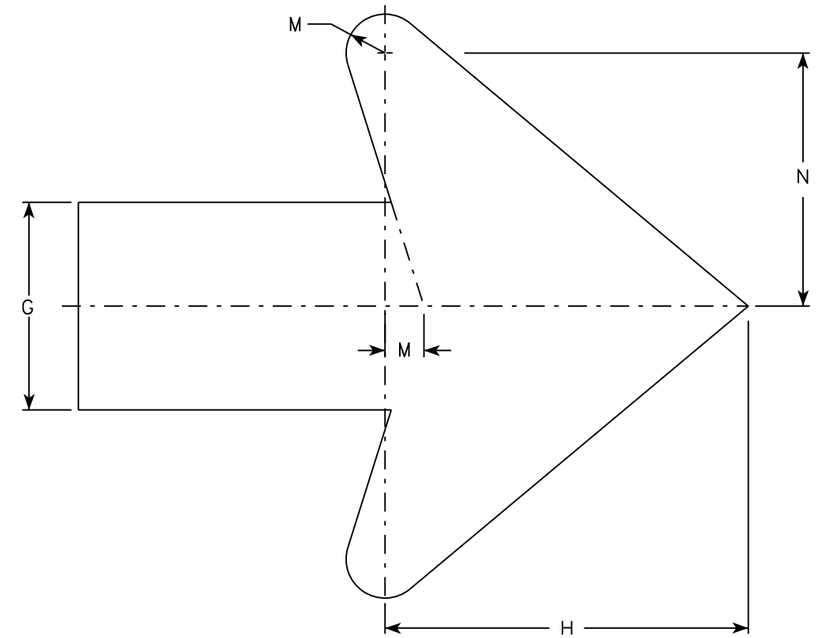
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M422.DGN PLOT DATE : 01-DEC-2015 18:04 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



M4-59R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown when base material is metal.
5. M4-59L is the same as M4-59R 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	30	1 1/8	3/8	1/2	5	3 1/2	2 3/4	16 5/8	11 1/2	12	10 1/2	3/4	4 7/8	2 1/8												6.25
3	30	30	1 1/8	3/8	1/2	5	3 1/2	2 3/4	16 5/8	11 1/2	12	10 1/2	3/4	4 7/8	2 1/8												6.25
4	48	48	1 3/8	1/2	5/8	8	5 5/8	4 3/8	26 5/8	20 5/8	20 1/2	17	1 1/8	6 7/8	3 3/8												16.0
5	48	48	1 3/8	1/2	5/8	8	5 5/8	4 3/8	26 5/8	20 5/8	20 1/2	17	1 1/8	6 7/8	3 3/8												16.0

STANDARD SIGN
M4-59 L&R

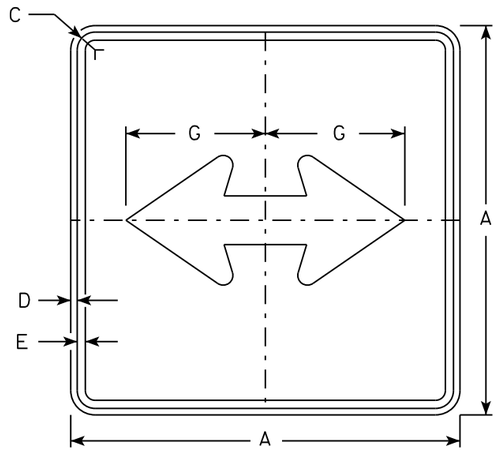
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

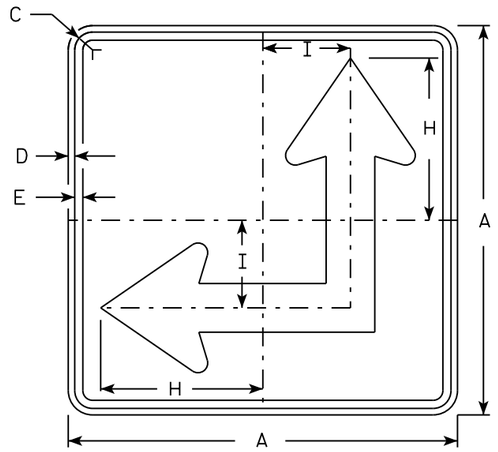
DATE 11/10/15 PLATE NO. M4-59.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M459.DGN PLOT DATE : 01-DEC-2015 18:05 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



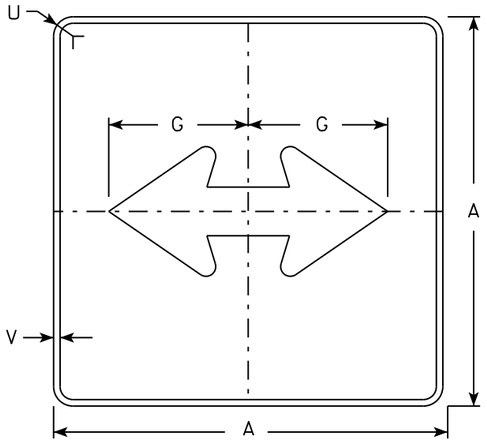
M6-4
MM6-4
MO6-4
MP6-4



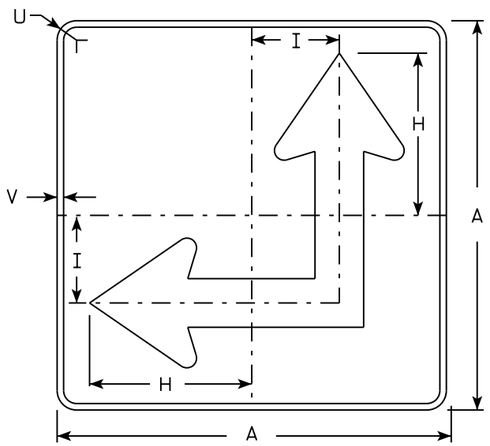
M6-6
MM6-6
MO6-6
MP6-6

NOTES

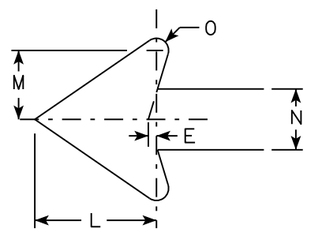
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



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	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

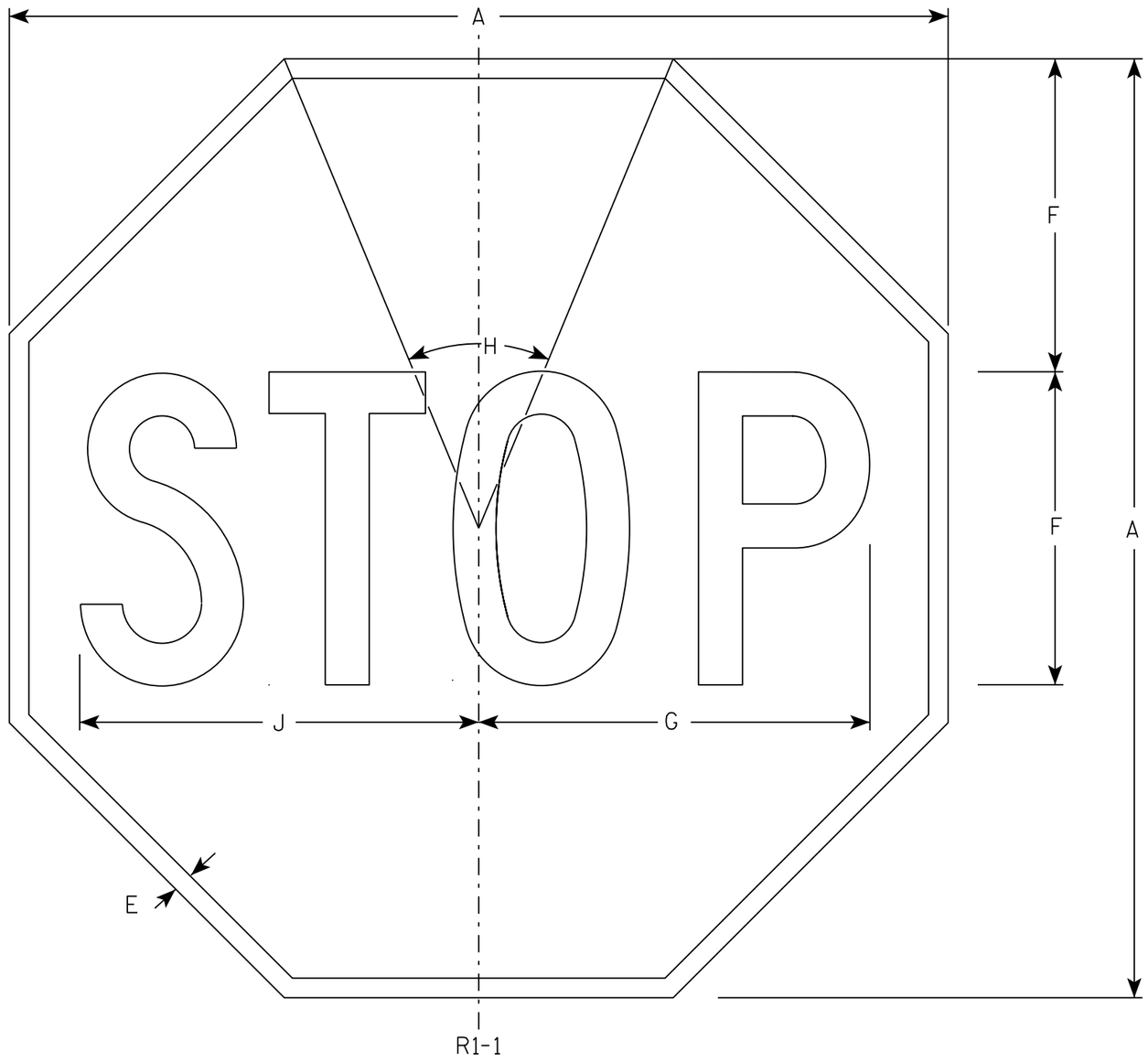
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 164 M6-4.10

