WKE

SEPTEMBER 2022

PROJECT ID: **2340-10-70**

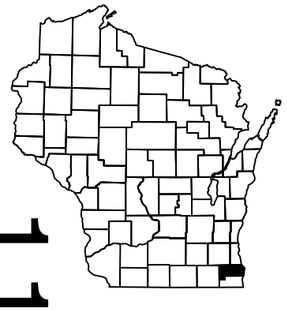
WITH: N/A

COUNTY: **RACINE**

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 = 418



DESIGN DESIGNATION			STH 20 (W OF CTH N)	STH 20 (E OF CTH N)	USH 45
A.A.D.T.	2023	=	5,250	7,200	3,500
A.A.D.T.	2043	=	5,600	8,200	3,900
D.H.V.		=	650	950	405
D.D.		=	59/41	59/41	60/40
T.		=	18.5%	18.5%	21.4%
DESIGN SPEED		=	45/55 MPH	50 MPH	50 MPH
ESALS		=	1,900,000	1,900,000	7,500,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WASHINGTON AVE, TOWN DOVER

STH 36 TO SB USH 45

STH 20

RACINE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2340-10-70	WISC 2022512	1

STATE PROJECT NUMBER

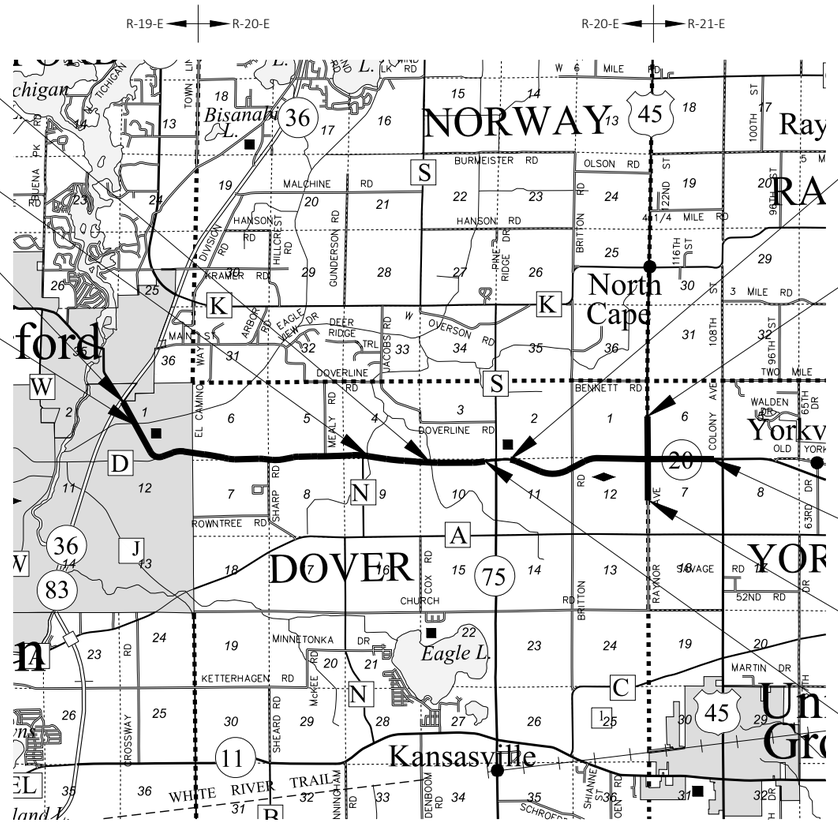
2340-10-70

STRUCTURE C-51-020
STA 241+90'A'

STRUCTURE C-51-047
STA 196+53'A'

BEGIN PROJECT
STA 3+39'A'

STRUCTURE B-51-073
STA 20+50'A'



BEGIN CONSTRUCTION
STA 295+12'A'

END CONSTRUCTION
STA 54+55'R'

END PROJECT
STA 441+48'A'

BEGIN CONSTRUCTION
STA 45+20'R'

END CONSTRUCTION
STA 276+39'A'

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.94 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, RACINE 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), GEOID 12A-WI.

ORIGINAL PLANS PREPARED BY

CORRE ENGINEERING

MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH| WITTENBERG

WISCONSIN
JESSICA D. LEWIS
E-37589
Lake Geneva, WI
PROFESSIONAL ENGINEER

DATE: 1/26/22 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CORRE, INC.
Designer	CORRE INC.
Project Manager	JULIE JENKS
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	JANET CANNON

APPROVED FOR THE DEPARTMENT

DATE: 1/26/2022 (Signature)

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\010101-TI.DWG PLOT DATE : 1/25/2022 11:49 AM PLOT BY : TOM ORNER PLOT NAME :

2

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

CURVE DATA IS BASED ON THE ARC DEFINITION.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED/TOPSOILED, FERTILIZED, AND EROSION MATTED. FINISHED SEEDED SURFACE SHALL BE 1-INCH BELOW THE TOP OF ADJACENT CONCRETE.

BEARINGS SHOWN ON THE PLANS ARE GROUND BEARINGS TO THE NEAREST SECOND.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FLOWLINE OF GRATE.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON.

WISDOT MONUMENTS WILL BE SUPPLIED BY THE STATE AND INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

EXISTING PIPE CULVERT AND/OR CONCRETE BOX CULVERT SIZES SHOWN ARE APPROXIMATE AND THE CONTRACTOR SHALL BASE ITS BID ON ACTUAL FIELD CONDITIONS.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS, EXACT LOCATIONS WILL BE APPROVED BY THE ENGINEER IN THE FIELD.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO REMOVALS.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE RACINE COUNTY SURVEYOR (SEWRPC) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY SECTION CORNER MONUMENT.

TRAFFIC CONTROL ITEMS AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS, EXACT LOCATIONS WILL BE APPROVED BY THE ENGINEER IN THE FIELD.

HMA PAVEMENT:
4" - 1 3/4" 4 MT 58-28 S UPPER LAYER
2 1/4" 3 MT 58-28 S LOWER LAYER

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
INTERSECTION/ ROUNDABOUT DETAILS
PLAN DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER PLAN
SIGNING PLAN
LIGHTING PLAN
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING PLAN
DETOUR PLAN
ALIGNMENT PLANS

UTILITY CONTACTS

GAS / PETROLEUM
ANR PIPELINE CO.
TODD BRISTER
W3925 PIPELINE LANE
EDEN, WI 53019
PHONE: (920) 477-2235
EMAIL: TODD_BRISTER@TCENERGY.COM

COMMUNICATION LINE
EVERSTREAM
SHAD GARCIA
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE : (414) 522-6685
EMAIL: SGARCIA@EVERSTREAM.NET

COMMUNICATION LINE
TDS METROCOM LLC
DAVE HUWE
525 JUNCTION RD
MADISON, WI 53717
PHONE : (608) 664-4312
EMAIL: DAVE HUWE@TDSTELECOM.COM

GAS / PETROLEUM
WE ENERGIES - GAS/PETROLEUM
PAYDEN VOLBRECHT
7815 NORTHWESTERN AVE
RACINE, WI 53406
PHONE: 1-800-261-5325
EMAIL: PAYDEN.VOLBRECHT@WE-ENERGIES.COM
GAS DISPATCH: 1-800-261-5325

COMMUNICATION LINE
AT&T WISCONSIN
MIKE VANBOVEN
411 7TH STREET
RACINE, WI 53403
PHONE: (262) 676-3958
EMAIL: MV3658@ATT.COM

COMMUNICATION LINE
MIDWEST FIBER NETWORKS LLC
CORY SCHMUKI
6070 NORTH FLINT ROAD
GLENDALE, WI 53209
PHONE: (414) 459-3561
EMAIL: CSCHMUKI@MIDWESTFIBERNETWORKS.COM

SEWER
VILLAGE OF ROCHESTER SEWER DEPARTMENT
CHRISTOPHER BIRKETT
PO BOX 65
ROCHESTER, WI 53167-0065
PHONE: (262) 534-2431
EMAIL: CBIRKETT@ROCHESTERWI.US

GAS / PETROLEUM
WEST SHORE PIPE LINE COMPANY
ARIC AUFDERMAUER
FIVE TEK PARK, 9999 HAMILTON BLVD
BREINIGSVILLE, PA 18031
PHONE: (414) 391-8102
EMAIL: AAUFDERMAUER@BUCKEYE.COM

ELECTRICITY-TRANSMISSION
ATC MANAGEMENT, INC.
CHRIS DAILEY
P.O BOX 47
WAUKESHA, WI 53187
PHONE: (262) 506-6884
EMAIL: CDAILEY@ATCLLC.COM

COMMUNICATION LINE
SPECTRUM
GERALD SCHULTZ
1320 N MARTIN LUTHER KING DR.
MILWAUKEE, WI 53212
PHONE : (414) 808-4863
EMAIL: GERLD.SCHULTZ@CHARTER.COM

ELECTRICITY
WE ENERGIES - ELECTRICITY
JAMES NELSON
7815 NORTHWESTERN AVE
RACINE, WI 53406
PHONE: 1-800-662-4797
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM
ELECTRIC DISPATCH #: 1-800-662-4797

WISCONSIN SIGNAL
WISCONSIN DEPARTMENT OF TRANSPORTATION
JOYCE MURPHY
141 NW BARSTOW STREET
WAUKESHA, WI 53188
PHONE: (262) 548-5933
EMAIL: JOYCE.MURPHY@DOT.WI.GOV

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

WisDOT CONTACT
WISDOT
JULIE JENKS, PE
141 NW BARSTOW STREET
WAUKESHA, WI 53187
PHONE: 262-548-6462
EMAIL:
JULIE.JENKS@DOT.WI.GOV

DNR LIAISON
DEPARTMENT OF NATURAL RESOURCES
BENTON STELZEL
141 NORTHWEST BARSTOW ST
WAUKESHA, WI 53188
PHONE: (262) 623-0194
E-MAIL: BENTON.STELZEL@WISCONSIN.GOV

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262)953-4289
CELL (920)912-1036
FAX (262)547-1103
EMAIL: RMERRY@SEWRPC.ORG

CONSULTANT CONTACT
CORRE, INC.
JESSICA LEWIS, P.E.
20900 SWENSON DRIVE, SUITE 800
WAUKESHA, WI 53186
PHONE: (262) 393-1508
E-MAIL: JLEWIS@CORREINC.COM

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N

TOWN OF WATER-FORD

CITY OF WATERFORD

TOWN OF NORWAY

TOWN OF RAYMOND

TOWN OF DOVER

TOWN OF YORKVILLE

TOWN OF ROCHESTER

BEGIN PROJECT
STA 3+39'A'

STH 36 / 83

SIGNALIZED INTERSECTION

STRUCTURE B-51-073
STA 20+50'A'
NO WORK

STH 20

WIND LAKE CANAL

WETLAND LIMITS (TYP)

STRUCTURE C-51-047
STA 196+53'A'
NO WORK

MEALY ROAD

END CONSTRUCTION
STA 276+39'A'

ROUNDABOUT

2 WAY STOP
ON SIDE ROAD

END CONSTRUCTION
STA 54+45'NB'

ROUNDABOUT

CTH D

1 WAY STOP
ON SIDE ROAD

SHARP ROAD

1 WAY STOP
ON SIDE ROAD

1 WAY STOP
ON SIDE ROAD

CTH N

1 WAY STOP
ON SIDE ROAD

STRUCTURE C-51-020
STA 241+90'A'
CULVERT CLEANING

CTH S

BEGIN CONSTRUCTION
STA 295+12'A'

N BRITTON ROAD

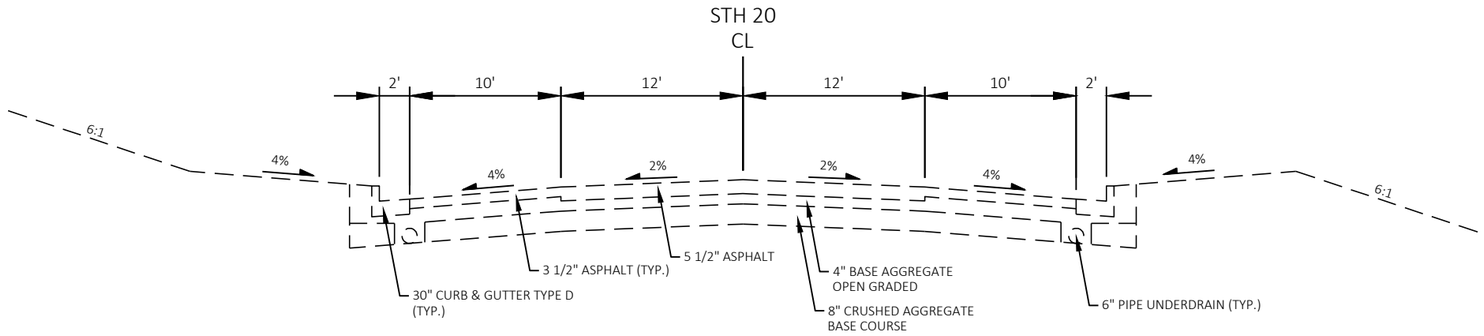
BEGIN CONSTRUCTION
STA 40+00'NB'

N RAYNOR ROAD

END PROJECT
STA 441+48'A'

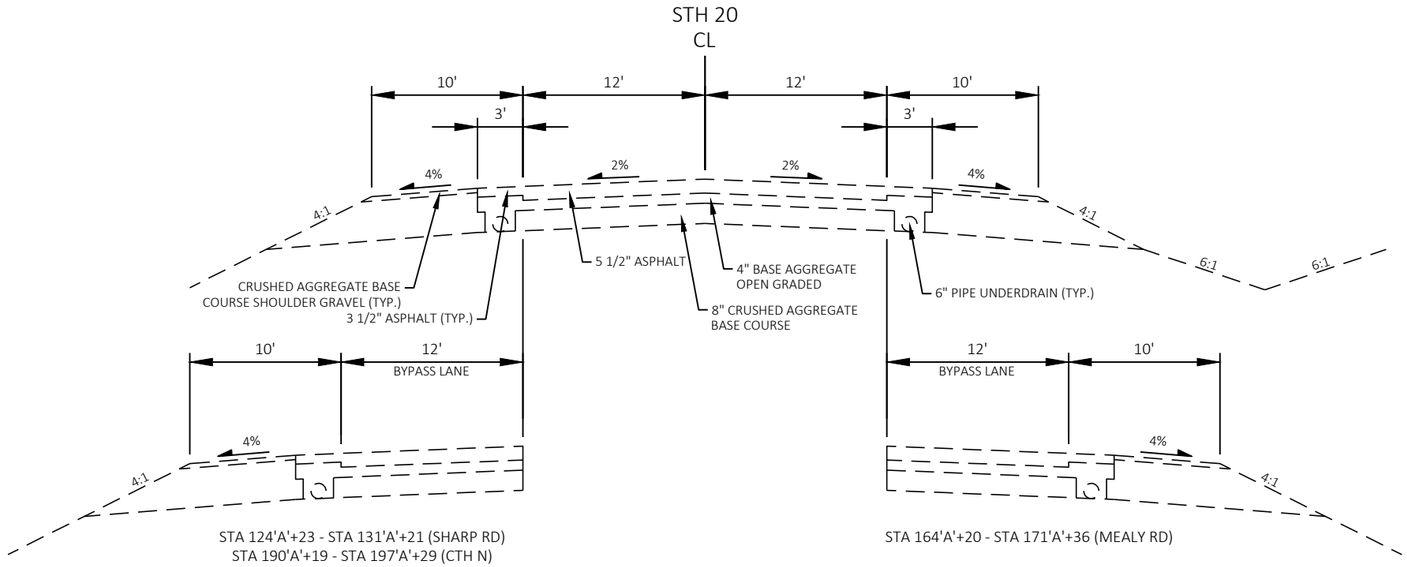
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 1/26/2022 5:01 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION
STH 20

STA 3'A'+39 - STA 16'A'+10



STA 124'A'+23 - STA 131'A'+21 (SHARP RD)
STA 190'A'+19 - STA 197'A'+29 (CTH N)

STA 164'A'+20 - STA 171'A'+36 (MEALY RD)

EXISTING TYPICAL SECTION
STH 20

STA 16'A'+10 - STA 60'A'+84
STA 62'A'+93 - STA 69'A'+46
STA 71'A'+29 - STA 90'A'+92
STA 93'A'+46 - STA 112'A'+59
STA 114'A'+63 - STA 132'A'+32
STA 136'A'+62 - STA 150'A'+41
STA 168'A'+11 - STA 244'A'+92
STA 250'A'+00 - STA 275'A'+92
STA 300'A'+81 - STA 364'A'+81
STA 378'A'+68 - STA 382'A'+19
STA 384'A'+38 - STA 384'A'+65
STA 387'A'+36 - STA 441'A'+49

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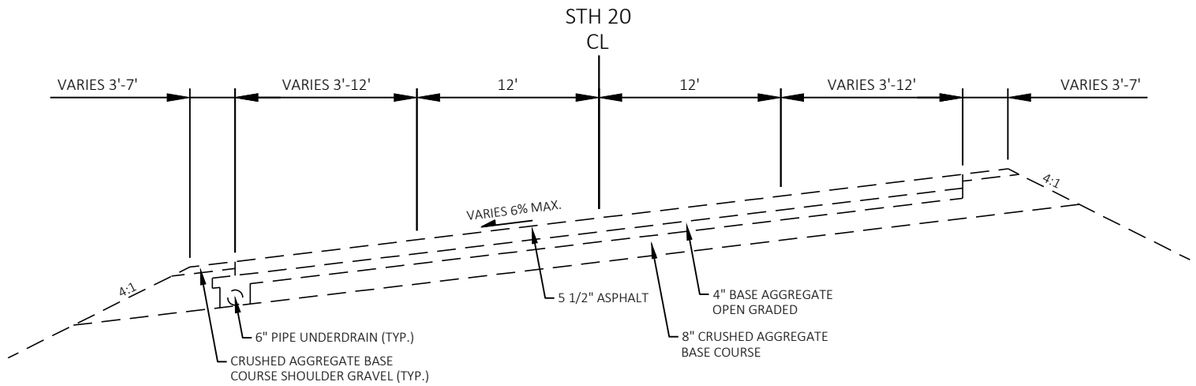
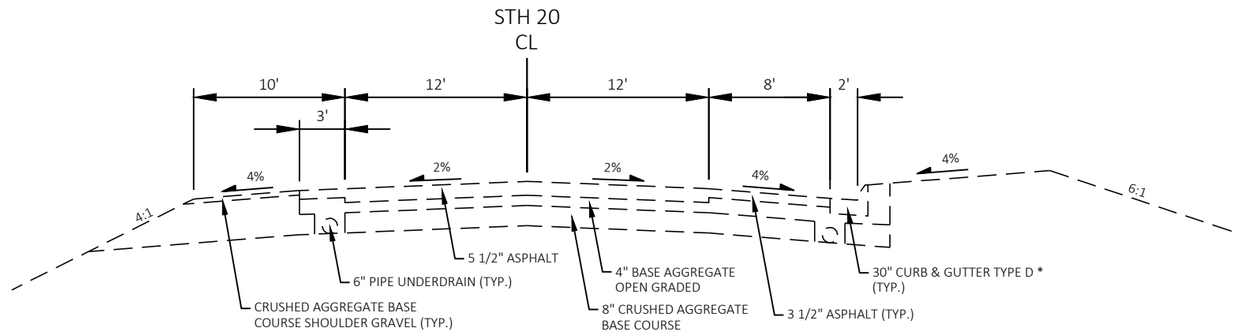


EXISTING TYPICAL SECTION
STH 20

STA 43'A'+20 - STA 52'A'+85



*CURB & GUTTER SECTION - LEFT - MIRROR

STA 100'A'+99 - STA 104'A'+27
STA 132'A'+32 - STA 136'A'+62
STA 150'A'+41 - STA 152'A'+41
STA 160'A'+66 - STA 168'A'+11
STA 244'A'+92 - STA 250'A'+00
STA 275'A'+92 - STA 276'A'+39
STA 295'A'+12 - STA 300'A'+81
STA 365'A'+31 - STA 373'A'+81
STA 384'A'+65 - STA 387'A'+36

EXISTING TYPICAL SECTION
STH 20

PARTIAL URBAN SEGMENTS

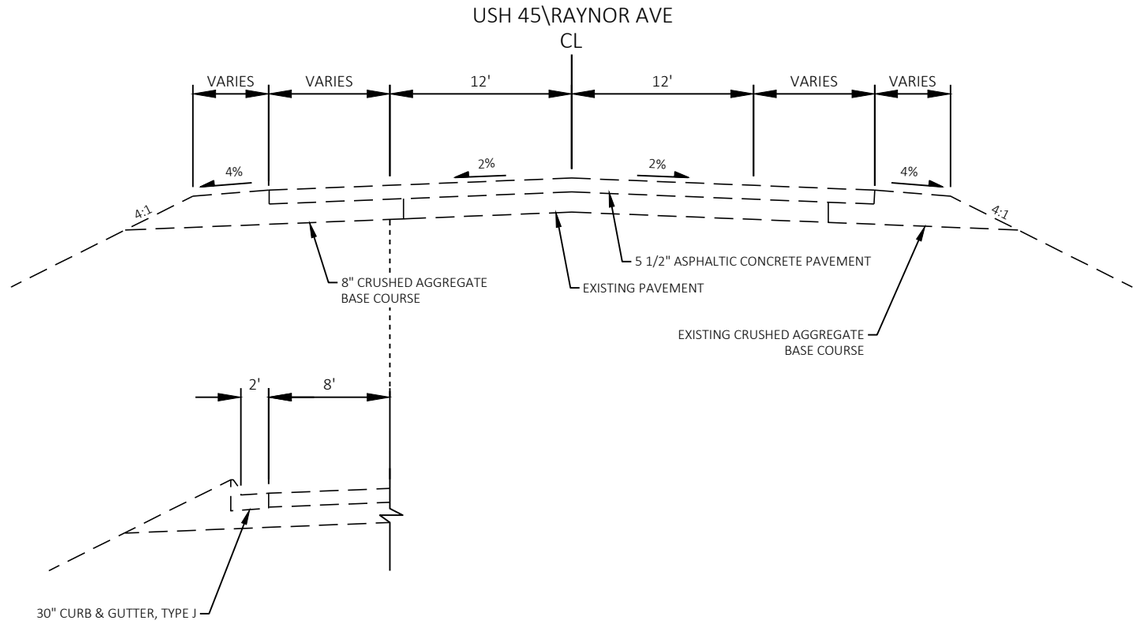
*CURB & GUTTER SECTION - RIGHT

STA 60'A'+84 - STA 62'A'+93
STA 69'A'+46 - STA 71'A'+29
STA 90'A'+92 - STA 93'A'+46
STA 112'A'+59 - STA 114'A'+63
STA 152'A'+03 - STA 161'A'+20
STA 244'A'+92 - STA 250'A'+00
STA 364'A'+81 - STA 378'A'+68
STA 382'A'+19 - STA 384'A'+38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020302-ts
PLOT DATE : 1/26/2022 5:01 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

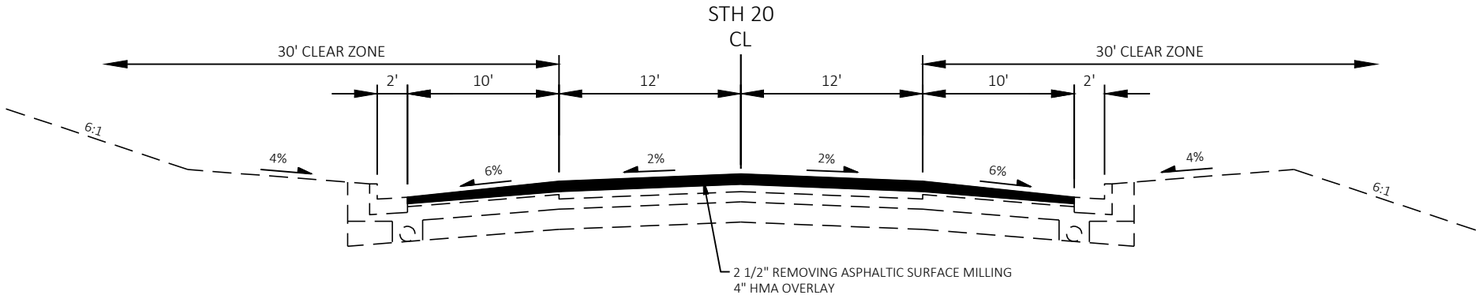


STA 50'A'+63.1 TO 52'A'+60.37

EXISTING TYPICAL SECTION
USH 45\RAYNOR AVENUE

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 6	E

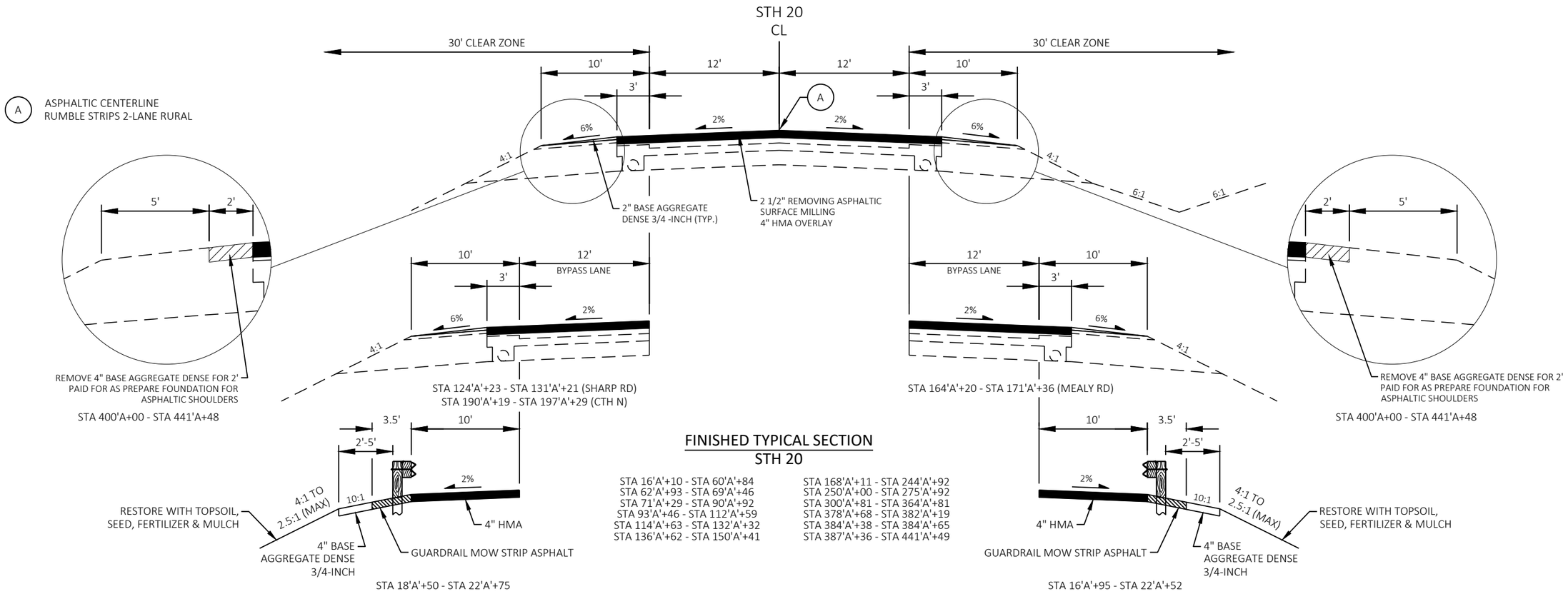
2



NOTE:
ALL 12' TRAVEL LANES TO BE PAVED IN ECHELON. 3' SHOULDERS TO BE PAVED CONCURRENTLY WITH ECHELON PAVING.

FINISHED TYPICAL SECTION
STH 20

STA 3'A'+39 - STA 16'A'+10

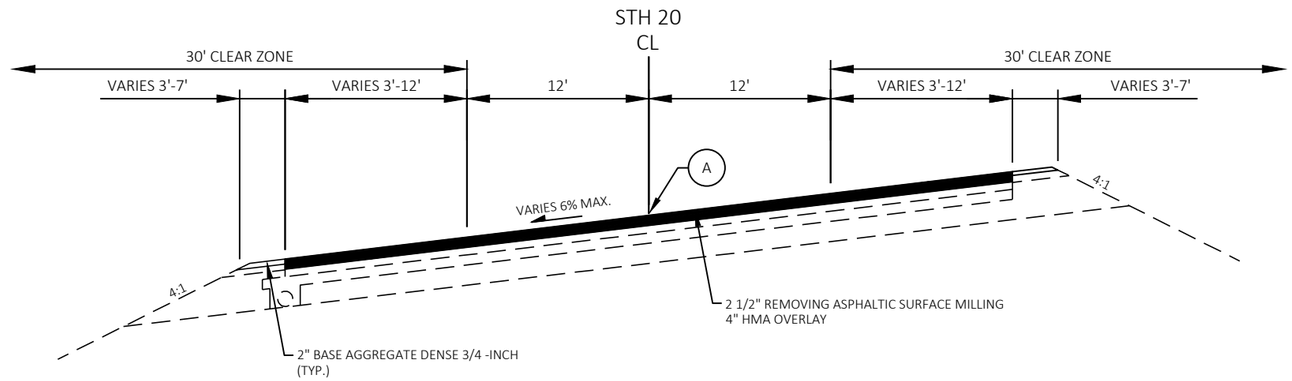


FINISHED TYPICAL SECTION
STH 20

STA 16'A'+10 - STA 60'A'+84
STA 62'A'+93 - STA 69'A'+46
STA 71'A'+29 - STA 90'A'+92
STA 93'A'+46 - STA 112'A'+59
STA 114'A'+63 - STA 132'A'+32
STA 136'A'+62 - STA 150'A'+41
STA 168'A'+11 - STA 244'A'+92
STA 250'A'+00 - STA 275'A'+92
STA 300'A'+81 - STA 364'A'+81
STA 378'A'+68 - STA 382'A'+19
STA 384'A'+38 - STA 384'A'+65
STA 387'A'+36 - STA 441'A'+49

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\020301-TS.DWG PLOT DATE : 1/26/2022 5:01 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 020304-ts
WISDOT/CADDS SHEET 42

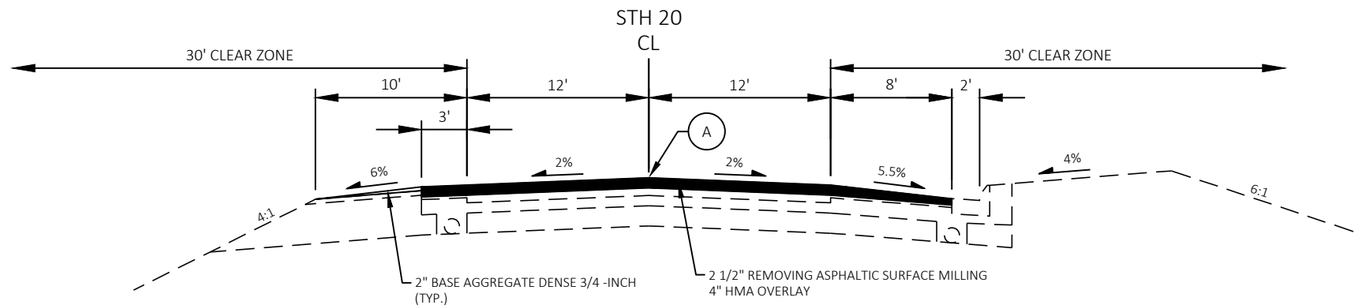


FINISHED TYPICAL SECTION
STH 20

STA 43'A'+20 - STA 52'A'+85

NOTE:
ALL 12' TRAVEL LANES TO BE PAVED IN ECHELON. 3' SHOULDERS
TO BE PAVED CONCURRENTLY WITH ECHELON PAVING.

(A) ASPHALTIC CENTERLINE
RUMBLE STRIPS 2-LANE RURAL



*CURB & GUTTER SECTION - LEFT - MIRROR

STA 100'A'+99 - STA 104'A'+27
STA 132'A'+32 - STA 136'A'+62
STA 150'A'+41 - STA 152'A'+41
STA 160'A'+66 - STA 168'A'+11
STA 244'A'+92 - STA 250'A'+00
STA 275'A'+92 - STA 276'A'+39
STA 295'A'+12 - STA 300'A'+81
STA 365'A'+31 - STA 373'A'+81
STA 384'A'+65 - STA 387'A'+36

FINISHED TYPICAL SECTION
STH 20

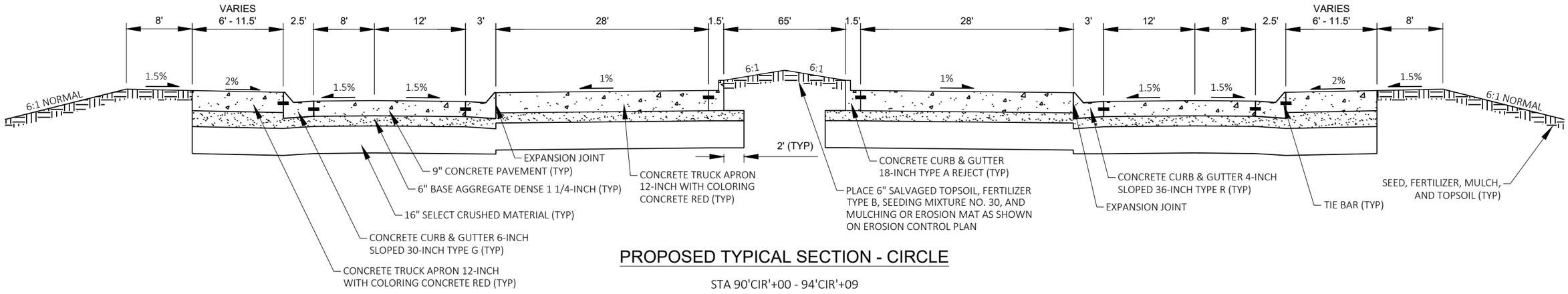
PARTIAL URBAN SEGMENTS

*CURB & GUTTER SECTION - RIGHT

STA 60'A'+84 - STA 62'A'+93
STA 69'A'+46 - STA 71'A'+29
STA 90'A'+92 - STA 93'A'+46
STA 112'A'+59 - STA 114'A'+63
STA 152'A'+03 - STA 161'A'+20
STA 244'A'+92 - STA 250'A'+00
STA 364'A'+81 - STA 378'A'+68
STA 382'A'+19 - STA 384'A'+38

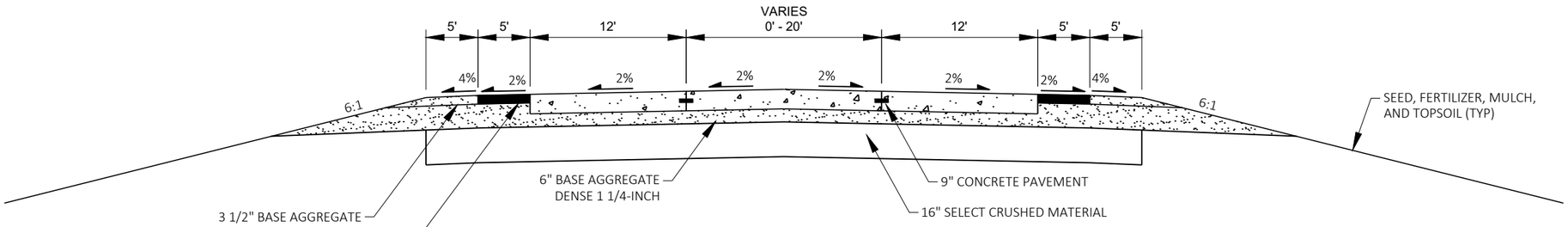
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\020301-TS.DWG PLOT DATE : 1/26/2022 5:01 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:10 FT
LAYOUT NAME - 020305-ts
WISDOT/CADDS SHEET 42



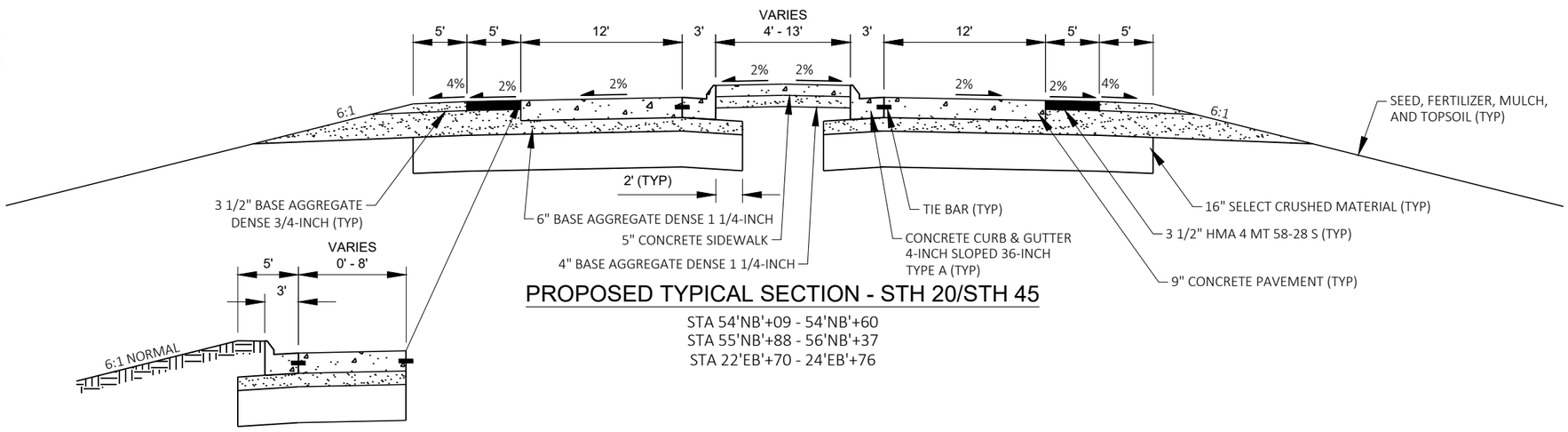
PROPOSED TYPICAL SECTION - CIRCLE

STA 90'CIR'+00 - 94'CIR'+09



PROPOSED TYPICAL SECTION - STH 20/STH 45

STA 56'NB'+37 - 59'NB'+44
STA 54'NB'+60 - 55'NB'+88
STA 24'EB'+76 - 30'EB'+12



PROPOSED TYPICAL SECTION - STH 20/STH 45

STA 54'NB'+09 - 54'NB'+60
STA 55'NB'+88 - 56'NB'+37
STA 22'EB'+70 - 24'EB'+76

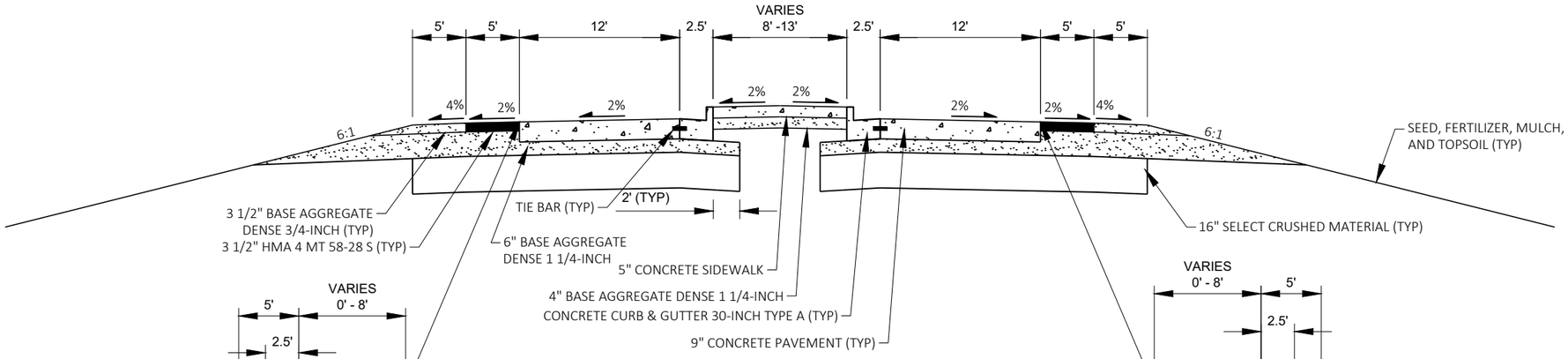
STA 55'NB'+07 - 55'NB'+28

WISCONSIN
JEDIDIAH J. MUNROE
PE-39156
MADISON, WI
PROFESSIONAL ENGINEER
1-26-2022
Responsible for Roundabout Design

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN: PROPOSED TYPICAL SECTIONS	SHEET 9	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020303-ts
PLOT DATE : 7/11/2022 11:33 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

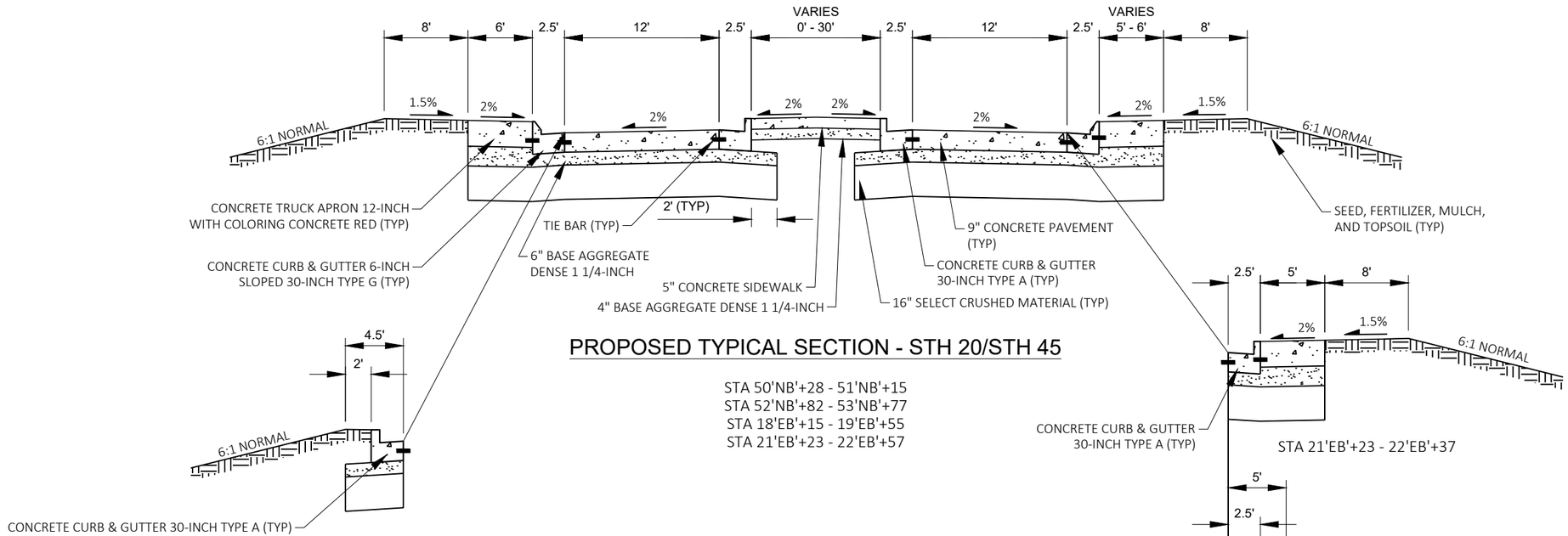


PROPOSED TYPICAL SECTION - STH 20/STH 45

STA 50'NB'+05 - 50'NB'+28
STA 53'NB'+77 - 54'NB'+13
STA 18'EB'+08 - 18'EB'+15
STA 22'EB'+57 - 22'EB'+70

STA 53'NB'+70 - 54'NB'+13
STA 22'EB'+57 - 22'EB'+70

STA 53'NB'+77 - 54'NB'+13
STA 50'NB'+05 - 50'NB'+28
STA 18'EB'+08 - 18'EB'+15



PROPOSED TYPICAL SECTION - STH 20/STH 45

STA 50'NB'+28 - 51'NB'+15
STA 52'NB'+82 - 53'NB'+77
STA 18'EB'+15 - 19'EB'+55
STA 21'EB'+23 - 22'EB'+57

STA 53'NB'+53 - 54'NB'+09
STA 18'EB'+15 - 18'EB'+80
STA 22'EB'+37 - 22'EB'+57

STA 21'EB'+23 - 22'EB'+37

STA 53'NB'+53 - 54'NB'+09
STA 18'EB'+08 - 18'EB'+38
STA 22'EB'+26 - 22'EB'+57

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN: PROPOSED TYPICAL SECTIONS	SHEET 10	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020304-ts
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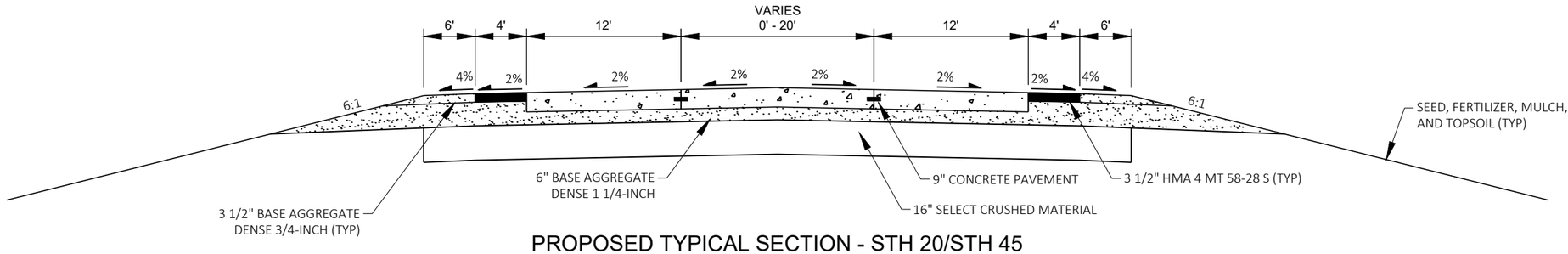
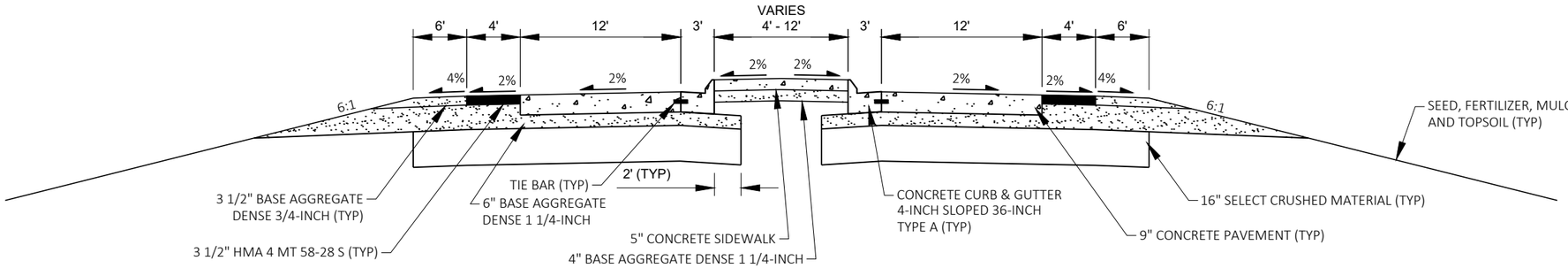
WISDOT/CADDS SHEET 42



PROPOSED TYPICAL SECTION - STH 20/STH 45

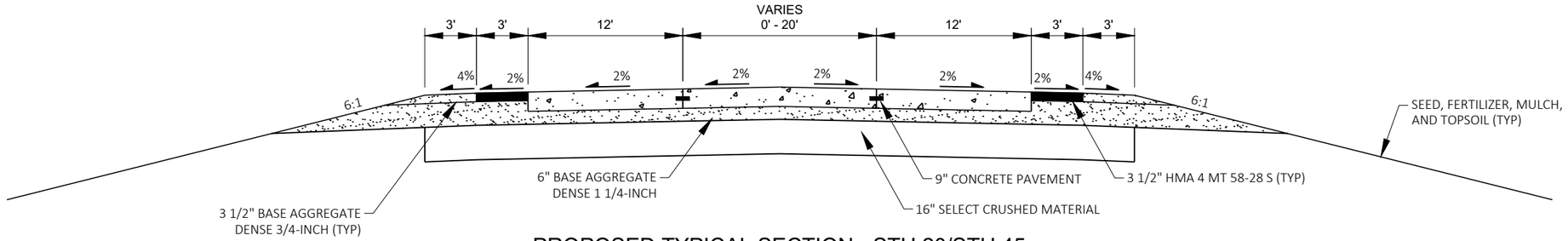
STA 10'EB'+00 - 16'EB'+01



PROPOSED TYPICAL SECTION - STH 20/STH 45

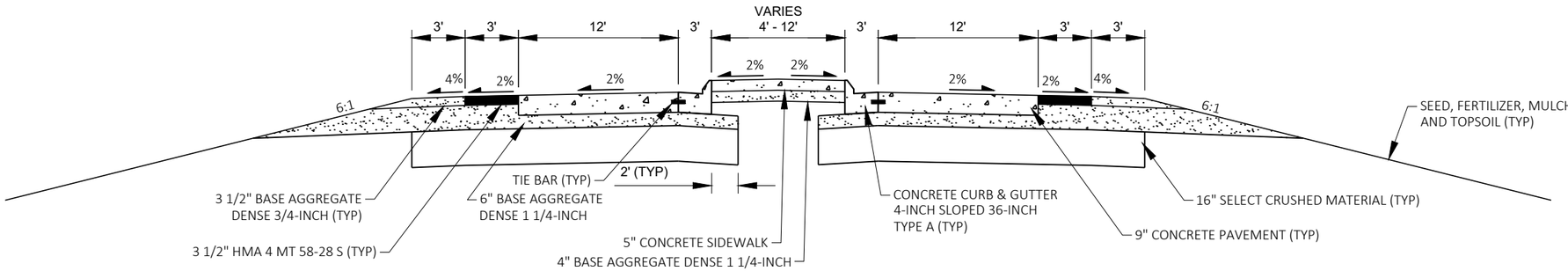
STA 16'EB'+01 - 18'EB'+08

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN: PROPOSED TYPICAL SECTIONS	SHEET 11	E



PROPOSED TYPICAL SECTION - STH 20/STH 45

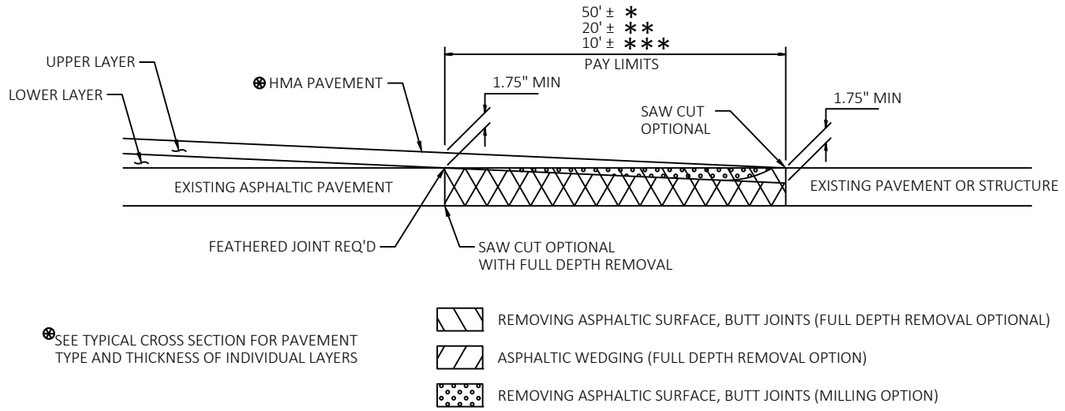
STA 44'NB'+61 - 47'NB'+61



PROPOSED TYPICAL SECTION - STH 20/STH 45

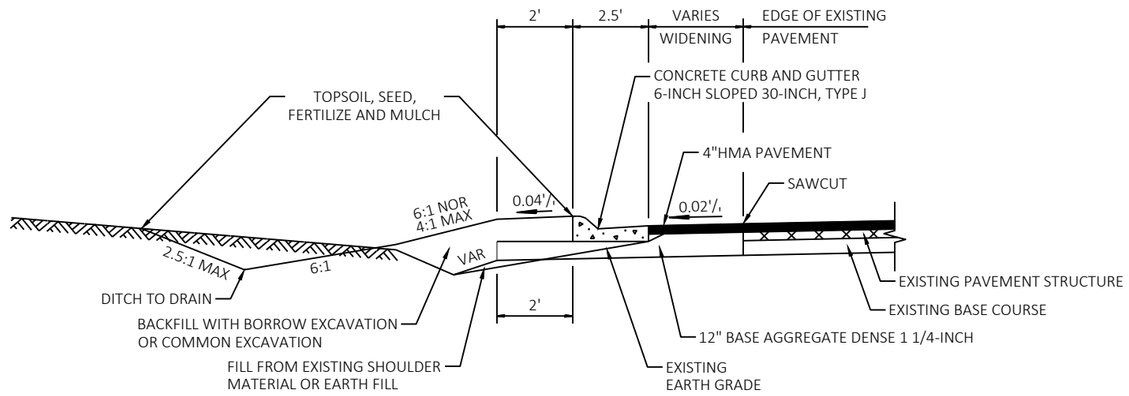
STA 47'NB'+61 - 50'NB'+05

2



BUTT JOINT DETAIL FOR NON MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES



WIDENING TYPICAL

STA 50'A+53 TO STA 53'A+47

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION DETAILS	SHEET 13	E

2

REMOVING ASPHALT SURFACE

STEP 1

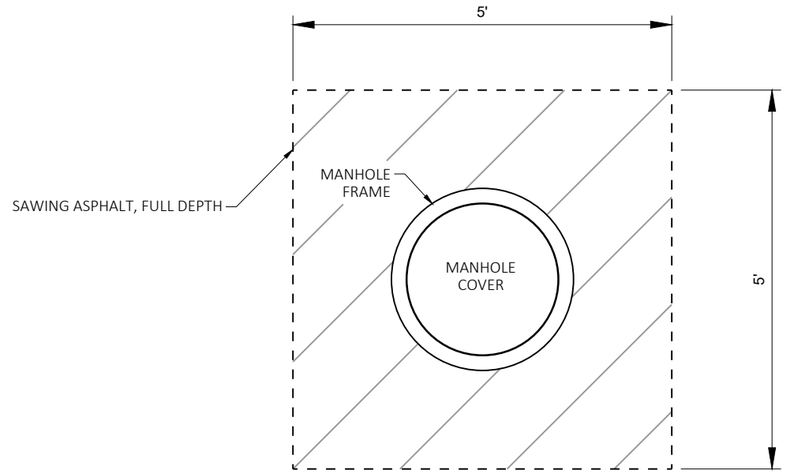
PRIOR TO REMOVING ASPHALT SURFACE:
- SAW PAVEMENT FULL DEPTH
- REMOVE AND RESTORE MANHOLE COVER
- FURNISH AND INSTALL TEMPORARY COVER PLATE
- BACKFILL USING ASPHALT SURFACE, TEMPORARY

STEP 2

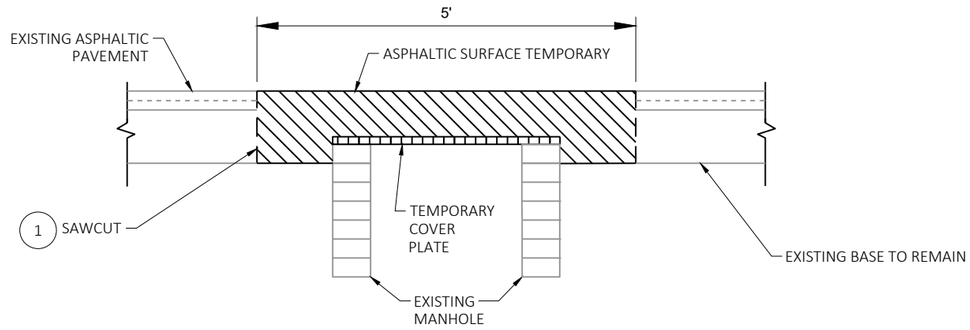
AFTER PAVING LOWER LAYER:

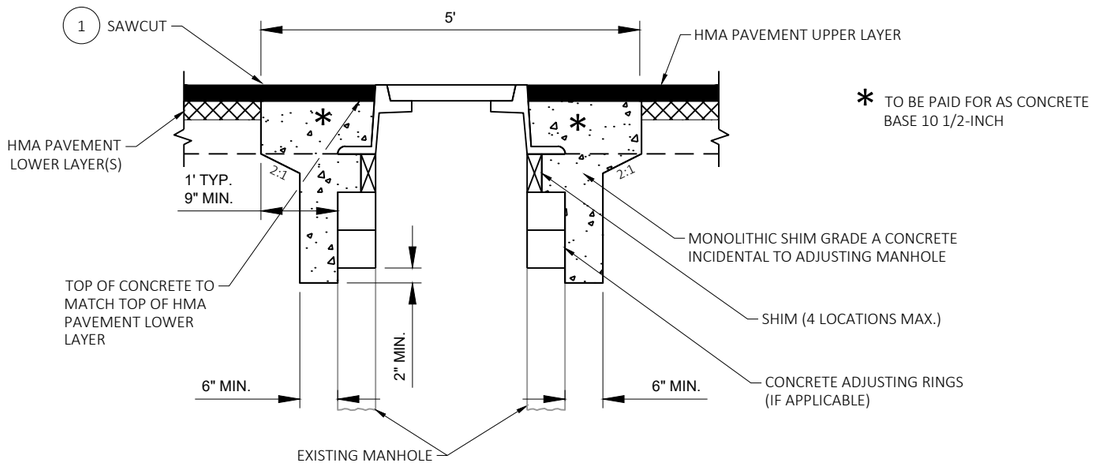
- EXCAVATE AND REMOVE TEMPORARY COVER PLATE
- ADJUST AND REINSTALL MANHOLE FRAME AND COVER USING MONOLITHIC CONCRETE SHIM

ALL WORK EXCEPT SAWING ASPHALT AND INSTALLATION AND
REMOVAL OF TEMPORARY COVER PLATE IS INCLUDED IN THE COST OF ADJUSTING MANHOLE COVERS.



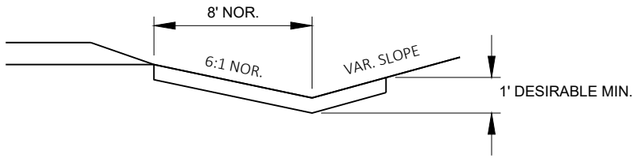
PLAN VIEW



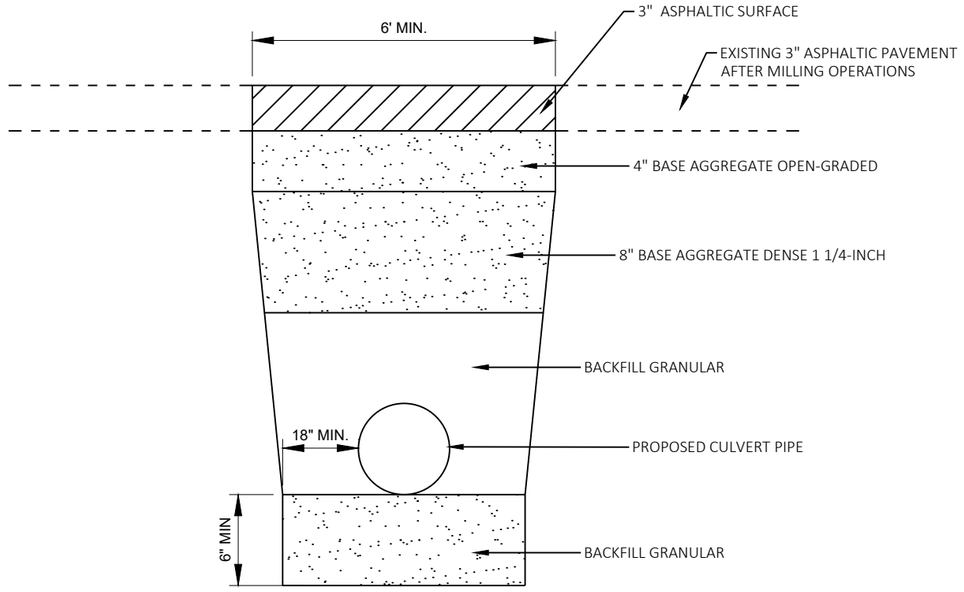


ADJUSTING MANHOLE DETAILS

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION DETAILS	SHEET 14	E

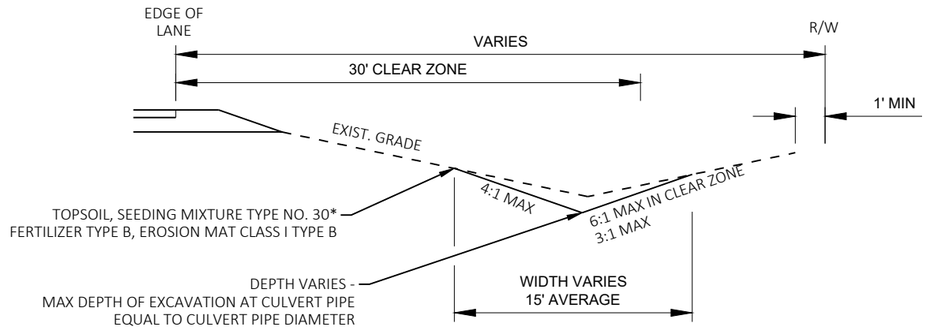


EROSION MAT DETAIL FOR DITCHES



DETAIL FOR INSTALLATION OF CULVERT PIPE

STA 55'A'+10
STA 65'A'+95

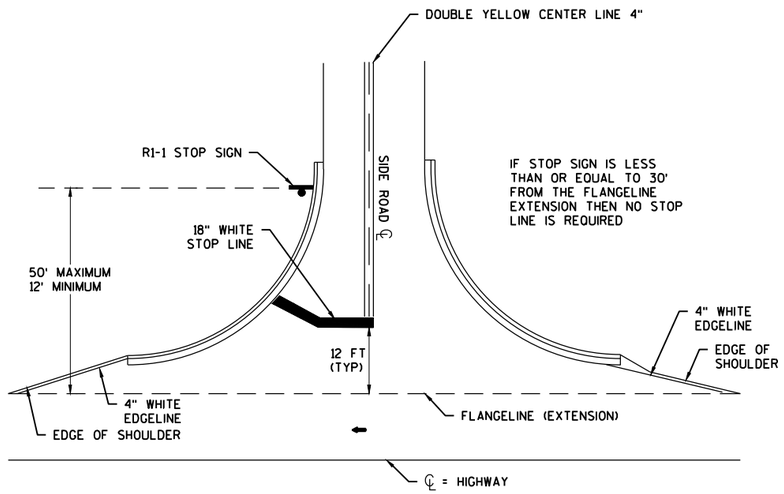


DITCHING AND SHAPING

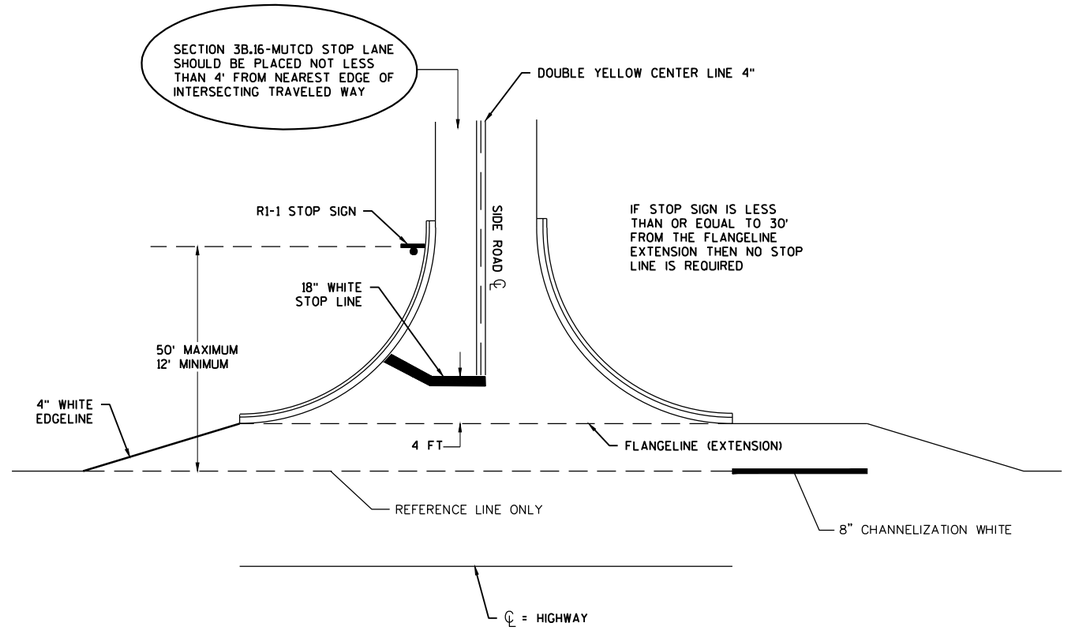
NOTES

MINIMUM 0.5% DITCH SLOPE REQUIRED.

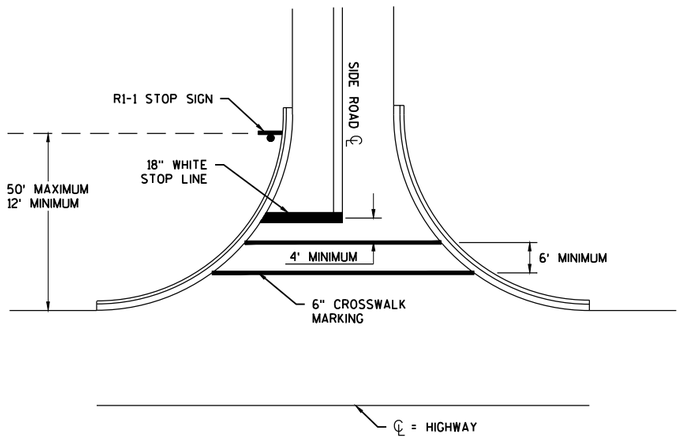
*USE SEED MIXTURE TYPE 60 AND DO NOT USE FERTILIZER IN WETLANDS AND WITHIN 20' OF WETLANDS.



TYPICAL PAVEMENT MARKING FOR SIDEROADS



TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE

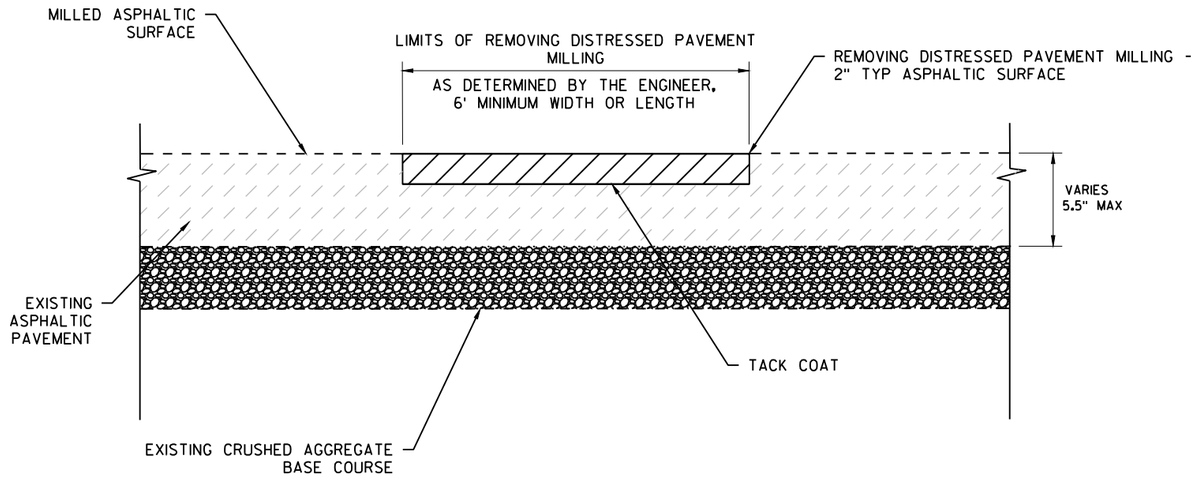


TYPICAL PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

NOTES:
18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

STOP LINES REQUIRED WHERE:

- CROSSWALK MARKINGS EXIST OR BEING PROVIDED
- LARGE RADII
- OFFSET LEFT TURNS WHERE STOP BAR FOR LEFT TURN IS SET BACK FROM THRU MOVEMENT.



REMOVING DISTRESSED PAVEMENT MILLING

NOTES:

MILL EXISTING SURFACE 2" OR 2 1/2" PER TYPICAL SECTION PRIOR TO REMOVING DISTRESSED PAVEMENT.

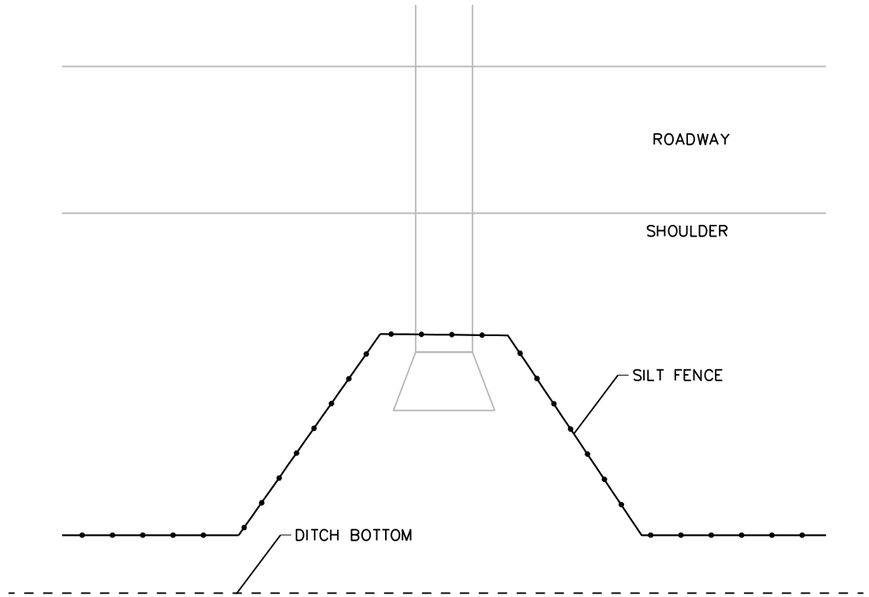
REMOVE DISTRESSED PAVEMENT BY MILLING 2" INCREMENTS.

PLACE ASPHALTIC SURFACE USING ENGINEER-APPROVED MACHINE METHODS AS DESCRIBED IN STANDARD SPEC 465.3

COMPACT USING ORDINARY COMPACTION PROCEDURE DESCRIBED IN STANDARD SPEC 450.3.2.6.

LIMITS OF DISTRESSED PAVEMENT MILLING TO BE REMOVED AND PAVED IN SAME DAY.

FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

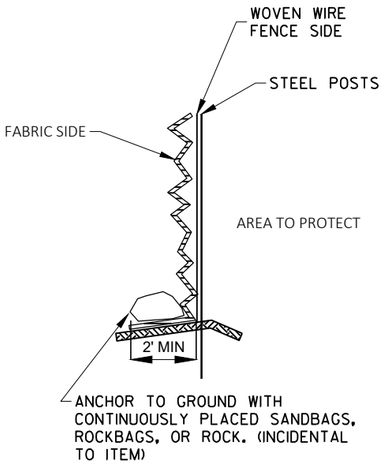


TYPICAL SILT FENCE DETAIL AT PIPE INLET

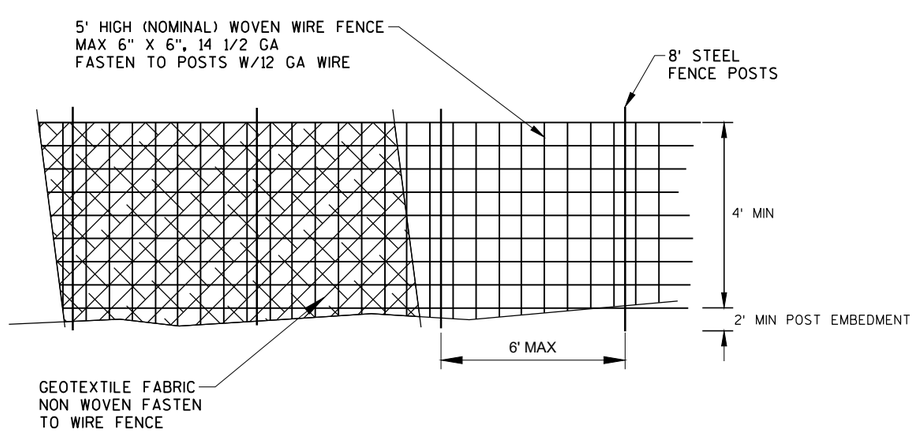
NOTE

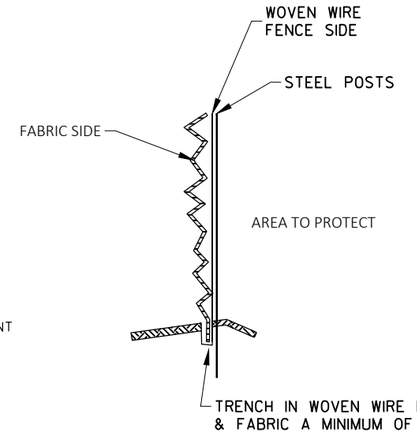
SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

GENERAL NOTES
THE FABRIC TO WOVEN WIRE FENCE EVERY 2-FEET
ADJUST POST EMBEDMENT AND/OR SPACING BASED ON EXISTING SOILS



ANCHORED INSTALLATION FOR WET CONDITION





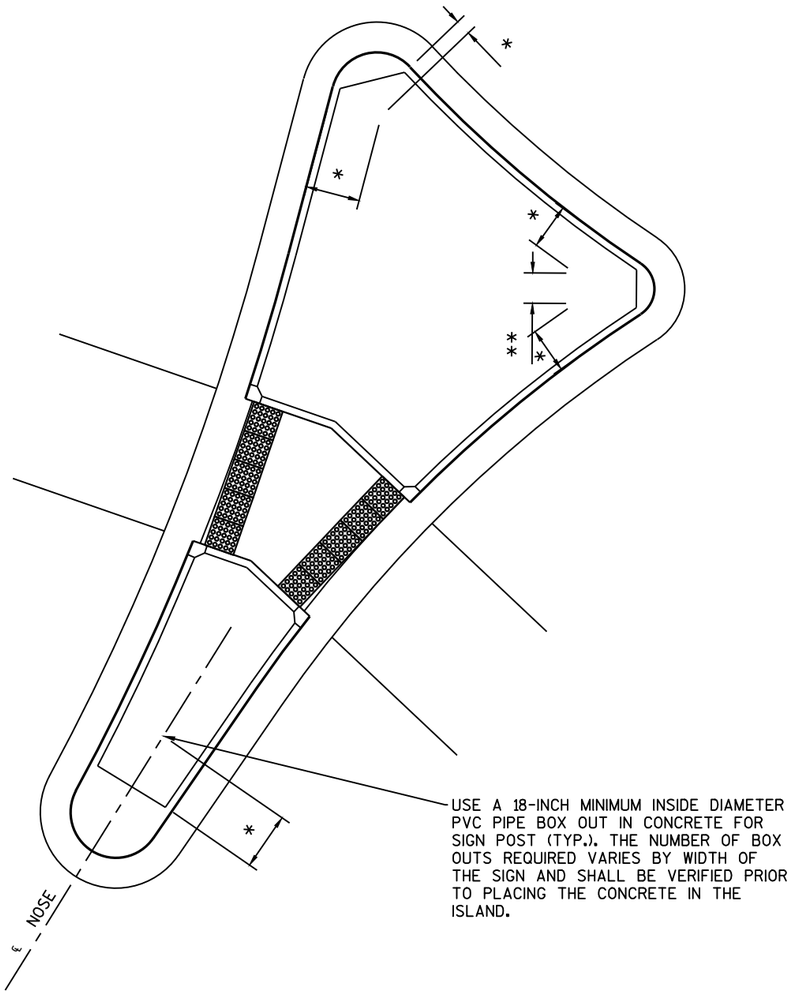
TRENCH INSTALLATION FOR DRY CONDITION

HEAVY DUTY SILT FENCE

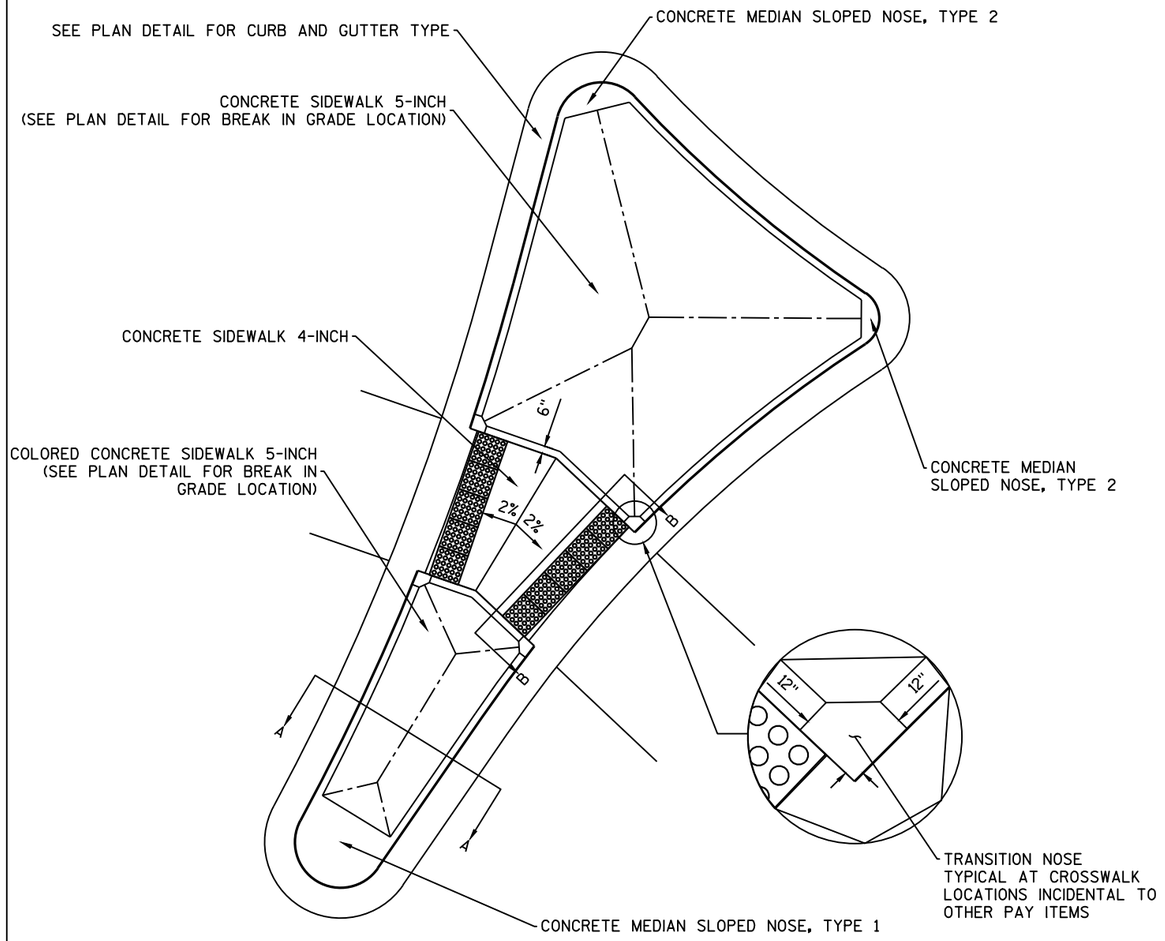
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CONSTRUCTION DETAILS	SHEET 18	E

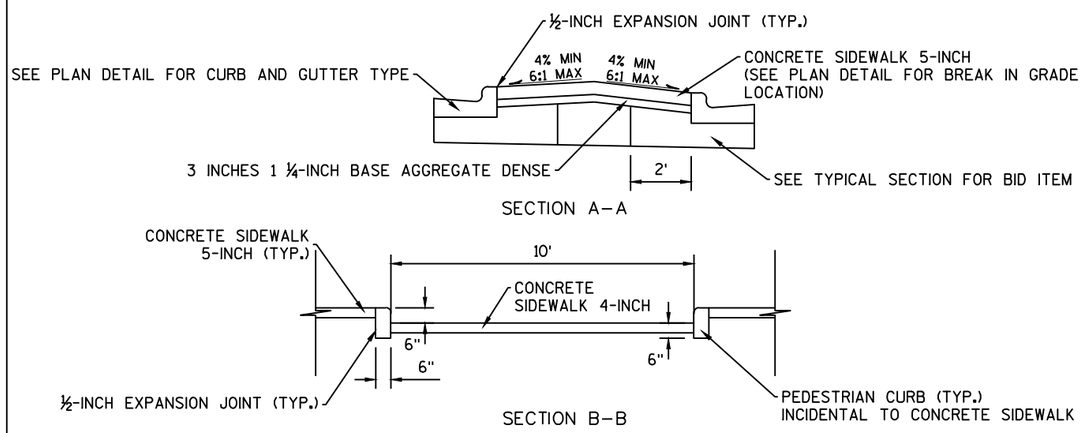
* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE SIGN DETAILS FOR POST SPACING.

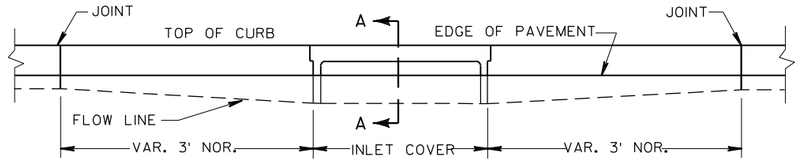


ISLAND SIGN LOCATION DETAIL (TYP.)

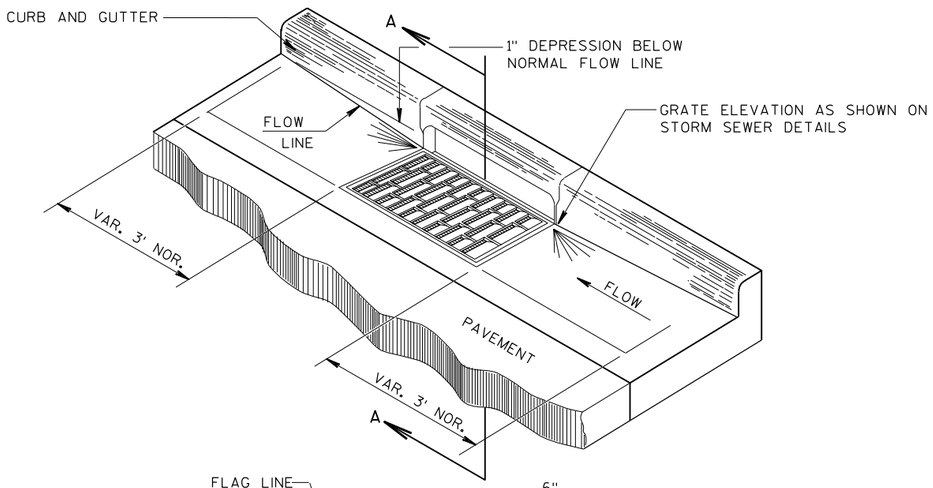


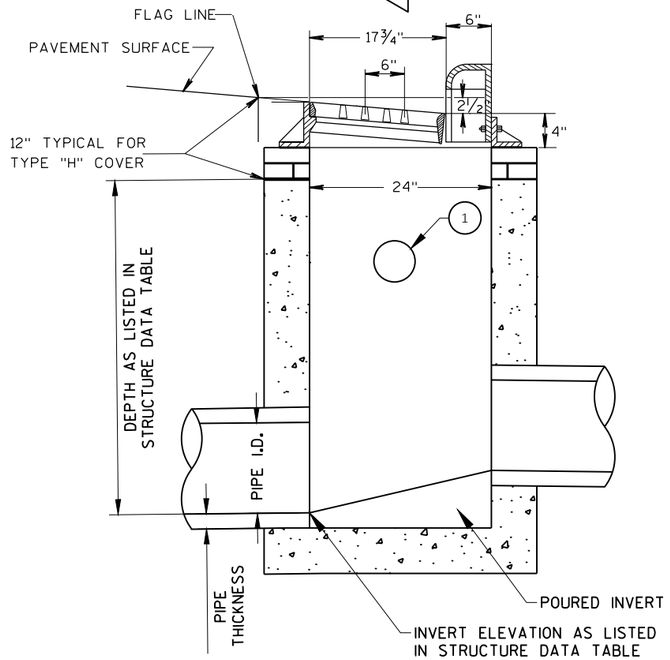


SPLITTER ISLAND DETAIL (TYP.)



ELEVATION



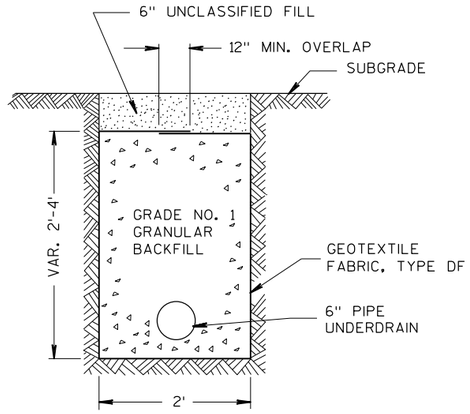


SECTION A-A

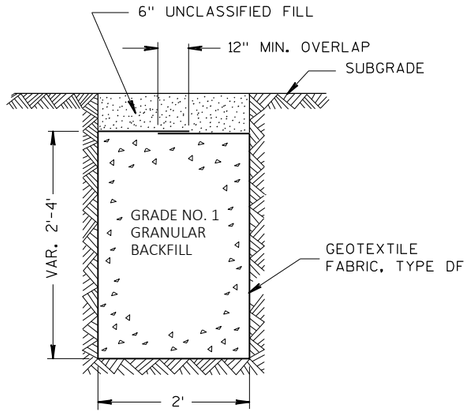
(1) PIPE UNDERDRAIN 6-INCH WITH GEOTEXTILE FABRIC TYPE DF SCHEDULE A AND BACKFILL COARSE AGGREGATE SIZE NO. 1. SEE "PIPE UNDERDRAIN 6-INCH DETAIL" AND MISCELLANEOUS QUANTITIES FOR LOCATIONS AND ADDITIONAL INFORMATION.