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ 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

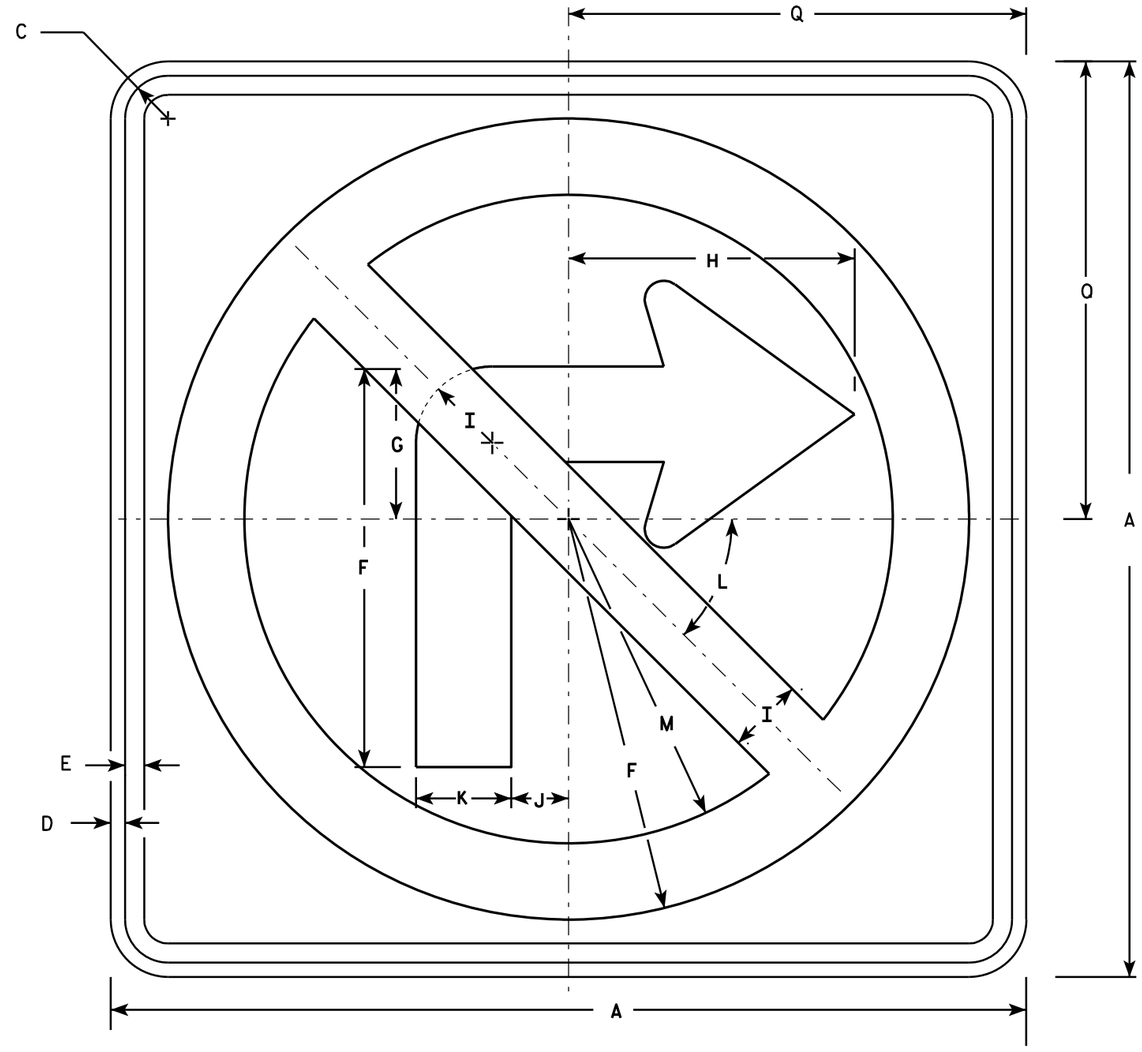
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

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

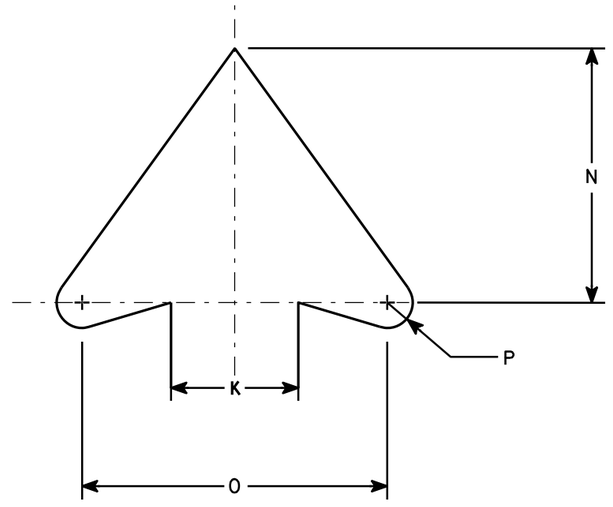
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 165	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

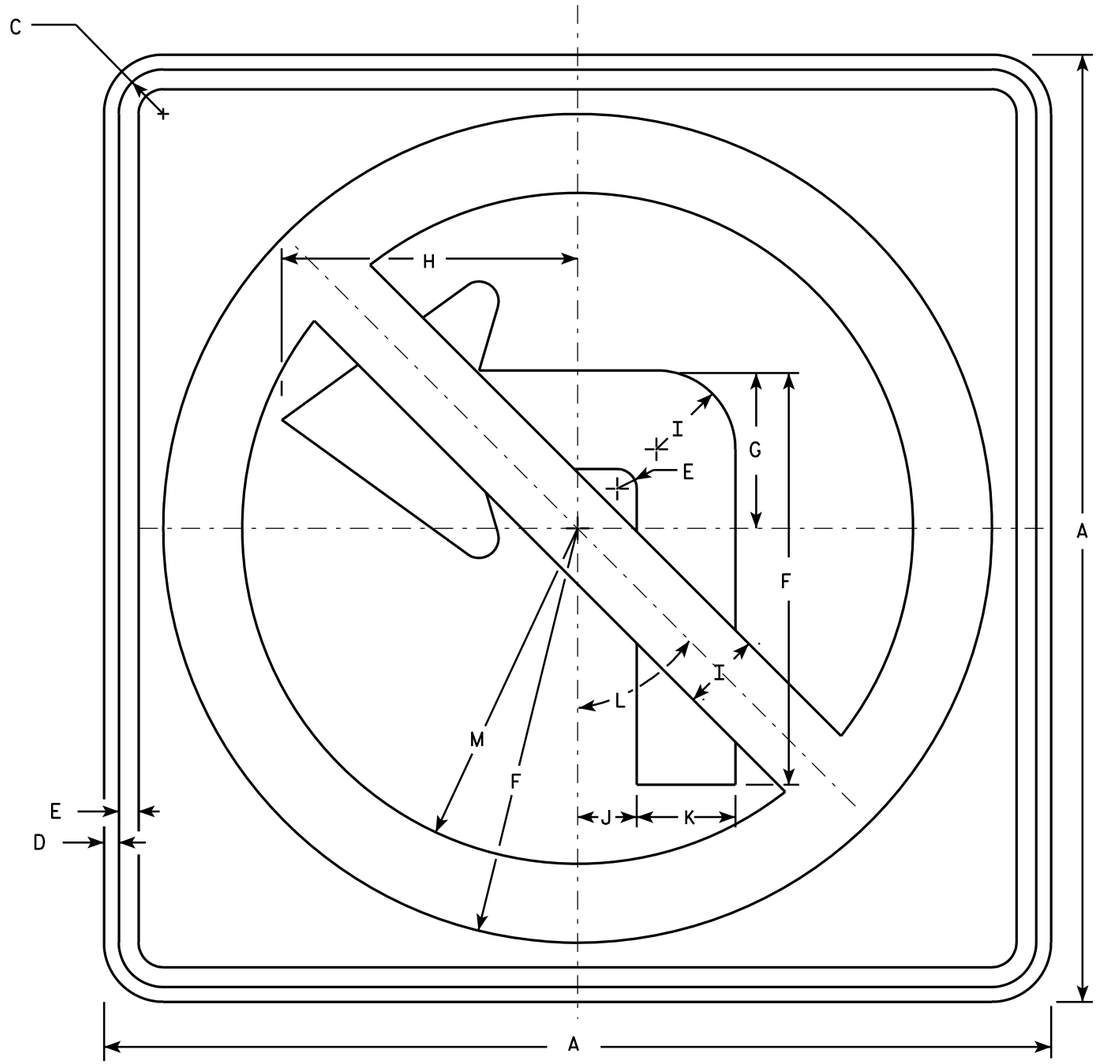
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

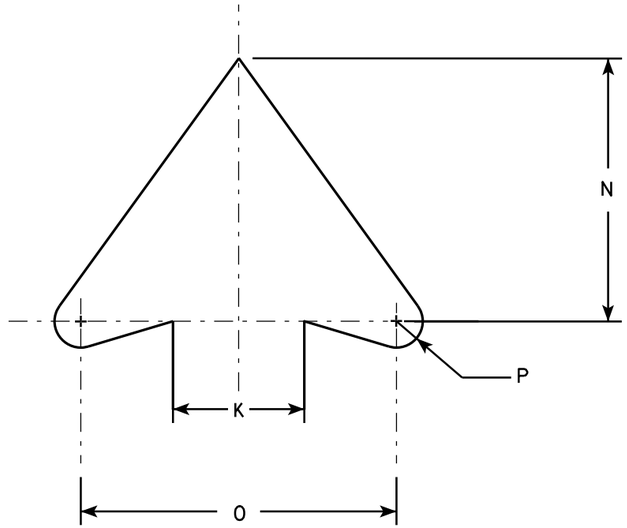
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

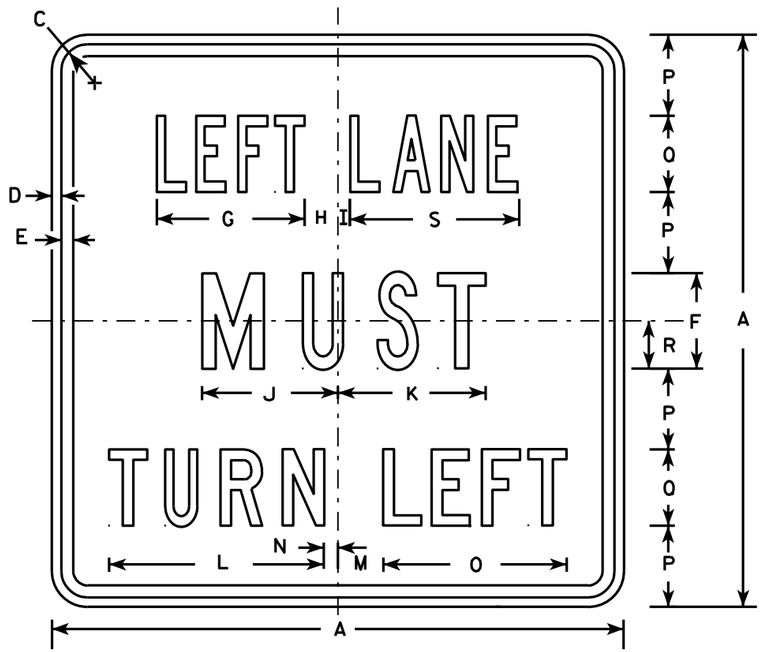
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

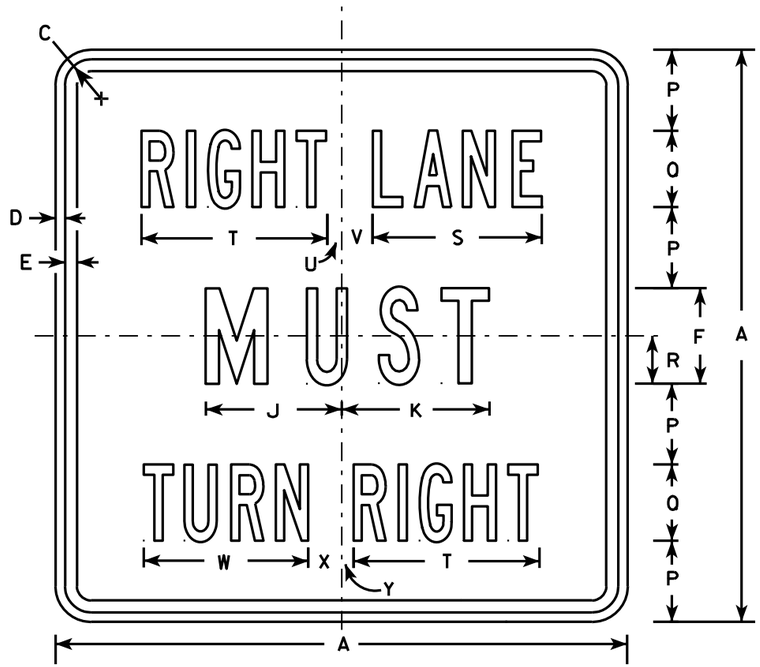
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 167	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																											

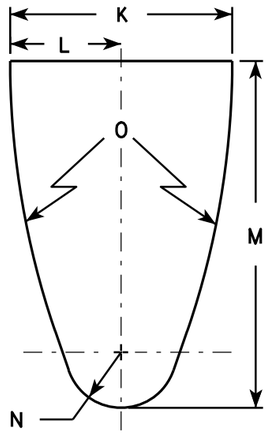
STANDARD SIGN
R3-7L & R3-7R

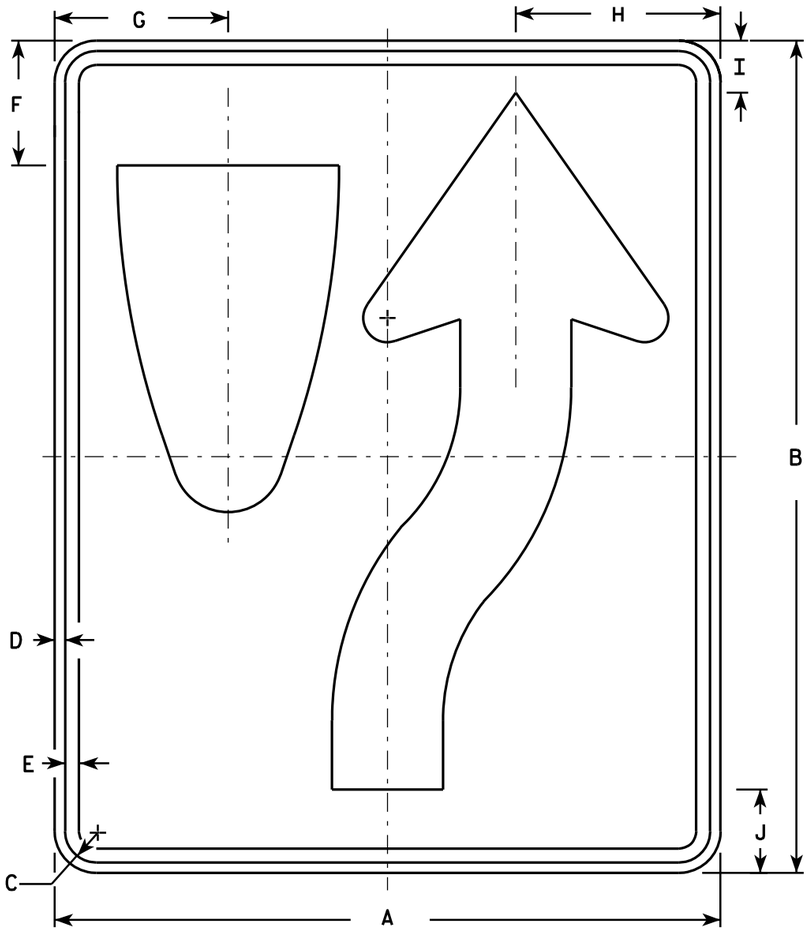
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E

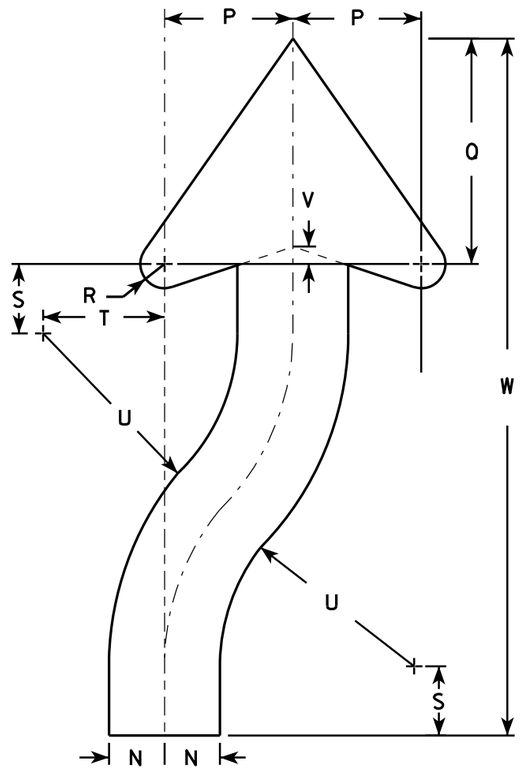




R4-7

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

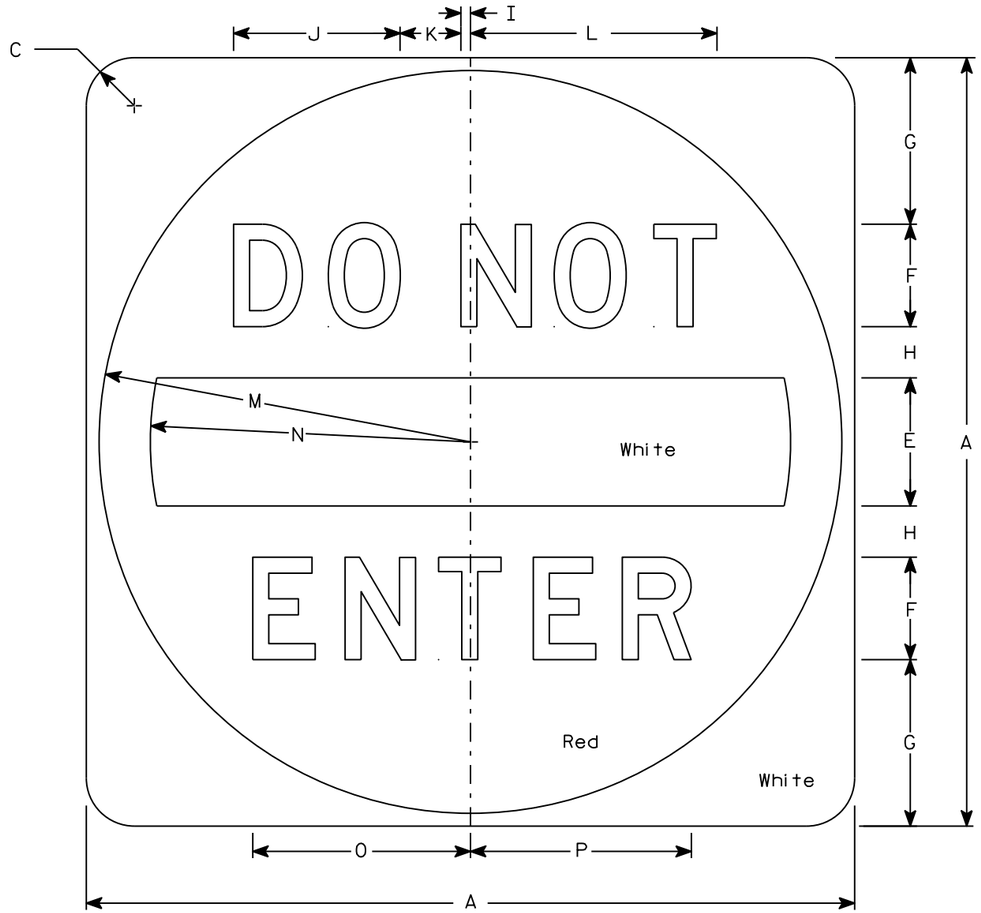
STANDARD SIGN
R4-7 & R4-8

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: 169	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