DETAIL OF CURB AND GUTTER AT INLETS AT SAG LOCATIONS

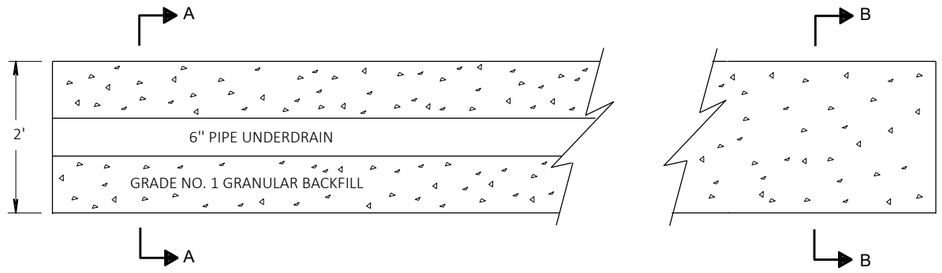
(INLET TYPE 2X3-H SHOWN)



SECTION A-A
(WITH PIPE UNDERDRAIN)



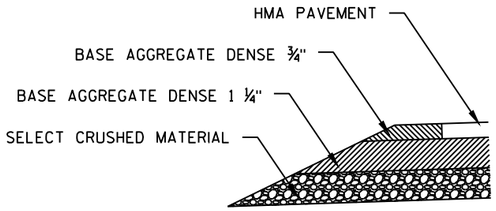
SECTION B-B
(WITHOUT PIPE UNDERDRAIN)



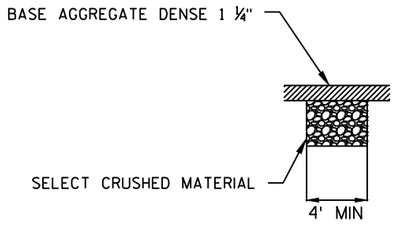
PLAN VIEW

UNDERDRAIN DETAIL

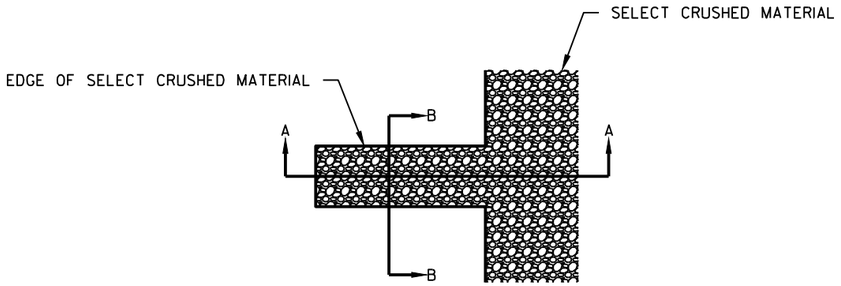
2



SECTION A-A



SECTION B-B



DETAIL FOR FRENCH DRAINS

NOTES: PAID FOR AS SELECT CRUSHED MATERIAL

PLACE EVERY 250' AND AT LOW POINTS

2

2

N

REMOVE FLASHER HEAD, POLE MOUNT

REMOVE CURB & GUTTER

REMOVE CURB & GUTTER

REMOVE CURB & GUTTER

REMOVE SMALL PIPE CULVERT

REMOVE CURB & GUTTER

REMOVE CURB & GUTTER

REMOVE SMALL PIPE CULVERT

REMOVE SMALL PIPE CULVERT

CLEARING AND GRUBBING
STA 400'A+00 - STA 401'A+00

REMOVING ASPHALTIC SURFACE
(INCLUDED IN THE COST FOR EXCAVATION COMMON)

MATCH LINE STA. 401+00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	REMOVAL PLAN	SHEET 22	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021050-RM.DWG
LAYOUT NAME - 021050-rm
PLOT DATE : 1/26/2022 5:02 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

MATCH LINE STA. 401+00

STH 20

402'A'

404'A'

406'A'

+83

408'A'

410'A'

412'A'

414'A'

SIGN

POST

W

R

REMOVING ASPHALTIC SURFACE
(INCLUDED IN THE COST FOR EXCAVATION COMMON)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	REMOVAL PLAN	SHEET 23	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021050-RM.DWG
LAYOUT NAME - 021051-rm

PLOT DATE : 1/26/2022 5:02 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

STH 20

394'A'

396'A'

398'A'

400'A'

S RAYNOR AVE

+87

42'R'

44'R'

46'R'

48'R'

50'R'

52'R'

54'R'

56

USH 45

REMOVE CURB & GUTTER

REMOVE CURB & GUTTER

REMOVE SMALL PIPE CULVERT

REMOVE SMALL PIPE CULVERT

REMOVE CURB & GUTTER

REMOVE CURB & GUTTER

REMOVE SMALL PIPE CULVERT

REMOVE FENCE

TREES TO REMAIN

CLEARING AND GRUBBING
STA 43'R+00 - STA 44'R+00

18" CMCP

MATCH LINE STA. 56+00

REMOVING ASPHALTIC SURFACE
(INCLUDED IN THE COST FOR EXCAVATION COMMON)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	REMOVAL PLAN	SHEET 24	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021052-RM.DWG
LAYOUT NAME - 021052-rm

PLOT DATE : 1/28/2022 7:00 AM PLOT BY : JESSICA LEWIS, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

MATCH LINE STA. 56+00

REMOVE SMALL PIPE CULVERT

15" CMCP

+38

USH 45

SIGN

SIGN

VENT

VENT

SEPC

58'R'

60'R'

62'R'

64'R'

66'R'

68'R'

POST

POST

POST

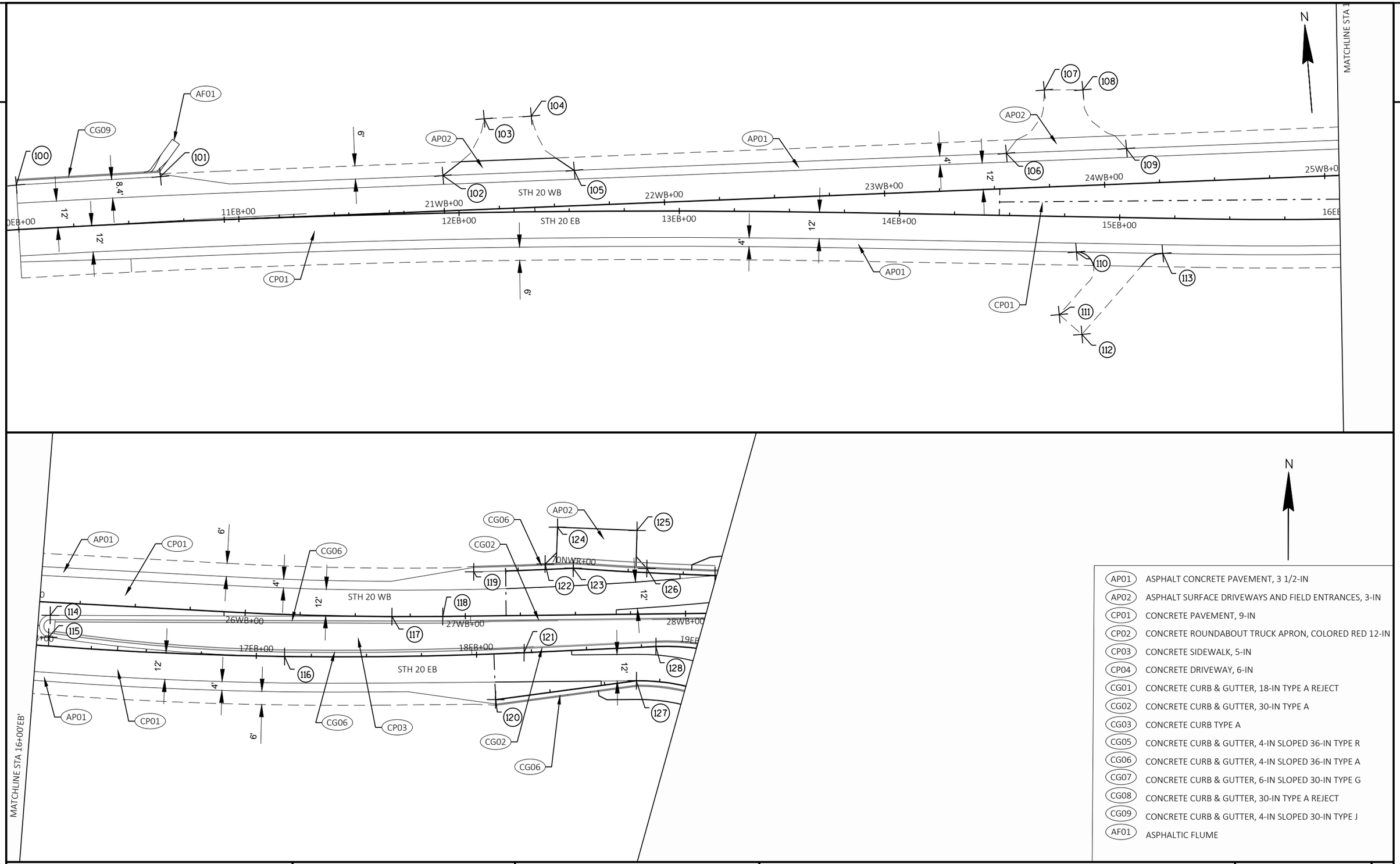
POST

REMOVING ASPHALTIC SURFACE
(INCLUDED IN THE COST FOR EXCAVATION COMMON)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	REMOVAL PLAN	SHEET 25	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021052-RM.DWG
LAYOUT NAME - 021053-rm

PLOT DATE : 1/26/2022 5:02 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

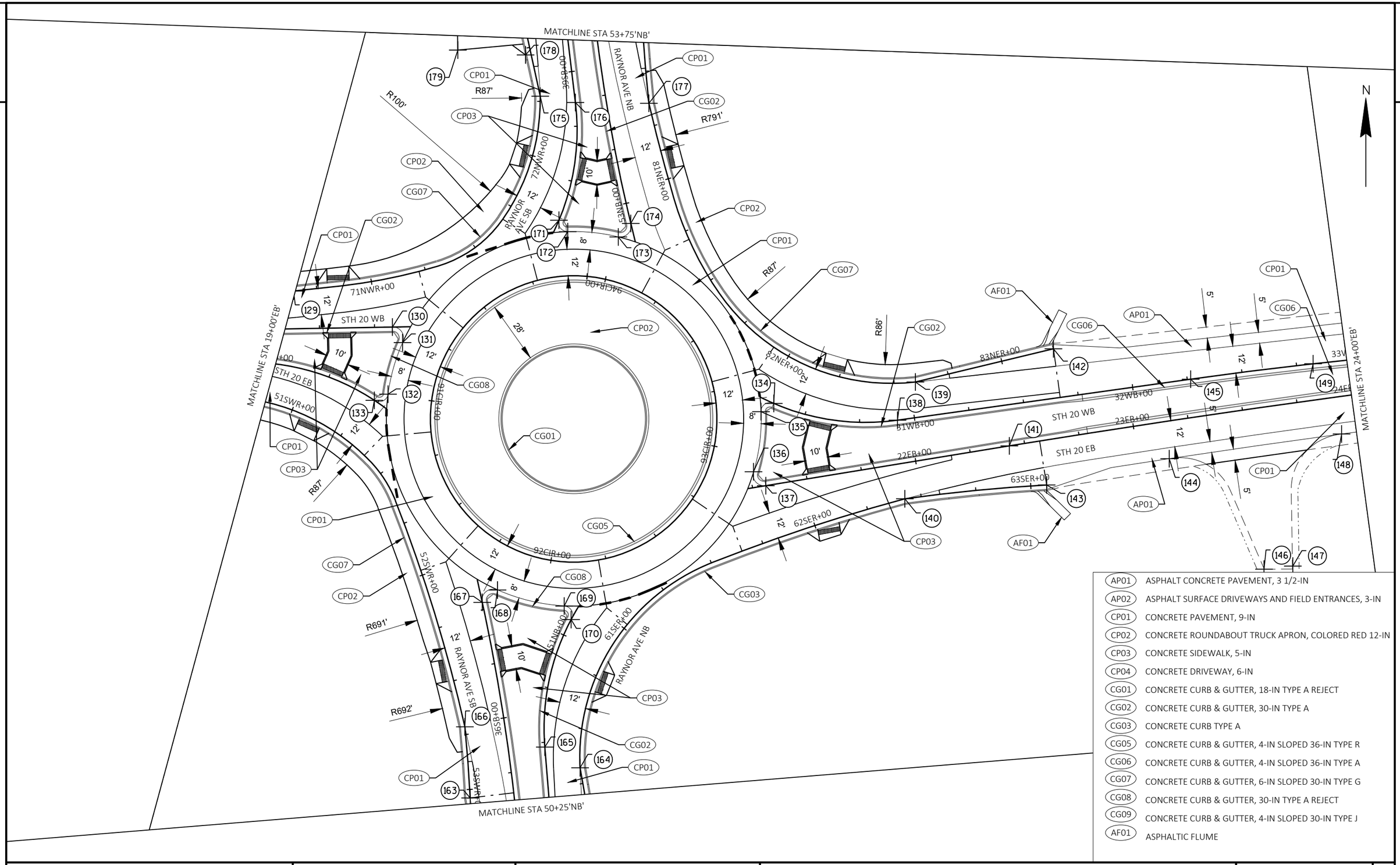


AP01	ASPHALT CONCRETE PAVEMENT, 3 1/2-IN
AP02	ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
CP01	CONCRETE PAVEMENT, 9-IN
CP02	CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
CP03	CONCRETE SIDEWALK, 5-IN
CP04	CONCRETE DRIVEWAY, 6-IN
CG01	CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
CG02	CONCRETE CURB & GUTTER, 30-IN TYPE A
CG03	CONCRETE CURB TYPE A
CG05	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE A
CG07	CONCRETE CURB & GUTTER, 6-IN SLOPED 30-IN TYPE G
CG08	CONCRETE CURB & GUTTER, 30-IN TYPE A REJECT
CG09	CONCRETE CURB & GUTTER, 4-IN SLOPED 30-IN TYPE J
AF01	ASPHALTIC FLUME

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	INTERSECTION DETAILS	SHEET 26 E

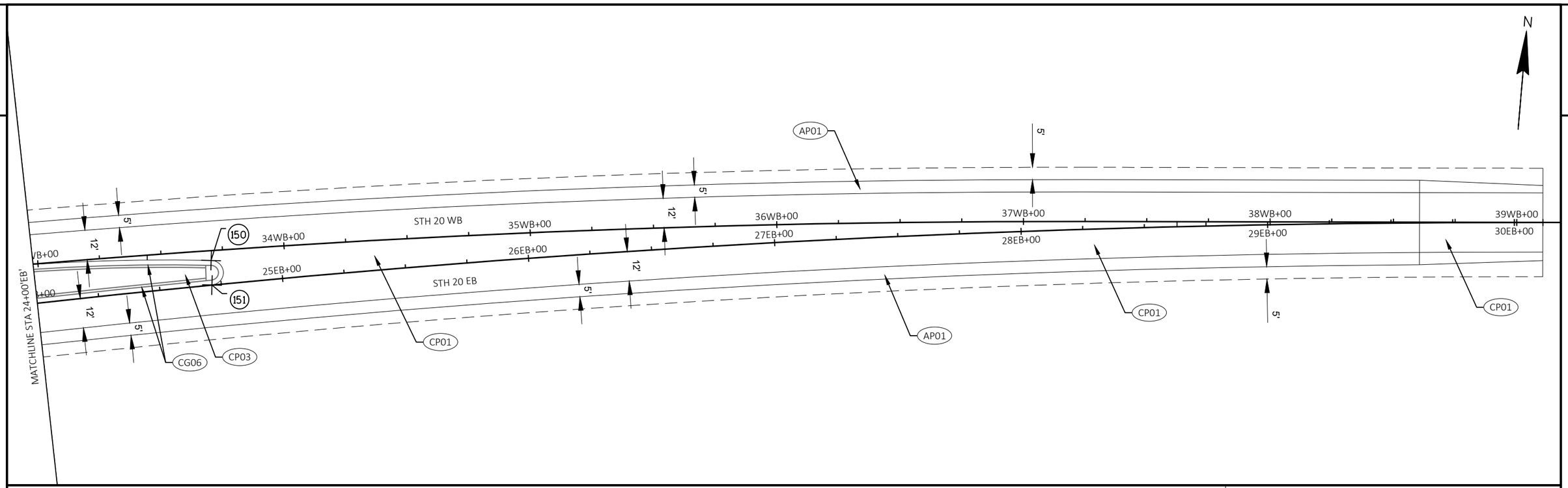
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021202-id
PLOT DATE : 7/11/2022 11:32 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



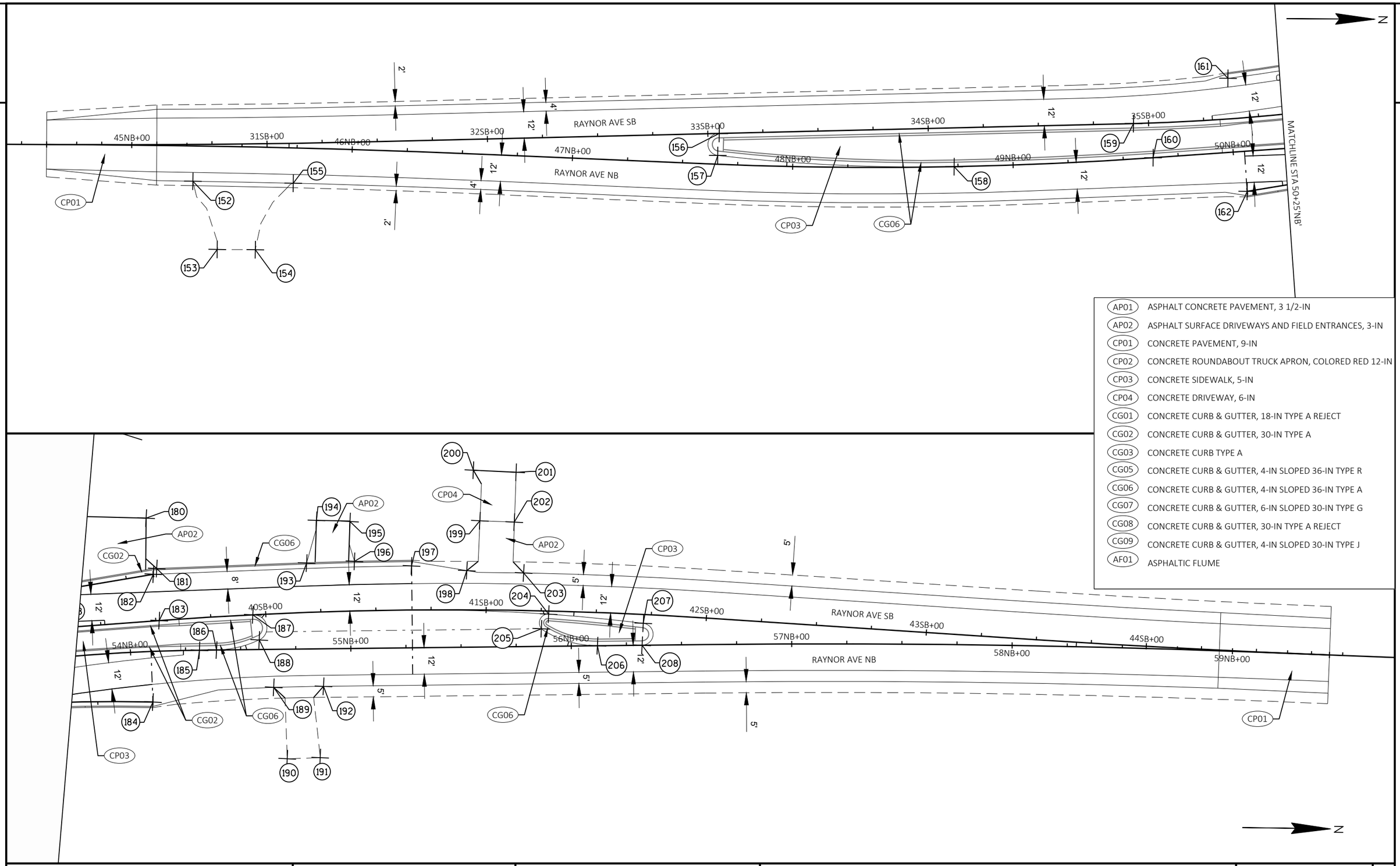
AP01	ASPHALT CONCRETE PAVEMENT, 3 1/2-IN
AP02	ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
CP01	CONCRETE PAVEMENT, 9-IN
CP02	CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
CP03	CONCRETE SIDEWALK, 5-IN
CP04	CONCRETE DRIVEWAY, 6-IN
CG01	CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
CG02	CONCRETE CURB & GUTTER, 30-IN TYPE A
CG03	CONCRETE CURB TYPE A
CG05	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE A
CG07	CONCRETE CURB & GUTTER, 6-IN SLOPED 30-IN TYPE G
CG08	CONCRETE CURB & GUTTER, 30-IN TYPE A REJECT
CG09	CONCRETE CURB & GUTTER, 4-IN SLOPED 30-IN TYPE J
AF01	ASPHALTIC FLUME

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	INTERSECTION DETAILS	SHEET 27 E



2

AP01	ASPHALT CONCRETE PAVEMENT, 3 1/2-IN
AP02	ASPHALT SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
CP01	CONCRETE PAVEMENT, 9-IN
CP02	CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
CP03	CONCRETE SIDEWALK, 5-IN
CP04	CONCRETE DRIVEWAY, 6-IN
CG01	CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
CG02	CONCRETE CURB & GUTTER, 30-IN TYPE A
CG03	CONCRETE CURB TYPE A
CG05	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE A
CG07	CONCRETE CURB & GUTTER, 6-IN SLOPED 30-IN TYPE G
CG08	CONCRETE CURB & GUTTER, 30-IN TYPE A REJECT
CG09	CONCRETE CURB & GUTTER, 4-IN SLOPED 30-IN TYPE J
AF01	ASPHALTIC FLUME



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CG05	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE A
CG07	CONCRETE CURB & GUTTER, 6-IN SLOPED 30-IN TYPE G
CG08	CONCRETE CURB & GUTTER, 30-IN TYPE A REJECT
CG09	CONCRETE CURB & GUTTER, 4-IN SLOPED 30-IN TYPE J
AF01	ASPHALTIC FLUME

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	INTERSECTION DETAILS	SHEET 29	E

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
100	10+00.00 EB	20.23 LT	191597.94	561399.20	813.542
101	10+65.29 EB	20.70 LT	191596.02	561464.71	812.619
102	11+93.03 EB	17.03 LT	191585.23	561592.52	810.863
103	12+12.09 EB	42.48 LT	191609.27	561613.44	809.580
104	12+33.32 EB	43.43 LT	191608.63	561634.86	809.240
105	12+52.50 EB	18.58 LT	191582.34	561652.16	810.014
106	14+48.02 EB	28.18 LT	191572.87	561848.23	807.223
107	14+64.73 EB	57.24 LT	191600.01	561867.91	805.327
108	14+82.25 EB	57.62 LT	191598.54	561885.37	805.230
109	15+02.50 EB	31.31 LT	191570.23	561902.74	806.457
110	14+80.67 EB	16.00 RT	191525.49	561876.04	806.709
111	14+73.35 EB	44.57 RT	191497.85	561865.75	804.495
112	14+83.78 EB	53.35 RT	191488.02	561875.20	804.492
113	15+19.87 EB	16.00 RT	191521.36	561915.02	806.179
114	16+05.32 EB	13.99 LT	191543.48	562002.75	805.417

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
115	16+05.30 EB	4.01 LT	191533.53	562002.05	805.349
116	17+12.82 EB	0.00	191525.42	562109.20	804.246
117	17+61.83 EB	18.14 LT	191543.81	562157.87	804.064
118	17+85.12 EB	17.78 LT	191544.04	562180.93	803.852
119	18+00.00 EB	37.58 LT	191564.35	562194.86	802.865
120	18+07.88 EB	20.77 RT	191506.39	562205.16	802.945
121	18+21.60 EB	0.00	191527.80	562217.95	803.233
122	18+32.99 EB	39.74 LT	191568.08	562227.25	803.262
123	18+45.66 EB	37.25 LT	191566.26	562240.04	802.977
124	18+39.41 EB	56.20 LT	191584.86	562232.80	803.537
125	18+75.37 EB	53.05 LT	191583.58	562268.88	803.419
126	18+79.06 EB	35.58 LT	191566.33	562273.48	802.668
127	18+71.97 EB	15.06 RT	191515.38	562269.03	802.537
128	18+81.54 EB	0.00	191530.92	562277.80	802.753
129	19+03.07 EB	33.86 LT	191563.31	562304.43	802.531

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
130	19+39.45 EB	32.73 LT	191546.97	562349.23	802.497
131	19+45.30 EB	28.98 LT	191539.93	562353.88	802.194
132	19+51.64 EB	5.80 LT	191516.53	562347.25	802.227
133	19+48.23 EB	0.00	191513.72	562341.08	802.347
134	21+40.69 EB	36.23 LT	191512.28	562522.26	801.182
135	21+34.34 EB	33.51 LT	191508.56	562516.43	801.217
136	21+26.61 EB	7.17 LT	191481.32	562513.05	801.094
137	21+31.11 EB	0.00	191474.98	562518.66	800.992
138	21+94.83 EB	19.71 LT	191504.72	562578.35	800.606
139	22+05.69 EB	35.47 LT	191522.03	562586.53	800.173
140	21+92.40 EB	16.07 RT	191469.02	562581.74	800.088
141	22+43.06 EB	0.00 LT	191493.06	562629.13	799.943
142	22+69.68 EB	40.34 LT	191537.12	562649.11	799.322
143	22+56.94 EB	20.23 RT	191475.31	562646.05	799.412
144	23+13.90 EB	16.97 RT	191487.24	562701.64	798.922

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
145	23+28.86 EB	17.27 LT	191523.31	562711.39	799.264
146	23+49.40 EB	72.82 RT	191437.11	562744.62	796.551
147	23+62.63 EB	74.64 RT	191438.47	562757.68	796.379
148	23+93.12 EB	16.97 RT	191498.43	562779.83	798.062
149	23+84.63 EB	16.33 LT	191530.28	562766.90	798.688
150	24+71.83 EB	9.96 LT	191535.20	562854.41	797.583
151	24+71.24 EB	0.00	191525.24	562855.02	797.452

2

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
152	45+27.96 NB	16.00 RT	190836.92	562440.81	810.753
153	45+39.58 NB	46.75 RT	190848.31	562471.62	810.213
154	45+57.03 NB	46.55 RT	190865.59	562471.56	810.154
155	45+73.65 NB	16.00 RT	190882.46	562441.21	809.926
156	47+66.11 NB	14.00 LT	191075.45	562416.45	806.938
157	47+65.81 NB	4.01 LT	191074.87	562426.43	806.714
158	48+73.23 NB	0.00	191182.16	562430.30	804.726
159	49+55.75 NB	16.08 LT	191263.32	562409.81	803.558
160	49+63.59 NB	0.00	191272.37	562425.22	803.003
161	49+99.99 NB	33.57 LT	191305.92	562388.81	802.451
162	50+05.12 NB	18.18 RT	191315.24	562439.97	801.973
163	50+27.65 NB	35.62 LT	191333.33	562384.52	802.050
164	50+37.23 NB	15.18 RT	191347.00	562434.37	801.761
165	50+47.86 NB	0.00	191356.36	562418.38	801.849
166	50+56.89 NB	35.92 LT	191365.56	562382.12	801.778

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
167	50+99.02 NB	39.76 LT	191422.00	562389.98	801.998
168	51+04.92 NB	35.83 LT	191427.63	562396.91	801.635
169	51+11.51 NB	5.72 LT	191420.38	562427.17	801.427
170	51+07.79 NB	0.03 RT	191414.25	562430.34	801.425
171	52+99.24 NB	31.40 LT	191595.41	562424.81	801.917
172	52+93.52 NB	28.71 LT	191590.23	562428.76	801.797
173	52+86.03 NB	6.96 LT	191587.84	562451.70	801.711
174	52+90.61 NB	0.00 LT	191593.94	562457.38	801.950
175	53+54.09 NB	29.19 LT	191651.71	562416.29	800.995
176	53+48.89 NB	13.85 LT	191648.86	562432.29	801.344
177	53+43.06 NB	18.95 RT	191648.50	562465.59	800.989
178	53+72.86 NB	33.09 LT	191670.46	562409.65	801.224
179	53+78.58 NB	63.28 LT	191672.62	562378.93	801.985
180	54+09.48 NB	60.48 LT	191706.01	562378.24	801.405
181	54+13.21 NB	37.44 LT	191711.87	562400.86	800.640

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
182	54+11.66 NB	34.94 LT	191710.46	562403.49	800.443
183	54+13.51 NB	13.82 LT	191714.09	562424.38	800.860
184	54+09.26 NB	22.98 RT	191712.95	562461.40	800.506
185	54+31.29 NB	0.03 RT	191732.94	562436.95	800.841
186	54+39.05 NB	0.00	191740.69	562436.50	800.799
187	54+55.70 NB	15.80 LT	191756.40	562419.76	800.612
188	54+58.47 NB	4.37 LT	191759.83	562431.01	800.603
189	54+64.79 NB	17.19 RT	191767.38	562452.17	800.311
190	54+70.55 NB	49.65 RT	191775.02	562484.24	797.281
191	54+85.53 NB	49.30 RT	191789.96	562483.02	797.352
192	54+87.38 NB	17.00 RT	191789.93	562450.66	800.196
193	54+80.37 NB	38.94 LT	191779.68	562395.22	800.175
194	54+85.03 NB	58.27 LT	191783.22	562375.66	801.171
195	55+00.23 NB	57.61 LT	191798.42	562375.43	801.010
196	55+02.07 NB	39.51 LT	191801.31	562393.40	800.123

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
197	55+27.98 NB	37.16 LT	191827.25	562394.24	800.343
198	55+52.97 NB	34.76 LT	191852.41	562395.19	799.884
199	55+59.18 NB	57.25 LT	191857.30	562372.37	800.647
200	55+56.47 NB	80.21 LT	191853.26	562349.61	801.376
201	55+75.86 NB	79.09 LT	191872.68	562349.61	801.132
202	55+74.75 NB	56.48 LT	191872.89	562372.24	800.514
203	55+78.79 NB	33.39 LT	191878.26	562395.06	799.847
204	55+89.88 NB	14.58 LT	191890.42	562413.19	800.141
205	55+86.51 NB	8.00 LT	191887.44	562419.96	800.009
206	56+11.85 NB	0.00	191913.20	562426.47	800.162
207	56+32.76 NB	9.95 LT	191933.50	562415.32	800.058
208	56+32.14 NB	0.00	191933.46	562425.29	800.145

2

2

VILLAGE OF WATERFORD

BCK3J'S INVESTMENTS LLC

CURVE 1

PI STA. 10+90.72'A'
Y: 194,898.40
X: 526,245.75
DELTA = 03°51'25.75"
T = 257.24'
L = 514.29'
R = 7639.44'
PC STA. 8+33.48'A'
Y: 195,116.49
X: 526,109.32
PT STA. 13+47.77'A'
Y: 194,671.64
X: 526,367.20

BECK

BEGIN PROJECT
STA 3+39.00'A'

BP: 2+03.90'A'

BCK3J'S INVESTMENTS LLC

BCK3J'S INVESTMENTS LLC

SANITARY MANHOLE FRAME AND GRATE &
SANITARY CHIMNEY SEALS

PC: 8+33.48'A'

ADJ-MH

STH 20 R/L

BECK

BECK

MATCH AT FLANGE
OF EXIST. C&G

4'A'

S32° 01' 45"E

6'A'

STH 20

12'
12' LANE
12' LANE
12'

8'A'

HMA

10'A'

12'A'

CURVE 1

STH 83

ADJ-MH

WDNR

EXIST. CONCRETE FLUME

WORK BY OTHERS
SHARON LANE REMOVED

SHARON LANE

LYNCH VENTURES LLC

XXXXXX

BECK DR

ADJ-MH

LYNCH LANE

WORK BY OTHERS
RELOCATION OF INTERSECTION.
NEW ACCESS ROAD TO REPLACE SHARON LANE.

STA. 13+00.00
MATCH LINE

STH 36

LYNCH VENTURES LLC

VOGT

LYNCH VENTURES LLC

KNUEPPEL

KLEMKO

ANDERSON

RODMAN

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 31	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd
PLOT DATE : 3/24/2022 1:47 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

N

BECK

STA 18'A'+49 TO STA 20'A'+22, LT
GUARDRAIL MOW STRIP ASPHALT
(SEE SDD GUARDRAIL MOW STRIP)

STA 16'A'+00 TO STA 20'A'+00
STA 21'A'+00 TO STA 24'A'+00
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS &
BARRIER SYSTEM GRADING SHAPING FINISHING

STA 20'A'+84 TO STA 22'A'+75, LT
GUARDRAIL MOW STRIP ASPHALT
(SEE SDD GUARDRAIL MOW STRIP)

WDNR WIND LAKE CANAL
ACCESS SITE

BECK

BECK

PT 13+47.77A

EXIST.
CONCRETE FLUME

+10.64
24.00' LT

+19.78
21.82' LT

+01.42
15.13' LT

+54.70
15.00' LT

+66.85
22.00' LT

POST #1
+71.63, 24' LT

MGST

REM-GR

MGS

THRIE

STRUCTURE B-51-073

CG30T

CSD

THRIE

REM-GR

MGS

MGST

POST #1
+56.37, 24' LT

+94.87
22.00' LT

+64.87
15.00' LT

TAPER CURB
END

STH 20 R/L

10' SHLD (3' PAVED)

12'
14'A' 12' LANE
12' LANE
12'

HMA

16'A'

S28° 10' 19"E

18'A'

20'A'

22'A'

STH 20

24'A'

HMA

12' LANE
12' LANE

26'A'

28'A'

10' SHLD (3' PAVED)

+89.99
24.86' RT

+55.02
18.82' RT

+86.94
22.00' RT

+72.19
22.00' RT

+42.19
15.00' RT

BECK DR

ADJ-MH

MGS

REM-GR

MGST

THRIE

CG30T

CSD

THRIE

REM-GR

MGST

POST #1
+99.78, 24' RT

POST #1
+34.33, 24' RT

PAVE FULL WIDTH HMA SHOULDER
TO FACE OF BEAM GUARD

PAVE FULL WIDTH
HMA SHOULDER
TO FACE OF BEAM GUARD

WETLAND LIMITS (TYP)

WIND LAKE CANAL

MGS

STA 20'A'+84 TO STA 22'A'+53, RT
GUARDRAIL MOW STRIP ASPHALT
(SEE SDD GUARDRAIL MOW STRIP)

KOJIS TRUST

STA 16'A'+94 TO STA 20'A'+22, RT
GUARDRAIL MOW STRIP ASPHALT
(SEE SDD GUARDRAIL MOW STRIP)

KOJIS TRUST

THOMPSEN

PLUTA

LYNCH VENTURES LLC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 32	E

2

2

MATCH LINE STA. 28+00.00

MATCH LINE STA. 43+00.00

S AND S FROST HOLDINGS LLC

N

WETLAND LIMITS (TYP)

+24, 41.3' LT
IE = 766.88'

CCP

STH 20 R/L

+28.92
15.00' LT

+53.37
22.04' LT

MATCH AT FACE
OF EXIST. C&G

CCP

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

30'A' 32'A' 34'A' S28° 10' 19"E 36'A' HMA STH 20 38'A' 40'A' 42'A'

CAUTION

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

90' - 19x30-INCH RCCP CL IV
1 - 19x30-INCH AEW RCCP
1 - MANHOLE 5-FT DIAMETER,
MANHOLE COVER TYPE J

+68, 36.7' RT
RIM = 769.99'
IE (NW) = 767.04'

ECKERT

KOJIS TRUST

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 33	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 4/20/2022 12:29 PM PLOT BY : BEN KROLCZYK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

CURVE 2

PI STA. 49+06.45'A'
Y: 191,534.54
X: 528,047.32
DELTA = 82°05'23.57"
T = 586.89'
L = 965.76'
R = 674.07'
PC STA. 43+19.56'A'
Y: 192,051.90
X: 527,770.24
PT STA. 52+85.32'A'
Y: 191,737.78
X: 528,597.89

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

N

MATCH LINE STA. 43+00.00

PC: 43+19.56'A'

MATCH AT FACE OF EXIST. C&G

44'A'

48'A'

50'A'

WETLAND LIMITS (TYP)

S AND S FROST HOLDINGS LLC

FROST

+79.90
28.28' LT

+53.28
29.00' LT

+52.06
667.62' LT

CG

R639'

+85.32
29.06' LT

PT: 52+85.32'A'

+47.47
29.00' LT

REMOVE SMALL PIPE CULVERT

STH 20 R/L

+10, 31.7'LT
IE=790.48

+52.89
12.00' LT

10' SHLD (3' PAVED)

12' LANE N69° 44' 17"E 58

12' LANE

10' SHLD (3' PAVED)

56'A'

STH 20

MATCH LINE STA. 58+00.00

60' - 19X30-INCH CPRCHE CL IV
2 - 19X30-INCH AEW CPRCHE

+14, 27.4' RT
IE=789.78

794.707

794.557

794.295

794.085

793.906

54'A'

52'A'

HMA

CURVE 2

CTH D

HOPPE

RUINS

GOETZ

CORRAO

FROST

FROST

STA. 43+00'A' TO STA. 54+00'A'
HIGH FRICTION SURFACE TREATMENT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 34	E

2

CURVE 3

PI STA. 64+57.07'A'
Y: 192,143.57
X: 529,697.13
DELTA = 28°22'28.87"
T = 413.85'
L = 810.71'
R = 1637.02'
PC STA. 60+43.23'A'
Y: 192,000.26
X: 529,308.90
PT STA. 68+53.93'A'
Y: 192,085.17
X: 530,106.84

N

FROST

HOPPE

JOHNSON

JOHNSON

+98, 52.4' LT
IE = 787.06'

REMOVE SMALL PIPE CULVERTS

STH 20 R/L

PT: 68+53.93'A'

PC: 60+43.23'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

64'A'
HMA
66'A'
62'A'
68'A'
70'A'
72'A'

STH 20

CURVE 3

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

N69° 44' 17"E
S81° 53' 14"E

60'A'

MATCH LINE STA. 58+00.00

MATCH AT FACE
OF EXIST. C&G

MATCH AT FACE
OF EXIST. C&G

WETLAND LIMITS (TYP)

+96, 34.4' RT
IE = 790.58'

86' - 30-INCH CPRC CL IV
2 - 30-INCH AEW CPRC

NORTH REVOCABLE TRUST

MICH-WIS PIPE LINE CO

ANR PIPELINE CO

MATCH LINE STA. 73+00.00

FROST

MEIER

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

2

2

MATCH LINE STA. 73+00.00

JOHNSON

JOHNSON

KOHIS

GUNDERSON

NIEMYJSKI

N

CURVE 4

PI STA. 89+93.69'A'
Y: 191,783.20
X: 532,225.18
DELTA = 03°34'07.01"
T = 710.51'
L = 1420.57'
R = 22807.9'
PC STA. 82+83.18'A'
Y: 191,883.47
X: 531,521.78
PT STA. 97+03.75'A'
Y: 191,639.34
X: 532,920.98

PC: 82+83.18'A'

CCP

STH 20 R/L

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

74'A' S81° 53' 14"E 76'A' 78'A' 80'A' HMA 82'A' 84'A' STH 20 86'A' 88

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

CURVE 4

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

DITCHING & SHAPING

MEIER

KOHIS

GUNDERSON

MATCH LINE STA. 88+00.00

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 36	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021206-pd
PLOT DATE : 1/26/2022 5:04 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE STA. 88+00.00

GUNDERSON

NORTH REVOCABLE TRUST

MILLER

CURVE 4

PI STA. 89+93.69'A'
Y: 191,783.20
X: 532,225.18
DELTA = 03°34'07.01"
T = 710.51'
L = 1420.57'
R = 22807.9'
PC STA. 82+83.18'A'
Y: 191,883.47
X: 531,521.78
PT STA. 97+03.75'A'
Y: 191,639.34
X: 532,920.98

CURVE 5

PI STA. 102+05.79'A'
Y: 191,537.69
X: 533,412.63
DELTA = 12°56'30.99"
T = 216.35'
L = 430.85'
R = 1907.45'
PC STA. 99+89.45'A'
Y: 191,581.50
X: 533,200.76
PT STA. 104+20.30'A'
Y: 191,542.45
X: 533,628.92

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

PT: 97+03.75'A'

STH 20 R/L

WETLAND LIMITS (TYP)

PC: 99+89.45'A'

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

MATCH AT FACE OF EXIST. C&G

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

90'A'

92'A'

94'A'

96'A'

HMA

STH 20

98'A'

100'A'

102'A'

S78° 19' 07"E

CURVE 4

MATCH AT FACE OF EXIST. C&G

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

CURVE 5

MATCH LINE STA. 103+00.00

TALASKA

DEBACK TRUST

DOVER FARM LLC

DOVER FARM LLC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
.XXXXX.	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 37	E

2

2

N

MILLER

DOVERCREST
REAL ESTATE LLC

HASENBEIN

MATCH LINE STA. 103+00.00

PT: 104+20.30'A'

MATCH AT FACE
OF EXIST. C&G

DITCHING & SHAPING

STH 20 R/L

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

CCP

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

104'A'
106'A'
108'A'
HMA
110'A'
112'A'
N88° 44' 22"E
114'A'
STH 20
116'A'
118

MATCH AT FACE
OF EXIST. C&G

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

WALVOORD

MATCH LINE STA. 118+00.00

DOVER
FARM LLC

DOVER
FARM LLC

DOVER
FARM LLC

DOVER
FARM LLC

DOVER
FARM LLC

DOVER
FARM LLC

DOVER
FARM LLC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 38	E

2

2

N

HASENBEIN

HASENBEIN

CURVE 6

PI STA. 122+80.81'A'
Y: 191,583.38
X: 535,488.98
DELTA = 07°24'37.80"
T = 164.81'
L = 329.17'
R = 2545.02'
PC STA. 121+15.99'A'
Y: 191,579.75
X: 535,324.20
PT STA. 124+45.16'A'
Y: 191,565.72
X: 535,652.84

CURVE 7

PI STA. 133+83.16'A'
Y: 191,465.23
X: 536,585.44
DELTA = 17°01'06.67"
T = 342.89'
L = 680.72'
R = 2291.76'
PC STA. 130+40.27'A'
Y: 191,501.96
X: 536,244.53
PT STA. 137+20.99'A'
Y: 191,529.88
X: 536,922.17

MATCH LINE STA. 118+00.00

SECTION CORNER MONUMENT

WETLAND LIMITS (TYP)

PC: 121+15.99'A'

PT: 124+45.16'A'

PC: 130+40.27'A'

STH 20 R/L

STH 20

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

120'A'

N88° 44' 22"E

122'A'

124'A'

+89.55
16.26' LT

HMA

126'A'

+74.74
24.00' LT

128'A'

S83° 51' 00"E

+45.33
24.00' LT

130'A'

+17.93
12.59' LT

132'A'

CURVE 6

CURVE 7

XXXX

SHARP RD

MATCH LINE STA. 133+00.00

WALVOORD

STORE MASTER
FUNDING XII, LLC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
— — —	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 39	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021209-pd
PLOT DATE : 1/26/2022 5:05 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

CURVE 7

PI STA. 133+83.16'A'
Y: 191,465.23
X: 536,585.44
DELTA = 17°01'06.67"
T = 342.89'
L = 680.72'
R = 2291.76'
PC STA. 130+40.27'A'
Y: 191,501.96
X: 536,244.53
PT STA. 137+20.99'A'
Y: 191,529.88
X: 536,922.17

HASENBEIN

SCHAAL LIVING TRUST

CURVE 8

PI STA. 147+14.42'A'
Y: 191,717.20
X: 537,897.78
DELTA = 09°17'28.78"
T = 186.15'
L = 371.49'
R = 2290.83'
PC STA. 145+28.27'A'
Y: 191,682.10
X: 537,714.97
PT STA. 148+99.76'A'
Y: 191,722.32
X: 538,083.87

SCHAAL

N

MATCH LINE STA. 133+00.00

MATCH AT FACE OF EXIST. C&G

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

PT 137+20.99'A'

STH 20 R/L

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

PC 145+28.27'A'

WETLAND LIMITS (TYP)

CURVE 8

CURVE 7

10' SHLD
12' LANE
12' LANE
10' SHLD (3' PAVED)

134'A'
136'A'
138'A'
140'A'
142'A'
144'A'
146'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

HMA

N79° 07' 53"E STH 20

SIGN

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

ORCHARD

HAGER TRUST

MATCH LINE STA. 148+00.00

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

STORE MASTER FUNDING XII, LLC

HAGER TRUST

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 40	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021210-pd
PLOT DATE : 1/26/2022 5:05 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

N

MATCH LINE STA. 148+00.00

SCHAAL

SCHAAL

BELLANTE

MC CRAY

MC CRAY

CURVE 9

PI STA. 160+01.54'A'
Y: 191,752.65
X: 539,185.23
DELTA = 01°03'15.59"
T = 211.53'
L = 423.05'
R = 22990.08'
PC STA. 157+90.01'A'
Y: 191,746.82
X: 538,973.78
PT STA. 162+13.06'A'
Y: 191,754.58
X: 539,396.76

** NOTE: STH 20 ALIGNMENT DOES NOT MATCH ROADWAY CENTERLINE FROM STA. 157+90.01'A' TO STA. 197+70.86'A'

PT STA. 148+99.76'A'

PC STA. 157+90.01'A'

PT STA. 162+13.06'A'

SEPTIC

RIPRAP

MATCH AT FACE OF EXIST. C&G

STH 20 R/L

MATCH AT FACE OF EXIST. C&G

10' SHLD
12' LANE
12' LANE
10' SHLD (3' PAVED)

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD

149'A' 150'A' 151'A' 152'A' 153'A' 154'A' N88° 25' 22"E HMA 156'A' 157'A' 158'A' STH 20 160'A' 161'A' 162'A'

CURVE 9

MATCH AT FACE OF EXIST. C&G

SHAFFAR LLC

SHAFFAR LLC

SHAFFAR LLC

MEALY FARMS LLC

HAGER TRUST

MATCH LINE STA. 163+00.00

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 41	E

2

2

N

MATCH LINE STA. 163+00.00

MC CRAY

SHADER

DOSEDLA

THE FARM AT DOVER LLC

CURVE 10

PI STA. 173+01.68'A'
Y: 191,764.51
X: 540,485.33
DELTA = 02°05'20.97"
T = 417.88'
L = 835.66'
R = 22918.31'
PC STA. 168+83.80'A'
Y: 191,760.70
X: 540,067.47
PT STA. 177+19.47'A'
Y: 191,783.55
X: 540,902.77

MEALY RD

PC: 168+83.80'A'

PT: 177+19.47'A'

WETLAND LIMITS (TYP)

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

** NOTE: STH 20 ALIGNMENT DOES NOT MATCH ROADWAY CENTERLINE FROM STA. 157+90.01'A' TO STA. 197+70.86'A'

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

MATCH AT FACE
OF EXIST. C&G

CCP

STH 20 R/L

164'A'

166'A'

N89° 28' 38"E

168'A'

170'A'

172'A'

174'A'

176'A'

10' SHLD (3' PAVED)

12' LANE

12' LANE

10' SHLD (3' PAVED)

HMA

STH 20

CURVE 10

+52.27
17.76' RT

+13.03
28.65' RT

+76.23
30.12' RT

+35.67
19.97' RT

MATCH LINE STA. 178+00.00

ROWNTREE
BROTHERS
PARTNERSHIP

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 42	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021212-pd
PLOT DATE : 1/26/2022 5:06 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
xxxxx	SAWING ASPHALT

N

MATCH LINE STA. 178+00.00

THE FARM AT DOVER LLC

KURT

CURVE 11

PI STA. 191+96.30'A'
Y: 191,850.86
X: 542,378.07
DELTA = 11°31'51.06"
T = 578.47'
L = 1153.03'
R = 5729.30'
PC STA. 186+17.83'A'
Y: 191,824.49
X: 541,800.21
PT STA. 197+70.86'A'
Y: 191,761.17
X: 542,949.55

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

WETLAND LIMITS (TYP)

PC: 186+17.83'A'

CCP

STH 20 R/L

** NOTE: STH 20 ALIGNMENT DOES NOT MATCH ROADWAY CENTERLINE FROM STA. 157+90.01'A' TO STA. 197+70.86'A'

+18.89
11.10' LT

+55.55
22.30' LT

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

HMA

182'A'
184'A'
186'A'
188'A'
190'A'
192'A'

N87° 23' 17"E

STH 20

CURVE 11

+28.34
17.84' RT

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

DITCHING & SHAPING

MATCH LINE STA. 193+00.00

ROWNTREE BROTHERS PARTNERSHIP

ROWNTREE BROTHERS PARTNERSHIP

ROWNTREE FARMS INC.

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 43	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021213-pd
PLOT DATE : 1/26/2022 5:06 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

CURVE 11

PI STA. 191+96.30'A'
Y: 191,850.86
X: 542,378.07
DELTA = 11°31'51.06"
T = 578.47'
L = 1153.03'
R = 5729.30'
PC STA. 186+17.83'A'
Y: 191,824.49
X: 541,800.21
PT STA. 197+70.86'A'
Y: 191,761.17
X: 542,949.55

KURT

MAPLE LEAF
DUCK FARMS INC

MAPLE LEAF
DUCK FARMS INC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

N

** NOTE: STH 20 ALIGNMENT DOES NOT MATCH ROADWAY CENTERLINE FROM STA. 157+90.01'A' TO STA. 197+70.86'A'

MATCH LINE STA. 193+00.00

+54.12
23.82' LT

CURVE 11

+93.46
14.53' LT

PT: 197+70.86'A'

STH 20 R/L

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

194'A' 196'A' 198'A' 200'A' S81° 04' 52"E HMA 202'A' STH 20 204'A' 206'A' 208

+11.44
16.40' RT

WETLAND LIMITS (TYP)

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

BERM

CTH N / DOWNY DR

ROWNTREE
FARMS INC

MATCH LINE STA. 208+00.00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 44	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021214-pd
PLOT DATE : 1/26/2022 5:06 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

CURVE 12

PI STA. 216+47.91'A'
Y: 191,470.16
X: 544,803.90
DELTA = 06°01'06.84"
T = 602.14'
L = 1203.17'
R = 11453.96'
PC STA. 210+45.77'A'
Y: 191,563.52
X: 544,209.04
PT STA. 222+48.94'A'
Y: 191,439.70
X: 545,405.27

MAPLE LEAF
DUCK FARMS INC

MAPLE LEAF
DUCK FARMS INC

N

MATCH LINE STA. 208+00.00

PC: 210+45.77'A'

PT: 222+48.94'A'

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

CURVE 12

STH 20 R/L

STH 20

S81° 04' 52"E

210'A'

212'A'

214'A'

216'A'

218'A'

220'A'

222'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

HMA

GUY

BERM

OH

G

FO

POST

MATCH LINE STA. 223+00.00

JANES

ROWNTREE

BIRD TRUST

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 45	E

2

2

N

MATCH LINE STA. 223+00.00

MAPLE LEAF
DUCK FARMS INC

CURVE 13

PI STA. 226+99.87'A'
Y: 191,416.88
X: 545,855.62
DELTA = 01°58'13.58"
T = 394.00'
L = 787.93'
R = 22911.06'
PC STA. 223+05.87'A'
Y: 191,436.81
X: 545,462.13
PT STA. 230+93.80'A'
Y: 191,383.43
X: 546,248.20

SCHAAL

CURVE 14

PI STA. 240+96.03'A'
Y: 191,298.33
X: 547,246.81
DELTA = 05°04'11.49"
T = 507.55'
L = 1014.43'
R = 11464.32'
PC STA. 235+88.48'A'
Y: 191,341.42
X: 546,741.10
PT STA. 246+02.91'A'
Y: 191,300.09
X: 547,754.35

MOCZYNSKI

PC: 223+05.87'A'

PT: 230+93.80'A'

PC: 235+88.48'A'

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

STH 20 R/L

CURVE 13

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

CURVE 14

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

224'A'
226'A'
228'A'
HMA
230'A'
232'A'
S85° 07' 45"E
234'A'
STH 20
236'A'
238

POST
POST
POST

2

2

CURVE 14

PI STA. 240+96.03'A'
Y: 191,298.33
X: 547,246.81
DELTA = 05°04'11.49"
T = 507.55'
L = 1014.43'
R = 11464.32'
PC STA. 235+88.48'A'
Y: 191,341.42
X: 546,741.10
PT STA. 246+02.91'A'
Y: 191,300.09
X: 547,754.35

N

MATCH LINE STA. 238+00.00

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

WETLAND LIMITS (TYP)

BEGUHL

STH 20 R/L

CURVE 14

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

PT: 246+02.91'A'

BEGUHL

STORCK TRUST

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

240'A'
242'A'
244'A'
246'A'
248'A'
250'A'
252'A'

HMA

S89°48' 03"E

STH 20

CCP

REM-GR

MATCH AT FACE
OF EXIST. C&G

BEGUHL

SEPTIC

SHEAHAN

SMOLENSKY

HINNERS

MATCH LINE STA. 253+00.00

BIRD TRUST

BIRD TRUST

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
xxxxx	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 47	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021217-pd
PLOT DATE : 1/26/2022 5:07 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MATCH LINE STA. 253+00.00

N

STORCK

KENNEDY / KITZEROW

FORTIER

MASTRANGELO

STORCK

STORCK

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

BERM

STH 20 R/L

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

254'A' 256'A' 258'A' 260'A' N89° 48' 03"E HMA 262'A' 264'A' STH 20 266'A'

GUY

HINNERS

SMOLENSKY

SMOLENSKY

SMOLENSKY

MATCH LINE STA. 268+00.00

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 48	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021218-pd

PLOT DATE : 1/26/2022 5:07 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

STORCK

CURVE 15

PI STA. 272+93.66'A'
Y: 191,309.44
X: 550,445.09
DELTA = 08°55'33.21"
T = 224.00'
L = 447.09'
R = 2869.88'
PC STA. 270+69.66'A'
Y: 191,308.66
X: 550,221.09
PT STA. 275+16.75'A'
Y: 191,344.97
X: 550,666.25

CURVE 16

PI STA. 280+37.47'A'
Y: 191,427.55
X: 551,180.38
DELTA = 03°21'32.30"
T = 112.53'
L = 224.99'
R = 3837.72'
PC STA. 279+24.95'A'
Y: 191,409.70
X: 551,069.28
PT STA. 281+49.93'A'
Y: 191,438.85
X: 551,292.34

MATCH LINE STA. 268+00.00

STORCK

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

PC: 270+69.66'A'

DITCHING & SHAPING

CCP

PT: 275+16.75'A'

BEAUMONT REVOCABLE TRUST

END CONSTRUCTION
STA 276'A'+38.76

PC: 279+24.95'A'

PT: 281+49.93'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

STH 20 R/L

270'A'
N89° 48' 03"E
STH 20
272'A'
HMA
274'A'
276'A'
N80° 52' 30"E
278'A'
280'A'
282'A'
N84° 14' 02"E

CURVE 15

CURVE 16

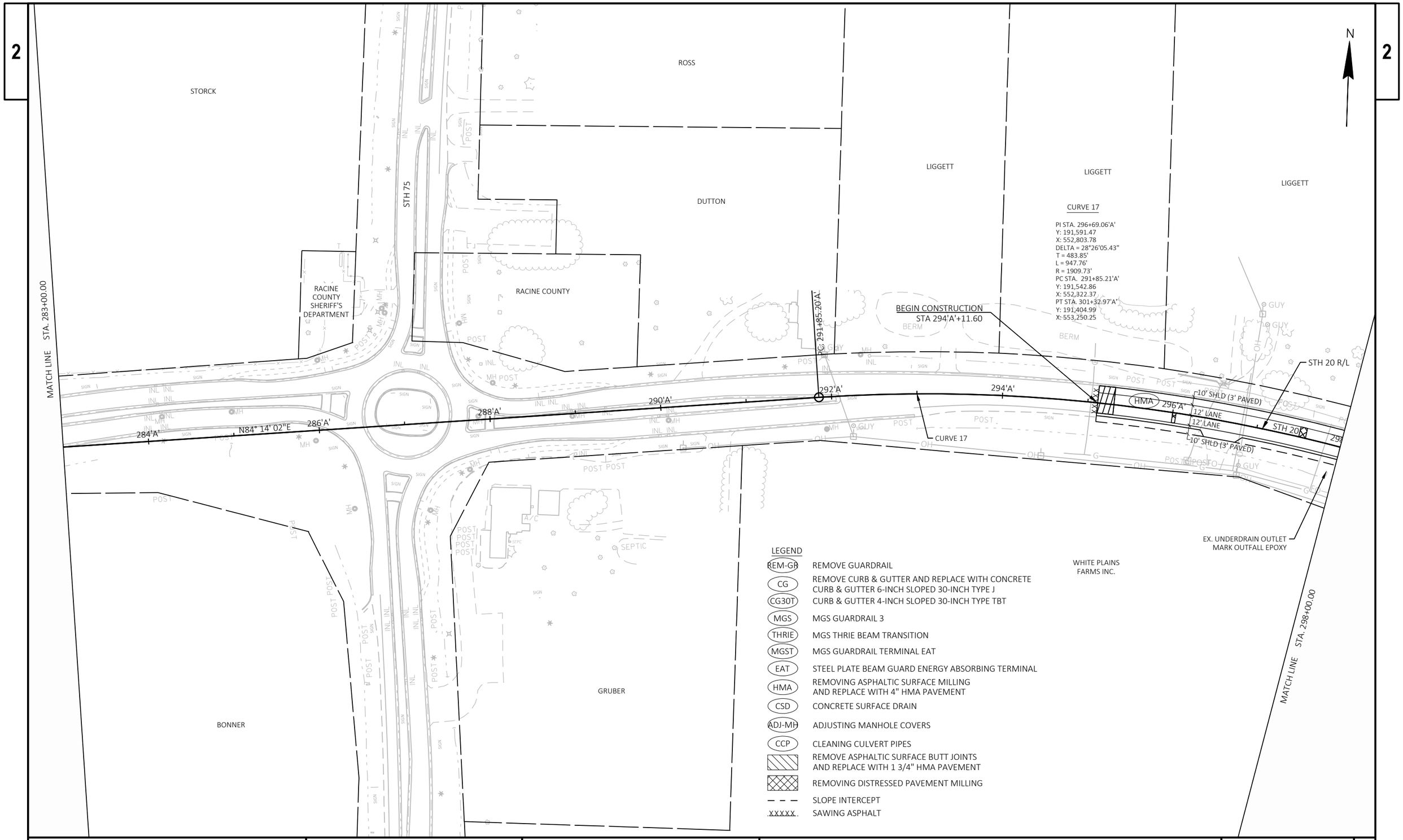
MATCH LINE STA. 283+00.00

SMOLENSKY

BONNER REVOCABLE TRUST

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT



LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 50	E

2

2

WHITE PLAINS FARMS INC.

WHITE PLAINS FARMS INC.

N

CURVE 17

PI STA. 296+69.06'A'
Y: 191,591.47
X: 552,803.78
DELTA = 28°26'05.43"
T = 483.85'
L = 947.76'
R = 1909.73'
PC STA. 291+85.21'A'
Y: 191,542.86
X: 552,322.37
PT STA. 301+32.97'A'
Y: 191,404.99
X: 553,250.25

HAAG

MATCH AT FACE OF EXIST. C&G

PT: 301+32.97'A'

STA. 298+00.00

MATCH LINE

300'A'

302'A'

304'A'

306'A'

308'A'

310'A'

312'A'

10' SHLD (3' PAVED)

12' LANE

12' LANE

10' SHLD (3' PAVED)

HMA

STH 20 R/L

STH 20

S67° 19' 52"E

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

CURVE 17

STA. 313+00.00

MATCH LINE

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

WHITE PLAINS FARMS INC.

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 51	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021221-pd

PLOT DATE : 1/26/2022 5:07 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

N

MATCH LINE STA. 313+00.00

BIRD TRUST

GRESL

CURVE 18

PI STA. 330+02.25'A'
Y: 190,299.16
X: 555,897.88
DELTA = 50°15'55.34"
T = 1075.05'
L = 2010.40'
R = 2291.59'
PC STA. 319+27.20'A'
Y: 190,713.49
X: 554,905.88
PT STA. 339+37.60'A'
Y: 190,797.17
X: 556,850.62

STOCKPILE

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

314'A'

S67° 19' 52"E

316'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

318'A'

PC. 319+27.20'A'

320'A'

HMA

322'A'

EX. UNDERDRAIN OUTLET MARK OUTFALL EPOXY

WETLAND LIMITS (TYP)

STH 20 R/L

324'A'

STH 20

326'A'

CULVERT PIPE

CURVE 18

MATCH LINE STA. 328+00.00

FLIESS

WHITE PLAINS FARMS INC.

GRESL

GRESL

THOM TRUST

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 52	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021222-pd
PLOT DATE : 1/26/2022 5:08 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE STA. 328+00.00

GRESL

TABOR TRUST

TABOR TRUST

CURVE 19

PI STA. 330+02.25'A'
Y: 190,299.16
X: 555,897.88
DELTA = 50°15'55.34"
T = 1075.05'
L = 2010.40'
R = 2291.59'
PC STA. 319+27.20'A'
Y: 190,713.49
X: 554,905.88
PT STA. 339+37.60'A'
Y: 190,797.17
X: 556,850.62

N

WETLAND LIMITS (TYP)

PT: 339+37.60'A'

+42.79
24.97' LT

+72.25
15.00' LT

342'A'

N62° 24' 12"E

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

330'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

332'A'

334'A'

336'A'

HMA

338'A'

340'A'

STH 20

+49.44
15.00' RT

+84.00
24.99' RT

N BRITTON RD

MATCH LINE STA. 343+00.00

CURVE 19

STH 20 R/L

GUY POLE

DOVER STATE
HABITAT AREA

JJKK INVESTMENTS, LLC

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 53	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021223-pd
PLOT DATE : 1/26/2022 5:08 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

MATCH LINE STA. 343+00.00

N BRITTON RD

TABOR TRUST

KARCZEWSKI

CURVE 19

PI STA. 357+44.08'A'
Y: 191,634.01
X: 558,451.58
DELTA = 28°45'53.32"
T = 489.63'
L = 958.60'
R = 1909.40'
PC STA. 352+54.46'A'
Y: 191,407.20
X: 558,017.66
PT STA. 362+13.05'A'
Y: 191,624.03
X: 558,941.11

+88.97
24.80' LT

+89.27
15.00' LT

WETLAND LIMITS (TYP)

STH 20 R/L

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

PC: 352+54.46'A'

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

HMA

344'A'
346'A'
348'A'
350'A'
352'A'
354'A'
356'A'

N62° 24' 12"E

STH 20

CURVE 19

+28.78
24.67' RT

+01.85
15.00' RT

POST

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

DOVER STATE HABITAT AREA

WISDNR

EVASKA

MATCH LINE STA. 358+00.00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 54	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021224-pd

PLOT DATE : 1/26/2022 5:08 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

CADD

KARCZEWSKI

CURVE 19

PI STA. 357+44.08'A'
Y: 191,634.01
X: 558,451.58
DELTA = 28°45'53.32"
T = 489.63'
L = 958.60'
R = 1909.40'
PC STA. 352+54.46'A'
Y: 191,407.20
X: 558,017.66
PT STA. 362+13.05'A'
Y: 191,624.03
X: 558,941.11

KARCZEWSKI

SECTION CORNER MONUMENT

HEGEMANN

WOODWARD

STH 20 R/L

PT: 362+13.05'A'

PI: 370+70.76'A'

BERM

SEPTIC

CURVE 19

MATCH LINE STA. 358+00.00

360'A'

HMA

362'A'

364'A'

366'A'

368'A'

S88° 49' 54"E

STH 20

370'A'

372'A'

10' SHLD (3' PAVED)

12' LANE

12' LANE

10' SHLD (3' PAVED)

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

MATCH AT FACE
OF EXIST. C&G

MATCH LINE STA. 373+00.00

EVASKA

STA 361+88 TO 364+82, RT
DITCHING & SHAPING

NOVAK

BISLEW

ABBOTT

KOVACH

ABBOTT

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
xxxxx	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 55	E

2

MATCH LINE STA. 373+00.00

CADD | DOLPHIN MANOR LLC | JOHNSON | ROCKWELL | ROCKWELL | PETERSON | MUELEMANN

N

CURVE 20

PI STA. 386+04.98'A'
Y: 191,580.42
X: 561,332.64
DELTA = 00°58'41.57"
T = 196.77'
L = 393.53'
R = 23049.53'
PC STA. 384+08.22'A'
Y: 191,584.01
X: 561,135.90
PT STA. 388+01.74'A'
Y: 191,573.46
X: 561,529.28

CCP

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

PI: 383+47.26'A'

PC: 384+08.22'A'

MATCH AT FLANGE
OF EXIST. C&G

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

374'A' 376'A' 378'A' 380'A' 382'A' 384'A' 386'A'

S89° 02' 20"E

HMA

STH 20

S88° 57' 09"E

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

STH 20 R/L

MATCH AT FACE
OF EXIST. C&G

WETLAND LIMITS (TYP)

CURVE 20

EX. UNDERDRAIN OUTLET
MARK OUTFALL EPOXY

STA 386'A'+71
END RESURFACE
BEGIN RECONSTRUCT

MATCH LINE STA. 11'EB'+29

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

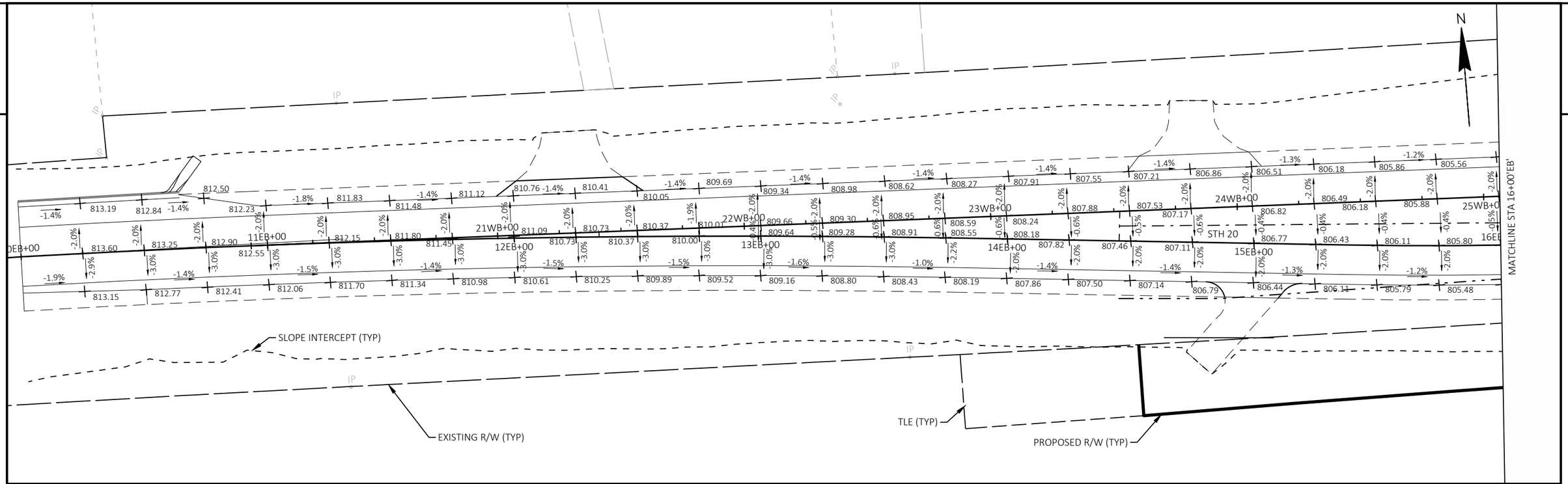
ABBOTT

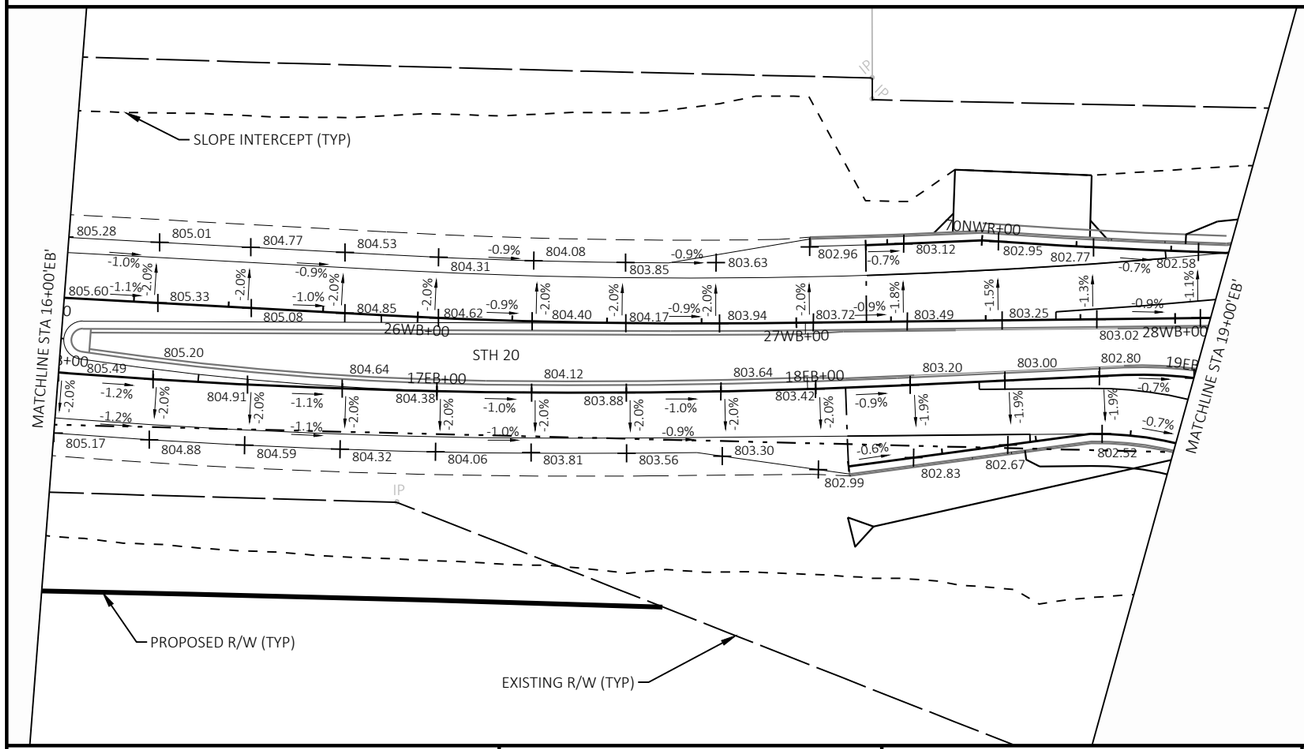
LEMBCKE

2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 56	E

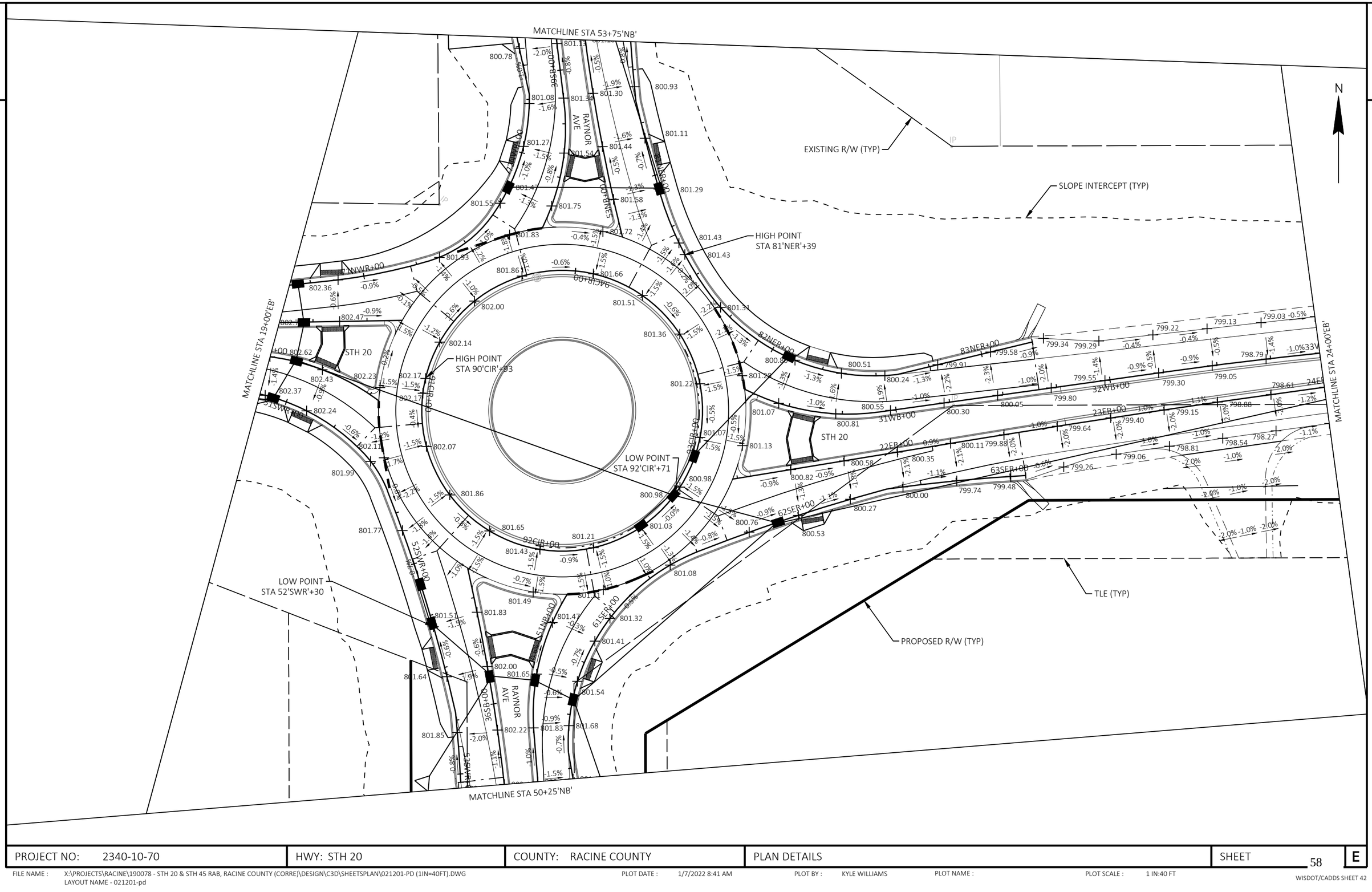
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021226-pd
PLOT DATE : 1/26/2022 5:09 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT





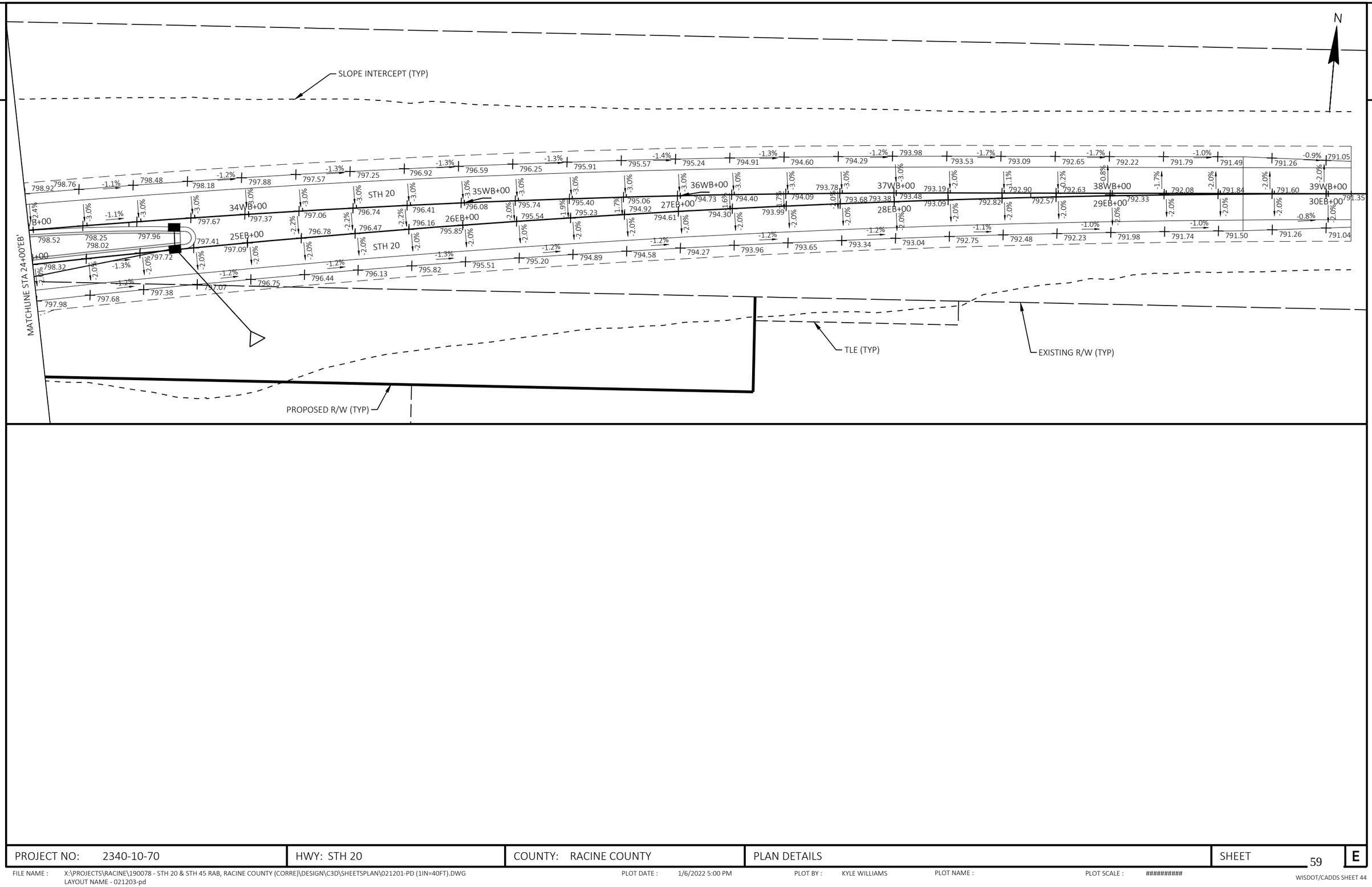
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN DETAILS	SHEET 57	E

2



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN DETAILS	SHEET 58	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\021201-PD (1IN=40FT).DWG
LAYOUT NAME - 021201-pd
PLOT DATE : 1/7/2022 8:41 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN DETAILS	SHEET 59	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\021201-PD (1IN=40FT).DWG
LAYOUT NAME - 021203-pd
PLOT DATE : 1/6/2022 5:00 PM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

2

2

N

MATCH LINE STA. 26'EB'+45

MATCH LINE STA. 418+00.00

ABBOTT

ABBOTT

CHRISTENSEN

NELSON

OAKES

SPANG

VARGAS

CURVE 22

PI STA. 410+05.60'A'
Y: 191,571.53
X: 563,732.62
DELTA = 01°05'56.33"
T = 218.17'
L = 436.32'
R = 22747.61'
PC STA. 407+87.43'A'
Y: 191,566.62
X: 563,514.51
PT STA. 412+23.75'A'
Y: 191,572.26
X: 563,950.78

STA 406'A'+67 TO 441'A'+48
PREPARE FOUNDATION FOR
ASPHALTIC SHOULDERS

STA 406'A'+67 TO 416'A'+00
DITCHING & SHAPING, RT

PT: 403+56.58'A'

PC: 407+87.43'A'

PT: 412+23.75'A'

WETLAND LIMITS (TYP)

STH 20 R/L

CCP

10' SHLD (3' PAVED)
12' LANE
12' LANE
10' SHLD (3' PAVED)

10' SHLD (5' PAVED)
12' LANE
12' LANE
10' SHLD (5' PAVED)

404'A'
406'A'
408'A'
410'A'
HMA
412'A'
414'A'
STH 20
N89° 48' 33"E
416'A'
N88° 42' 36"E

STA 406+67
END RECONSTRUCT
BEGIN RESURFACE

CURVE 22

GUY
RIPRAP
SIGN

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
– – –	SLOPE INTERCEPT
xxxxx	SAWING ASPHALT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 60	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021228-pd
PLOT DATE : 1/26/2022 5:09 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

N

MATCH LINE STA. 418+00.00

OAKES

MUTTER

EILERS

FLEISCHMAN

SECTION CORNER MONUMENT

PI : 422+74.78'A'

+35.51 17.93' LT

+96.18 24.00' LT

EAT

REM-GR

+48.77 24.00' LT

+68.77 22.00' LT

STH 20 R/L

CCP

10' SHLD (5' PAVED)

12' LANE

12' LANE

10' SHLD (5' PAVED)

'A' N89° 48' 33"E 420'A' 422'A' 424'A' HMA 426'A' 428'A' STH 20 S89° 32' 43"E 430'A' 432'A'

PAVE FULL WIDTH HMA SHOULDER TO FACE OF BEAM GUARD

PAVE FULL WIDTH HMA SHOULDER TO FACE OF BEAM GUARD

+40.52 18.24' RT

+98.12 24.00' RT

REM-GR

EAT

+69.97 22.00' RT

REM-GR

+49.97 24.00' RT

EAT

FOOTBRIDGE

WETLAND LIMITS (TYP)

MATCH LINE STA. 433+00.00

VARGAS

WALKER

HEGEMANN

KUIPER

KUIPER

RICHARDSON

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 61	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021229-pd

PLOT DATE : 1/26/2022 5:09 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE STA. 433+00.00

LEGEND

REM-GR	REMOVE GUARDRAIL
CG	REMOVE CURB & GUTTER AND REPLACE WITH CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J
CG30T	CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE TBT
MGS	MGS GUARDRAIL 3
THRIE	MGS THRIE BEAM TRANSITION
MGST	MGS GUARDRAIL TERMINAL EAT
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
HMA	REMOVING ASPHALTIC SURFACE MILLING AND REPLACE WITH 4" HMA PAVEMENT
CSD	CONCRETE SURFACE DRAIN
ADJ-MH	ADJUSTING MANHOLE COVERS
CCP	CLEANING CULVERT PIPES
	REMOVE ASPHALTIC SURFACE BUTT JOINTS AND REPLACE WITH 1 3/4" HMA PAVEMENT
	REMOVING DISTRESSED PAVEMENT MILLING
	SLOPE INTERCEPT
XXXXX	SAWING ASPHALT

N

HEGEMANN

GENGLER

HUBBARD

END PROJECT
STA 441'A'+48

DITCHING & SHAPING

STH 20 R/L

10' SHLD (5' PAVED)
12' LANE
12' LANE
10' SHLD (5' PAVED)

434'A' 436'A' S89° 32' 43"E HMA 438'A' STH 20 440'A' 442'A' 444'A' 446'A' 448'A'

ASPHALTIC PAVEMENT
BUTT JOINT REQUIRED

CCP

WETLAND LIMITS (TYP)

RICHARDSON

TOP FLIGHT LLC

TOP FLIGHT LLC

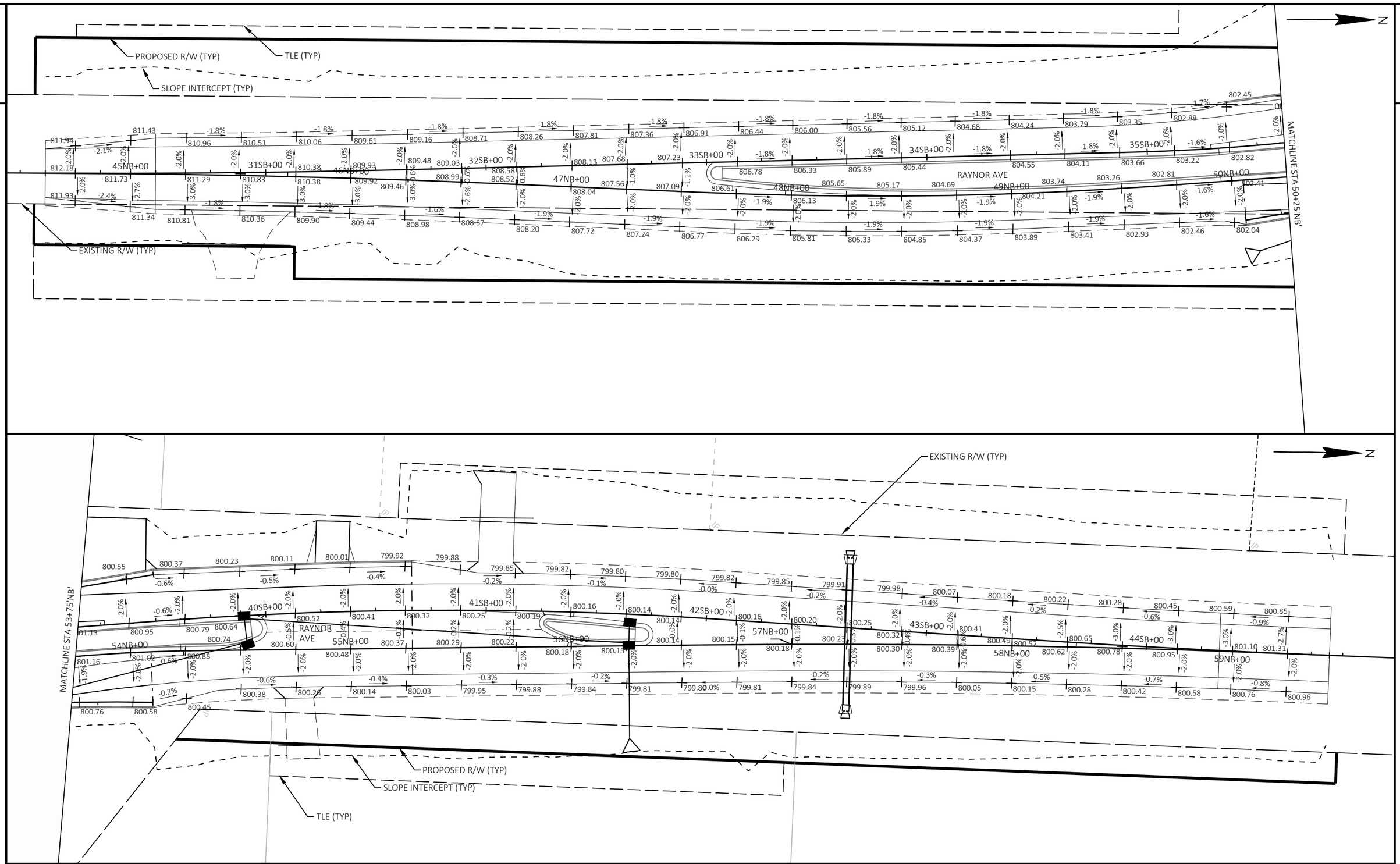
SAUNDERS

LAKETA HOLDINGS LLC

2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	PLAN DETAILS	SHEET 62	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021230-pd
PLOT DATE : 1/26/2022 5:09 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN DETAILS	SHEET 63	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\021201-PD (1IN=40FT).DWG
LAYOUT NAME - 021204-pd

PLOT DATE : 1/6/2022 5:00 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

RAYNOR AVE - SOUTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	50+76.27	54.29' L	801.88	191394.83	562366.58
2	50+70.15	50.20' L	801.95	191385.14	562369.16
3	50+80.43	51.34' L	801.47	191400.33	562370.76
4	50+77.66	49.18' L	801.49	191395.86	562372.00
5	50+71.36	44.98' L	801.56	191386.17	562374.57
6	50+68.33	43.28' L	801.60	191381.69	562375.71
7	50+82.27	49.99' L	801.51	191402.65	562372.70
8	50+78.32	46.86' L	801.53	191396.33	562374.46
9	50+71.94	42.61' L	801.60	191386.64	562377.03
10	50+67.57	40.22' L	801.65	191380.30	562378.64
11	50+84.52	28.31' L	801.91	191400.15	562394.46
12	50+77.19	24.28' L	801.97	191390.31	562396.27

RAYNOR AVE - SOUTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
13	50+85.39	26.09' L	801.82	191400.61	562396.89
14	50+77.97	21.99' L	801.88	191390.78	562398.71
15	50+89.99	15.65' L	801.66	191402.82	562408.49
16	50+81.12	13.48' L	801.72	191392.51	562407.81
17	50+89.98	2.49' L	801.47	191398.69	562420.98
18	50+80.20	2.50' L	801.53	191389.05	562418.28
19	50+89.98	0.00'	801.54	191397.90	562423.34
20	50+79.96	0.00'	801.60	191388.26	562420.66
21	50+98.45	21.37' R	801.42	191397.53	562446.01
22	50+89.95	20.63' R	801.46	191391.42	562442.93
23	50+77.66	19.45' R	801.53	191382.11	562439.23
24	50+69.47	18.60' R	801.57	191375.62	562437.30

RAYNOR AVE - SOUTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
25	50+95.81	23.66' R	801.39	191394.75	562447.35
26	50+89.94	23.15' R	801.42	191390.63	562445.32
27	50+77.29	21.94' R	801.49	191381.32	562441.61
28	50+71.60	21.35' R	801.51	191376.97	562440.26
29	50+89.93	28.18' R	801.51	191389.04	562450.10
30	50+76.48	26.90' R	801.51	191379.75	562446.35

N

EXISTING RIGHT-OF-WAY

CONCRETE SIDEWALK 4-INCH

SLOPE INTERCEPT

PROPOSED RIGHT-OF-WAY

RAYNOR AVE SB

CONCRETE CURB PEDESTRIAN

CONCRETE SIDEWALK 4-INCH

365B+00

51NB+00

YIELD

EXISTING RIGHT-OF-WAY

SLOPE INTERCEPT

CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD (TYP)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CURB RAMP DETAILS	SHEET 64	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 021301-cr

PLOT DATE : 1/19/2022 9:10 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

RAYNOR AVE - NORTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	53+35.80	43.27' L	801.61	191630.53	562405.57
2	53+27.48	48.13' L	801.73	191621.00	562402.39
3	53+37.64	36.04' L	801.17	191633.70	562412.35
4	53+33.53	37.76' L	801.22	191629.17	562411.42
5	53+25.02	42.28' L	801.32	191619.56	562408.62
6	53+21.25	44.75' L	801.37	191615.18	562406.96
7	53+38.39	33.10' L	801.20	191634.99	562415.11
8	53+32.58	35.46' L	801.26	191628.61	562413.85
9	53+24.05	39.98' L	801.36	191618.99	562411.07
10	53+18.82	43.45' L	801.42	191612.92	562408.73
11	53+25.17	18.06' L	801.55	191624.30	562432.37
12	53+16.01	21.57' L	801.63	191614.41	562430.76

RAYNOR AVE - NORTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
13	53+24.17	15.76' L	801.97	191623.73	562434.82
14	53+14.99	19.30' L	801.55	191613.85	562433.19
15	53+21.15	8.93' L	801.42	191622.04	562442.12
16	53+11.25	11.07' L	801.49	191611.79	562442.03
17	53+21.24	2.50' L	801.38	191623.38	562448.40
18	53+11.27	2.50' L	801.44	191613.58	562450.41
19	53+21.28	0.00'	801.46	191623.91	562450.85
20	53+11.27	0.00'	801.51	191614.10	562452.86
21	53+28.28	19.83' R	801.09	191634.47	562469.00
22	53+21.59	20.22' R	801.14	191628.13	562470.63
23	53+11.33	20.82' R	801.21	191618.46	562473.22
24	53+04.62	21.22' R	801.26	191612.15	562474.98

RAYNOR AVE - NORTH LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
25	53+26.37	22.44' R	801.07	191633.13	562471.92
26	53+21.63	22.72' R	801.10	191628.66	562473.08
27	53+11.34	23.33' R	801.17	191618.98	562475.67
28	53+06.58	23.61' R	801.22	191614.53	562476.91
29	53+21.73	28.73' R	801.50	191629.91	562478.95
30	53+11.36	29.34' R	801.58	191620.24	562481.55

N

SLOPE INTERCEPT

EXISTING RIGHT-OF-WAY

CONCRETE SIDEWALK 4-INCH

SLOPE INTERCEPT

TEMPORARY LIMITED EASEMENT

RAYNOR AVE SB

RAYNOR AVE NB

S3NB+00

CONCRETE SIDEWALK 4-INCH

DETECTABLE WARNING FIELD (TYP)

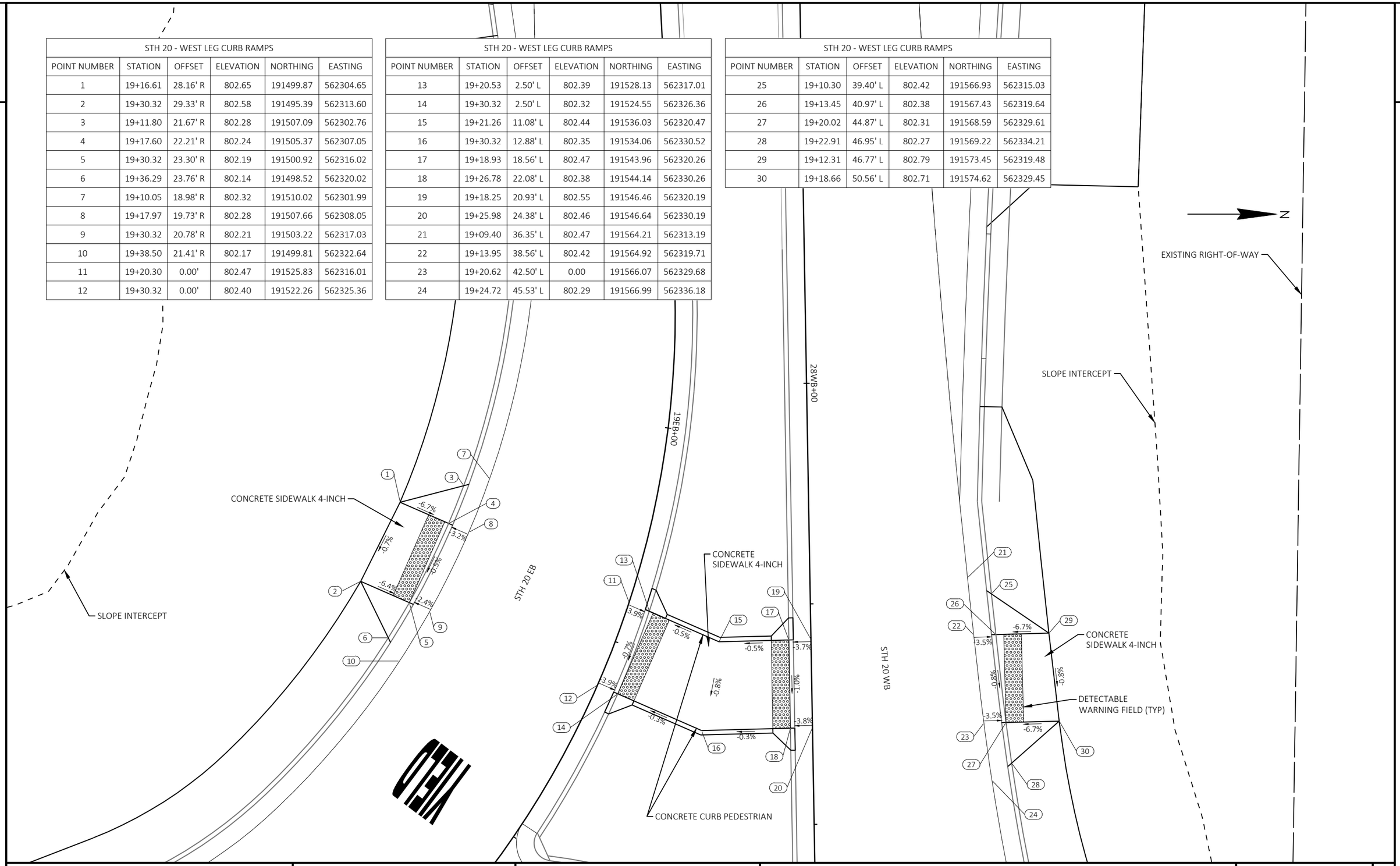
CONCRETE SIDEWALK 4-INCH
CONCRETE CURB PEDESTRIAN

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CURB RAMP DETAILS	SHEET 65	E

STH 20 - WEST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	19+16.61	28.16' R	802.65	191499.87	562304.65
2	19+30.32	29.33' R	802.58	191495.39	562313.60
3	19+11.80	21.67' R	802.28	191507.09	562302.76
4	19+17.60	22.21' R	802.24	191505.37	562307.05
5	19+30.32	23.30' R	802.19	191500.92	562316.02
6	19+36.29	23.76' R	802.14	191498.52	562320.02
7	19+10.05	18.98' R	802.32	191510.02	562301.99
8	19+17.97	19.73' R	802.28	191507.66	562308.05
9	19+30.32	20.78' R	802.21	191503.22	562317.03
10	19+38.50	21.41' R	802.17	191499.81	562322.64
11	19+20.30	0.00'	802.47	191525.83	562316.01
12	19+30.32	0.00'	802.40	191522.26	562325.36

STH 20 - WEST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
13	19+20.53	2.50' L	802.39	191528.13	562317.01
14	19+30.32	2.50' L	802.32	191524.55	562326.36
15	19+21.26	11.08' L	802.44	191536.03	562320.47
16	19+30.32	12.88' L	802.35	191534.06	562330.52
17	19+18.93	18.56' L	802.47	191543.96	562320.26
18	19+26.78	22.08' L	802.38	191544.14	562330.26
19	19+18.25	20.93' L	802.55	191546.46	562320.19
20	19+25.98	24.38' L	802.46	191546.64	562330.19
21	19+09.40	36.35' L	802.47	191564.21	562313.19
22	19+13.95	38.56' L	802.42	191564.92	562319.71
23	19+20.62	42.50' L	0.00	191566.07	562329.68
24	19+24.72	45.53' L	802.29	191566.99	562336.18

STH 20 - WEST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
25	19+10.30	39.40' L	802.42	191566.93	562315.03
26	19+13.45	40.97' L	802.38	191567.43	562319.64
27	19+20.02	44.87' L	802.31	191568.59	562329.61
28	19+22.91	46.95' L	802.27	191569.22	562334.21
29	19+12.31	46.77' L	802.79	191573.45	562319.48
30	19+18.66	50.56' L	802.71	191574.62	562329.45

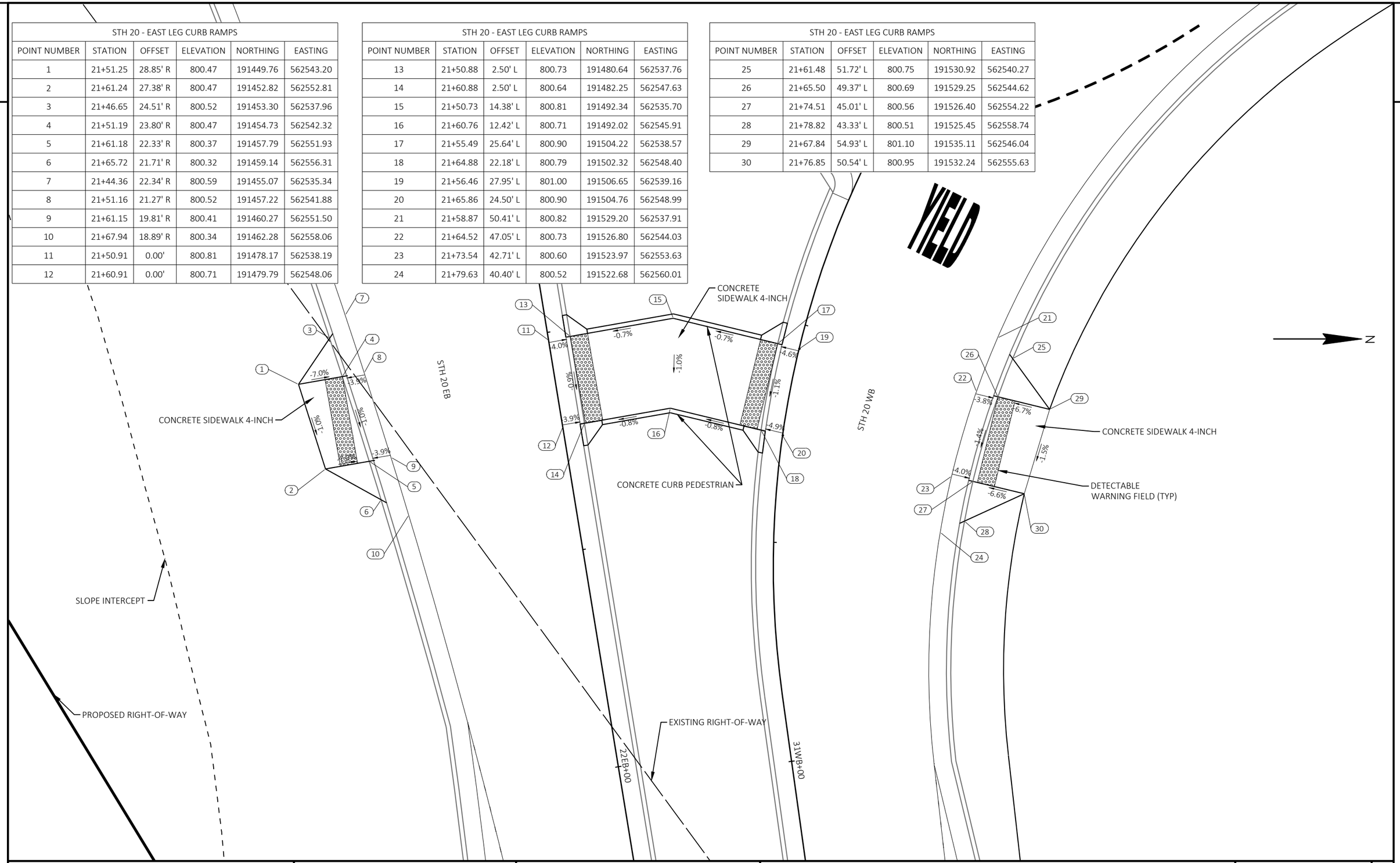


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CURB RAMP DETAILS	SHEET 66	E

STH 20 - EAST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	21+51.25	28.85' R	800.47	191449.76	562543.20
2	21+61.24	27.38' R	800.47	191452.82	562552.81
3	21+46.65	24.51' R	800.52	191453.30	562537.96
4	21+51.19	23.80' R	800.47	191454.73	562542.32
5	21+61.18	22.33' R	800.37	191457.79	562551.93
6	21+65.72	21.71' R	800.32	191459.14	562556.31
7	21+44.36	22.34' R	800.59	191455.07	562535.34
8	21+51.16	21.27' R	800.52	191457.22	562541.88
9	21+61.15	19.81' R	800.41	191460.27	562551.50
10	21+67.94	18.89' R	800.34	191462.28	562558.06
11	21+50.91	0.00'	800.81	191478.17	562538.19
12	21+60.91	0.00'	800.71	191479.79	562548.06

STH 20 - EAST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
13	21+50.88	2.50' L	800.73	191480.64	562537.76
14	21+60.88	2.50' L	800.64	191482.25	562547.63
15	21+50.73	14.38' L	800.81	191492.34	562535.70
16	21+60.76	12.42' L	800.71	191492.02	562545.91
17	21+55.49	25.64' L	800.90	191504.22	562538.57
18	21+64.88	22.18' L	800.79	191502.32	562548.40
19	21+56.46	27.95' L	801.00	191506.65	562539.16
20	21+65.86	24.50' L	800.90	191504.76	562548.99
21	21+58.87	50.41' L	800.82	191529.20	562537.91
22	21+64.52	47.05' L	800.73	191526.80	562544.03
23	21+73.54	42.71' L	800.60	191523.97	562553.63
24	21+79.63	40.40' L	800.52	191522.68	562560.01

STH 20 - EAST LEG CURB RAMPS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
25	21+61.48	51.72' L	800.75	191530.92	562540.27
26	21+65.50	49.37' L	800.69	191529.25	562544.62
27	21+74.51	45.01' L	800.56	191526.40	562554.22
28	21+78.82	43.33' L	800.51	191525.45	562558.74
29	21+67.84	54.93' L	801.10	191535.11	562546.04
30	21+76.85	50.54' L	800.95	191532.24	562555.63



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CURB RAMP DETAILS	SHEET 67	E

2

2

BEGIN PROJECT
STA 3+39.00'A'

STH 83

STH 20

STH 36

4'A'

6'A'

8'A'

10'A'

12'A'

BECK DR

LYNCH LANE

MATCH LINE STA. 13+00.00

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 68	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec
PLOT DATE : 3/24/2022 10:44 AM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 13+00.00

MATCH LINE STA. 43+00.00

N

14'A' 16'A' 18'A' 20'A' 22'A' 24'A' STH 20 26'A' 28

BECK DR

WETLAND LIMITS (TYP)

TRIBUTARY TO FOX RIVER

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 69	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 1/26/2022 5:11 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

N

MATCH LINE STA. 28+00.00

MATCH LINE STA. 58+00.00

RESTORE WITH TOPSOIL, SEED, FERTILIZER AND MULCH FOR AREA BEHIND CURB & GUTTER.