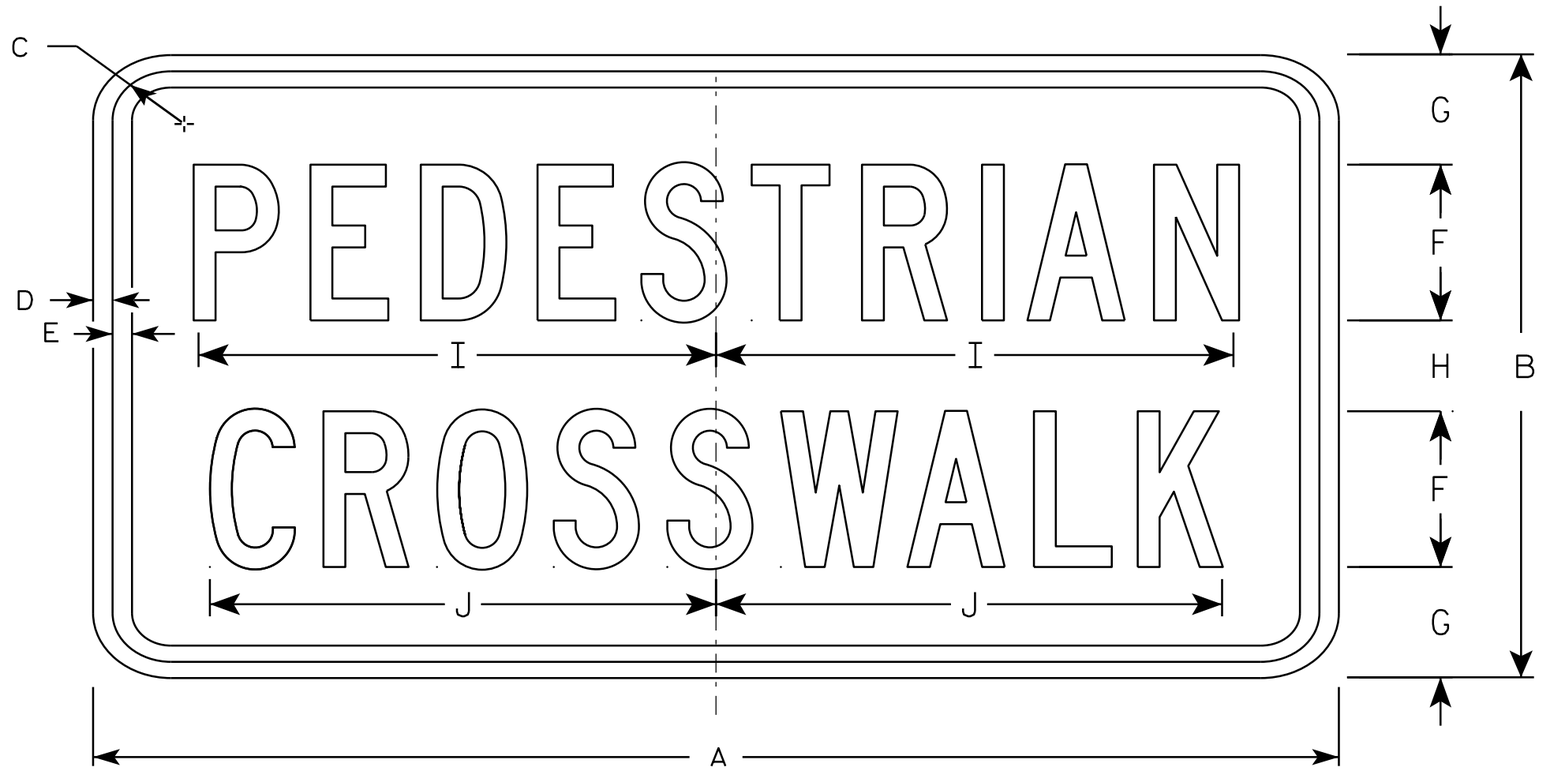
STANDARD SIGN
R5-1

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: 170 | E



R9-8

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 - 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																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	9 3/4																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	13	13																	3.75
4																											
5																											

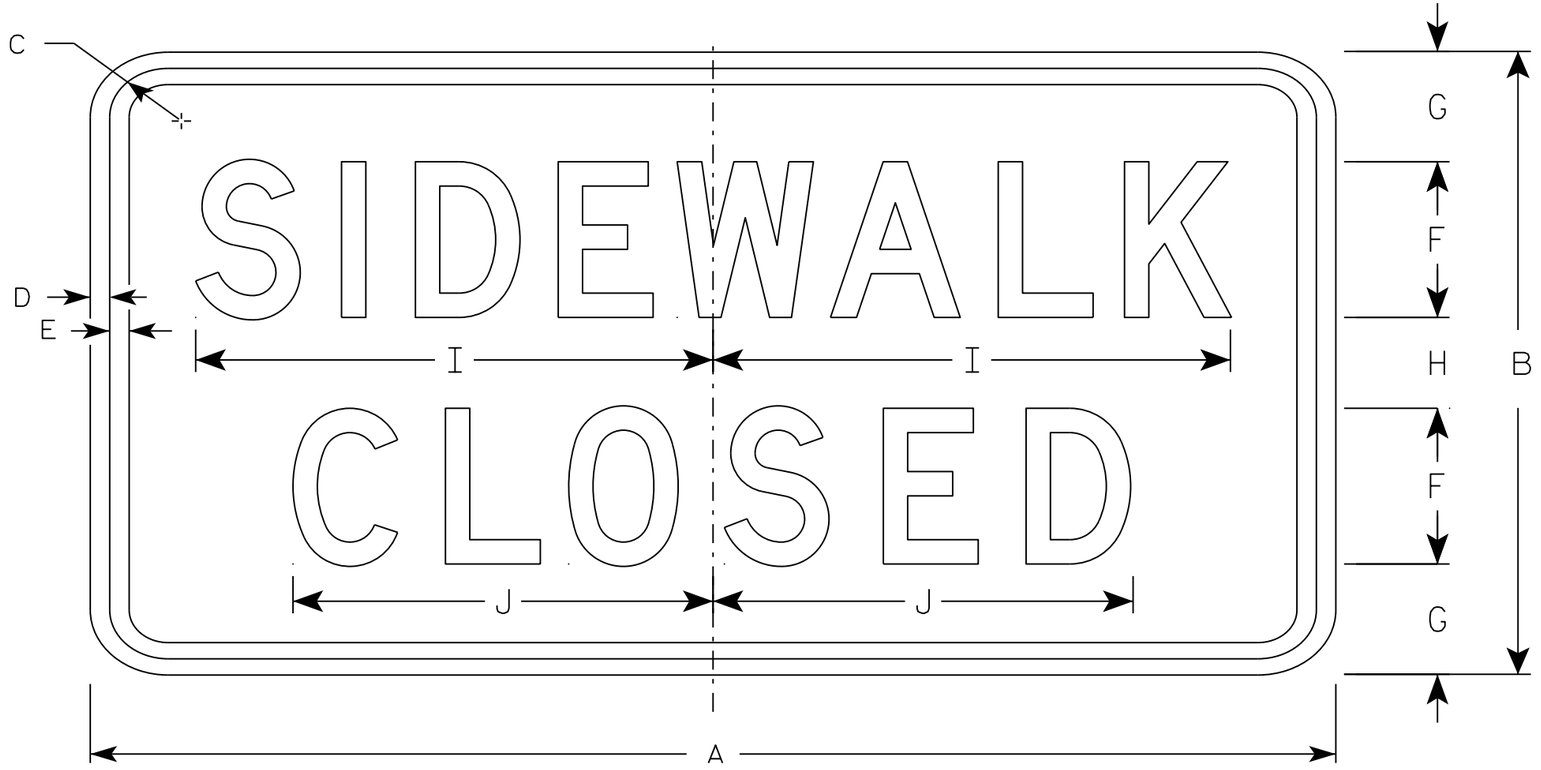
STANDARD SIGN
R9-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/16 PLATE 171 R9-8.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R9-9

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 - 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