WETLAND LIMITS (TYP)

STH 20

CTH D

44'A'

46'A'

48'A'

50'A'

52'A'

54'A'

56'A'

58'

48'D'

46'D'

2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 70	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022004-ec
PLOT DATE : 1/26/2022 5:11 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

N

2

MATCH LINE STA. 58+00.00

60'A'

62'A'

64'A'

66'A'

68'A'

70'A'

72'A'

STH 20

WETLAND LIMITS (TYP)

MATCH LINE STA. 373+00.00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 71	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 1/26/2022 5:12 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 58+00.00

N

BERM
SIGN
FLAG
BERM
BERM
GUY
GUY
OH
OH
POST
POST
POST
SEPTIC

374'A' 376'A' 378'A' 380'A' 382'A' 384'A' STH 20 386'A'

G FO G FO G FO

2

2

N

MATCH LINE STA. 388+00.00

MATCH LINE STA. 403+00.00

ASPHALTIC FLUME

WETLAND LIMITS (TYP)

52' N RAYNOR AVE / USH 45

48' RAYNOR DR

STH 20

390'A' 392'A' 394'A' 396'A' 398'A' 400'A' 402'A'

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 73	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022027-ec

PLOT DATE : 1/31/2022 10:06 AM PLOT BY : JESSICA LEWIS, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 403+00.00

MATCH LINE STA. 418+00.00

WETLAND LIMITS (TYP)

GUY

RIPRAP

404'A'

406'A'

408'A'

410'A'

412'A'

414'A'

STH 20

416'A'

30' CMCP

LEGEND

INLET PROTECTION TYPE X	TEMPORARY DITCH CHECK
FLOW ARROW	CULVERT PIPE CHECK
SILT FENCE	RIP RAP MEDIUM
HEAVY DUTY SILT FENCE	EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"
SLOPE INTERCEPT	

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 74	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022028-ec

PLOT DATE : 1/26/2022 5:12 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

N

MATCH LINE STA. 418+00.00

'A' 420'A' 422'A' 424'A' 426'A' 428'A' STH 20 430'A' 432'A'

72" RCP

ANT

POST

POST

FOOTBRIDGE

WETLAND LIMITS (TYP)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY:RACINE	EROSION CONTROL	SHEET 75	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022029-ec

PLOT DATE : 1/26/2022 5:12 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

38 40 42 RAYNOR DR 44 46 48 50 USH 45

MATCHLINE STA. 52+00.00

395'A'

396'A'

398'A'

400'A'

STH 20

WETLAND LIMITS (TYP)

ASPHALTIC FLUME

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	EROSION CONTROL	SHEET 76	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022031-ec
PLOT DATE : 1/26/2022 5:13 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

MATCHLINE STA. 52+00.00

USH 45

52 54 56 58 60 62 64 66

LEGEND

- INLET PROTECTION TYPE X
- FLOW ARROW
- SILT FENCE
- HEAVY DUTY SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIP RAP MEDIUM
- EROSION MAT CLASS I, TYPE B SEE "EROSION MAT DETAIL FOR DITCHES"

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	EROSION CONTROL	SHEET 77	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022032-ec
PLOT DATE : 1/26/2022 5:13 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

1 DRAINAGE STRUCTURE

EXISTING R/W

PROPOSED R/W

REMOVE SS

REMOVE MH

PIPE UNDERDRAIN 6-INCH

STH 20

STH 20 EB R/L

STA 14'EB'+00 TO 18'EB'+52, RT
DRAIN TILE EXPLORATION &
CONNECT TO NEW PIPE UNDERDRAIN 6-INCH

44' - CP CL III-B
18-INCH

+64.1, 38.9' RT
IE = 803.00

+08.7, 38.2' RT
IE = 802.50

1.1 18+13.8, 36.9' RT
1 - 24" AECPRC

1.2 19+04.6, 19.0' RT
CB 6-FT DIA, HM-S COVER

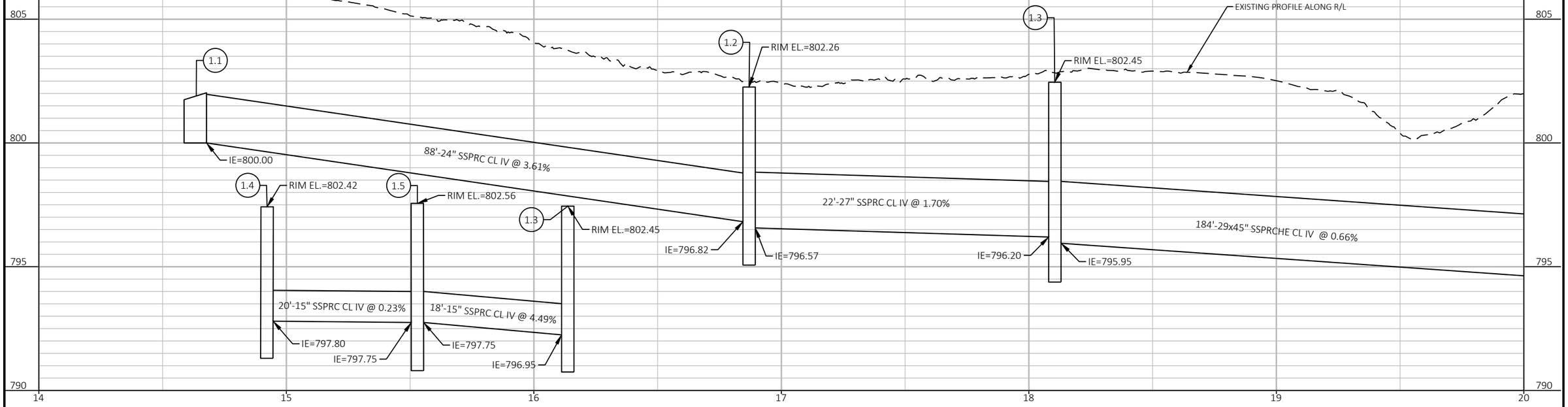
1.3 19+12.2, 0.6' LT
CB 7-FT DIA, H-S COVER

1.4 19+06.2, 36.4' LT
CB 4-FT DIA, HM-S COVER

1.5 19+11.7, 18.1' LT
CB 4-FT DIA, H-S COVER

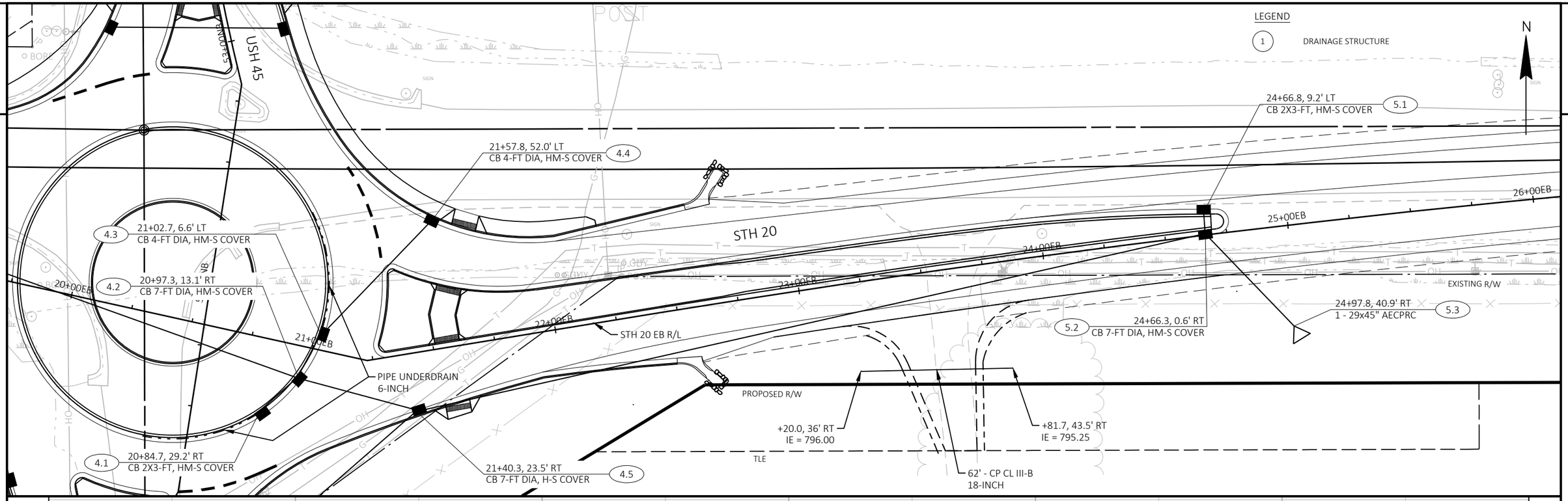
CONNECT UNDERDRAIN TO CB

14+00EB 15+00EB 16+00EB 17+00EB 18+00EB 19+00EB 20+00EB



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 78	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022501-SS.DWG PLOT DATE : 1/26/2022 5:18 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:40 FT
LAYOUT NAME - 022501-ss



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 79	E

LEGEND

1 DRAINAGE STRUCTURE

TLE
PROPOSED R/W

EXISTING R/W

RAYNOR DR NB R/L

RAYNOR DR

EXISTING R/W

PROPOSED R/W
TLE

STH 20

3.1 50+94.4, 64.1' LT
CB 2X3-FT DIA, HM-S COVER

3.2 50+84.7, 52.8' LT
CB 4-FT DIA, HM-S COVER

3.4 50+71.1, 20.3' LT
CB 4-FT DIA, H-S COVER

3.3 50+31.8, 49.8' LT
1 - 15" AECPRC

3.7 50+72.0, 0.7' LT
CB 4-FT DIA, H-S COVER

3.6 50+64.4, 18.6' RT
CB 4-FT DIA, H-S COVER

3.5 50+10.8, 32.5' RT
1 - 15" AECPRC

TLE
EXISTING R/W

16.1 53+15.5, 46.7' LT
CB 4-FT DIA, HM-S COVER

16.2 53+00.2, 22.8' RT
CB 4-FT DIA, HM-S COVER

48+00NB
49+00NB
50+00NB
51+00NB
52+00NB
53+00NB
54+00NB
20+00EB
21+00EB

805
800
795
790

48 49 50 51 52 53 54

EXISTING PROFILE ALONG R/L

RIM EL.=801.52 — 3.6
RIM EL.=800.56 — 4.5
126'-15" SSPRC CL IV @ 0.55%
IE=796.64
IE=795.94

RIM EL.=801.94 — 3.4
RIM EL.=801.57 — 3.7
RIM EL.=801.52 — 3.6
3.3
54'-15" SSPRC CL IV @ 4.17%
IE=798.98
20'-15" SSPRC CL IV @ 0.23%
IE=796.73
IE=796.73
IE=796.68
20'-15" SSPRC CL IV @ 0.23%
IE=796.68
IE=796.64
52'-15" SSPRC CL IV @ 4.51%
IE=796.90
3.5
IE=799.24

RIM EL.=801.94 — 3.4
RIM EL.=801.43 — 3.2
RIM EL.=801.52 — 3.1
36'-15" SSPRC CL IV @ 0.23%
IE=796.81
IE=796.73
18'-12" SSPRC CL III @ 0.67%
IE=797.06
IE=797.18

RIM EL.=802.21 — 16.2
RIM EL.=801.39 — 16.1
152'-15" SSPRC CL IV @ 0.34%
IE=796.59
16.2 RIM EL.=801.21
72'-15" SSPRC CL IV @ 0.25%
IE=796.59
IE=796.77

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 80	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022505-ss
PLOT DATE : 1/26/2022 5:19 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

N

32' - CP CL III-B
18-INCH
2 - AEW

FIELD LOCATE AND
ADJUST DRAIN TILE

PLE

54+51.8, 14.4' LT
CB 4-FT DIA, HM-S COVER
17.1

+50.9, 59' LT
IE = 796.00

+82.9, 58.4' LT
IE = 795.90

57+26.5, 36.4' LT
IE=795.38

RECONSTRUCT MH

EXISTING R/W

56+26.5, 9.5' LT
CB 4-FT DIA, HM-S COVER
18.1

18" CMCP

USH 45

58+00NB

59+00NB

57+00NB

56+00NB

55+00NB

54+00NB

USH 45 NB R/L

64' - CPRCHE CL HE-IV 19X30-INCH
2 - AECPRCHE 19X30-INCH

56+26.2, 1.3' LT
CB 4-FT DIA, HM-S COVER
18.2

EXISTING R/W

57+24.6, 27.5' RT
IE = 795.12

PROPOSED R/W

+96.5, 43.3' RT
IE = 796.00

18.3
56+26.0, 42.0' RT
1 - 15" AECPRC

+66.5, 43.6' RT
IE = 796.20

17.2
54+52.9, 3.6' LT
CB 4-FT DIA, HM-S COVER

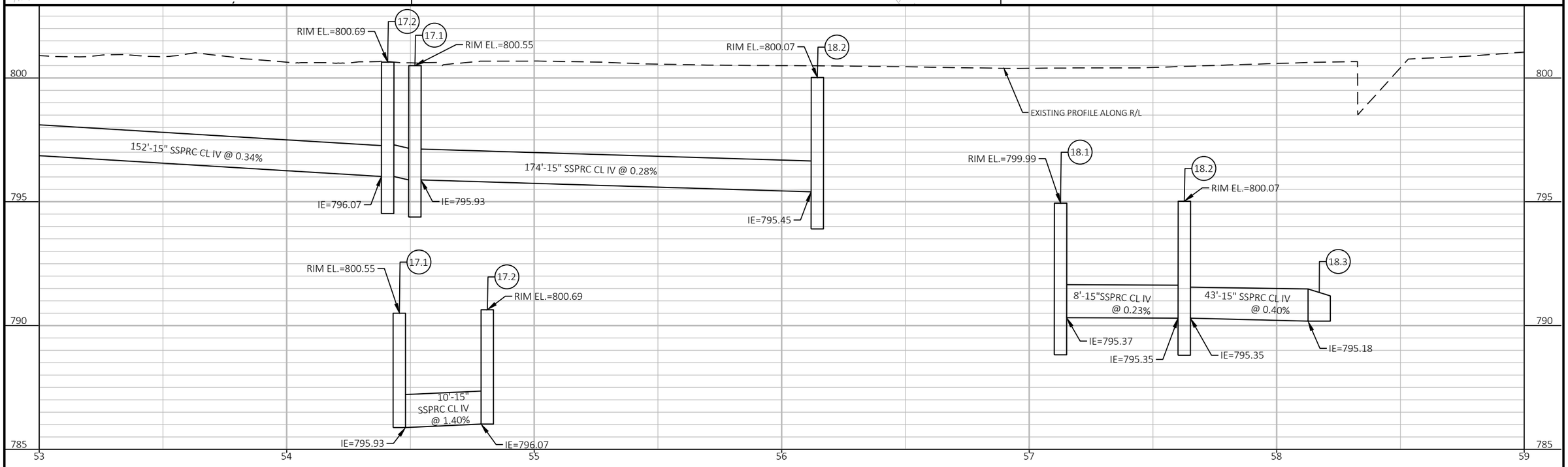
TLE

30' - CP CL III-B
18-INCH
2 - AEW

ADJUST MH COVER

LEGEND

1 DRAINAGE STRUCTURE



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	STORM SEWER	SHEET 81	E

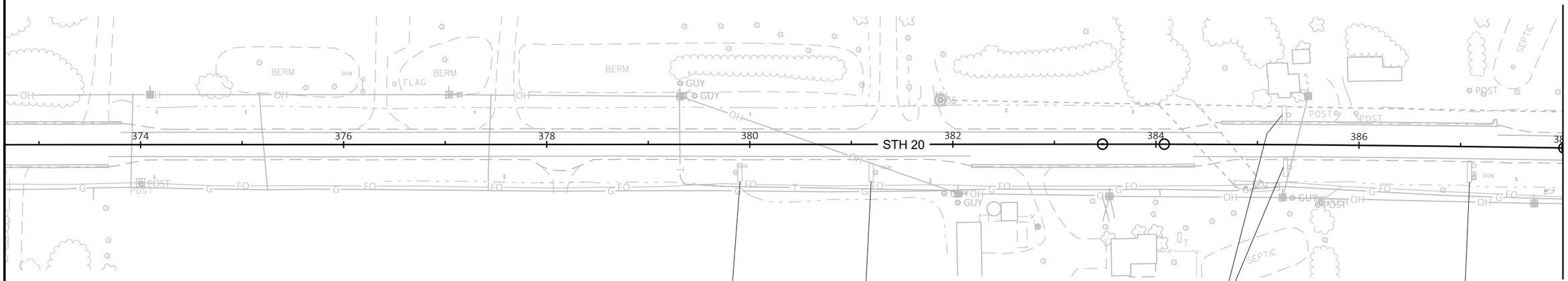
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

2



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.

SIGNING COORDINATOR	COUNTIES	PHONE #
JENNY BUCKETT	MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE	414-750-2427
CHUCK SALDIVAR	RACINE, WALWORTH, WAUKESHA	414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

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

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

BOX OUT OR CORING OF CONCRETE SIGN POSTS IS INCIDENTAL TO THE POST

NO PASSING ZONE
W14-3
ESTR
SEE PERMANENT SIGNING PLAN

JCT 45
J1-1
ESTR
SEE PERMANENT SIGNING PLAN

W2-1
REMOVE
1R
2R

NORTH 45 EAST 20 SOUTH 45
3R
J2-3
REMOVE

SHEET 1 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 82	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-01R
PLOT DATE : 9/22/2021 12:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

11R — R7-1R REMOVE

W14-3 REMOVE PART OF 10R

10R — R2-1 REMOVE

9R — S3-1 REMOVE

8R — R7-1D REMOVE

CONT'D ON SHT 1

388 390 392 394

STH 20

4R — R7-1L REMOVE

5R — Union Grove / Racine / Milwaukee — D1-3 REMOVE

6R — R7-1D REMOVE

CONT'D ON SHT 3

SHEET 2 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 83	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-02R

PLOT DATE : 9/22/2021 12:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

SEE SHEETS 33-35

SEE ELECTRICAL PLAN TO REMOVE BEACON

BEACON

USH 45

STH 20

394 396 398 400

18" RCCP

N RAYNOR AVE

48

7R — WEST 20 — J4-1 REMOVE — Waterford 9 — D2-1 REMOVE

21R — NO PARKING ANY TIME — R7-1L REMOVE

23R — SOUTH 45 / EAST 20 / WEST 20 — J2-3 REMOVE

22R — STOP — R1-1 — TRAFFIC ON 00 DOES NOT STOP — W4-4C REMOVE

18R — YIELD — R1-2 REMOVE

17R — NORTH 45 — J3-1 REMOVE

20R — NORTH 45 — J3-1 REMOVE

13R — NORTH 45 / SOUTH 45 — J3-2 REMOVE

14R — NO PARKING ANY TIME — R7-1R REMOVE

STREET NAME SIGN BY OTHERS (TOWN) REMOVE BY OTHERS

15R — STOP — R1-1 — TRAFFIC ON 00 DOES NOT STOP — W4-4C REMOVE

16R — SOUTH 45 / EAST 20 — JV4-1 REMOVE

CONT'D ON SHT 2

CONT'D ON SHT 4

SEE SHEETS 30-32

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 84 E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-03R
PLOT DATE : 9/22/2021 12:47 PM
PLOT BY : VANDE LEEST, CYNTHIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

29R — WEST 20 NORTH 45 — J2-2 REMOVE

28R — Waterford / Muskego — D1-2 REMOVE

26R 27R — W2-1 REMOVE

400 402 STH 20 404

CONT'D ON SHT 3

CONT'D ON SHT 11

24R — NO PASSING ZONE — W14-3 REMOVE

25R — SPEED LIMIT 55 — R2-1 REMOVE

Yorkville POPULATION 3091 — I2-3 MOVE

SEE PERMANENT SIGNING PLAN

2

SHEET 4 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 85	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-04R

PLOT DATE : 9/22/2021 12:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

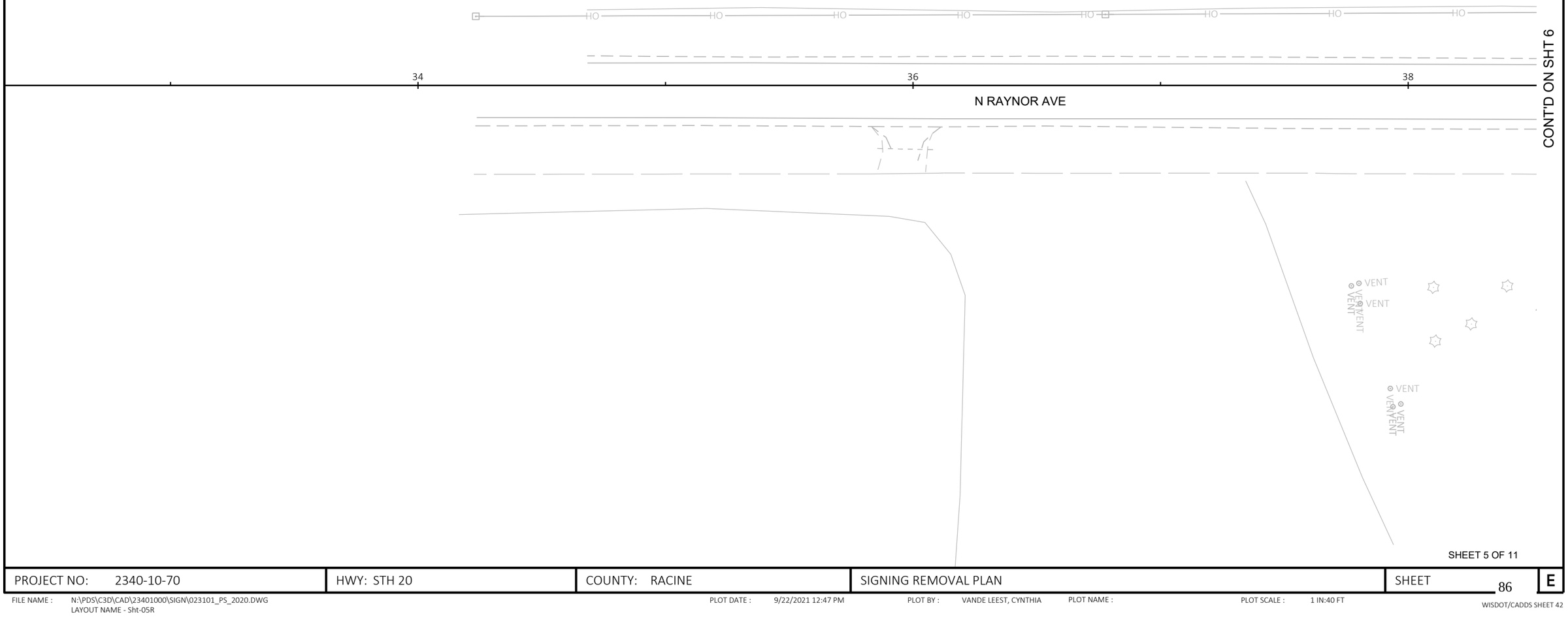
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

NO SIGNS THIS SHEET

N



SHEET 5 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 86	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-05R

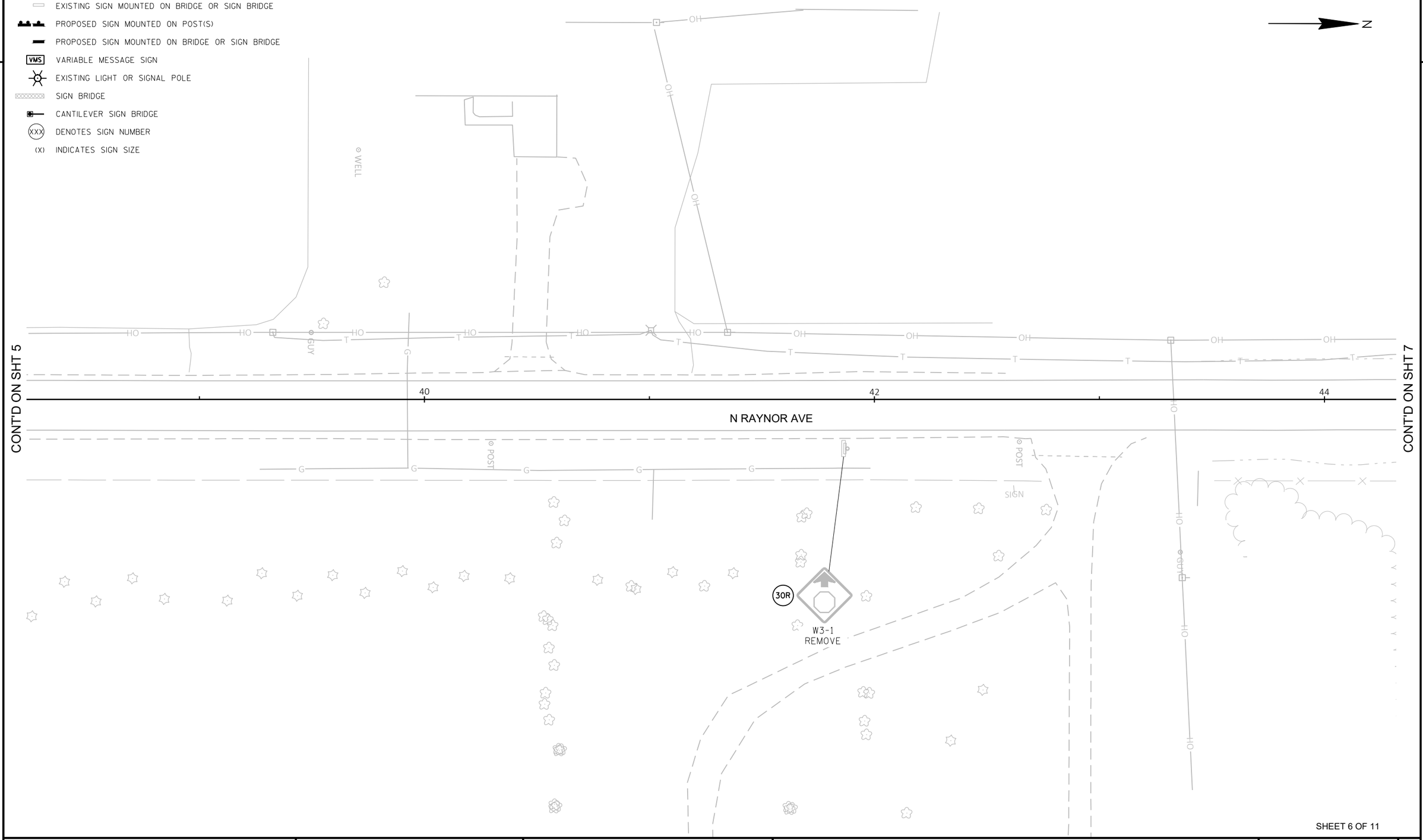
PLOT DATE : 9/22/2021 12:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



2

SHEET 6 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 87	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-06R

PLOT DATE : 9/22/2021 12:47 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

31R — WEIGHT LIMIT CLASS B

R5-1 REMOVE

STH 20

396

18" RCCP

SEE SHEET 3 FOR INTERSECTION SIGNS

CONT'D ON SHT 6

46

48

N RAYNOR AVE

CONT'D ON SHT 8

398

STH 20/USH 45

SHEET 7 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 88	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-07R

PLOT DATE : 9/22/2021 12:48 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 20

396

CONT'D ON SHT 7

SEE SHEET 3 FOR INTERSECTION SIGNS

FILLER CAP

CANOPY

WELL

MWEL

BORE

GUY

OH

SIGN

SEPC

USH 45

52

54

MH

SSS

30" RCCP

Union Grove
Racine
Waterford

34R

D1-3
REMOVE

GUY POLE

POST

GUY WIRE

NORTH
45

32R

J4-1
REMOVE

Milwaukee 19

D2-1
REMOVE

ADOPT A HIGHWAY

I55-56
MOVE
SEE
PERMANENT
SIGNING PLAN

SPEED LIMIT
55

R2-1
REMOVE
PART
OF 33R

NO PASSING ZONE

33R

W14-3
REMOVE

398

CONT'D ON SHT 9

SHEET 8 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 89	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-08R

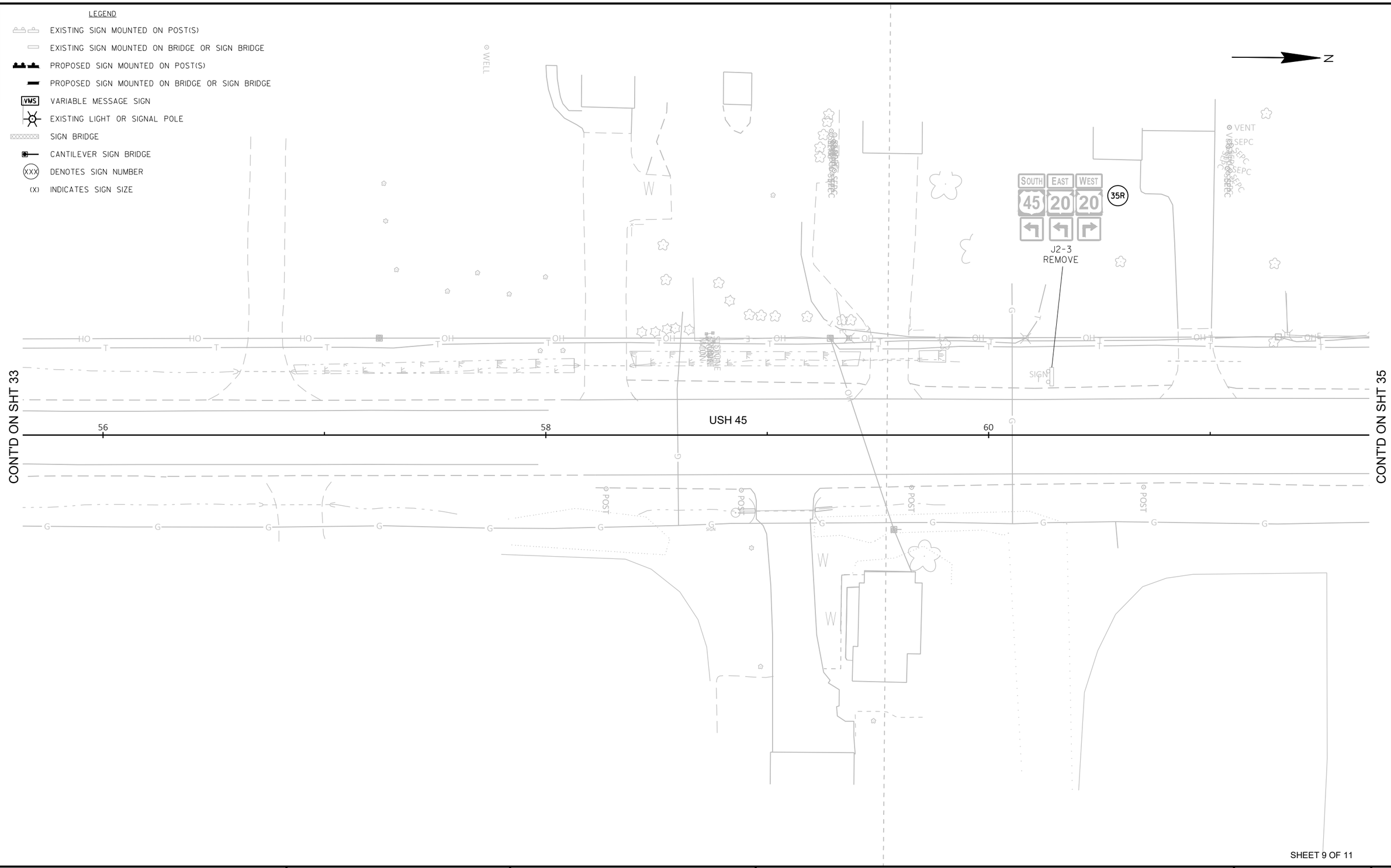
PLOT DATE : 9/22/2021 12:48 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



2

SHEET 9 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 90	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-09R

PLOT DATE : 9/22/2021 12:48 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

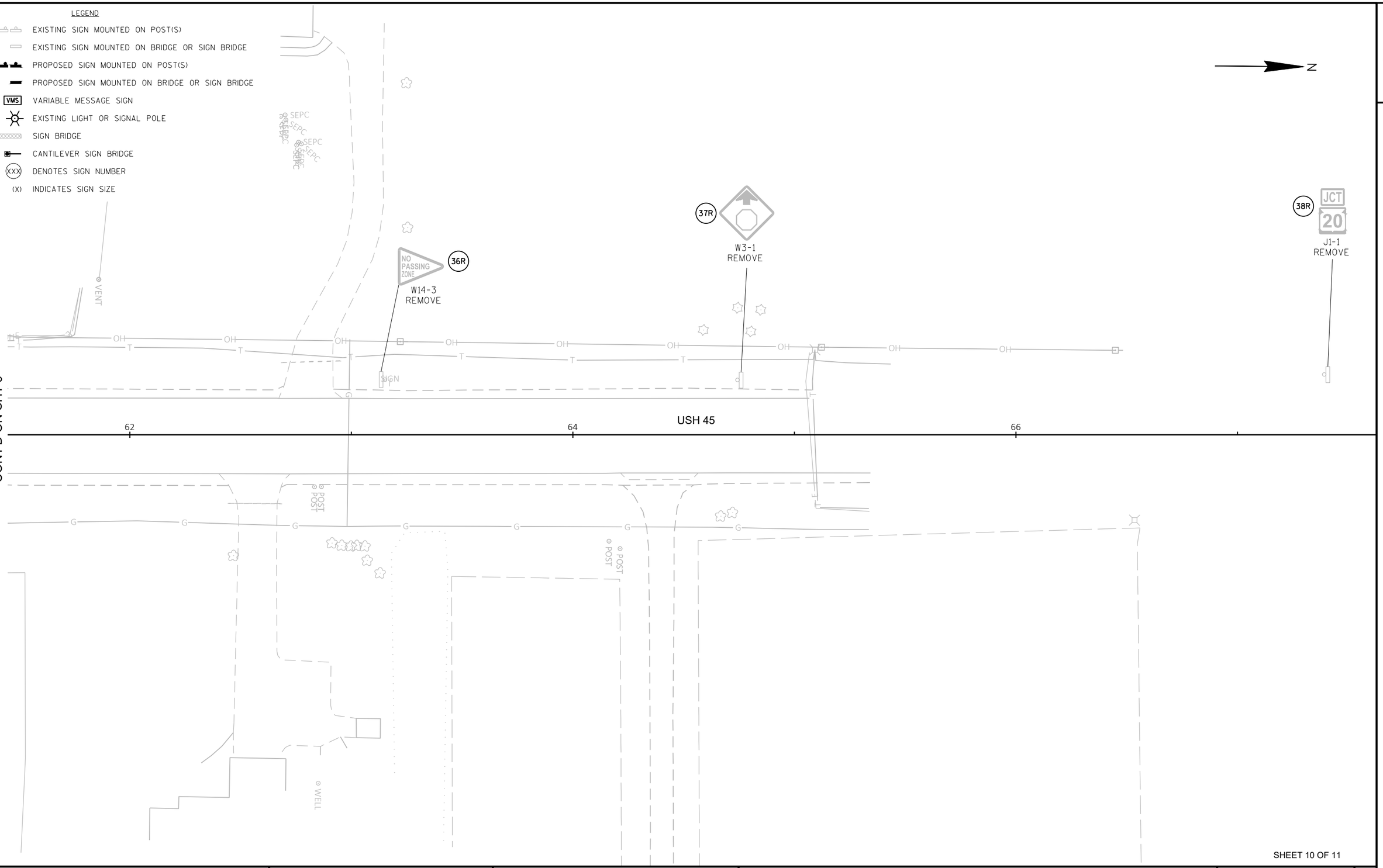
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



CONT'D ON SHT 9

SHEET 10 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 91	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-10R

PLOT DATE : 9/22/2021 12:48 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

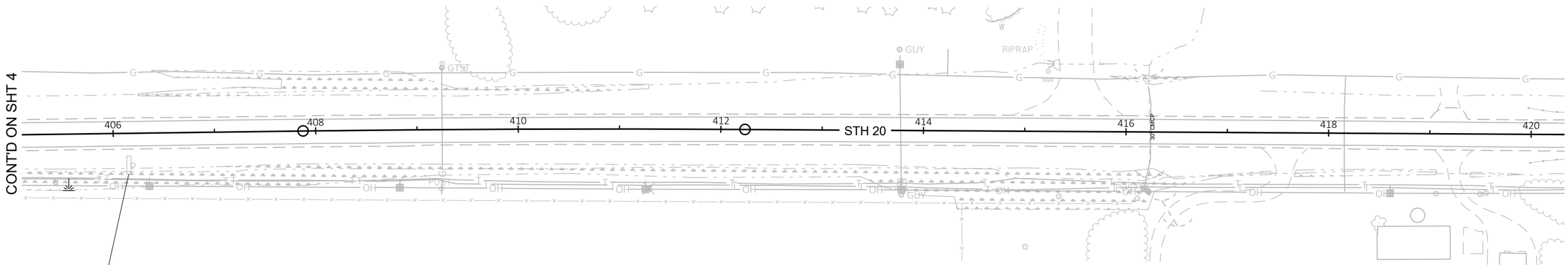
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



ENGINE BRAKE MUFFLERS REQUIRED

R10-64 PERMIT SIGN BY VILLAGE OF YORKVILLE MOVE SEE PERMANENT SIGNING PLAN

SHEET 11 OF 11

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	SIGNING REMOVAL PLAN	SHEET 92	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023101_PS_2020.DWG
LAYOUT NAME - Sht-11R

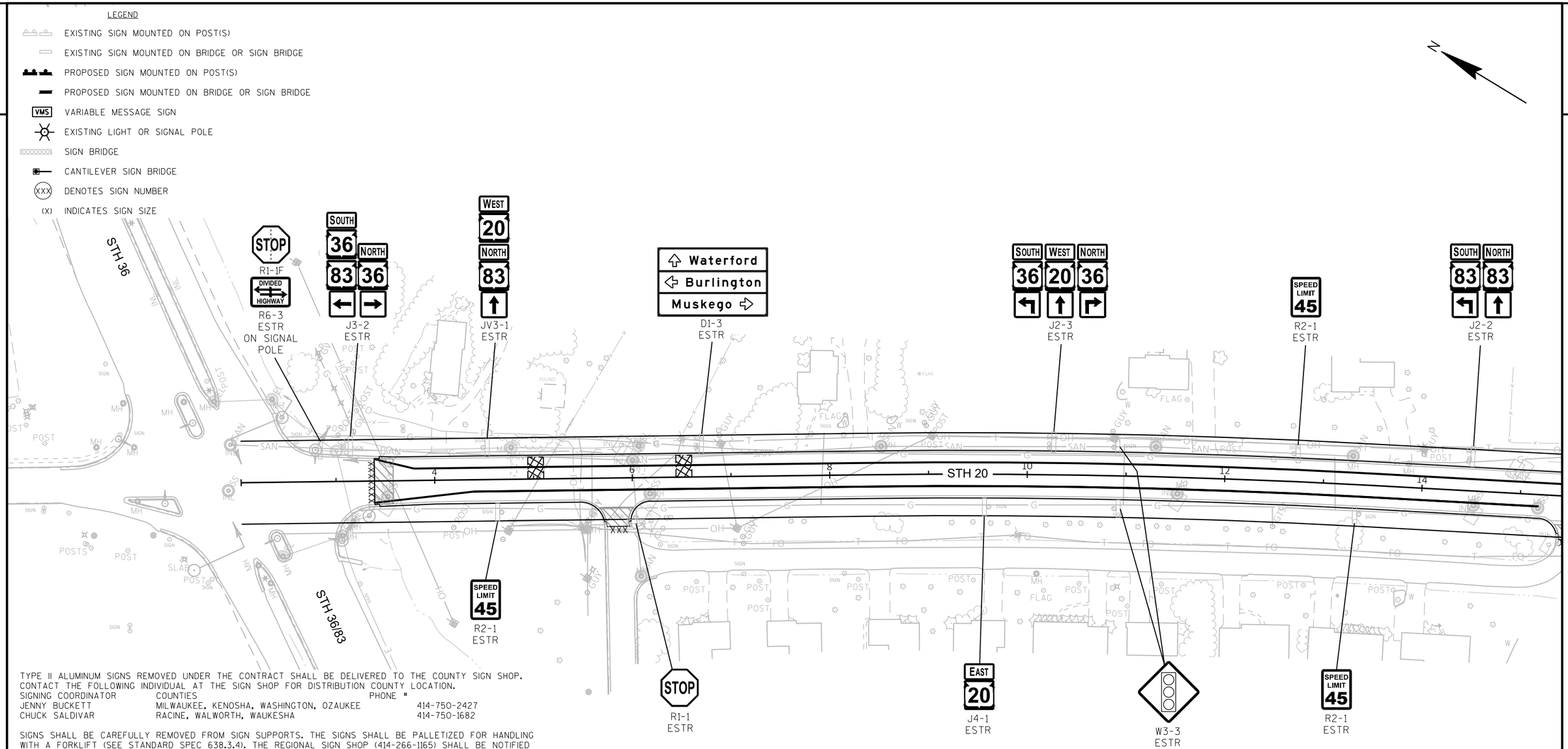
PLOT DATE : 9/22/2021 12:48 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.

SIGNING COORDINATOR	COUNTIES	PHONE #
JENNY BUCKETT	MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE	414-750-2427
CHUCK SALDIVAR	RACINE, WALWORTH, WAUKESHA	414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

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

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

BOX OUT OR CORING OF CONCRETE SIGN POSTS IS INCIDENTAL TO THE POST

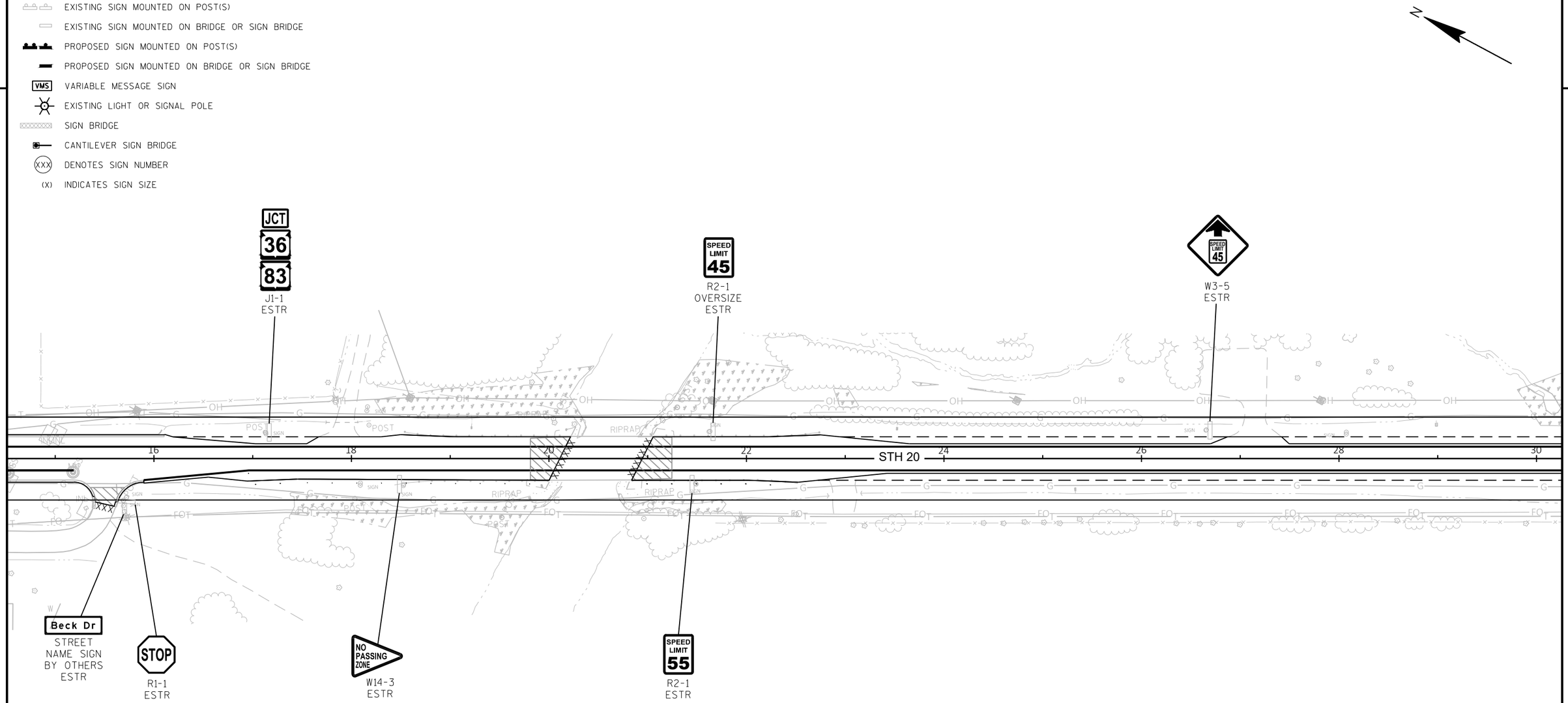
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 93	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-01
PLOT DATE : 9/22/2021 1:19 PM
PLOT BY : VANDE LEEST, CYNTHIA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 2 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 94	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-02

PLOT DATE : 9/22/2021 1:19 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

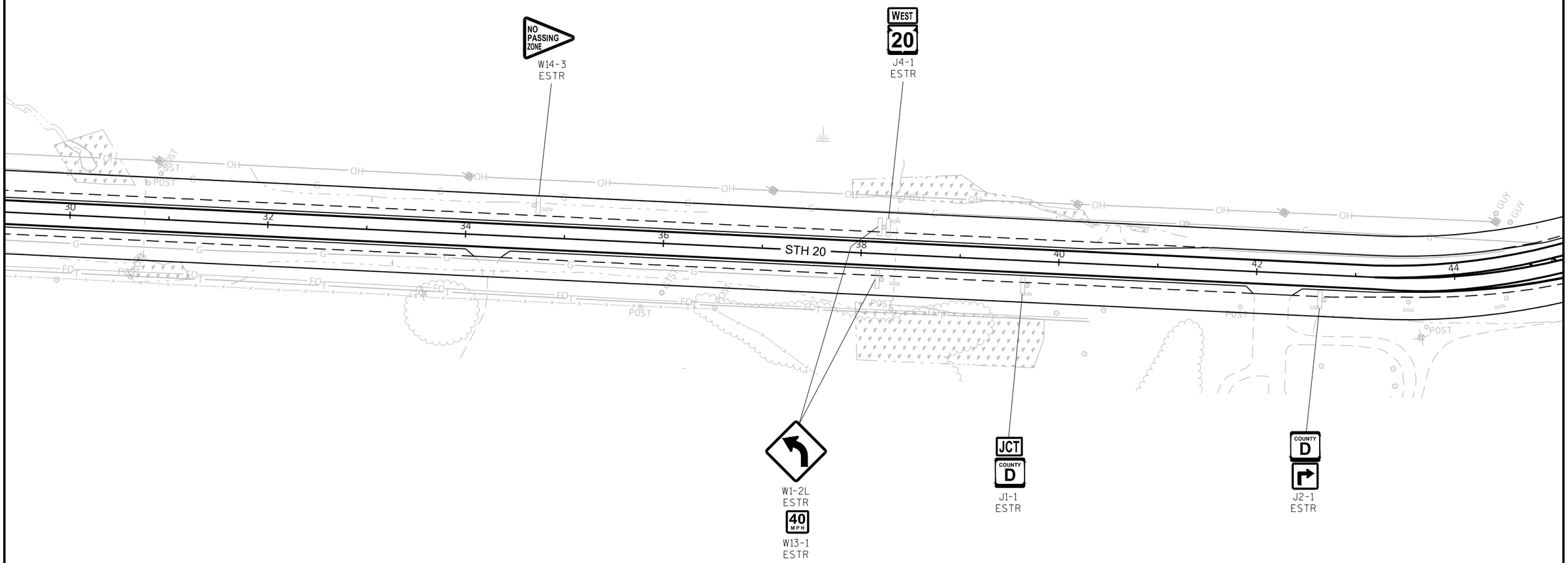
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 3 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 95	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-03

PLOT DATE : 9/22/2021 1:19 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

STH 20

CTH D

WASHINGTON AVE

W1-8(2S)
4' HEIGHT
BACK TO BACK
REMOVE
2 3 4 5
6 7 8 9
10 11 12 13

Rochester
REMOVE
1 Rochester
D1-1(2S)

ADOPT A HIGHWAY 15
I55-56
MOVE

14 COUNTY D
J2-1(2S)
COUNTY D
REMOVE

16 STOP
R1-1(2S)
STOP
REMOVE

20 18
J13-1(2S)
20
REMOVE

ADOPT A HIGHWAY 35
I55-56
MOVE

REMOVE
17
W1-6(2S)
IN LINE WITH
TANGENT OF ROAD

W1-8(2S)
4' HEIGHT
BACK TO BACK
REMOVE
19 20 21 22
23 24 25 26
27 28 29 30

Rochester
Waterford
REMOVE
33 Rochester
Waterford
D1-2(2S)

COUNTY D
REMOVE
34 COUNTY D
J2-1(2S)

40 MPH
REMOVE
W1-2R(2S) 31 32
40 MPH 31A 32A
W13-1(2S)

161
W1-2R(2S)
REMOVE

SHEET 4 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 96	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-04

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

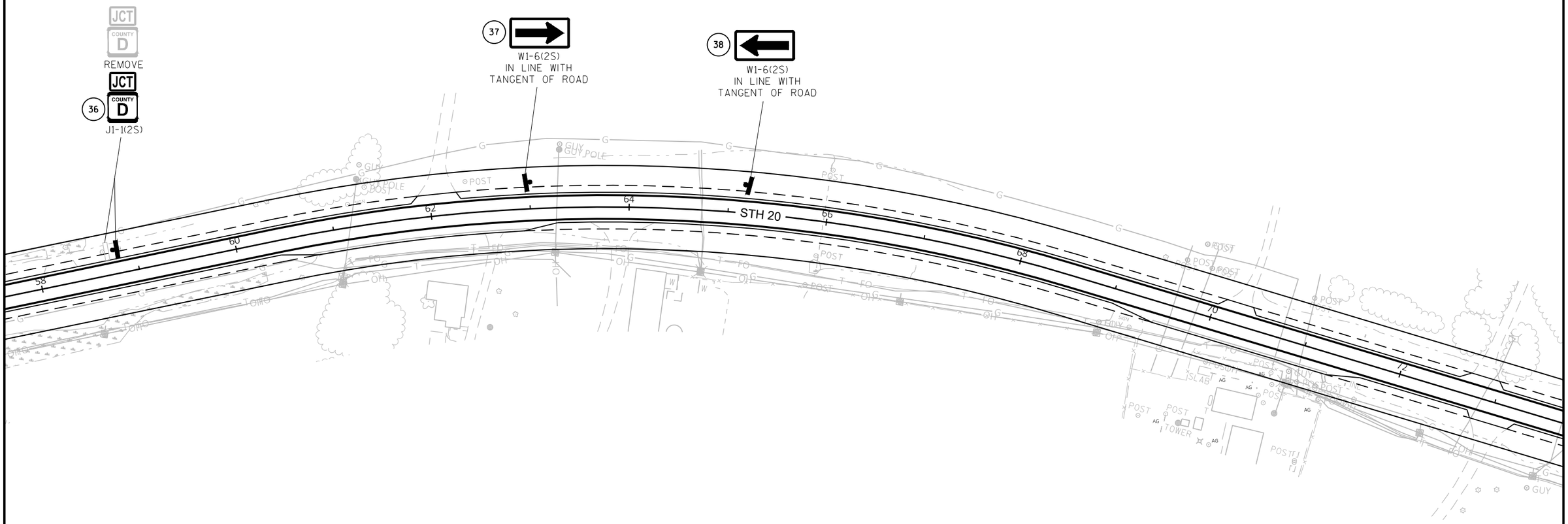
N

REMOVE
JCT
COUNTY D

36 JCT COUNTY D
J1-1(2S)

37
W1-6(2S)
IN LINE WITH
TANGENT OF ROAD

38
W1-6(2S)
IN LINE WITH
TANGENT OF ROAD



SHEET 5 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 97	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-05

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

W1-2R
ESTR

50 MPH
W13-1
ESTR

NO PASSING ZONE
W14-3
ESTR

74 76 78 80 STH 20 82 84 86 88

GUY POST SIGN FOH G T

SHEET 6 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 98	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-06

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

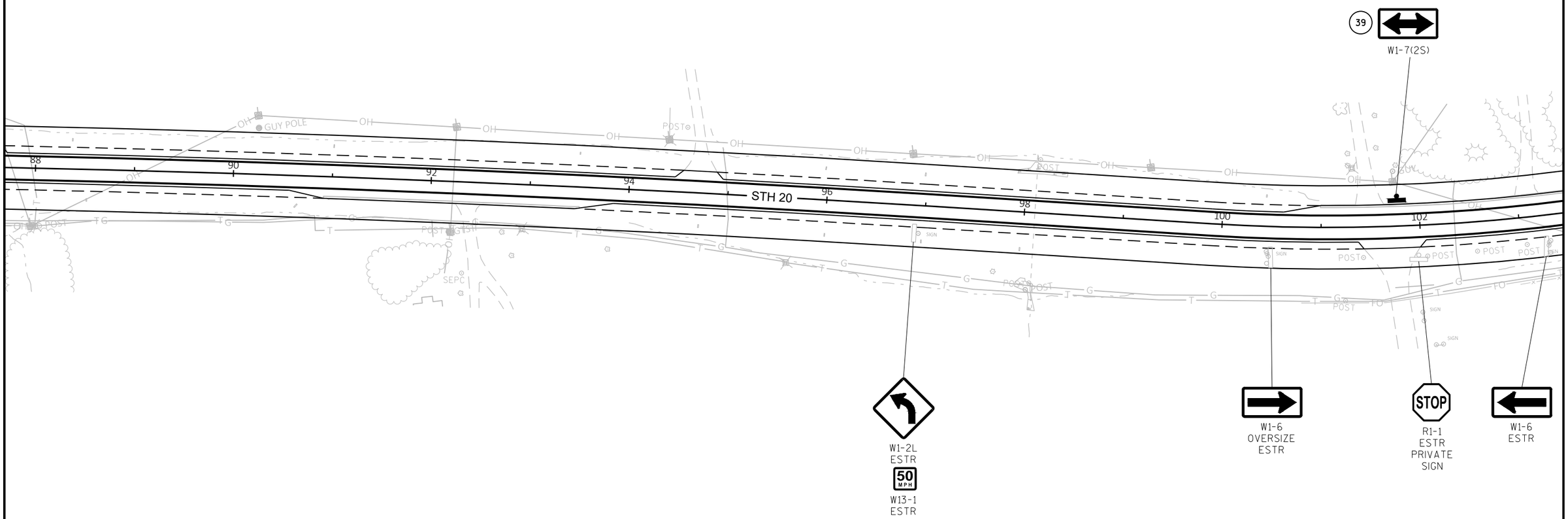
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



SHEET 7 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 99	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-07

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

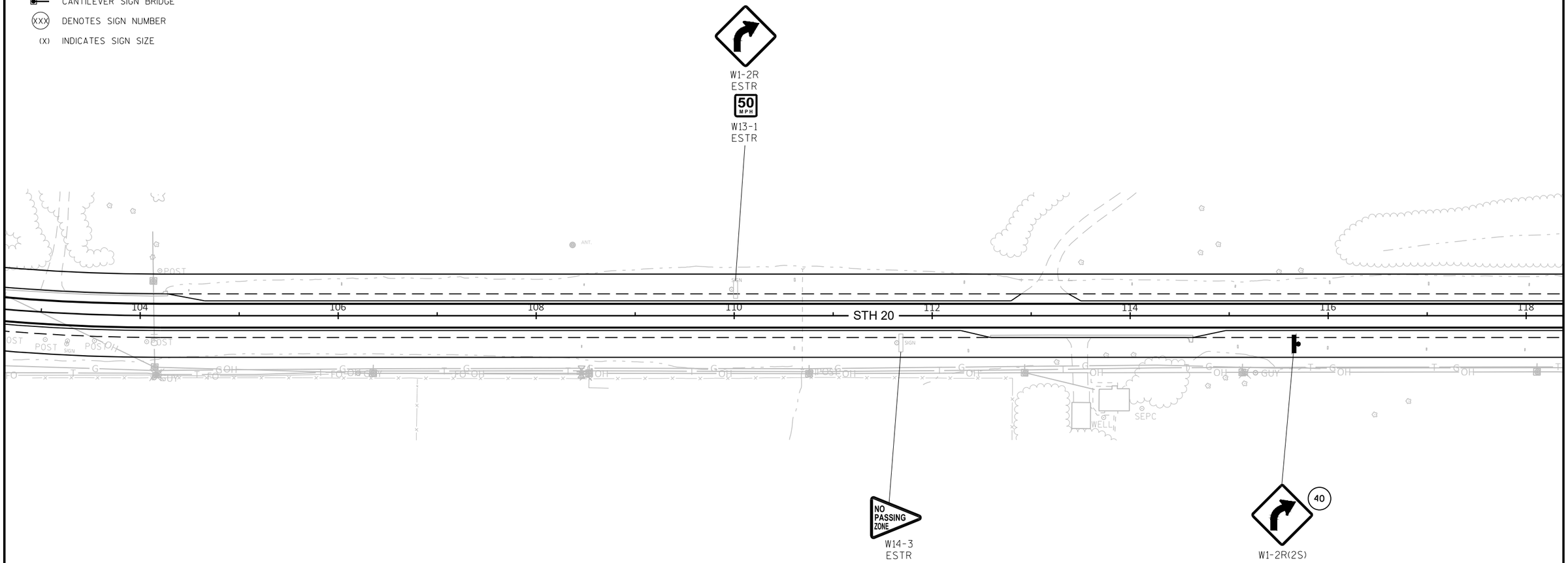
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 8 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 100	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-08

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

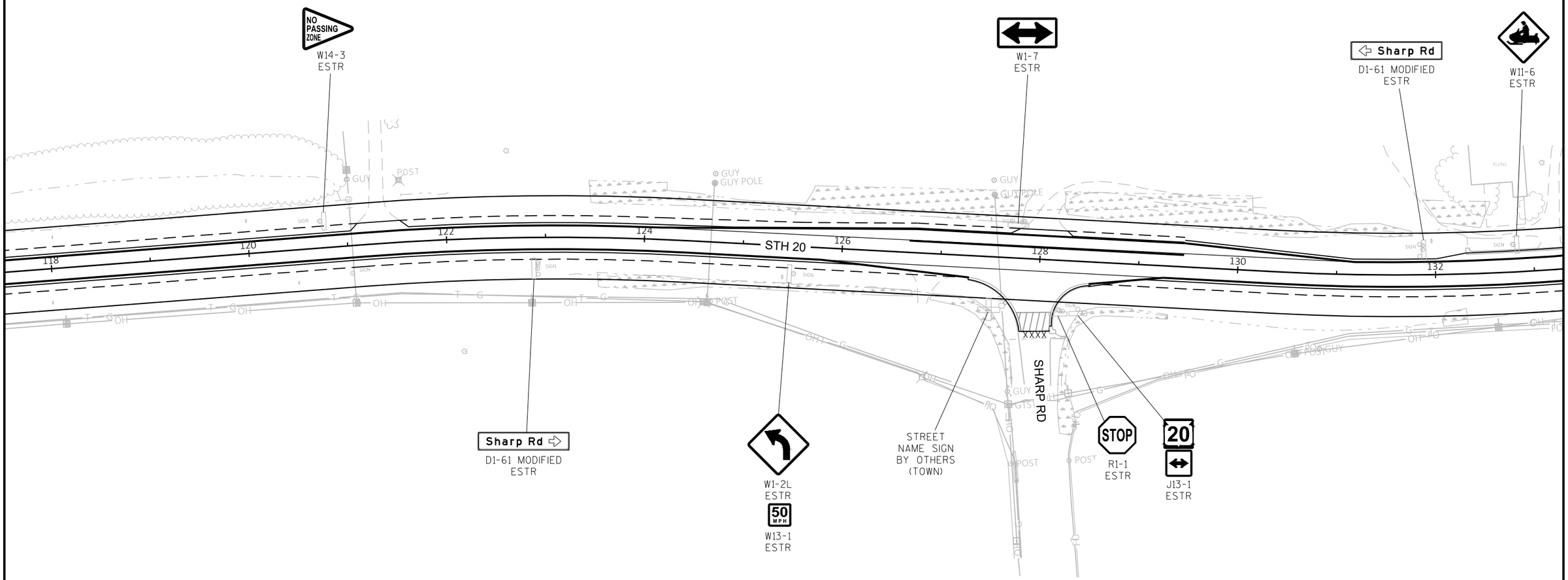
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 9 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 101	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-09

PLOT DATE : 9/22/2021 1:20 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

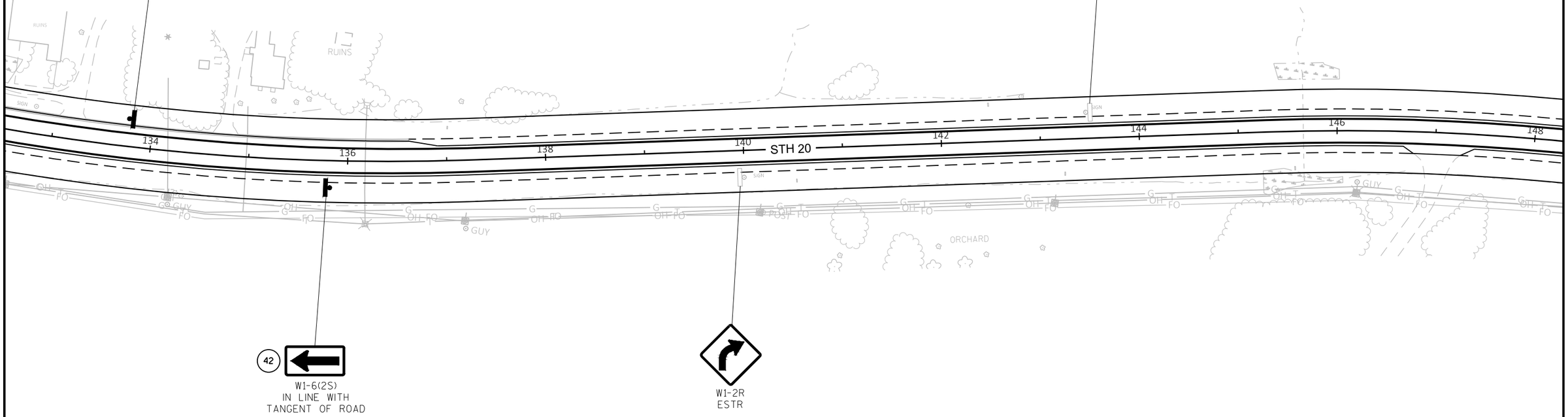
N

41 W1-6(2S) IN LINE WITH TANGENT OF ROAD

W1-2R ESTR

50 MPH

W13-1 ESTR



42 W1-6(2S) IN LINE WITH TANGENT OF ROAD

W1-2R ESTR

2

SHEET 10 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 102	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-10

PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

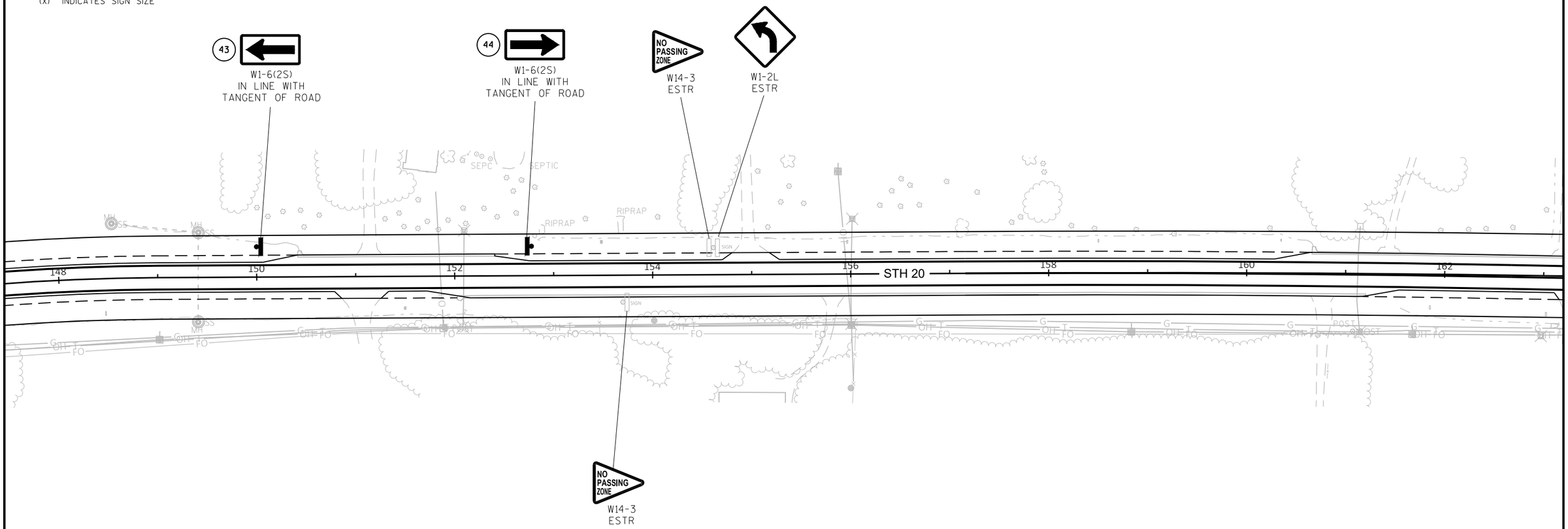
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



2

SHEET 11 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 103	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-11

PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

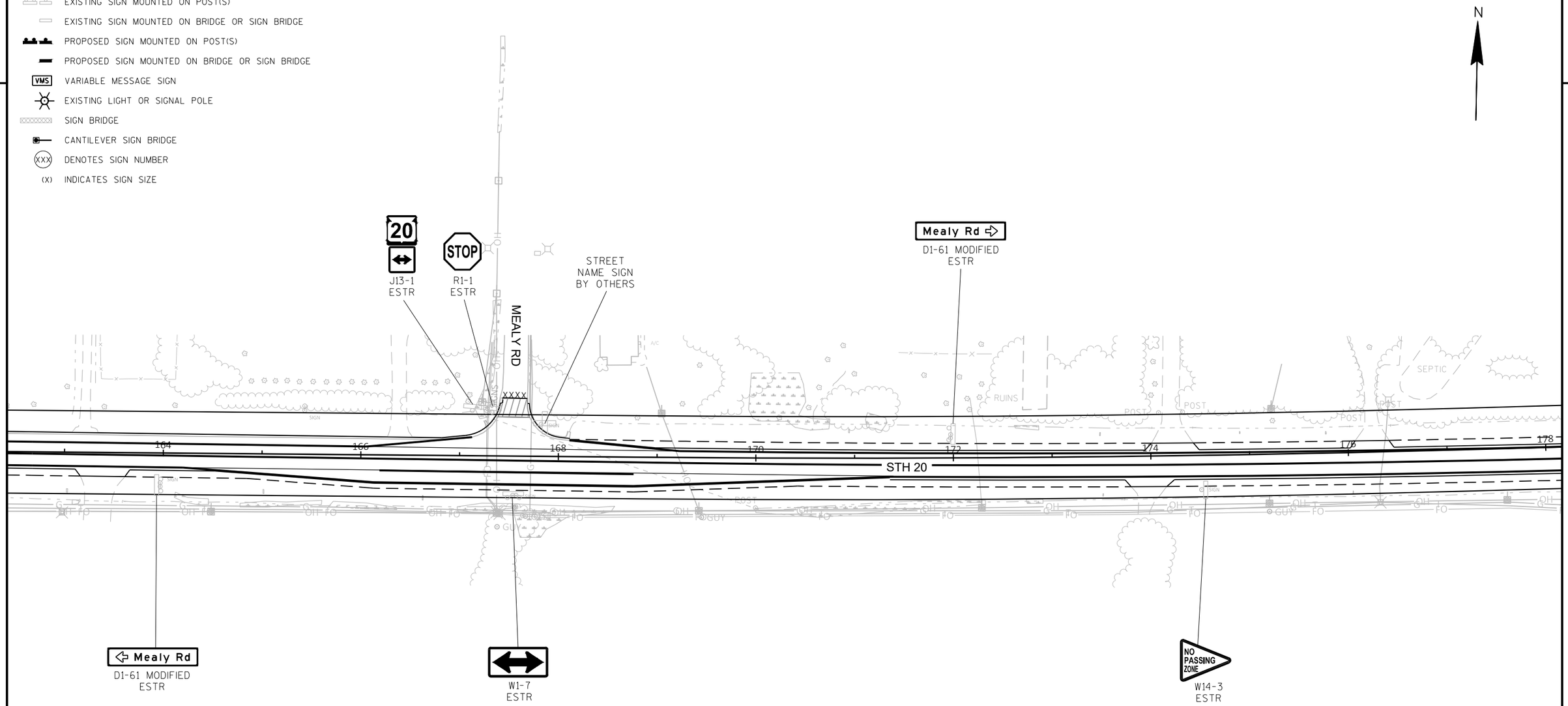
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 12 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 104	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-12

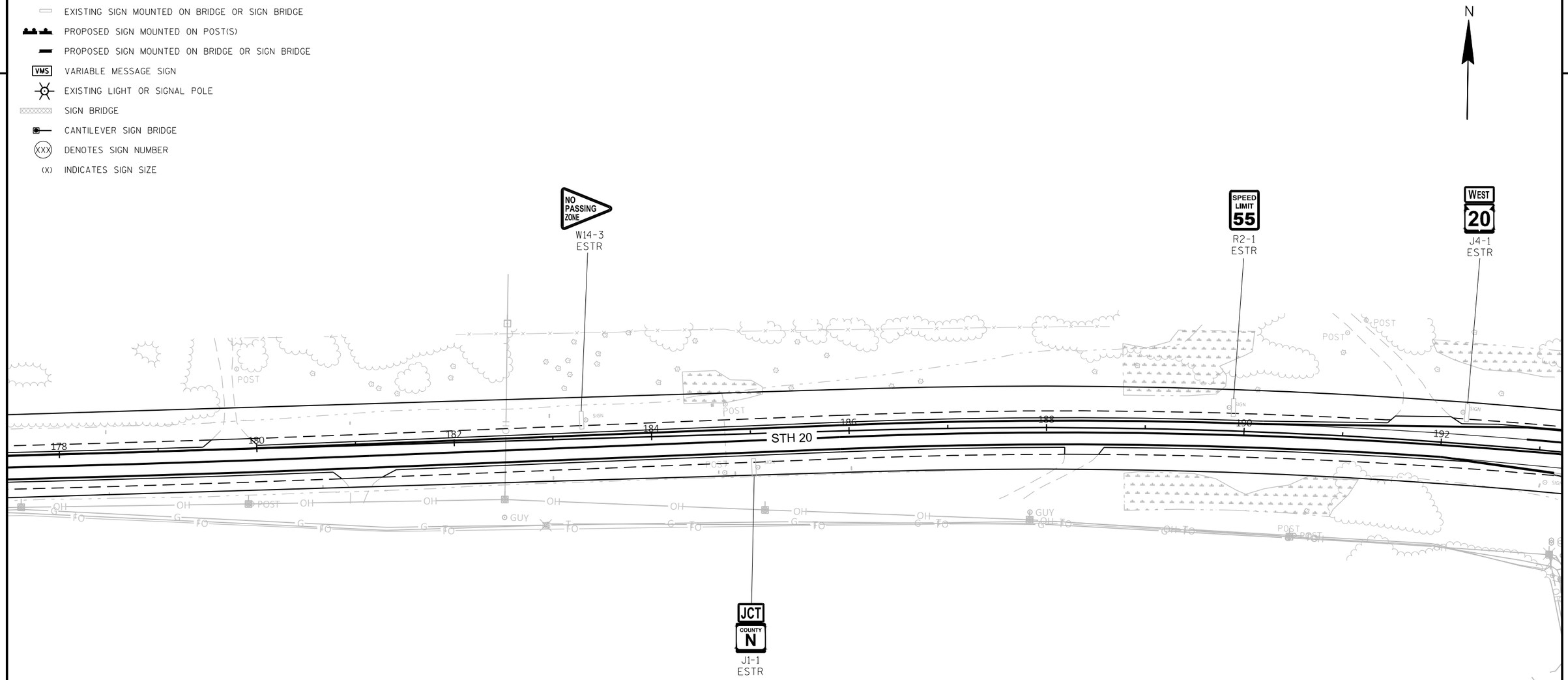
PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 13 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 105	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-13

PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

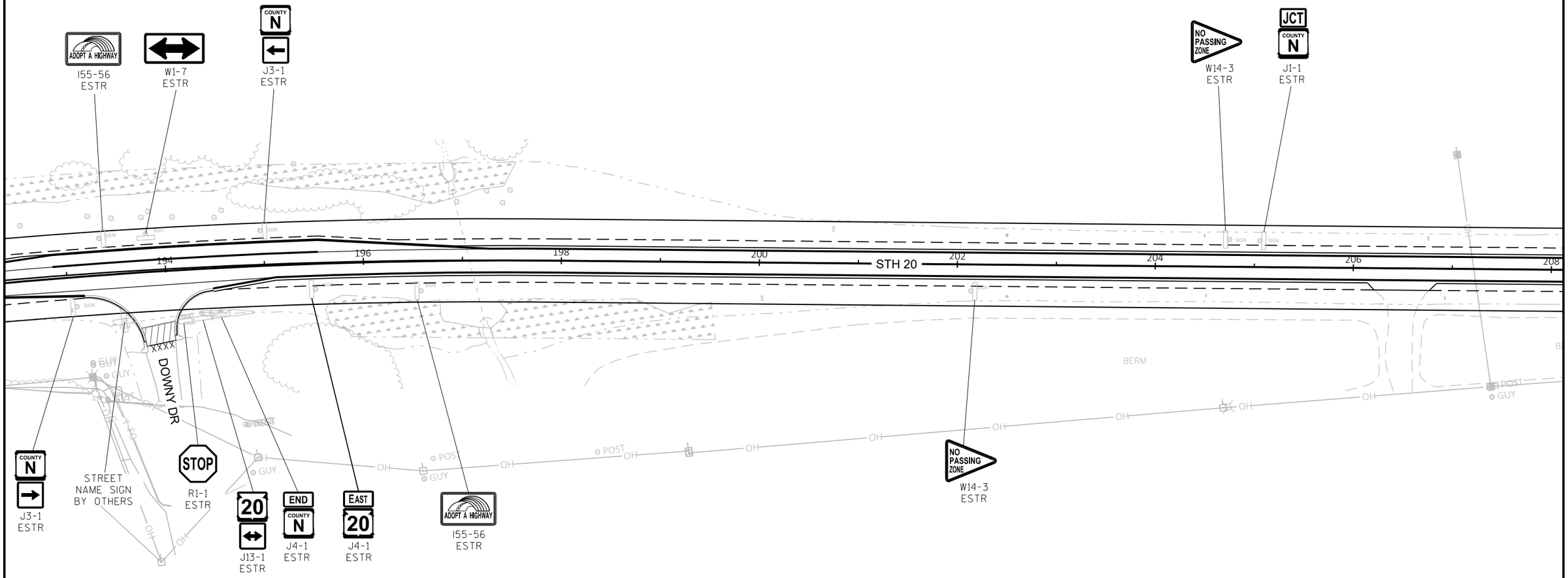
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 14 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 106	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-14

PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

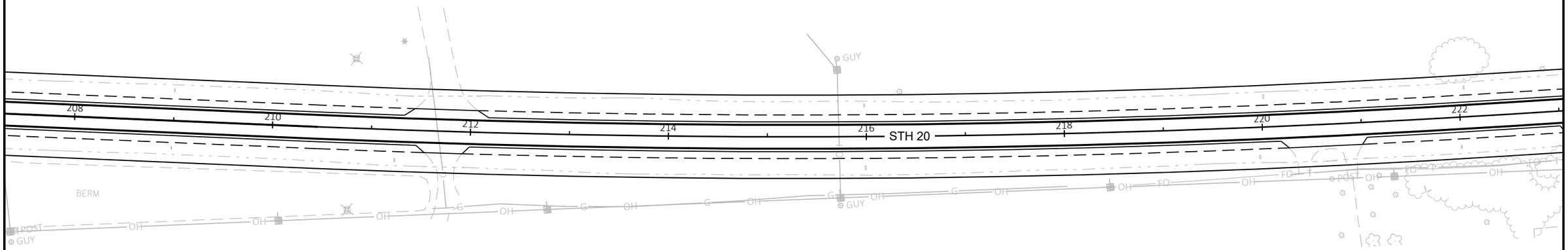
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

NO SIGNS
THIS SHEET



2

SHEET 15 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 107	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-15

PLOT DATE : 9/22/2021 1:21 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

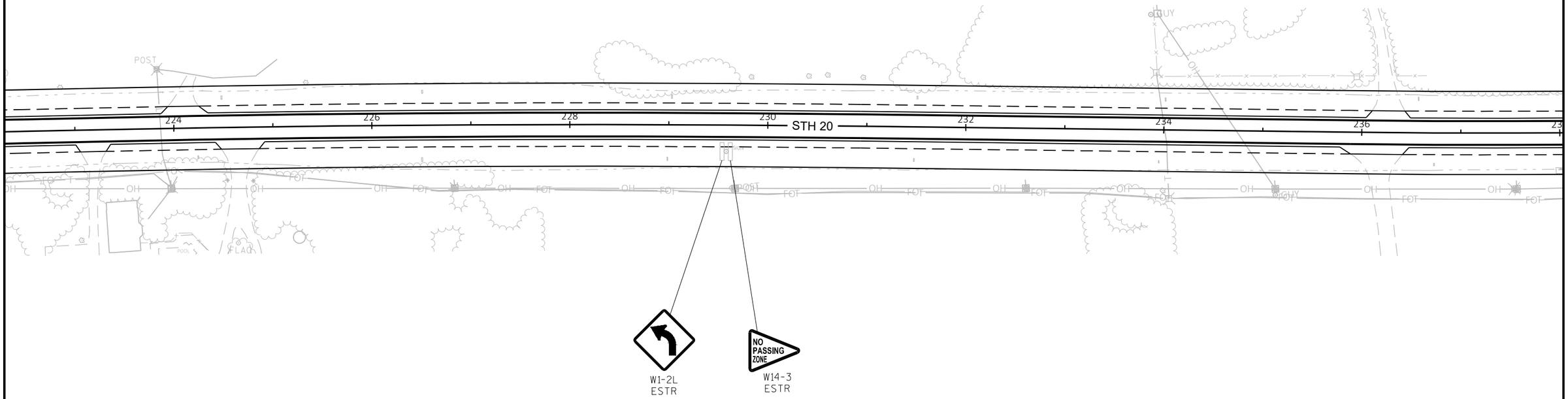
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

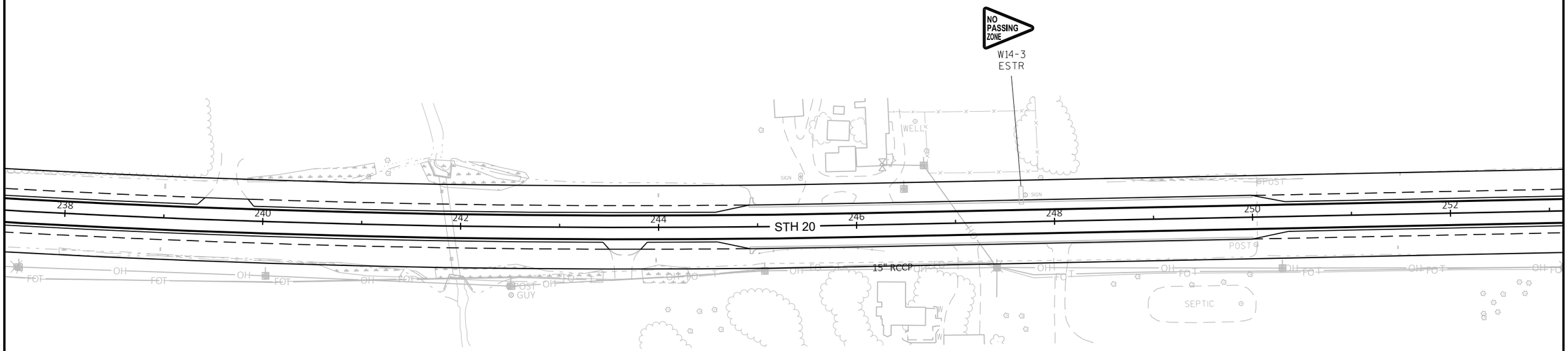

POST
224
226
228
230
STH 20
232
234
236
POST
POST
POST

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 17 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 109	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-17

PLOT DATE : 9/22/2021 1:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

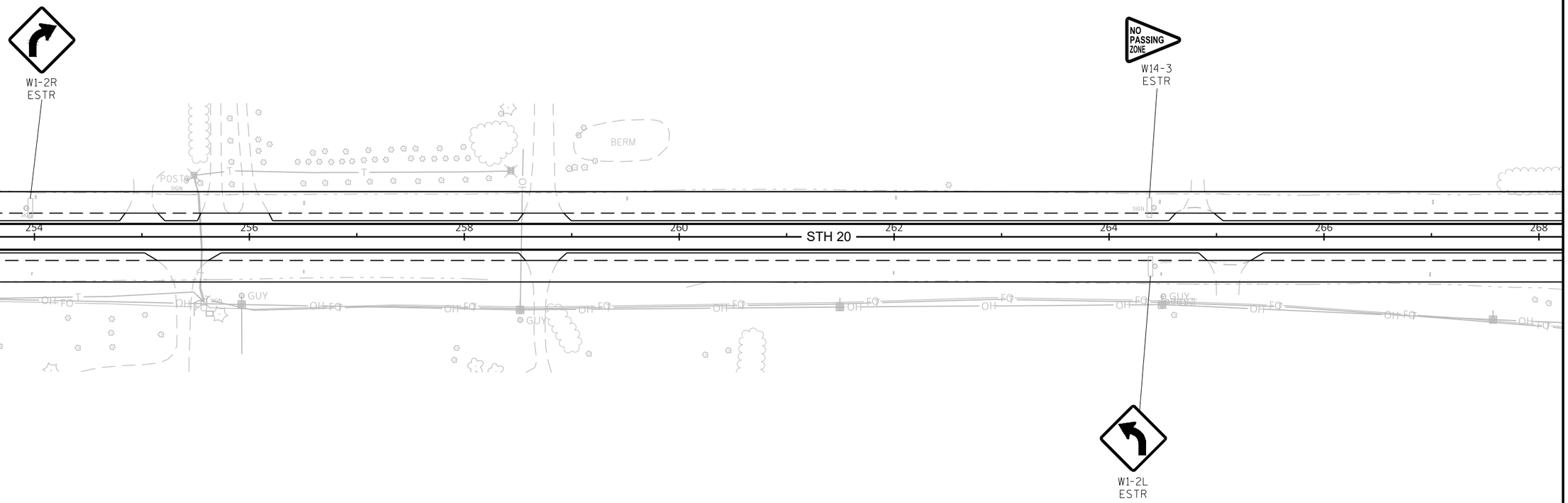
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 18 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 110	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-18

PLOT DATE : 9/22/2021 1:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

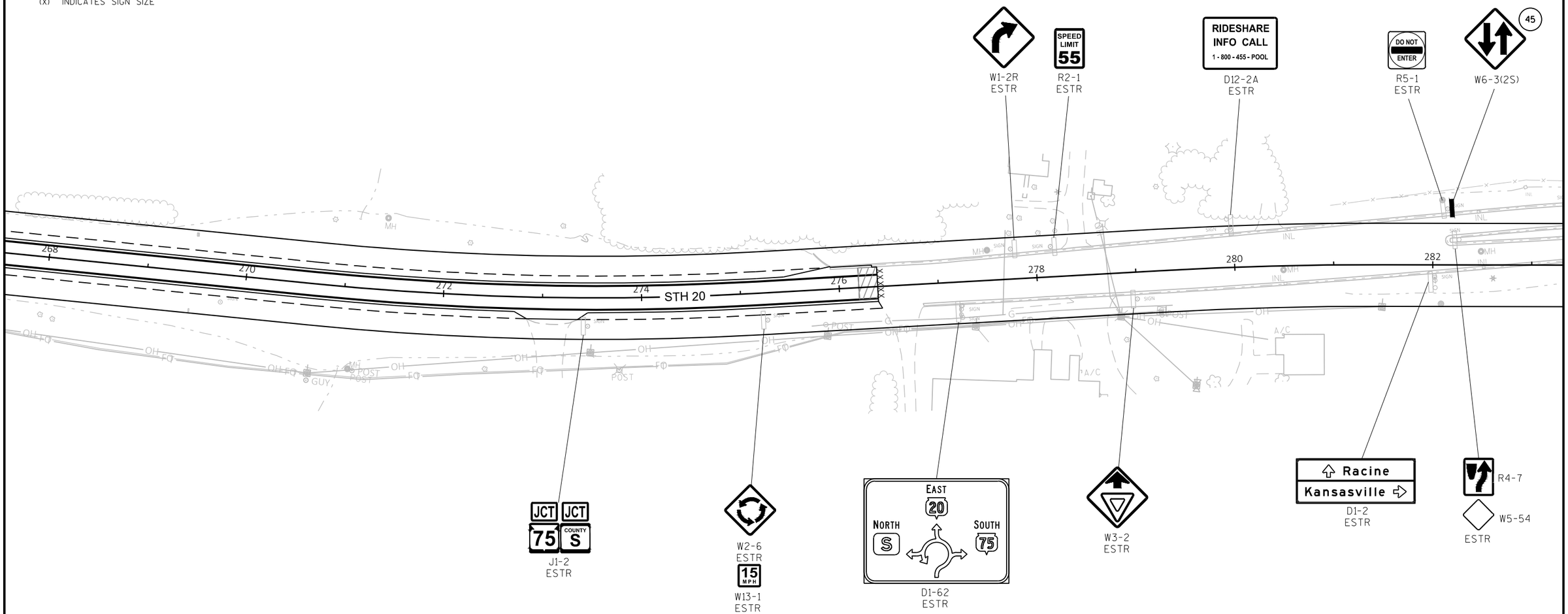
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 19 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 111	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-19

PLOT DATE : 9/22/2021 1:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

CTH S

STH 20

STH 75

284 286 288 290 292 294 296 298

WRONG WAY R5-1A ESTR

Waterford 6 D2-1 ESTR

WEST 20 J4-1 ESTR

WEST 20 D1-1 ESTR

YIELD R1-2 / TO TRAFFIC FROM LEFT R1-54 ESTR

YIELD R1-2 / ONE WAY R6-2R ESTR

NORTH S D1-1 ESTR

YIELD R1-2 / TO TRAFFIC FROM LEFT R1-54 ESTR

YIELD R1-2 / ONE WAY R6-2R ESTR

R4-7 / W5-54 ESTR

Waterford / Kansasville D1-2 ESTR

W3-2 ESTR

WEST 20 / SOUTH 75 / NORTH S D1-62 ESTR

YIELD R1-2 / ONE WAY R6-2R ESTR

YIELD R1-2 / TO TRAFFIC FROM LEFT R1-54 ESTR

ONE WAY R6-1R / R6-4B ESTR

SOUTH 75 D1-1 ESTR

EAST 20 D1-1 ESTR

EAST 20 J4-1 ESTR

WRONG WAY R5-1A ESTR

ONE WAY R6-2R ESTR

R3-4 ESTR

DO NOT ENTER R5-1 ESTR

SPEED LIMIT 55 R2-1 ESTR

YIELD R1-2 / ONE WAY R6-2R ESTR

YIELD R1-2 / TO TRAFFIC FROM LEFT R1-54 ESTR

SHEET 20 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 112	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-20

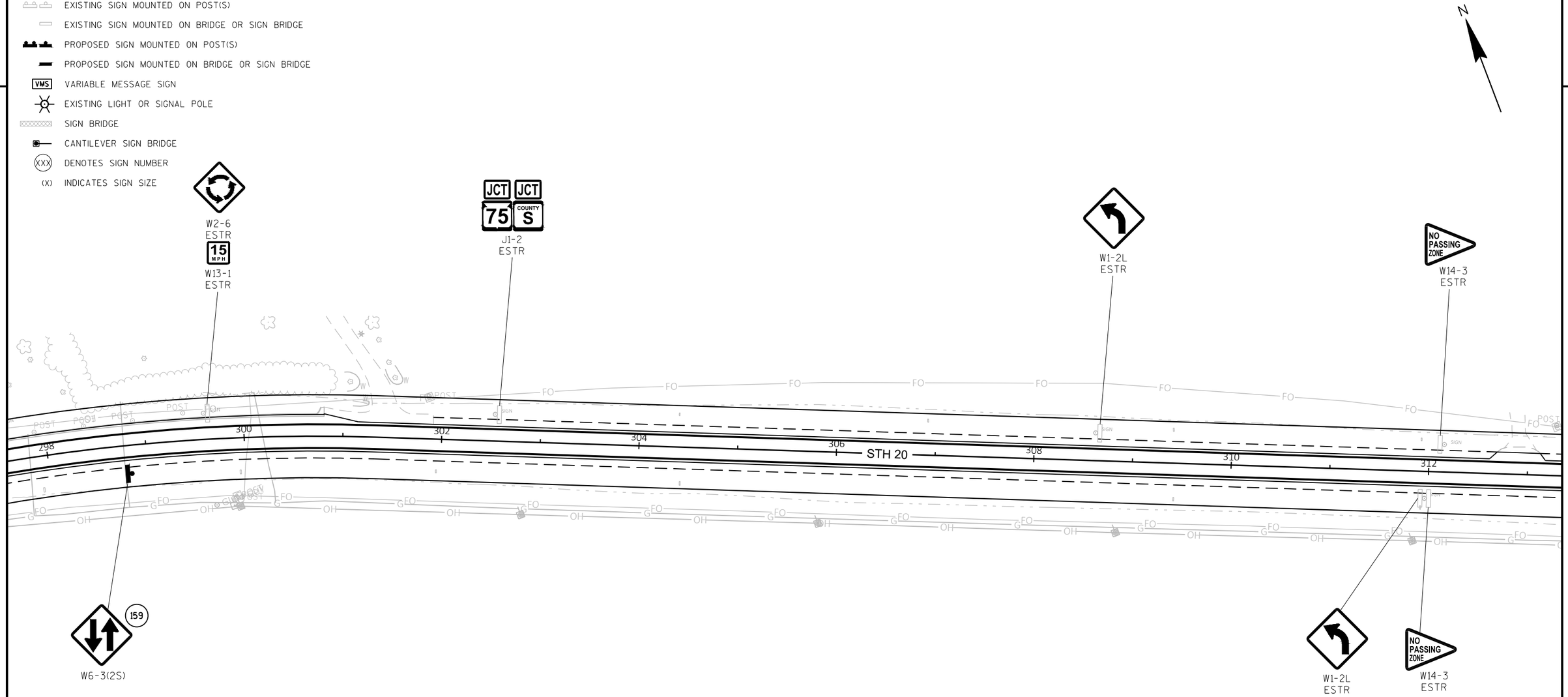
PLOT DATE : 9/22/2021 1:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

SHEET 21 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 113	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-21

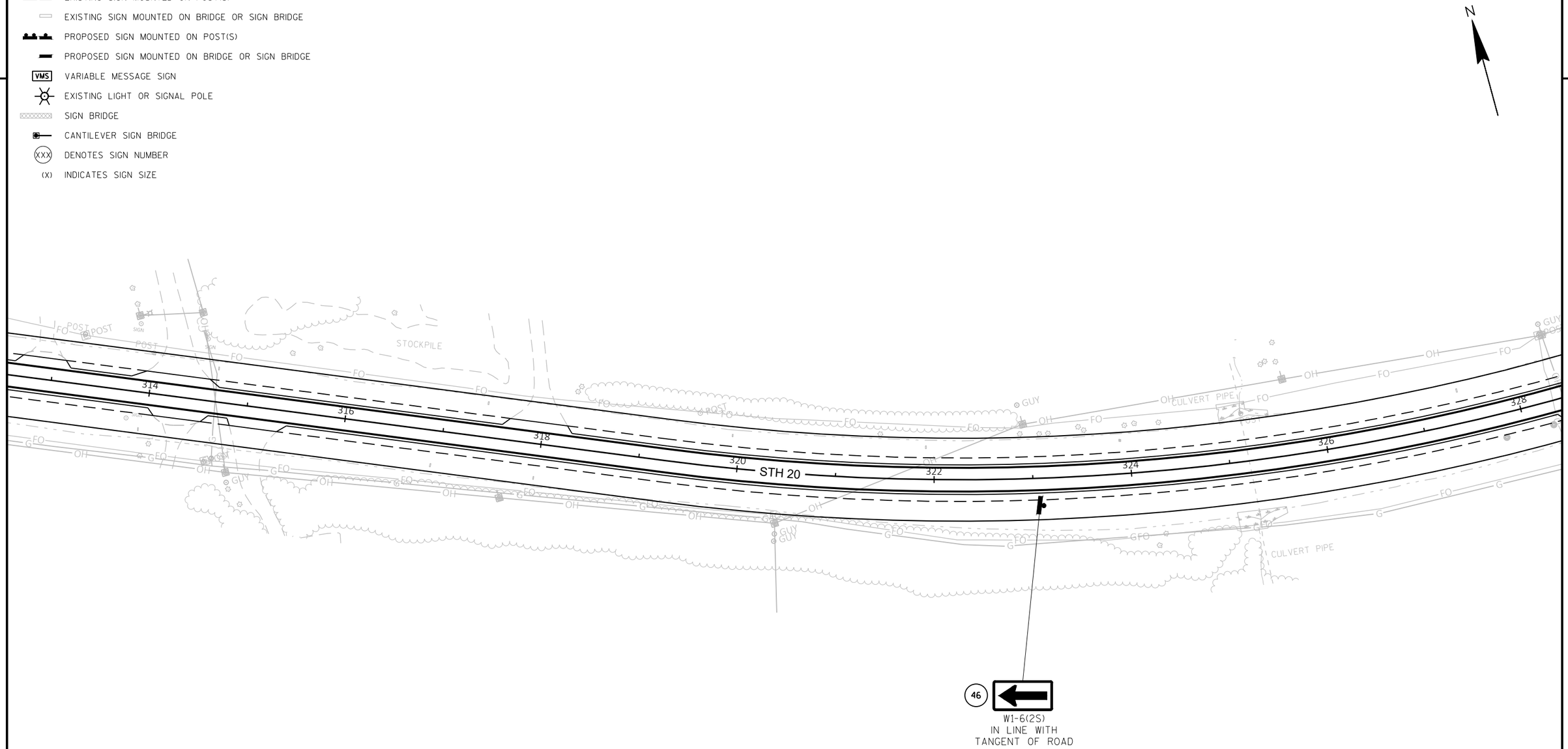
PLOT DATE : 9/22/2021 1:22 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

SHEET 22 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 114	E

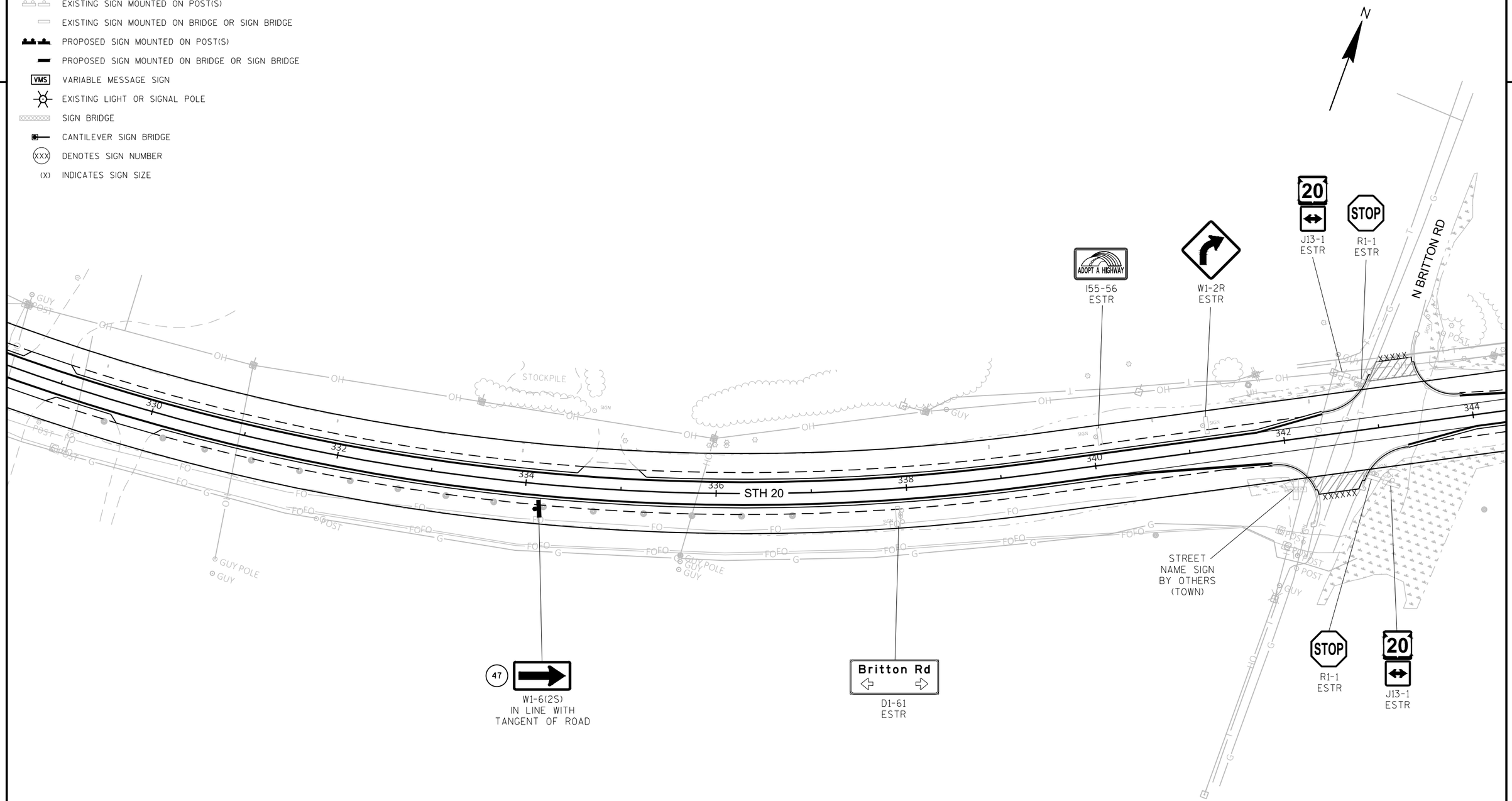
FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-22

PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 23 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 115	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-23

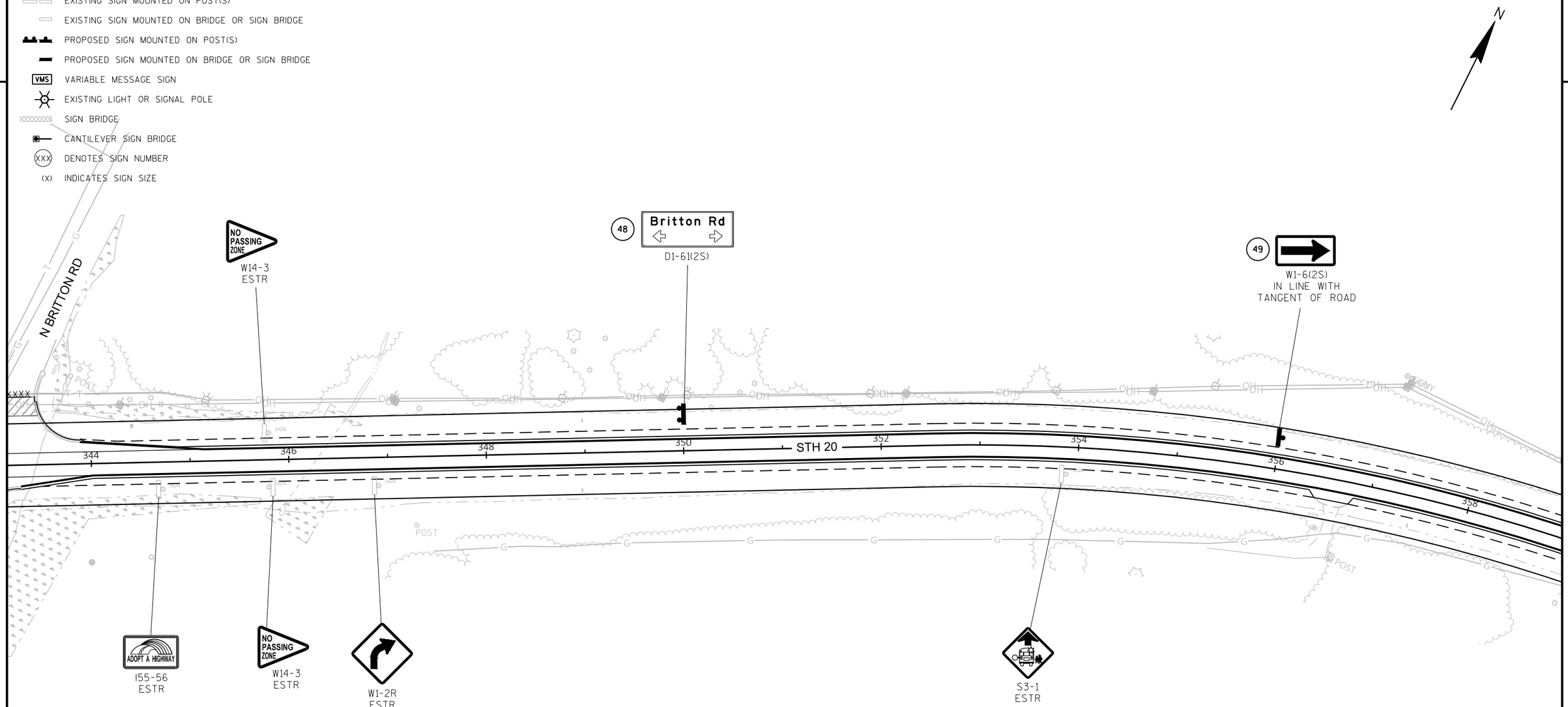
PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 24 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 116	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-24

PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

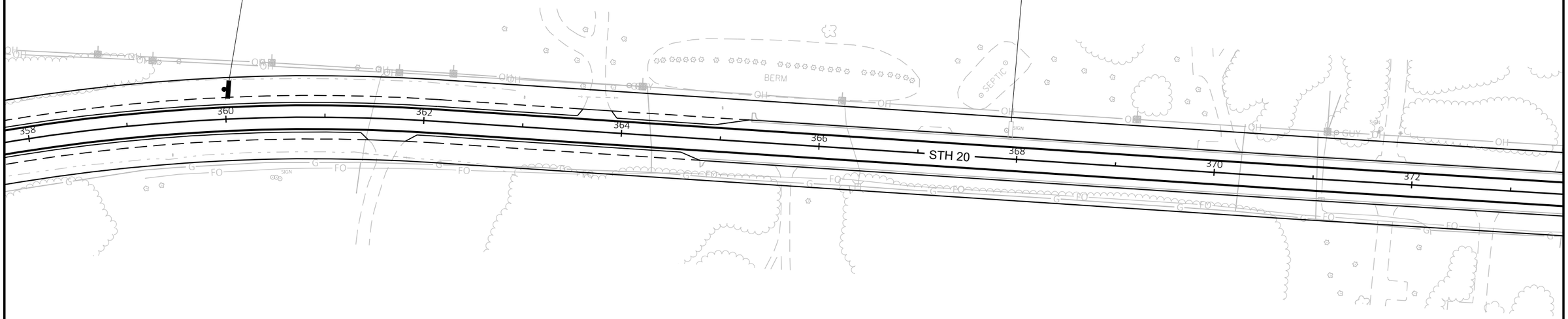
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

W1-6(2S)
IN LINE WITH
TANGENT OF ROAD

W1-2L
ESTR



SHEET 25 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 117	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-25

PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

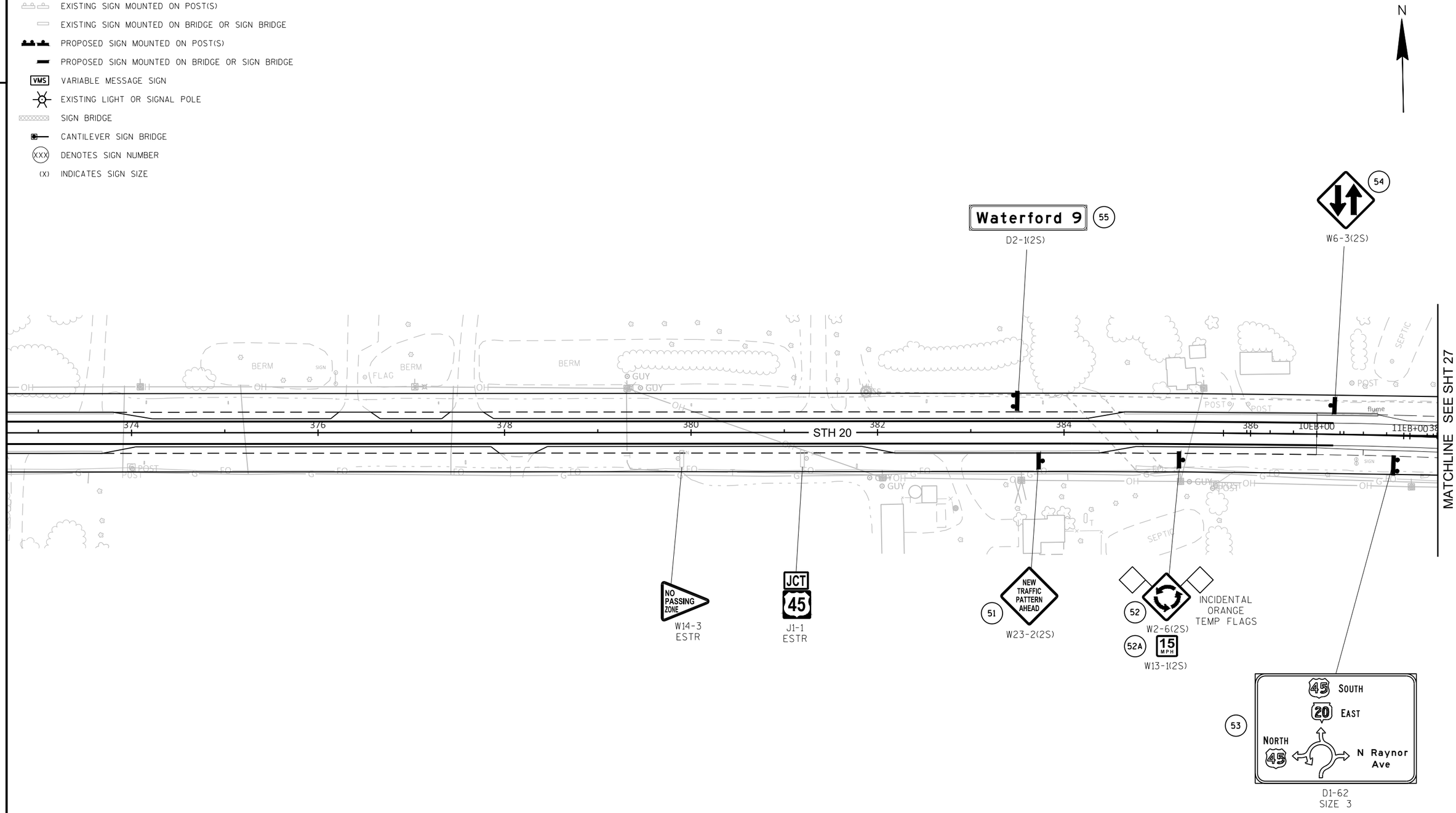
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



SHEET 26 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 118	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-26

PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

CONT'D ON SHT 26

CONT'D ON SHT 28

66 NO PASSING ZONE
W14-3(2S)

65 NO PARKING ANY TIME
R7-1R(2S)

64 SPEED LIMIT 55
R2-1(2S)

63
S3-1(2S)

62 DO NOT ENTER
R5-1(2S)

61 NO PARKING ANY TIME
R7-1D(2S)

124
R3-4(2S)

388 390 392 394

21WB+00 22WB+00 23WB+00 24WB+00 25WB+00 26WB+00

13EB+00 14EB+00 15EB+00 16EB+00 17EB+00

STH 20

56 NO PARKING ANY TIME
R7-1L(2S)

58 Union Grove Racine / Milwaukee Muskego
D1-4(2S)

59 NO PARKING ANY TIME
R7-1D(2S)

60 R4-7(2S)

60A W5-54(2S)

SHEET 27 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 119	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-27

PLOT DATE : 9/22/2021 1:23 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

SEE SHEETS 33-35

CONT'D ON SHT 27

CONT'D ON SHT 29

N

STH 20

USH 45

N RAYNOR AVE

95 W11-2(2S) 95A W16-7L(2S)

91 92 R1-6(2S) 2' HEIGHT

93 R1-2(2S) 94 TO TRAFFIC FROM LEFT R1-54(2S)

111 R1-2(2S)

89 W11-2(2S) 89A W16-7L(2S)

96 W11-2(2S) 96A W16-7L(2S)

WEST 20 97 J4-1(2S)

NO PARKING ANY TIME 98 R7-1L(2S)

101 WEST 20 D1-1(2S)

NORTH 45 90 D1-1(2S)

87 R1-2(2S) 88 TO TRAFFIC FROM LEFT R1-54(2S)

85 W11-2(2S) 85A W16-7L(2S)

86 R1-2(2S)

69 NO PARKING ANY TIME R7-1R(2S)

99 100 R1-6(2S) 2' HEIGHT

70 W11-2(2S) 70A W16-7L(2S)

72 R1-2(2S) 73 TO TRAFFIC FROM LEFT R1-54(2S)

102 R1-2(2S)

ONE WAY 103 104 105 106 R6-1R(2S)

107 108 109 110 R6-4B(2S)

68 N Raynor Ave D1-1(2S)

71 W11-2(2S) 71A W16-7L(2S)

74 75 R1-6(2S) 2' HEIGHT

77 R1-2(2S) 78 TO TRAFFIC FROM LEFT R1-54(2S)

76 R1-2(2S)

79 W11-2(2S) 79A W16-7L(2S)

80 W11-2(2S) 80A W16-7L(2S)

83 SOUTH EAST 45 20 D1-1(2S)

81 82 R1-6(2S) 2' HEIGHT

SOUTH 45 EAST 20 84 JV4-1(2S)

SEE SHEETS 30-32

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 120	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-28
PLOT DATE : 9/22/2021 1:24 PM
PLOT BY : VANDE LEEST, CYNTHIA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

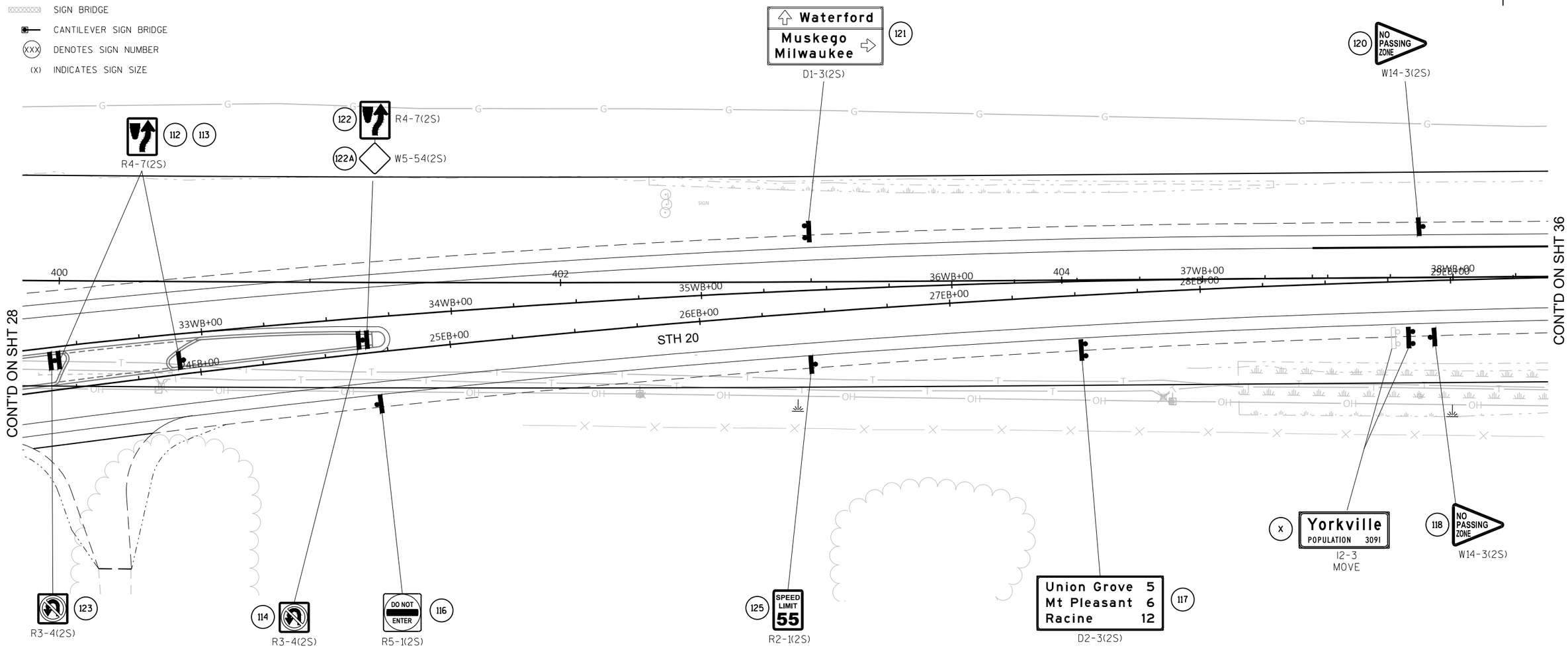
2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

2



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 121	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-29

PLOT DATE : 9/22/2021 1:24 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

HO HO HO HO HO HO HO HO

34 36 38

N RAYNOR AVE

CONT'D ON SHT 31

126 JCT 45 JCT 20

J1-1(2S)

VENT VENT VENT VENT VENT VENT

SHEET 30 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 122	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-30

PLOT DATE : 9/22/2021 1:24 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

CONT'D ON SHT 30

CONT'D ON SHT 32

40 42 44

N RAYNOR AVE

127 NEW TRAFFIC PATTERN AHEAD
W23-2(2S)

52 W2-6(2S)
16X16 TEMP FLAGS
52A 15 MPH
W13-1(2S)

129 45 NORTH
WEST 20 45 SOUTH 20 EAST
D1-62
SIZE 2

SHEET 31 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 123	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-31

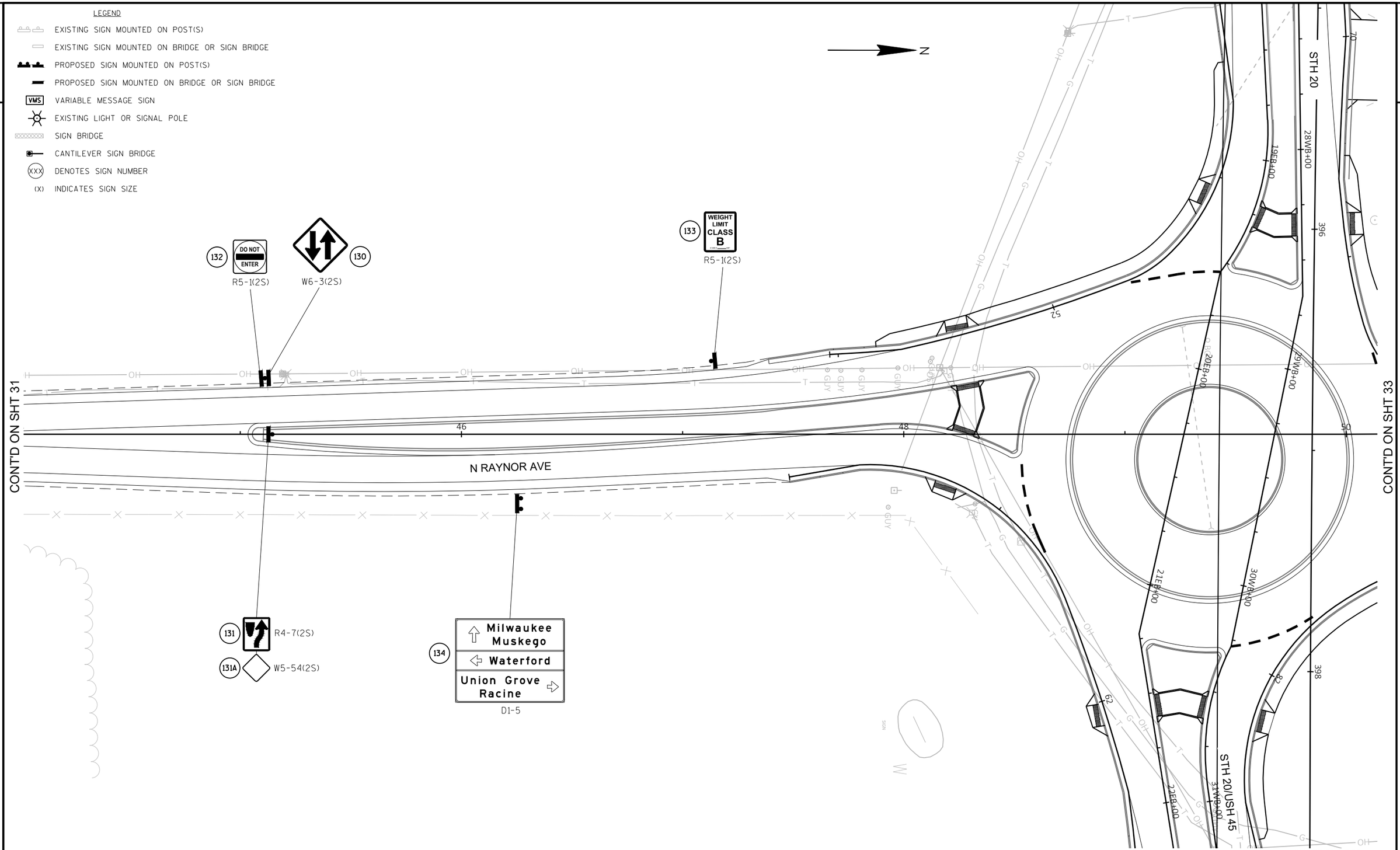
PLOT DATE : 9/22/2021 1:24 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 124	E

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

STH 20
28WB+00

CONT'D ON SHT 32

CONT'D ON SHT 34

USH 45

135 R4-7(2S)

136 R4-7(2S)

140 R4-7(2S)

140A W5-54(2S)

138 Milwaukee 19
D2-1(2S)

139 DO NOT ENTER
R5-1(2S)

141 NORTH 45
J4-1(2S)

142 ADOPT A HIGHWAY
I55-56
MOVE

FILLER CAP

CANOPY

WELL

MH

SHEET 33 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 125	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-33

PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

149 — Union Grove / Racine / Waterford — D1-3(2S)

146 — NO PASSING ZONE — W14-3(2S)

N Raynor Ave
45 SOUTH
20 EAST
WEST 20
148 — D1-62 SIZE 3

USH 45

56 58 60

CONT'D ON SHT 33

CONT'D ON SHT 35

144 — SPEED LIMIT 55 — R2-1(2S)

145 — NO PASSING ZONE — W14-3(2S)

147 — W6-3(2S)

SHEET 34 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 126	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-34

PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

16X16
TEMP FLAGS

152 W2-6(2S)

152A 15 MPH W13-1(2S)

151 NEW TRAFFIC PATTERN AHEAD W23-2(2S)

150 JCT 20 J1-1(2S)

VENT

SEPC

OH

T

G

SIGN

POST

WELL

CONT'D ON SHT 34

62 64 66

USH 45

SHEET 35 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 127	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-35

PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:40 FT

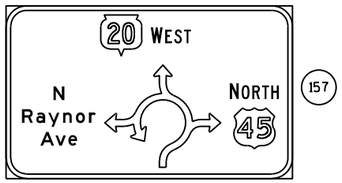
WISDOT/CADDS SHEET 42

2

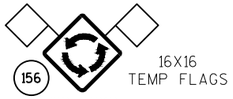
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



D1-62
SIZE 3



W13-1(2S)

W23-2(2S)

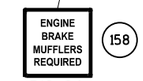
J1-1(2S)

CONT'D ON SHT 29

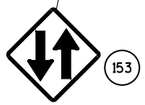
CONT'D ON SHT 37

STH 20

406 408 410 412 414 416 418 420



R10-64
PERMIT SIGN
MOVE



W6-3(2S)

SHEET 36 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 128	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-36

PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

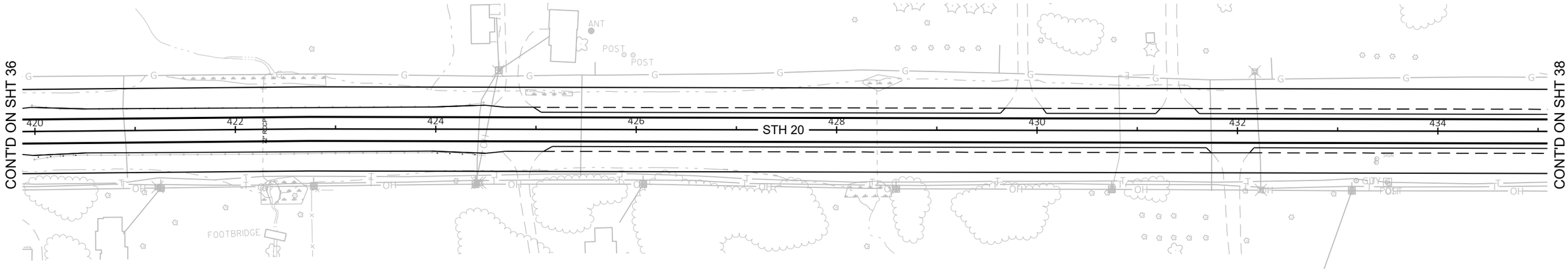
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

NO SIGNS THIS SHEET

N

2



SHEET 37 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 129	E

FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-37

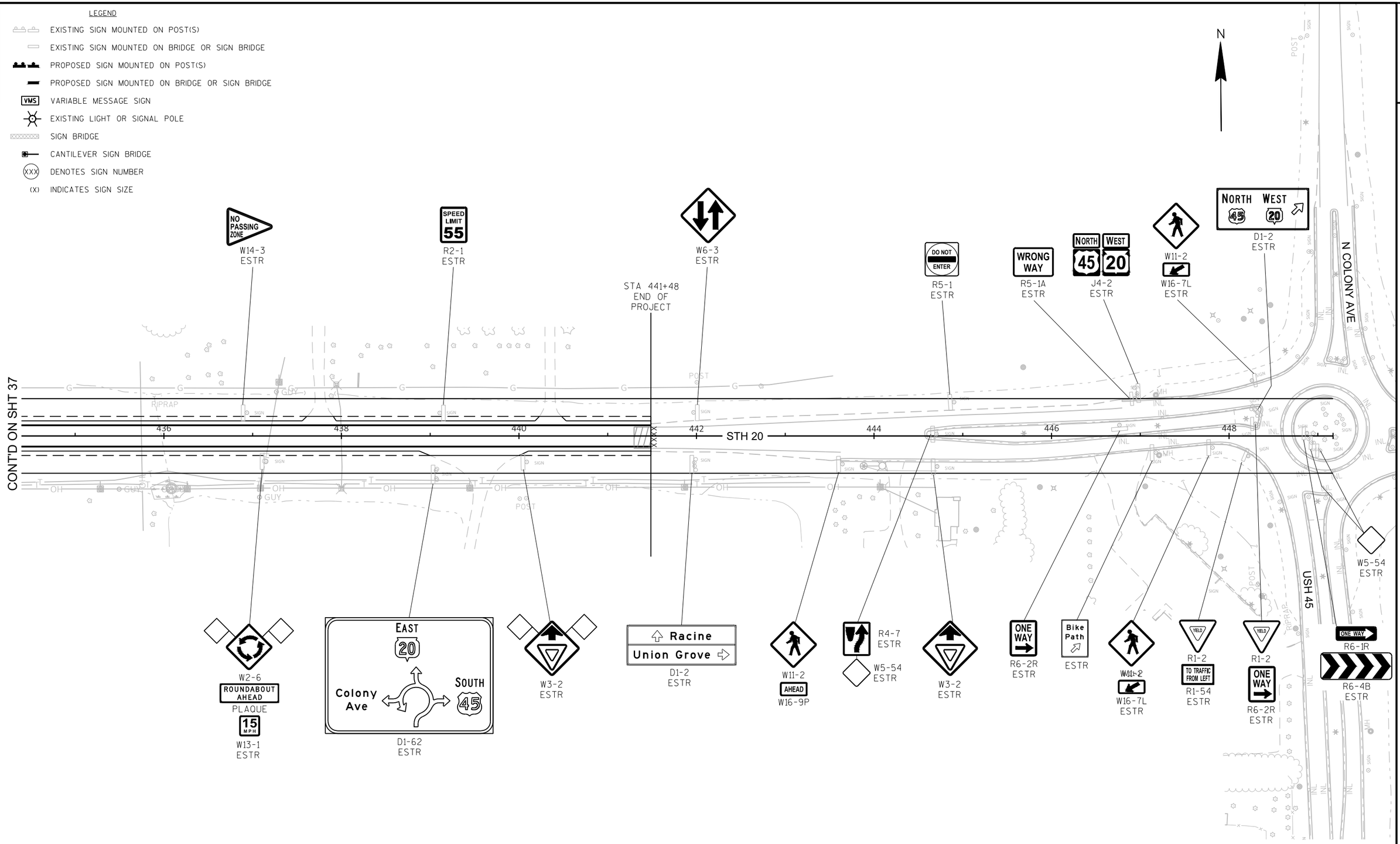
PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 38 OF 38

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET 130	E

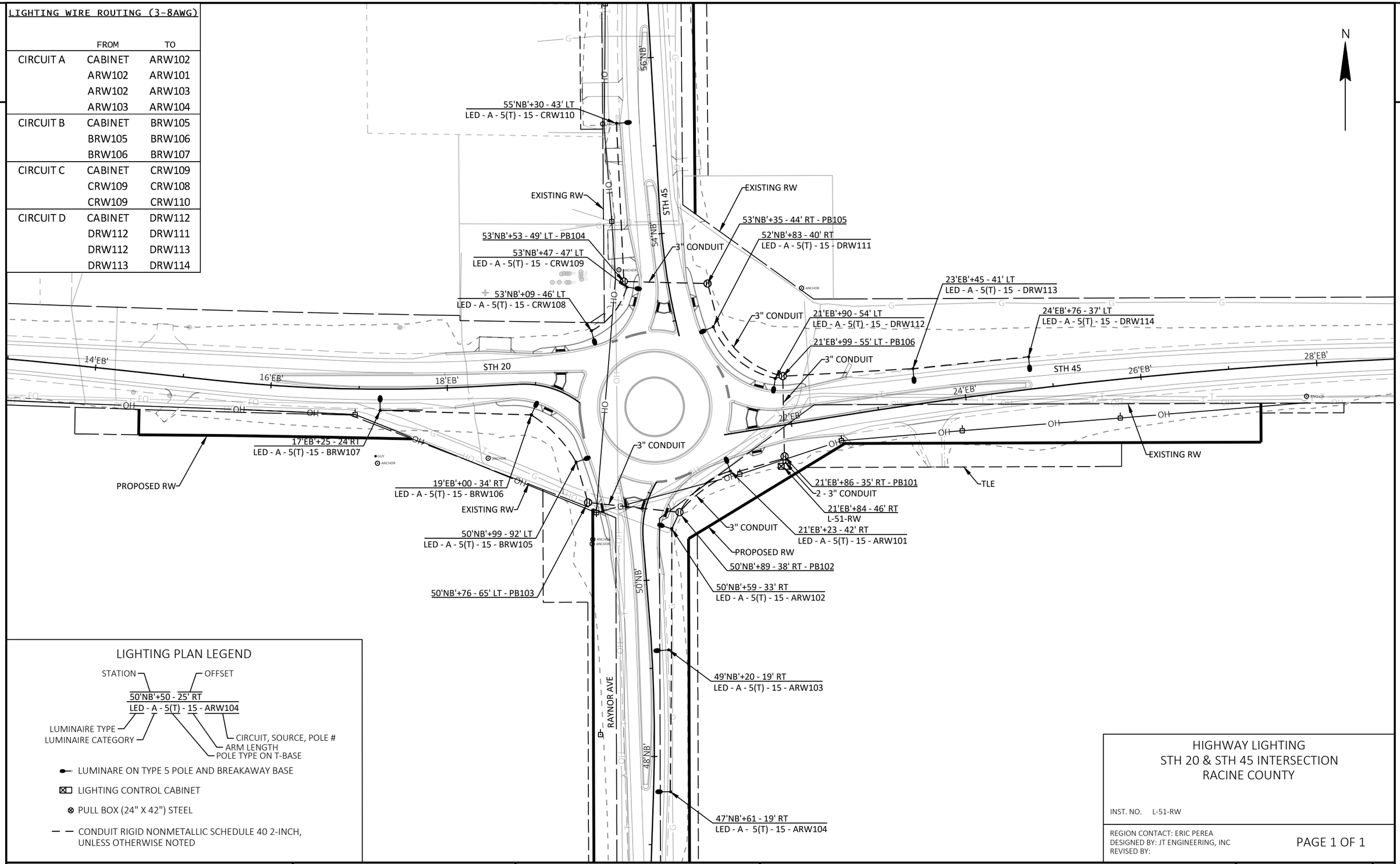
FILE NAME : N:\PDS\C3D\CAD\23401000\SIGN\023201_PS_2020.DWG
LAYOUT NAME - Sht-38

PLOT DATE : 9/22/2021 1:25 PM PLOT BY : VANDE LEEST, CYNTHIA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LIGHTING WIRE ROUTING (3-8AWG)

	FROM	TO
CIRCUIT A	CABINET	ARW102
	ARW102	ARW101
	ARW102	ARW103
	ARW103	ARW104
CIRCUIT B	CABINET	BRW105
	BRW105	BRW106
	BRW106	BRW107
CIRCUIT C	CABINET	CRW109
	CRW109	CRW108
	CRW109	CRW110
CIRCUIT D	CABINET	DRW112
	DRW112	DRW111
	DRW112	DRW113
	DRW113	DRW114



LIGHTING PLAN LEGEND

STATION — OFFSET

50'NB'+50 - 25' RT

LED - A - 5(T) - 15 - ARW104

LUMINAIRE TYPE
LUMINAIRE CATEGORY
CIRCUIT, SOURCE, POLE #
ARM LENGTH
POLE TYPE ON T-BASE

- LUMINARE ON TYPE 5 POLE AND BREAKAWAY BASE
- LIGHTING CONTROL CABINET
- PULL BOX (24" X 42") STEEL
- CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH, UNLESS OTHERWISE NOTED

HIGHWAY LIGHTING
STH 20 & STH 45 INTERSECTION
RACINE COUNTY

INST. NO. L-51-RW

REGION CONTACT: ERIC PEREA
DESIGNED BY: JT ENGINEERING, INC
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	LIGHTING	SHEET 131	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 023601-lp (1)
PLOT DATE : 1/6/2022 5:05 PM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

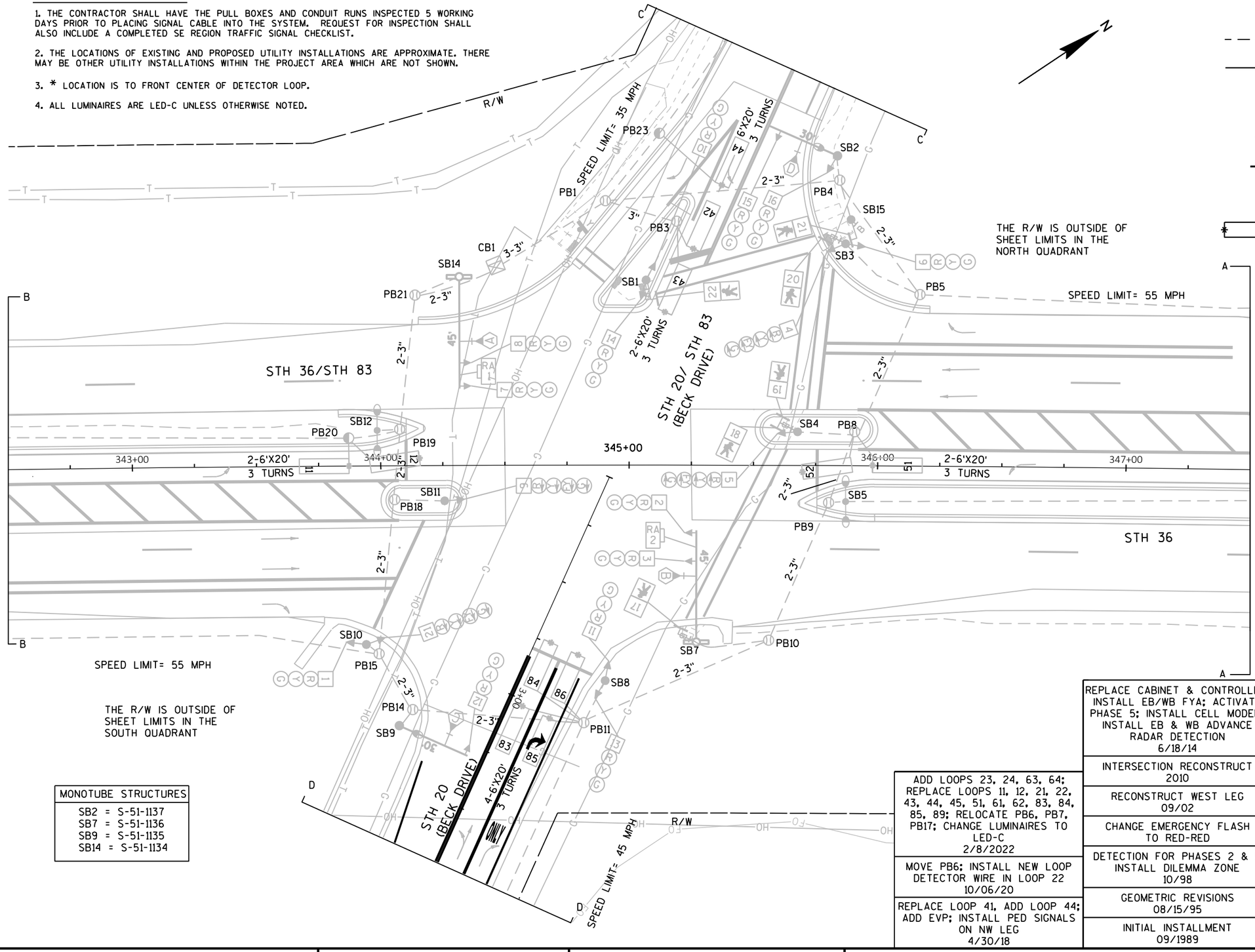
CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. REQUEST FOR INSPECTION SHALL ALSO INCLUDE A COMPLETED SE REGION TRAFFIC SIGNAL CHECKLIST.

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

3. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.

4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.



MONOTUBE STRUCTURES
SB2 = S-51-1137
SB7 = S-51-1136
SB9 = S-51-1135
SB14 = S-51-1134

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- FYA YELLOW ARROW
- GA GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- Y YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY
- RA X RADAR DETECTOR
- RADAR DETECTION ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

REPLACE CABINET & CONTROLLER; INSTALL EB/WB FYA; ACTIVATE PHASE 5; INSTALL CELL MODEM; INSTALL EB & WB ADVANCE RADAR DETECTION 6/18/14
INTERSECTION RECONSTRUCT 2010
RECONSTRUCT WEST LEG 09/02
CHANGE EMERGENCY FLASH TO RED-RED
DETECTION FOR PHASES 2 & 5 INSTALL DILEMMA ZONE 10/98
GEOMETRIC REVISIONS 08/15/95
INITIAL INSTALLMENT 09/1989

ADD LOOPS 23, 24, 63, 64; REPLACE LOOPS 11, 12, 21, 22, 43, 44, 45, 51, 61, 62, 83, 84, 85, 89; RELOCATE PB6, PB7, PB17; CHANGE LUMINAIRES TO LED-C 2/8/2022
MOVE PB6; INSTALL NEW LOOP DETECTOR WIRE IN LOOP 22 10/06/20
REPLACE LOOP 41, ADD LOOP 44; ADD EVP; INSTALL PED SIGNALS ON NW LEG 4/30/18

REVISION

REV. NO.	RELOCATE PB12, PB13, LOOP 81, & LOOP 82			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
10	DATE	BY	DATE	BY

TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY
SIGNAL NO. S51-0406
CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 09/05/89 — EDWARD J. FRIEDE, REGION TRAFFIC ENGINEER

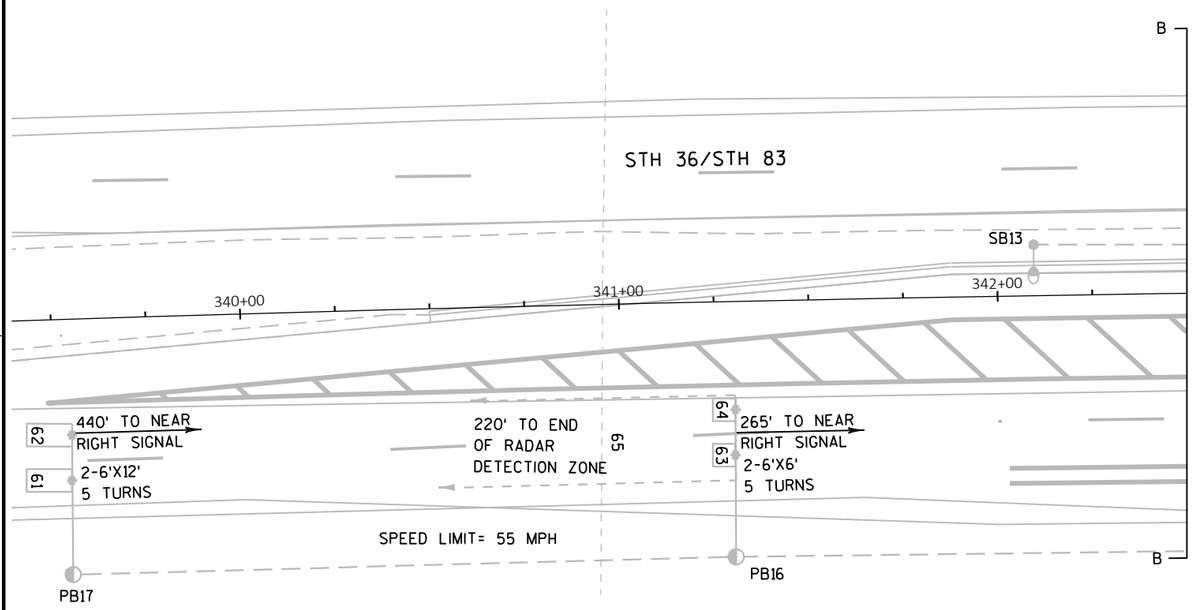
APPROVED
DATE 09/19/89 — H. O. PRICE, STATE TRAFFIC ENGINEER

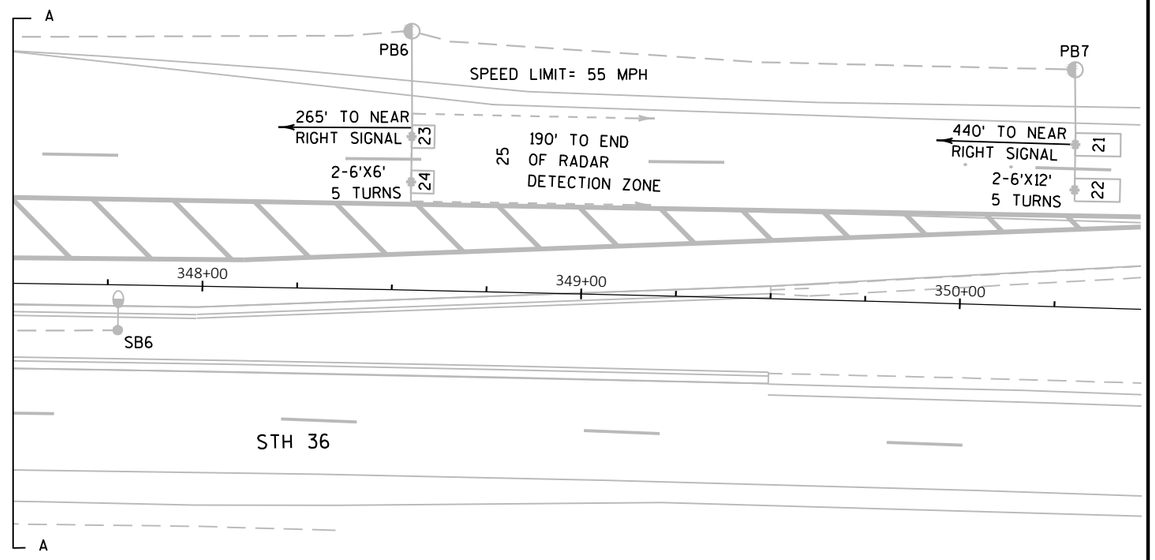
REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: JT ENGINEERING, INC.

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	TRAFFIC SIGNAL PLAN	SHEET 132	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - S51-0406_R8_PG1
PLOT DATE : 4/26/2022 2:33 PM
PLOT BY : JIM PAVELSKI
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

2





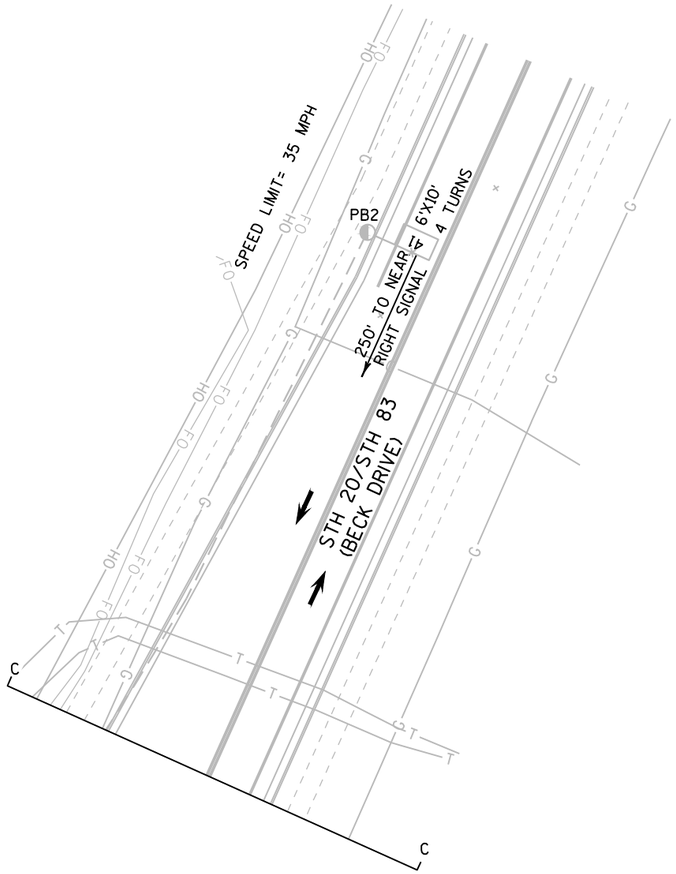
TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

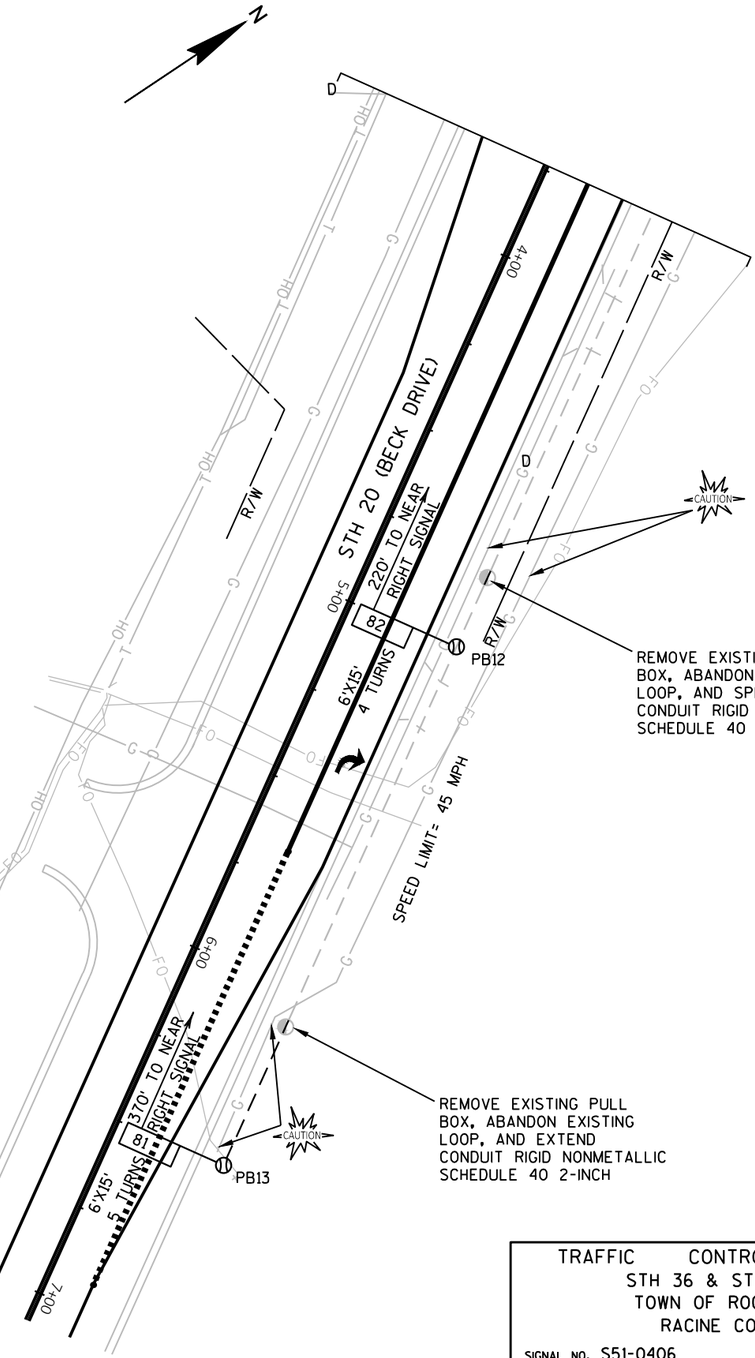
SIGNAL NO. S51-0406

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: JT ENGINEERING, INC.

PAGE 2 OF 4

PROJECT NO:2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	TRAFFIC SIGNAL PLAN	SHEET 133	E





TRAFFIC CONTROL SIGNAL
STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY

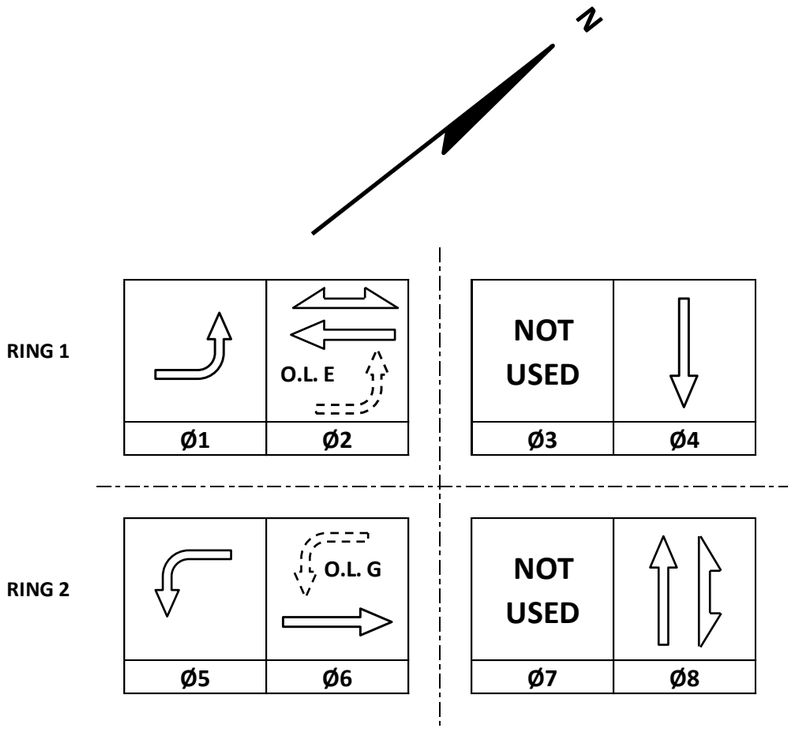
SIGNAL NO. S51-0406

REGION CONTACT: D. BRANTNER
DESIGNED BY:
REVISED BY: JT ENGINEERING, INC

PROJECT NO:2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	TRAFFIC SIGNAL PLAN	SHEET 134	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - S51-0406_R8_PG3
PLOT DATE : 4/26/2022 2:36 PM
PLOT BY : JIM PAVELSKI
PLOT NAME :
PLOT SCALE : 1" = 40'_XREF
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	10,11,12	R
Ø5	9,21	R ←
Ø6	1,2,3	R
Ø7		
Ø8	13,14,15,16	R
Ø2P	22,23	
Ø4P		
Ø6P		
Ø8P	17,18,19,20	
OLE	4,5	-
OLF		
OLG	9,21	-
OLH		



CONTROLLER LOGIC

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

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+8 OR 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

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

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

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

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

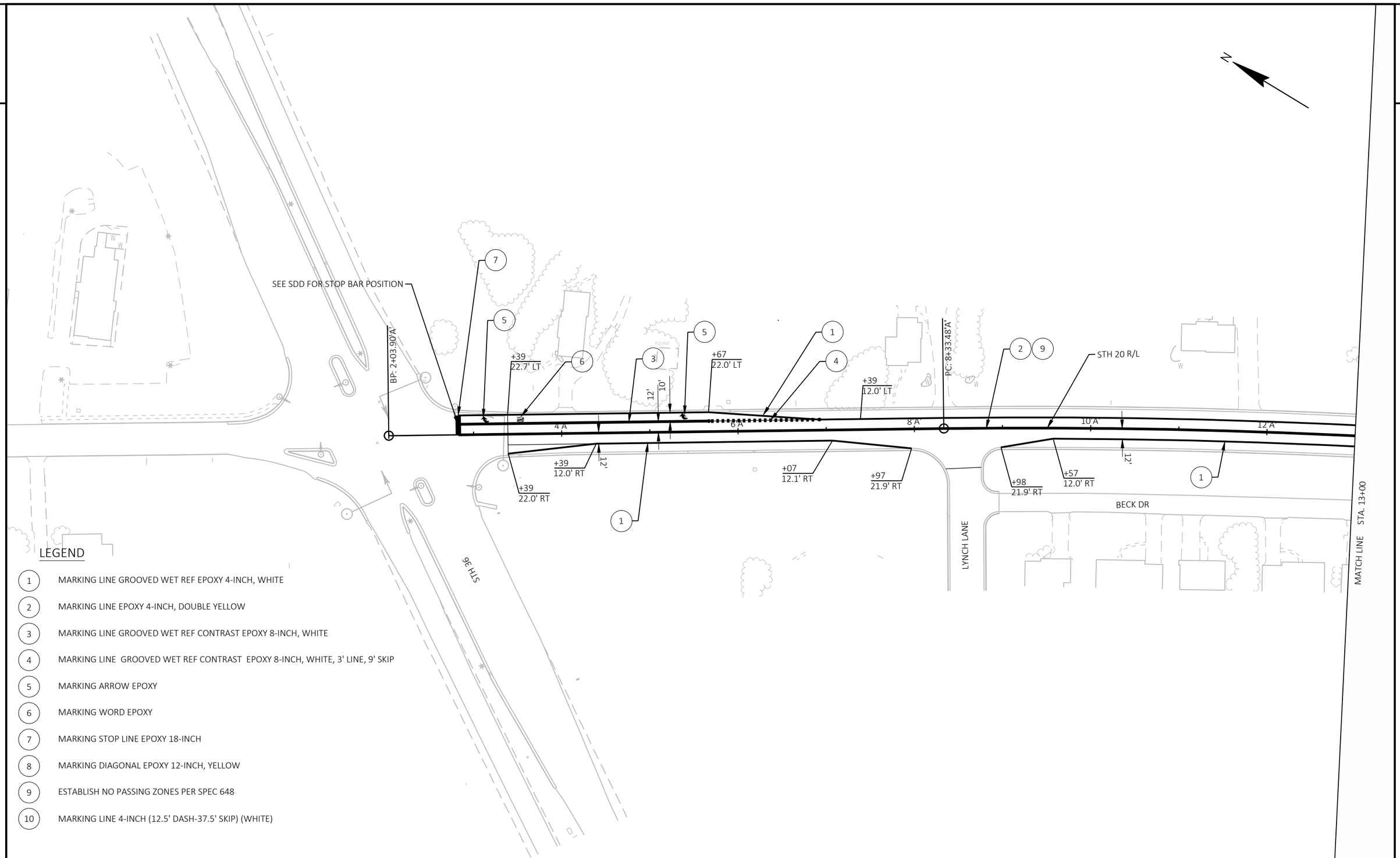
DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23					49	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	11	21	23	41	43	51	61	63	81	83	85					25	PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	4	4	5	6	6	8	8	8					2	CALLED PHASE
CALL OPTION	X	X	X		X	X	X	X		X	X					X	CALL OPTION
DELAY TIME					X					X	X						DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X					X	EXTENTION OPTION
EXTEND TIME				X					X								EXTEND TIME
USE ADDED INITIAL		X	X				X	X									USE ADDED INITIAL
CROSS SWITCH PHASE	2					6											CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24					50	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	12	22	24	42	44	52	62	64	82	84	86					65	PLAN LOOP DETECTOR*(S)
CALLED PHASE	1	2	2	4	4	5	6	6	8	8	8					6	CALLED PHASE
CALL OPTION	X	X	X		X	X	X	X		X	X					X	CALL OPTION
DELAY TIME					X					X	X						DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X	X					X	EXTENTION OPTION
EXTEND TIME				X					X								EXTEND TIME
USE ADDED INITIAL		X	X				X	X									USE ADDED INITIAL
CROSS SWITCH PHASE	2					6											CROSS SWITCH PHASE

STH 36 & STH 20/83
TOWN OF ROCHESTER
RACINE COUNTY
SIGNAL NO: S51-0406 CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE
DATE: 02/2022 PAGE NO. 4 OF 4

2



LEGEND

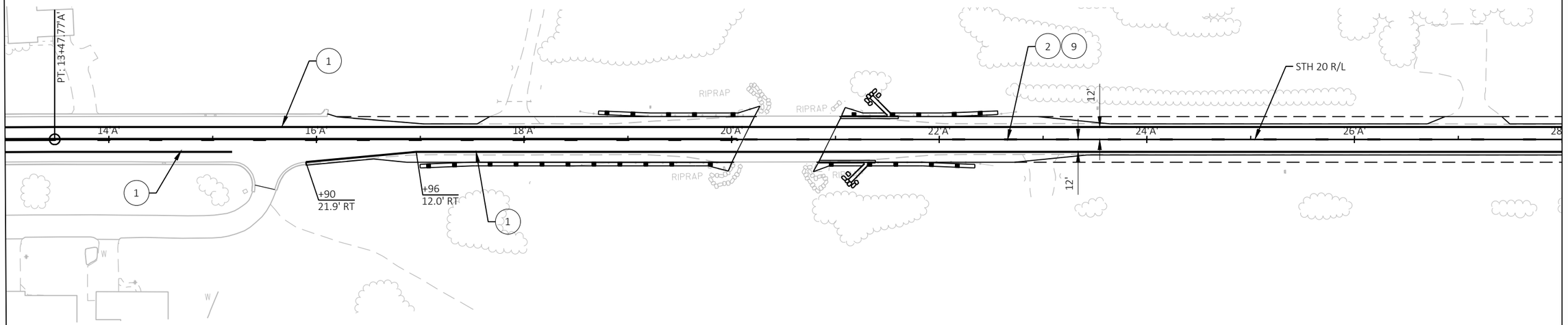
1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 136	E

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



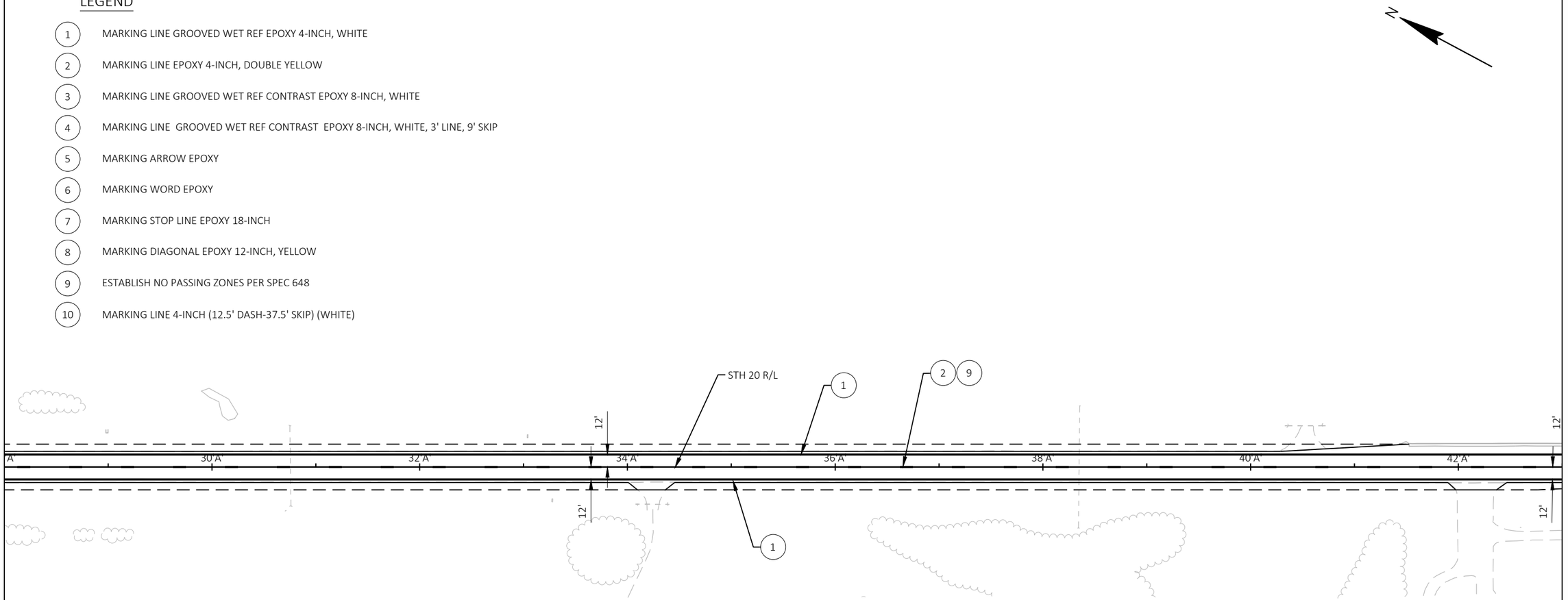
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 137	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 02
PLOT DATE : 1/26/2022 5:20 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



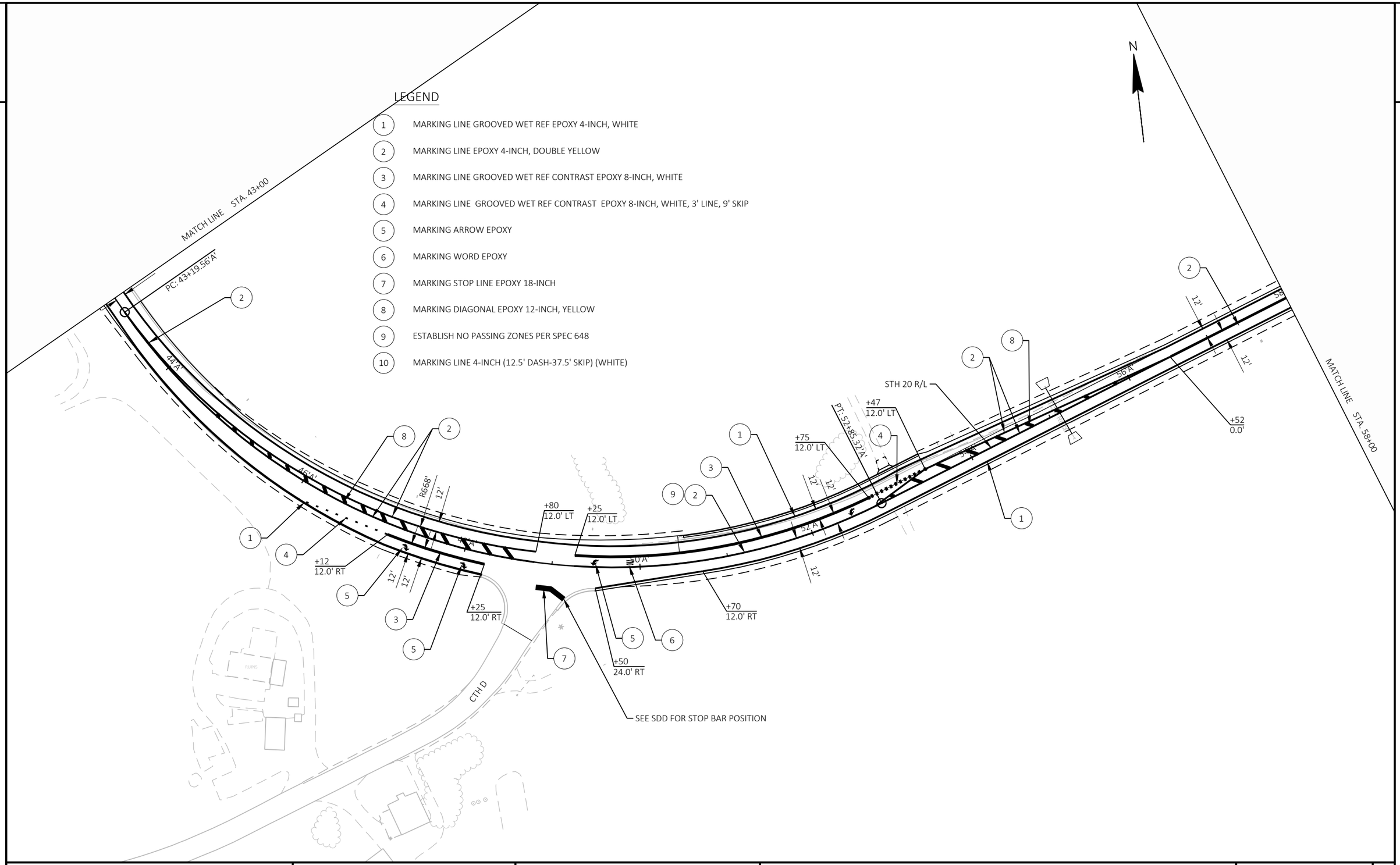
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 138	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 03
PLOT DATE : 1/26/2022 5:20 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



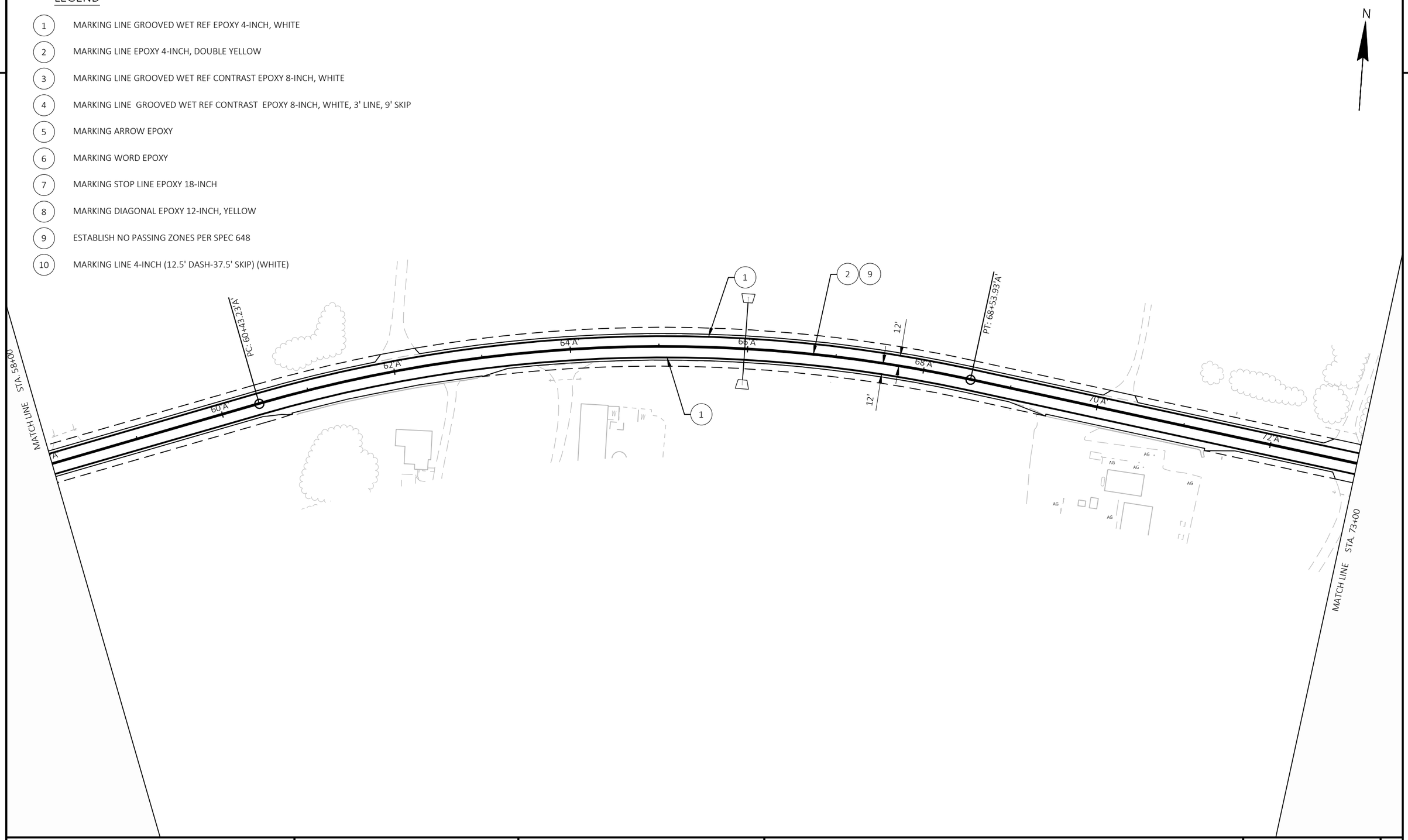
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 139	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 04
PLOT DATE : 1/26/2022 5:20 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



2

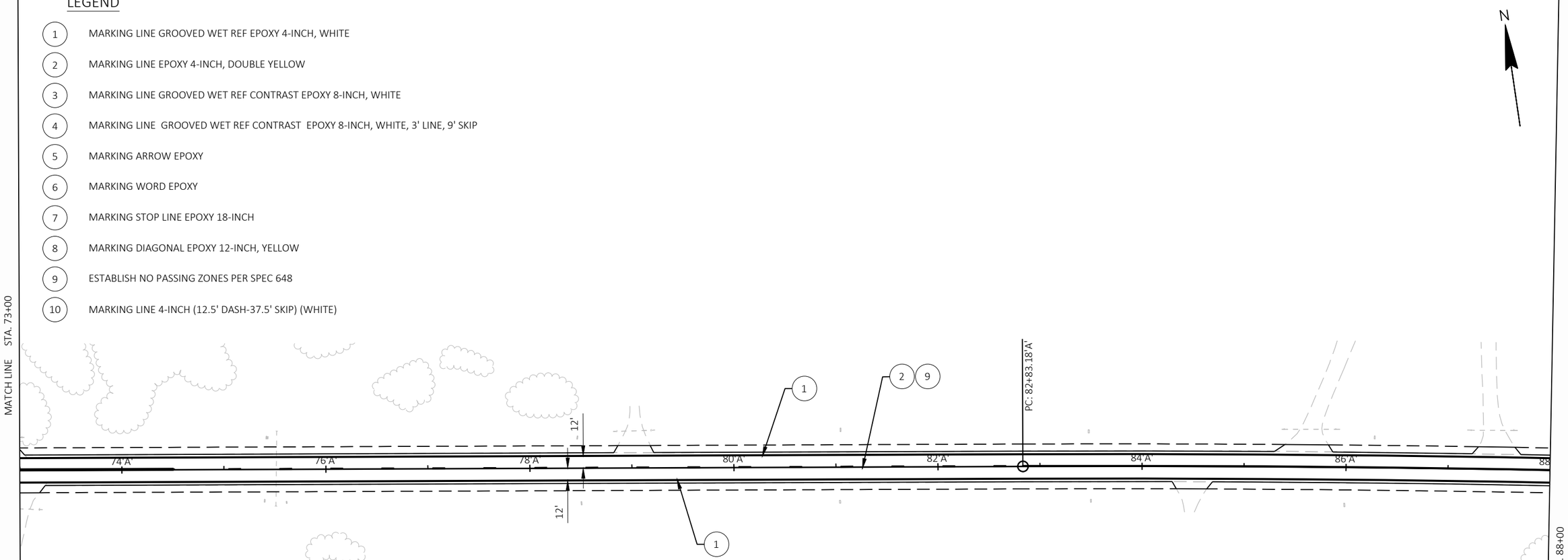
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 140	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 05
PLOT DATE : 1/26/2022 5:20 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



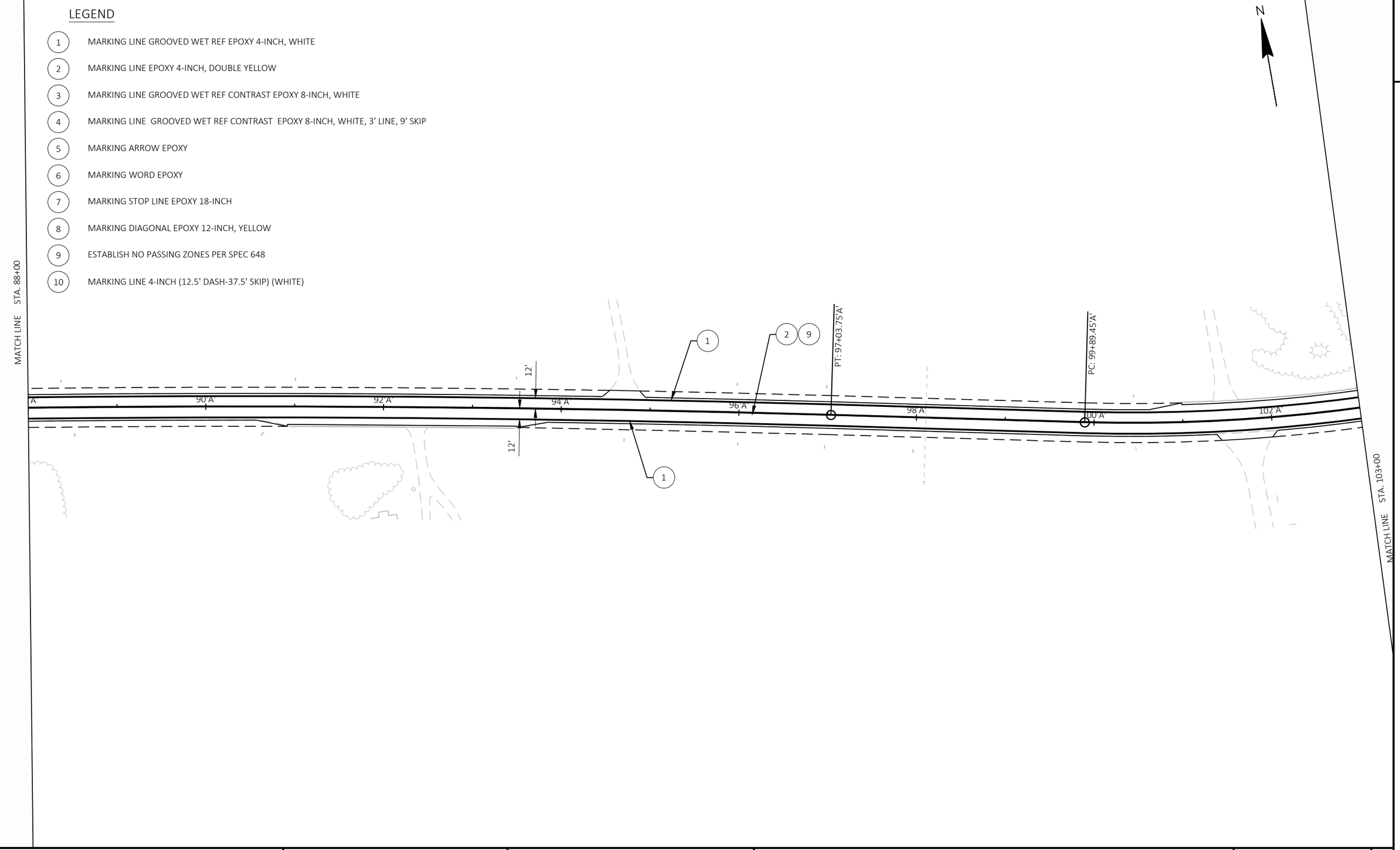
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 141	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 06
PLOT DATE : 1/26/2022 5:20 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

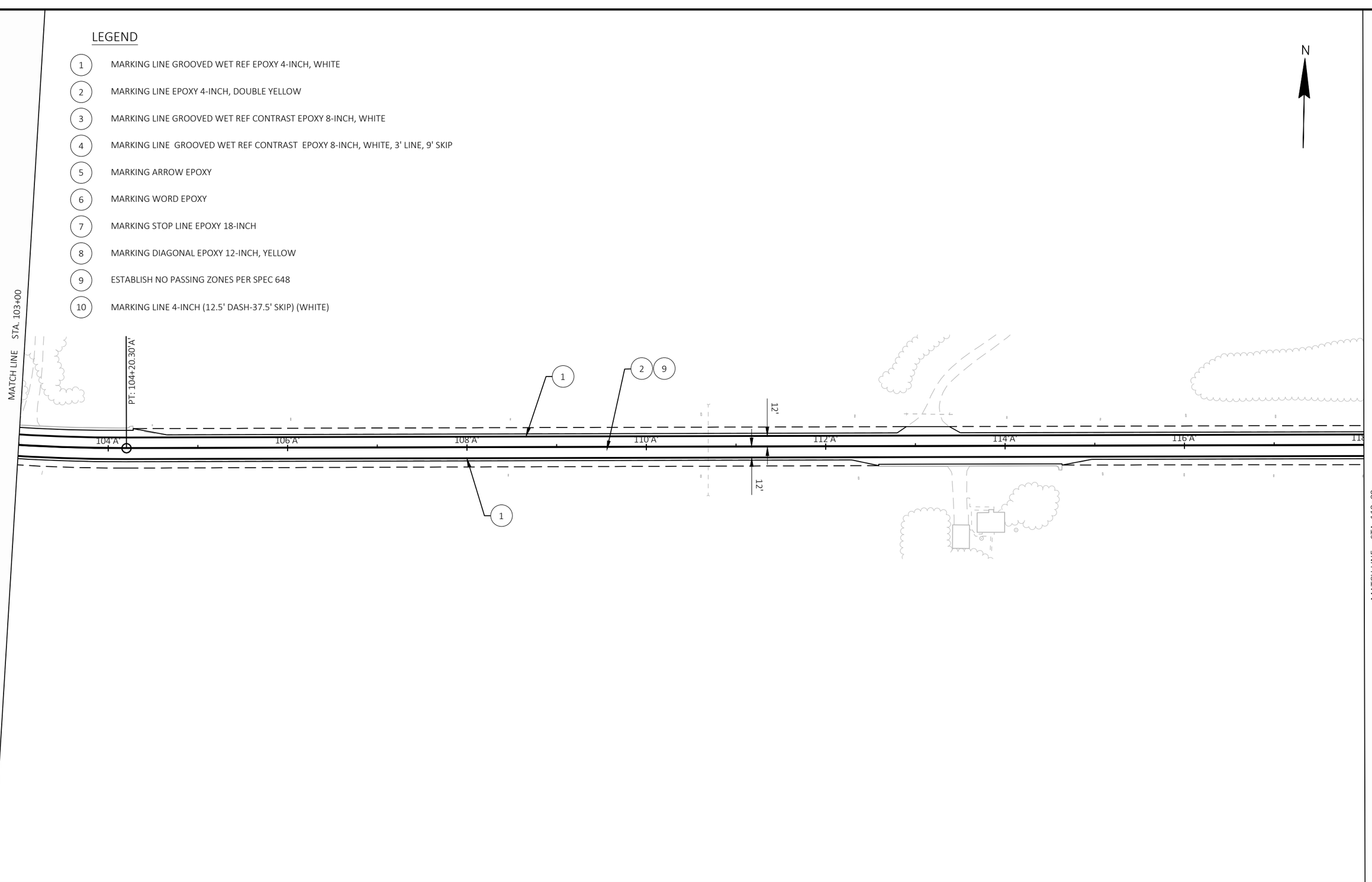


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 142	E

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



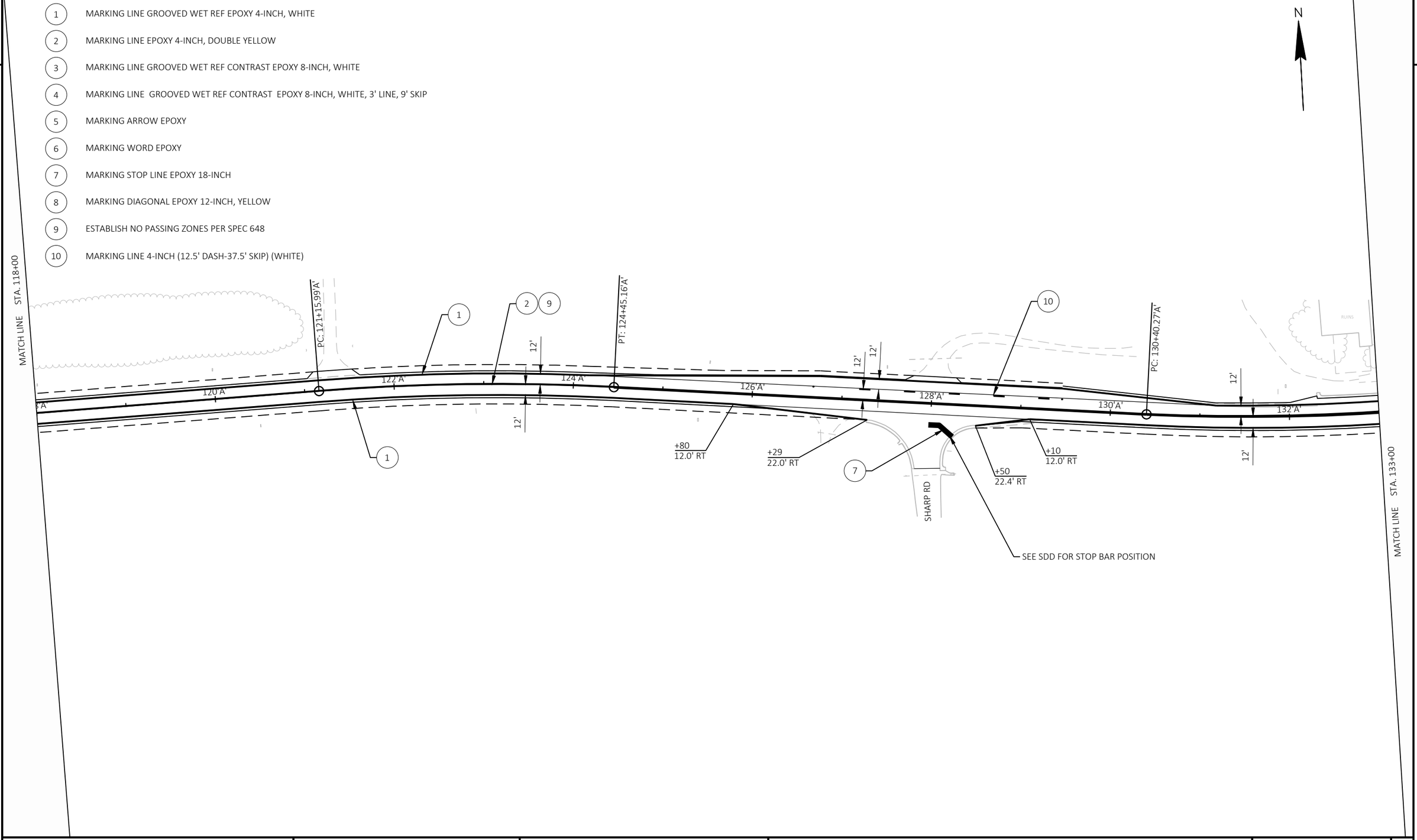
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 143	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 08
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



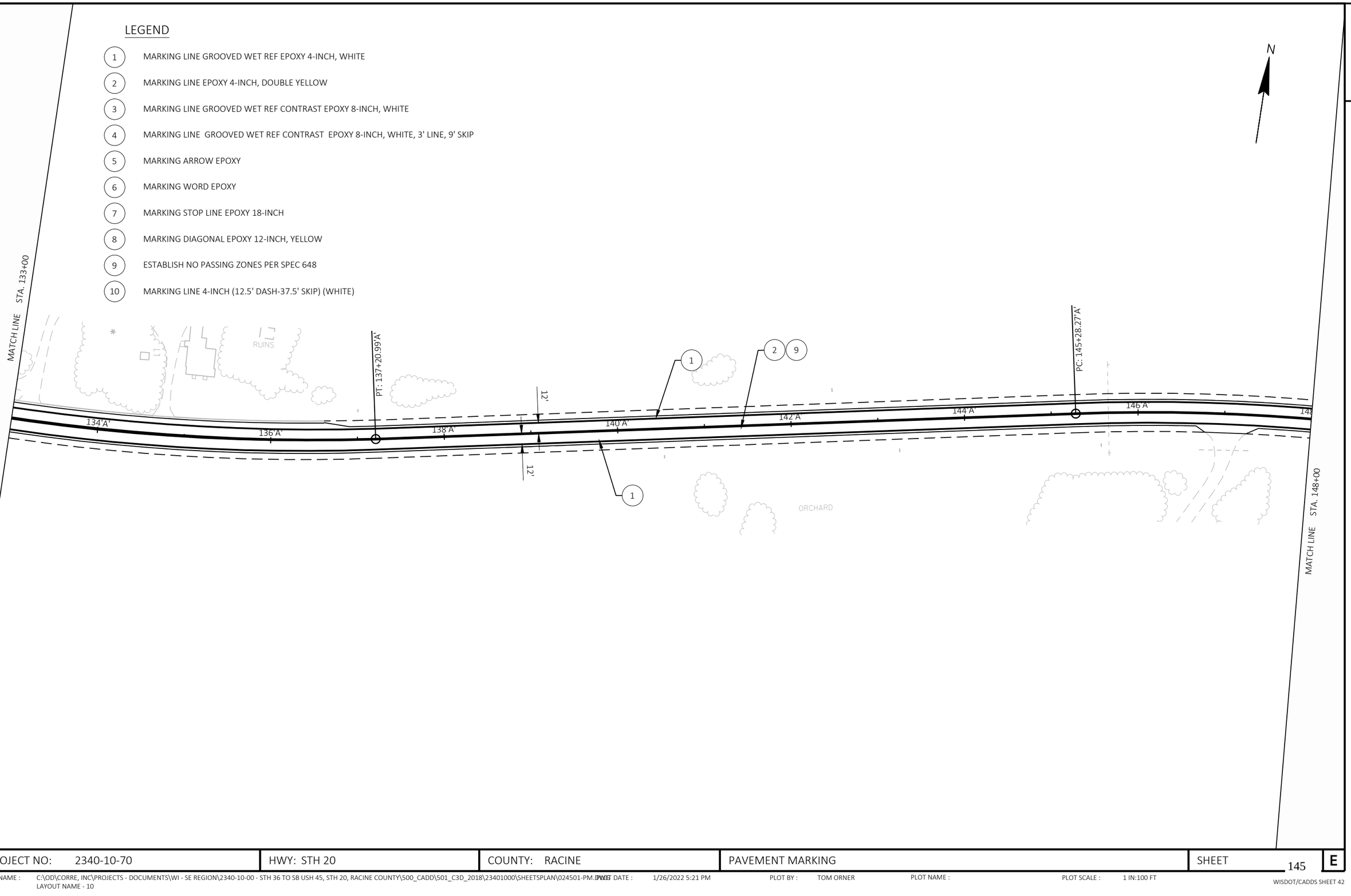
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 144	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 09
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



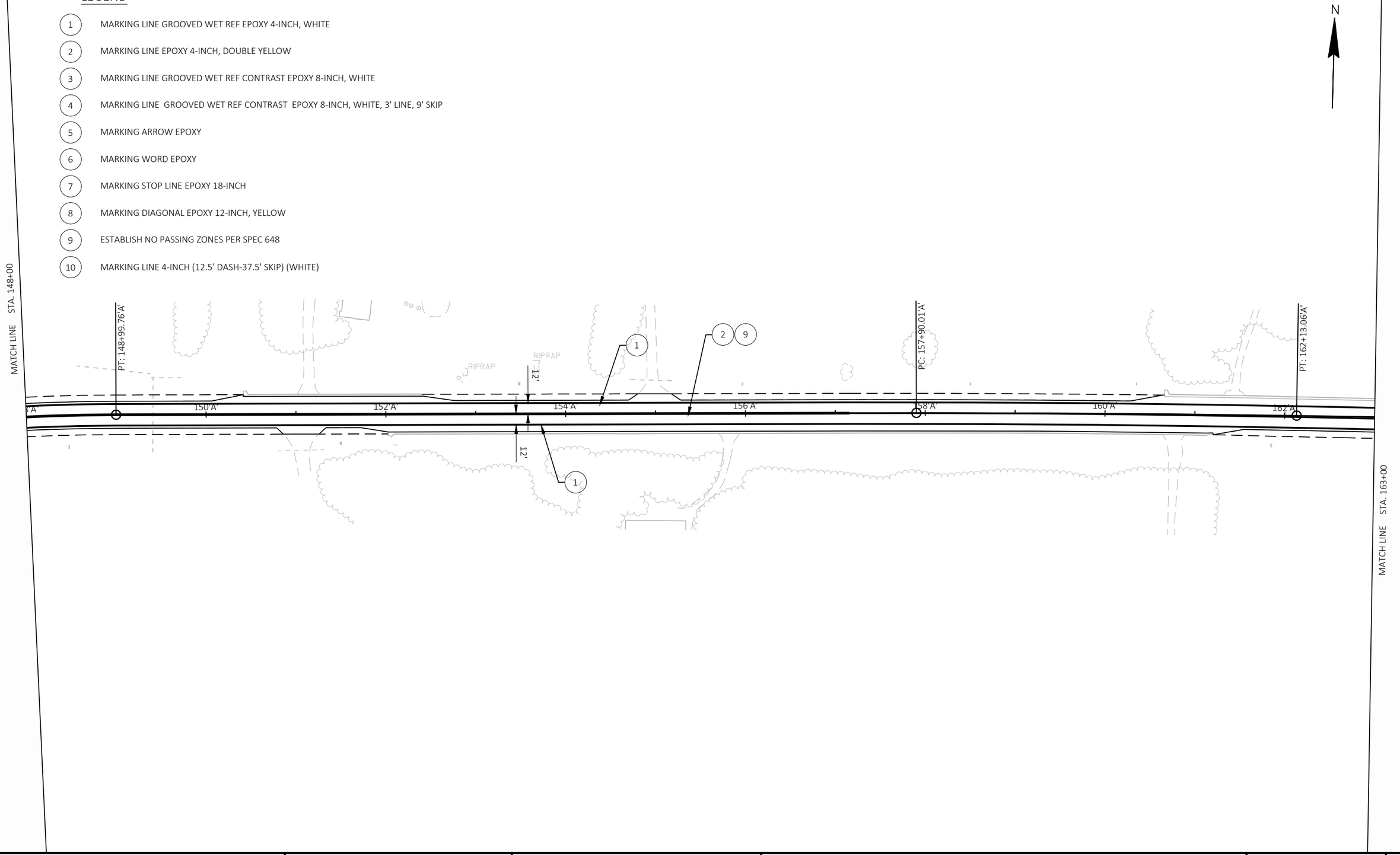
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 145	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 10
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



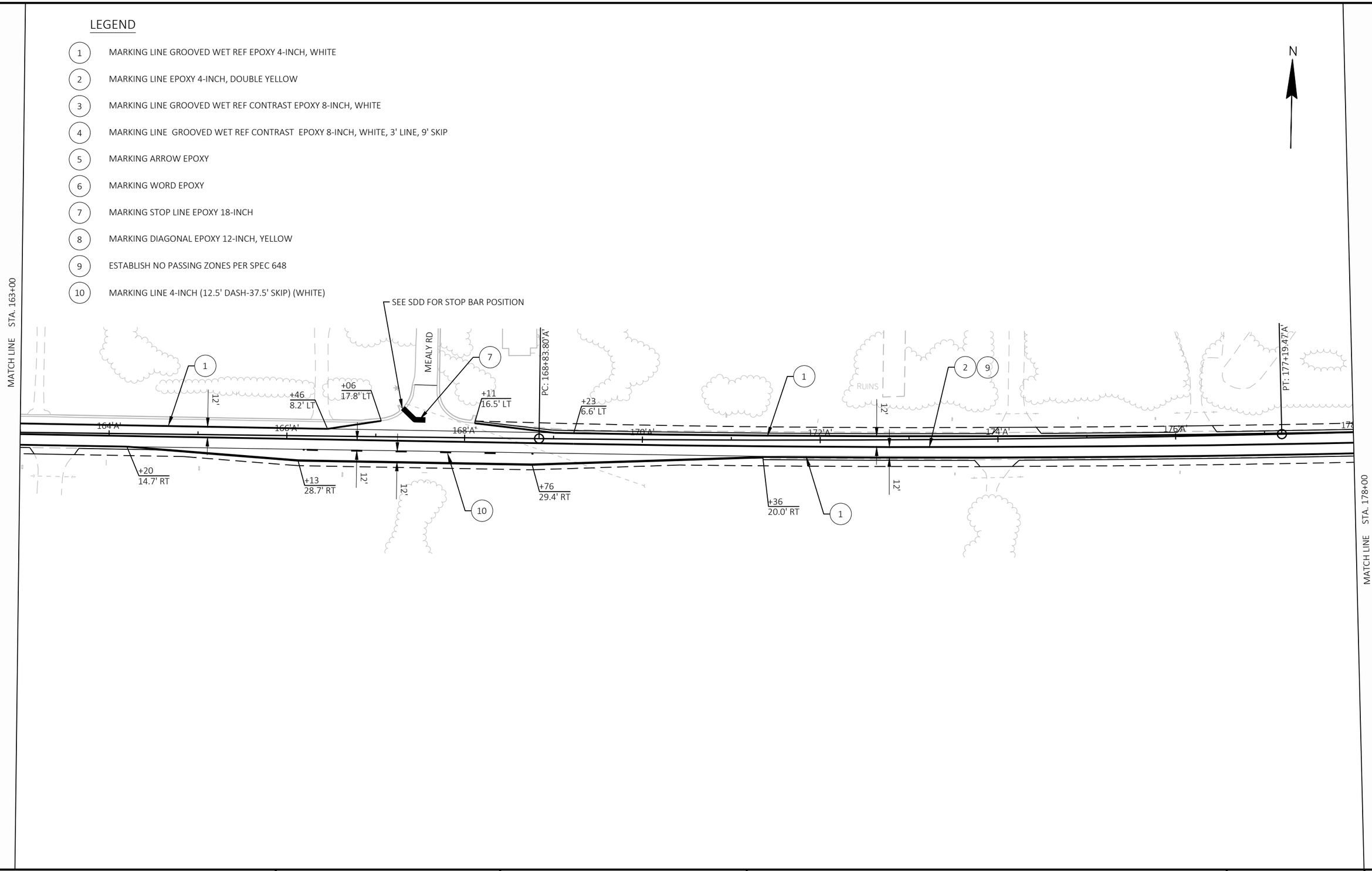
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 146	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 11
PLOT DATE : 1/26/2022 5:21 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 147	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 12
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

N

2

MATCH LINE STA. 178+00

1

2 9

12'

PC: 186+17.83'A'

+19
8.1' LT

+86
21.5' LT

+27
14.8' RT

180'A'

182'A'

184'A'

186'A'

188'A'

190'A'

192'A'

12'

1

MATCH LINE STA. 193+00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 148	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 13

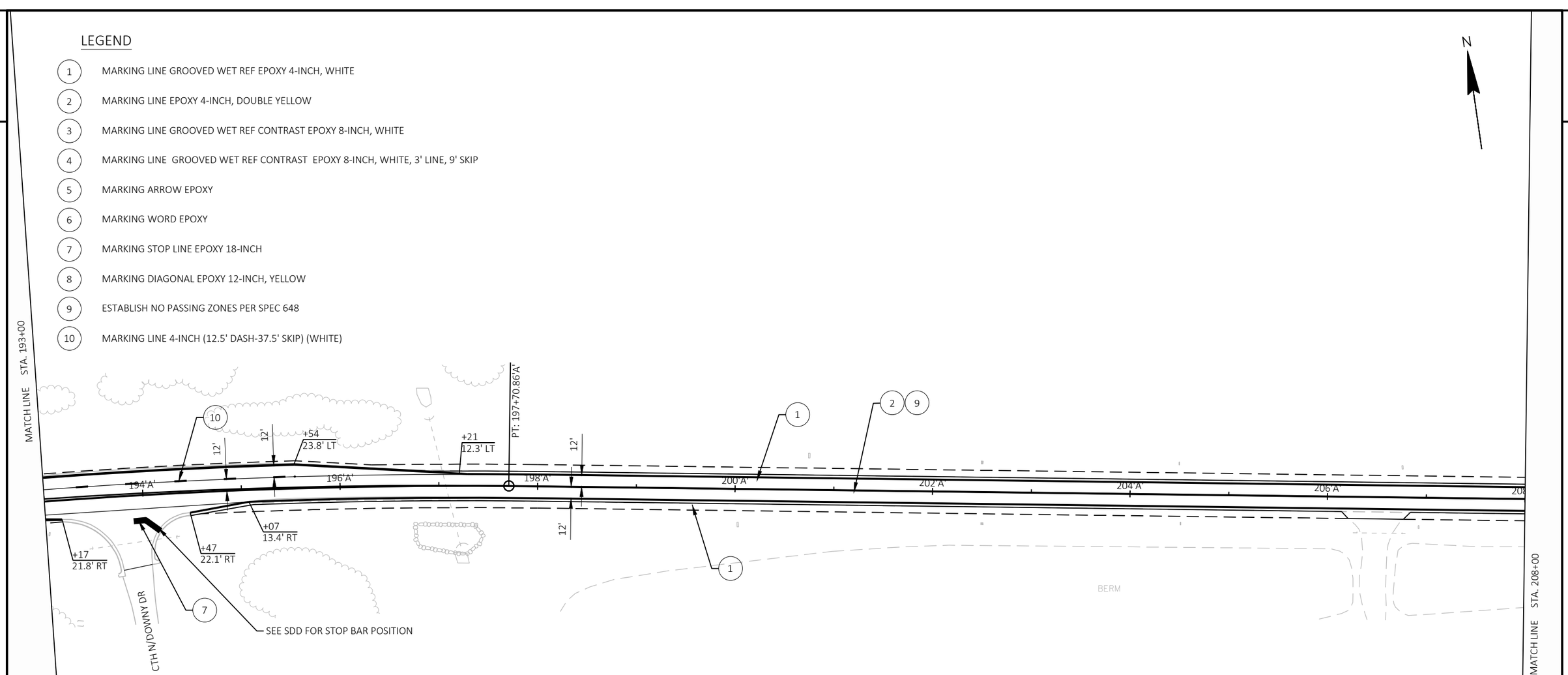
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