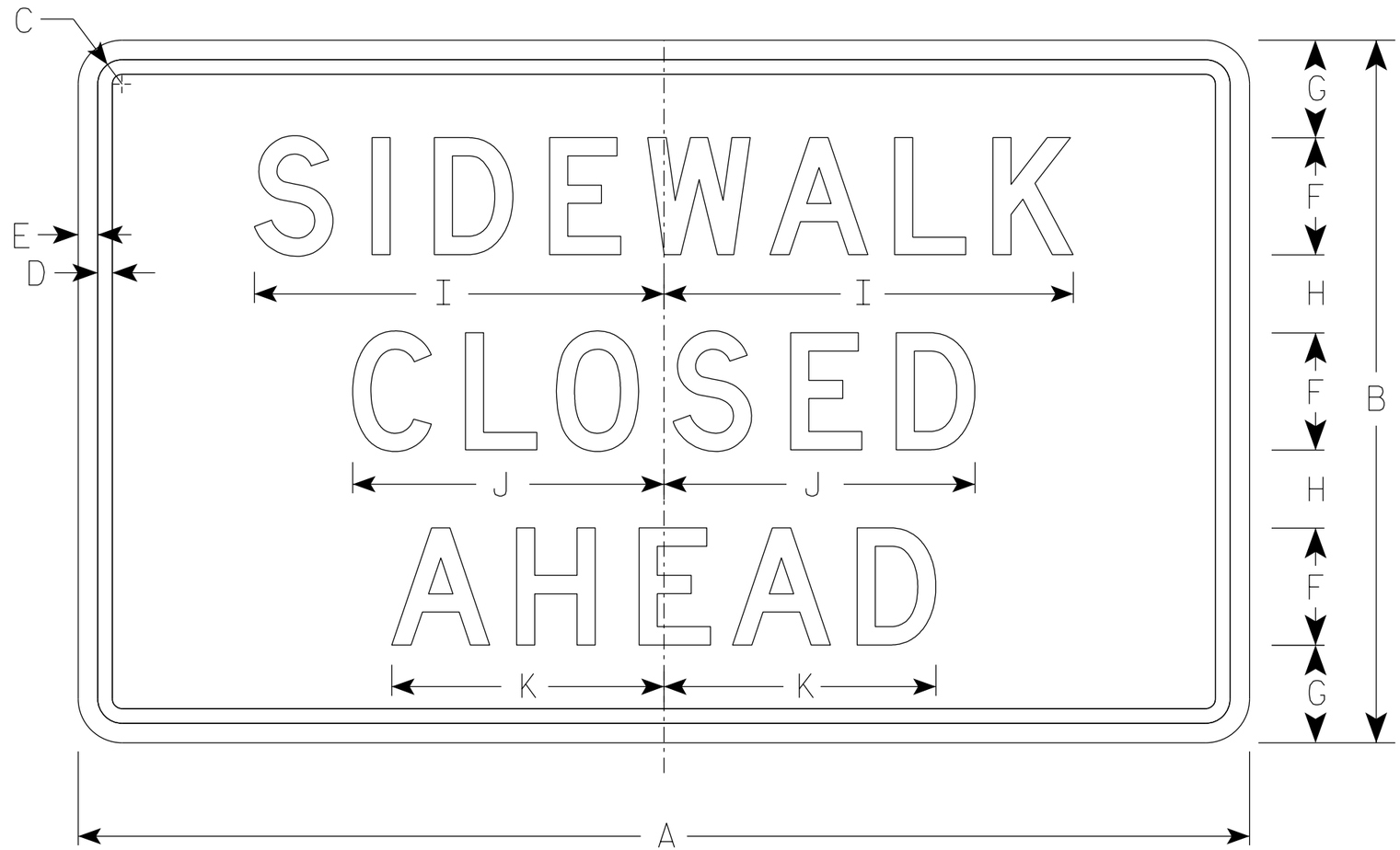
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 172 R9-9.6

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-9A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/8	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

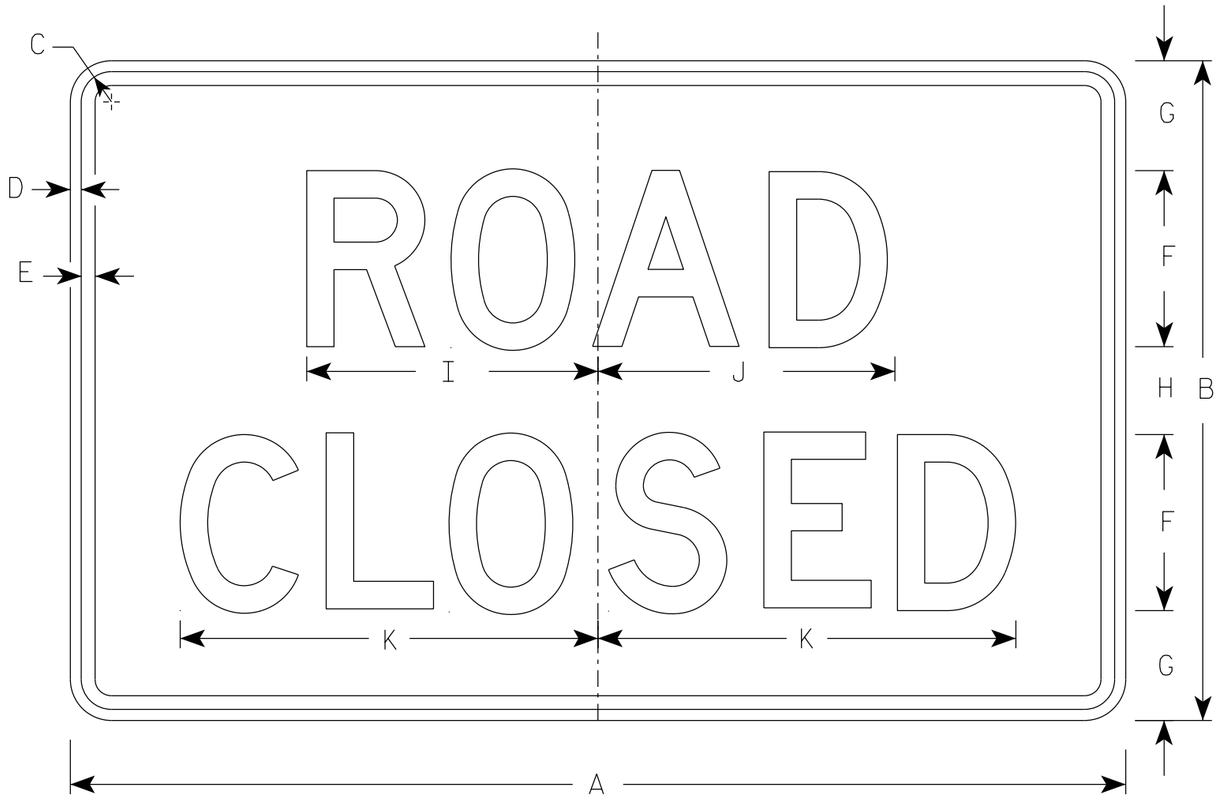
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/31/2020 PLATE NO. R9-9A.1

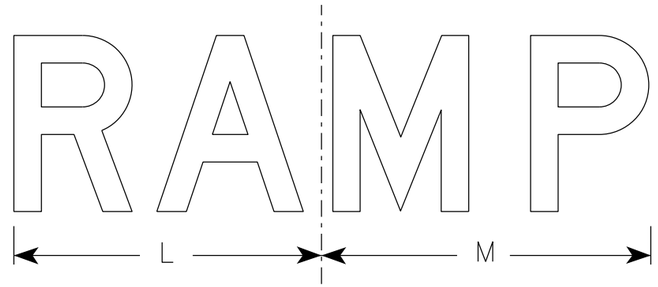
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 173 | E



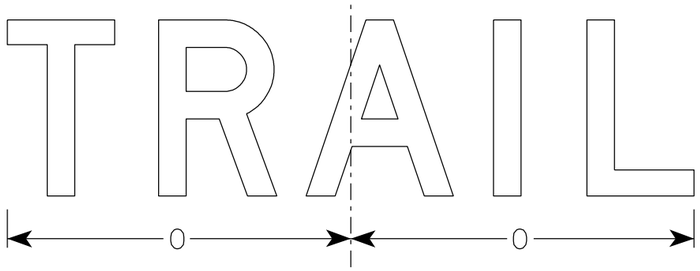
R11-2

NOTES

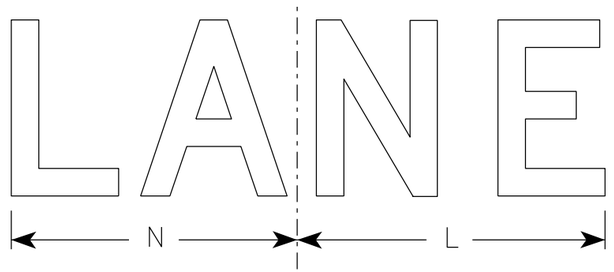
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

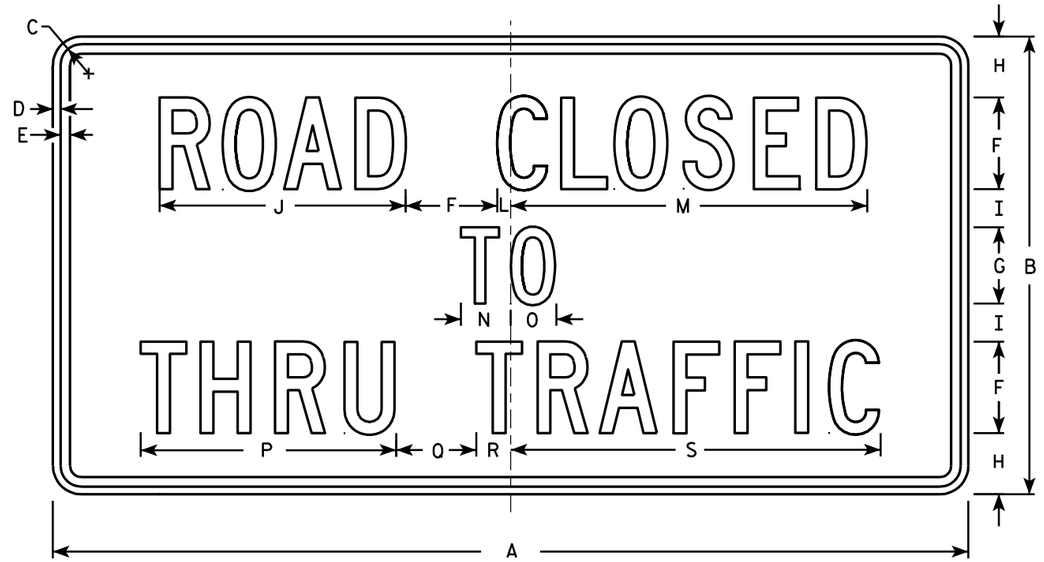
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 174	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