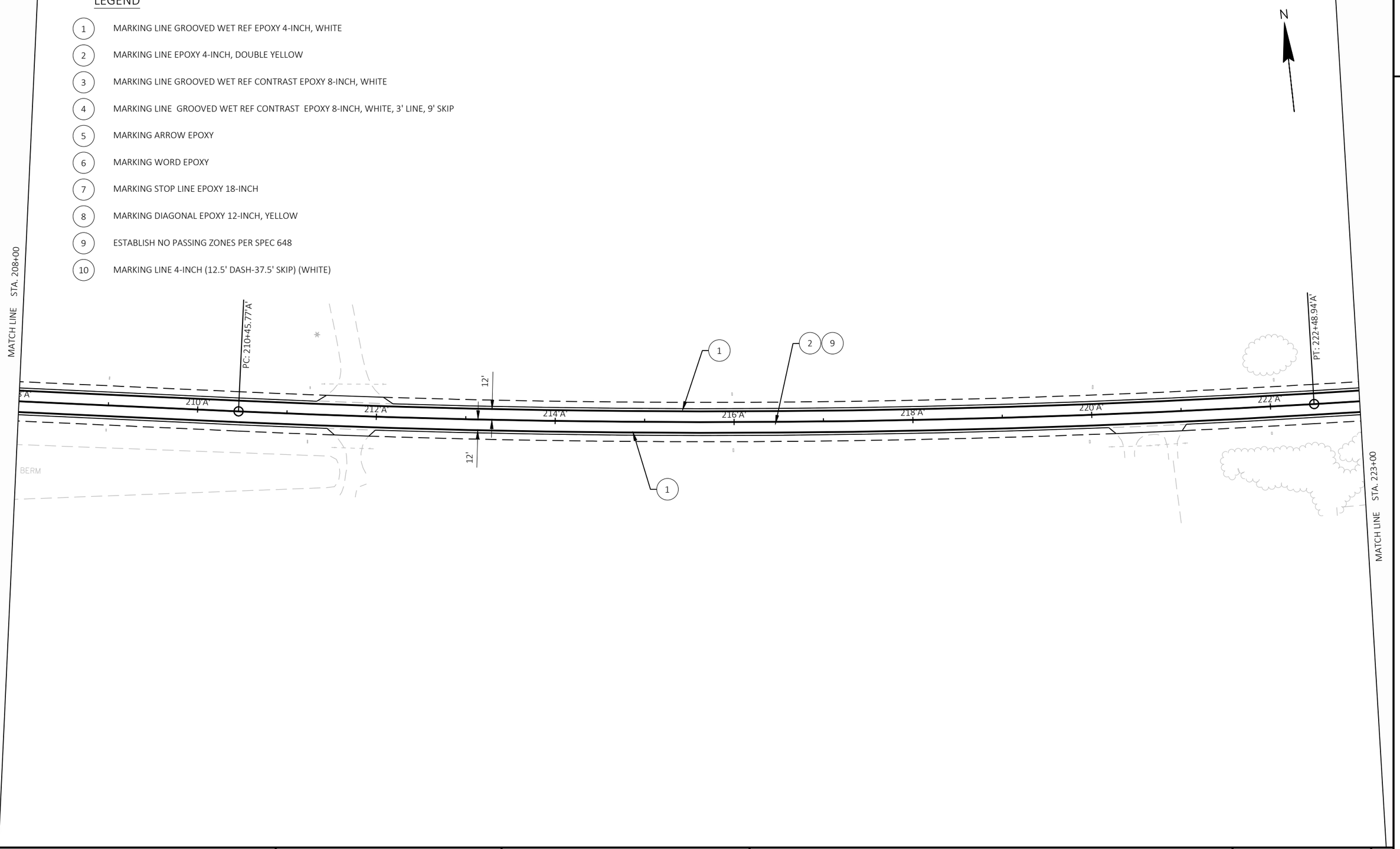


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 149	E

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 150	E

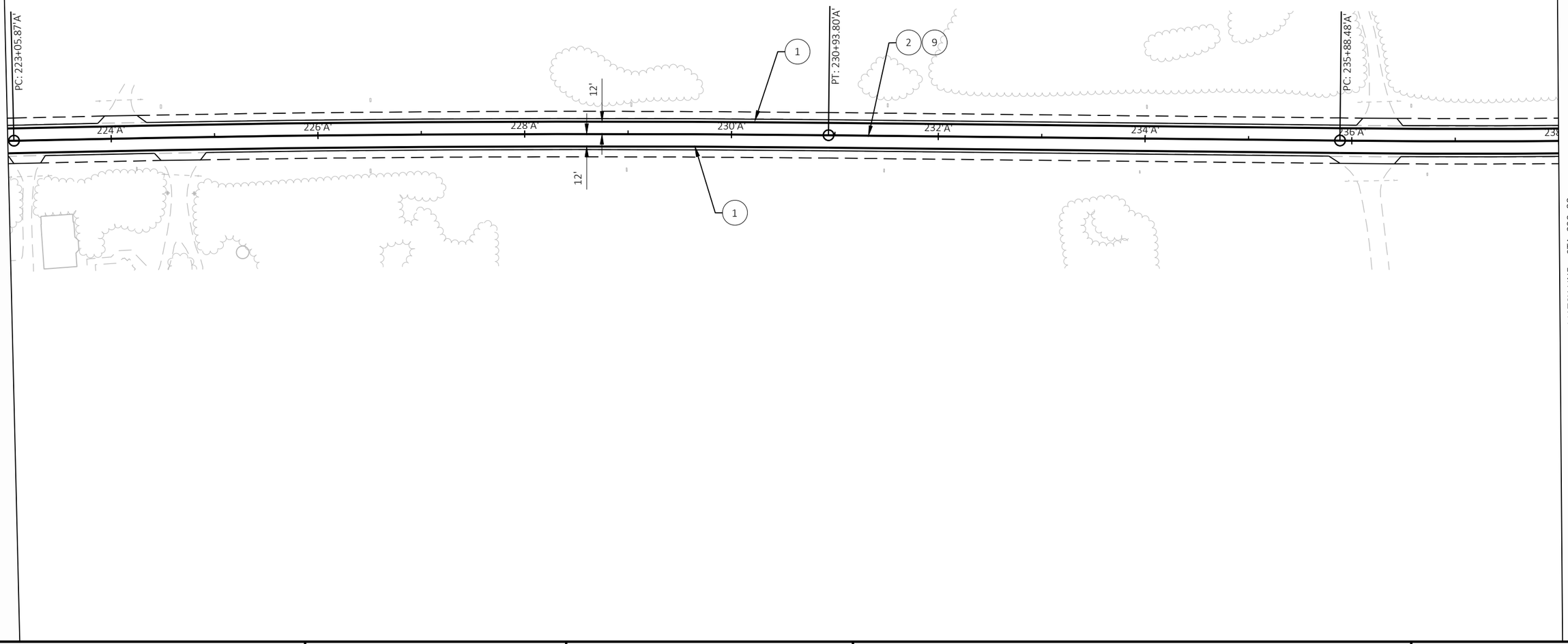
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 15
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 151	E

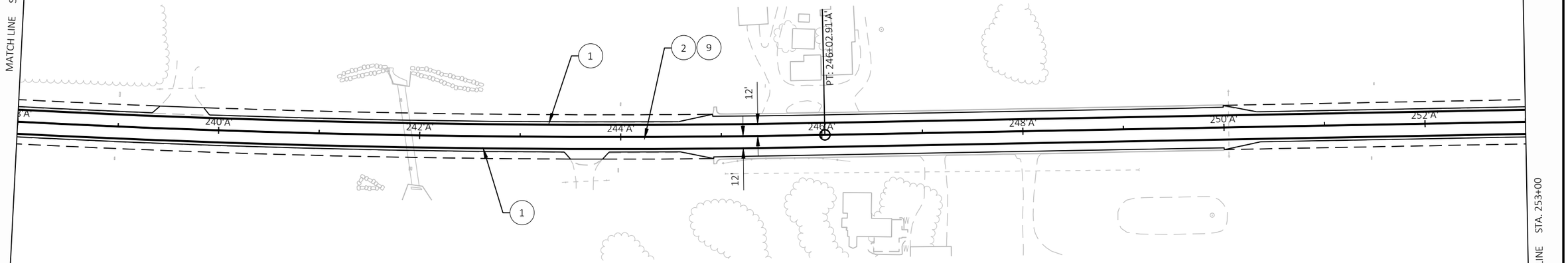
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 16
PLOT DATE : 1/26/2022 5:21 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



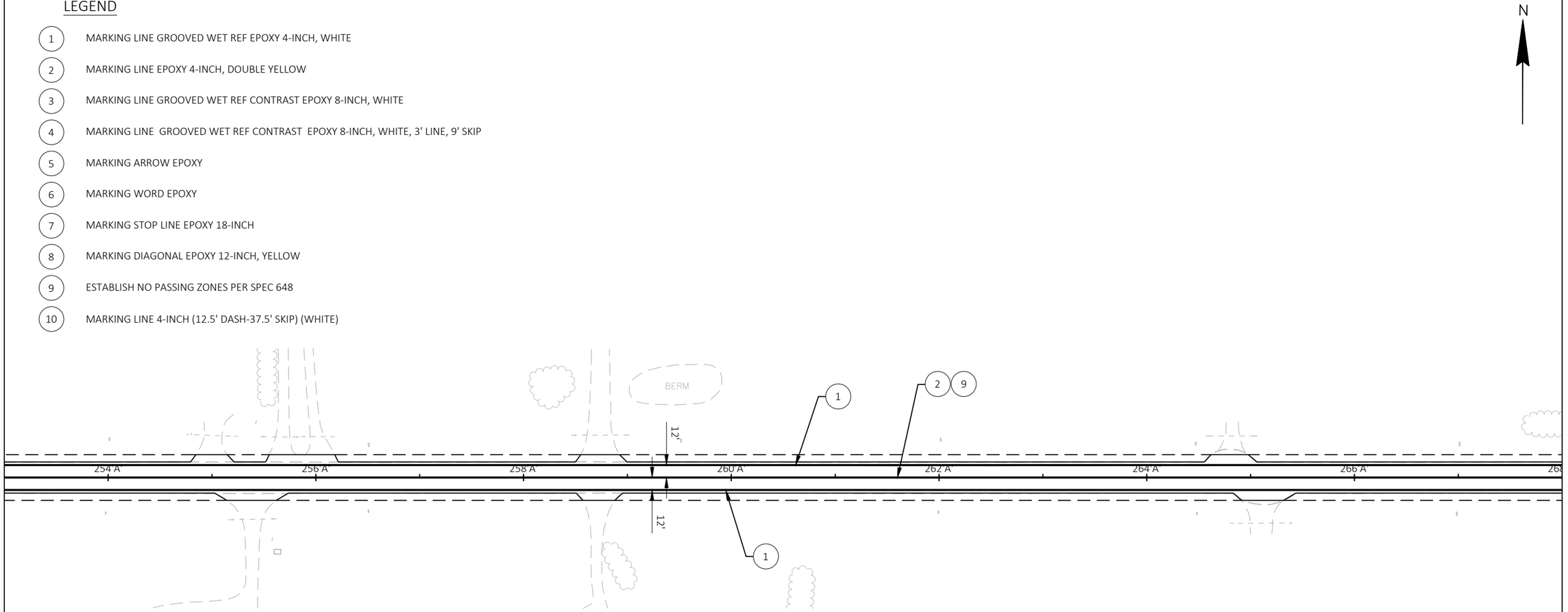
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 152	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 17
PLOT DATE : 1/26/2022 5:22 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



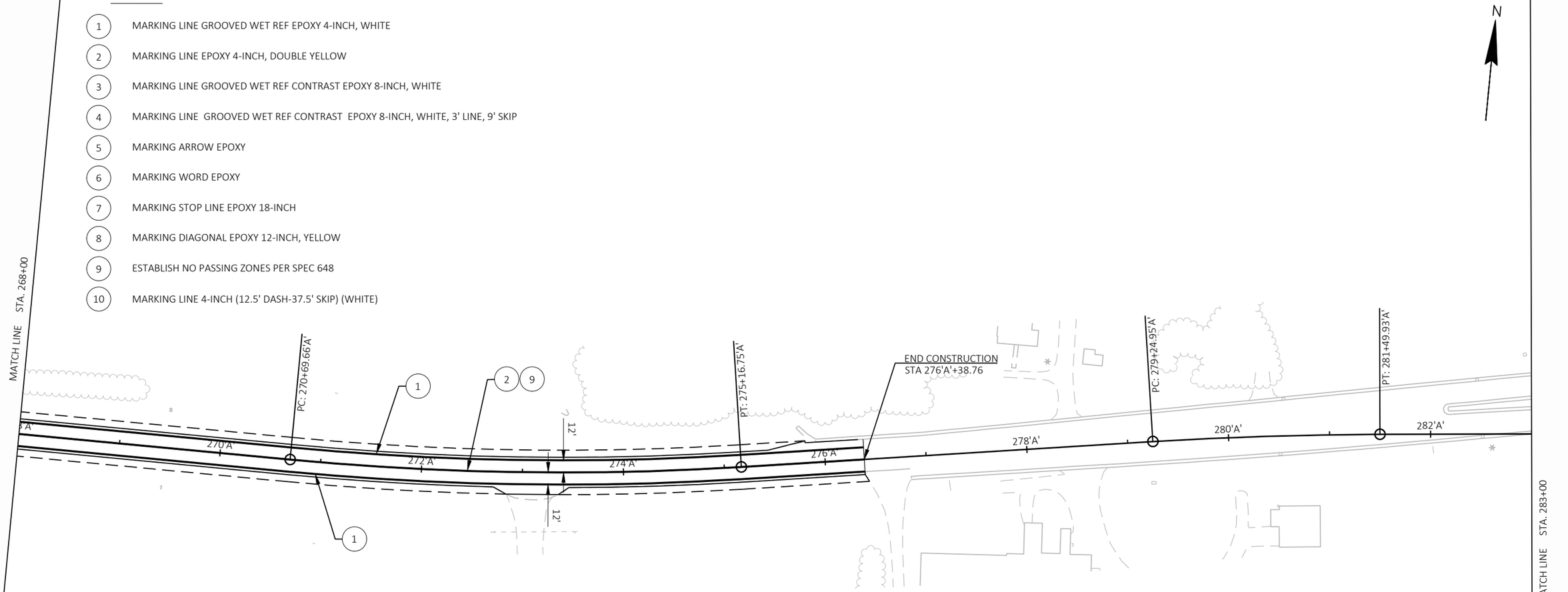
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 153	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 18
PLOT DATE : 1/26/2022 5:22 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



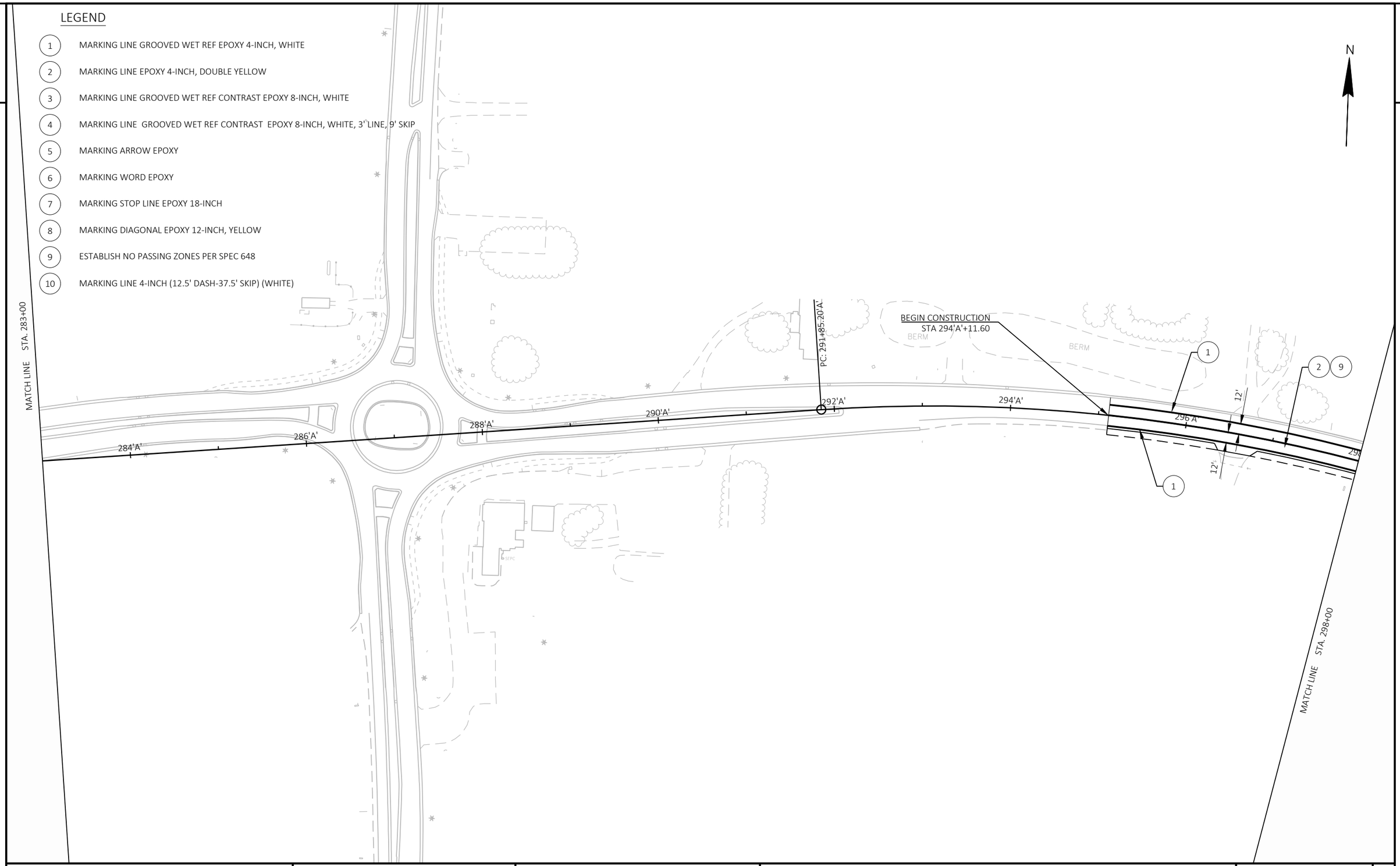
2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 154	E

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 155	E

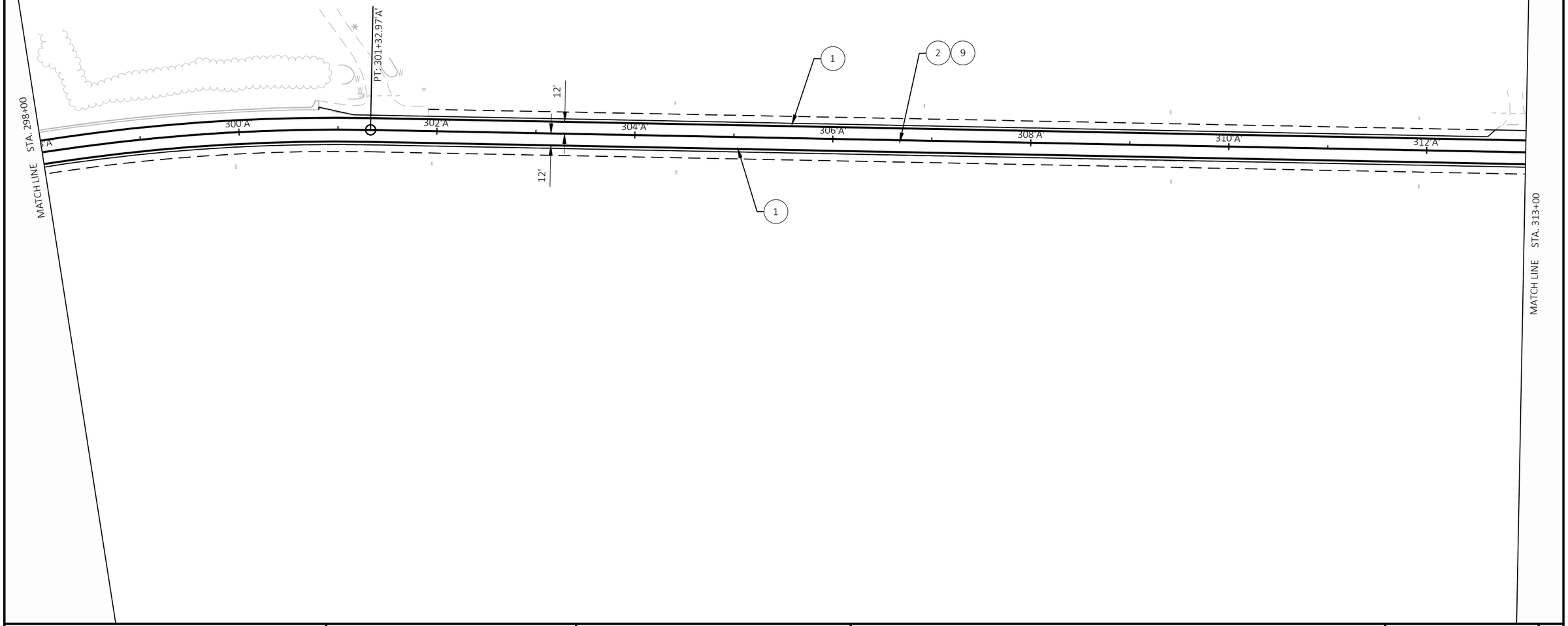
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 20
PLOT DATE : 1/26/2022 5:22 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 156	E

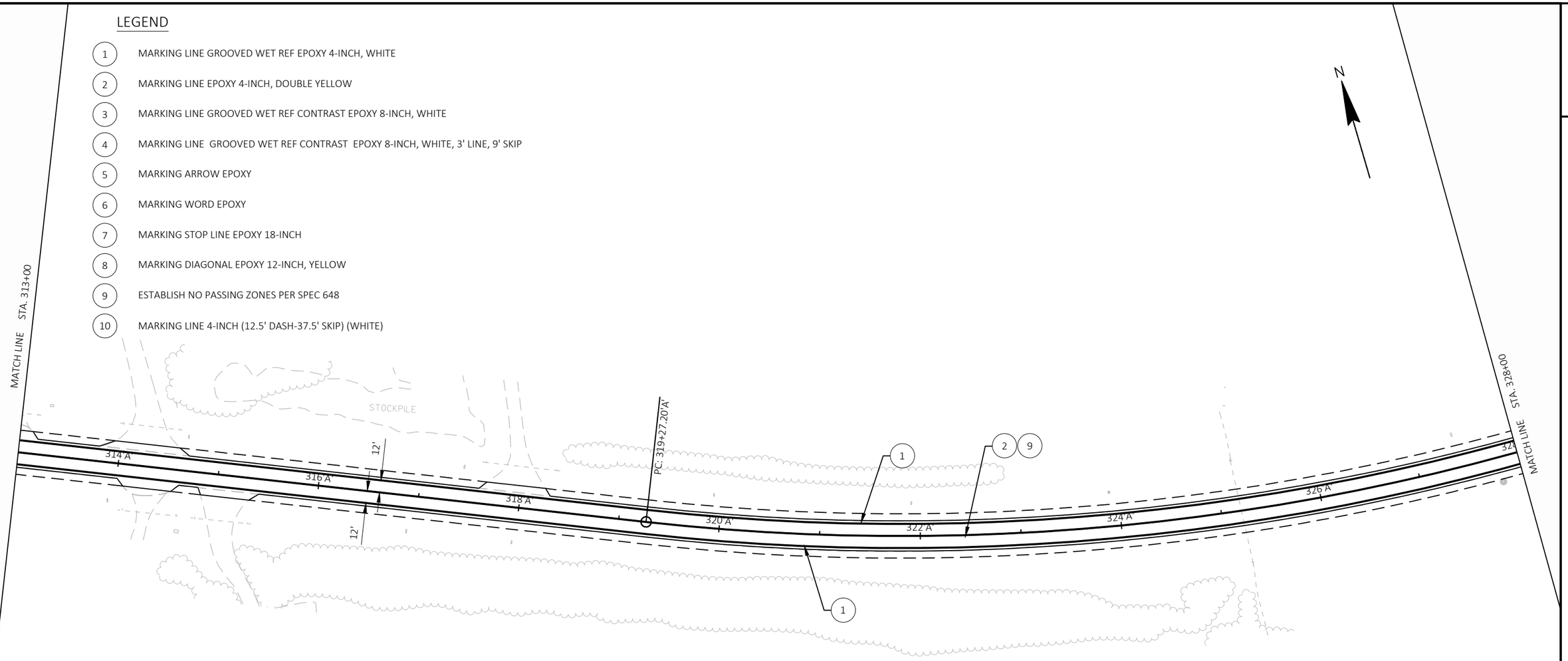
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 21
PLOT DATE : 1/26/2022 5:22 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

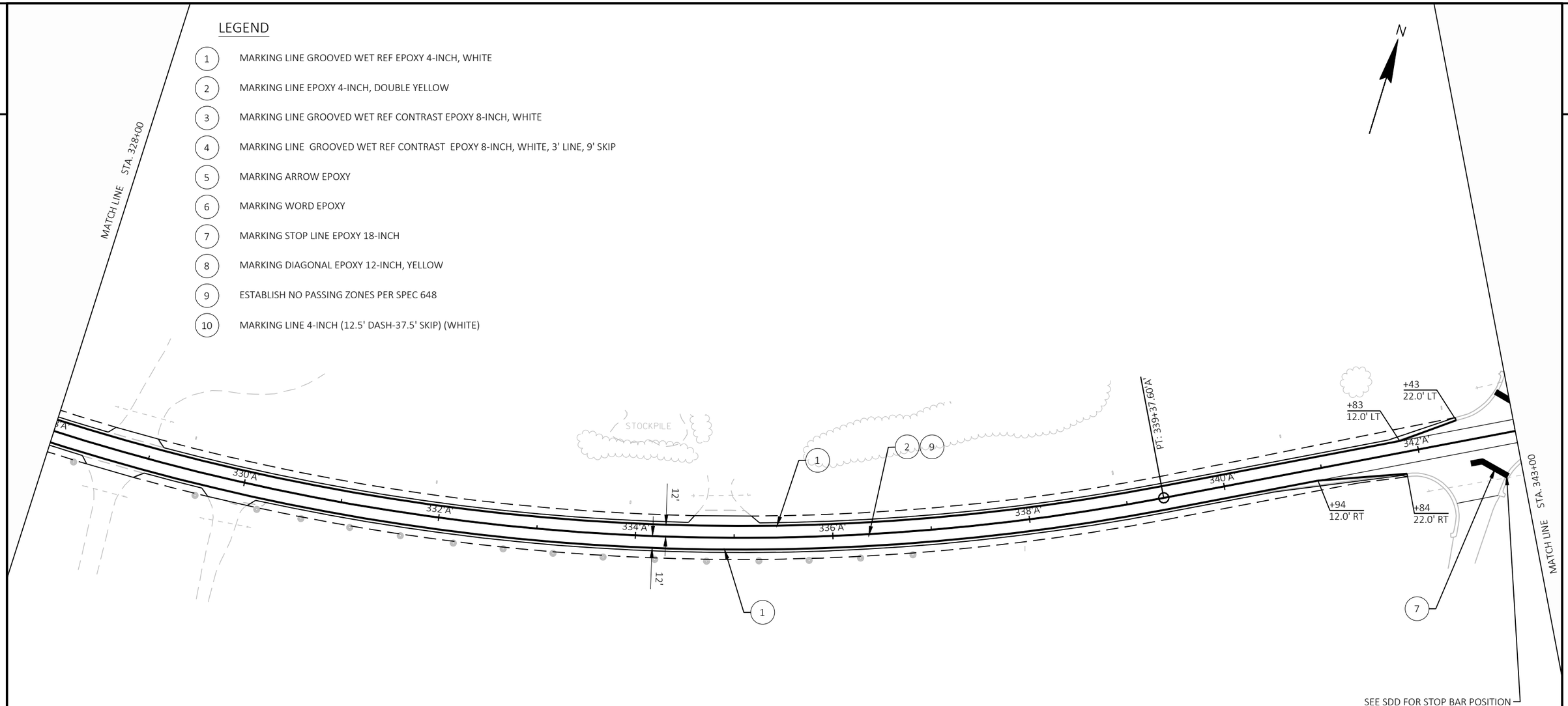


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 157	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 22
PLOT DATE : 1/26/2022 5:22 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



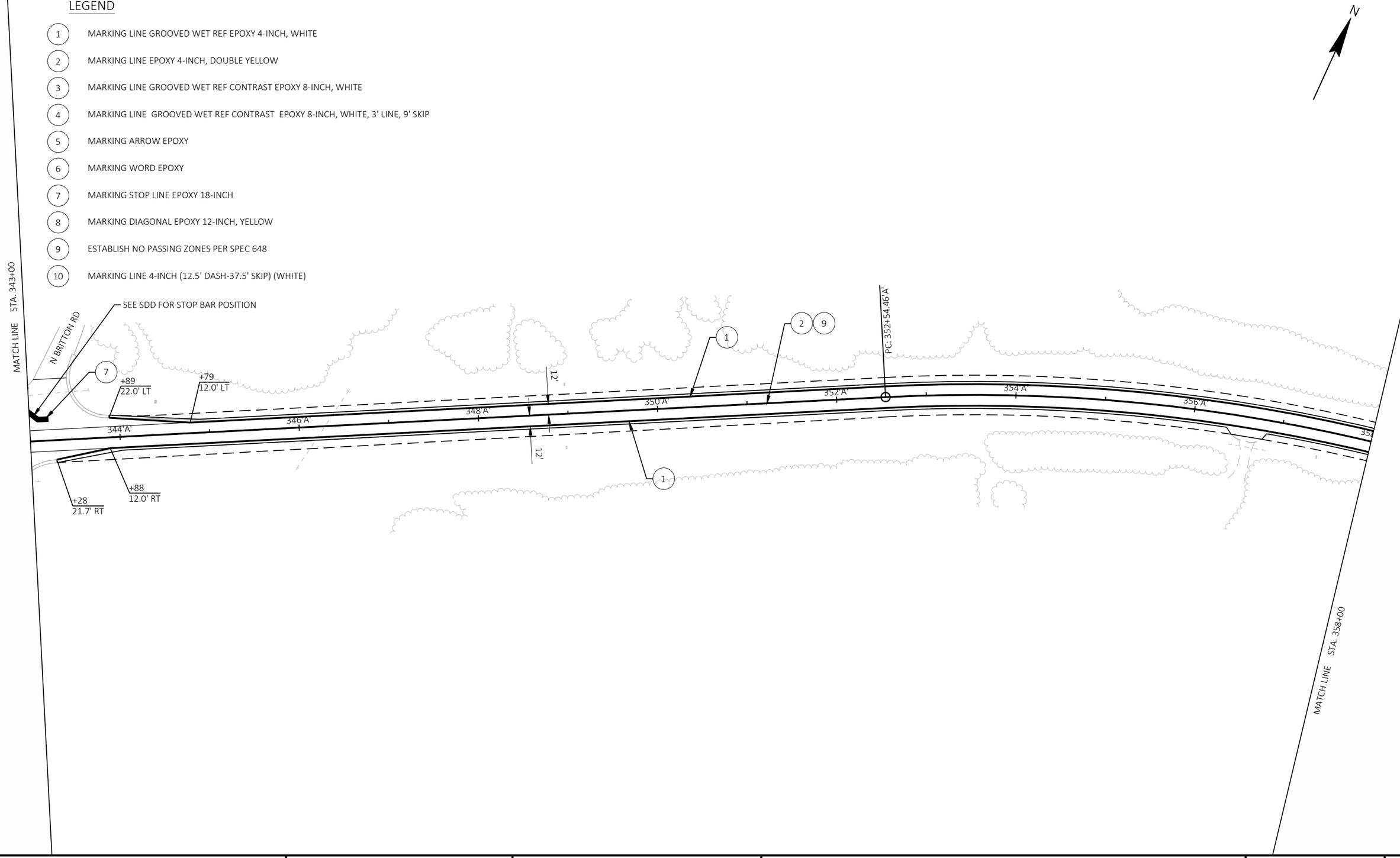
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 158	E

2

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



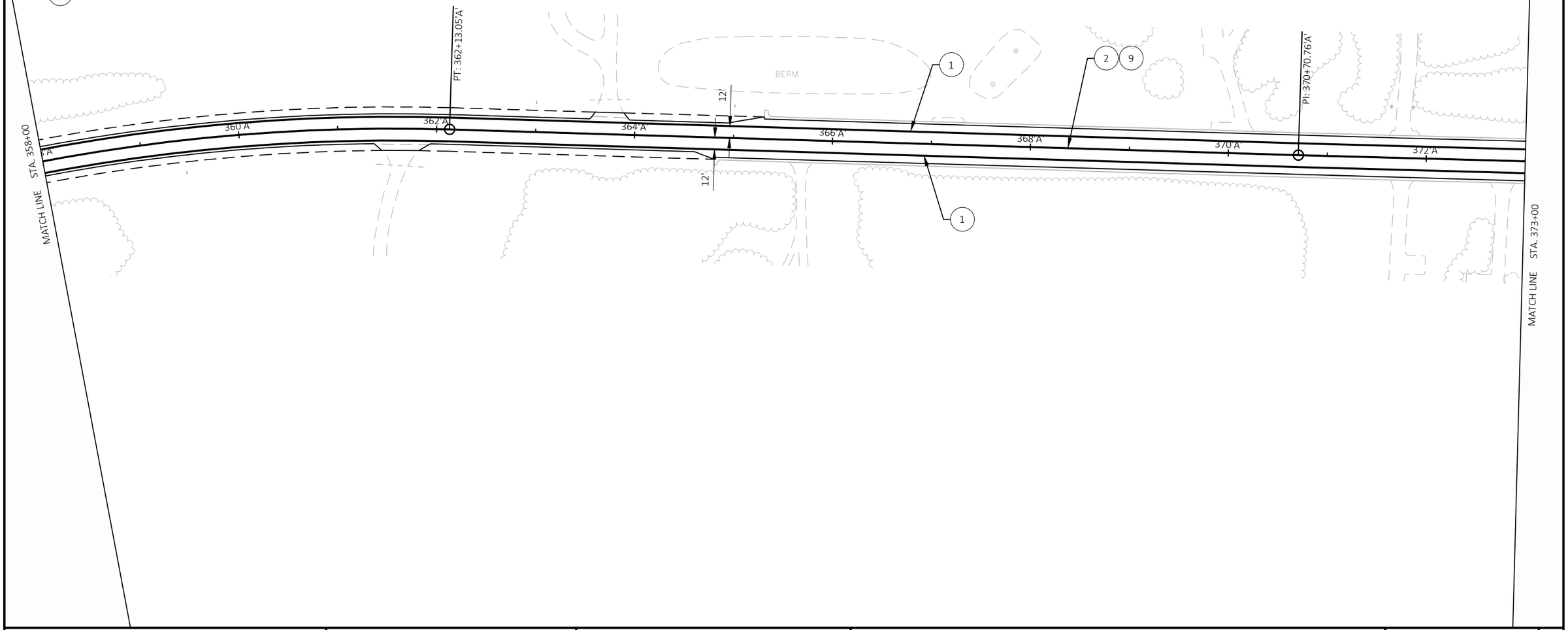
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 159	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 24
PLOT DATE : 1/26/2022 5:22 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



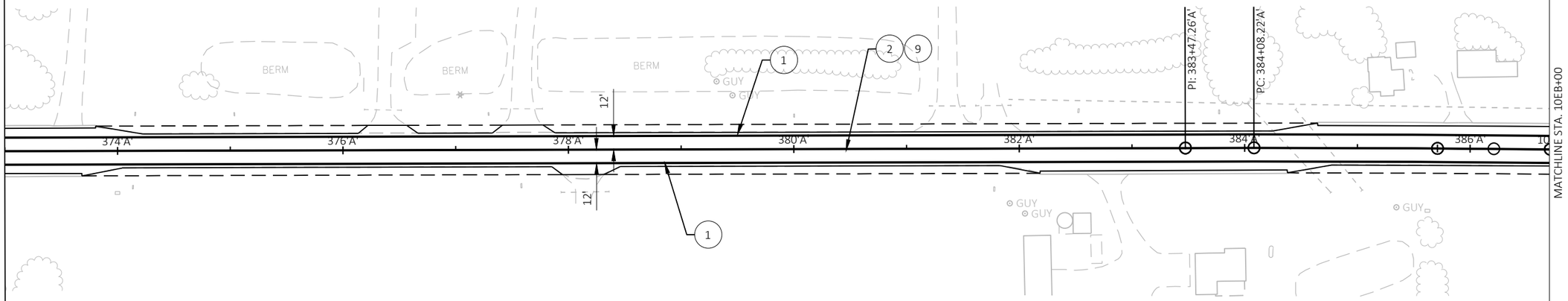
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 160	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 25
PLOT DATE : 1/26/2022 5:22 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



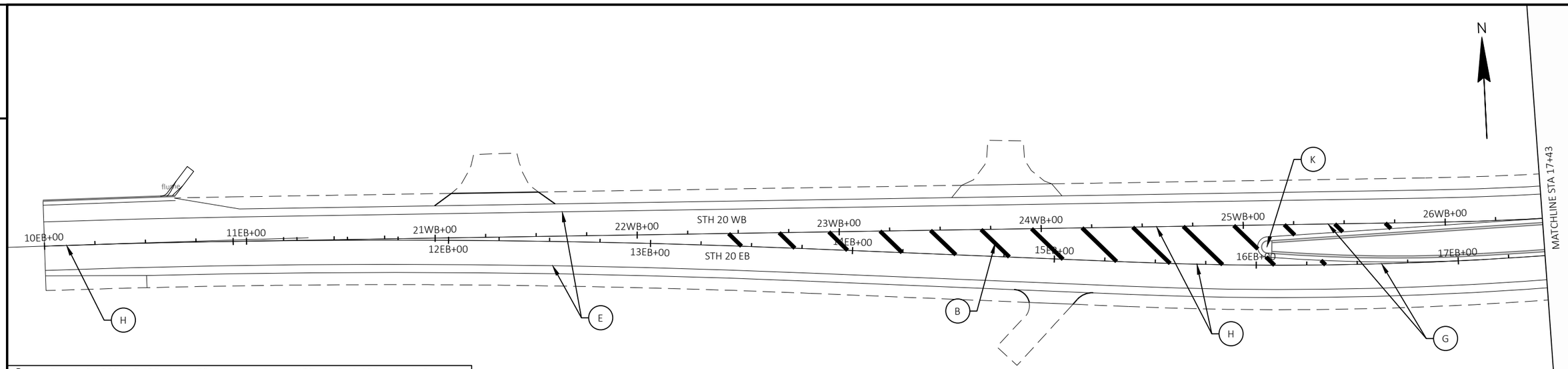
N

2

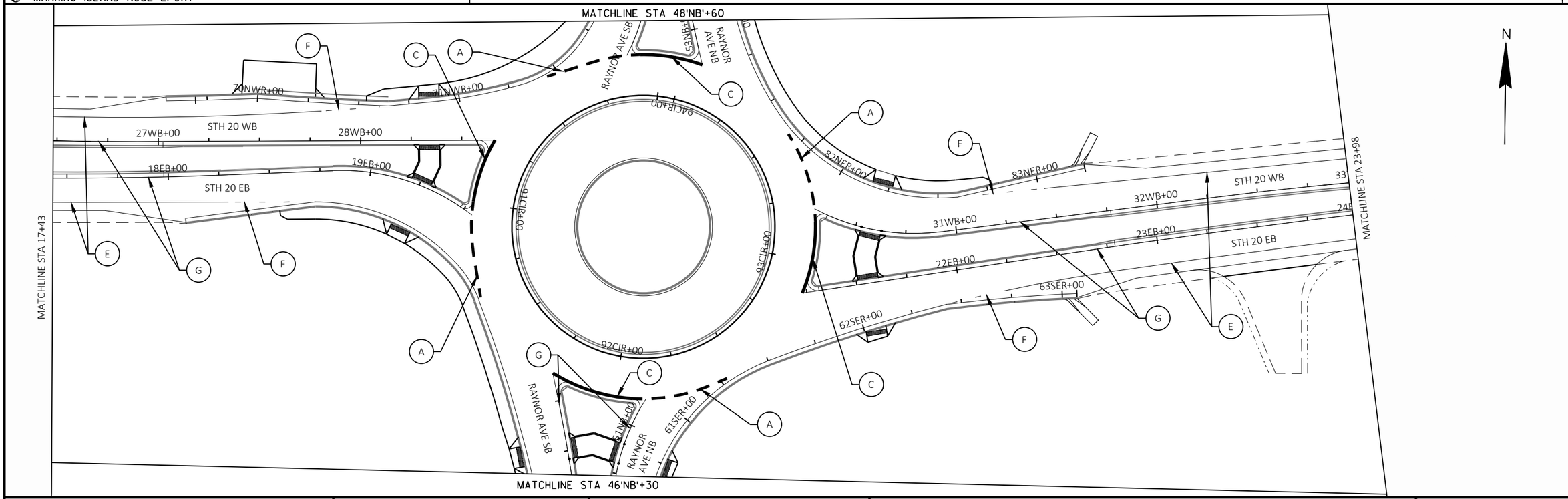
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 161	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 26
PLOT DATE : 1/26/2022 5:22 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2



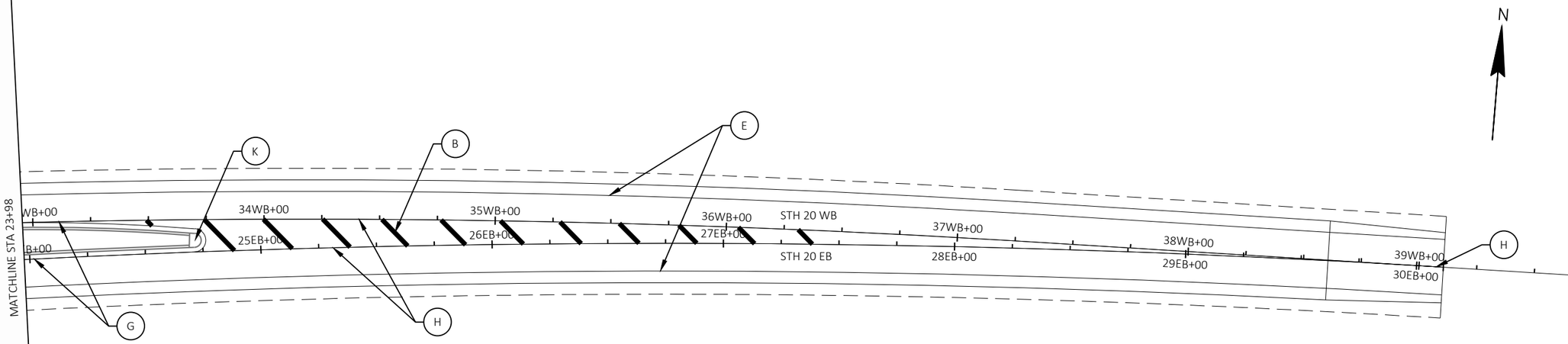
Ⓐ MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
Ⓑ MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
Ⓒ MARKING LINE EPOXY 8-INCH (WHITE)
Ⓓ MARKING ARROW EPOXY
Ⓔ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
Ⓕ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
Ⓖ MARKING LINE EPOXY 4-INCH (YELLOW)
Ⓗ MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
Ⓘ MARKING LINE EPOXY 4-INCH (YELLOW SKIP)(12.5'SEG., 37.5' GAP)
Ⓙ MARKING CONTRAST EPOXY WORDS (YIELD)
Ⓚ MARKING ISLAND NOSE EPOXY



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PAVEMENT MARKING	SHEET 162	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm
PLOT DATE : 2/14/2022 12:16 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



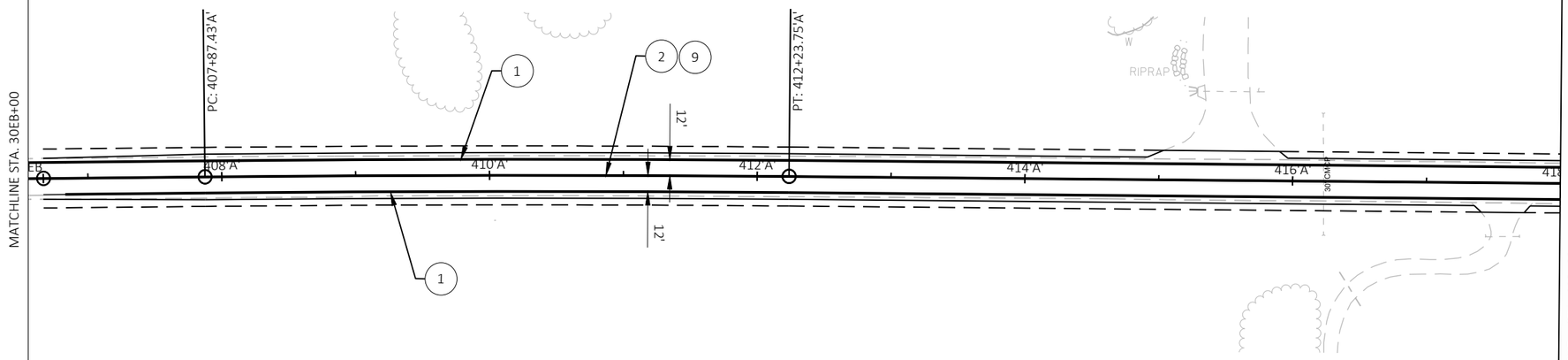
Ⓐ MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
Ⓑ MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
Ⓒ MARKING LINE EPOXY 8-INCH (WHITE)
Ⓓ MARKING ARROW EPOXY
Ⓔ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
Ⓕ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
Ⓖ MARKING LINE EPOXY 4-INCH (YELLOW)
Ⓗ MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
Ⓘ MARKING LINE EPOXY 4-INCH (YELLOW SKIP)(12.5'SEG., 37.5' GAP)
Ⓙ MARKING CONTRAST EPOXY WORDS (YIELD)
Ⓚ MARKING ISLAND NOSE EPOXY

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PAVEMENT MARKING	SHEET 163	E

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)



2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 164	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 28
PLOT DATE : 1/26/2022 5:23 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

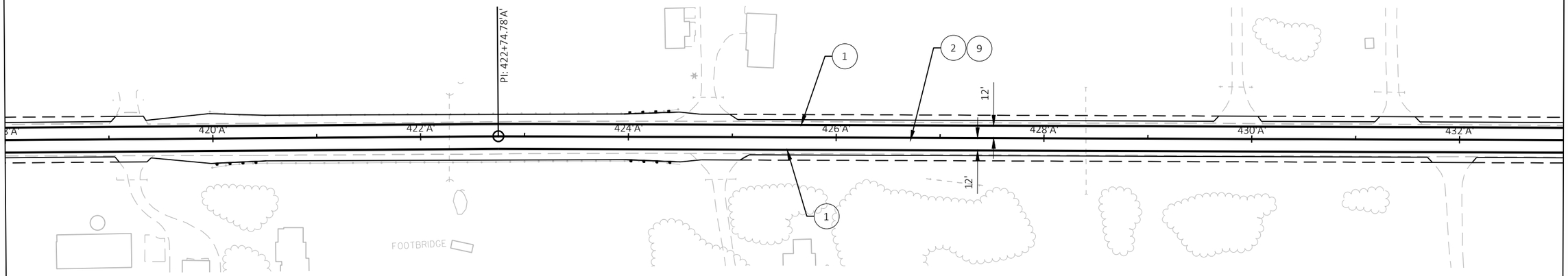
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

N

2

MATCH LINE STA. 418+00



MATCH LINE STA. 433+00

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 165	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 29
PLOT DATE : 1/26/2022 5:23 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
2. MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW
3. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE
4. MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH, WHITE, 3' LINE, 9' SKIP
5. MARKING ARROW EPOXY
6. MARKING WORD EPOXY
7. MARKING STOP LINE EPOXY 18-INCH
8. MARKING DIAGONAL EPOXY 12-INCH, YELLOW
9. ESTABLISH NO PASSING ZONES PER SPEC 648
10. MARKING LINE 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)

N

MATCH LINE STA. 433+00

END PROJECT
STA 441'A'+48

1 2 9

RIPRAP

12'

12'

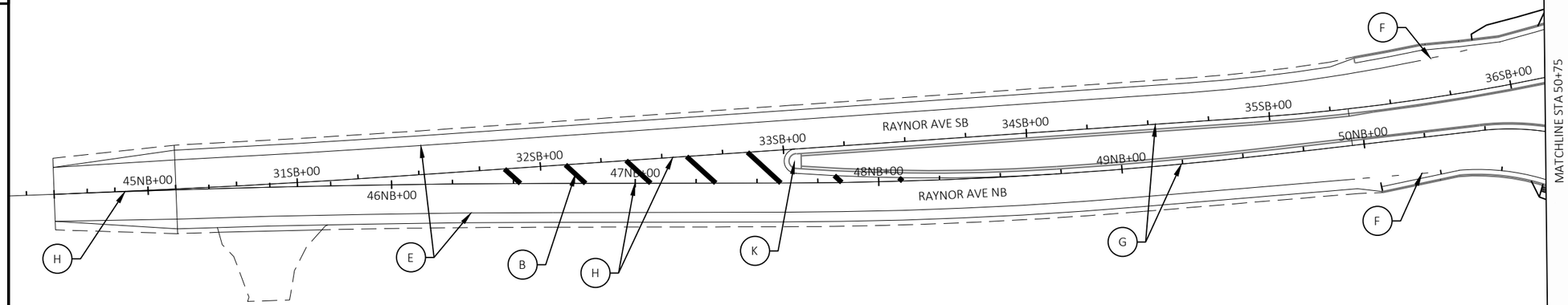
434'A' 436'A' 438'A' 440'A' 442'A' 444'A' 446'A' 448'A'

1

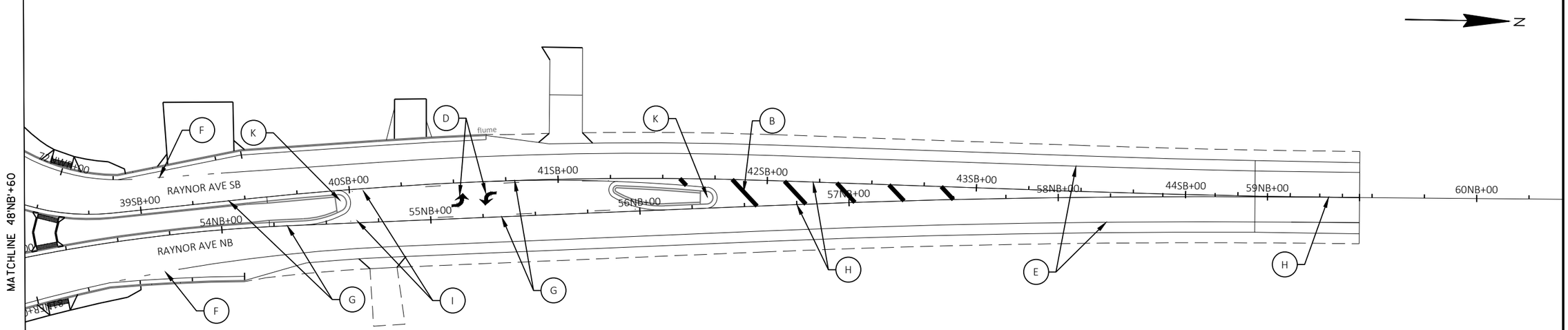
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PAVEMENT MARKING	SHEET 166	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 30
PLOT DATE : 1/26/2022 5:23 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



2



Ⓐ MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
Ⓑ MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
Ⓒ MARKING LINE EPOXY 8-INCH (WHITE)
Ⓓ MARKING ARROW EPOXY
Ⓔ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
Ⓕ MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
Ⓖ MARKING LINE EPOXY 4-INCH (YELLOW)
Ⓗ MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
Ⓘ MARKING LINE EPOXY 4-INCH (YELLOW SKIP)(12.5'SEG., 37.5' GAP)
Ⓙ MARKING CONTRAST EPOXY WORDS (YIELD)
Ⓚ MARKING ISLAND NOSE EPOXY

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PAVEMENT MARKING	SHEET 167	E

LEGEND

PERMANENT/TEMPORARY SIGN ON POST

BARRICADE WITHOUT/WITH SIGN AND TWO TYPE A WARNING LIGHT (FLASHING)

WORK AREA

DETOUR ROUTE

1 DETOUR M4-8
2 EAST M3-2
3 WEST M3-4
4 20 M1-6
5 MO5-1R
6 MO5-1L
7 MO6-1
8 MO6-1
9 MO6-1
10 END DETOUR M4-8A
11 ROAD CLOSED AHEAD W20-3A
12 DETOUR AHEAD W20-2A
13 ROAD CLOSED 500 FT W20-3D
14 R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC — TYPE III BARRICADE
15 MO6-2L
16 M4-9R 30"X24" DETOUR
17 M4-9L 30"X24" DETOUR
18 MO6-2
19 MO5-2R 21"X21"
20 MO5-2L 21"X21"

FIXED MESSAGE SIGN
HWY 20 CLOSED AHEAD

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

SEE SDD BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

BEGIN PROJECT
STA 3+39.08'A'

END PROJECT
STA 441+48.58'A'

1000' 300' 300' 500'

1000'

500' 500' 500' 500'

CTH K
E MAIN DRIVE
ARBOR ROAD
DOVER LINE ROAD
MEALY ROAD
STH 36
STH 20
CTH D
ROWNTREE ROAD
SHARP ROAD
CTH N
PLANK ROAD
CTH J
CTH A
SUNNYSIDE DR
S COX RD
STH 75 / BEAUMONT AVE
CHURCH ROAD
KETTERHAGEN ROAD
STH 83
STH 11 / DURAND AVE
N BRITTON ROAD
N CAPE STREET
USH 45 / N RAYNOR ROAD
NORTH COLONY AVE
USH 45
CTH C / SPRING ST

N

LEGEND

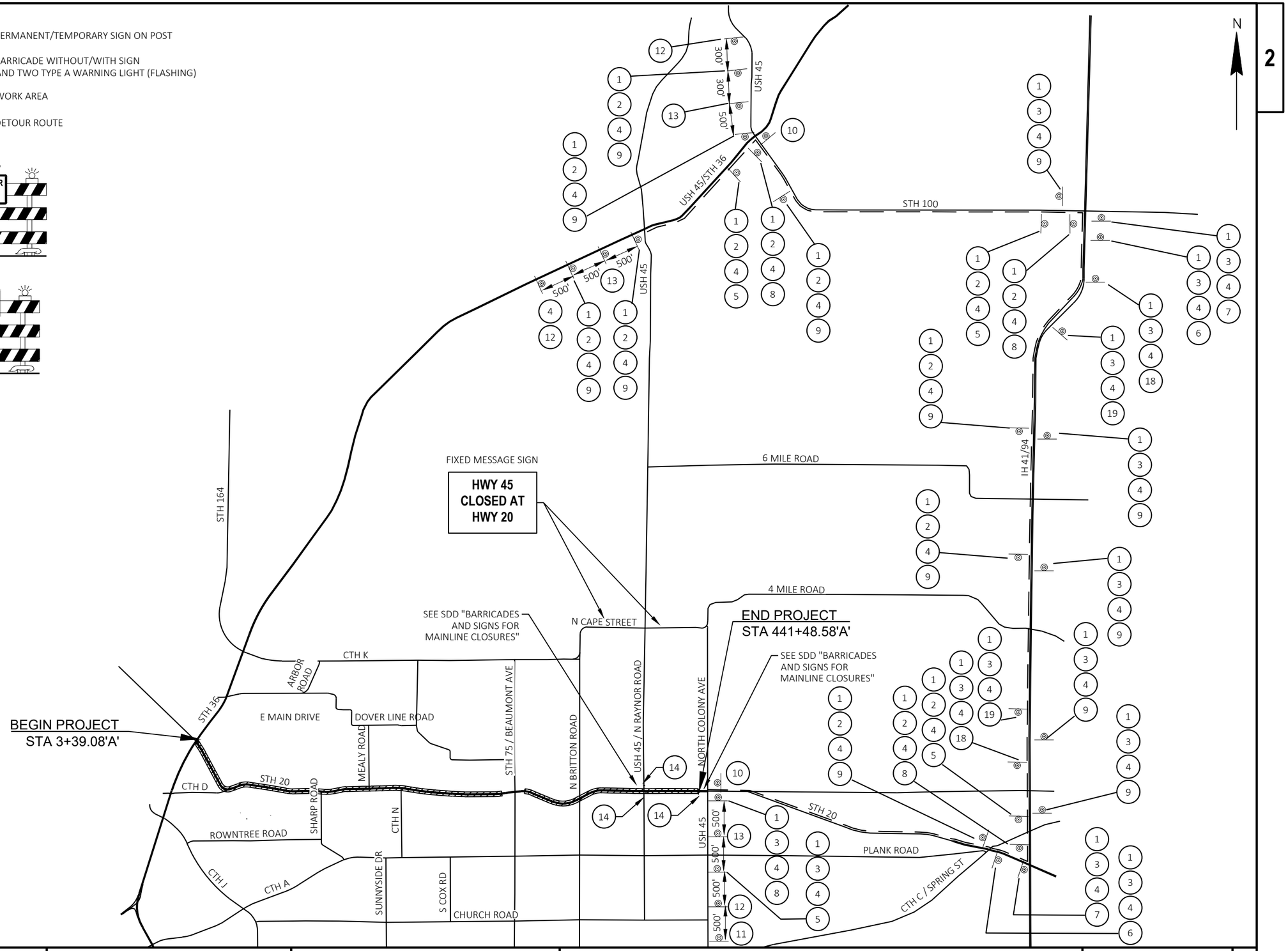
1 DETOUR M4-8
2 SOUTH M3-3
3 NORTH M3-1
4 45 M1-4
5 MO5-1R
6 MO5-1L
7 MO6-1
8 MO6-1
9 MO6-1
10 END DETOUR M4-8A
11 ROAD CLOSED AHEAD W20-3A
12 DETOUR AHEAD W20-2A
13 ROAD CLOSED 500 FT W20-3D
14 R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC — TYPE III BARRICADE
15 MO6-2L
16 M4-9R 30"X24" DETOUR
17 M4-9L 30"X24" DETOUR
18 MO6-2
19 MO5-2R
20 MO5-2L 21"X21"

PERMANENT/TEMPORARY SIGN ON POST

BARRICADE WITHOUT/WITH SIGN AND TWO TYPE A WARNING LIGHT (FLASHING)

WORK AREA

DETOUR ROUTE



PROJECT NO: 2340-10-00	HWY: STH 20	COUNTY: RACINE	DETOUR USH 45	SHEET 169	E

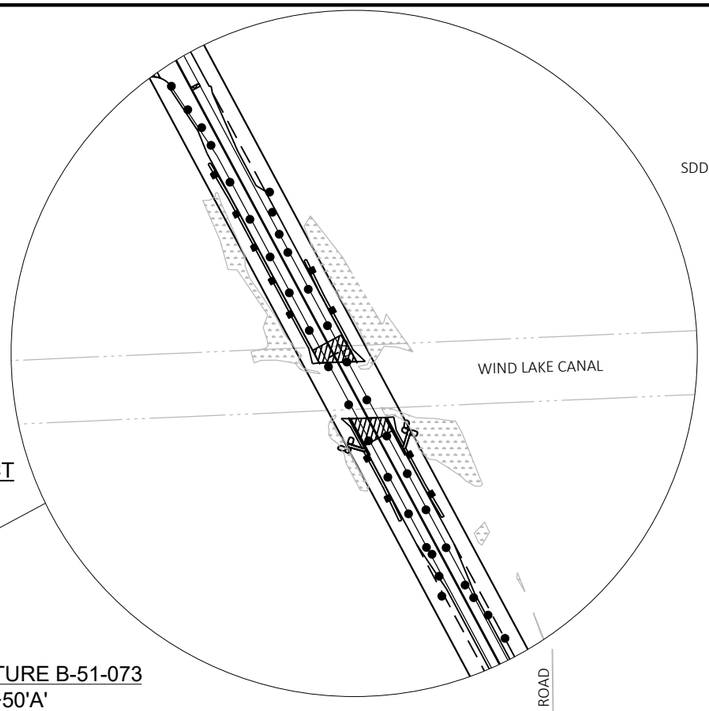
2

SDD TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

N

LEGEND

TRAFFIC CONTROL DRUM

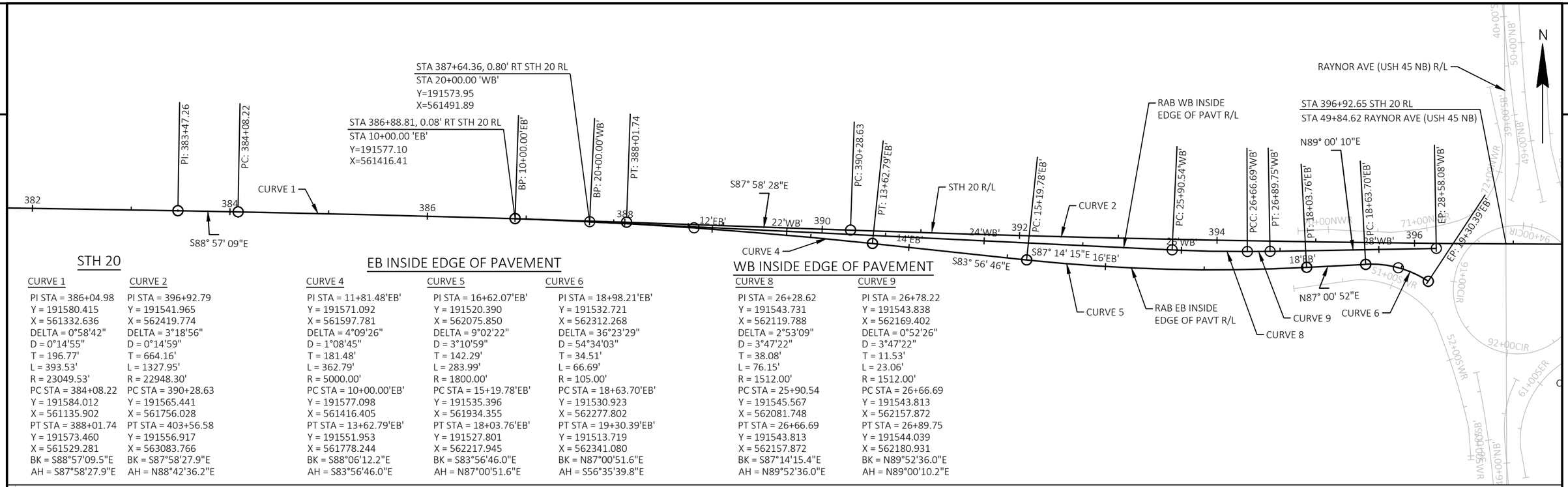


CULVERT REPLACEMENT AREAS

CONSTRUCT PIPE HALF AT A TIME IN ORDER TO MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES.
SDD TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION.

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	TRAFFIC CONTROL - WITHIN CLOSURE	SHEET 170	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\025001-TCOV.DWG
LAYOUT NAME - 01
PLOT DATE : 7/11/2022 8:42 AM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42



STH 20

CURVE 1	CURVE 2
PI STA = 386+04.98	PI STA = 396+92.79
Y = 191580.415	Y = 191541.965
X = 561332.636	X = 562419.774
DELTA = 0°58'42"	DELTA = 3°18'56"
D = 0°14'55"	D = 0°14'59"
T = 196.77'	T = 664.16'
L = 393.53'	L = 1327.95'
R = 23049.53'	R = 22948.30'
PC STA = 384+08.22	PC STA = 390+28.63
Y = 191584.012	Y = 191565.441
X = 561135.902	X = 561756.028
PT STA = 388+01.74	PT STA = 403+56.58
Y = 191573.460	Y = 191556.917
X = 561529.281	X = 563083.766
BK = S88°57'09.5"E	BK = S87°58'27.9"E
AH = S87°58'27.9"E	AH = N88°42'36.2"E

EB INSIDE EDGE OF PAVEMENT

CURVE 4	CURVE 5	CURVE 6
PI STA = 11+81.48'EB'	PI STA = 16+62.07'EB'	PI STA = 18+98.21'EB'
Y = 191571.092	Y = 191520.390	Y = 191532.721
X = 561597.781	X = 562075.850	X = 562312.268
DELTA = 4°09'26"	DELTA = 9°02'22"	DELTA = 36°23'29"
D = 1°08'45"	D = 3°10'59"	D = 54°34'03"
T = 181.48'	T = 142.29'	T = 34.51'
L = 362.79'	L = 283.99'	L = 66.69'
R = 5000.00'	R = 1800.00'	R = 105.00'
PC STA = 10+00.00'EB'	PC STA = 15+19.78'EB'	PC STA = 18+63.70'EB'
Y = 191577.098	Y = 191535.396	Y = 191530.923
X = 561416.405	X = 561934.355	X = 562277.802
PT STA = 13+62.79'EB'	PT STA = 18+03.76'EB'	PT STA = 19+30.39'EB'
Y = 191551.953	Y = 191527.801	Y = 191513.719
X = 561778.244	X = 562217.945	X = 562341.080
BK = S88°06'12.2"E	BK = S83°56'46.0"E	BK = N87°00'51.6"E
AH = S83°56'46.0"E	AH = N87°00'51.6"E	AH = S56°35'39.8"E

WB INSIDE EDGE OF PAVEMENT

CURVE 8	CURVE 9
PI STA = 26+28.62	PI STA = 26+78.22
Y = 191543.731	Y = 191543.838
X = 562119.788	X = 562169.402
DELTA = 2°53'09"	DELTA = 0°52'26"
D = 3°47'22"	D = 3°47'22"
T = 38.08'	T = 11.53'
L = 76.15'	L = 23.06'
R = 1512.00'	R = 1512.00'
PC STA = 25+90.54	PC STA = 26+66.69
Y = 191545.567	Y = 191543.813
X = 562081.748	X = 562157.872
PT STA = 26+66.69	PT STA = 26+89.75
Y = 191543.813	Y = 191544.039
X = 562157.872	X = 562180.931
BK = S87°14'15.4"E	BK = N89°52'36.0"E
AH = N89°52'36.0"E	AH = N89°00'10.2"E

STH 20

CURVE 3
PI STA = 410+05.60
Y = 191571.528
X = 563732.619
DELTA = 1°05'56"
D = 0°15'07"
T = 218.17'
L = 436.32'
R = 22747.61'
PC STA = 407+87.43
Y = 191566.616
X = 563514.509
PT STA = 412+23.75
Y = 191572.255
X = 563950.783
BK = N88°42'36.2"E
AH = N89°48'32.5"E

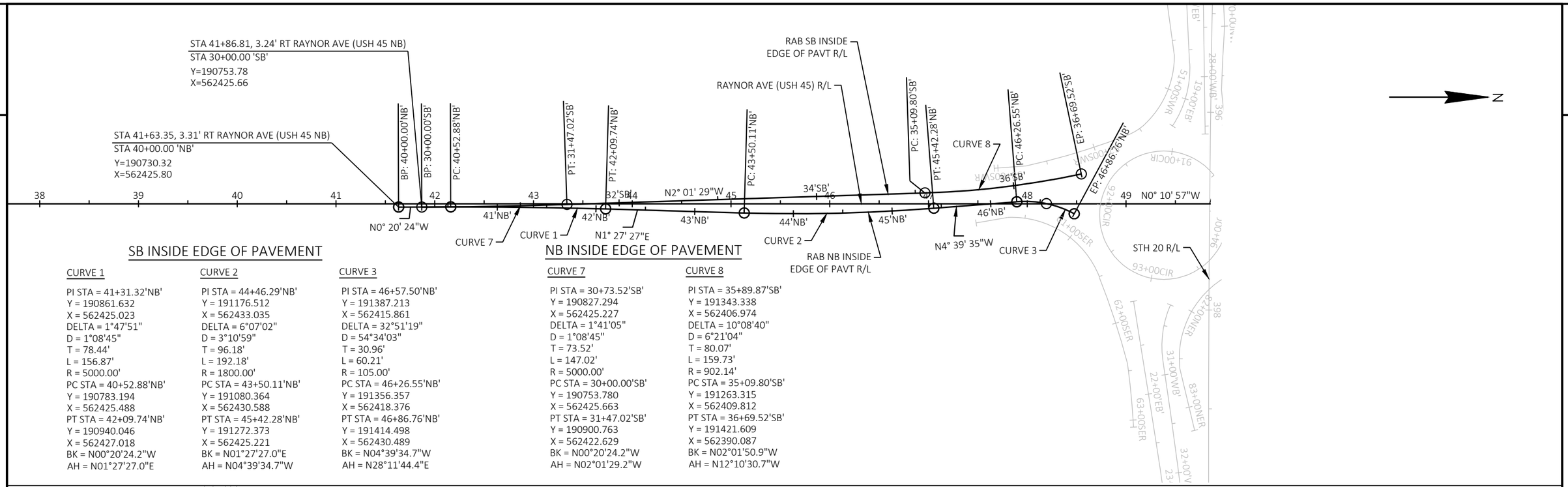
EB INSIDE EDGE OF PAVEMENT

CURVE 7
PI STA = 26+09.19'EB'
Y = 191556.438
X = 563016.334
DELTA = 8°11'28"
D = 1°02'30"
T = 393.82'
L = 786.30'
R = 5500.00'
PC STA = 22+15.37'EB'
Y = 191492.822
X = 562627.685
PT STA = 30+01.67'EB'
Y = 191564.032
X = 563410.082
BK = N80°42'14.1"E
AH = N88°53'42.5"E

WB INSIDE EDGE OF PAVEMENT

CURVE 10	CURVE 11	CURVE 12
PI STA = 30+57.32	PI STA = 34+12.01	PI STA = 38+49.14
Y = 191500.659	Y = 191555.191	Y = 191562.676
X = 562549.248	X = 562901.197	X = 563339.320
DELTA = 31°14'13"	DELTA = 7°57'03"	DELTA = 0°00'33"
D = 54°30'20"	D = 1°13'07"	D = 0°00'15"
T = 29.39'	T = 326.77'	T = 111.42'
L = 57.31'	L = 652.48'	L = 222.84'
R = 105.12'	R = 4701.93'	R = 1389305.87'
PC STA = 30+27.93	PC STA = 30+85.24	PC STA = 37+37.72
Y = 191512.278	Y = 191504.721	Y = 191560.519
X = 562522.256	X = 562578.352	X = 563227.920
PT STA = 30+85.24	PT STA = 37+37.72	PT STA = 39+60.56
Y = 191504.721	Y = 191560.519	Y = 191564.815
X = 562578.352	X = 563227.920	X = 563450.720
BK = S66°42'30.7"E	BK = N81°06'53.7"E	BK = N88°53'26.0"E
AH = N82°03'16.7"E	AH = N89°03'56.9"E	AH = N88°53'59.1"E

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - STH 20	SHEET 171	E

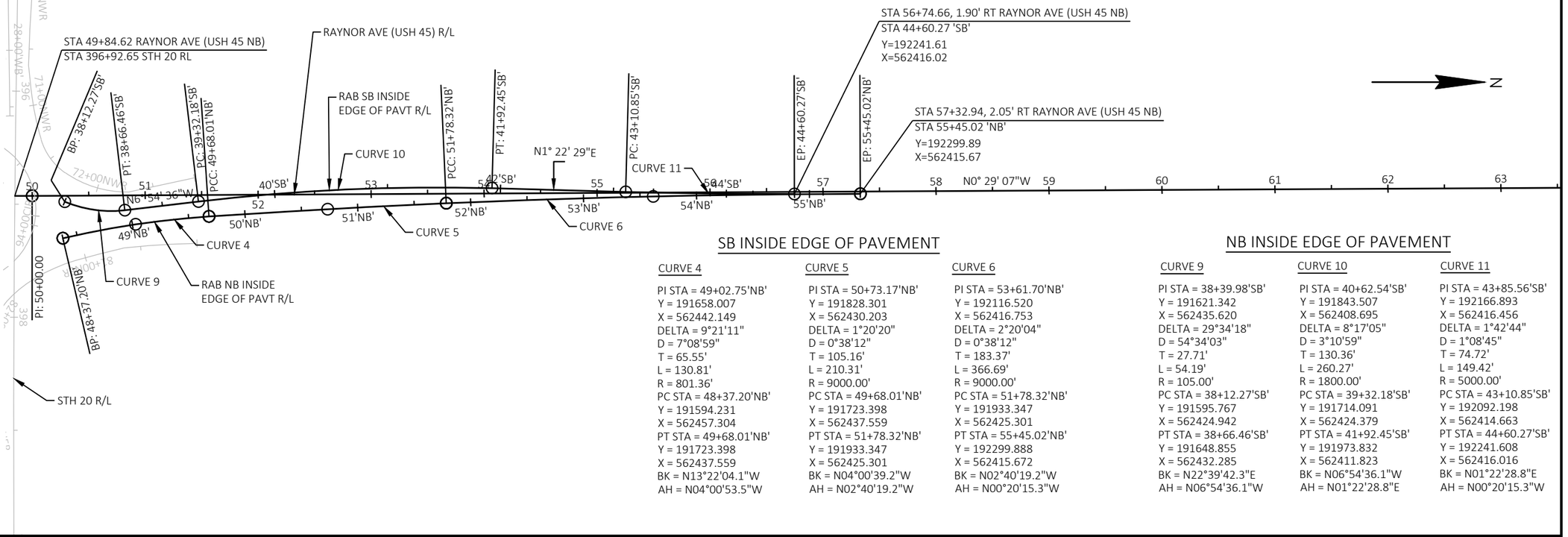


SB INSIDE EDGE OF PAVEMENT

CURVE 1	CURVE 2	CURVE 3
PI STA = 41+31.32'NB'	PI STA = 44+46.29'NB'	PI STA = 46+57.50'NB'
Y = 190861.632	Y = 191176.512	Y = 191387.213
X = 562425.023	X = 562433.035	X = 562415.861
DELTA = 1°47'51"	DELTA = 6°07'02"	DELTA = 32°51'19"
D = 1°08'45"	D = 3°10'59"	D = 54°34'03"
T = 78.44'	T = 96.18'	T = 30.96'
L = 156.87'	L = 192.18'	L = 60.21'
R = 5000.00'	R = 1800.00'	R = 105.00'
PC STA = 40+52.88'NB'	PC STA = 43+50.11'NB'	PC STA = 46+26.55'NB'
Y = 190783.194	Y = 191080.364	Y = 191356.357
X = 562425.488	X = 562430.588	X = 562418.376
PT STA = 42+09.74'NB'	PT STA = 45+42.28'NB'	PT STA = 46+86.76'NB'
Y = 190940.046	Y = 191272.373	Y = 191414.498
X = 562427.018	X = 562425.221	X = 562430.489
BK = N00°20'24.2"W	BK = N01°27'27.0"E	BK = N04°39'34.7"W
AH = N01°27'27.0"E	AH = N04°39'34.7"W	AH = N28°11'44.4"E

NB INSIDE EDGE OF PAVEMENT

CURVE 7	CURVE 8
PI STA = 30+73.52'SB'	PI STA = 35+89.87'SB'
Y = 190827.294	Y = 191343.338
X = 562425.227	X = 562406.974
DELTA = 1°41'05"	DELTA = 10°08'40"
D = 1°08'45"	D = 6°21'04"
T = 73.52'	T = 80.07'
L = 147.02'	L = 159.73'
R = 5000.00'	R = 902.14'
PC STA = 30+00.00'SB'	PC STA = 35+09.80'SB'
Y = 190753.780	Y = 191263.315
X = 562425.663	X = 562409.812
PT STA = 31+47.02'SB'	PT STA = 36+69.52'SB'
Y = 190900.763	Y = 191421.609
X = 562422.629	X = 562390.087
BK = N00°20'24.2"W	BK = N02°01'50.9"W
AH = N02°01'29.2"W	AH = N12°10'30.7"W



SB INSIDE EDGE OF PAVEMENT

CURVE 4	CURVE 5	CURVE 6
PI STA = 49+02.75'NB'	PI STA = 50+73.17'NB'	PI STA = 53+61.70'NB'
Y = 191658.007	Y = 191828.301	Y = 192116.520
X = 562442.149	X = 562430.203	X = 562416.753
DELTA = 9°21'11"	DELTA = 1°20'20"	DELTA = 2°20'04"
D = 7°08'59"	D = 0°38'12"	D = 0°38'12"
T = 65.55'	T = 105.16'	T = 183.37'
L = 130.81'	L = 210.31'	L = 366.69'
R = 801.36'	R = 9000.00'	R = 9000.00'
PC STA = 48+37.20'NB'	PC STA = 49+68.01'NB'	PC STA = 51+78.32'NB'
Y = 191594.231	Y = 191723.398	Y = 191933.347
X = 562457.304	X = 562437.559	X = 562425.301
PT STA = 49+68.01'NB'	PT STA = 51+78.32'NB'	PT STA = 55+45.02'NB'
Y = 191723.398	Y = 191933.347	Y = 192299.888
X = 562437.559	X = 562425.301	X = 562415.672
BK = N13°22'04.1"W	BK = N04°00'39.2"W	BK = N02°40'19.2"W
AH = N04°00'53.5"W	AH = N02°40'19.2"W	AH = N00°20'15.3"W

NB INSIDE EDGE OF PAVEMENT

CURVE 9	CURVE 10	CURVE 11
PI STA = 38+39.98'SB'	PI STA = 40+62.54'SB'	PI STA = 43+85.56'SB'
Y = 191621.342	Y = 191843.507	Y = 192166.893
X = 562435.620	X = 562408.695	X = 562416.456
DELTA = 29°34'18"	DELTA = 8°17'05"	DELTA = 1°42'44"
D = 54°34'03"	D = 3°10'59"	D = 1°08'45"
T = 27.71'	T = 130.36'	T = 74.72'
L = 54.19'	L = 260.27'	L = 149.42'
R = 105.00'	R = 1800.00'	R = 5000.00'
PC STA = 38+12.27'SB'	PC STA = 39+32.18'SB'	PC STA = 43+10.85'SB'
Y = 191595.767	Y = 191714.091	Y = 192092.198
X = 562424.942	X = 562424.379	X = 562414.663
PT STA = 38+66.46'SB'	PT STA = 41+92.45'SB'	PT STA = 44+60.27'SB'
Y = 191648.855	Y = 191973.832	Y = 192241.608
X = 562432.285	X = 562411.823	X = 562416.016
BK = N22°39'42.3"E	BK = N06°54'36.1"W	BK = N01°22'28.8"E
AH = N06°54'36.1"W	AH = N01°22'28.8"E	AH = N00°20'15.3"W

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - USH 45	SHEET 172	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\027203-AD.DWG
LAYOUT NAME - 01
PLOT DATE : 1/26/2022 5:24 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:100 FT

NW OUTSIDE EDGE OF PAVEMENT

CURVE 1
PI STA = 69+84.65
Y = 191565.378
X = 562224.712
DELTA = 1°10'44"
D = 3°50'25"
T = 15.35'
L = 30.70'
R = 1492.00'
PC STA = 69+69.30
Y = 191564.815
X = 562209.373
PT STA = 70+00.00
Y = 191566.257
X = 562240.036
BK = N87°53'48.5"E
AH = N86°43'04.7"E

CURVE 2
PI STA = 70+32.24
Y = 191564.120
X = 562272.201
DELTA = 2°21'35"
D = 3°39'38"
T = 32.24'
L = 64.46'
R = 1565.24'
PC STA = 70+00.00
Y = 191566.257
X = 562240.036
PT STA = 70+64.46
Y = 191563.309
X = 562304.428
BK = S86°11'57.9"E
AH = S88°33'32.9"E

CURVE 3
PI STA = 70+75.69
Y = 191564.431
X = 562315.600
DELTA = 0°51'28"
D = 3°49'11"
T = 11.23'
L = 22.46'
R = 1500.00'
PC STA = 70+64.46
Y = 191563.309
X = 562304.428
PT STA = 70+86.92
Y = 191565.719
X = 562326.754
BK = N84°16'05.2"E
AH = N83°24'37.3"E

CURVE 4
PI STA = 71+09.09
Y = 191568.263
X = 562348.773
DELTA = 10°08'00"
D = 22°55'06"
T = 22.17'
L = 44.22'
R = 250.00'
PC STA = 70+86.92
Y = 191565.719
X = 562326.754
PT STA = 71+31.14
Y = 191574.641
X = 562370.001
BK = N83°24'37.3"E
AH = N73°16'36.9"E

CURVE 5
PI STA = 71+50.34
Y = 191580.166
X = 562388.389
DELTA = 38°29'14"
D = 104°10'27"
T = 19.20'
L = 36.95'
R = 55.00'
PC STA = 71+31.14
Y = 191574.641
X = 562370.001
PT STA = 71+68.08
Y = 191595.934
X = 562399.344
BK = N73°16'36.9"E
AH = N34°47'22.5"E

CURVE 6
PI STA = 71+98.71
Y = 191621.083
X = 562416.832
DELTA = 35°49'11"
D = 60°27'00"
T = 30.63'
L = 59.26'
R = 94.78'
PC STA = 71+68.08
Y = 191595.934
X = 562399.344
PT STA = 72+27.34
Y = 191651.710
X = 562416.293
BK = N34°48'46.0"E
AH = N01°00'25.3"W

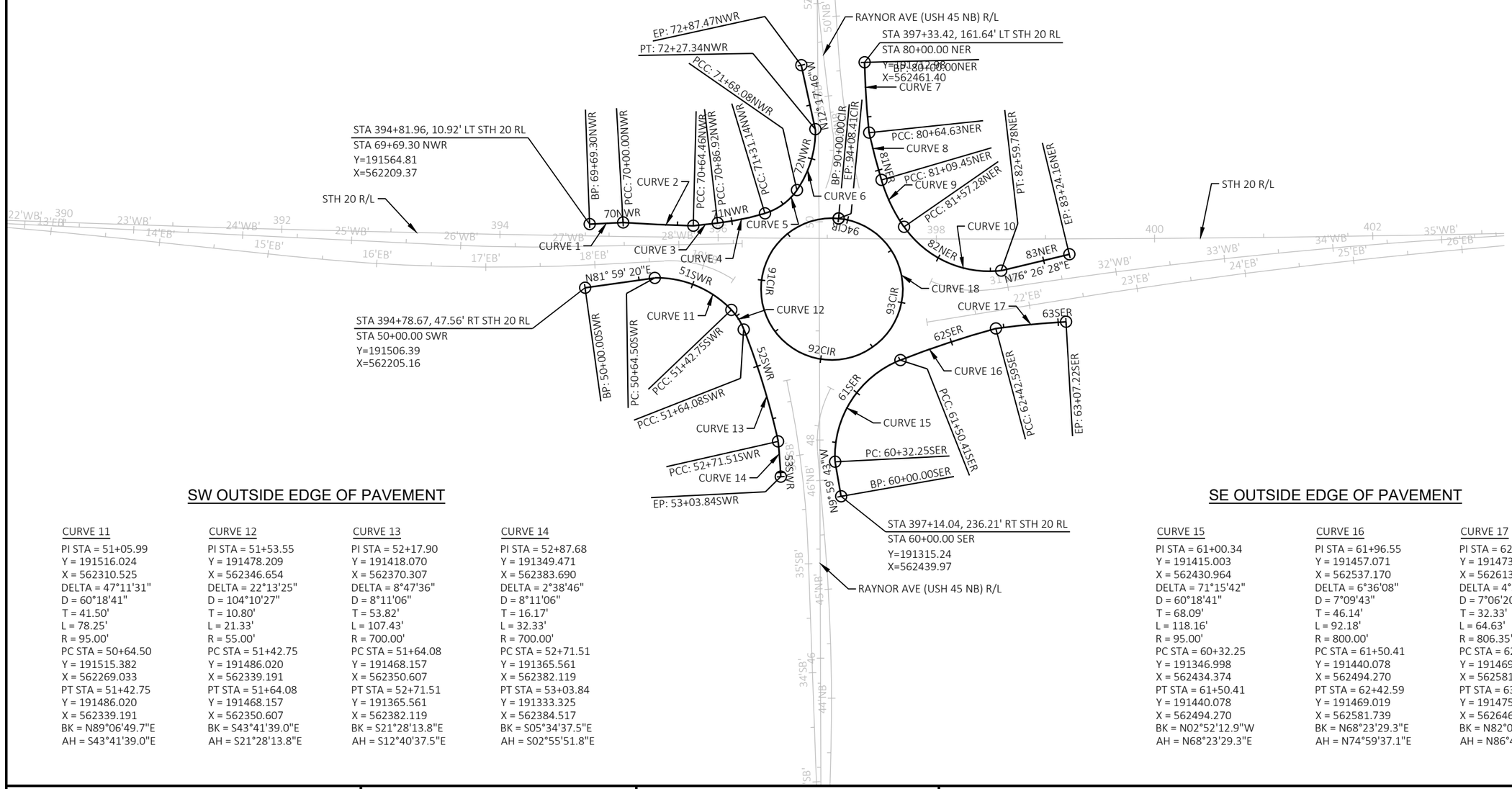
NE OUTSIDE EDGE OF PAVEMENT

CURVE 7
PI STA = 80+32.33
Y = 191680.659
X = 562462.192
DELTA = 4°37'44"
D = 7°09'43"
T = 32.33'
L = 64.63'
R = 800.00'
PC STA = 80+00.00
Y = 191712.983
X = 562461.398
PT STA = 80+64.63
Y = 191648.504
X = 562465.592
BK = S01°24'26.1"E
AH = S06°02'10.4"E

CURVE 8
PI STA = 80+87.05
Y = 191626.676
X = 562470.686
DELTA = 3°12'46"
D = 7°10'07"
T = 22.41'
L = 44.82'
R = 799.25'
PC STA = 80+64.63
Y = 191648.504
X = 562465.592
PT STA = 81+09.45
Y = 191605.168
X = 562476.995
BK = S13°08'07.7"E
AH = S16°20'53.7"E

CURVE 9
PI STA = 81+33.57
Y = 191582.041
X = 562483.842
DELTA = 18°16'11"
D = 38°11'50"
T = 24.12'
L = 47.83'
R = 150.00'
PC STA = 81+09.45
Y = 191605.168
X = 562476.995
PT STA = 81+57.28
Y = 191562.225
X = 562497.594
BK = S16°29'28.1"E
AH = S34°45'39.3"E

CURVE 10
PI STA = 82+14.17
Y = 191515.485
X = 562530.021
DELTA = 61°51'20"
D = 60°20'42"
T = 56.89'
L = 102.50'
R = 94.95'
PC STA = 81+57.28
Y = 191562.225
X = 562497.594
PT STA = 82+59.78
Y = 191522.031
X = 562586.530
BK = S34°45'07.3"E
AH = N83°23'33.0"E



RAB EDGE OF PAVEMENT

CURVE 18
PI STA = 90+00.00
Y = 191569.984
X = 562437.611
DELTA = 360°00'00"
D = 88°08'51"
T = 0.00'
L = 408.41'
R = 65.00'
PC STA = 90+00.00
Y = 191569.984
X = 562437.611
PT STA = 94+08.41
Y = 191569.984
X = 562437.611
BK = N84°36'17.5"W
AH = N84°36'17.5"W

SW OUTSIDE EDGE OF PAVEMENT

CURVE 11
PI STA = 51+05.99
Y = 191516.024
X = 562310.525
DELTA = 47°11'31"
D = 60°18'41"
T = 41.50'
L = 78.25'
R = 95.00'
PC STA = 50+64.50
Y = 191515.382
X = 562269.033
PT STA = 51+42.75
Y = 191486.020
X = 562339.191
BK = N89°06'49.7"E
AH = S43°41'39.0"E

CURVE 12
PI STA = 51+53.55
Y = 191478.209
X = 562346.654
DELTA = 22°13'25"
D = 104°10'27"
T = 10.80'
L = 21.33'
R = 55.00'
PC STA = 51+42.75
Y = 191486.020
X = 562339.191
PT STA = 51+64.08
Y = 191468.157
X = 562350.607
BK = S43°41'39.0"E
AH = S21°28'13.8"E

CURVE 13
PI STA = 52+17.90
Y = 191418.070
X = 562370.307
DELTA = 8°47'36"
D = 8°11'06"
T = 53.82'
L = 107.43'
R = 700.00'
PC STA = 51+64.08
Y = 191468.157
X = 562350.607
PT STA = 52+71.51
Y = 191365.561
X = 562382.119
BK = S21°28'13.8"E
AH = S12°40'37.5"E

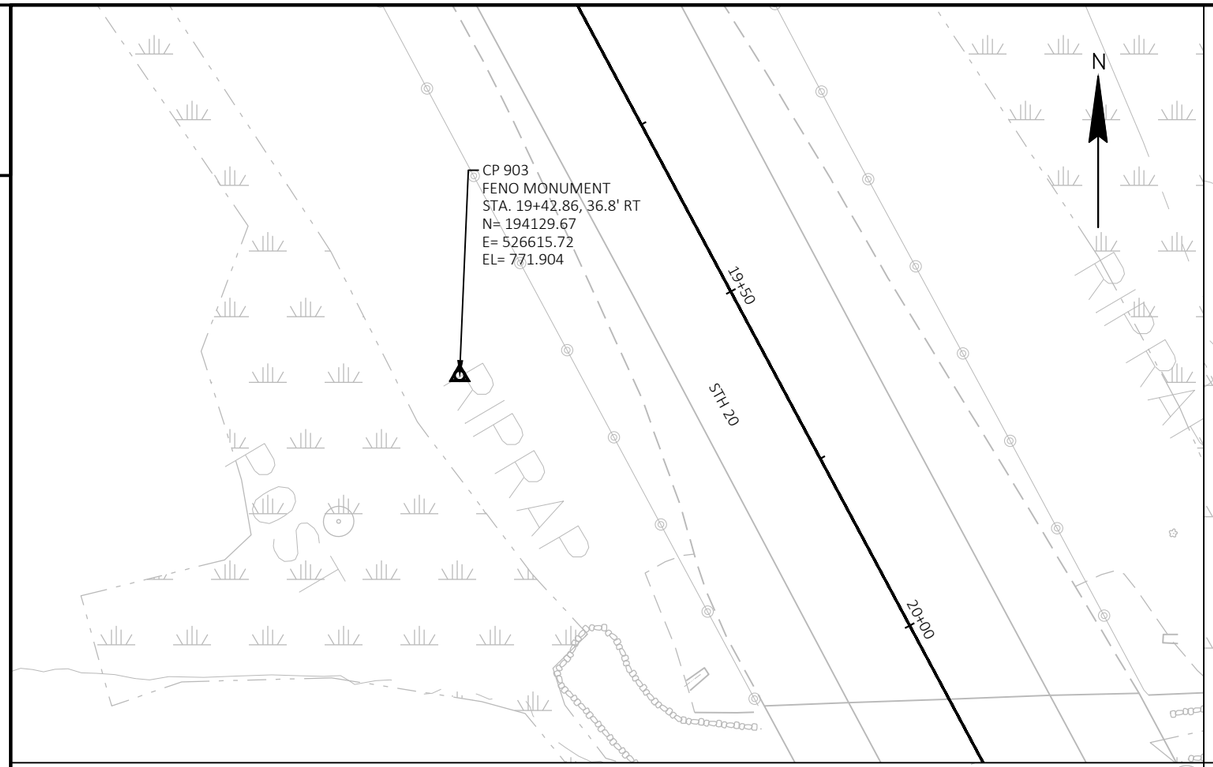
CURVE 14
PI STA = 52+87.68
Y = 191349.471
X = 562383.690
DELTA = 2°38'46"
D = 8°11'06"
T = 16.17'
L = 32.33'
R = 700.00'
PC STA = 52+71.51
Y = 191365.561
X = 562382.119
PT STA = 53+03.84
Y = 191333.325
X = 562384.517
BK = S05°34'37.5"E
AH = S02°55'51.8"E

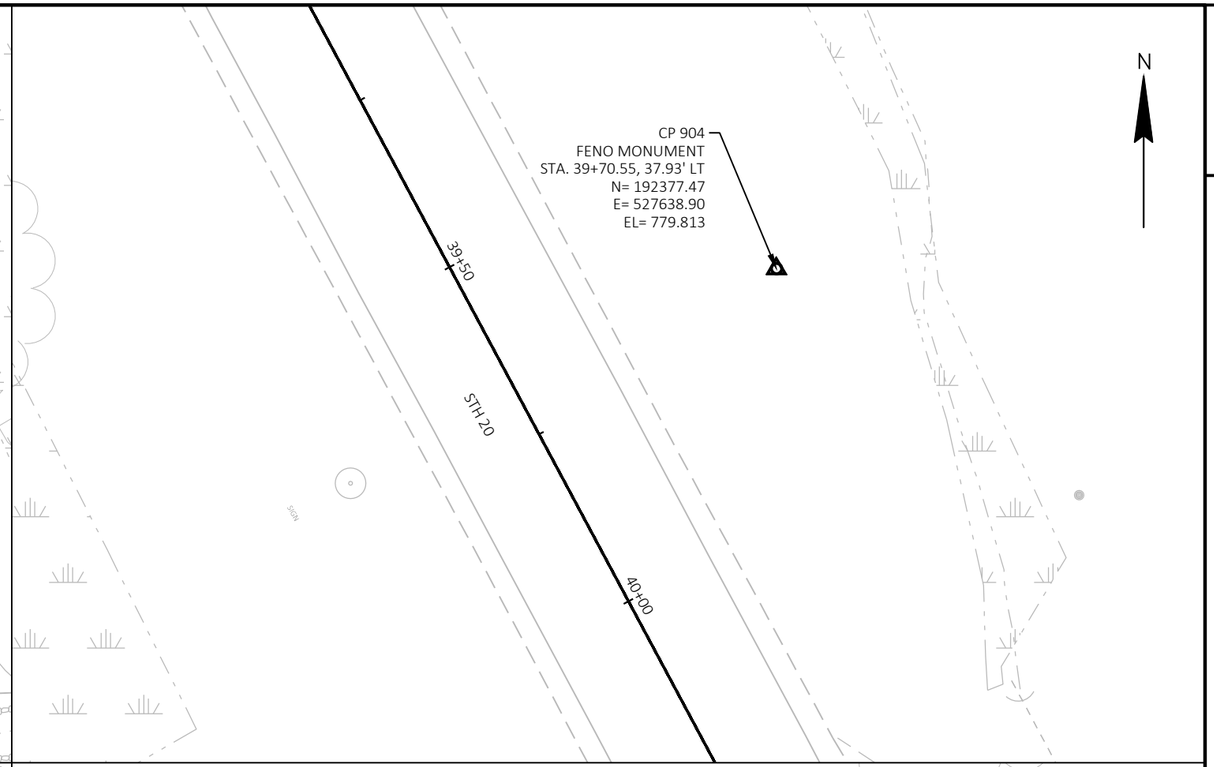
SE OUTSIDE EDGE OF PAVEMENT

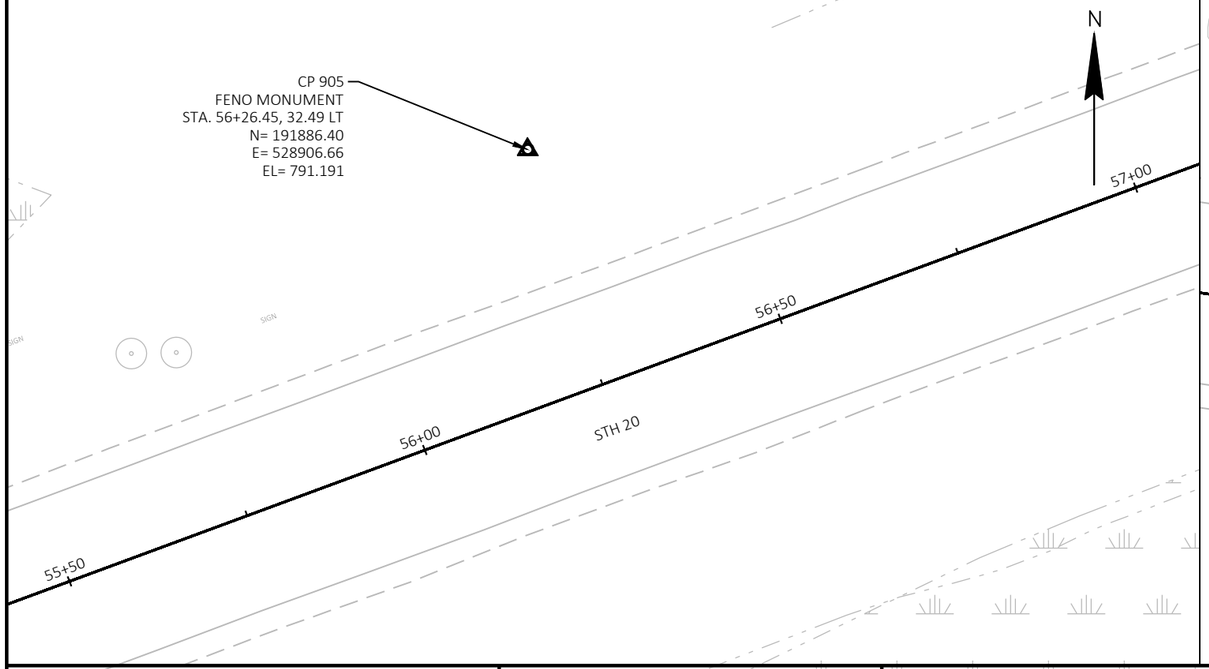
CURVE 15
PI STA = 61+00.34
Y = 191415.003
X = 562430.964
DELTA = 71°15'42"
D = 60°18'41"
T = 68.09'
L = 118.16'
R = 95.00'
PC STA = 60+32.25
Y = 191346.998
X = 562434.374
PT STA = 61+50.41
Y = 191440.078
X = 562494.270
BK = N02°52'12.9"W
AH = N68°23'29.3"E