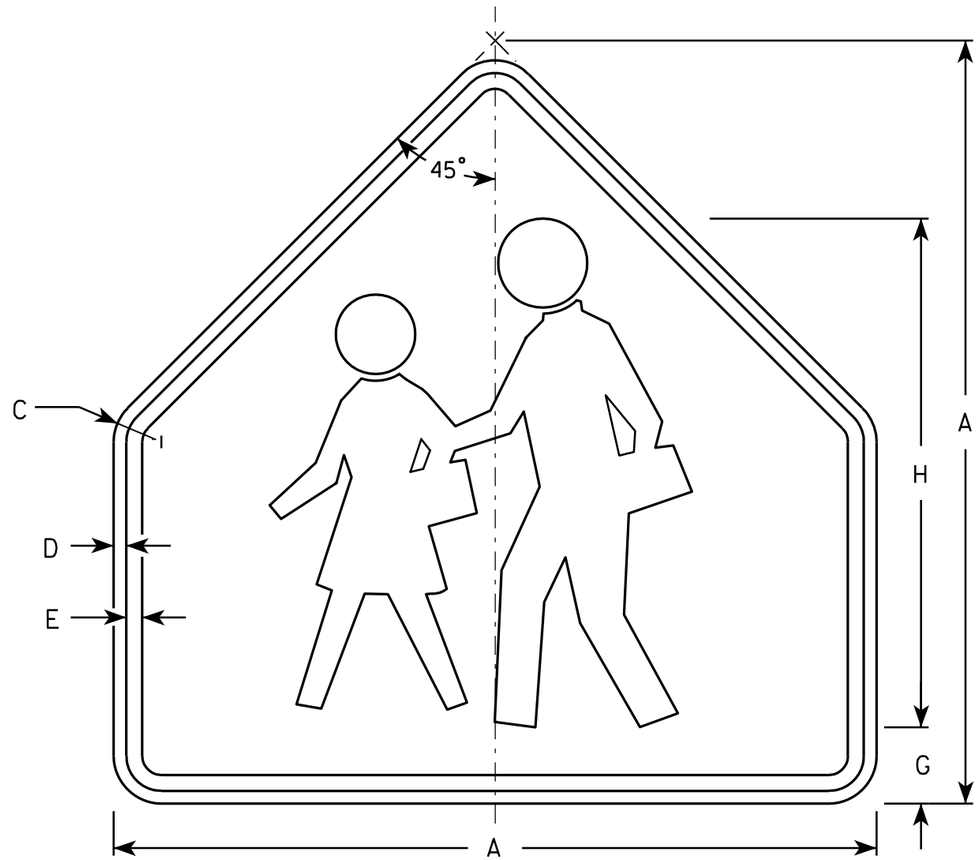
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 175 | E



S1-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow-Green
   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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

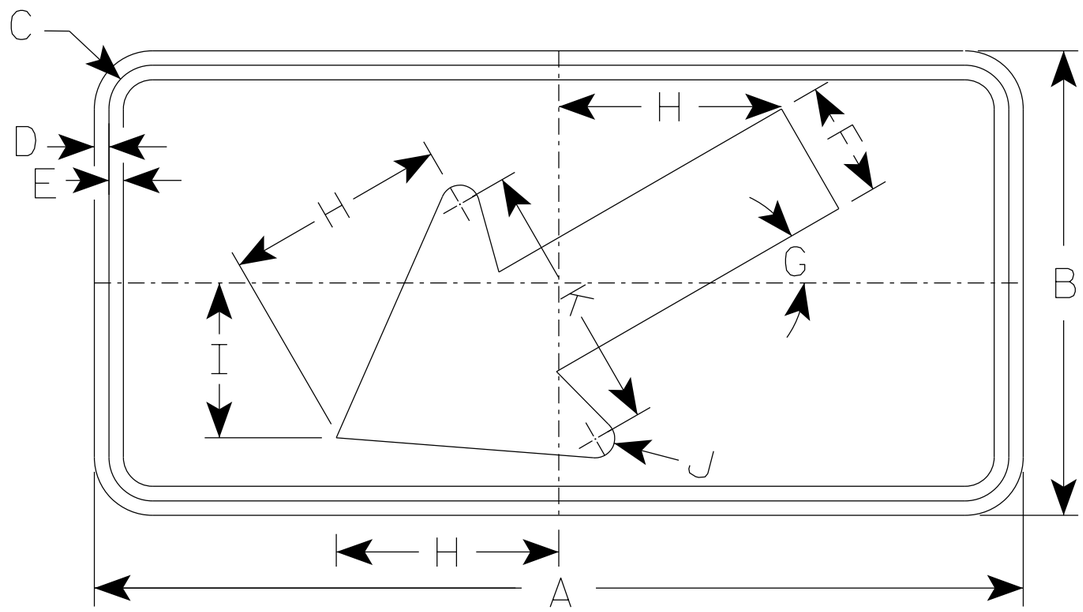
STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 176	E



S16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow-Green
   Message - Black
3. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

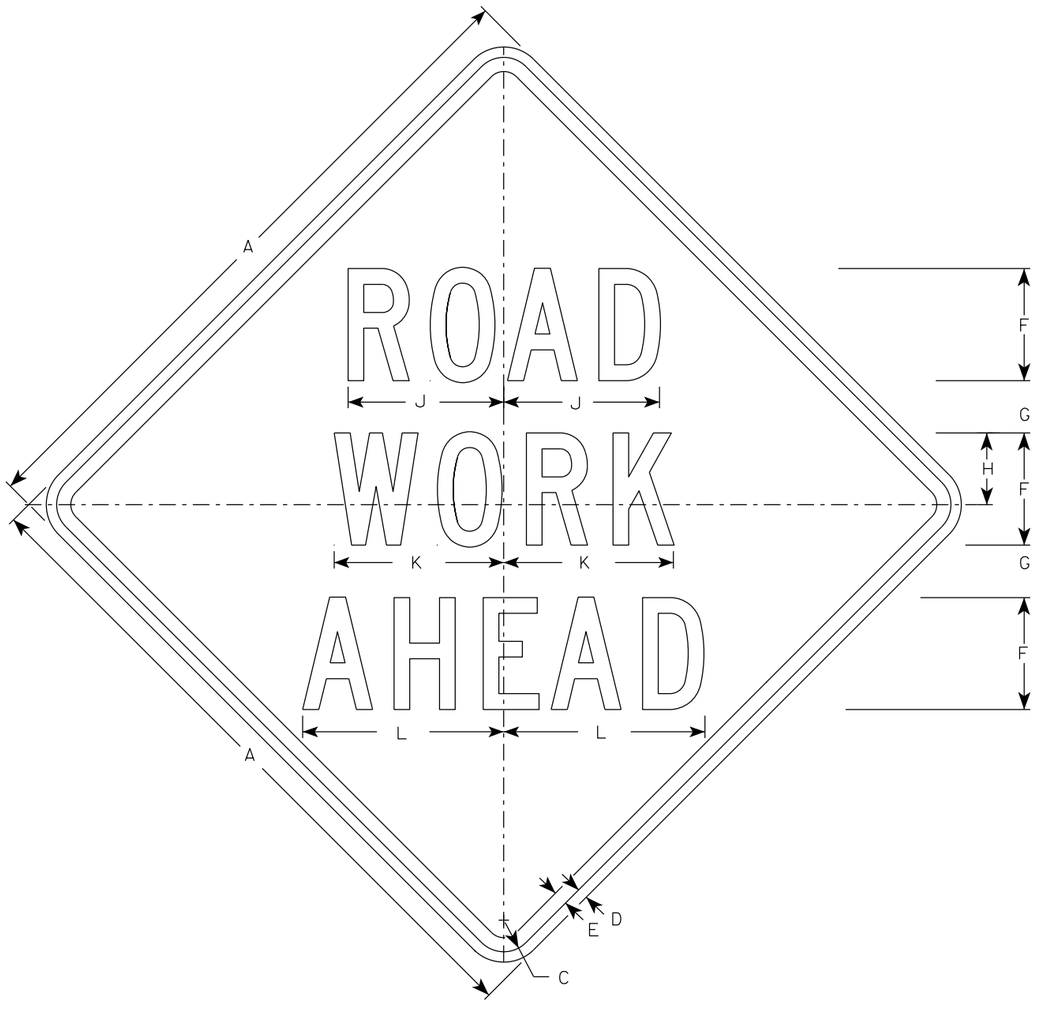
STANDARD SIGN
S16-7

WISCONSIN DEPT OF TRANSPORTATION

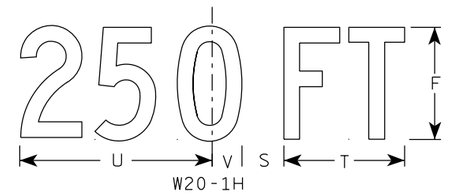
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. S16-7.2