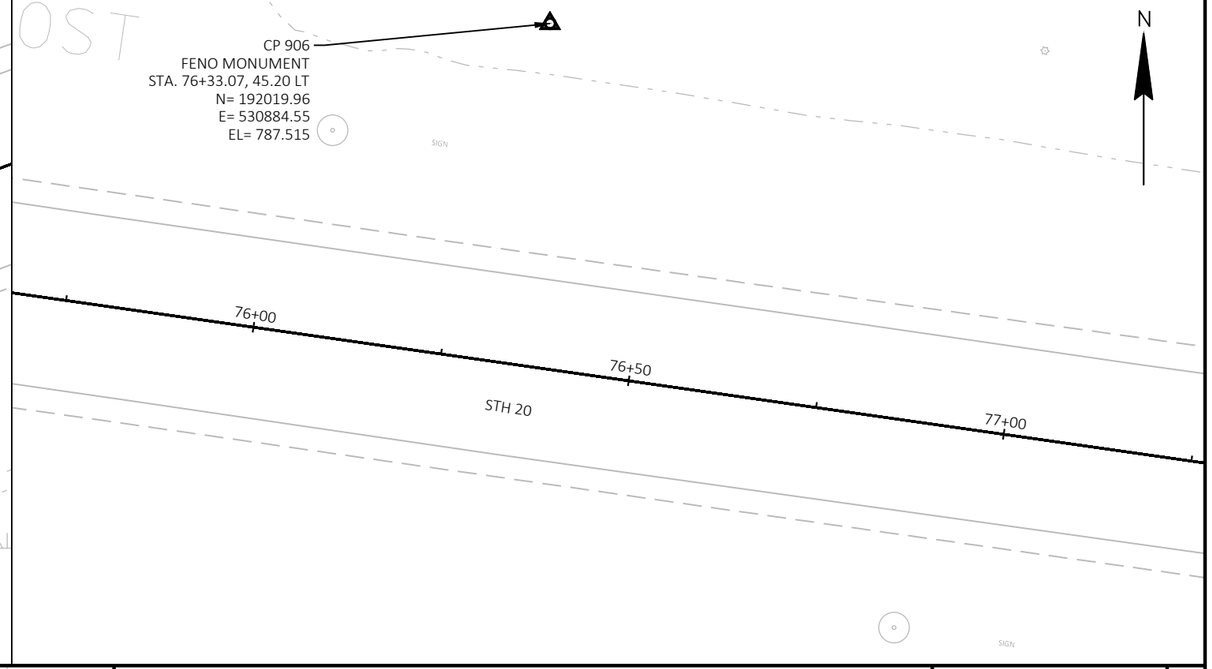
CURVE 16
PI STA = 61+96.55
Y = 191457.071
X = 562537.170
DELTA = 6°36'08"
D = 7°09'43"
T = 46.14'
L = 92.18'
R = 800.00'
PC STA = 61+50.41
Y = 191440.078
X = 562494.270
PT STA = 62+42.59
Y = 191469.019
X = 562581.739
BK = N68°23'29.3"E
AH = N74°59'37.1"E

CURVE 17
PI STA = 62+74.92
Y = 191473.453
X = 562613.767
DELTA = 4°35'33"
D = 7°06'20"
T = 32.33'
L = 64.63'
R = 806.35'
PC STA = 62+42.59
Y = 191469.019
X = 562581.739
PT STA = 63+07.22
Y = 191475.308
X = 562646.048
BK = N82°07'05.4"E
AH = N86°42'38.6"E

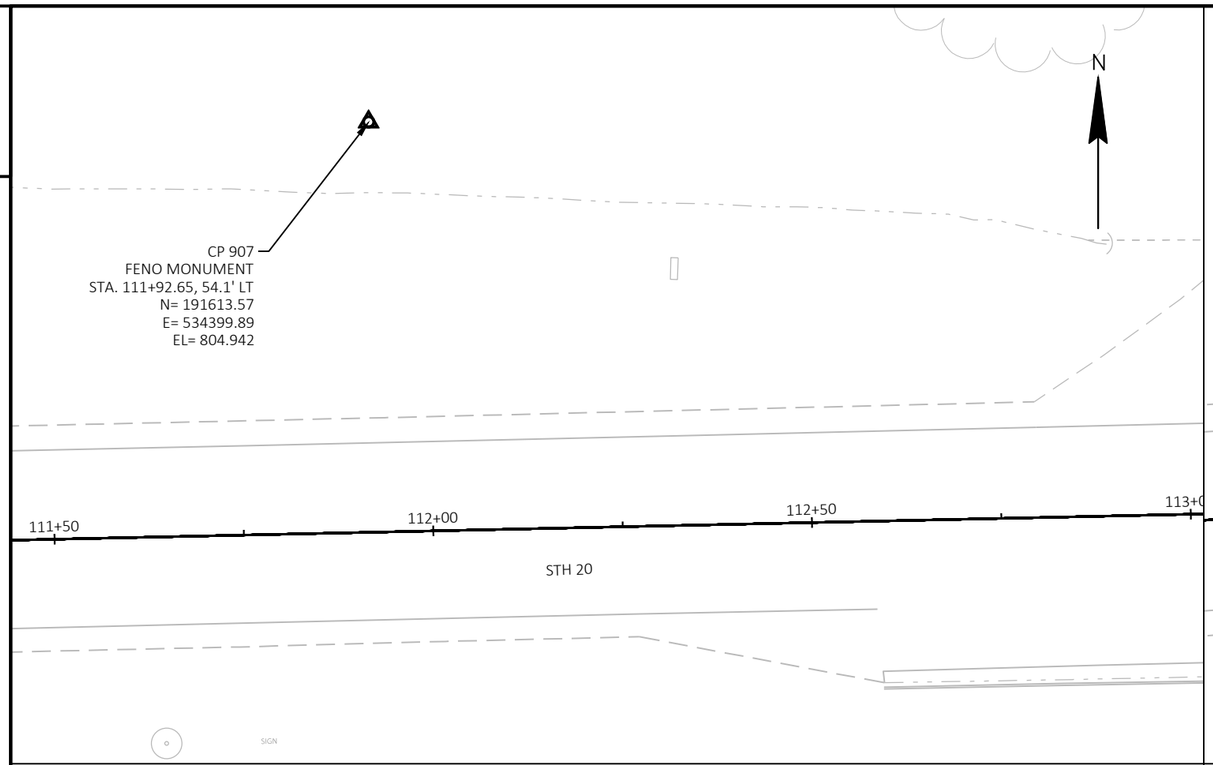


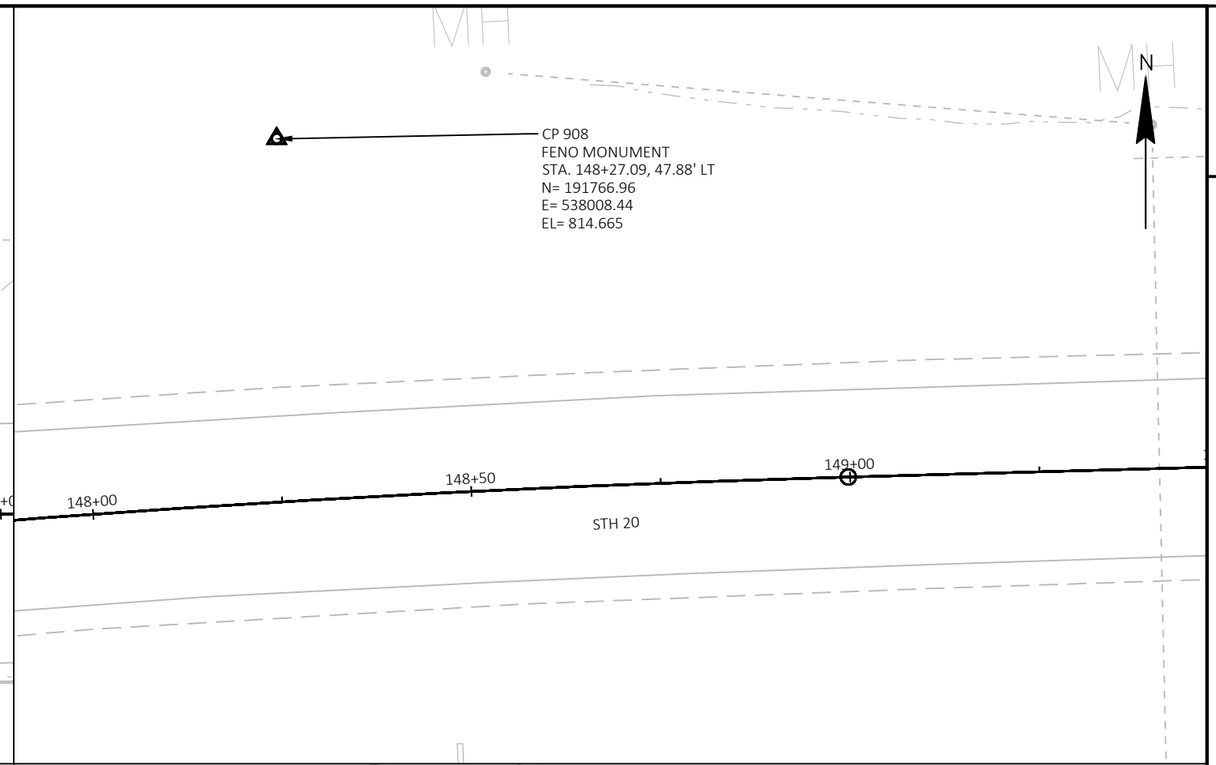


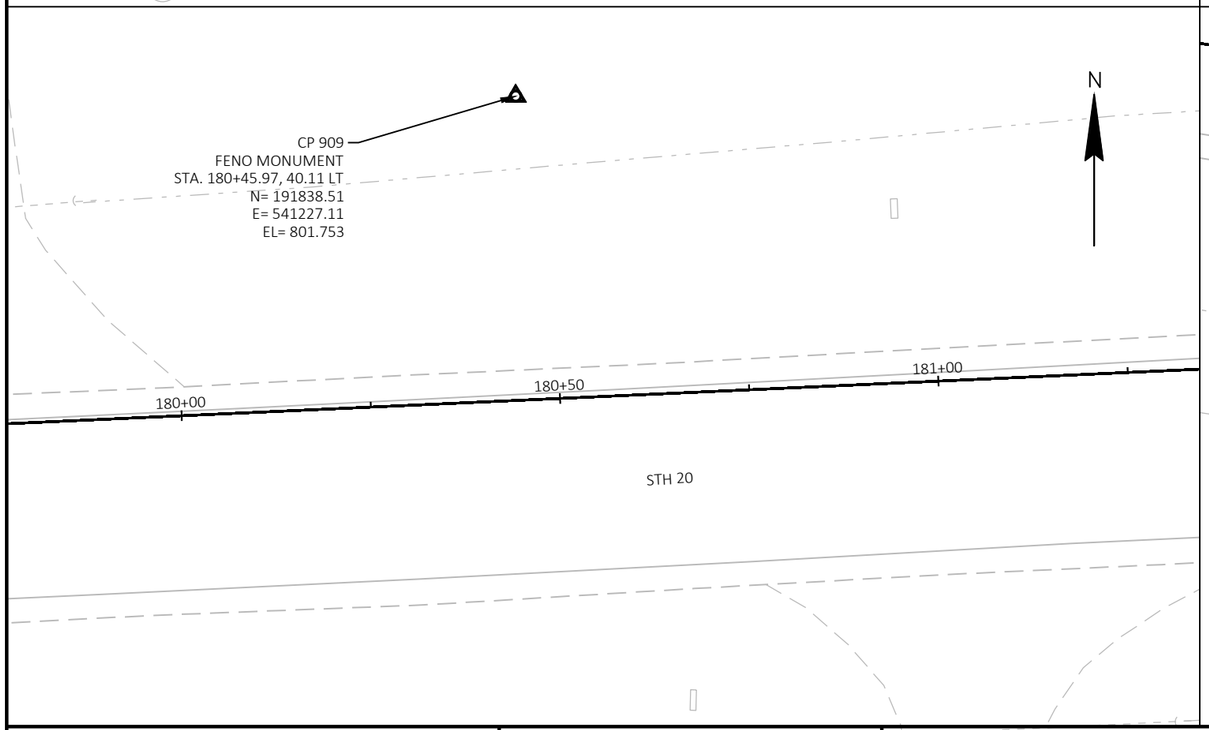


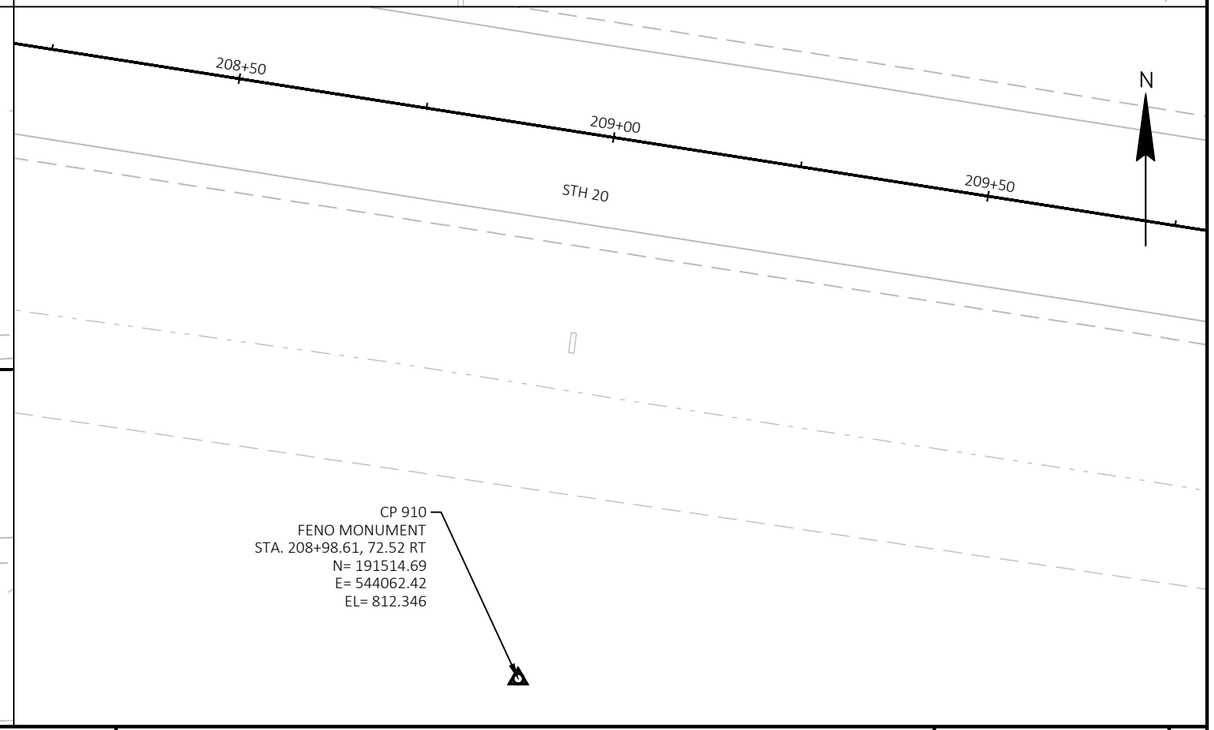


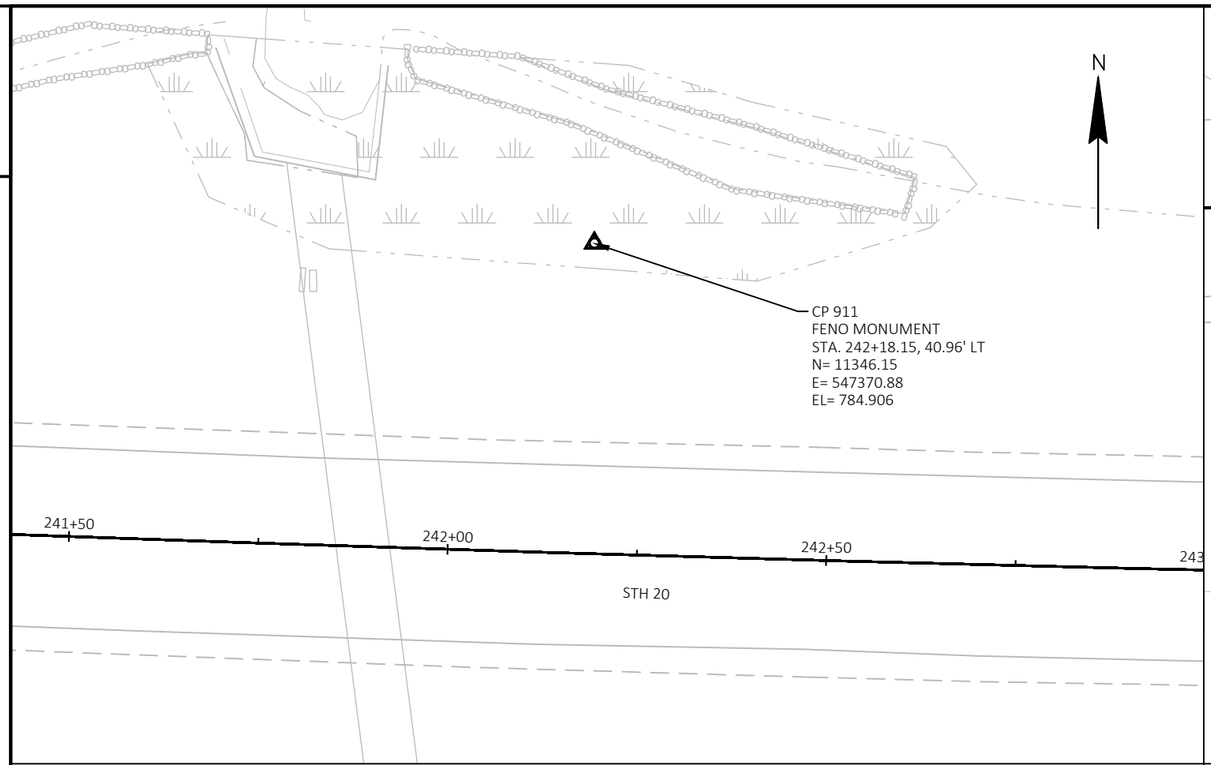
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - SURVEY CONTROL	SHEET 174	E

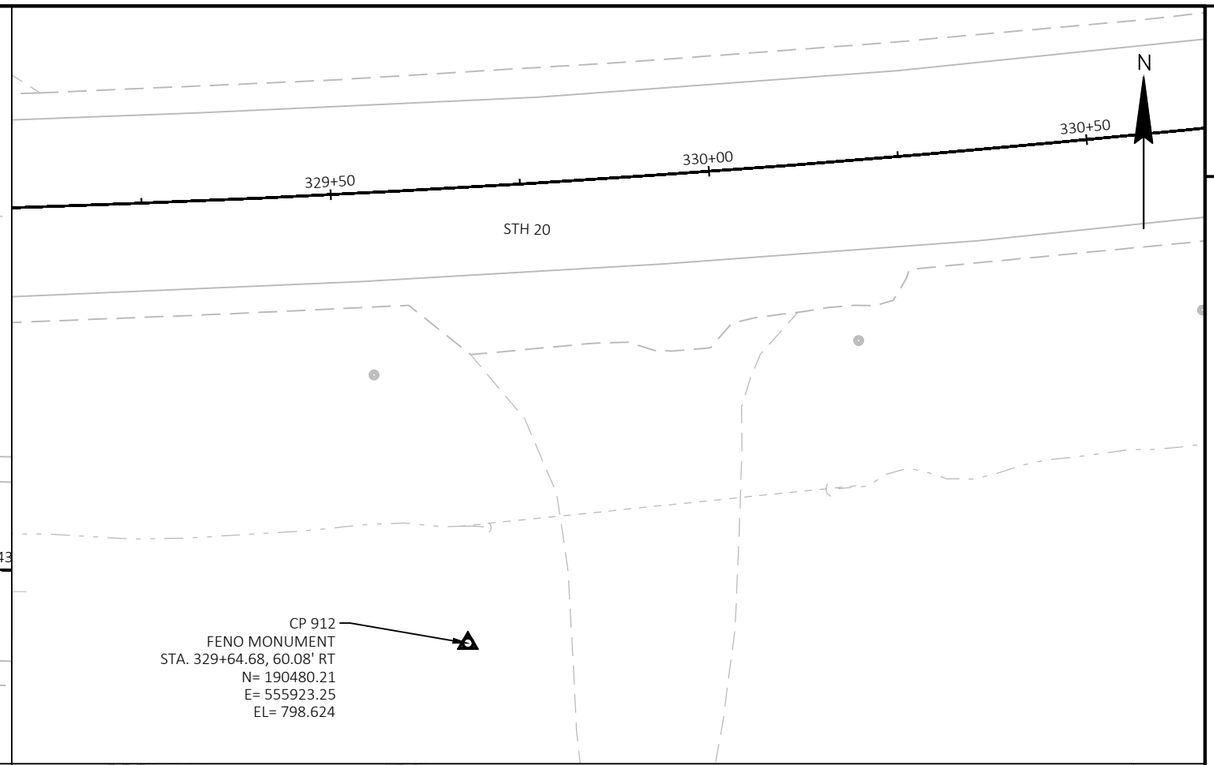

CP 907
FENO MONUMENT
STA. 111+92.65, 54.1' LT
N= 191613.57
E= 534399.89
EL= 804.942
N
111+50
112+00
112+50
113+0
STH 20
SIGN

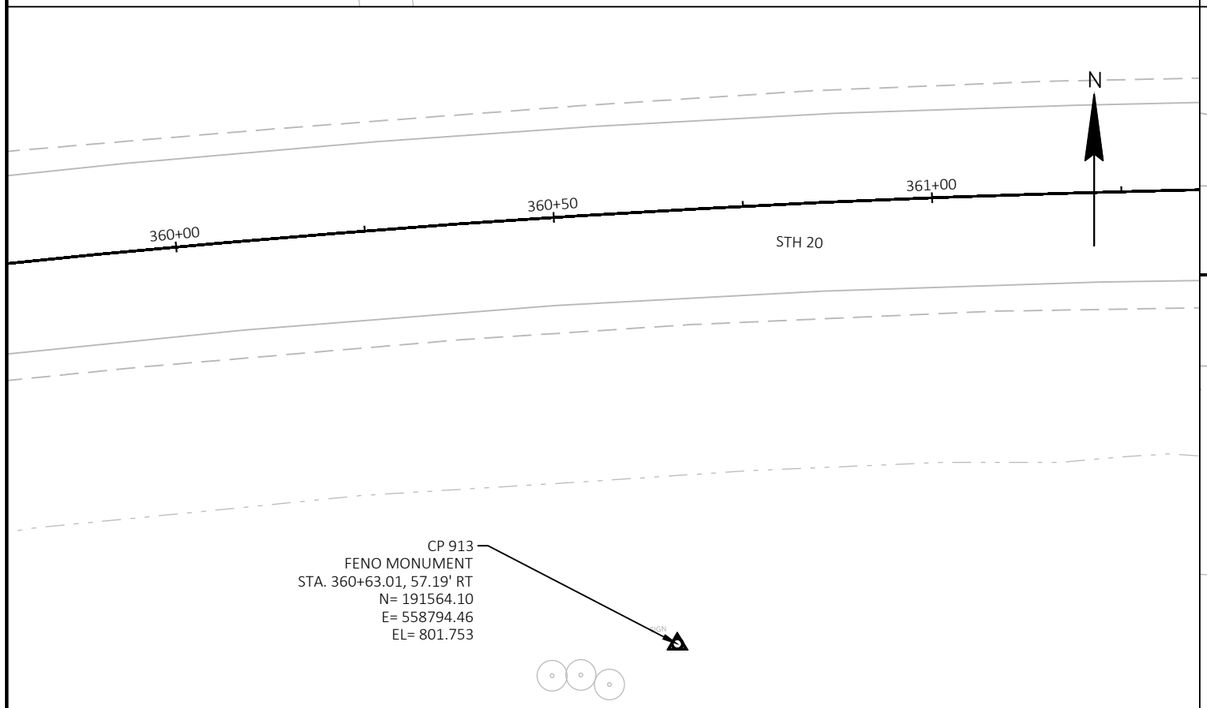

MH
MH
CP 908
FENO MONUMENT
STA. 148+27.09, 47.88' LT
N= 191766.96
E= 538008.44
EL= 814.665
N
148+00
148+50
149+00
STH 20

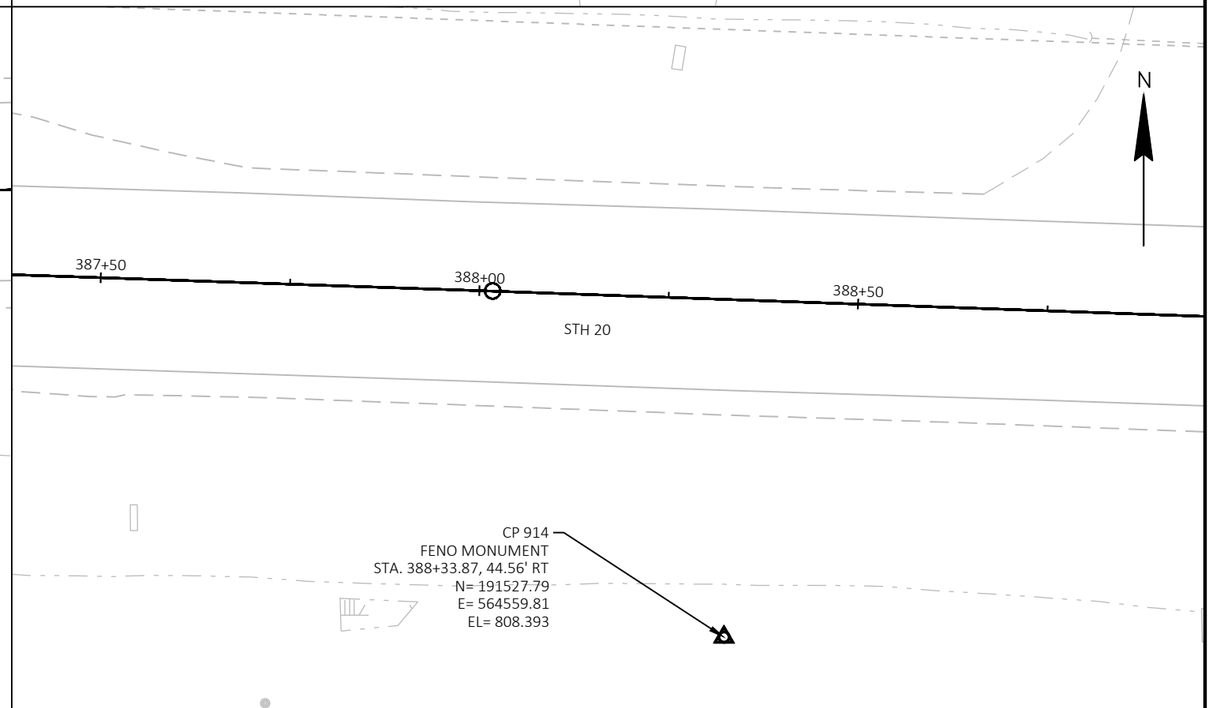

CP 909
FENO MONUMENT
STA. 180+45.97, 40.11 LT
N= 191838.51
E= 541227.11
EL= 801.753
N
180+00
180+50
181+00
STH 20


208+50
209+00
209+50
N
STH 20
CP 910
FENO MONUMENT
STA. 208+98.61, 72.52 RT
N= 191514.69
E= 544062.42
EL= 812.346

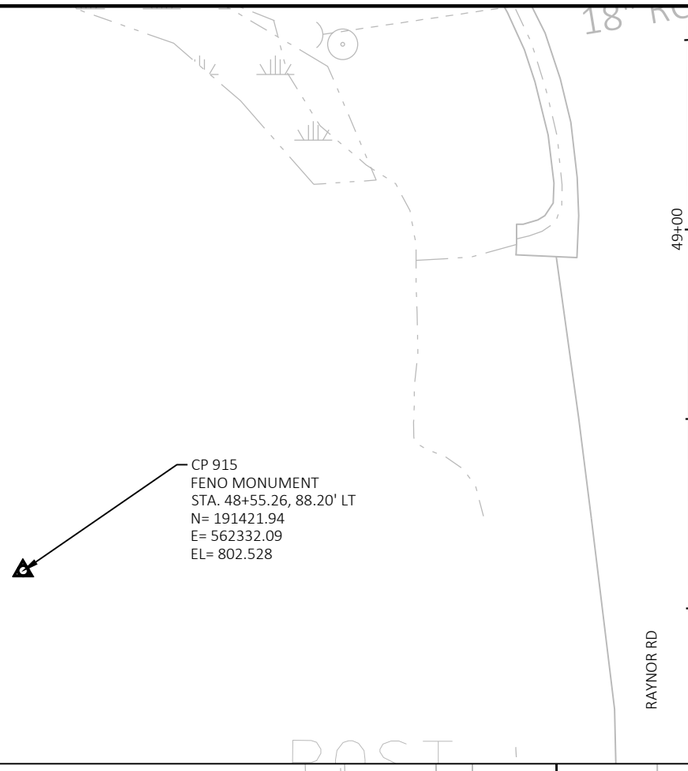


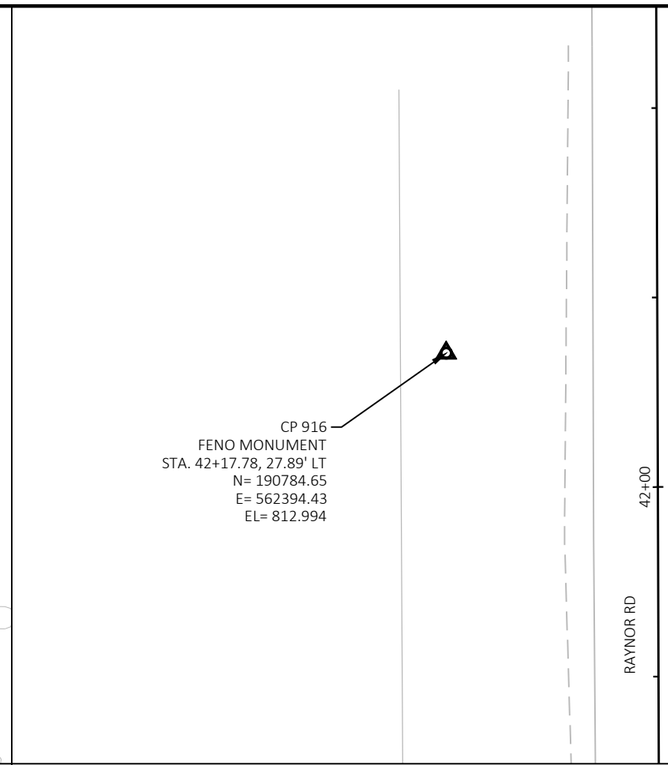


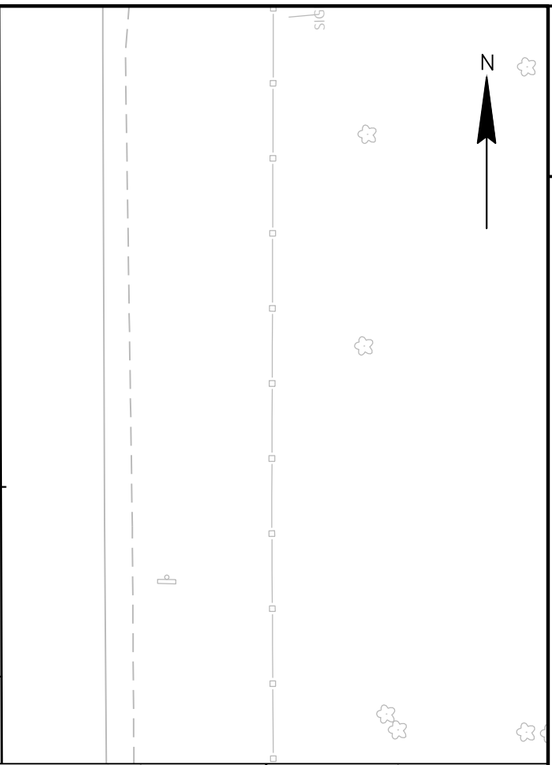




PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - SURVEY CONTROL	SHEET 176	E







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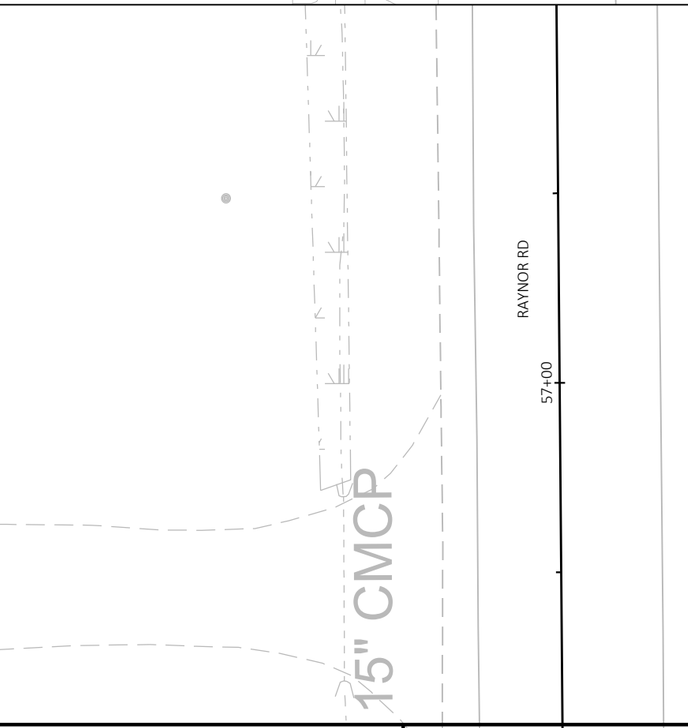
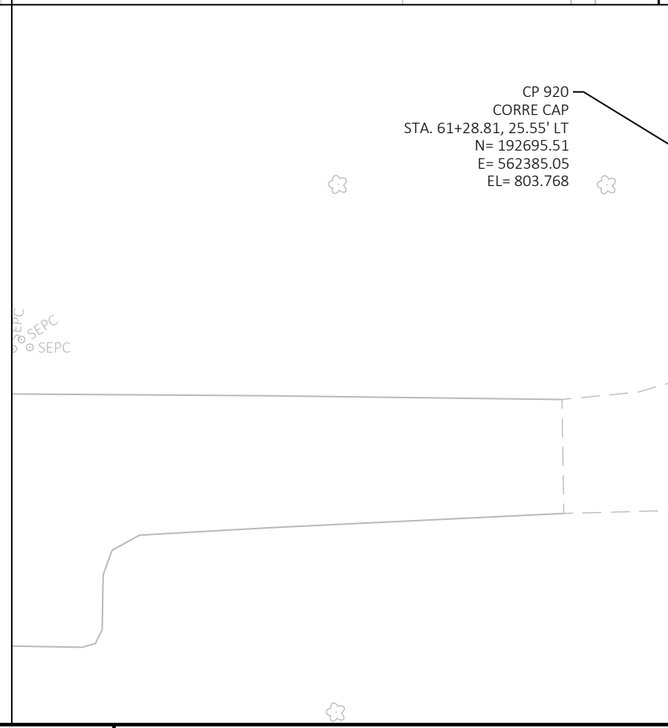
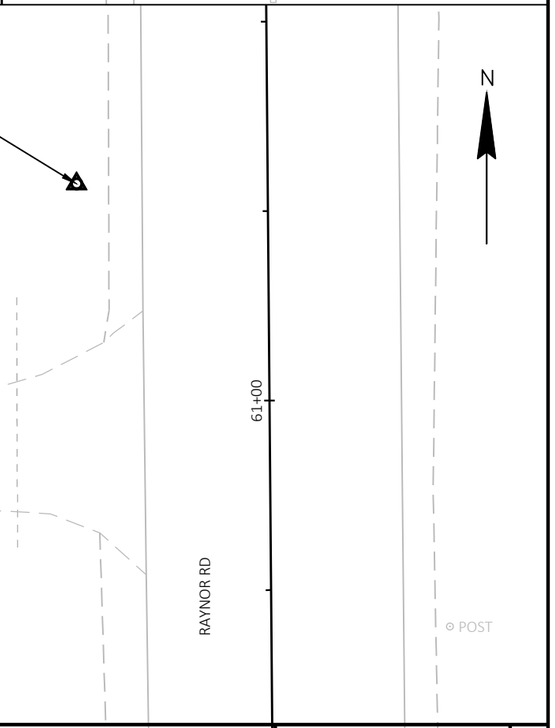


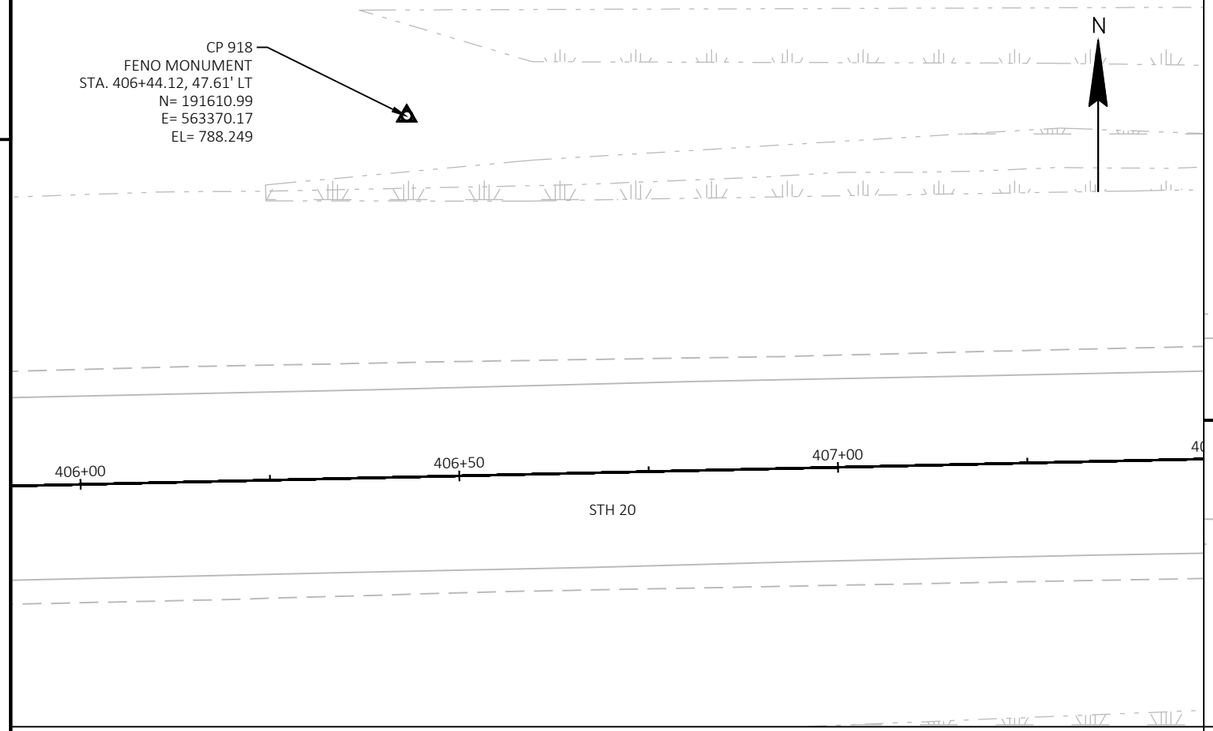




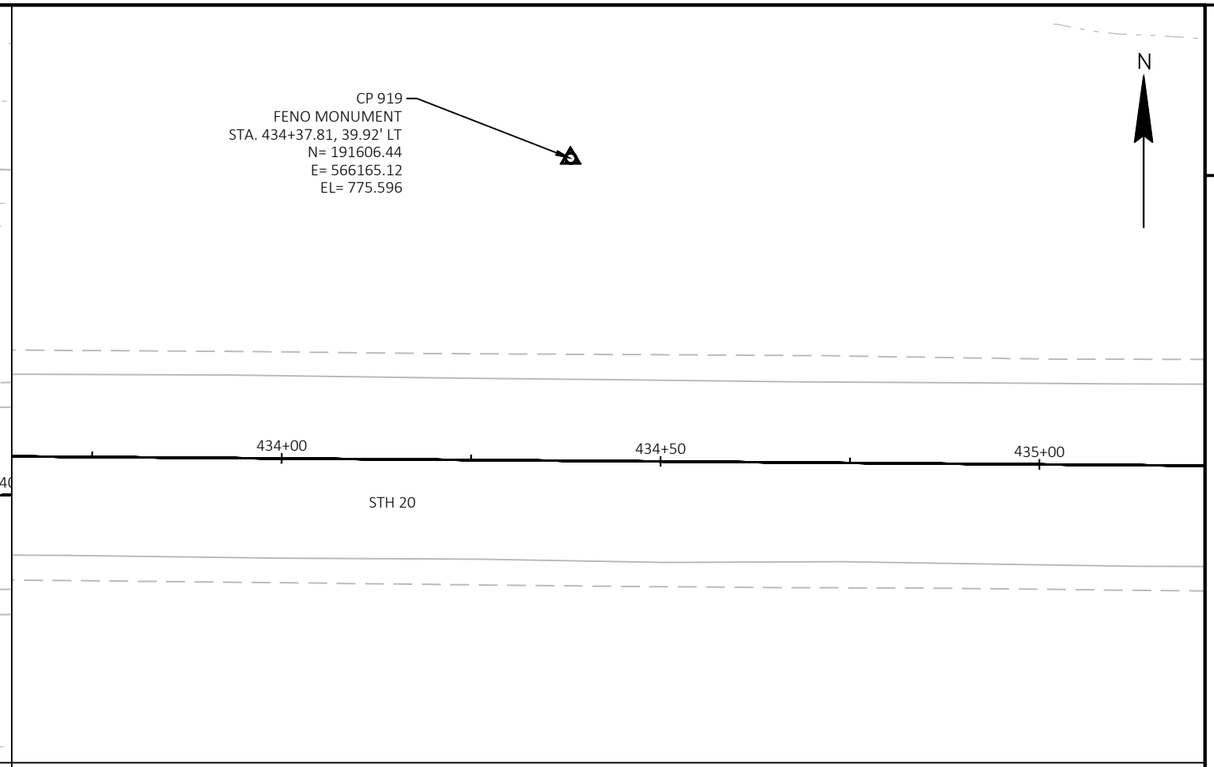
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - SURVEY CONTROL	SHEET 177	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\027206-AD_SURVEY.DWG
LAYOUT NAME - 04
PLOTDATE : 1/26/2022 5:27 PM PLOT BY : TOM ORNER PLOT NAME : PLOT SCALE : 1 IN:20 FT

CP 918
FENO MONUMENT
STA. 406+44.12, 47.61' LT
N= 191610.99
E= 563370.17
EL= 788.249



CP 919
FENO MONUMENT
STA. 434+37.81, 39.92' LT
N= 191606.44
E= 566165.12
EL= 775.596



2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	ALIGNMENT DETAILS - SURVEY CONTROL	SHEET 178	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\027206-AD_SV.DWG
LAYOUT NAME - 05
PLOTDATE : 1/26/2022 5:28 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

2340-10-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	203.0100	Removing Small Pipe Culverts	EACH	11.000	11.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,141.000	1,141.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	149,050.000	149,050.000
0012	204.0150	Removing Curb & Gutter	LF	1,144.000	1,144.000
0014	204.0165	Removing Guardrail	LF	1,316.000	1,316.000
0016	204.0170	Removing Fence	LF	1,200.000	1,200.000
0018	204.0210	Removing Manholes	EACH	2.000	2.000
0020	204.0245	Removing Storm Sewer (size) 01. 8-Inch	LF	121.000	121.000
0022	204.0245	Removing Storm Sewer (size) 02. 5-Inch	LF	94.000	94.000
0024	204.9060.S	Removing (item description) 01. Stop Sign Flasher Assembly	EACH	1.000	1.000
0026	205.0100	Excavation Common	CY	19,980.000	19,980.000
0028	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	44.000	44.000
0030	213.0100	Finishing Roadway (project) 01. 2340-10-70	EACH	1.000	1.000
0032	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,314.000	2,314.000
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	11,220.000	11,220.000
0036	310.0110	Base Aggregate Open-Graded	TON	768.000	768.000
0038	312.0110	Select Crushed Material	TON	16,514.000	16,514.000
0040	312.0115	Select Crushed Material	CY	500.000	500.000
0042	320.0170	Concrete Base 10 1/2-Inch	SY	18.000	18.000
0044	405.0100	Coloring Concrete WisDOT Red	CY	418.000	418.000
0046	415.0090	Concrete Pavement 9-Inch	SY	12,867.000	12,867.000
0048	416.0160	Concrete Driveway 6-Inch	SY	20.000	20.000
0050	416.0512	Concrete Truck Apron 12-Inch	SY	1,255.000	1,255.000
0052	416.1010	Concrete Surface Drains	CY	2.000	2.000
0054	455.0605	Tack Coat	GAL	20,784.000	20,784.000
0056	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0058	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0060	460.2005	Incentive Density PWL HMA Pavement	DOL	25,900.000	25,900.000
0062	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	20,190.000	20,190.000
0064	460.2010	Incentive Air Voids HMA Pavement	DOL	35,740.000	35,740.000
0066	460.6223	HMA Pavement 3 MT 58-28 S	TON	19,760.000	19,760.000
0068	460.6224	HMA Pavement 4 MT 58-28 S	TON	15,878.000	15,878.000
0070	465.0105	Asphaltic Surface	TON	88.000	88.000
0072	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	95.000	95.000
0074	465.0315	Asphaltic Flumes	SY	19.000	19.000
0076	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	36,790.000	36,790.000
0078	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	4.000	4.000
0080	520.3518	Culvert Pipe Class III-B 18-Inch	LF	218.000	218.000
0082	520.8700	Cleaning Culvert Pipes	EACH	13.000	13.000
0084	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	86.000	86.000
0086	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	3.000	3.000
0088	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0090	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0092	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	214.000	214.000
0094	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	5.000	5.000
0096	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	1.000	1.000
0098	601.0105	Concrete Curb Type A	LF	304.000	304.000

2340-10-70

Line	Item	Item Description	Unit	Total	Qty
0100	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	207.000	207.000
0102	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	1,167.000	1,167.000
0104	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	1,096.000	1,096.000
0106	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	294.000	294.000
0108	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	1,555.000	1,555.000
0110	601.0576	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type J	LF	66.000	66.000
0112	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	396.000	396.000
0114	601.0584	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type TBT	LF	110.000	110.000
0116	601.0600	Concrete Curb Pedestrian	LF	166.000	166.000
0118	602.0405	Concrete Sidewalk 4-Inch	SF	1,572.000	1,572.000
0120	602.0410	Concrete Sidewalk 5-Inch	SF	13,800.000	13,800.000
0122	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	320.000	320.000
0124	606.0200	Riprap Medium	CY	12.000	12.000
0126	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	38.000	38.000
0128	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	84.000	84.000
0130	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	813.000	813.000
0132	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	88.000	88.000
0134	608.0427	Storm Sewer Pipe Reinforced Concrete Class IV 27-Inch	LF	22.000	22.000
0136	608.2429	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	LF	612.000	612.000
0138	611.0420	Reconstructing Manholes	EACH	1.000	1.000
0140	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0142	611.0636	Inlet Covers Type HM-S	EACH	16.000	16.000
0144	611.0639	Inlet Covers Type H-S	EACH	6.000	6.000
0146	611.1004	Catch Basins 4-FT Diameter	EACH	14.000	14.000
0148	611.1006	Catch Basins 6-FT Diameter	EACH	1.000	1.000
0150	611.1230	Catch Basins 2x3-FT	EACH	3.000	3.000
0152	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0154	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0156	611.8120.S	Cover Plates Temporary	EACH	7.000	7.000
0158	612.0106	Pipe Underdrain 6-Inch	LF	1,058.000	1,058.000
0160	612.0700	Drain Tile Exploration	LF	452.000	452.000
0162	614.0010	Barrier System Grading Shaping Finishing	EACH	7.000	7.000
0164	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	3.000	3.000
0166	614.0396	Guardrail Mow Strip Asphalt	SY	338.000	338.000
0168	614.2300	MGS Guardrail 3	LF	400.000	400.000
0170	614.2500	MGS Thrie Beam Transition	LF	157.580	157.580
0172	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0174	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2340-10-70	EACH	1.000	1.000
0176	619.1000	Mobilization	EACH	1.000	1.000
0178	620.0300	Concrete Median Sloped Nose	SF	135.000	135.000
0180	624.0100	Water	MGAL	108.000	108.000
0182	625.0100	Topsoil	SY	11,483.000	11,483.000
0184	625.0500	Salvaged Topsoil	SY	11,483.000	11,483.000
0186	627.0200	Mulching	SY	11,726.000	11,726.000
0188	628.1504	Silt Fence	LF	2,874.000	2,874.000
0190	628.1520	Silt Fence Maintenance	LF	4,374.000	4,374.000
0192	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0194	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0196	628.2004	Erosion Mat Class I Type B	SY	11,726.000	11,726.000

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Line	Item	Item Description	Unit	Total	Qty
0198	628.2008	Erosion Mat Urban Class I Type B	SY	417.000	417.000
0200	628.6505	Soil Stabilizer Type A	ACRE	4.740	4.740
0202	628.7015	Inlet Protection Type C	EACH	31.000	31.000
0204	628.7020	Inlet Protection Type D	EACH	6.000	6.000
0206	628.7504	Temporary Ditch Checks	LF	688.000	688.000
0208	628.7555	Culvert Pipe Checks	EACH	70.000	70.000
0210	628.7560	Tracking Pads	EACH	5.000	5.000
0212	628.7570	Rock Bags	EACH	66.000	66.000
0214	629.0210	Fertilizer Type B	CWT	14.460	14.460
0216	630.0130	Seeding Mixture No. 30	LB	621.000	621.000
0218	630.0160	Seeding Mixture No. 60	LB	30.000	30.000
0220	630.0200	Seeding Temporary	LB	621.000	621.000
0222	630.0500	Seed Water	MGAL	516.000	516.000
0224	631.1100	Sod Erosion Control	SY	23.000	23.000
0226	633.5200	Markers Culvert End	EACH	7.000	7.000
0228	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	101.000	101.000
0230	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	12.000	12.000
0232	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	39.000	39.000
0234	637.1220	Signs Type I Reflective SH	SF	270.500	270.500
0236	637.2210	Signs Type II Reflective H	SF	532.925	532.925
0238	637.2230	Signs Type II Reflective F	SF	431.050	431.050
0240	638.2102	Moving Signs Type II	EACH	5.000	5.000
0242	638.2602	Removing Signs Type II	EACH	60.000	60.000
0244	638.3000	Removing Small Sign Supports	EACH	75.000	75.000
0246	642.5201	Field Office Type C	EACH	1.000	1.000
0248	643.0300	Traffic Control Drums	DAY	4,513.000	4,513.000
0250	643.0420	Traffic Control Barricades Type III	DAY	5,345.000	5,345.000
0252	643.0705	Traffic Control Warning Lights Type A	DAY	13,780.000	13,780.000
0254	643.0900	Traffic Control Signs	DAY	23,280.000	23,280.000
0256	643.0910	Traffic Control Covering Signs Type I	EACH	11.000	11.000
0258	643.0920	Traffic Control Covering Signs Type II	EACH	59.000	59.000
0260	643.1000	Traffic Control Signs Fixed Message	SF	158.000	158.000
0262	643.1050	Traffic Control Signs PCMS	DAY	140.000	140.000
0264	643.5000	Traffic Control	EACH	1.000	1.000
0266	645.0111	Geotextile Type DF Schedule A	SY	751.000	751.000
0268	645.0120	Geotextile Type HR	SY	22.000	22.000
0270	646.1020	Marking Line Epoxy 4-Inch	LF	90,662.000	90,662.000
0272	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	86,419.000	86,419.000
0274	646.3020	Marking Line Epoxy 8-Inch	LF	141.000	141.000
0276	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	750.000	750.000
0278	646.5020	Marking Arrow Epoxy	EACH	8.000	8.000
0280	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0282	646.5520	Marking Outfall Epoxy	EACH	103.000	103.000
0284	646.6120	Marking Stop Line Epoxy 18-Inch	LF	72.000	72.000
0286	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	95.000	95.000
0288	646.7120	Marking Diagonal Epoxy 12-Inch	LF	678.000	678.000
0290	646.8220	Marking Island Nose Epoxy	EACH	5.000	5.000
0292	648.0100	Locating No-Passing Zones	MI	7.330	7.330
0294	650.4000	Construction Staking Storm Sewer	EACH	27.000	27.000

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Line	Item	Item Description	Unit	Total	Qty
0296	650.4500	Construction Staking Subgrade	LF	3,903.000	3,903.000
0298	650.5000	Construction Staking Base	LF	4,197.000	4,197.000
0300	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,923.000	3,923.000
0302	650.6000	Construction Staking Pipe Culverts	EACH	6.000	6.000
0304	650.7000	Construction Staking Concrete Pavement	LF	3,573.000	3,573.000
0306	650.8000	Construction Staking Resurfacing Reference	LF	40,450.000	40,450.000
0308	650.8500	Construction Staking Electrical Installations (project) 01. 2340-10-70	LS	1.000	1.000
0310	650.9000	Construction Staking Curb Ramps	EACH	16.000	16.000
0312	650.9910	Construction Staking Supplemental Control (project) 01. 2340-10-70	LS	1.000	1.000
0314	650.9920	Construction Staking Slope Stakes	LF	3,867.000	3,867.000
0316	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,435.000	1,435.000
0318	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	620.000	620.000
0320	652.0800	Conduit Loop Detector	LF	140.000	140.000
0322	653.0140	Pull Boxes Steel 24x42-Inch	EACH	8.000	8.000
0324	653.0905	Removing Pull Boxes	EACH	2.000	2.000
0326	654.0105	Concrete Bases Type 5	EACH	14.000	14.000
0328	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0330	655.0610	Electrical Wire Lighting 12 AWG	LF	2,030.000	2,030.000
0332	655.0620	Electrical Wire Lighting 8 AWG	LF	8,025.000	8,025.000
0334	655.0700	Loop Detector Lead In Cable	LF	1,485.000	1,485.000
0336	655.0800	Loop Detector Wire	LF	675.000	675.000
0338	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. L-51-RW	LS	1.000	1.000
0340	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	14.000	14.000
0342	657.0322	Poles Type 5-Aluminum	EACH	14.000	14.000
0344	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	14.000	14.000
0346	659.1115	Luminaires Utility LED A	EACH	14.000	14.000
0348	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0350	690.0150	Sawing Asphalt	LF	622.000	622.000
0352	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	3,860.000	3,860.000
0354	740.0440	Incentive IRI Ride	DOL	30,594.000	30,594.000
0356	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,600.000	1,600.000
0358	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,800.000	1,800.000
0360	SPV.0060	Special 01. Catch Basins 7-Ft Dia	EACH	4.000	4.000
0362	SPV.0060	Special 02. Field Locate and Adjust Drain Tile	EACH	1.000	1.000
0364	SPV.0060	Special 03. Marking Contrast Epoxy Words	EACH	4.000	4.000
0366	SPV.0060	Special 04. Sanitary Manhole Frame and Grate	EACH	1.000	1.000
0368	SPV.0060	Special 05. Sanitary Chimney Seals	EACH	1.000	1.000
0370	SPV.0060	Special 06. Section Corner Monuments	EACH	4.000	4.000
0372	SPV.0060	Special 07. Utility Line Opening (ULO)	EACH	6.000	6.000
0374	SPV.0090	Special 01. Heavy Duty Silt Fence	LF	1,500.000	1,500.000
0376	SPV.0090	Special 02. Ditching and Shaping	LF	1,857.000	1,857.000
0378	SPV.0180	Special 01. Resin Binder High Friction Surface Treatment Modified	SY	5,000.000	5,000.000
0380	SPV.0180	Special 02. Removing Distressed Pavement Milling	SY	659.000	659.000

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CLEARING AND GRUBBING ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	STH 20					
		400+00	-	401+00	1	1
				SUBTOTAL	1	1
	RAYNOR AVE					
		43+00	-	44+00	1	1
				SUBTOTAL	1	1
	TOTALS				2	2

CURB & GUTTER REMOVALS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0150 REMOVING CURB & GUTTER LF
0010	STH 20					
		50+53	-	53+53	LT	300
		10'EB'+00	-	30'EB'+12	LT/RT	844
					SUBTOTAL	1,144
	TOTALS					1,144

REMOVING PAVEMENT BUTT JOINTS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
0010	STH 20					
		3+39	-	3+58	MAINLINE	97
		5+74	-	5+96	RT	54
		15+41	-	15+60	RT	47
		19+81	-	20+11	MAINLINE	143
		20+84	-	21+25	MAINLINE	142
		48+57	-	48+88	RT	85
		127+85	-	128+13	RT	65
		167+43	-	167+68	LT	57
		193+77	-	194+06	RT	66
		276+20	-	276+39	MAINLINE	67
		295+12	-	295+30	MAINLINE	67
		342+28	-	343+44	LT/RT	200
		441+30	-	441+58	MAINLINE	50
	TOTALS					1,141

REMOVING SMALL PIPE CULVERTS

CATEGORY	ROADWAY	STATION	O/S	203.0100 REMOVING SMALL PIPE CULVERTS EACH	DESCRIPTION
0010	STH 20				
		55+12	LT/RT	1	18"X24" RCP
		65+96	LT/RT	1	24" CMP
		391+75	RT	1	18" CMP
		396+96	RT	1	18" RCP
		400+19	RT	1	18" CMP
			SUBTOTAL	5	
	RAYNOR AVE				
		42+90	RT	1	10"X14" CMP
		52+18	RT	1	18" CMP
		52+98	LT	1	18" CMP
		54+60	LT/RT	1	30" RCP
		56+73	LT	1	15" CMP
		56+87	RT	1	15" CMP
			SUBTOTAL	6	
	TOTALS			11	

REMOVING GUARDRAIL

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0165 REMOVING GUARDRAIL LF
0010	STH 20					
		18+44	-	20+23	LT/RT	498
		20+83	-	22+75	LT/RT	530
		245+00	-	246+28	RT	128
		419+98	-	420+52	RT	54
		423+96	-	424+50	LT/RT	106
	TOTAL					1,316

MILLING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0120 REMOVING ASPHALTIC SURFACE MILING SY	SPV.0180.02 REMOVING DISTRESSED PAVEMENT MILING SY
0010	STH 20						
		3+39	-	20+22	LT/RT	7,350	32
		20+84	-	276+39	LT/RT	94,500	394
		295+12	-	390+03	LT/RT	35,000	200
		404+97	-	441+48	LT/RT	12,200	33
					SUBTOTAL	149,050	659
	TOTALS					149,050	659

REMOVALS

CATEGORY	ROADWAY	STATION	O/S	204.0170 REMOVING FENCE LF	204.9060.S.01 REMOVING STOP SIGN FLASHER ASSEMBLY EACH
0010	RAYNOR AVE				
		43+51 TO 49+25	RT	1,200	--
		50+25	LT	--	1
	TOTALS			1,200	1

REMOVING STORM SEWER

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0210 REMOVING MANHOLES EA	204.0245.01 REMOVING STORM SEWER 8-INCH LF	204.0245.02 REMOVING STORM SEWER 5-INCH LF	COMMENTS
0010	STH 20								
		14'EB'+00	-	15'EB'+00	MAINLINE	2	121	--	PLASTIC
		17'EB'+00	-	18'EB'+00	MAINLINE	--	--	94	PLASTIC
	TOTAL					2	121	94	

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PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET 183	E

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2) CY	205.0100 EXCAVATION COMMON (1) EBS EXCAV. (3) CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2) CY	AVAILABLE MATERIAL (4) CY	EXPANDED EBS BACKFILL (5) FACTOR 1.00 CY	UNEXPANDED FILL CY	EXPANDED FILL (7) FACTOR 1.30 CY	MASS ORDINATE +/- (8) CY	WASTE CY	312.0115 SELECT CRUSHED MATERIAL CY
53+50 TO 59+41 "NB"	NORTH LEG	4,311		303	4,008		202	263	3,746	3,746	0
21+50 TO 30+12 "EB"	EAST LEG	3,285		449	2,836		673	875	1,961	1,961	0
44+61 TO 50+50 "NB"	SOUTH LEG	4,255		268	3,987		5	7	3,980	3,980	0
10+00 TO 19+00 "EB"	WEST LEG	4,866		426	4,440		222	289	4,152	4,152	0
90+00 TO 94+00 "CIR"	CIRCLE	2,763		297	2,466		1,977	2,570	-104	-104	0
	UNDISTRIBUTED		500			500			0	0	500
	SUBTOTAL	19,480	500		17,737	500	3,079	4,003	13,734	13,734	500
	TOTAL	19,980									500

1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS EXCAVATION IS TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL. MATERIAL EXCAVATED FROM EBS IS NOT TO BE USED AS FILL ELSEWHERE ON THE PROJECT.
4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.
5) ROCK EXCAVATION ITEM NUMBER 205.0200.
6) EXPANDED ROCK: FACTOR = 1.00
7) EXPANDED FILL: FACTOR = 1.00; EXPANDED FILL = (UNEXPANDED FILL ROCK * ROCK FACTOR) * FILL FACTOR
8) 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.

ASPHALTIC PAVING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0315 ASPHALTIC FLUMES SY	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	SPV. 0180.01 RESIN BINDER HIGH FRICTION SURFACE TREATMENT MODIFIED SY
0010	STH 20													
		3+39	-	20+22	LT	4	1,160	1,120	864	4	--	--	1,690	--
		20+84	-	276+39	LT/RT	3	12,000	11,500	8,950	56	--	--	25,600	5,000
		295+12	-	390+03	LT/RT	--	5,500	5,270	4,100	24	23	--	9,500	--
		10'EB'+00	-	19'EB'+00	ROUNDABOUT	--	32	--	153	--	26	--	--	--
		22'EB'+57	-	30'EB'+12	ROUNDABOUT	--	38	--	164	--	6	19	--	--
		404+97	-	441+48	LT/RT	37	1,940	1,870	1,450	4	--	--	3,660	--
					SUBTOTAL	44	20,670	19,760	15,681	88	55	19	36,790	5,000
	RAYNOR/USH 45													
		44'NB'+61	-	50'NB'+28	ROUNDABOUT	--	55	--	90	--	--	--	--	--
		54'NB'+10	-	59'NB'+44	ROUNDABOUT	--	59	--	107	--	40	--	--	--
					SUBTOTAL	--	114	--	197	--	40	--	--	--
	TOTALS					44	20,784	19,760	15,878	88	95	19	36,790	5,000

PWL MIXTURE USE TABLE

LOCATION	STATION	MIXTURE USE:	UNDERLAYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	STA 3+39 - 276+39, 294+12 - 389+71, 406+67 - 441+48	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	11,300	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	STA 3+39 - 276+39, 294+12 - 389+71, 406+67 - 441+48	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	14,530	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS & APPURTENANCES	STA 3+39 - 276+39, 294+12 - 389+71, 406+67 - 441+48	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	4,400	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
SHOULDERS & APPURTENANCES	STA 3+39 - 276+39, 294+12 - 389+71, 406+67 - 441+48	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	5,661	2 1/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	305.0110 BASE AGGREGATE DENSE ¾-INCH * TON	305.0120 BASE AGGREGATE DENSE 1¼-INCH TON	310.0110 BASE AGGREGATE OPEN-GRADED TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL
0010	STH 20									
		3+39	-	20+22	LT	2	1,000	--	--	10
		20+84	-	276+39	LT/RT	563	540	68	--	5
		295+12	-	390+03	LT/RT	209	1,150	--	--	11
		10'EB'+00	-	30'EB'+10	ROUNDABOUT	1,460	8,530	--	16,514	82
		404+97	-	441+48	LT/RT	80	--	--	--	--
TOTALS						2,314	11,220	68	16,514	108

*ADDITIONAL QTY SHOWN ELSEWHERE

CONCRETE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	405.0100 COLORING CONCRETE WISDOT RED CY	415.0090 CONCRETE PAVEMENT 9-INCH SY	416.0160 CONCRETE DRIVEWAY 6-INCH SY	416.0512 CONCRETE TRUCK APRON 12-INCH SY
0010	STH 20								
		10'EB'+00	-	30'EB'+12	MAINLINE	418	12,867	20	1,255
TOTALS						418	12,867	20	1,255

CONCRETE CURB & GUTTER

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	416.1010 CONCRETE SURFACE DRAINS CY	601.0105 CONCRETE CURB TYPE A LF	601.0405 CONCRETE CURB & GUTTER 18 INCH TYPE A REJECT LF	601.0409 CONCRETE CURB & GUTTER 30 INCH TYPE A LF	601.0409 CONCRETE CURB & GUTTER 30 INCH TYPE A REJECT LF	601.0413 CONCRETE CURB & GUTTER 6 INCH SLOPED 30-INCH TYPE G LF	601.0415 CONCRETE CURB & GUTTER 6 INCH SLOPED 30-INCH TYPE J LF	601.0551 CONCRETE CURB & GUTTER 4 INCH SLOPED 36-INCH TYPE A LF	601.0576 CONCRETE CURB & GUTTER 4 INCH SLOPED 30-INCH TYPE J LF	601.0580 CONCRETE CURB & GUTTER 4 INCH SLOPED 36-INCH TYPE R LF	601.0584 CONCRETE CURB & GUTTER 4 INCH SLOPED 30-INCH TYPE TB LF	601.0600 CONCRETE CURB PEDESTRIAN LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	STH 20																	
		20+75	-	22+00	RT/LT	2	--	--	--	--	--	--	--	--	--	110	--	--
		50+53	-	53+47	LT	--	--	--	--	--	--	294	--	--	--	--	--	--
		10'EB'+00	-	30'EB'+12	MAINLINE	--	304	207	1,109	58	1,096	--	1,555	66	396	--	166	135
TOTALS						2	304	207	1,167		1,096	294	1,555	66	396	110	166	135

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										CULVERT PIPE												
						520.1018	520.3518	520.8700	522.0430	522.1030	522.2419	522.2619			611.0530	611.2005	633.5200	SPV.0060.07	*	
						APRON ENDWALLS FOR CULVERT PIPE 18-INCH	CULVERT PIPE CLASS III-B 18-INCH	CLEANING CULVERT PIPES	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	CULVERT PIPE REINFORCED HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	THICKNESS (INCHES)		MANHOLE COVERS TYPE J	MANHOLES 5-FT DIAMETER	MARKERS CULVERT END	UTILITY LINE OPENING (ULO)	JOINT TIES
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	EACH	LF	EACH	LF	EACH	LF	EACH	STEEL	ALUMINUM	EACH	EACH	EACH	EACH	(EACH)	
0010	STH 20																			
		20+84	-	55+10	MAINLINE	--	--	2	--	--	--	--	--	--	--	--	--	--	--	
		30+19	-	30+70	MAINLINE	--	--	--	--	--	90	1	--	--	1	1	1	2	3	
		55+10	-	55+14	MAINLINE	--	--	--	--	--	60	2	--	--	--	--	2	2	6	
		55+14	-	276+39	MAINLINE	--	--	6	86	2	--	--	--	--	--	--	2	2	6	
		295+12	-	390+03	MAINLINE	--	--	2	--	--	--	--	--	--	--	--	--	--	--	
		14'EB'+64	-	15'EB'+09	RT	--	44	--	--	--	--	--	0.064	0.060	--	--	--	--	--	
		23'EB'+20	-	23'EB'+82	RT	--	62	--	--	--	--	--	0.064	0.060	--	--	--	--	--	
		404+97	-	441+48	MAINLINE	--	--	3	--	--	--	--	--	--	--	--	--	--	--	
					SUBTOTAL	--	106	13	86	2	150	3			1	1	5	6	15	
	RAYNOR/USH 45																			
		45'NB'+24	-	45'NB'+74	RT	--	50	--	--	--	--	--	0.064	0.060	--	--	--	--	--	
		54'NB'+66	-	54'NB'+96	RT	2	30	--	--	--	--	--	0.064	0.060	--	--	--	--	--	
		55'NB'+51	-	55'NB'+83	LT	2	32	--	--	--	--	--	0.064	0.060	--	--	--	--	--	
		57'NB'+25	-	57'NB'+26	MAINLINE	--	--	--	--	--	64	2	--	--	--	--	2	--	6	
					SUBTOTAL	4	112	--	--	--	64	2			--	--	2	--	6	
TOTALS						4	218	13	86	2	214	5			1	1	7	6	21	

* FOR INFORMATION ONLY

3

STORM SEWER

CATEGORY	ROADWAY	STRUCTURE NUMBER	STATION	O/S	COVER ELEV	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 608.0312 12-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 608.0318 18-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 608.0415 15-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 608.0424 24-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 608.0427 27-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 608.2429 29X45-INCH LF	% SLOPE	PIPE TIES REQ'D EACH *
0010	STH 20												
		1.1	18+14	36.9' RT	--	--	--	--	88	--	--	3.61	2
		1.2	19+05	19' RT	802.26	--	--	--	--	22	--	1.70	--
		1.3	19+12	0.6' LT	802.45	--	--	--	--	--	184	0.66	--
		1.4	19+06	36.4' LT	802.42	--	--	20	--	--	--	0.23	--
		1.5	19+12	18.1' LT	802.56	--	--	18	--	--	--	4.49	--
		4.1	20+85	29.2' RT	800.95	20	--	--	--	--	--	0.31	--
		4.2	20+97	13.2' RT	800.90	--	--	--	--	--	50	0.85	--
		4.3	21+03	6.6' LT	800.94	--	20	--	--	--	--	0.18	--
		4.4	21+58	52' LT	800.76	--	64	--	--	--	--	0.18	--
		4.5	21+40	23.5' RT	800.56	--	--	--	--	--	326	0.75	--
		5.1	24+67	9.2' LT	797.42	--	--	8	--	--	--	0.23	--
		5.2	24+66	0.6' RT	797.43	--	--	--	--	--	52	0.71	--
		5.3	24+98	40.9' RT	--	--	--	--	--	--	--	--	2
	RAYNOR/USH 45												
		3.1	50+94	64.1' LT	801.52	18	--	--	--	--	--	0.67	--
		3.2	50+85	52.8' LT	801.43	--	--	36	--	--	--	0.23	--
		3.3	50+32	49.8' LT	--	--	--	54	--	--	--	4.17	2
		3.4	50+71	20.3' LT	801.94	--	--	20	--	--	--	0.23	--
		3.5	50+11	32.5' RT	--	--	--	52	--	--	--	4.51	2
		3.6	50+64	18.6' RT	801.52	--	--	126	--	--	--	0.55	--
		3.7	50+72	0.7' LT	801.57	--	--	20	--	--	--	0.23	--
		16.1	53+16	46.7' LT	801.39	--	--	72	--	--	--	0.25	--
		16.2	53+00	22.8' RT	801.21	--	--	152	--	--	--	0.34	--
		17.1	54+52	14.4' LT	800.55	--	--	174	--	--	--	0.28	--
		17.2	54+53	3.6' LT	800.69	--	--	10	--	--	--	1.40	--
		18.1	56+27	5.5' LT	799.99	--	--	8	--	--	--	0.23	--
		18.2	56+26	1.3' LT	800.07	--	--	43	--	--	--	0.40	--
		18.3	56+26	42' RT	--	--	--	--	--	--	--	--	--
TOTAL						38	84	813	88	22	612		

*FOR INFORMATION ONLY

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\030201-MQ.DWG LAYOUT NAME - 05 PLOT DATE : 1/27/2022 2:34 PM PLOT BY : BEN KROLCZYK PLOT NAME : PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

3

STORM SEWER

CATEGORY	ROADWAY	STRUCTURE NUMBER	STATION	O/S	COVER ELEV	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 522.1015 15-INCH EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 522.1024 24-INCH EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 522.2629 29X45-INCH EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.1004 CATCH BASINS 4-FT DIA EACH	611.1006 CATCH BASINS 6-FT DIA EACH	SPV.0060.01 CATCH BASINS 7-FT DIA EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	*** DEPTH FT	FROM STRUCTURE	TO STRUCTURE	INLET ELEV	DISCH ELEV
0010	STH 20																		
		1.1	18+14	36.9' RT	--	--	1	--	--	--	--	--	--	--	--	1.1	1.2	--	800.00
		1.2	19+05	19' RT	802.26	--	--	--	--	--	1	--	1	--	7.13	1.2	1.3	794.80	796.57
		1.3	19+12	0.6' LT	802.45	--	--	--	--	--	--	1	--	1	7.42	1.3	4.2	794.70	796.49
		1.4	19+06	36.4' LT	802.42	--	--	--	--	1	--	--	1	--	5.99	1.4	1.5	796.10	797.80
		1.5	19+12	18.1' LT	802.56	--	--	--	--	1	--	--	--	1	6.18	1.5	1.3	796.05	797.75
		4.1	20+85	29.2' RT	800.95	--	--	--	1	--	--	--	1	--	5.68	4.1	4.2	794.94	796.61
		4.2	20+97	13.2' RT	800.90	--	--	--	--	--	--	1	1	--	7.92	4.2	4.5	792.94	794.73
		4.3	21+03	6.6' LT	800.94	--	--	--	--	1	--	--	1	--	6.56	4.3	4.2	794.05	795.76
		4.4	21+58	52' LT	800.76	--	--	--	--	1	--	--	1	--	6.26	4.4	4.3	794.17	795.88
		4.5	21+40	23.5' RT	800.56	--	--	--	--	--	--	1	--	1	7.71	4.5	5.2	792.52	794.31
		5.1	24+67	9.2' LT	797.42	--	--	--	1	--	--	--	1	--	5.69	5.1	5.2	791.40	793.10
		5.2	24+66	0.6' RT	797.43	--	--	--	--	--	--	1	1	--	7.06	5.2	5.3	790.04	791.83
		5.3	24+98	40.9' RT	--	--	--	1	--	--	--	--	--	--	--	5.3	--	791.60	--
	RAYNOR/USH 45																		
		3.1	50+94	64.1' LT	801.52	--	--	--	1	--	--	--	1	--	5.68	3.1	3.2	795.51	797.18
		3.2	50+85	52.8' LT	801.43	--	--	--	--	1	--	--	1	--	5.99	3.2	3.4	795.11	796.81
		3.3	50+32	49.8' LT	--	1	--	--	--	--	--	--	--	--	--	3.3	3.4	--	798.98
		3.4	50+71	20.3' LT	801.94	--	--	--	--	1	--	--	--	1	6.58	3.4	3.7	795.03	796.73
		3.5	50+11	32.5' RT	--	1	--	--	--	--	--	--	--	--	--	3.5	3.6	--	799.24
		3.6	50+64	18.6' RT	801.52	--	--	--	--	1	--	--	--	1	6.25	3.6	4.5	794.94	796.64
		3.7	50+72	0.7' LT	801.57	--	--	--	--	1	--	--	--	1	6.26	3.7	3.6	794.98	796.68
		16.1	53+16	46.7' LT	801.39	--	--	--	--	1	--	--	1	--	5.99	16.1	16.2	795.07	796.77
		16.2	53+00	22.8' RT	801.21	--	--	--	--	1	--	--	1	--	5.99	16.2	17.2	794.89	796.59
		17.1	54+52	14.4' LT	800.55	--	--	--	--	1	--	--	1	--	5.99	17.1	18.2	794.23	795.93
		17.2	54+53	3.6' LT	800.69	--	--	--	--	1	--	--	1	--	5.99	17.2	17.1	794.37	796.07
		18.1	56+27	5.5' LT	799.99	--	--	--	--	1	--	--	1	--	5.99	18.1	18.2	793.67	795.37
		18.2	56+26	1.3' LT	800.07	--	--	--	--	1	--	--	1	--	6.09	18.2	18.3	793.65	795.35
		18.3	56+26	42' RT	--	1	--	--	--	--	--	--	--	--	--	18.3	--	795.18	--
TOTAL						3	1	1	3	14	1	4	16	6					

***STRUCTURE DEPTH DOES NOT INCLUDE 6 INCHES OF ADJUSTMENT RINGS

3

3

CONCRETE SIDEWALK

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
0010	STH 20							
		10'EB'+00	-	30'EB'+12	ROUNDABOUT	1,572	13,800	320
	TOTALS					1,572	13,800	320

EROSION CONTROL

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	606.0200 RIP RAP MEDIUM CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EA	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EA	628.7015 INLET PROTECTION TYPE C EA	628.7020 INLET PROTECTION TYPE D EA	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EA	628.7560 TRACKING PADS EA	628.7570 ROCK BAGS EA	631.1100 SOD EROSION CONTROL SY	645.0120 GEOTEXTILE TYPE HR SY	SPV.0090.01 HEAVY DUTY SILT FENCE LF
0010	STH 20																		
		3+39	-	20+22	LT/RT	--	--	600	1	1	8	--	--	--	--	17	--	--	600
		20+84	-	276+39	LT/RT	9	400	1,000	1	1	--	--	--	--	--	--	--	18	600
		295+12	-	390+03	LT/RT	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10'EB'+00	-	30'EB'+12	ROUNDABOUT	--	1,507	1,507	2	2	17	5	550	44	4	36	19	--	--
		404+97	-	441+48	LT/RT	--	392	392	1	1	--	--	--	12	--	--	--	--	--
					SUBTOTAL	9	2,299	3,499	5	5	25	5	550	56	4	53	19	18	1,200
					UNDISTRIBUTED	3	575	875	1	1	6	1	138	14	1	13	5	4	300
TOTALS						12	2,874	4,374	6	6	31	6	688	70	5	66	23	22	1,500

ADJUSTING MANHOLES

CATEGORY	ROADWAY	STATION	O/S	320.0170 CONCRETE BASE 10 1/2-INCH SY	611.0420 RECONSTRUCTING MANHOLES EA	611.8110 ADJUSTING MANHOLE COVERS EA	611.8120.S COVER PLATES TEMPORARY EA	SPV.0060.04 SANITARY MANHOLE FRAME AND GRATE EA	SPV.0060.05 SANITARY CHIMNEY SEALS EA
0010	STH 20								
		3+52	16' RT	3	--	1	1	--	--
		6+18	16' RT	3	--	1	1	--	--
		11+52	17' RT	3	--	1	1	--	--
		14+53	14' RT	3	--	1	1	--	--
		15+18	14' RT	3	--	1	1	--	--
		SUBTOTAL		15	--	5	5	--	--
0010	RAYNOR/USH 45								
		56+87	50' LT	--	1	--	--	--	--
		56+90	35' RT	3	--	1	1	--	--
		SUBTOTAL		3	1	1	1	--	--
0030	STH 20								
		6+00	18' LT	--	--	--	1	1	1
		SUBTOTAL		--	--	--	1	1	1
	TOTAL			18	1	6	7	1	1

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UNDERDRAIN

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	310.0110 BASE AGGREGATE OPEN GRADED TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0700 DRAIN TILE EXPLORATION LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY	SPV.0060.02 FIELD LOCATE AND ADJUST DRAIN TILE EACH
0010	STH 20									
		50+53	-	53+47	LT	700	294	--	294	--
		10'EB"+00	-	30'EB'+12	MAINLINE	--	552	452	307	1
					SUBTOTAL	700	846	452	601	1
					UNDISTRIBUTED		212	--	150	--
	TOTALS					700	1,058	452	751	1

GUARDRAIL

CATEGORY	ROADWAY	STATION		STATION	O/S	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	614.0370 STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL EACH	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	STH 20										
		17+00	-	20+24	LT/RT	2	--	198	275	78.79	2
		20+82	-	22+56	LT/RT	2	--	139	125	78.79	2
		419+98	-	424+50	LT/RT	3	3	--	--	--	--
	TOTAL					7	3	338	400	157.58	4

RESTORATION

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6505 SOIL STABILIZER TYPE A ACRE	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
0010	STH 20														
		3+39	-	20+22	LT/RT	--	--	--	--	--	0.00	0.00	--	--	--
		20+84	-	276+39	LT/RT	193	193	386	386	327	0.08	0.24	11	11	9
		295+12	-	390+03	LT/RT	--	--	--	--	--	--	--	--	--	--
		10'EB'+00	-	30'EB'+12	ROUNDABOUT	8,990	8,990	8,990	8,990	--	3.71	11.33	486	486	404
	SUBTOTAL					9,183	9,183	9,376	9,376	327	3.79	11.57	497	497	412
	UNDISTRIBUTED					2,300	2,300	2,350	2,350	90	0.95	2.89	124	124	103
	TOTAL					11,483	11,483	11,726	11,726	417	4.74	14.46	621	621	516

TYPE II SIGN REMOVAL **2340-10-70 sth 20**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
1R	W2-1		1	1	
2R	W2-1		1	1	
3R	J2-3		1	2	
4R	R7-1L		1	1	
5R	D1-3		1	2	
6R	R7-1D		1	1	
7R	D2-1		1	2	
8R	R7-1D		1	1	
9R	S3-1		1	1	
10R	R2-1		1	1	INCLUDES REMOVAL OF W14-3
11R	R7-1R		1	1	
12R	NOT USED				
13R	J3-2		1	1	
14R	R7-1R		1	1	
15R	R1-1		1	1	REMOVE W4-4C ALSO. PART OF SAME PAY ITEM
16R	JV4-1		1	1	
17R	J3-1		1	1	
18R	R1-2		1	1	
19R	R1-1		1	1	
20R	J3-1		1	1	
21R	R7-1L		1	1	
22R	R1-1		1	1	REMOVE W4-4C ALSO. PART OF SAME PAY ITEM
23R	J3-3		1	2	
24R	W14-3		1	1	
25R	R2-1		1	1	
26R	W2-1		1	1	
27R	W2-1		1	1	
28R	D1-2		1	2	
29R	J2-2		1	1	
30R	W3-1		1	1	

3

TYPE II SIGN REMOVAL **2340-10-70 sth 20**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
31R	R12-53		1	1	
32R	D2-1		1	1	
33R	R2-1		1	1	W14-3 REMOVAL PART OF SAME PAY ITEM
34R	D1-3		1	2	
35R	J2-3		1	2	
36R	W14-3		1	1	
37R	W3-1		1	1	
38R	J1-1		1	1	
TOTALS			37 *	44 *	

* ADDITIONAL QTYS SHOWN ELSEWHERE

3

SHEET 2 OF 2

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – SIGNING REMOVALS	SHEET:	E

TYPE II PERMANENT SIGNING -

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	D1-1(2S)	ROCHESTER (ARROW RIGHT)	72	x	15	7.500		1	2	2						
2	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
3	W1-8(2S)		18	X	24		3.000								2	4 FOOT MOUNTING HEIGHT
4	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
5	W1-8(2S)		18	X	24		3.000								4	4 FOOT MOUNTING HEIGHT
6	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
7	W1-8(2S)		18	X	24		3.000								6	4 FOOT MOUNTING HEIGHT
8	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
9	W1-8(2S)		18	X	24		3.000								8	4 FOOT MOUNTING HEIGHT
10	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
11	W1-8(2S)		18	X	24		3.000								10	4 FOOT MOUNTING HEIGHT
12	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
13	W1-8(2S)		18	X	24		3.000								12	4 FOOT MOUNTING HEIGHT
14	J3-1(2S)		24	X	45	7.500		1	1	1						
	M1-5A	CTH D	24	X	24											
	M6-1		21	X	21											
15	I55-56								1	1			1			
16	R1-1(2S)		30	X	30	6.250		1	1	1						
17	W1-6(2S)		48	X	24		8.000	1	1	1						
18	J13-1(2S)		24	X	45	7.500		1	1	1						
	M1-6	STH 20	24	X	24	4.000										
	M6-4		21	X	21											
19	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
20	W1-8(2S)		18	X	24		3.000								19	4 FOOT MOUNTING HEIGHT
21	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
22	W1-8(2S)		18	X	24		3.000								21	4 FOOT MOUNTING HEIGHT
23	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
24	W1-8(2S)		18	X	24		3.000								23	4 FOOT MOUNTING HEIGHT
25	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
26	W1-8(2S)		18	X	24		3.000								25	4 FOOT MOUNTING HEIGHT
27	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
28	W1-8(2S)		18	X	24		3.000								27	4 FOOT MOUNTING HEIGHT
29	W1-8(2S)		18	X	24		3.000	1	1	1						4 FOOT MOUNTING HEIGHT
30	W1-8(2S)		18	X	24		3.000								29	4 FOOT MOUNTING HEIGHT

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

TYPE II PERMANENT SIGNING -

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
31	W1-2R(2S)		30	X	30		6.250	1	1	1						
31A	W13-1(2S)	40 MPH	18	X	18		2.250								31	
32	W1-2R(2S)		30	X	30		6.250	1	1	1						
32A	W13-1(2S)	40 MPH	18	X	18		2.250								32	
33	D1-2(2S)	ROCHESTER ARROW LEFT WATERFORD ARROW RIGHT	72	x	30	15.000		1	2	2						
34	J2-1(2S)		24	X	45	7.500		1	1	1						
	M1-5A	CTH D	24	X	24											
	M5-1L		21	X	21											
35	I55-56								1	1			1			
36	J1-1(2S)		24	X	39	6.500		1	1	1						
	M2-1		24	X	15											
	M1-5A	CTH D	24	X	24											
37	W1-6(2S)		48	X	24		8.000			1						
38	W1-6(2S)		48	X	24		8.000			1						
39	W1-7(2S)		48	X	24		8.000			1						
40	W1-2R(2S)		30	X	30		6.250			1						
41	W1-6(2S)		48	X	24		8.000			1						
42	W1-6(2S)		48	X	24		8.000			1						
43	W1-6(2S)		48	X	24		8.000			1						
44	W1-6(2S)		48	X	24		8.000			1						
45	W6-3(2S)		36	X	36		9.000			1						
46	W1-6(2S)		48	X	24		8.000			1						
47	W1-6(2S)		48	X	24		8.000			1						
48	D1-61(2S)		60	x	24	10.000				2						
49	W1-6(2S)		48	X	24		8.000			1						
50	W1-6(2S)		48	X	24		8.000			1						
51	W23-2(2S)		36	X	36		9.000			1						
52	W2-6(2S)		30	X	30		6.250			1						16 X 16 TEMPORARY FLAGS INCIDENTAL
52A	W13-1(2S)	15 MPH	18	X	18		2.250								52	
53	D1-62	ROUNDABOUT DIAGRAMMATIC	144	x	78						3			78		
54	W6-3(2S)		36	X	36		9.000			1						
55	D2-1(2S)	WATERFORD 9	72	x	15	7.500				2						
56	R7-1L(2S)		18	X	24	3.000				1						
57	NOT USED															
58	D1-4(2S)	UNION GROVE (AHEAD ARROW RACINE (AHEAD ARROW0	84	x	48	28.000				2						
		MILWAUKEE (LEFF ARROW) MUSKEGO (LEFT ARROW)														
59	R7-1D(2S)		18	X	24	3.000				1						
60	R4-7(2S)		24	X	30	5.000				1						
60A	W5-54(2S)		18	X	18		2.250								60	

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
61	R7-1D)2S)		18	X	24	3.000				1						
62	R5-1(2S)		30	X	30	6.250									61	
63	S3-1(2S)		36	X	36		9.000			1						
64	R2-1(2S)	SPEED LIMIT 55	24	X	30	5.000				1						
65	R7-1R(2S)		18	X	24	3.000				1						
66	W14-3(2S)		48	X	36		5.560			1						
67	NOT USED															
68	D1-1(2S)	N RAYNOR AVE (TILT ARROW RIGHT	90	x	15	9.375						2				
69	R7-1R(2S)		18	X	24	3.000						1				
70	W11-2(2S)		30	X	30		6.250					1				
70A	W16-7L(2S)		24	X	12		2.000								70	
71	W11-2(2S)		30	X	30		6.250					1				
71A	W16-7L(2S)		24	X	12		2.000								71	
72	R1-2(2S)		36	X	31	3.875						1				
73	R1-54(2S)		24	X	15	2.500									72	
74	R1-6(2S)		12	X	36	3.000						1				2 FOOT HEIGHT
75	R1-6(2S)		12	X	36	3.000									74	2 FOOT HEIGHT
76	R1-2(2S)		36	X	31	3.875						1				
77	R1-2(2S)		36	X	31	3.875						1				
78	R1-54(2S)		24	X	15	2.500									77	
79	W11-2(2S)		30	X	30		6.250					1				
79A	W16-7L(2S)		24	X	12		2.000								79	
80	W11-2(2S)		30	X	30		6.250					1				
80A	W16-7L(2S)		24	X	12		2.000								80	
81	R1-6(2S)		12	X	36	3.000						1				2 FOOT HEIGHT
82	R1-6(2S)		12	X	36	3.000									81	2 FOOT HEIGHT
83	D1-1(2S)	SOUTH 45 , EAST 20 TILT ARROW RIGHT	66	x	30	13.750						2				
84	JV4-1(2S)		24	X	72	12.000				1						
85	W11-2(2S)		30	X	30		6.250					1				
85A	W16-7L(2S)		24	X	12		2.000								85	
86	R1-2(2S)		36	X	31	3.875						1				
87	R1-2(2S)		36	X	31	3.875						1				
88	R1-54(2S)		24	X	15	2.500									87	
89	W11-2(2S)		30	X	30		6.250					1				
89A	W16-7L(2S)		24	X	12		2.000								89	
90	D1-1(2S)	NORTH 45 (TILT ARROW RIGHT)	42	x	30	8.750						2				

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	634.0622 WOOD POSTS 4"X6"X22' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
91	R1-6(2S)		12	X	36	3.000						1				2 FOOT HEIGHT
92	R1-6(2S)		12	X	36	3.000									91	2 FOOT HEIGHT
93	R1-2(2S)		36	X	31	3.875						1				
94	R1-54(2S)		24	X	15	2.500									93	
95	W11-2(2S)		30	X	30		6.250					1				
95A	W16-7L(2S)		24	X	12		2.000								95	
96	W11-2(2S)		30	X	30		6.250					1				
96A	W16-7L(2S)		24	X	12		2.000								96	
97	J4-1(2S)		24	X	36	6.000						1				
	M3-4		24	X	12											
	M1-6	STH 20	24	X	24											
98	R7-1L(2S)		18	X	24	3.000									97	
99	R1-6(2S)		12	X	36	3.000						1				2 FOOT HEIGHT
100	R1-6(2S)		12	X	36	3.000									99	2 FOOT HEIGHT
101	D1-1(2S)	WEST 20 (TILT ARROW RIGHT)	42	x	30	8.750						2				
102	R1-2(2S)		36	X	31	3.875						1				
103	R6-1L(2S)		36	X	12	3.000						2				
104	R6-1L(2S)		36	X	12	3.000						2				
105	R6-1L(2S)		36	X	12	3.000						2				
106	R6-1L(2S)		36	X	12	3.000						2				
107	R6-4B(2S)		60	X	24	10.000									103	4 FOOT HEIGHT
108	R6-4B(2S)		60	X	24	10.000									104	4 FOOT HEIGHT
109	R6-4B(2S)		60	X	24	10.000									105	4 FOOT HEIGHT
110	R6-4B(2S)		60	X	24	10.000									106	4 FOOT HEIGHT
111	R1-2(2S)		36	X	31	3.750						1				
112	R4-7(2S)		24	X	30	5.000				1						
113	R4-7(2S)		24	X	30	5.000				1						
114	R3-4(2S)		24	X	24	4.000									122	
115	NOT USED															
116	R5-1(2S)		30	X	30	6.250				1						
117	D2-3(2S)	UNION GROVE 5 MT PLEASANT 6 RACINE 12	84	x	36	21.000				2						
118	W14-3(2S)		48	X	36		5.560			1						
119	NOT USED															
120	W14-3(2S)		48	X	36		5.560			1						

TYPE II PERMANENT SIGNING -

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121	D1-3(2S)	WATERFORD (AHEAD ARROW) MUSKEGO, MILWAUKEE ARROW LEFT	72	x	36	18.000				2						
122	R4-7(2S)		24	X	30	5.000				1						
122A	W5-54(2S)		18	X	18		2.250									
123	R3-4(2S)		24	X	24	4.000									112	
124	R3-4(2S)		24	X	24	4.000									60	
125	R2-1(2S)	SPEED LIMIT 55	24	X	30	5.000				1						
126	J1-1(2S)		48	X	39	13.000				1						
	M2-1		24	X	15											
	M1-4	USH 45	24	X	24											
	M2-1		24	X	15											
	M1-6	STH 20	24	X	24											
127	W23-2(2S)		36	X	36		9.000			1						
128	W2-6(2S)		30	X	30		6.250			1						16 X 16 TEMP FLAGS INCIDENTAL
128A	W13-1(2S)	15 MPH	18	X	18		2.250								128	
129	D1-62	DIAGRAMMATIC SIGN	132	x	66						3			60.50		
130	W6-3(2S)		36	X	36		9.000			1						
131	R4-7(2S)		24	X	30	5.000				1						
131A	W5-54(2S)		18	X	18		2.250								131	
132	R5-1(2S)		30	X	30	6.250									130	
133	R12-53(2S)		24	X	30	5.000				1						
134	D1-5(2S)	MILW, MUSKEGO (ARROW UP) WATERFORD (ARROW LEFT) UNION GROVE (ARROW RIGHT	84	x	60	35.000				2						
135	R4-7(2S)		24	X	30	5.000						1				
136	R4-7(2S)		24	X	30	5.000				1						
137	NOT USED															
138	D2-1(2S)	MILWAUKEE 19	78	x	15	8.175				2						
139	R5-1(2S)		30	X	30	6.250				1						
140	R4-7(2S)		24	X	30	5.000				1						
141	J4-1(2S)		24	X	36	6.000				1						
	M3-1		24	X	12											
	M1-4	USH 45	24	X	24											
142	I55-56								1	1			1			
143	NOT USED															
144	R2-1(2S)	SPEED LIMIT 55	24	X	30	5.000				1						
145	W14-3(2S)		48	X	36		5.560			1						
146	W14-3(2S)		48	X	36		5.560			1						
147	W6-3(2S)		36	X	36		9.000			1						
148	D1-62	DIAGRAMMATIC SIGN	132	x	72						3			66		
149	D1-3(2S)	UNION GROVE (ARROW LEFT) RACINE (ARROW LEFT) WATERFORD (ARROW RIGHT)	84	x	36	21.000				2						
150	J1-1(2S)		24	X	39	6.500				1						
	M2-1		21	X	15											
	M1-6	STH 20	24	X	24											

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

TYPE II PERMANENT SIGNING -

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151	W23-2(2S)		36	X	36		9.000			1						
152	W6-2(2S)		30	X	30		6.250			1						16 X 16 TEMP FLAGS INCIDENTAL
152A	W13-1(2S)	15 MPH	18	X	18		2.250								152	
153	W6-3(2S)		36	X	36		9.000			1						
154	J1-1(2S)		24	X	39	6.500				1						
	M2-1		24	X	15											
	M1-4	USH 45	24	X	24											
155	W23-2(2S)		36	X	36		9.000			1						
156	W2-6(2S)		30	X	30		6.250			1						16 X 16 TEMP FLAGS INCIDENTAL
156A	W13-1(2S)	15 MPH	18	X	18		2.250									
157	D1-62	DIAGRAMMATIC SIGN	144	x	66						3			66		
158	NONE	ENGINE BRAKING SIGN - PERMIT							1	1			1			PERMIT SIGN TO CITY
159	W6-3(2S)		36	X	36		9.000			1						SHEET 21
160	I2-3								2	2			1			
161	W1-2R(2S)		30	X	30		6.250	1	1	1						SHEET 4
TOTALS						532.925	431.050	23 *	31 *	101	12	39	5	270.5		

* ADDITIONAL QTYS SHOWN ELSEWHERE

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

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TRAFFIC CONTROL

CATEGORY	ROADWAY	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS DAY	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	643.1000 FIXED MESSAGE SF	643.1050 SIGNS PCMS DAY
0010									
	CTH D & STH 20	190	190	380	285	--	3	--	--
	SHARP RD & STH 20	190	190	380	285	--	1	--	--
	MEALY RD & STH 20	190	190	380	285	--	1	--	--
	CTH N & STH 20	190	190	380	285	--	2	--	--
	STH 75/BEAUMOUNT AVE & STH 20	190	380	760	380	4	4	36	--
	N BRITTON RD & STH 20	190	380	760	570	--	2	--	--
	USH 45/RAYNOR RD & STH 20	190	380	760	570	1	4	--	--
	STH 36 & STH 20	190	475	570	1,995	--	8	--	28
	STH 83	190	--	--	760	--	--	--	--
	STH 83 & STH 11	190	--	--	1,520	--	--	--	--
	STH 11	190	--	4,370	760	--	--	--	--
	STH 11 & USH 45	190	--		1,520	--	--	--	--
	USH 45 & STH 20	190	475	570	1,995	3	5	90	28
	USH 45/RAYNOR RD & STH 20	190	950	1,140	190	--	5	--	28
	USH 45 & STH 36	190	--	--	1,045	--	12	--	--
	STH 36 & STH 100	190	--	--	1,900	--	--	--	--
	STH 100 & IH 41/94	190	--	--	1,520	--	--	--	--
	IH 41/94 & STH 20	190	--	--	1,520	--	--	--	--
	STH 20 & USH45/NORTH COLONY AVE	190	475	570	1,235	1	--	--	28
	SUBTOTAL	3,610	4,275	11,020	18,620	9	47	126	112
	UNDISTRIBUTED	903	1,070	2,760	4,660	2	12	32	28
	TOTAL	4,513	5,345	13,780	23,280	11	59	158	140

*ONE CYCLE FOR ALL SIGN COVERINGS

PAVEMENT MARKING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY TYPE 2 EA	646.5120 MARKING WORD EPOXY EA	646.5520 MARKING OUTFALL EPOXY EA	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.6320 MARKING DOTTED LINE EXTENSION EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.8220 MARKING ISLAND NOSE EPOXY EA	648.0100 LOCATING NO PASSING ZONES MI	SPV.0060.03 MARKING CONTRAST EPOXY WORDS EACH
0010	STH 20																	
		3+39	-	20+22	LT/RT	3,370	3,370	--	300	2	1	--	--	--	--	--	--	--
		20+84	-	276+39	LT/RT	51,200	51,200	--	450	4	1	82	72	--	150	--	4.84	--
		295+12	-	390+03	LT/RT	19,000	19,000	--	--	--	--	21	--	--	--	--	1.80	--
		10'EB'+00	-	30'EB'+12	ROUNDABOUT	9,782	5,539	141	--	2	--	--	--	95	528	5	--	4
		404+97	-	441+48	LT/RT	7,310	7,310	--	--	--	--	--	--	--	--	--	0.69	--
	TOTALS					90,662	86,419	141	750	8	2	103	72	95	678	5	7.33	4

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CONSTRUCTION STAKING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	650.4000 CONSTRUCTION STAKING STORM SEWER EA	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB AND GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EA	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATION 2340-10-70 LS	650.9000 CONSTRUCTION STAKING CURB RAMPS EA	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 2340-10-70 LS	650.9920 CONSTRUCTION STAKING SLOPES STAKES LF
0010	STH 20															
		3+39	-	20+22	LT	--	--	--	--	--	--	1,690	--	--	1	--
		20+84	-	276+39	LT/RT	--	--	294	294	1	--	25,600	--	--	--	294
		295+12	-	390+03	LT/RT	--	--	--	--	--	--	9,500	--	--	--	--
		10'EB'+00	-	19'EB'+55	ROUNDABOUT	5	955	955	726	1	955	--	1	4	--	955
		90'CIR'+00	-	94'CIR'+09	ROUNDABOUT	3	743	743	726	--	409	--	--	--	--	409
		21'EB'+23	-	30'EB'+12	ROUNDABOUT	5	889	889	726	1	889	--	--	4	--	889
		44'NB'+61	-	51'NB'+15	ROUNDABOUT	7	654	654	726	--	654	--	--	4	--	654
		52'NB'+82	-	59'NB'+44	ROUNDABOUT	7	662	662	726	3	666	--	--	4	--	666
		404+97	-	441+48	LT/RT		--	--	--	--	--	3,660	--	--	--	--
TOTALS						27	3,903	4,197	3,923	6	3,573	40,450	1	16	1	3,867

CONDUIT

LOCATION	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	REMARKS
CABINET-PB101	--	20	
PB101-PB102	--	140	
PB102-PB103	--	105	
PB104-PB105	--	100	
PB105-PB106	--	155	
PB106-PB101	--	100	
ARW101-PB102	75	--	
ARW102-PB102	20	--	
ARW102-ARW103	140	--	
ARW103-ARW104	175	--	
PB103-BRW105	50	--	
BRW105-BRW106	75	--	
BRW106-BRW107	175	--	
PB106-DRW112	10	--	
DRW112-DRW111	105	--	
PB106-DRW113	155	--	
DRW113-DRW114	135	--	
CRW108-CRW109	70	--	
CRW109-PB104	10	--	
PB104-CRW110	180	--	
PB12	10	--	TRAFFIC SIGNAL
PB13-EXISTING	50	--	TRAFFIC SIGNAL
TOTAL	1,435	620	

LOOP DETECTORS

LOCATION	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF	REMARKS
LOOP 81	70	825	375	
LOOP 82	70	660	300	
TOTAL	140	1,485	675	

PULL BOXES

STATION	OFFSET	LOCATION	653.0905 REMOVING PULL BOXES EACH	653.0140 PULL BOXES STEEL 24X42-INCH EACH	REMARKS
21'EB'+86	35' RT	PB101	--	1	
50'NB'+89	38' RT	PB102	--	1	
50'NB'+76	65' LT	PB103	--	1	
53'NB'+53	49' LT	PB104	--	1	
53'NB'+35	44' RT	PB105	--	1	
21'EB'+99	55' LT	PB106	--	1	
4+79	30' RT	--	1	--	TRAFFIC SIGNAL
4+99	30' RT	PB12	--	1	TRAFFIC SIGNAL
6+09	30' RT	--	1	--	TRAFFIC SIGNAL
6+49	30' RT	PB13	--	1	TRAFFIC SIGNAL
TOTAL			2	8	

3

LIGHTING STRUCTURES

STATION	STATION	OFFSET	LOCATION	654.0105 CONCRETE BASES TYPE 5 EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT EACH	659.1115 LUMINAIRES UTILITY LED A EACH
21'EB'+23	--	42' RT	ARW101	1	145	1	1	1	1
50'NB'+59	--	33' RT	ARW102	1	145	1	1	1	1
49'NB'+20	--	19' RT	ARW103	1	145	1	1	1	1
47'NB'+61	--	19' RT	ARW104	1	145	1	1	1	1
50'NB'+99	--	92' LT	BRW105	1	145	1	1	1	1
19'EB'+00	--	34' RT	BRW106	1	145	1	1	1	1
17'EB'+25	--	24' RT	BRW107	1	145	1	1	1	1
53'NB'+09	--	46' LT	CRW108	1	145	1	1	1	1
53'NB'+47	--	47' LT	CRW109	1	145	1	1	1	1
55'NB'+30	--	43' LT	CRW110	1	145	1	1	1	1
52'NB'+83	--	40' RT	DRW111	1	145	1	1	1	1
21'EB'+90	--	54' RT	DRW112	1	145	1	1	1	1
23'EB'+45	--	41' LT	DRW113	1	145	1	1	1	1
24'EB'+76	--	37' LT	DRW114	1	145	1	1	1	1
TOTAL				14	2,030	14	14	14	14

ELECTRICAL WIRE LIGHTING

FROM	TO	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
CABINET	ARW102	675
ARW102	ARW101	375
ARW102	ARW103	450
ARW103	ARW104	525
CABINET	BRW105	1110
BRW105	BRW106	330
BRW106	BRW107	555
CABINET	CRW109	1305
CRW109	CRW108	240
CRW109	CRW110	645
CABINET	DRW112	495
DRW112	DRW113	330
DRW112	DRW113	555
DRW113	DRW114	435
TOTAL		8,025

LIGHTING CABINET

STATION	STATION	OFFSET	LOCATION	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) L-51-RW LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
21'EB'+84	--	46' RT	CABINET	1	1	1
TOTAL				1	1	1

SAWING EXISTING PAVEMENT

CATEGORY	ROADWAY	STATION	-	STATION	690.0150 ASPHALT LF
0010	STH 20				
		3+39	-	20+22	44
		20+84	-	276+39	206
		295+12	-	390+03	120
		10'EB'+00	-	30'EB'+12	222
		404+97	-	441+48	30
	TOTALS				622

3

3

SECTION CORNER MONUMENT

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	SPV.0060.06 SECTION CORNER MONUMENTS EACH
0010	STH 20					
		20+84	-	276+39	LT/RT	1
		295+12	-	390+03	LT/RT	1
		10'EB'+00	-	30'EB'+12	ROUNDABOUT	1
		404+97	-	441+48	LT/RT	1
	TOTAL					4

DITCHING AND SHAPING

								(FOR INFORMATION ONLY) COMMON EXCAVATION	
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	SPV.0090.02 SPECIAL (02. DITCHING AND SHAPING) LF	630.0160 SEEDING MIXTURE NO. 60 LB	CUT CY	FILL CY
0010	STH 20								
		75+50	-	76+00	LT/RT	50	1	3	--
		108+50	-	110+50	LT/RT	200	3	6	--
		167+10	-	167+20	LT	10	1	2	--
		169+95	-	170+05	RT	10	1	2	--
		183+00	-	186+00	LT/RT	300	5	10	--
		228+10	-	228+20	LT	10	1	2	--
		361+88	-	364+82	RT	294	4	10	--
		406+67	-	416+00	RT	933	13	29	--
		436+00	-	436+50	LT/RT	50	1	3	--
	TOTAL					1857	30	67	0

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY NUMBER	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY, NAD 83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 MONUMENTS (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD."

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN (CITY).

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLES) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

EXISTING USH 45 AND RAYNOR AVENUE RIGHT-OF-WAY ESTABLISHED FROM PREVIOUS PROJECT T0807(6).

EXISTING STH 20 RIGHT-OF-WAY ESTABLISHED FROM PREVIOUS PROJECT T0807(6) AND 2340-02-20.

EXISTING STH 20 AND RAYNOR AVENUE ACCESS CONTROL ESTABLISHED FROM PREVIOUS PROJECT 2340-02-20.

EXISTING USH 45 ACCESS CONTROL ESTABLISHED FROM CONTROLLED ACCESS PROJECT 2340-01-29.

CAUTION
THIS PLAT IS FOR ILLUSTRATIVE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES.

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
2340-10-20		
FEDERAL PROJECT ID	4.01	

PLAT OF RIGHT OF WAY REQUIRED FOR

WASHINGTON AVE, TOWN DOVER
STH 36 TO SB USH 45

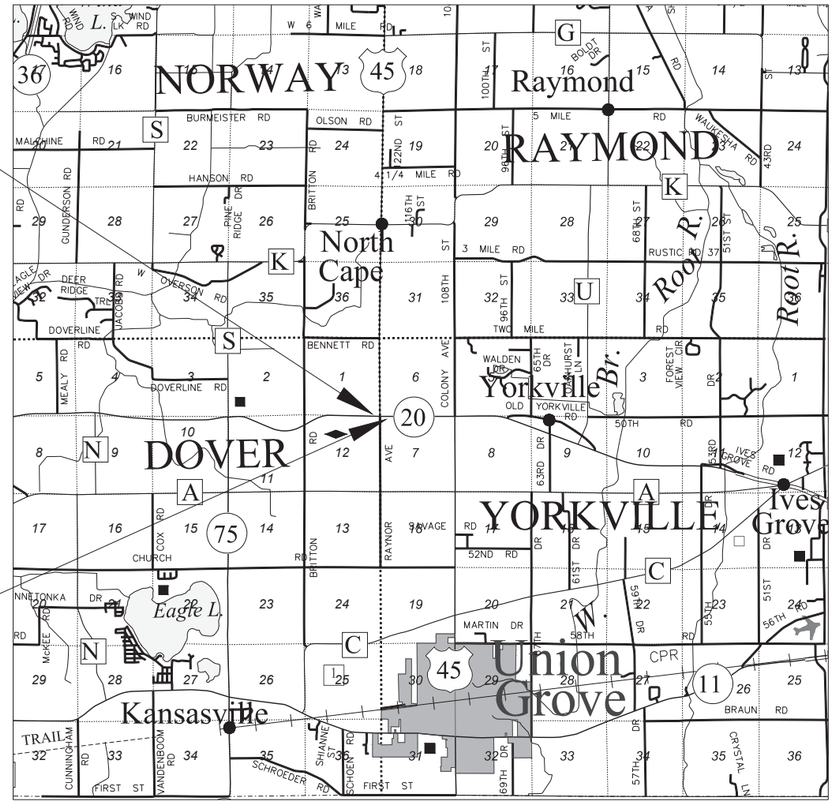
STH 20 — RACINE COUNTY

CONSTRUCTION PROJECT NUMBER: 2340-10-70

N

R-20-E ◄ ► R-21-E

T-4-N
T-3-N



BEGIN RELOCATION ORDER
STA 387+00.00
9.82' NORTH AND 992.23' WEST OF THE SE CORNER OF SEC 1, T-03-N, R-20-E

END RELOCATION ORDER
STA 407+00.00
2.36' NORTH AND 1,007' EAST OF THE SW CORNER OF SEC 6, T-03-N, R-21-E

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

LAYOUT SCALE 0 — 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.379 MILES

WISCONSIN SCOTT J. KOFFARNUS S-2782-006 MADISON WI LAND SURVEYOR

CORRE ENGINEERING
MADISON | OCONOMOWOC | EAU CLAIRE | GREEN BAY | WITTENBERG

REVISION DATE	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
09/07/2021	APPROVED FOR THE DEPARTMENT DATE: 10/16/20 (Signature)

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\040101-RP-2234.DWG
LAYOUT NAME - 040101-TI
PLOT DATE : 9/3/2021 4:02 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 50

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W ACRE(S) REQUIRED ACRE(S)			PLE (AC)	TLE (AC)
			NEW (AC)	EXISTING (AC)	TOTAL (AC)		
1 (2)	THOMAS P. LEMBCKE, LLC	FEE / TLE	0.54	0.46	1.00	---	0.27
2 (2)	SPANG TRUST JUDITH A.	FEE / TLE	1.14	0.23	1.37	---	0.41
3	DEPT TRANSPORTATION STATE OF WISCONSIN	FEE	0.01	---	0.01	---	---
4	CHERYL A. ABBOTT	FEE / TLE	0.08	---	0.08	---	0.08
5	ABBOTT TRUST CHERYL ANN	FEE	0.08	---	0.08	---	---
6 (2)	CINDY G. JOHNSON	PLE	---	---	---	0.08	---
7 (2)	JEFFERY S. & PATRICIA ERICKSON	PLE	---	---	---	0.17	---
8	GURDEV SINGH TRUST	TLE	---	---	---	---	0.002
UTILTIY NUMBER		INTERESTS REQUIRED					
80 (2)	ELIMINATED						
81	WE ENERGIES GAS	RELEASE OF RIGHTS					
82 (2)	AT&T WISCONSIN	RELEASE OF RIGHTS					

EXISTING ACCESS CONTROL FOR STH 20 AND RAYNOR AVENUE ESTABLISHED FROM PREVIOUS PROJECT 2340-02-20
EXISTING ACCESS CONTROL FOR USH 45 ESTABLISHED FROM CONTROLED ACCESS PROJECT 2340-01-29

HIGHWAY	BASIS OF EXISTING RW	YEAR	WIDTH
STH 20	T 0807(6)	1960	120', VARIES
STH 20	2340-02-20	1996	VARIES
RAYNOR AVE	2340-02-20	1996	49.5'
RAYNOR AVE (DOVER)	BY STATUTE	---	33'
RAYNOR AVE (YORKVILLE)	TOWN ROAD RECORD 1-135	1848	16.5'
USH 45	T0806(1)	1951	90'

COORDINATE POINT TABLE		
POINT	Y	X
PRW 10	191,572.03	562,087.09
PRW 11	191,379.81	562,401.72
PRW 12	191,567.66	562,612.30
PRW 13	191,734.05	562,418.41
PRW 14	191,367.01	562,420.47
PRW 15	190,765.46	562,422.38
PRW 100	191,496.13	562,085.94
PRW 101	191,468.98	562,156.30
PRW 102	191,473.66	561,846.34
PRW 103	191,502.38	561,846.77
PRW 104	191,379.76	562,387.42
PRW 105	190,765.35	562,389.38
PRW 106	190,765.27	562,363.38
PRW 107	191,389.81	562,361.39
PRW 110	191,507.66	562,612.51
PRW 111	191,509.39	563,119.14
PRW 112	191,465.39	563,119.29
PRW 113	191,463.78	562,647.37
PRW 114	191,355.93	562,470.00
PRW 115	190,883.79	562,471.50
PRW 116	190,883.74	562,457.00
PRW 117	191,379.07	562,436.93
PRW 120	191,734.43	562,463.41
PRW 121	191,724.30	562,477.50
PRW 130	192,250.51	562,459.04
PRW 131	192,250.63	562,473.04
PRW 132	190,765.57	562,457.38
PRW 133	190,765.51	562,438.88
TLE200	191,504.77	561,774.30
TLE201	191,474.75	561,773.84
TLE 202	191,411.65	562,304.82
TLE 203	191,283.71	562,305.23
TLE 204	191,283.87	562,355.73
TLE 205	190,783.72	562,357.32
TLE 206	190,783.74	562,363.32
TLE 207	190,765.65	562,481.88
TLE 208	191,362.00	562,479.98
TLE 209	191,436.63	562,602.71
TLE 210	191,437.85	562,961.18
TLE 211	191,464.85	562,961.08
TLE 212	191,498.39	563,119.17
TLE 213	191,498.71	563,213.39
TLE 214	191,509.71	563,213.35
TLE 215	191,713.44	562,492.59
TLE 216	192,000.40	562,490.16
TLE 217	192,000.27	562,475.16
PLE 218	192,249.75	562,369.04
PLE 219	192,249.54	562,344.04
PLE 220	191,820.04	562,347.68
PLE 221	191,820.25	562,372.68
TLE 222	191,611.41	562,374.45
TLE 223	191,600.94	562,358.63
TLE 224	191,767.20	562,477.13
TLE 226	191,767.25	562,492.13
PRW 901	191,567.01	562,419.83

CAST IRON MON
Y = 194207.41
X = 562397.46

SE-SE
TOWN OF DOVER

SW-SE
TOWN OF DOVER

SW-SW
VILLAGE OF YORKVILLE

NE-NE
TOWN OF DOVER

NW-NE
TOWN OF DOVER

NW-NW
VILLAGE OF YORKVILLE

LOT 1
CSM 2121
V.6, P.500
DOC.1659381

OUTLOT 1
CSM 2646
V.8, P.353
DOC.1992938

LOT 1, CSM 2646
V.8, P.353
DOC.1992938

LOT 1, CSM 1827
V.5, P.566
DOC.1532291

LOT 1
CSM 3142
V.10, P.263
DOC.2396732

R/L RAYNOR AVE

NORTH RAYNOR AVE

USH 45

RAYNOR AVE

STH 20

R/L STH 20

WASHINGTON AVE R/L = S87° 58' 28"E

SEC LN = S89° 08' 05"E, 2621.46'

SEC LN = S89° 48' 17"W, 2581.99'

SEC LN = R/L N0° 29' 07"W, 2640.50'

SEC LN = R/L N0° 10' 57"W, 2649.75'

R/L = S89° 02' 20"E

R/L = S88° 57' 09"E

R/L = N88° 42' 36"E

1/16 LINE

33' SEC LINE

60' REF LINE

55' REF LINE

102' SEC LINE

104' SEC LINE

60' SEC LINE

PLE - DRAINAGE
0.17 AC

PLE - DRAINAGE
0.08 AC

SLOPE INTERCEPT

TLE - SLOPES
0.08 AC

TLE - SLOPES
0.002 AC

TLE - SLOPES
0.05 AC

TLE - SLOPES
0.22 AC

TLE - SLOPES
0.18 AC

TLE - SLOPES
0.21 AC

TLE - SLOPES
0.02 AC

WE ENERGIES GAS
NO RECORD OF EASEMENT FOUND
PARCEL 2

AT&T WISCONSIN
NO RECORD OF EASEMENT FOUND
PARCEL 2

END RELOCATION ORDER
STA 407+00.00
Y = 191564.65
X = 563427.10

CAST IRON MON
Y = 191567.01
X = 562419.83

BEGIN RELOCATION ORDER
STA 387+00.00
Y = 191576.83
X = 561427.60

CAST IRON MON
Y = 191606.59
X = 559798.66

CAST IRON MON
Y = 188917.27
X = 562428.27

WISDOT MONUMENT
Y = 191575.81
X = 565001.80

PI STA = 383+47.26
PC STA = 384+08.22
PT STA = 388+01.74
PC STA = 390+28.63
PI STA = 403+56.58
PT STA = 407+87.43
PRW 901 396+92.37 15.38' LT
PRW 14 396+94.40 184.56' RT
PRW 11 396+75.72 171.89' RT
STA 396+92.65 = STA 49+85.55
PI STA = 386+04.98
Y = 191580.415
X = 561332.636
DELTA = 0°58'42"
D = 0°14'55"
T = 196.77'
L = 393.53'
R = 23049.53'
PC STA = 384+08.22
PT STA = 388+01.74
PI STA = 396+92.79
Y = 191541.965
X = 562419.774
DELTA = 3°18'56"
D = 0°14'59"
T = 664.16'
L = 1327.95'
R = 22948.30'
PC STA = 390+28.63
PT STA = 403+56.58
PI STA = 410+05.60
Y = 191571.528
X = 563732.619
DELTA = 1°05'56"
D = 0°15'07"
T = 218.17'
L = 436.32'
R = 22747.61'
PC STA = 407+87.43
PT STA = 412+23.75

PNT 103- PNT 100
L = 239.26'
LCH = 239.26'
CB = S88° 30' 13"E
R = 23008.30'
Δ = 0° 35' 45"

1/16 LINE STA 383+81.56

1/16 LINE STA 409+54.44

COURSE TABLE			
POINT	POINT	BEARING	DISTANCE
PRW 901	PRW 10	N89° 08' 05"W	332.78'
PRW 10	PRW 100	S00° 51' 55"W	75.91'
PRW 100	PRW 101	S68° 53' 36"E	75.42'
PRW 101	PRW 102	N89° 08' 05"W	310.00'
PRW 102	PRW 103	N00° 51' 55"E	28.73'
PRW 103	PRW 100	SEE CURVE DATA	
PRW 901	PRW 14	S00° 10' 57"E	200.00'
PRW 14	PRW 15	S00° 10' 57"E	601.55'
PRW 15	PRW 105	S89° 49' 03"W	33.00'
PRW 105	PRW 106	S89° 49' 03"W	26.00'
PRW 106	PRW 107	N00° 10' 57"W	624.54'
PRW 107	PRW 104	S68° 53' 36"E	27.90'
PRW 104	PRW 11	N89° 49' 03"E	14.29'
PRW 11	PRW 14	S55° 40' 55"E	22.70'
PRW 901	PRW 12	N89° 48' 17"E	192.47'
PRW 12	PRW 110	S00° 11' 43"E	60.00'
PRW 110	PRW 111	N89° 48' 17"E	506.64'
PRW 111	PRW 112	S00° 11' 43"E	44.00'
PRW 112	PRW 113	S89° 48' 17"W	471.92'

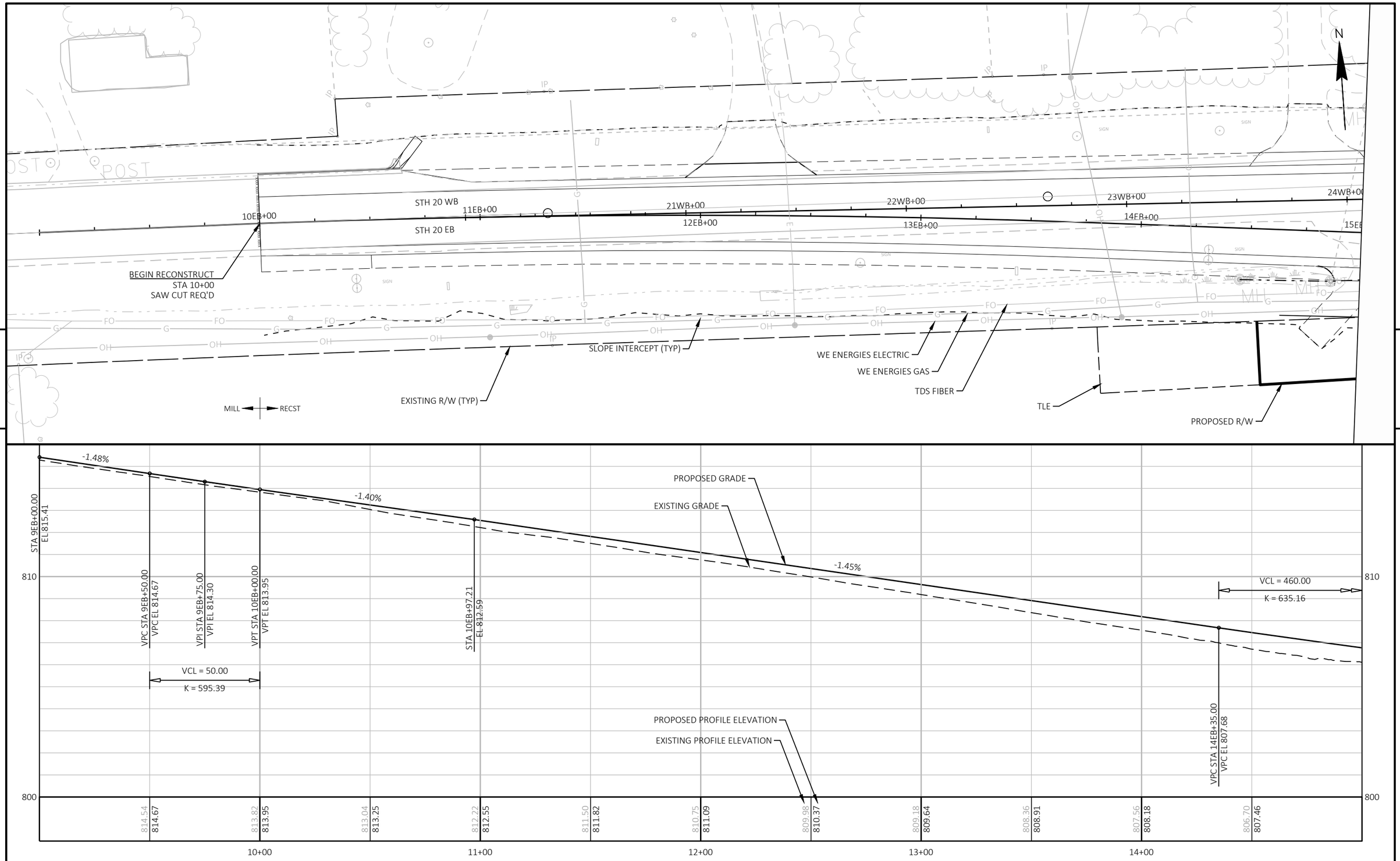
COURSE TABLE			
POINT	POINT	BEARING	DISTANCE
PRW 113	PRW 114	S58° 41' 46"W	207.58'
PRW 114	PRW 115	S00° 10' 57"E	472.14'
PRW 115	PRW 116	S89° 49' 03"W	14.50'
PRW 116	PRW 132	S00° 10' 57"E	118.17'
PRW 132	PRW 133	S89° 49' 03"W	18.50'
PRW 133	PRW 15	S89° 49' 03"W	16.50'
PRW 15	PRW 14	N00° 10' 57"W	601.55'
PRW 14	PRW 117	N53° 46' 48"E	20.40'
PRW 117	PRW 110	N53° 46' 48"E	217.64'
PRW 901	PRW 13	N00° 29' 07"W	167.05'
PRW 13	PRW 120	N89° 30' 53"E	45.00'
PRW 120	PRW 130	N00° 29' 07"W	516.10'
PRW 130	PRW 131	N89° 30' 53"E	14.00'
PRW 131	PRW 121	S00° 29' 07"E	526.35'
PRW 121	PRW 120	N54° 16' 13"W	17.35'

REVISION DATE 09/07/2021	DATE: 10/16/20	SCALE, FEET 0 100 200	HWY: STH 20
	GRID FACTOR N/A		COUNTY: RACINE

R/W PROJECT NUMBER: 2340-10-20	PLAT SHEET 4.02	
CONSTRUCTION PROJECT NUMBER: 2340-10-70	PS&E SHEET	E

FILE NAME : 040102-RP-22X34.DWG
LAYOUT NAME - 040102-rw
PLOT DATE : 9/3/2021 5:28 PM
PLOT BY : TOM ORNER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 75

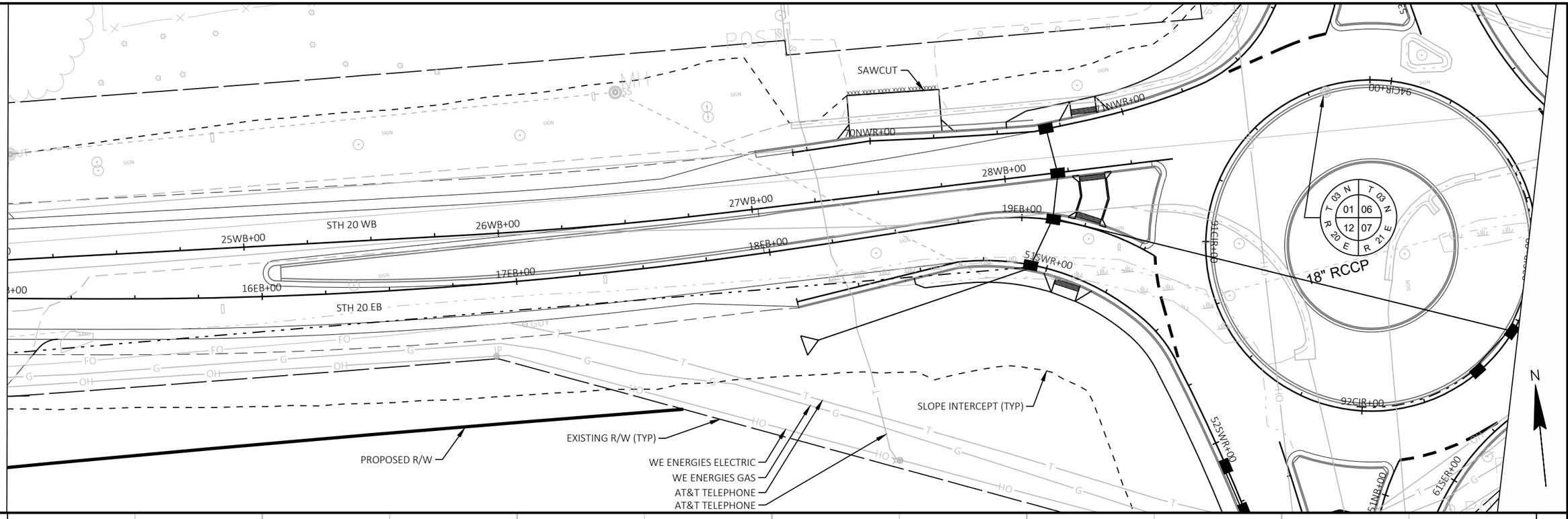


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - EB	SHEET 206 E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

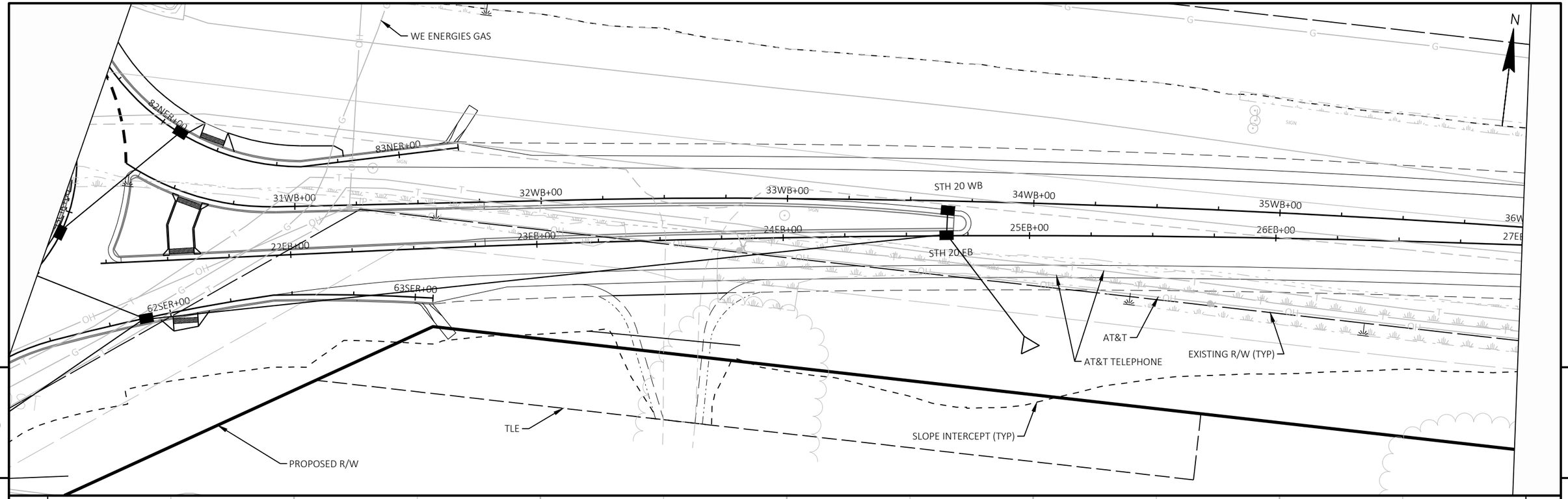
PLOT DATE : 1/7/2022 8:30 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

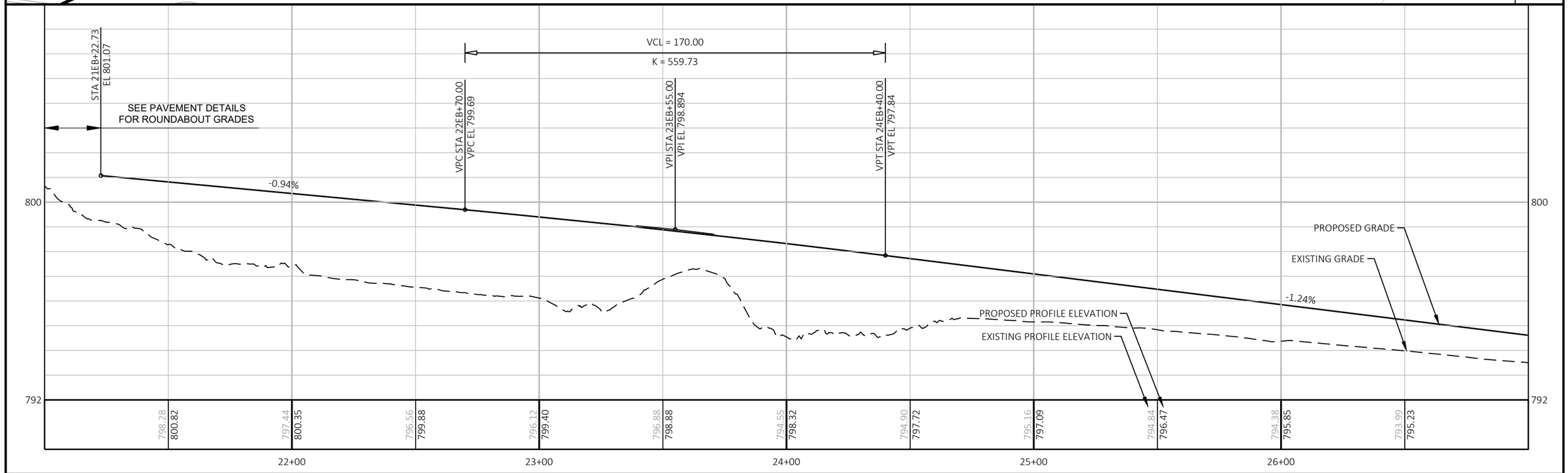
WISDOT/CADDS SHEET 44



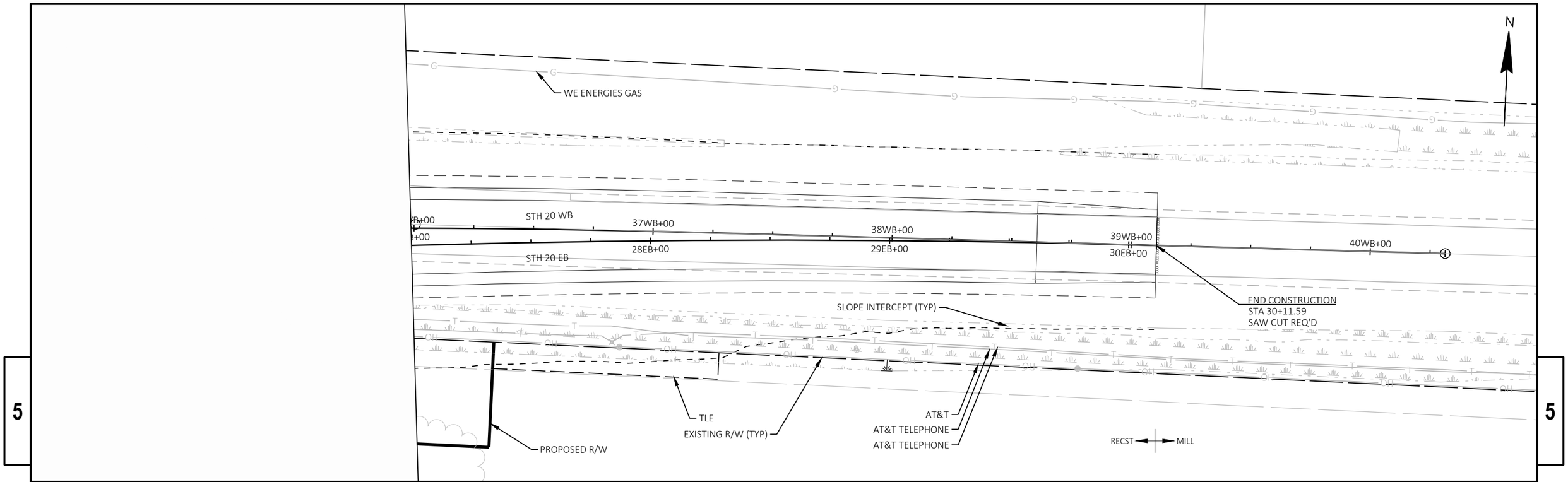
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - EB	SHEET 207	E

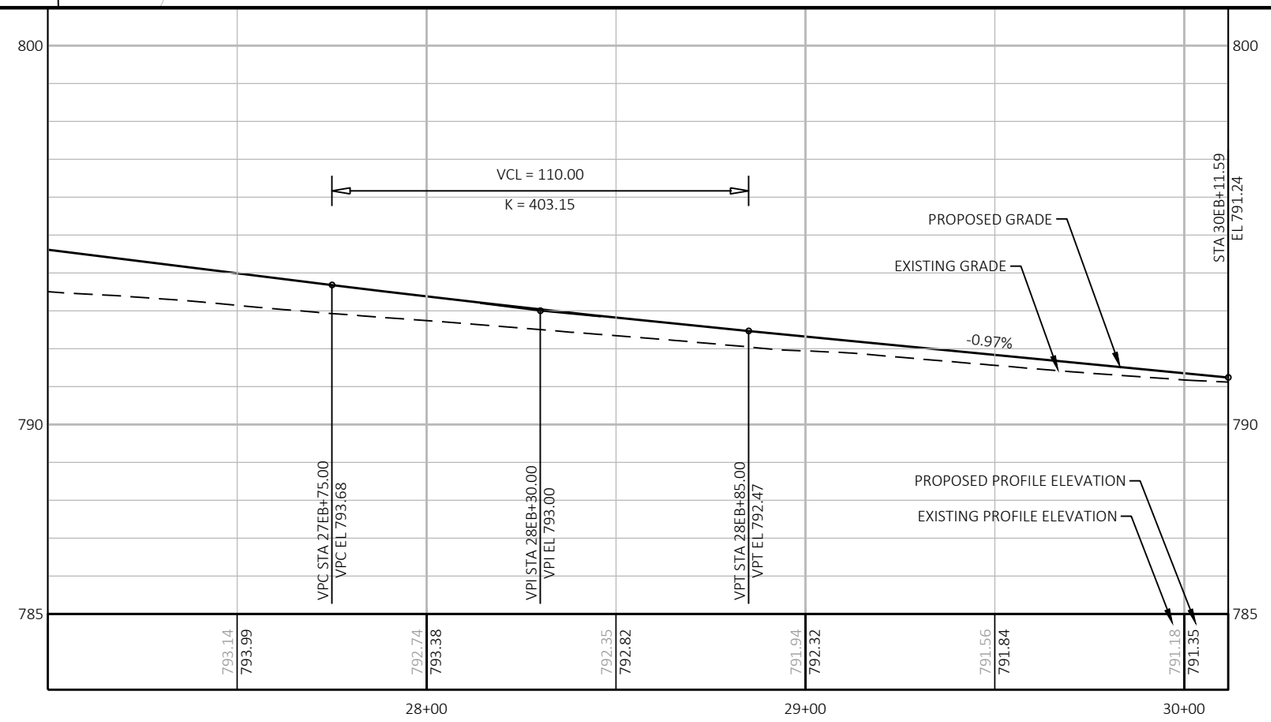
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050102-pp
PLOT DATE : 1/7/2022 8:30 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44





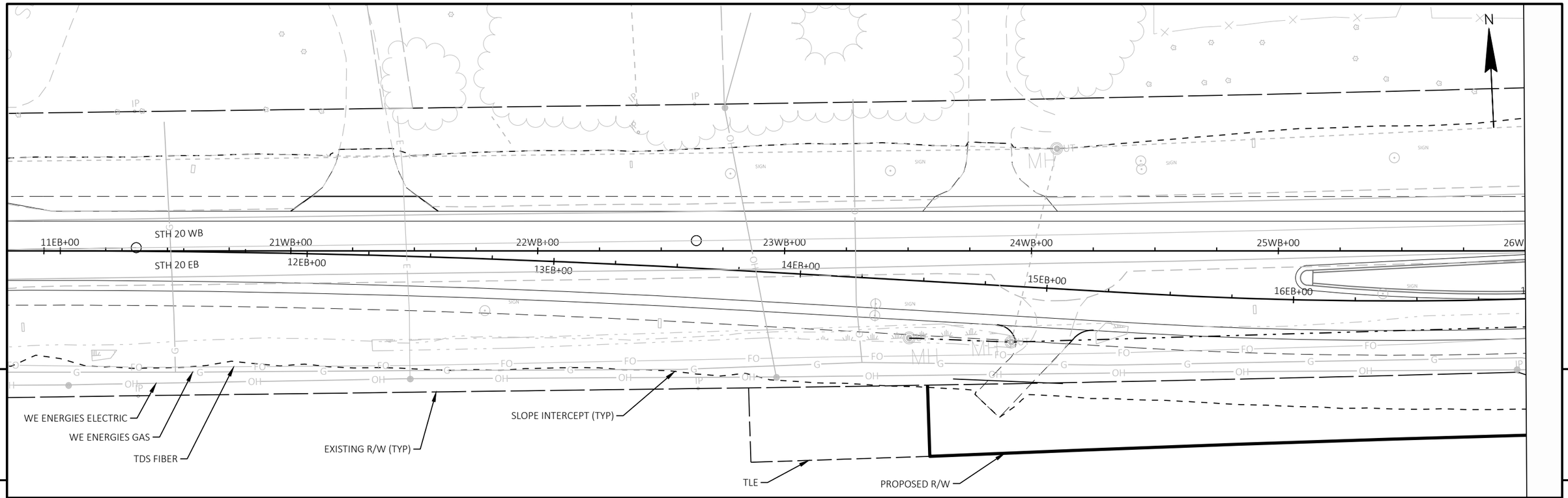
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - EB	SHEET 208	E

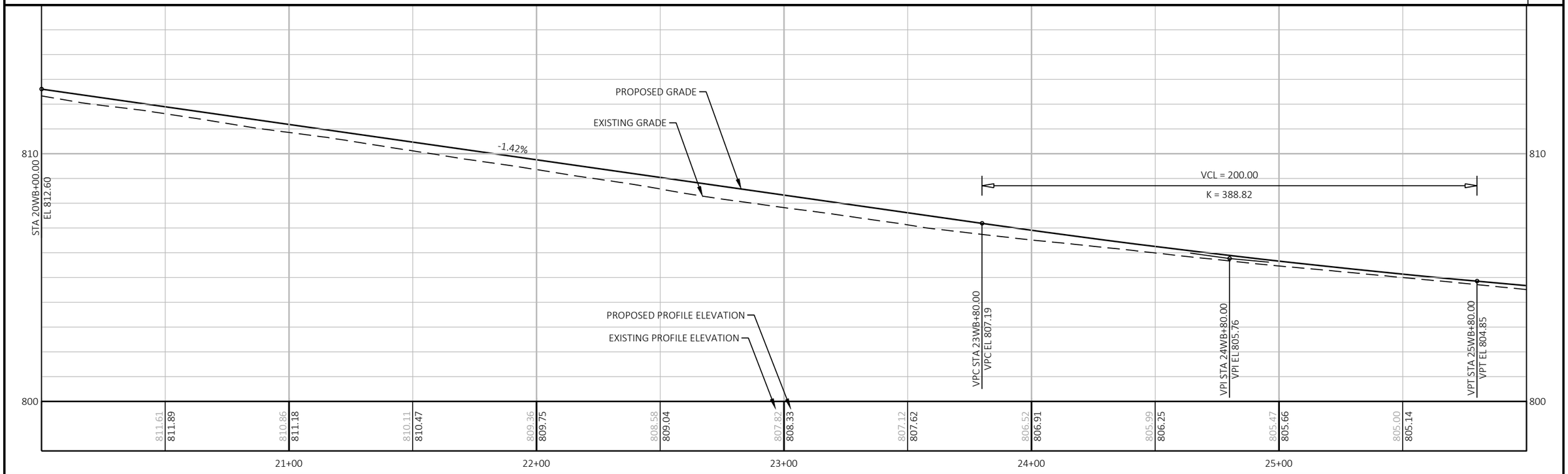




PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - EB	SHEET 209	E

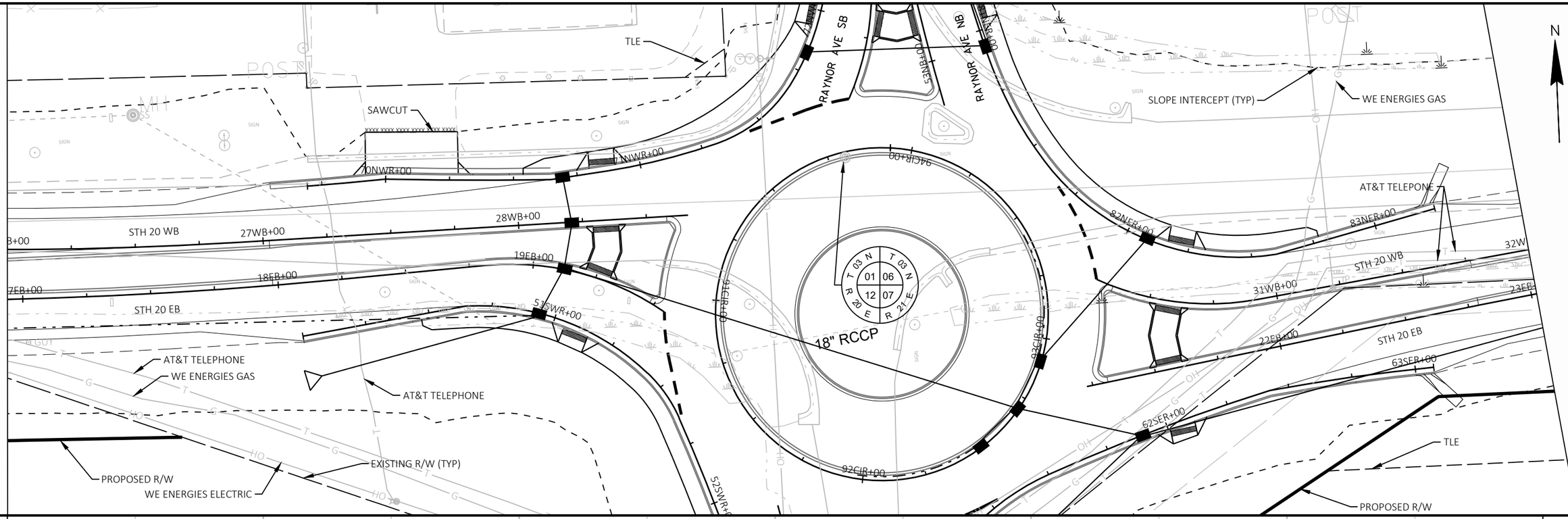
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050104-pp
PLOT DATE : 1/7/2022 8:30 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

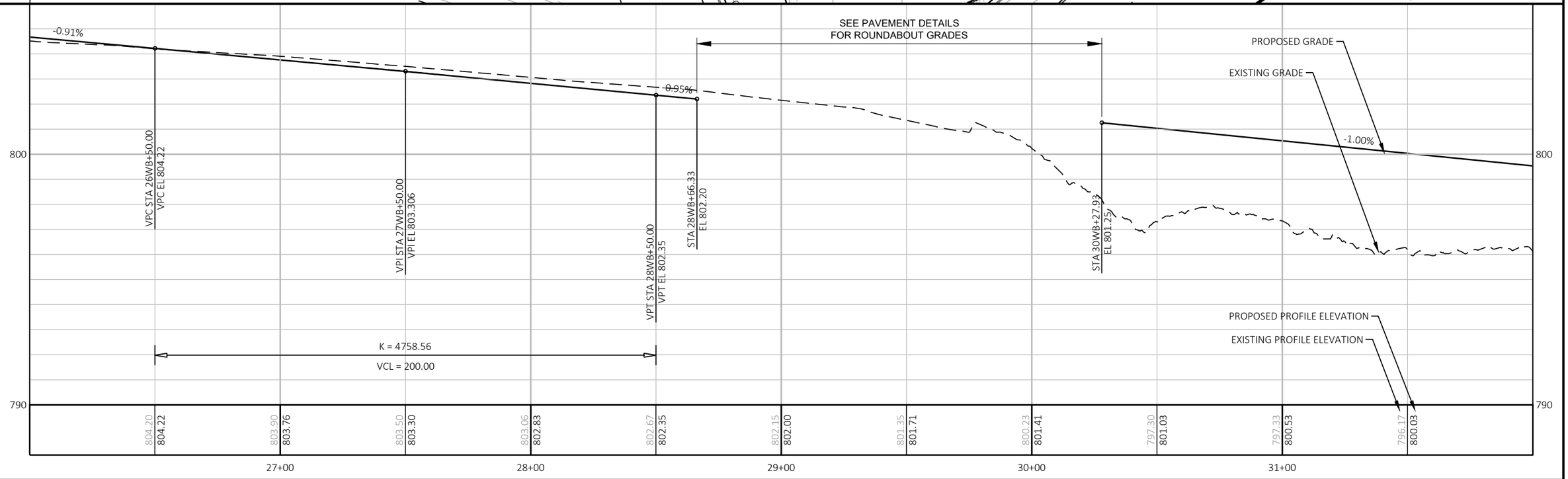




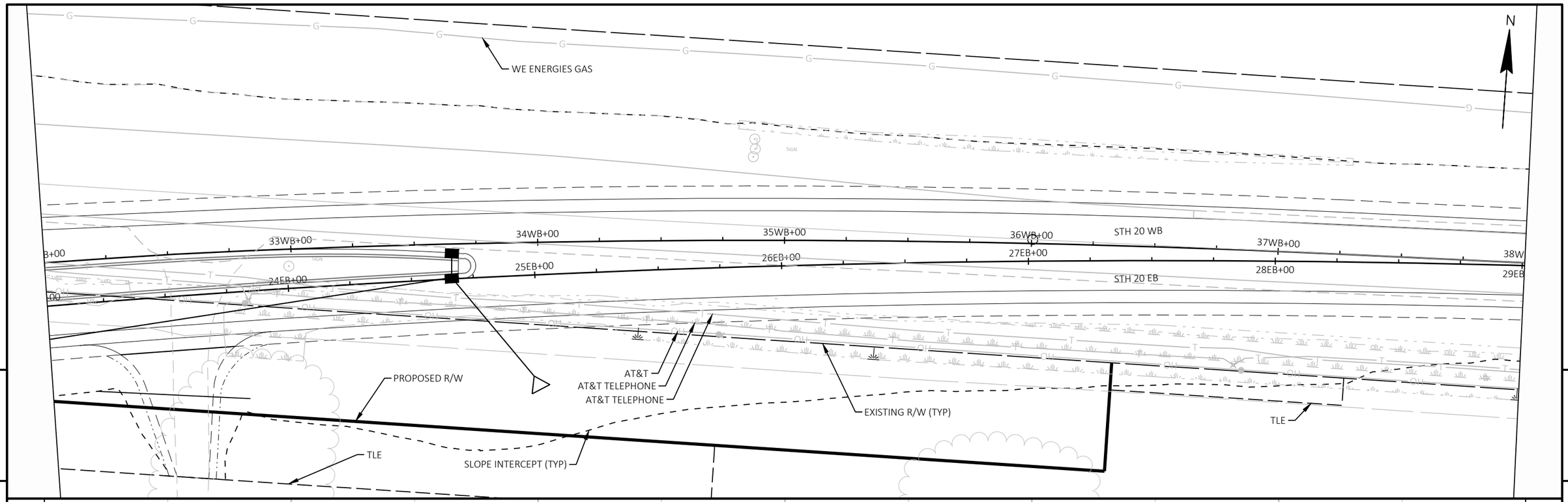
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - WB	SHEET 210	E

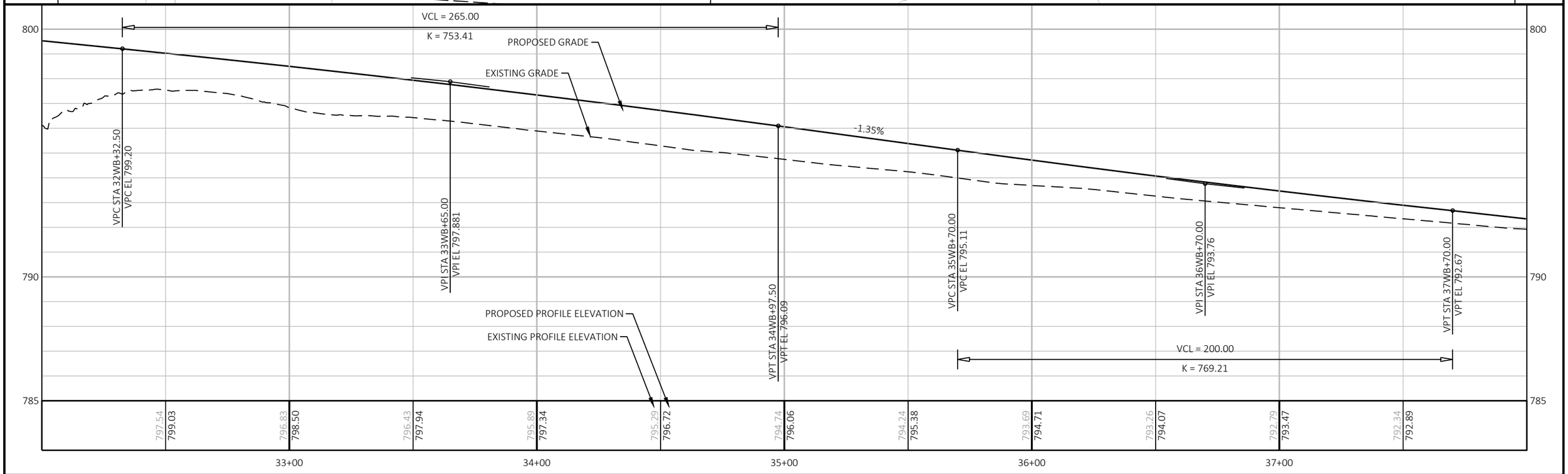
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050105-pp
PLOT DATE : 1/7/2022 8:30 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT





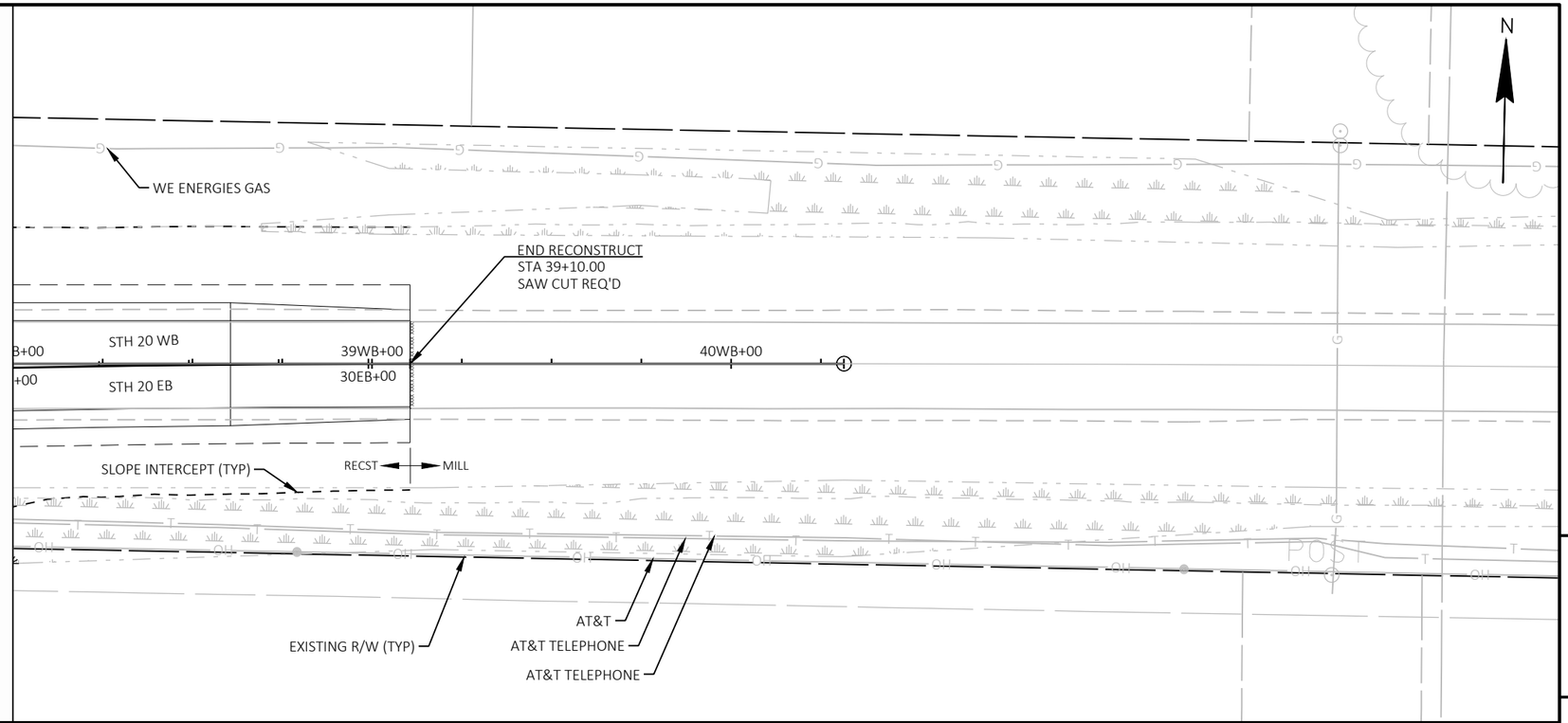
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - WB	SHEET 211	E

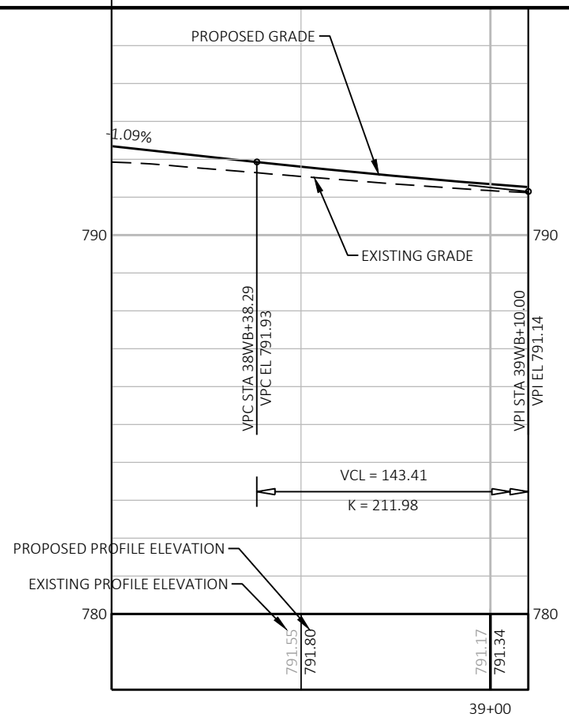




PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - WB	SHEET 212	E

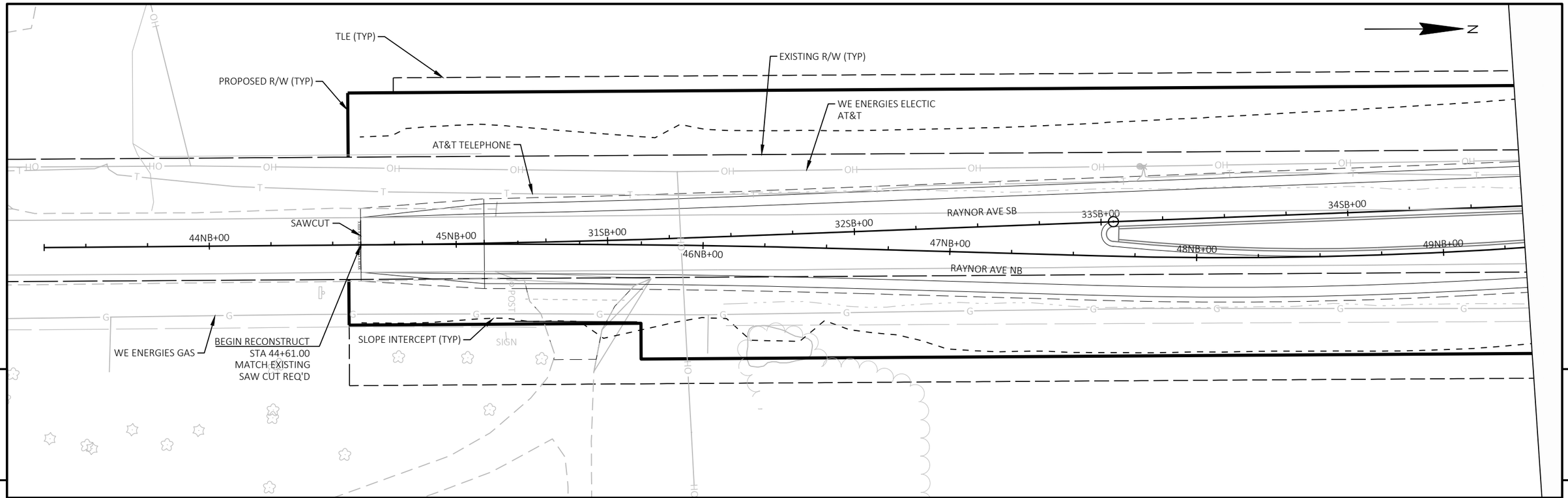
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050107-pp
PLOT DATE : 1/7/2022 8:31 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

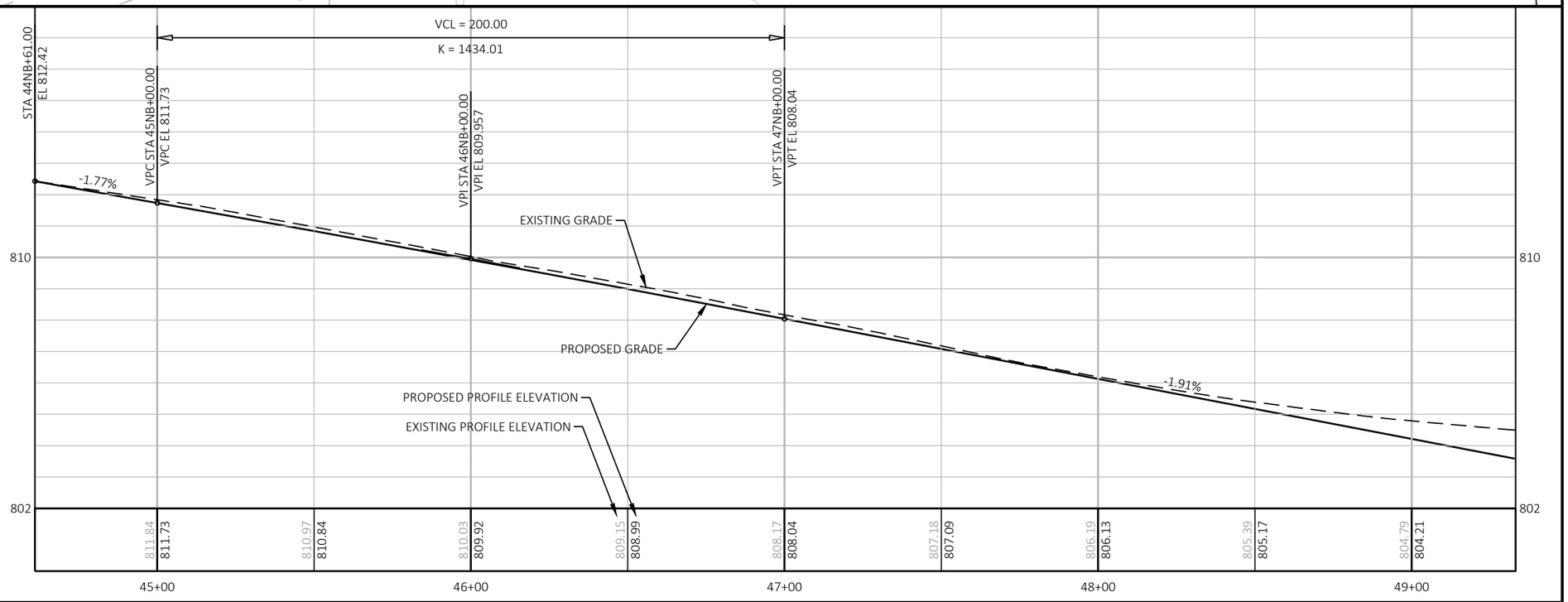




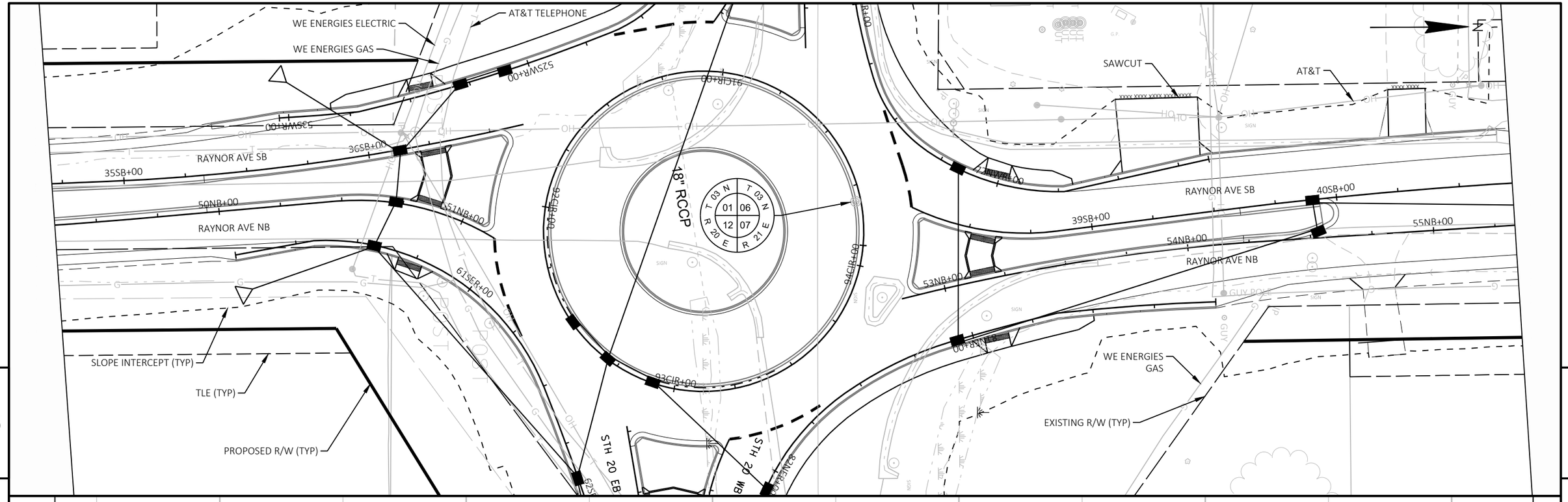
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: STH 20 - WB	SHEET 213	E

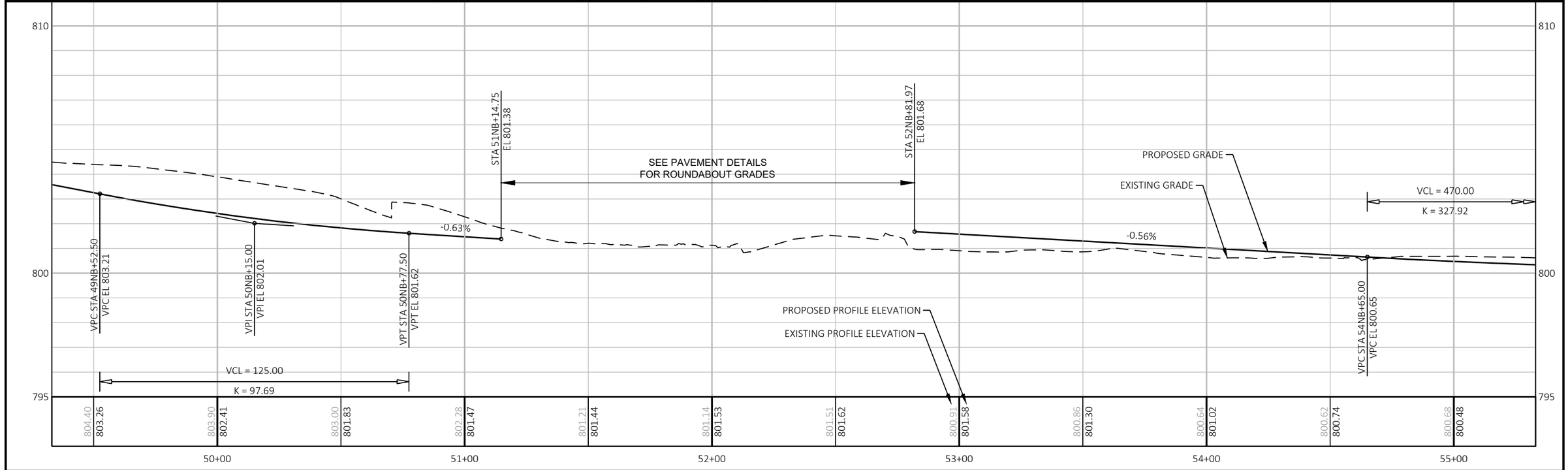
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050108-pp
PLOT DATE : 1/7/2022 8:31 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



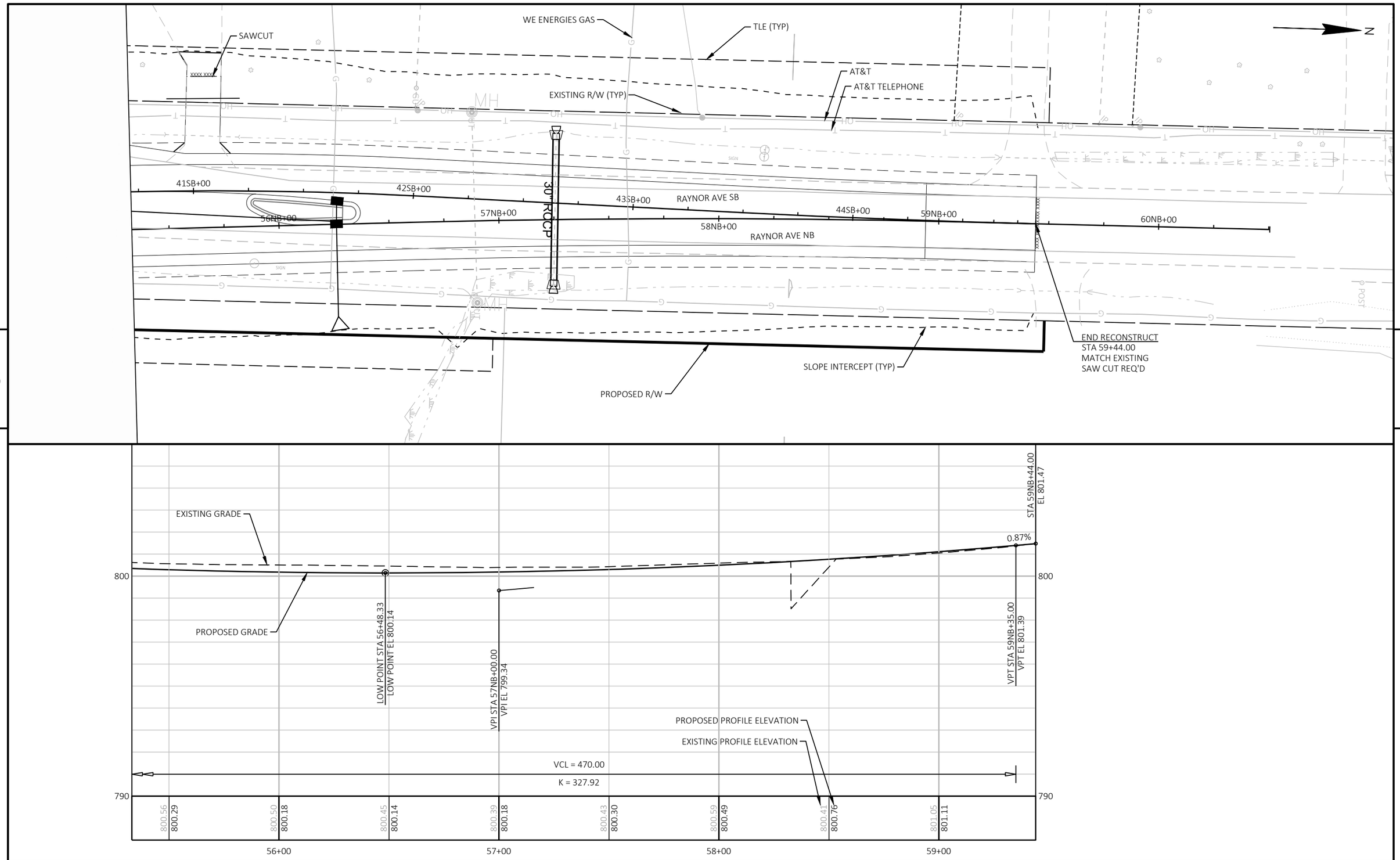


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - NB	SHEET 214	E





PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - NB	SHEET 215	E

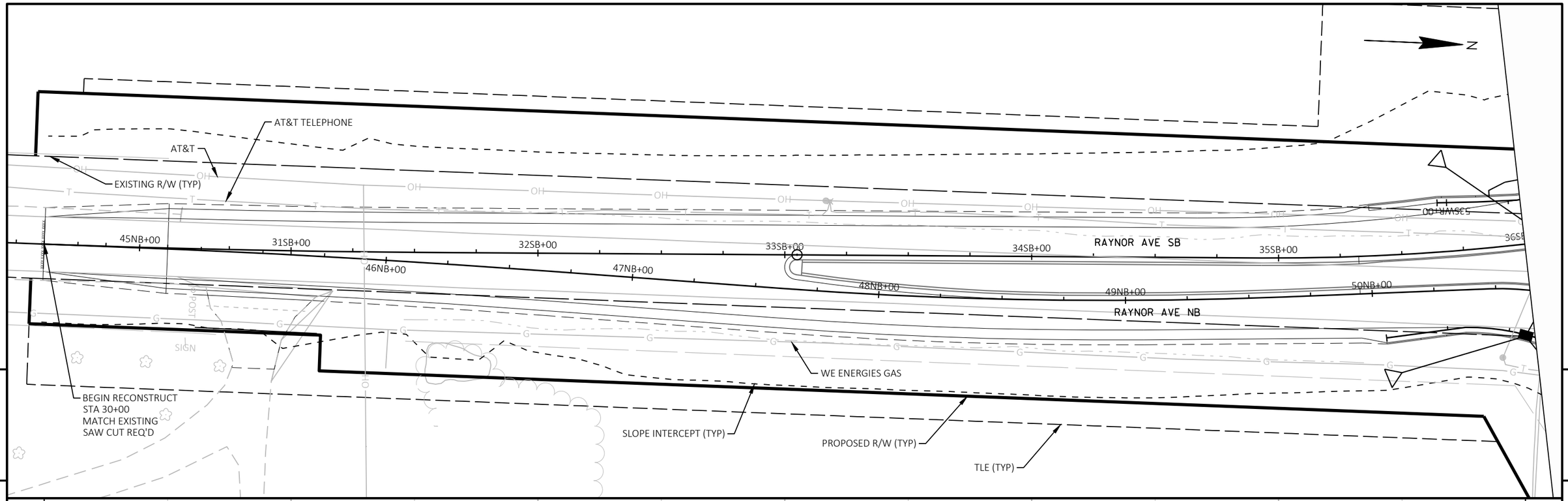


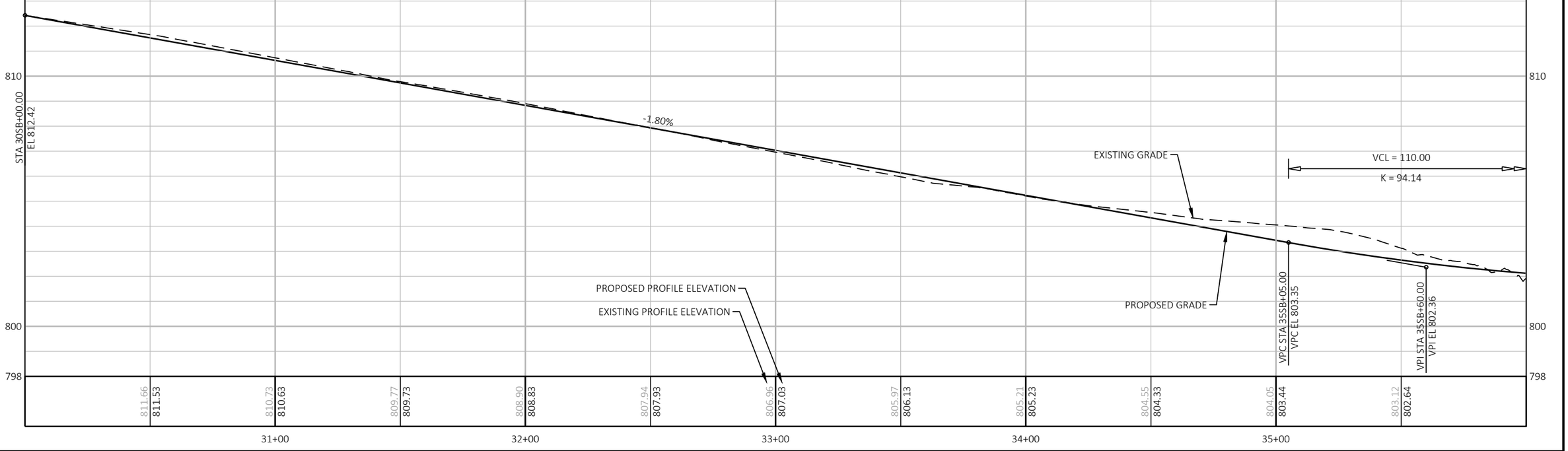
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - NB	SHEET 216 E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050111-pp

PLOT DATE : 1/7/2022 8:31 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

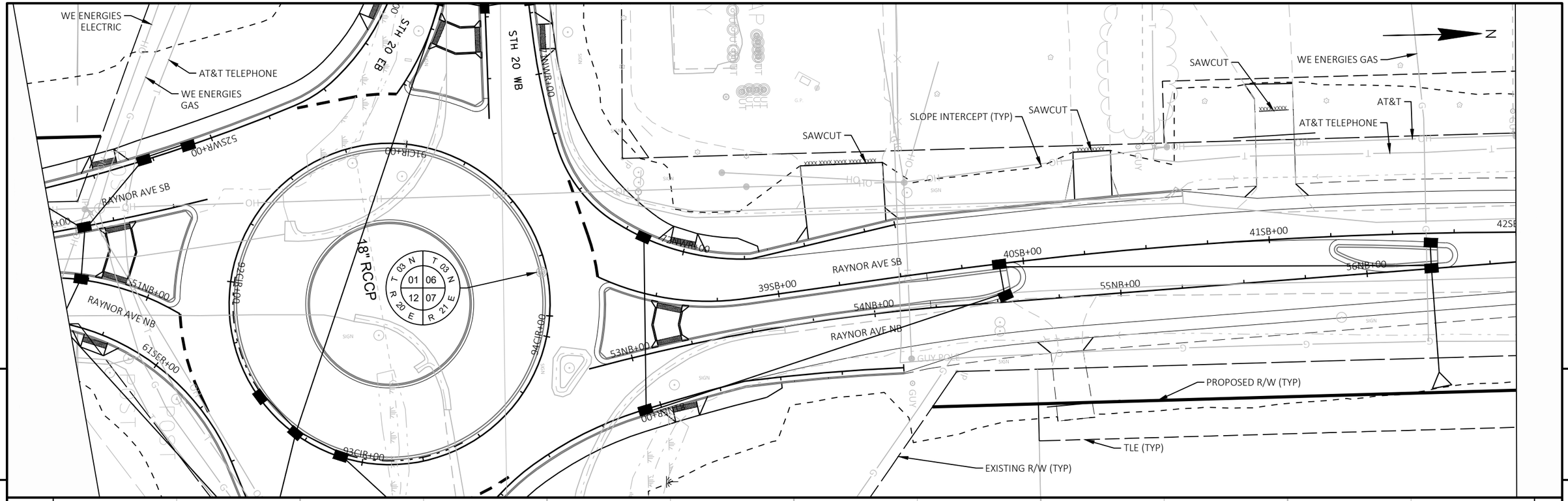
WISDOT/CADDS SHEET 44





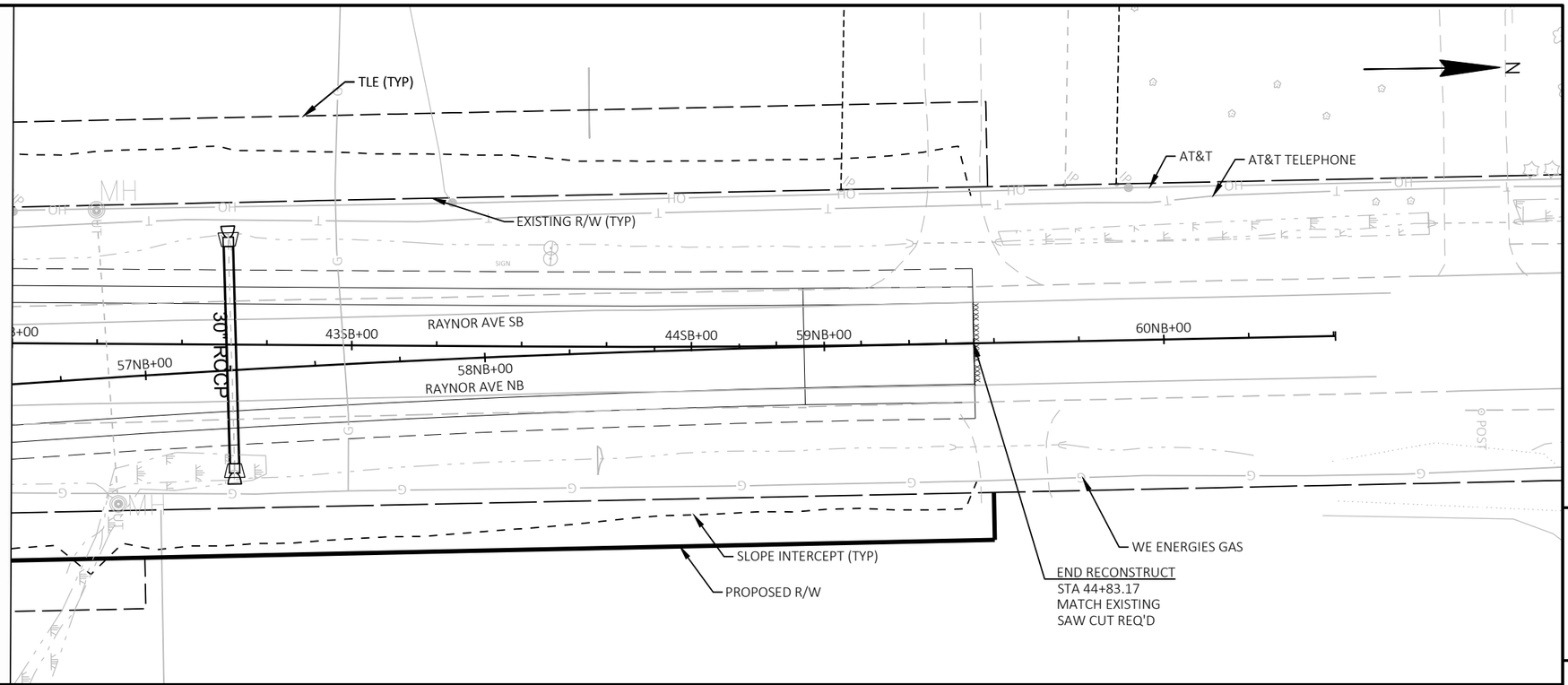
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - SB	SHEET 217	E

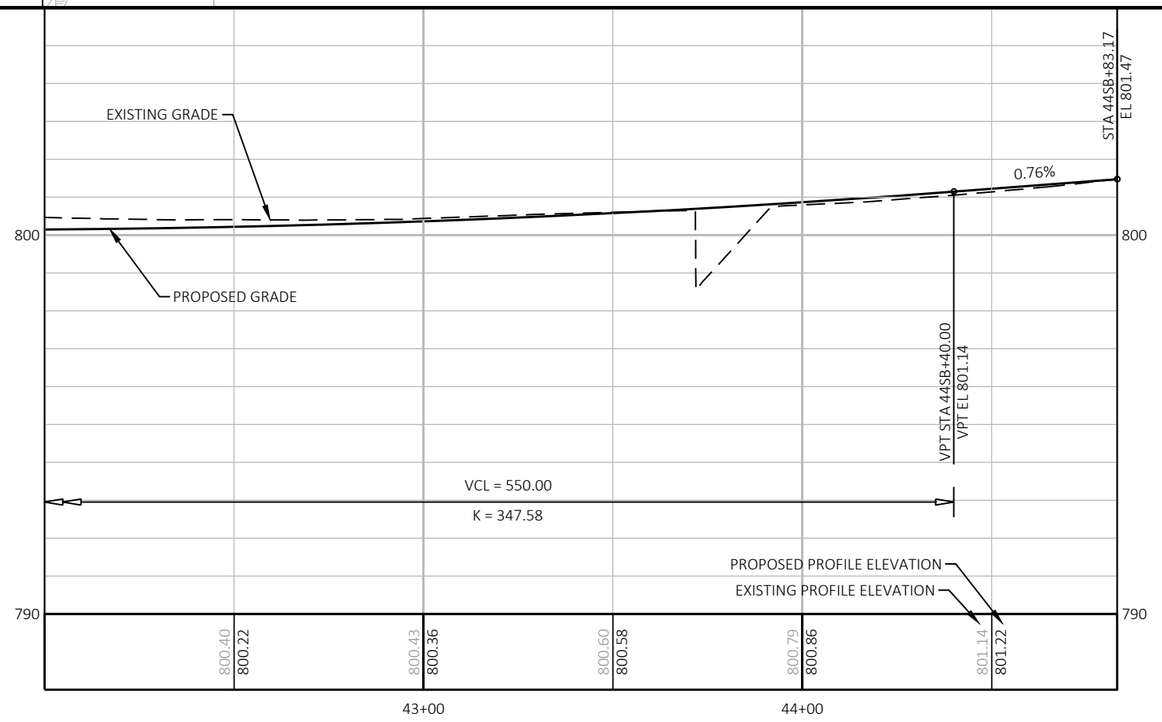
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050112-pp
PLOT DATE : 1/7/2022 8:32 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - SB	SHEET 218	E

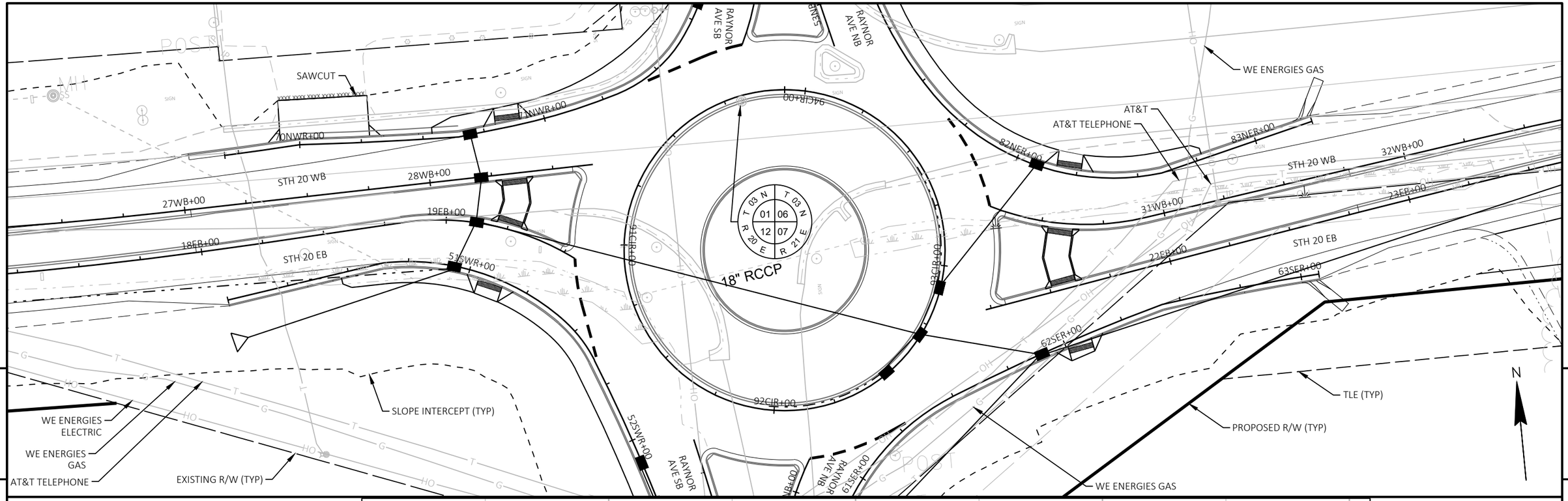
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050113-pp
PLOT DATE : 1/7/2022 8:32 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

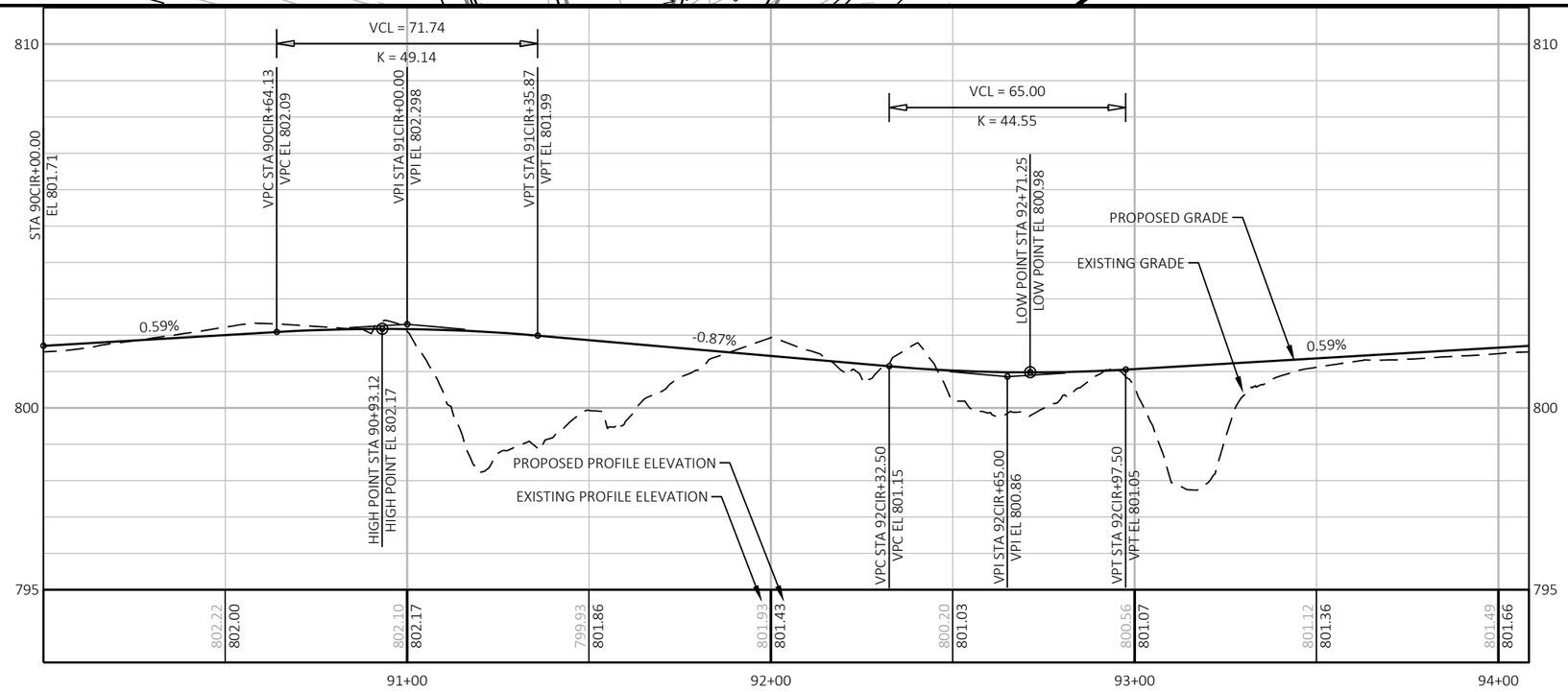




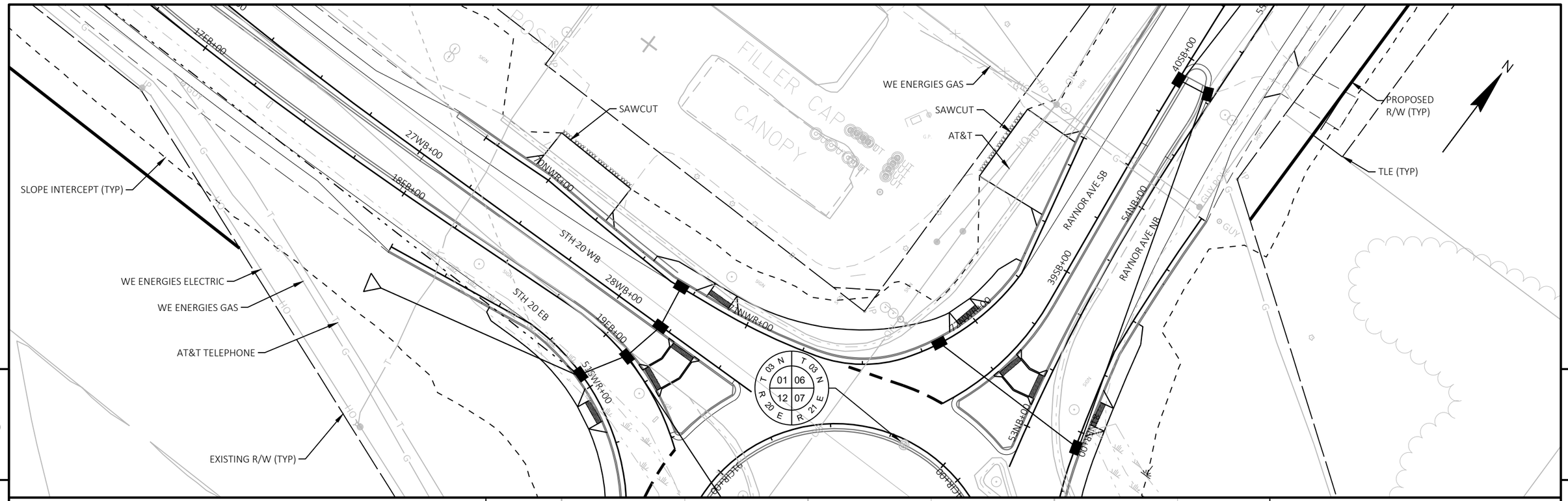
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: RAYNOR AVE - SB	SHEET 219	E