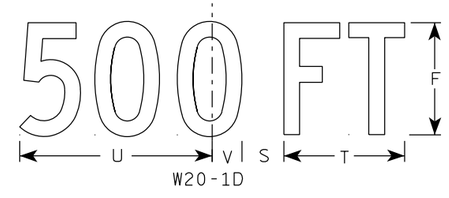
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 E



W20-1A



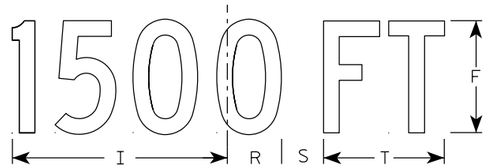
W20-1H



W20-1D



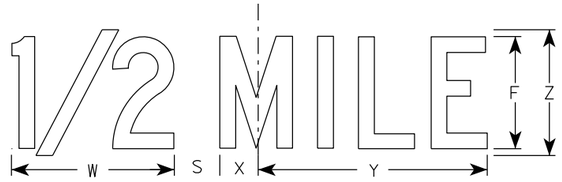
W20-1C



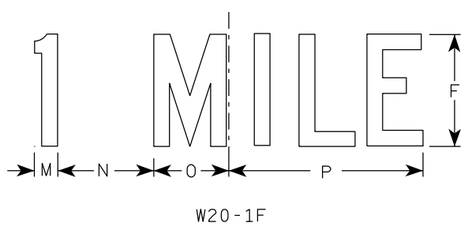
W20-1B

NOTES

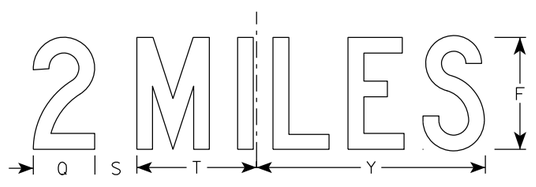
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

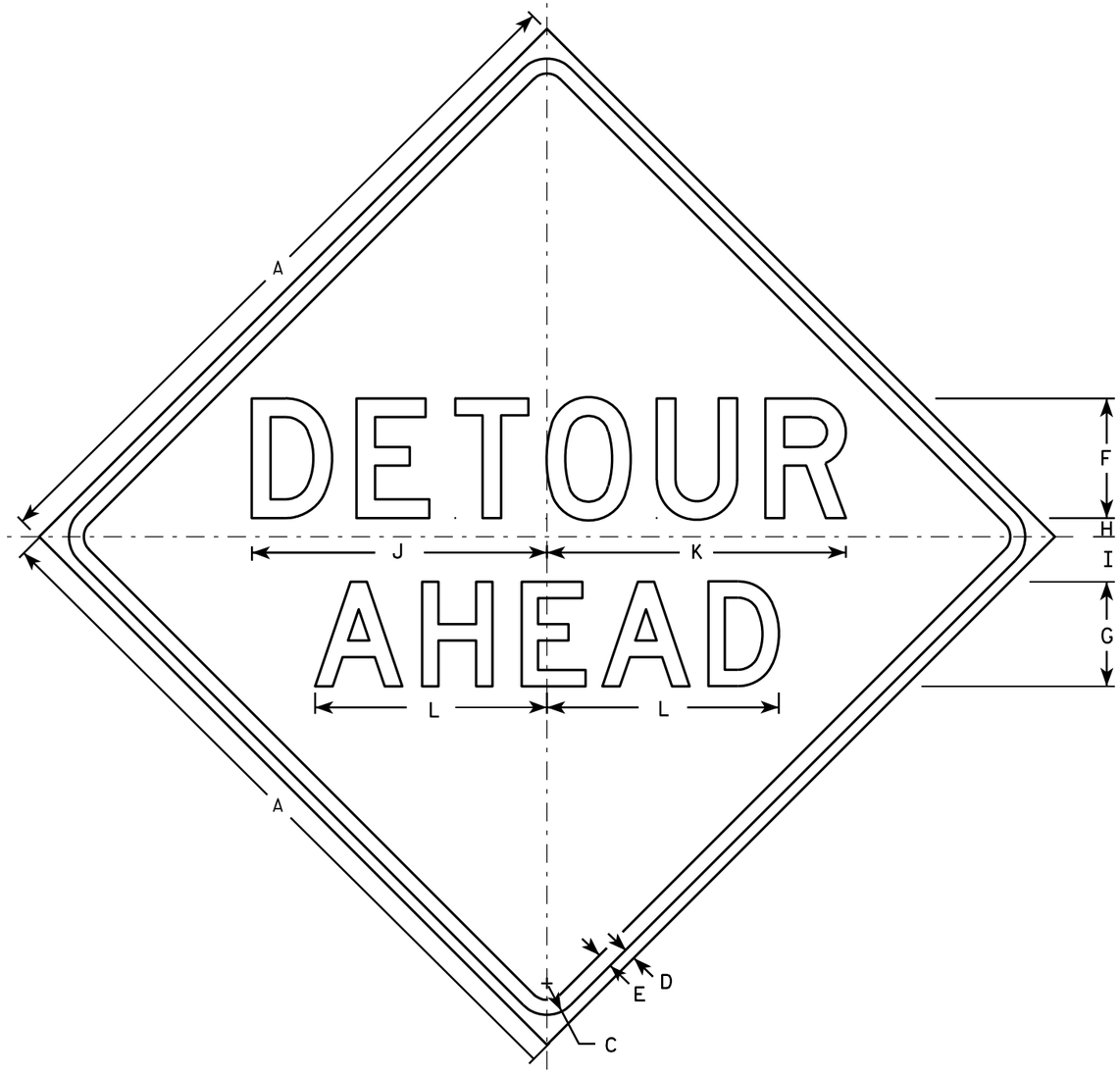
SHEET NO: E

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

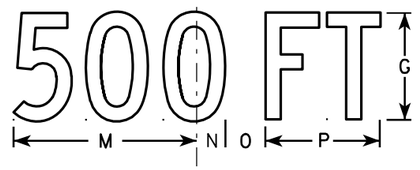
WISDOT/CADDS SHEET 42

7

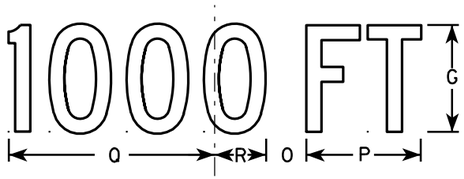
7



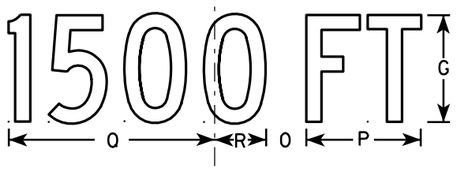
W20-2A



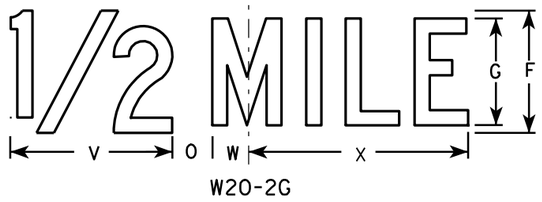
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

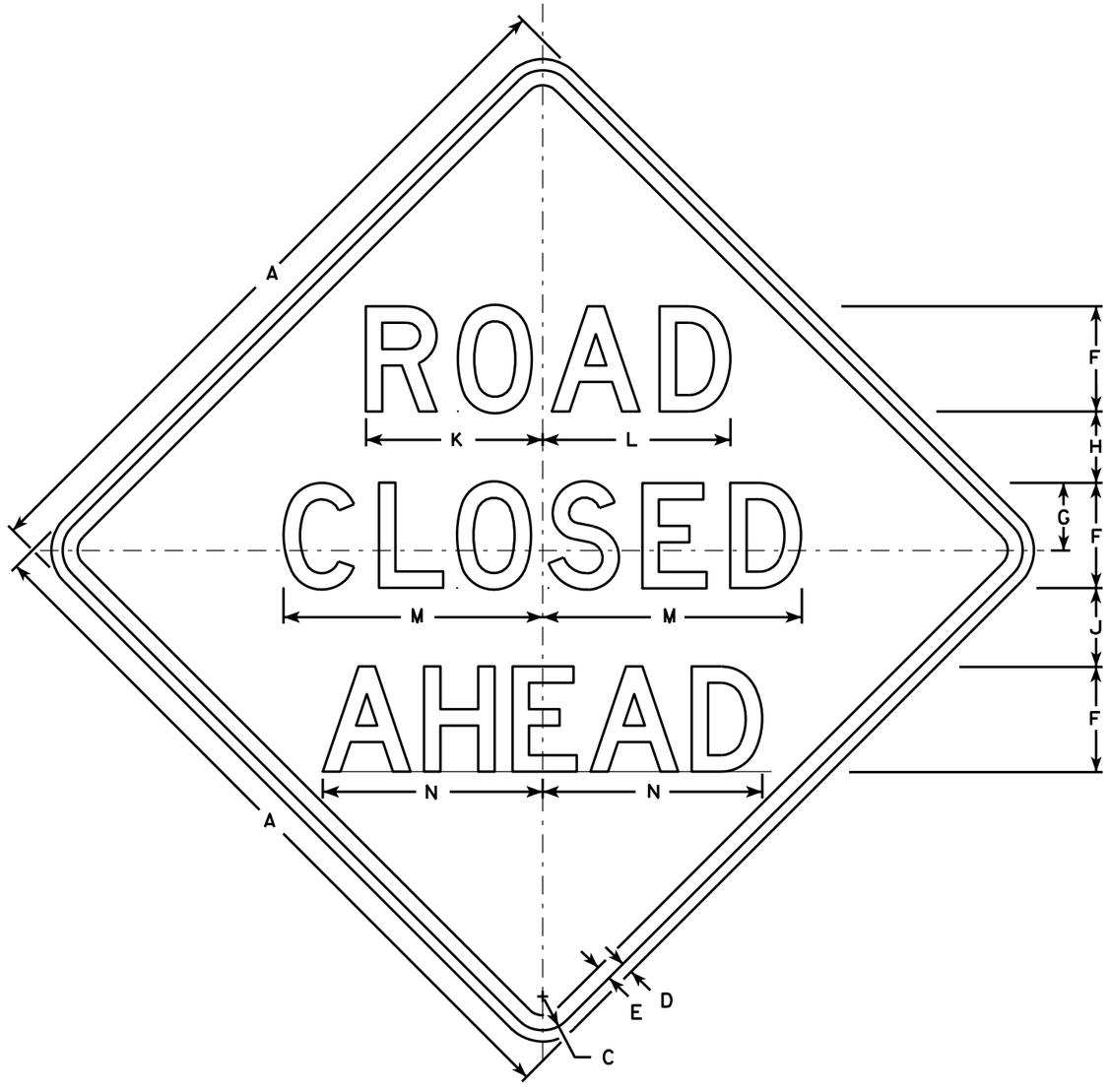
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