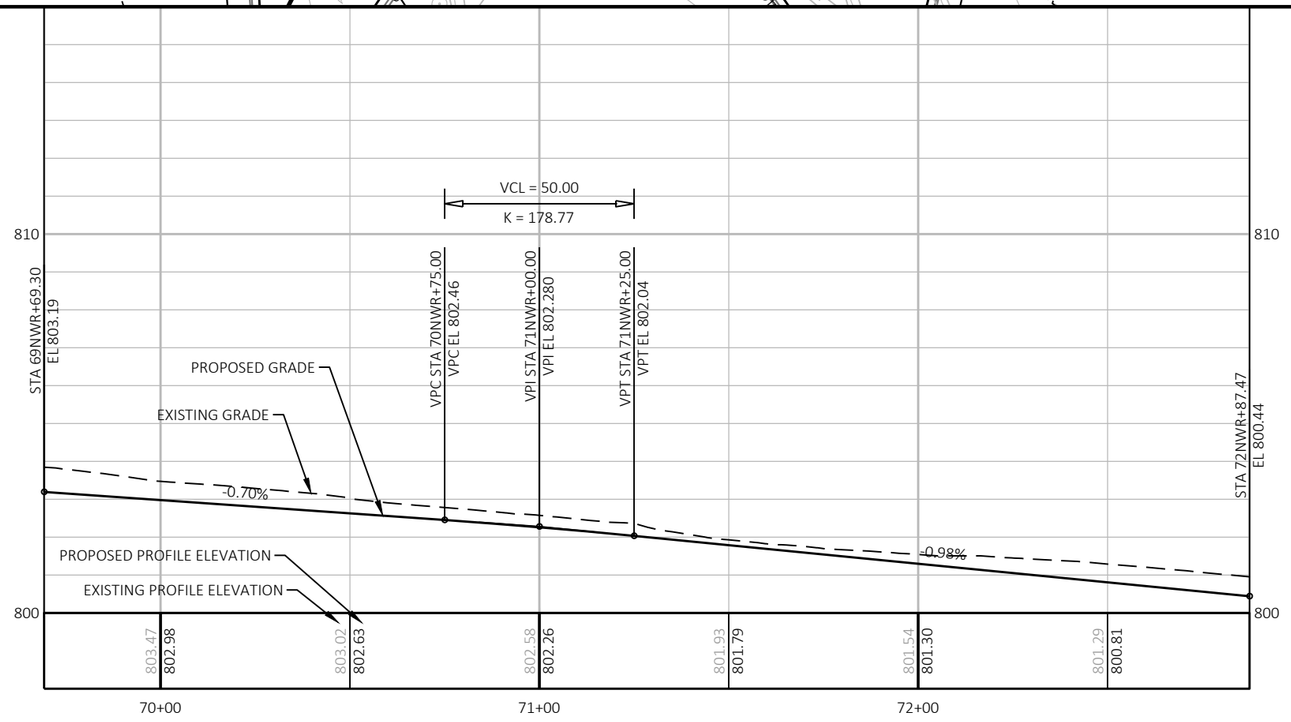
FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050114-pp
PLOT DATE : 1/7/2022 8:32 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



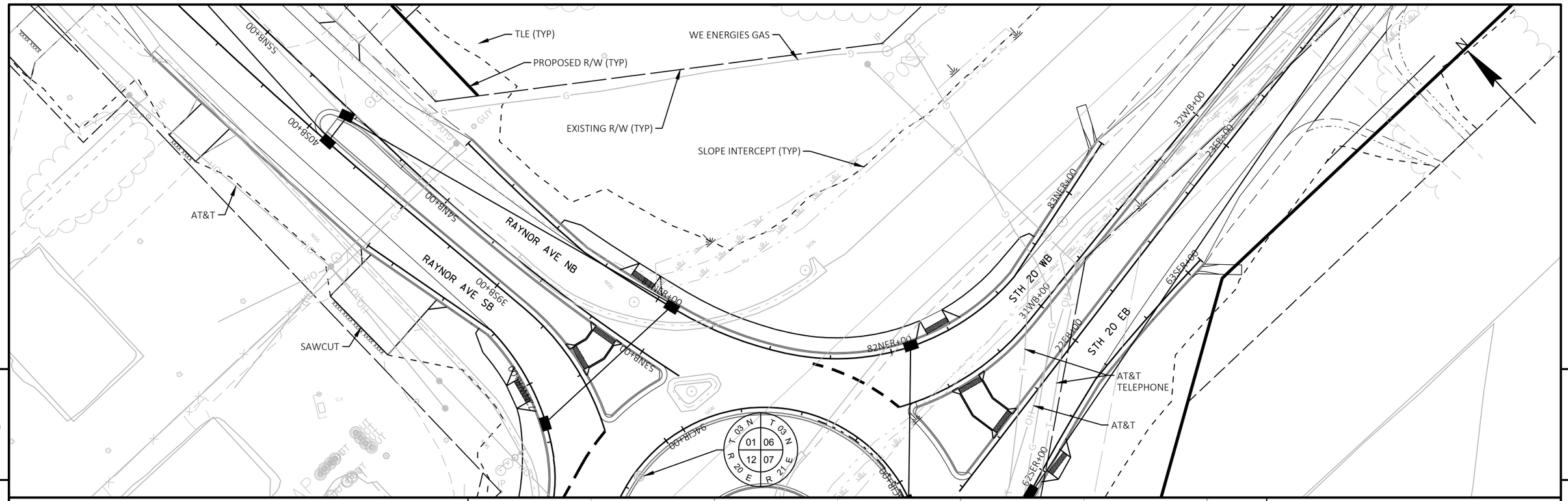


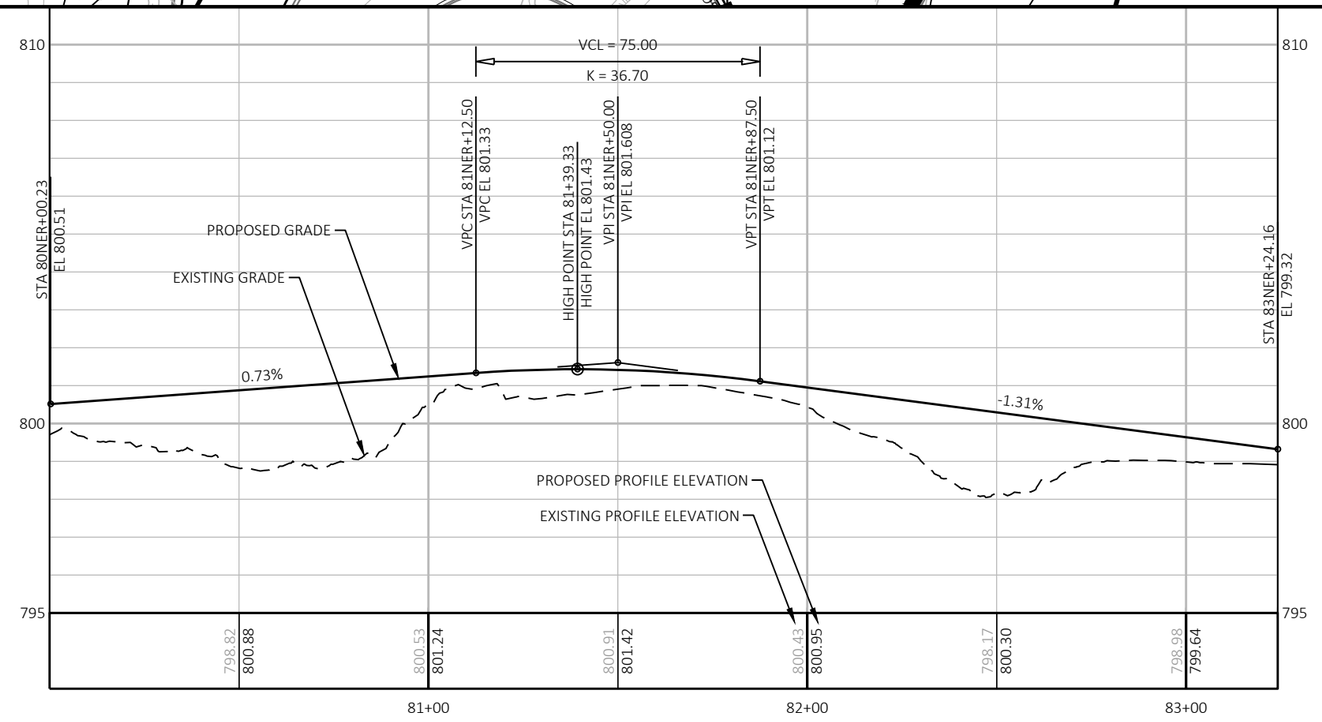
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: CIRCLE	SHEET 220	E



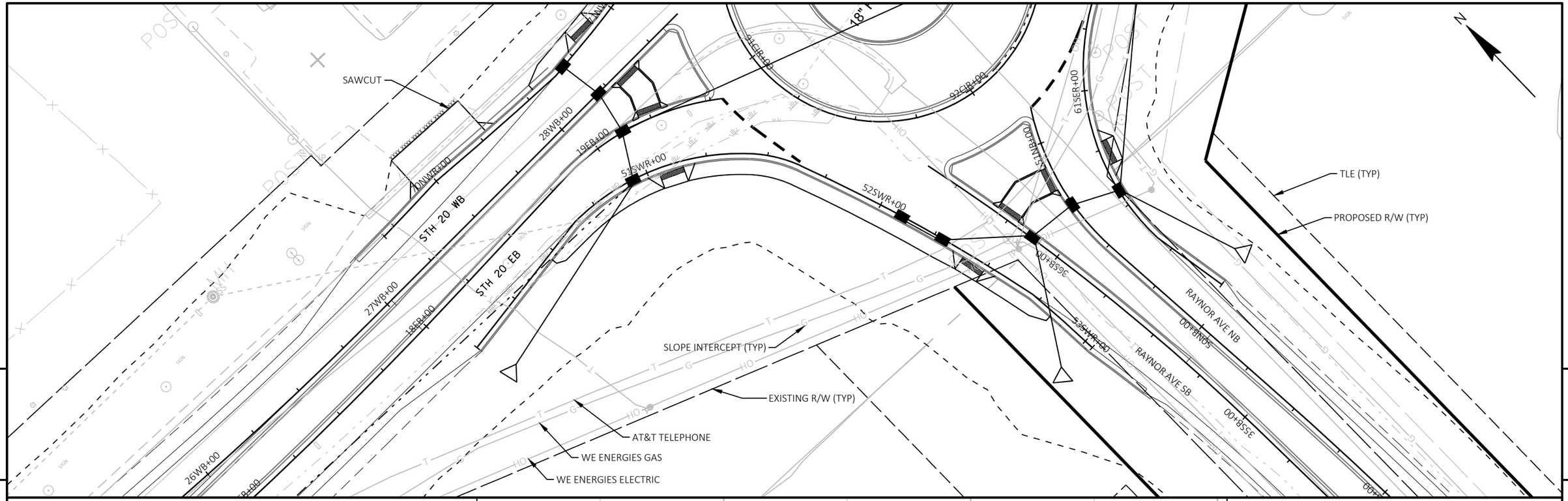


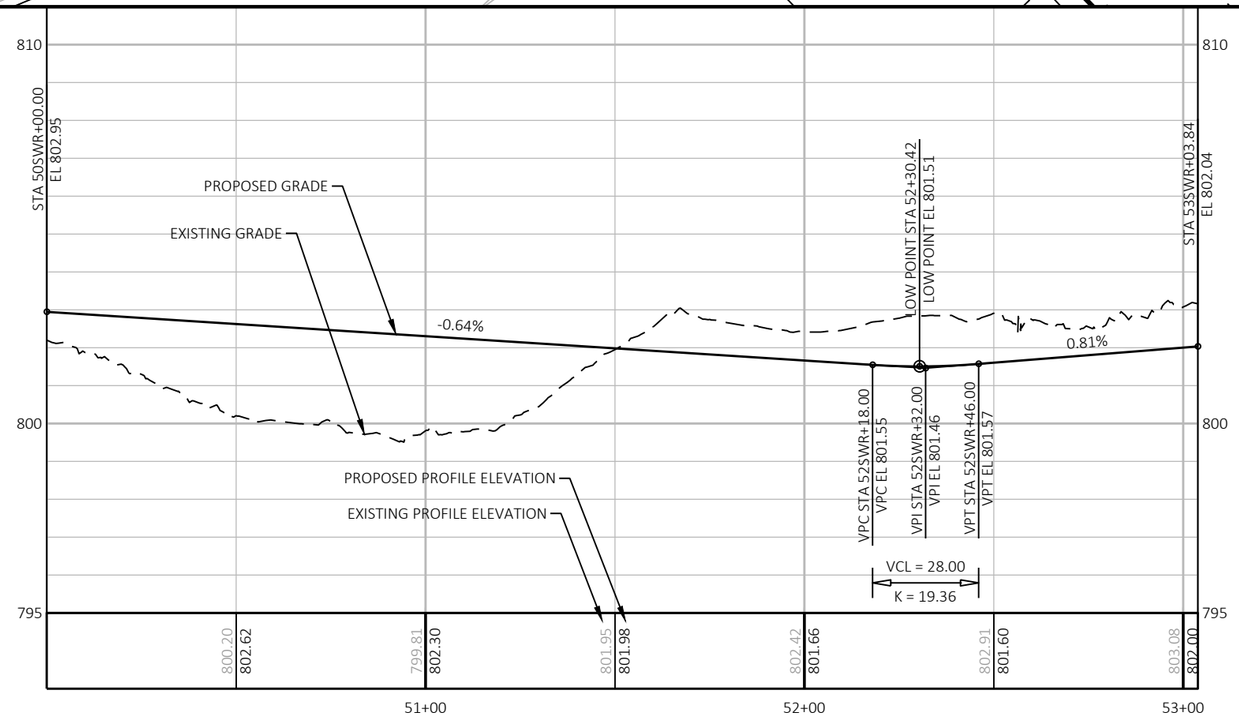
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: NW RADIUS	SHEET 221	E



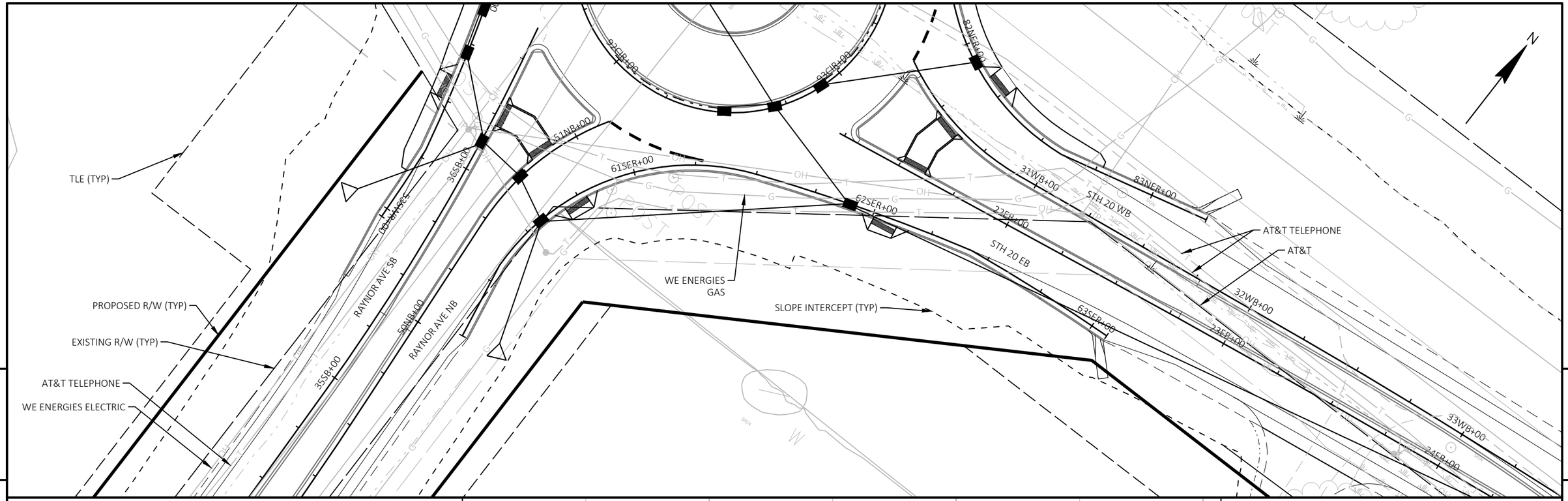


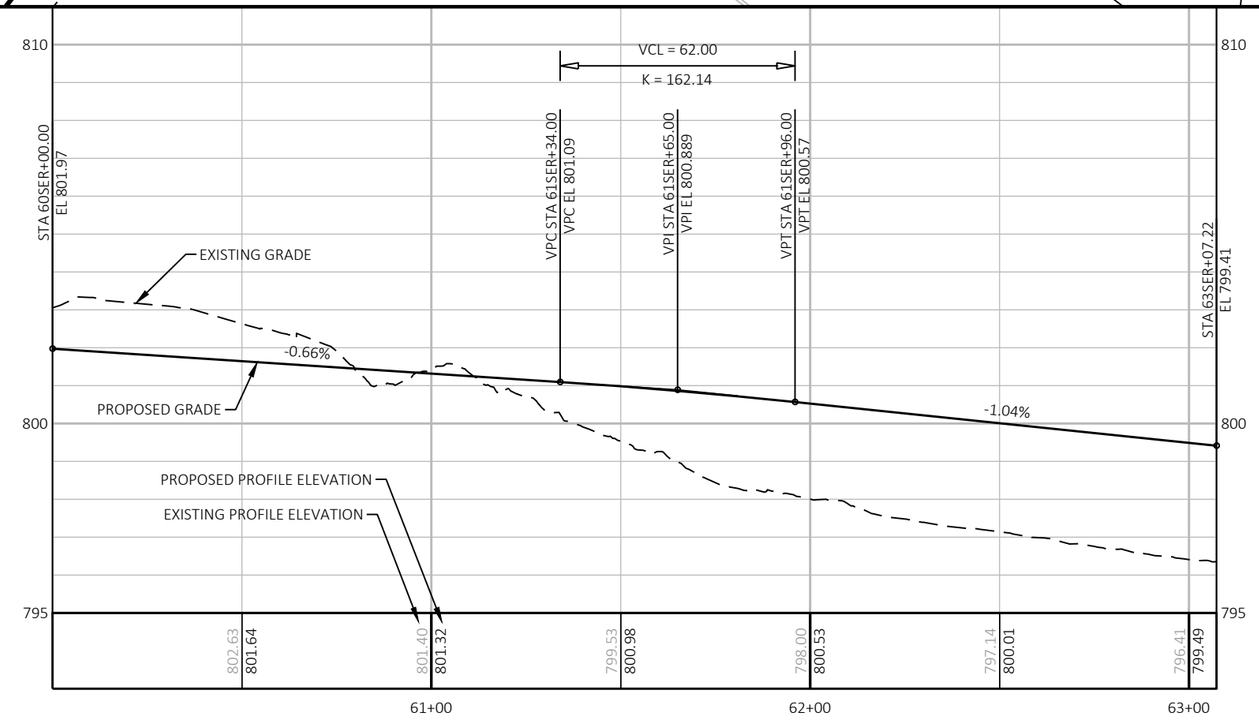
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: NE RADIUS	SHEET 222	E





PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: SW RADIUS	SHEET 223	E





PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	PLAN AND PROFILE: SE RADIUS	SHEET 224	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050119-pp
PLOT DATE : 1/7/2022 8:33 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

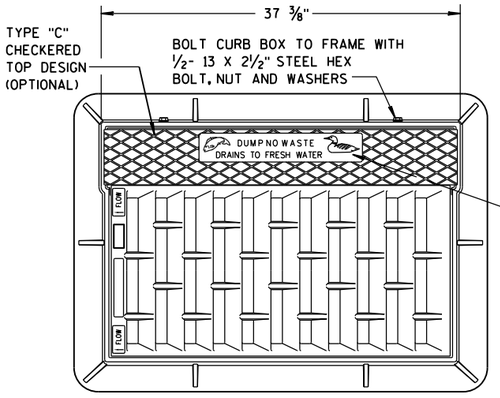
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-07A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-12	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D05-02	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09F10-04	LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY
11B02-02	CONCRETE MEDIAN NOSE
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-10	URBAN DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

6

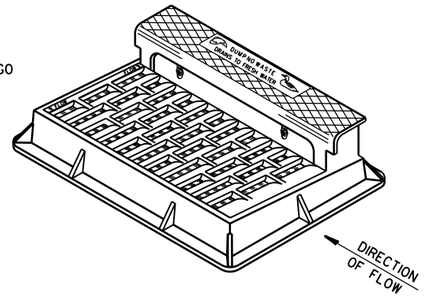
Standard Detail Drawing List

14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDABOUT ARROWS
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C08-21B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-21C	PAVEMENT MARKING (TURN LANES)
15C08-21D	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C18-06B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-07A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15C35-05B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-05C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D12-10A	TRAFFIC CONTROL, LANE CLOSURE
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D32-06	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

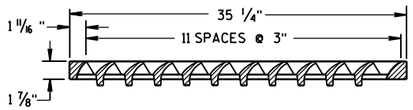
6

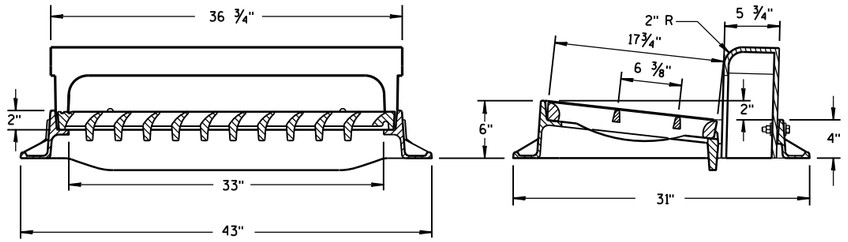


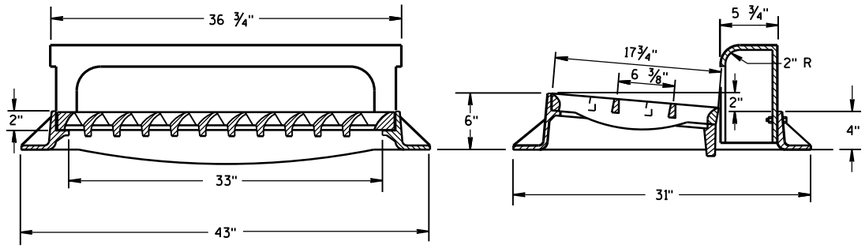
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

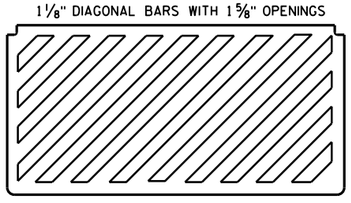






TYPE "H"

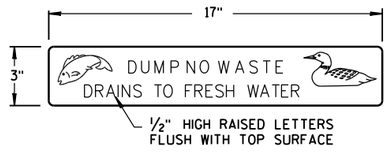
NOTE: EITHER CASTING IS ACCEPTABLE



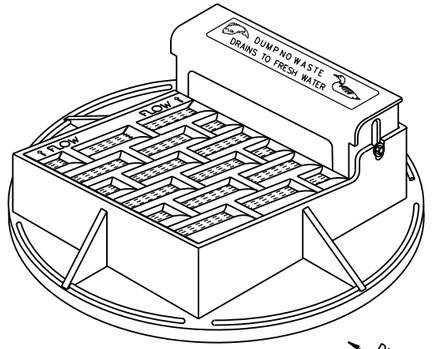
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

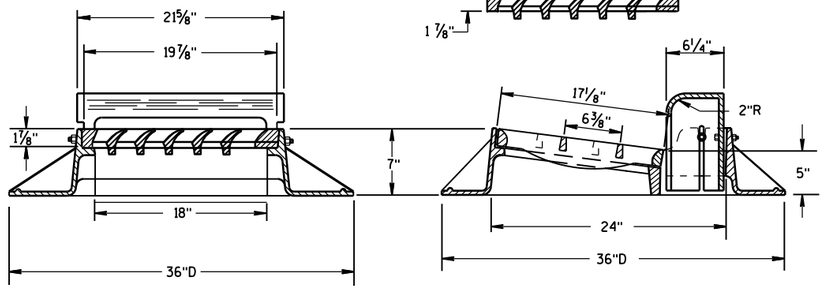


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



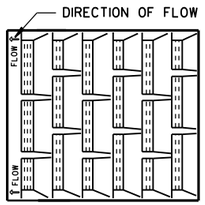
TYPE "A"

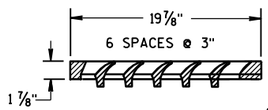
GENERAL NOTES

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

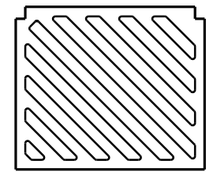
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





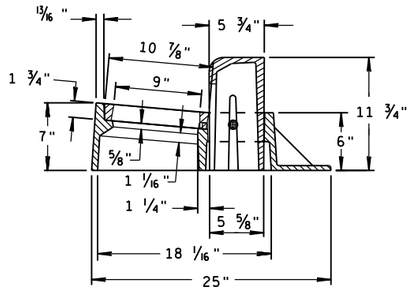
1" DIAGONAL BARS WITH 1 1/2" OPENINGS

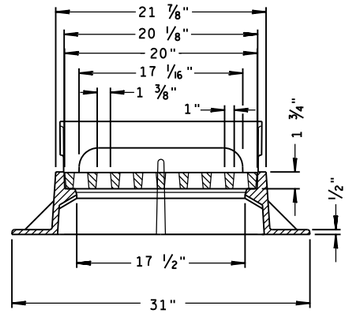


SPECIAL GRATE FOR TYPE "A" COVER

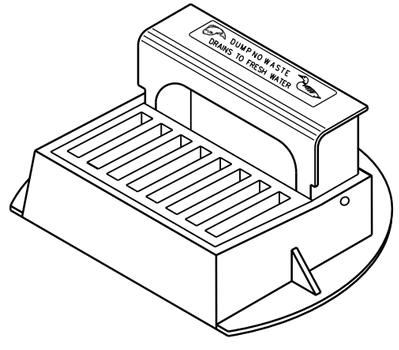
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



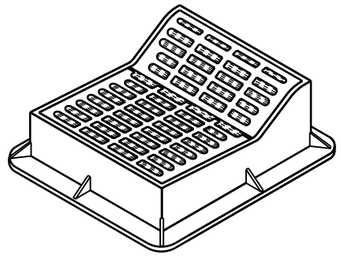
INLET COVERS
TYPE A, H, A-S, H-S & Z

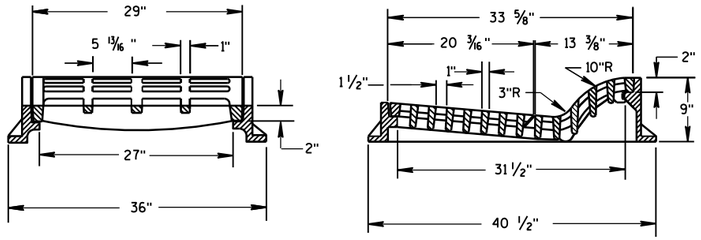
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

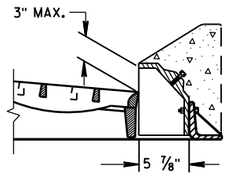
S.D.D. 8 A 5-19a





TYPE "F"

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



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

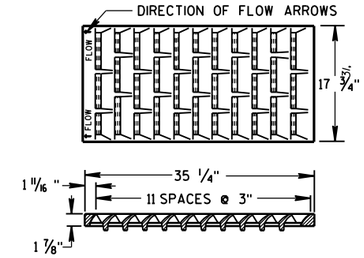
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

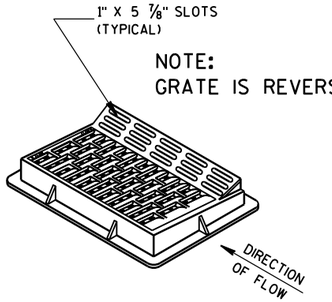
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

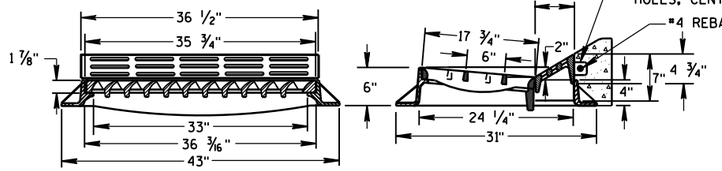
GENERAL NOTES

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

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



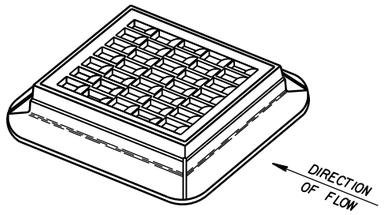


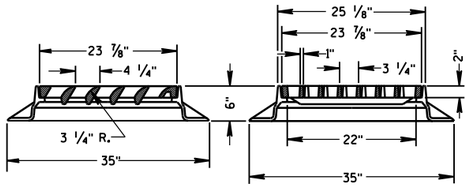


TYPE "HM"

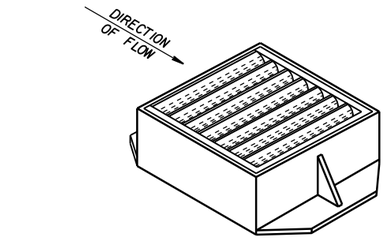
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

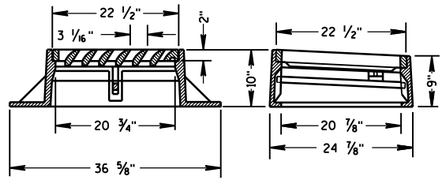
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



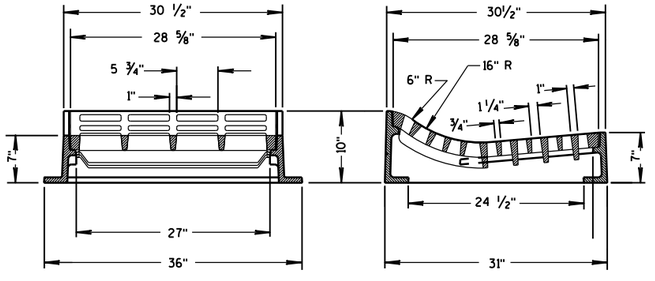


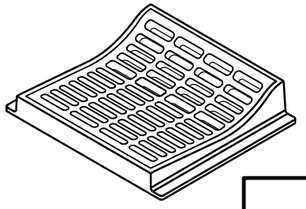
TYPE "S"





TYPE "V"





TYPE "T"

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

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

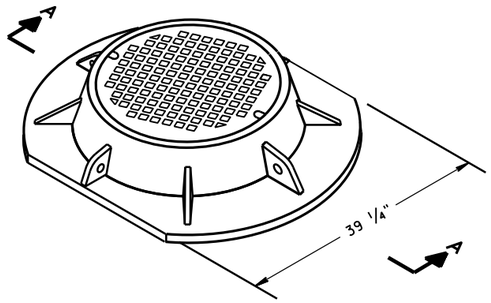
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

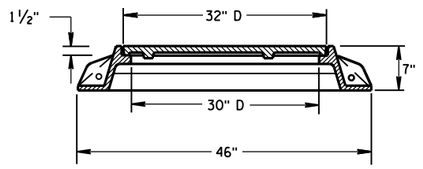
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

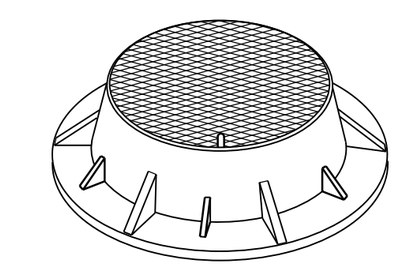
FHWA

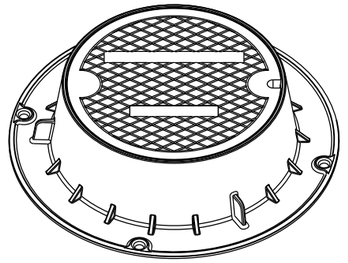
6
S.D.D. 8 A 5-19c

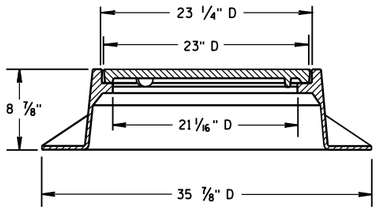


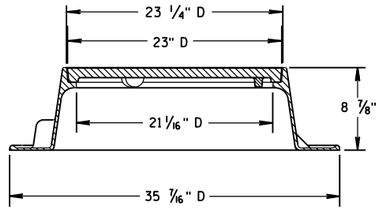


SECTION A-A
TYPE "K"









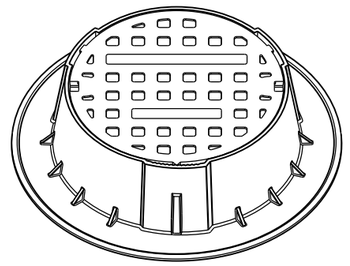
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

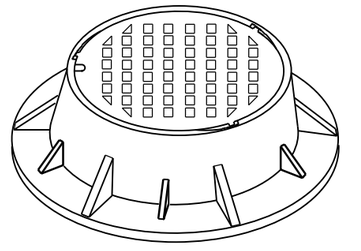
GENERAL NOTES

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.

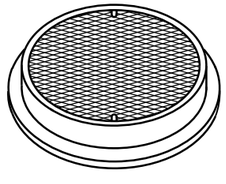
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

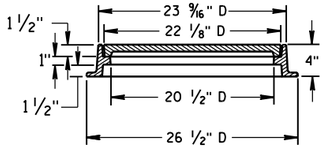
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



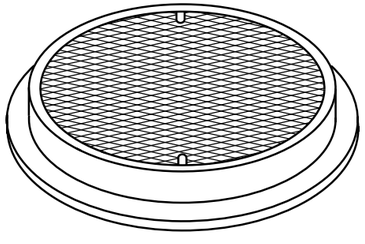


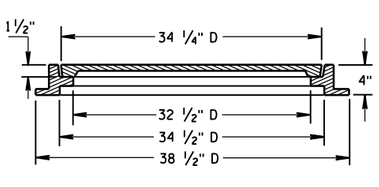
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





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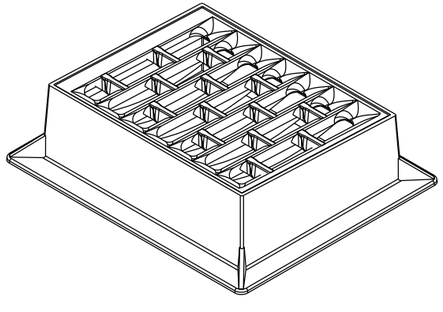
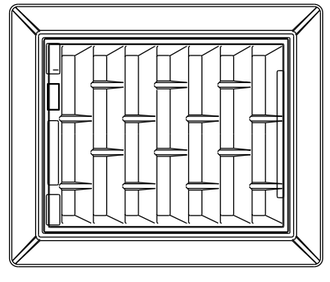
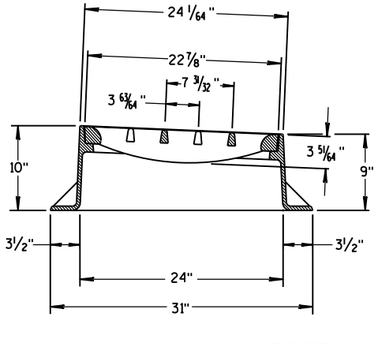
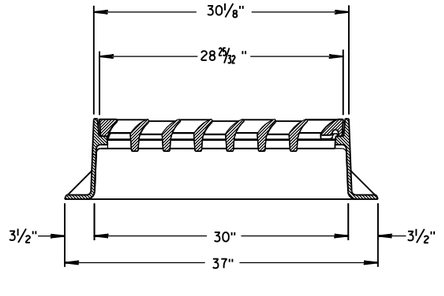








INLET COVER TYPE "BW"

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

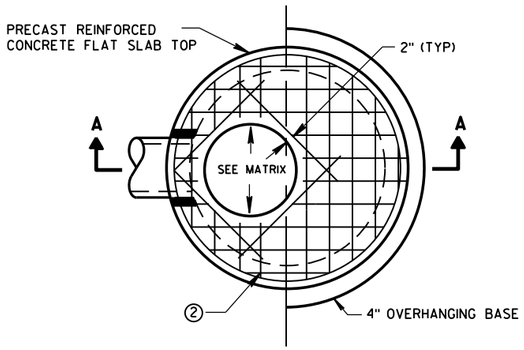
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

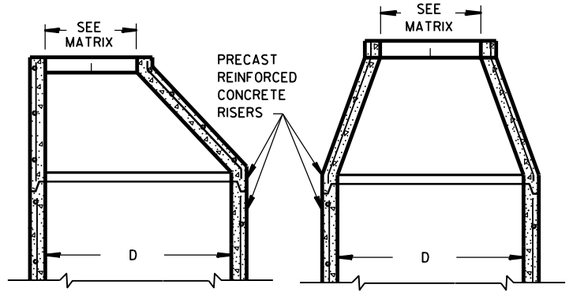
S.D.D. 8 A 5-19d

6

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

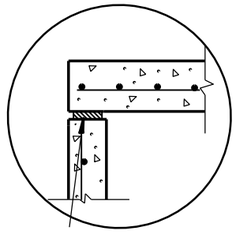


PLAN VIEW CIRCULAR OPENING

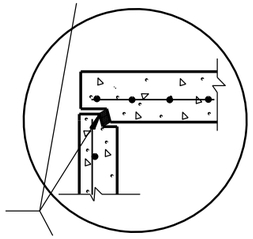


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

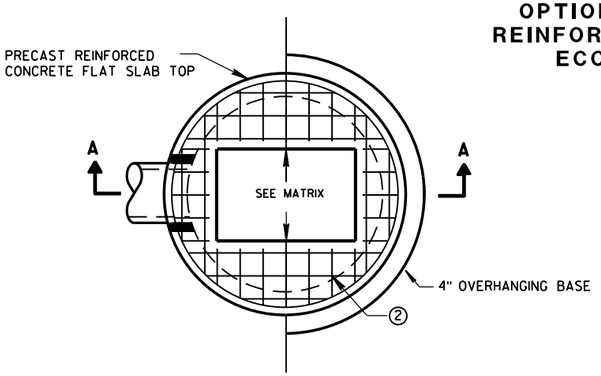
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



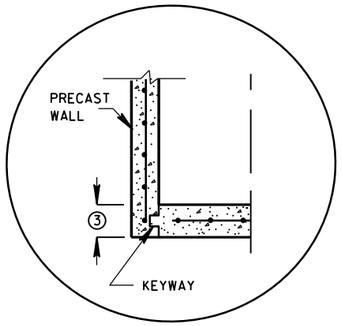
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

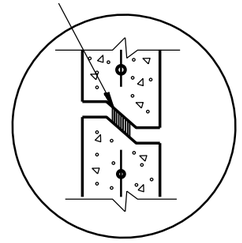


PLAN VIEW RECTANGULAR OPENING



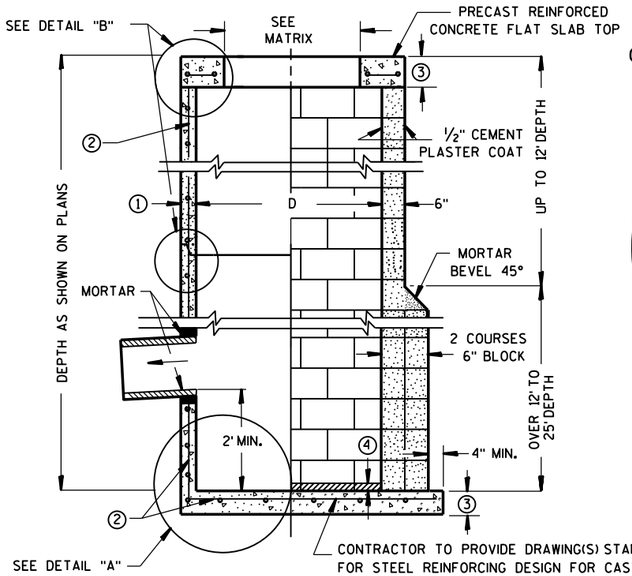
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



RISER WITH TONGUE AND GROOVE JOINT

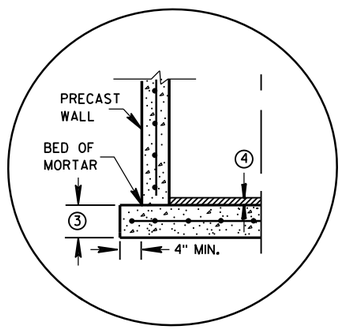
DETAIL "B"



SECTION A-A

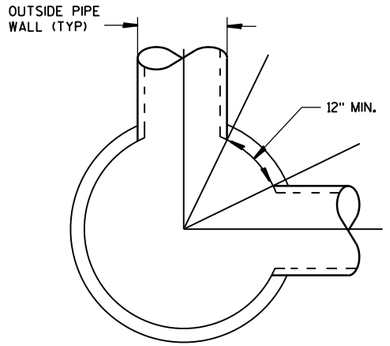
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CATCH BASIN COVER OPENING MATRIX

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

PIPE MATRIX

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

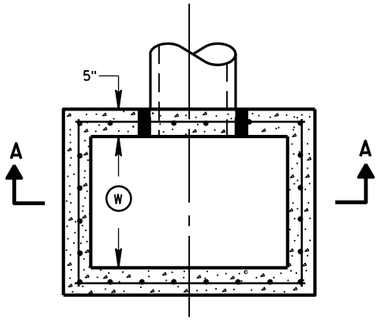
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

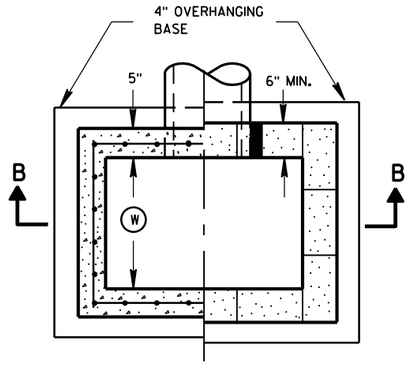
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

S.D.D. 8 A 8-2

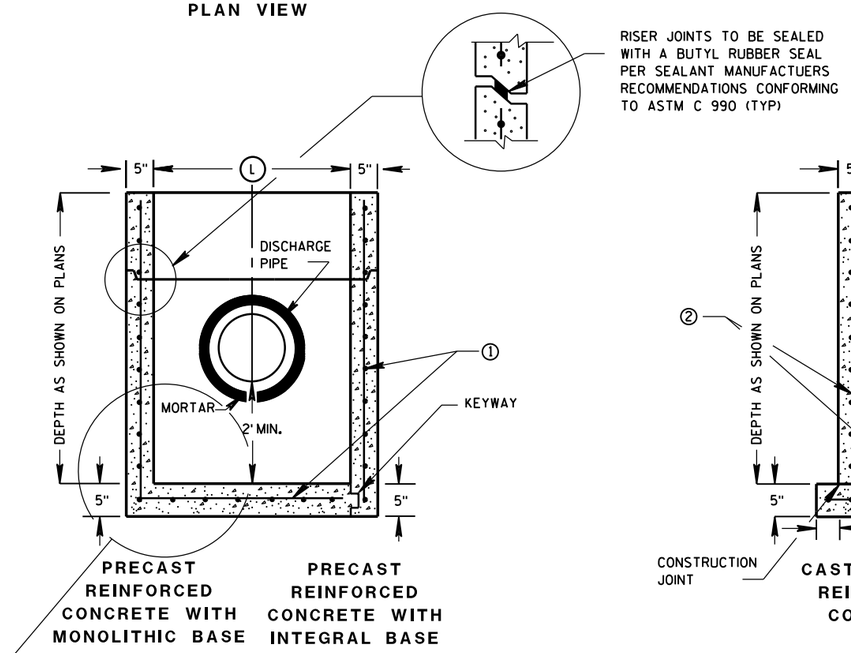
S.D.D. 8 A 8-2



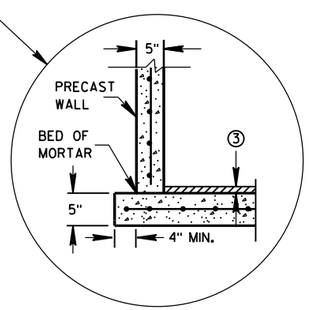
PLAN VIEW



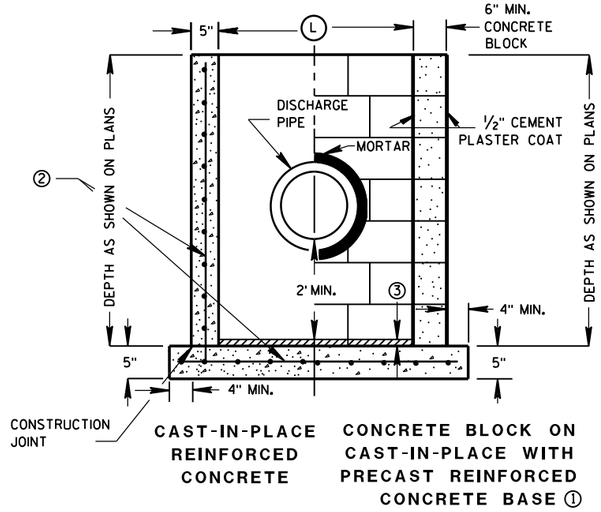
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

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

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

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

ALL PRECAST CATCH BASIN 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" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS 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.

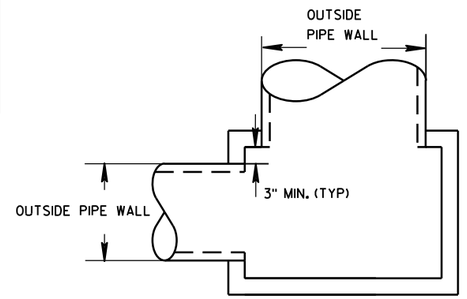
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
FHWA

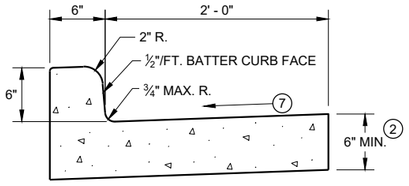
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR

6

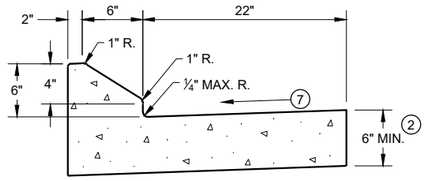
S.D.D. 8 A 9-2

6

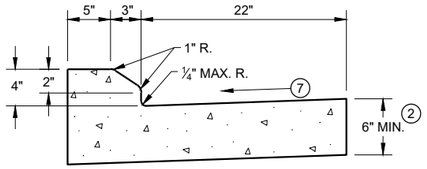
S.D.D. 8 A 9-2



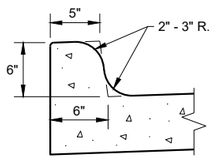
TYPES A[1] & D



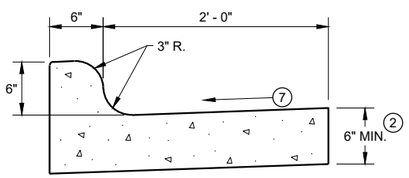
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

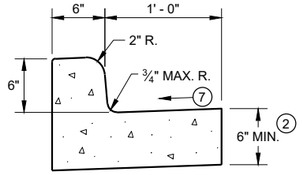


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



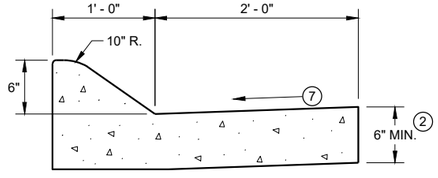
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"



TYPES A[1] & D

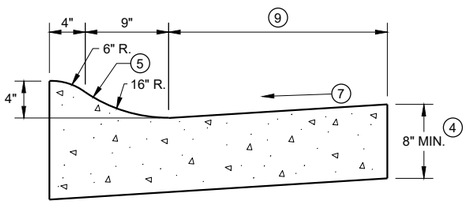
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D

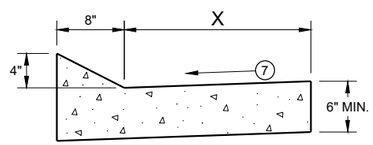
4" SLOPED CURB TYPES A[1] & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R[1] & T

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

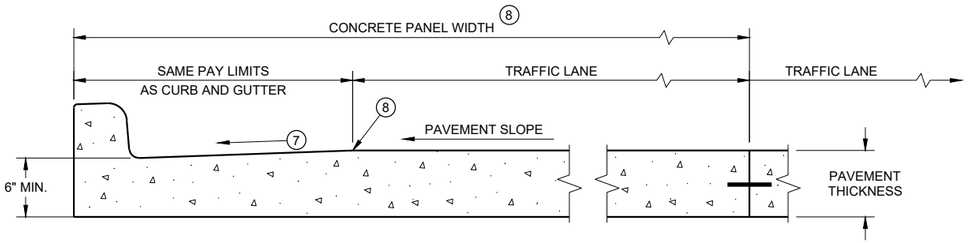


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

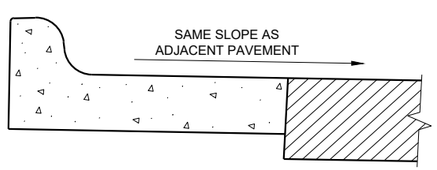
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

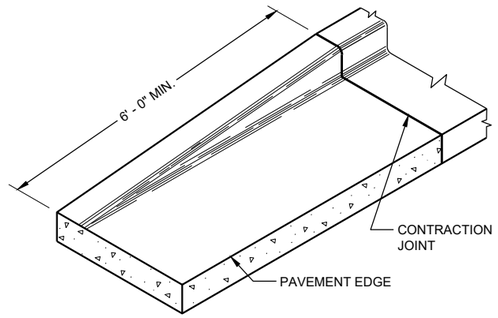
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

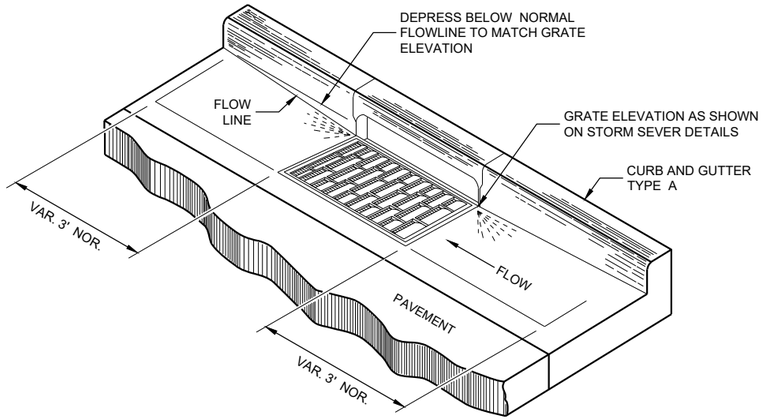
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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



END SECTIONCURB AND GUTTER



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

GENERAL NOTES

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

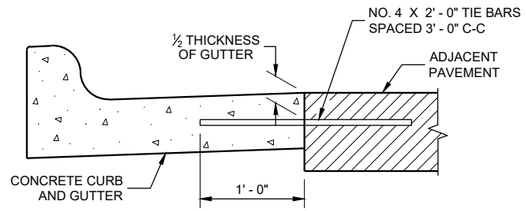
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

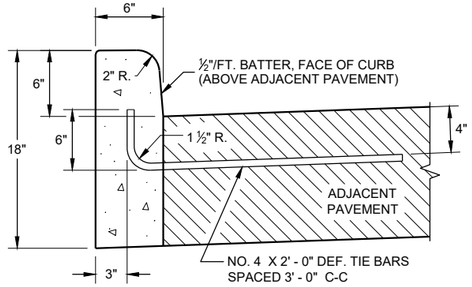
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

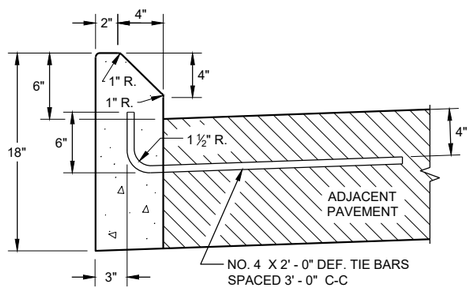
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

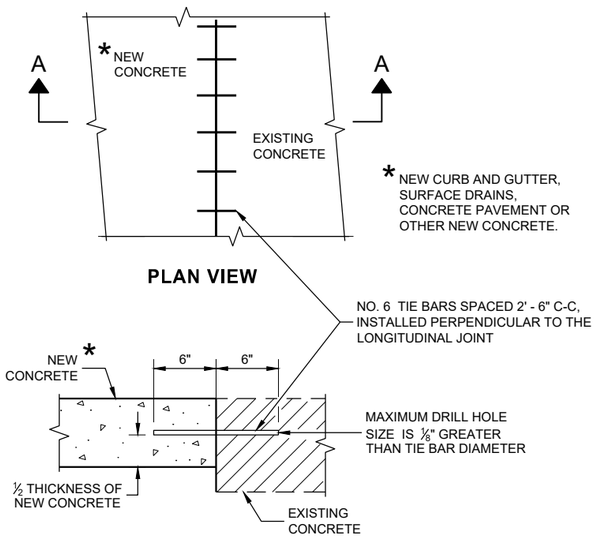


TYPES A (1) & D



TYPES G (1) & J

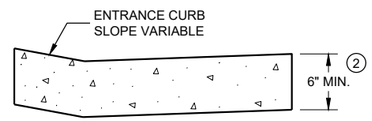
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD08D01 - 22b

6

SDD08D01 - 22b

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

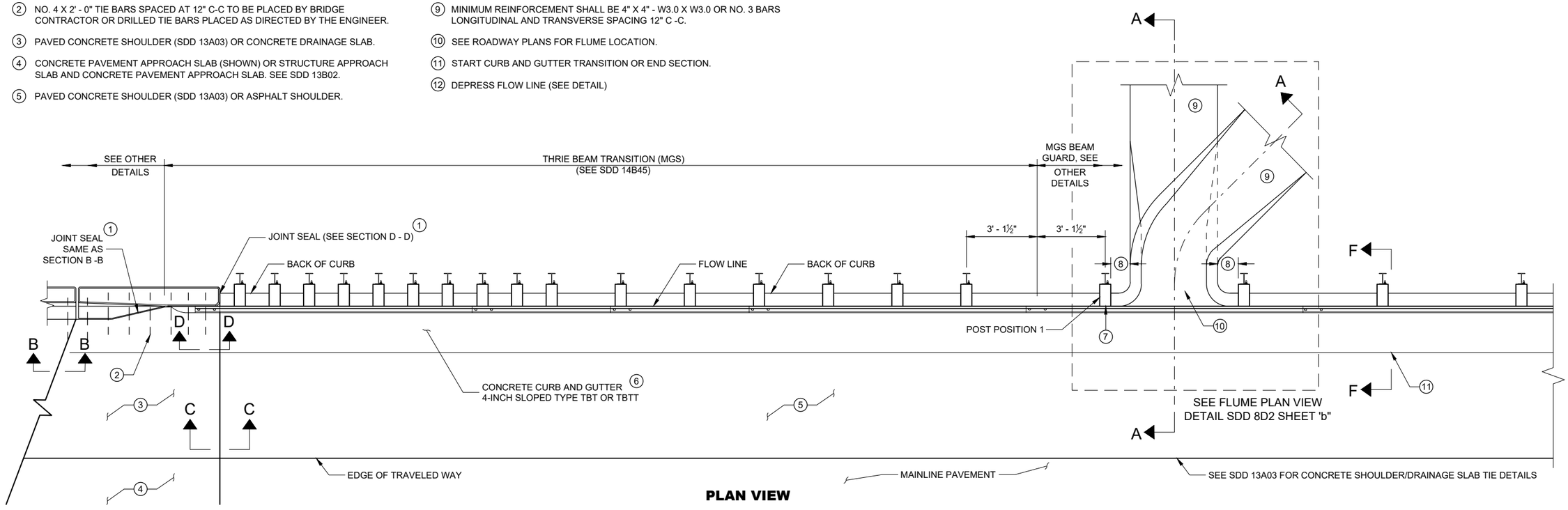
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

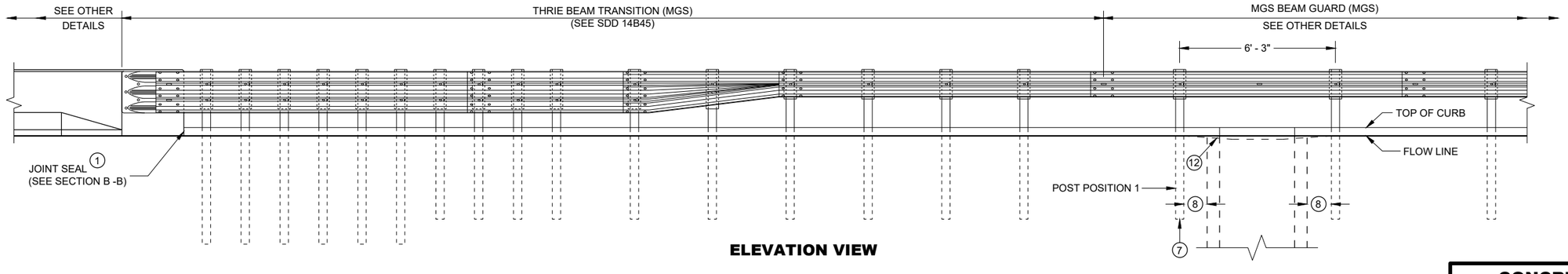
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



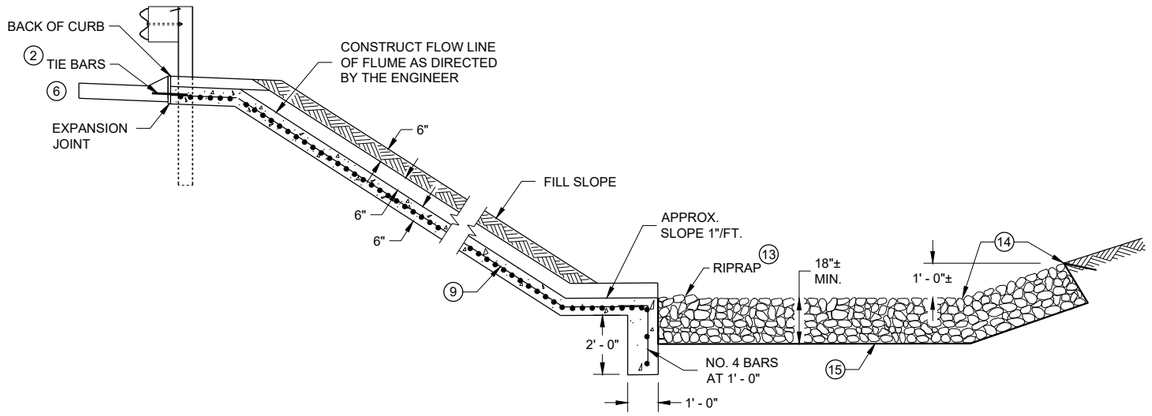
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

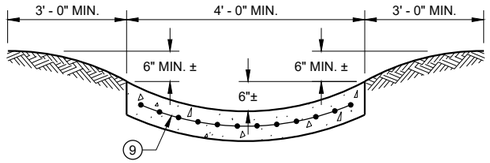
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D02 - 07a

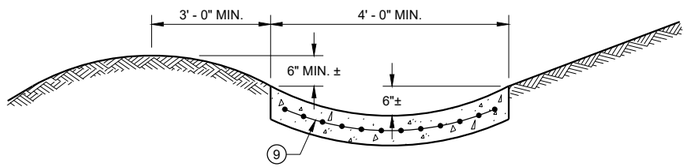
SDD 08D02 - 07a



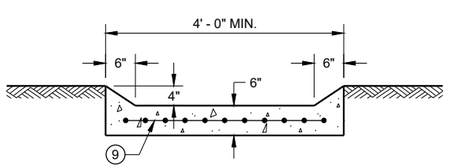
SECTION A - A



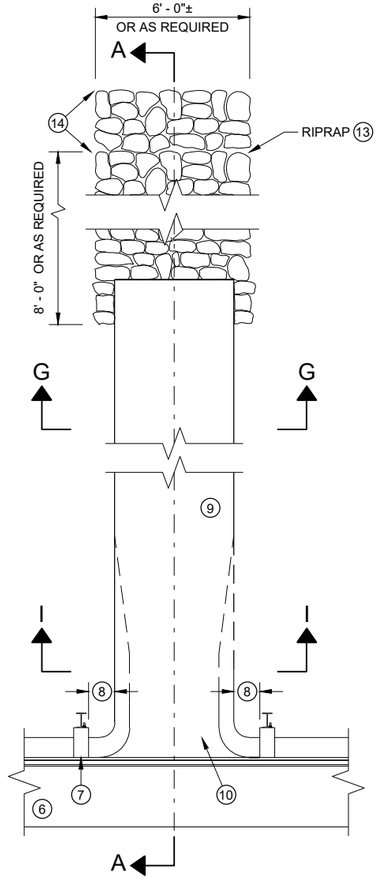
SECTION G - G



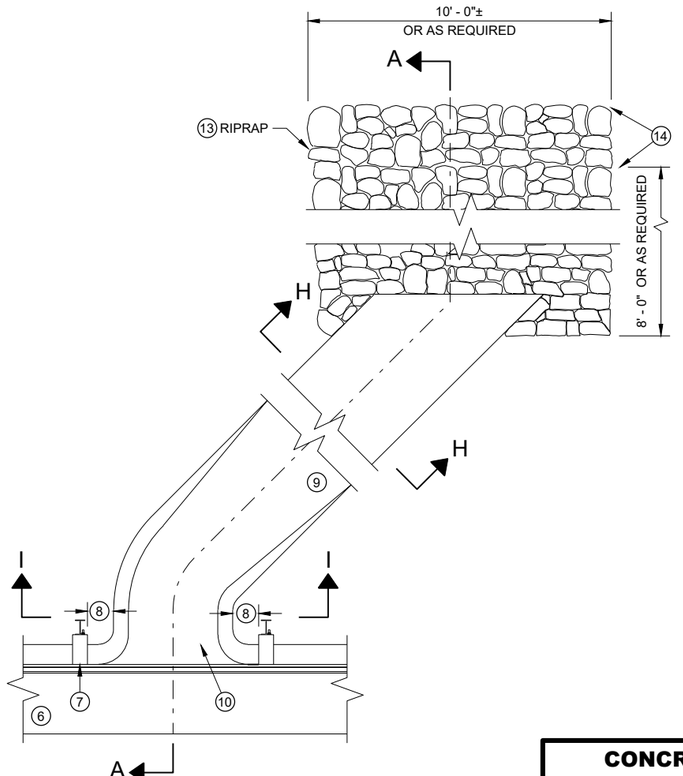
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

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

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE FABRIC TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

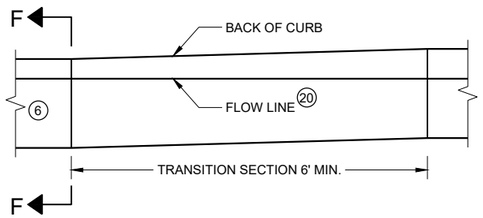
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

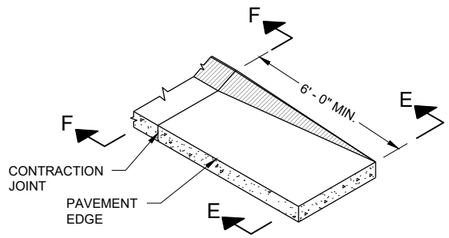
SDD 08D02 - 07b

6

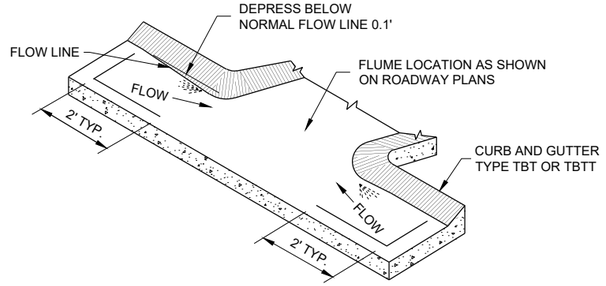
SDD 08D02 - 07b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE FABRIC TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

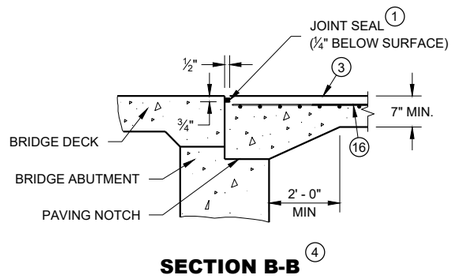
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

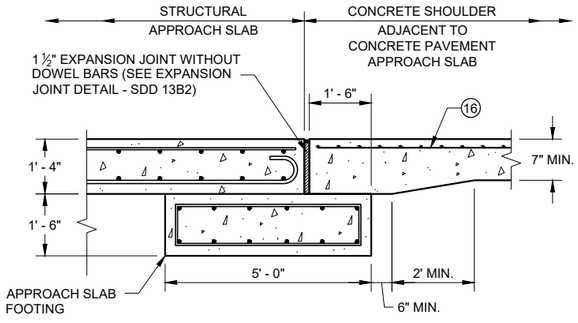
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

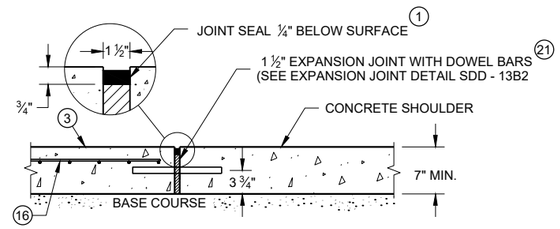
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



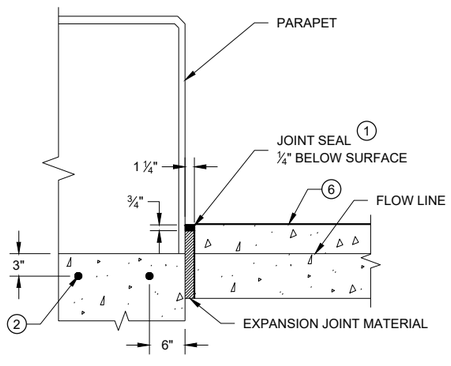
SECTION B-B (4)



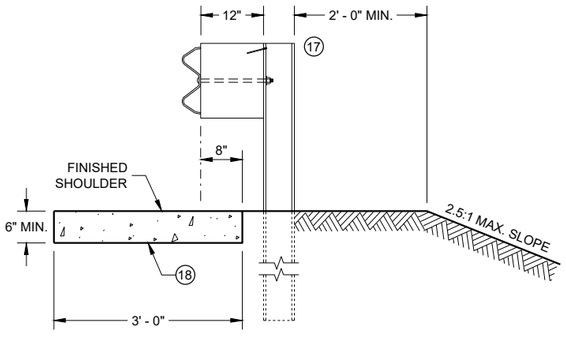
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



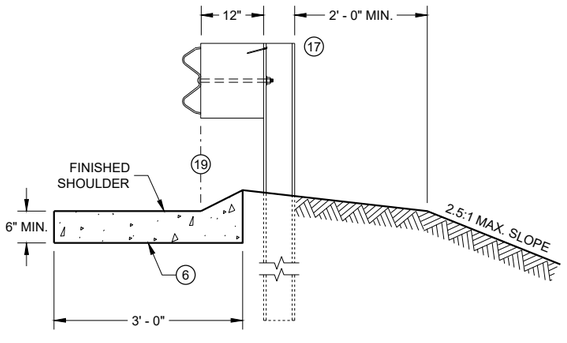
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

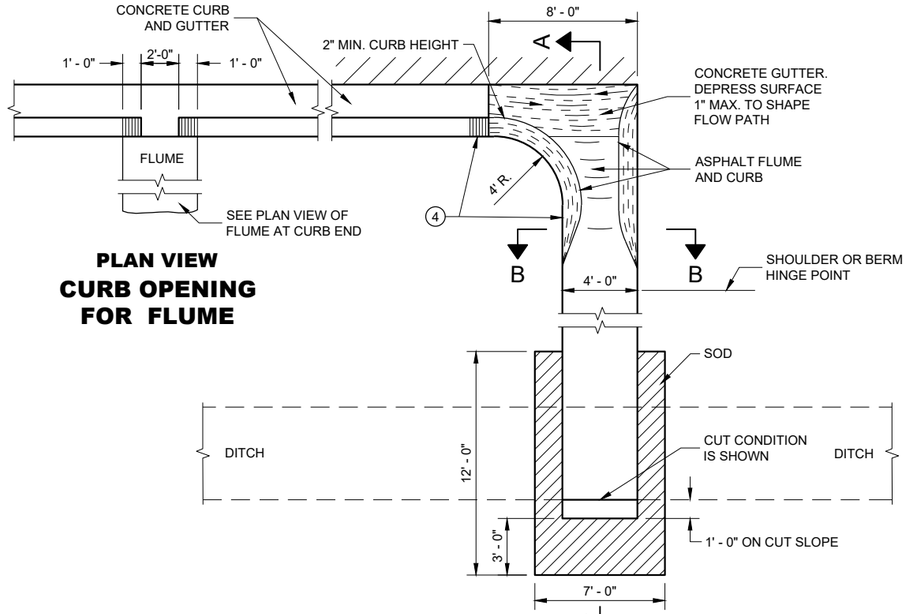
FHWA

SDD 08D02 - 07c

SDD 08D02 - 07c

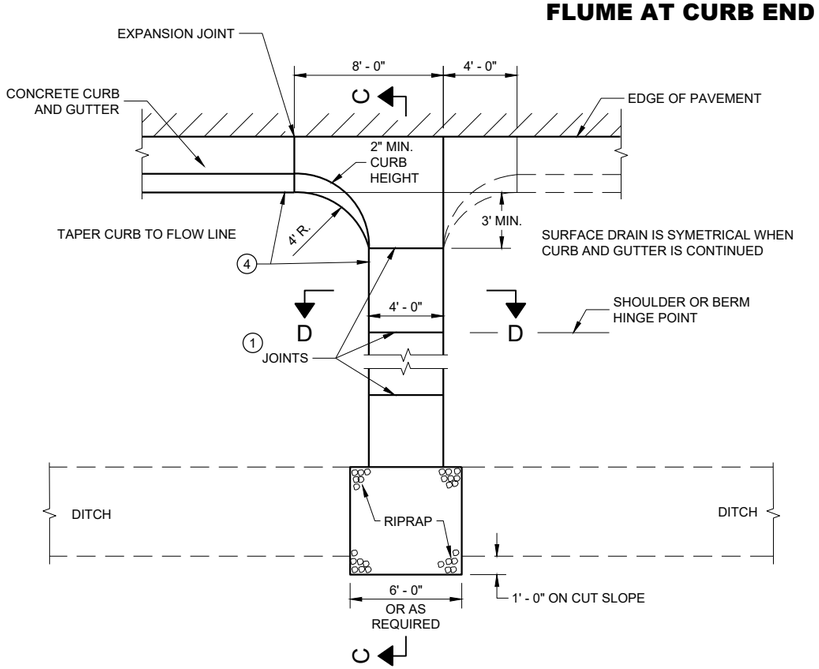
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



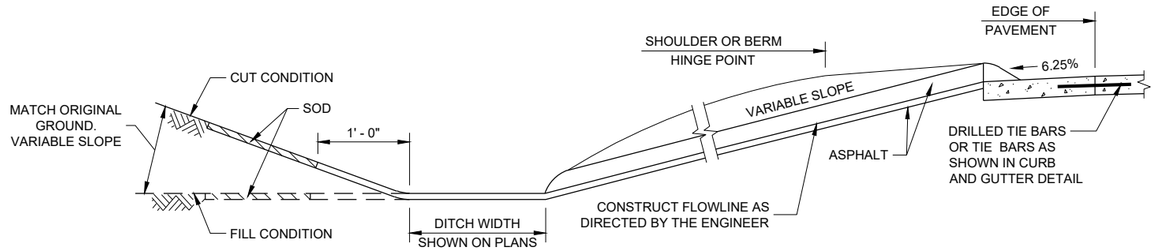
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

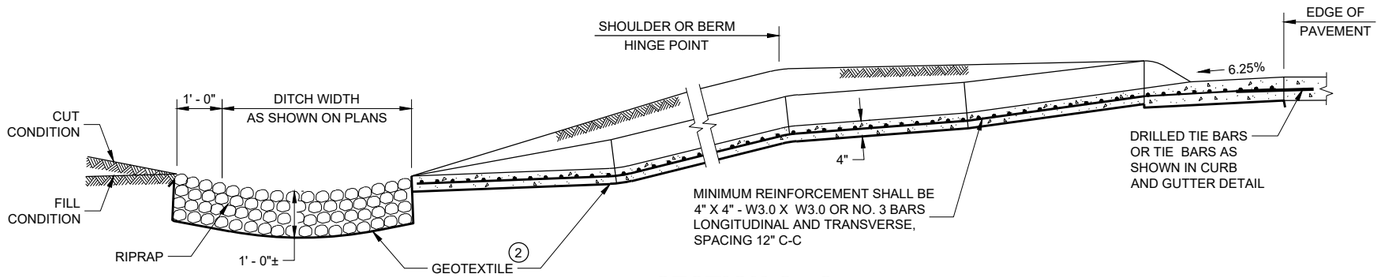
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

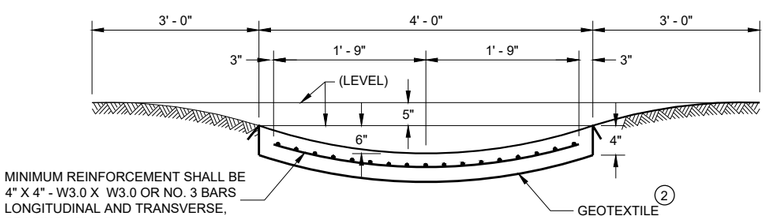


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 08D04 - 06

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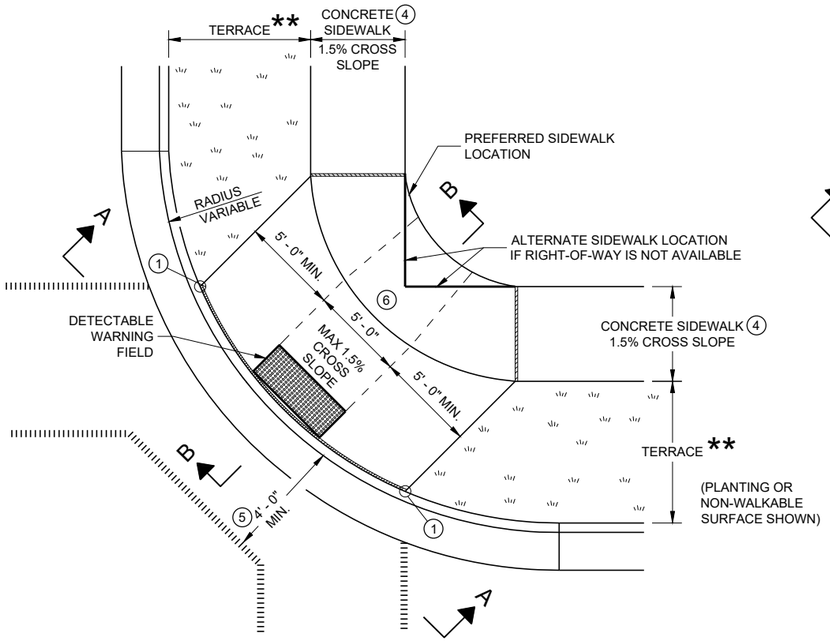
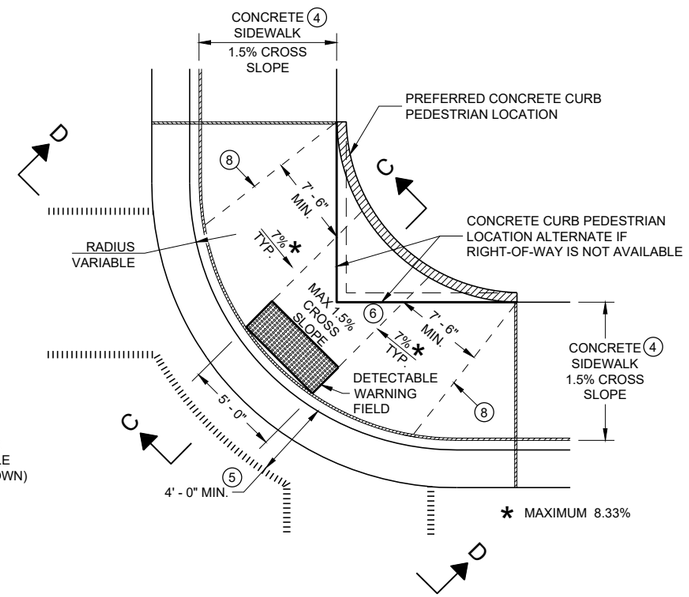
SDD 08D04 - 06



PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

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.

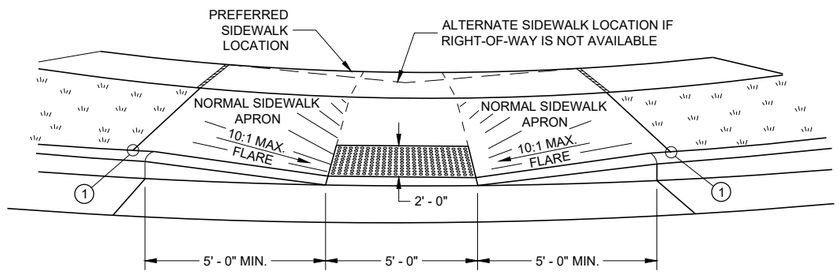
(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

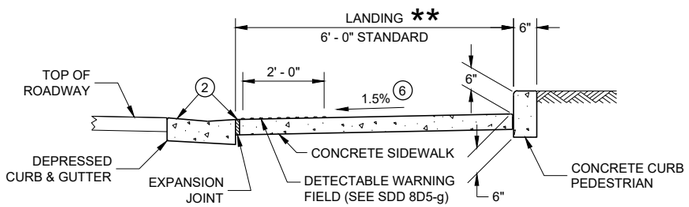
(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(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.



VIEW A - A FOR TYPE 1

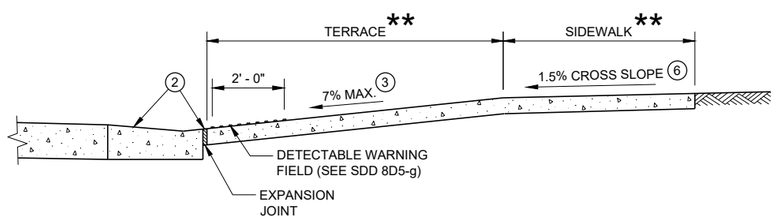


SECTION C - C FOR TYPE 1 - A

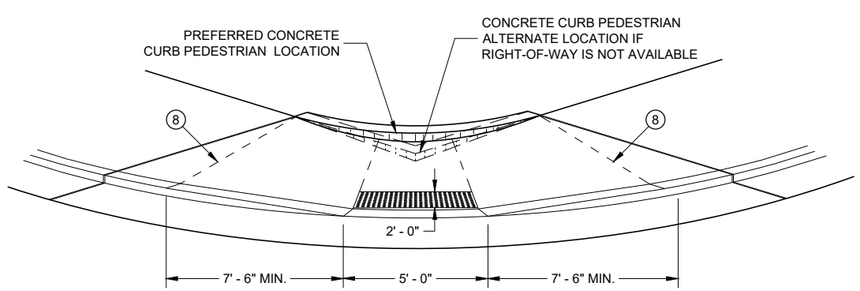
LEGEND

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



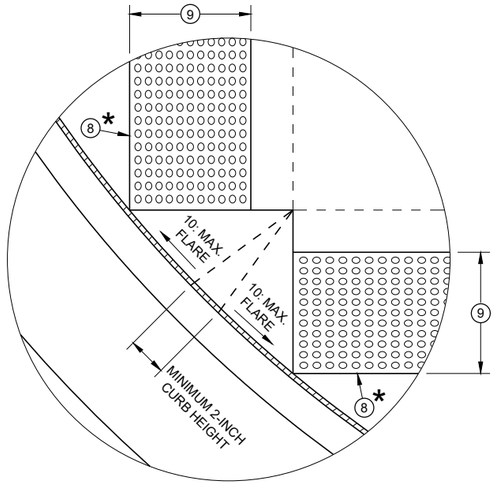
VIEW D - D FOR TYPE 1 - A

CURB RAMPS
TYPE 1 AND 1-A

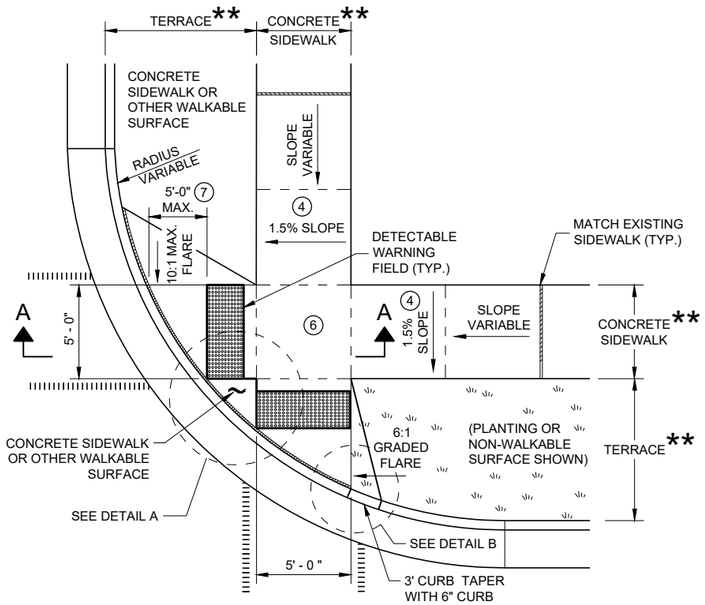
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20a

SDD 08D05 - 20a



DETAIL A



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

GENERAL NOTES

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

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

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

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

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

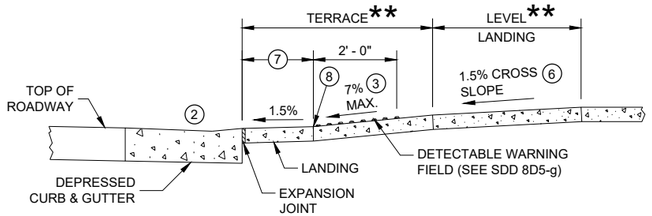
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

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

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

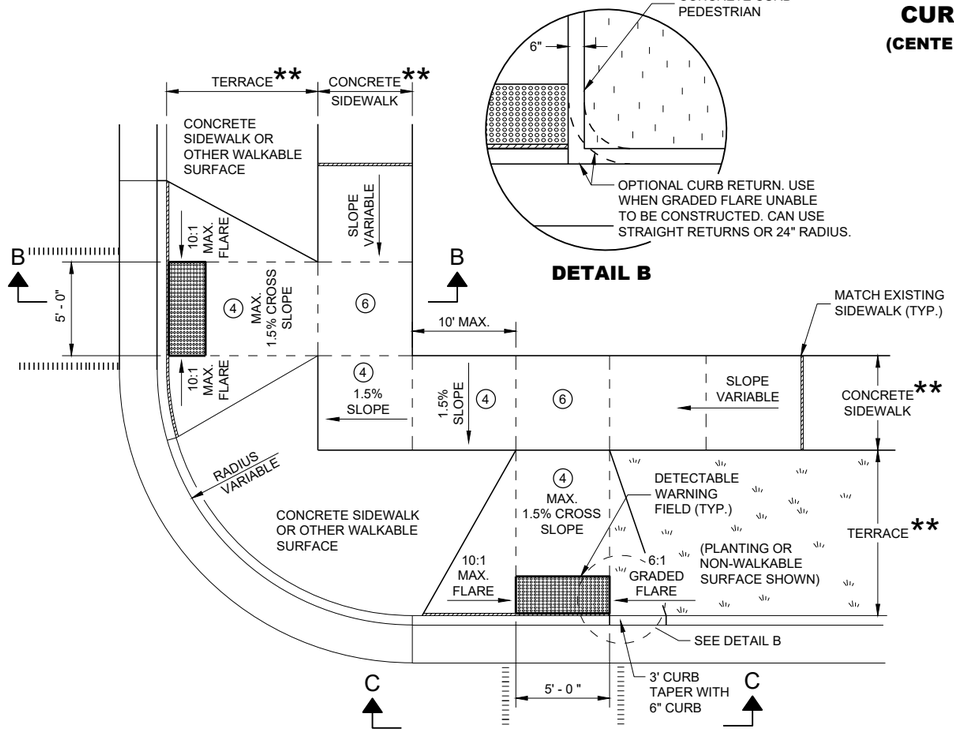
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

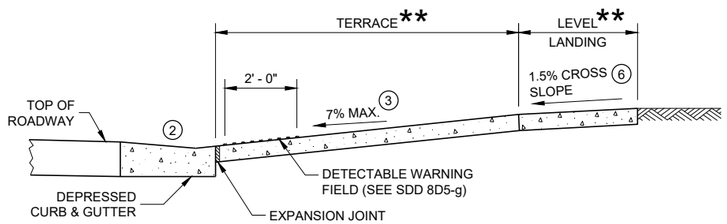
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

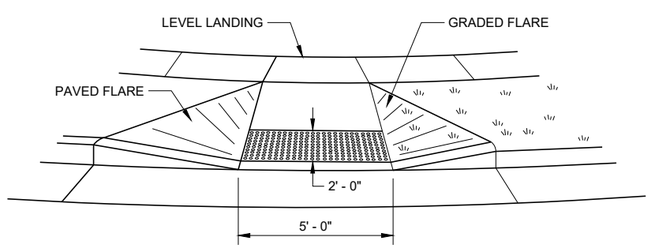
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

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



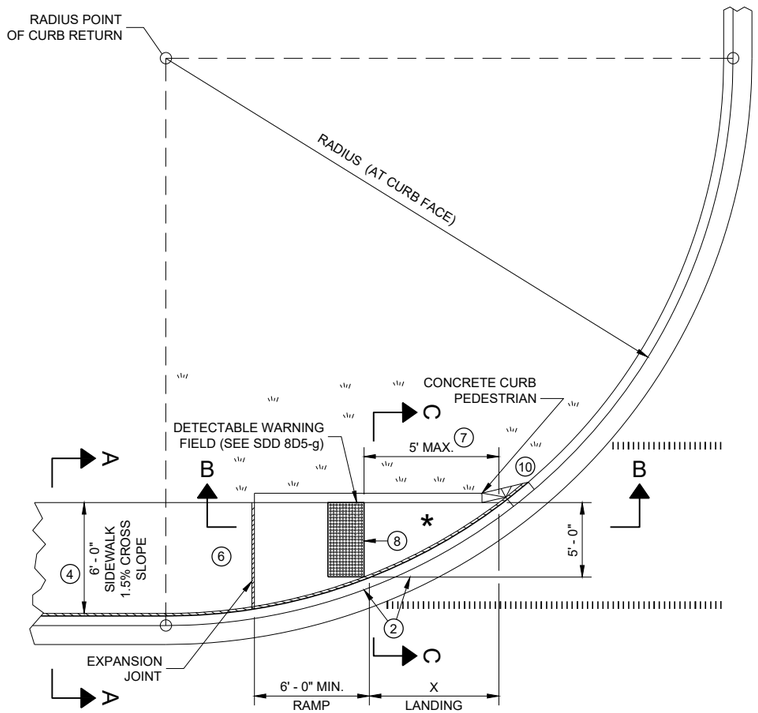
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

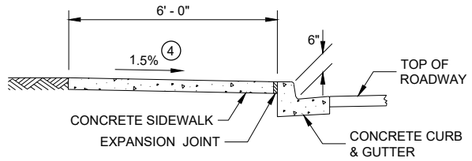


PLAN VIEW

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.

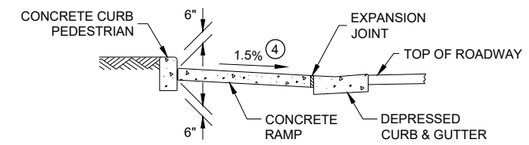
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

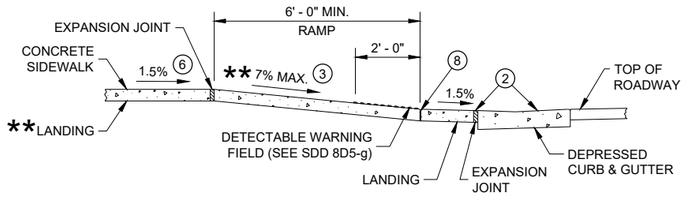
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



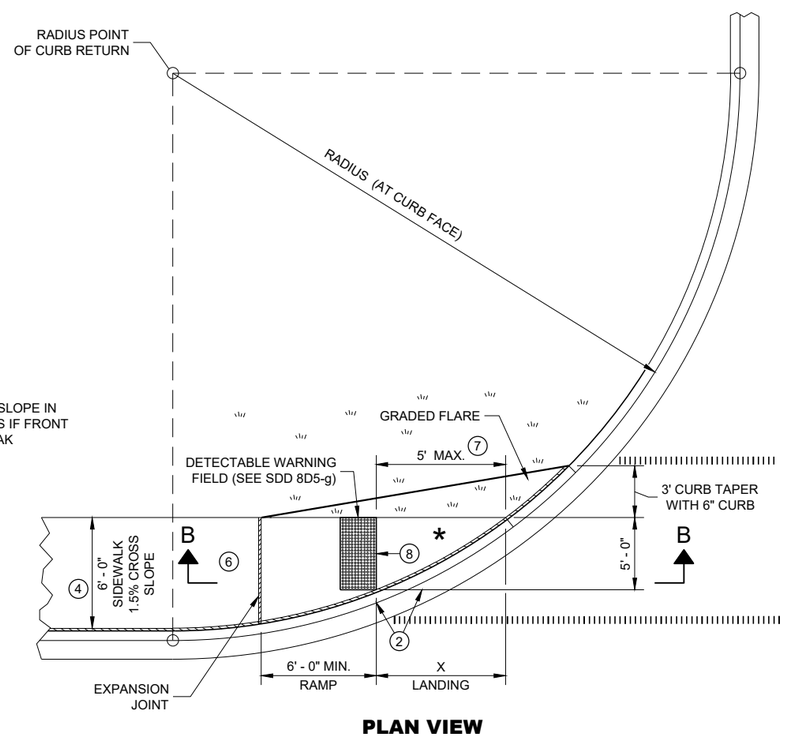
SECTION C - C FOR TYPE 4A



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

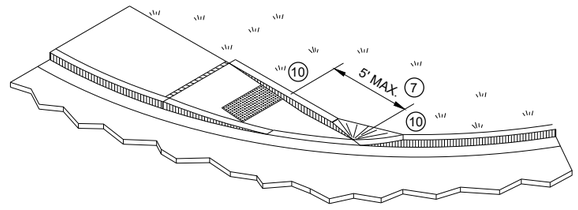
SECTION B - B FOR TYPE 4A AND TYPE 4A1

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

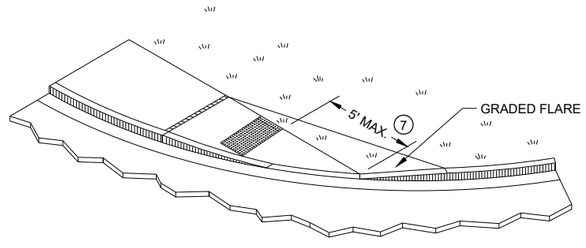


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



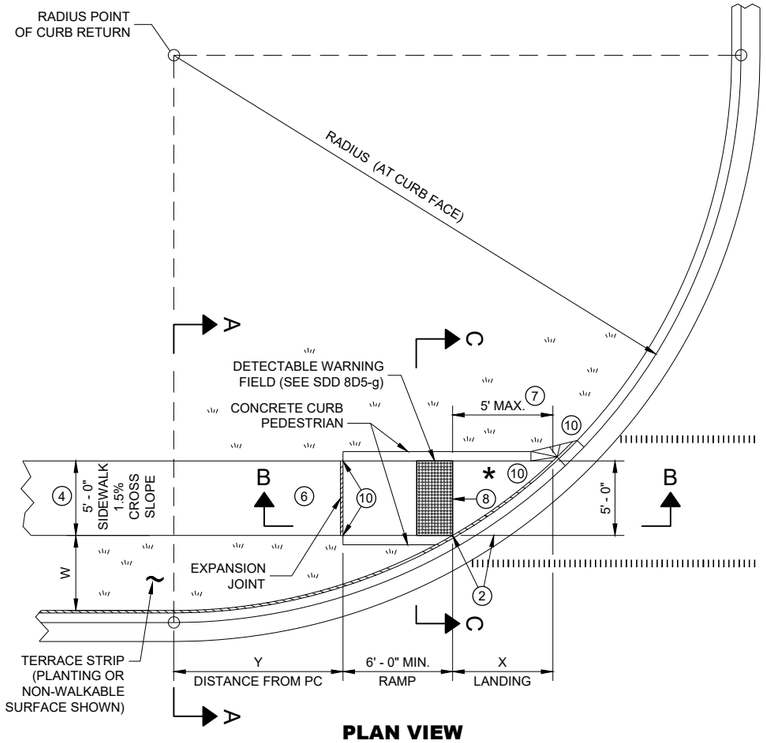
ISOMETRIC VIEW FOR TYPE 4A1

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.

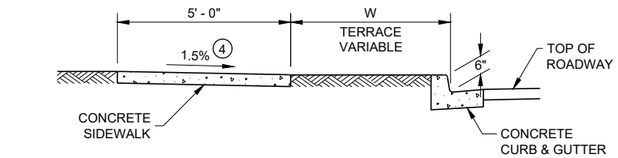
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

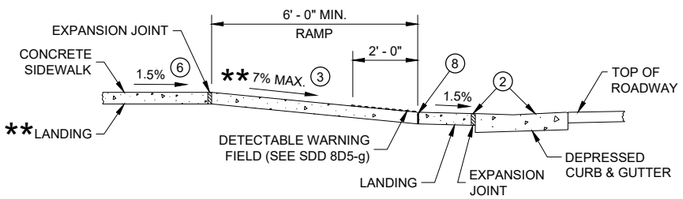
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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