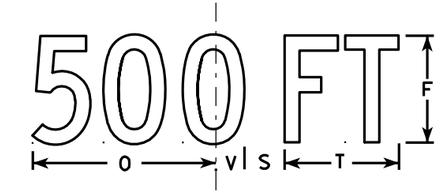
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E

7

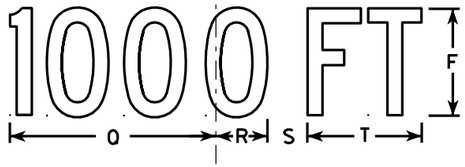
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



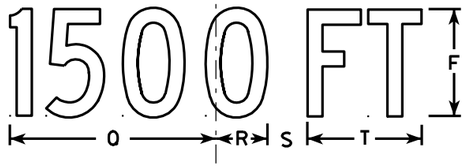
W20-3A



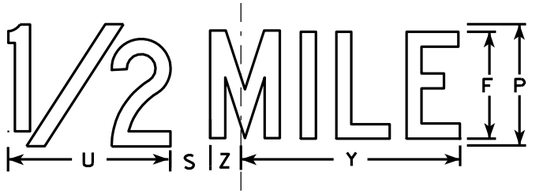
W20-3D



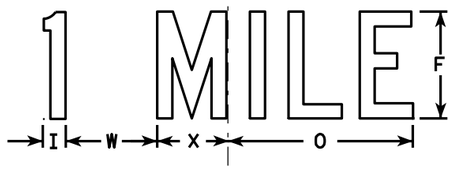
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

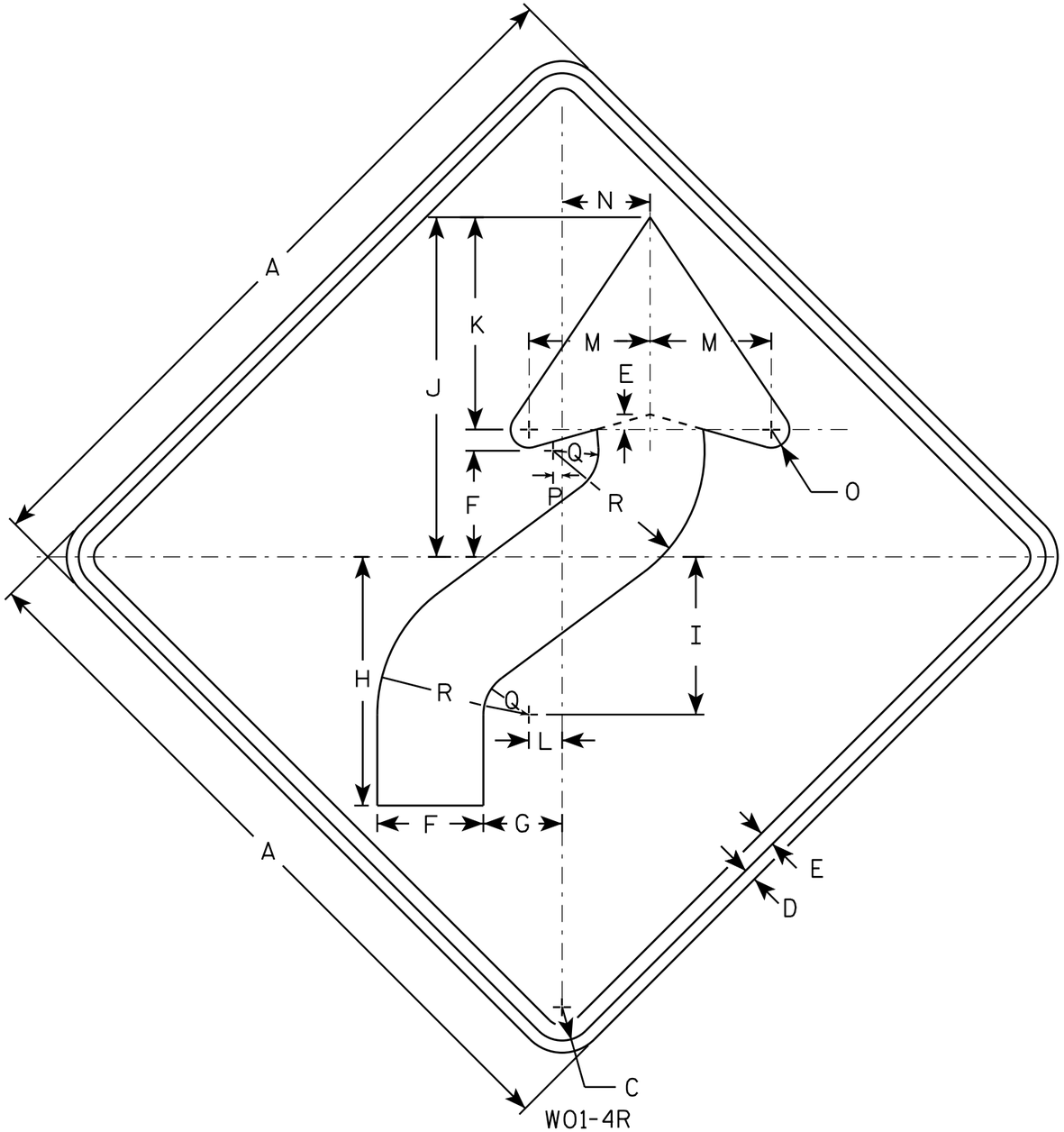
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 180 | E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

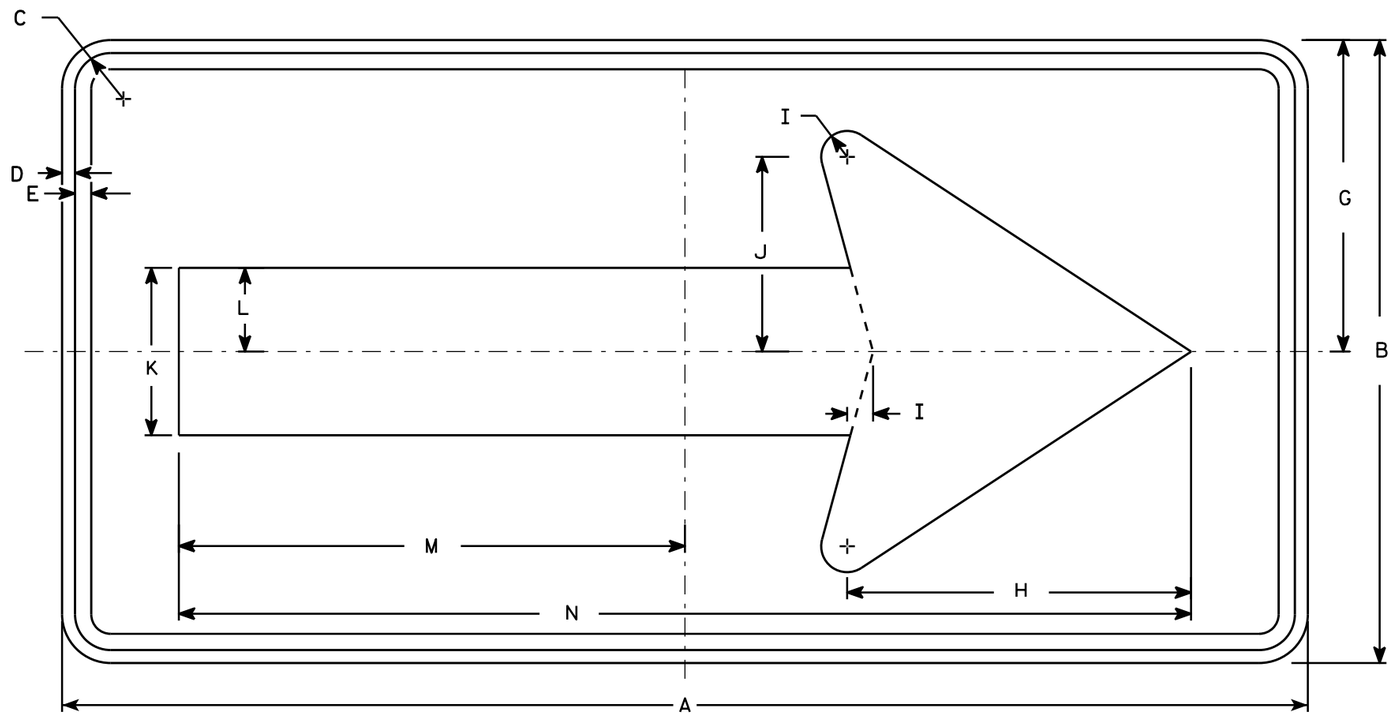
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov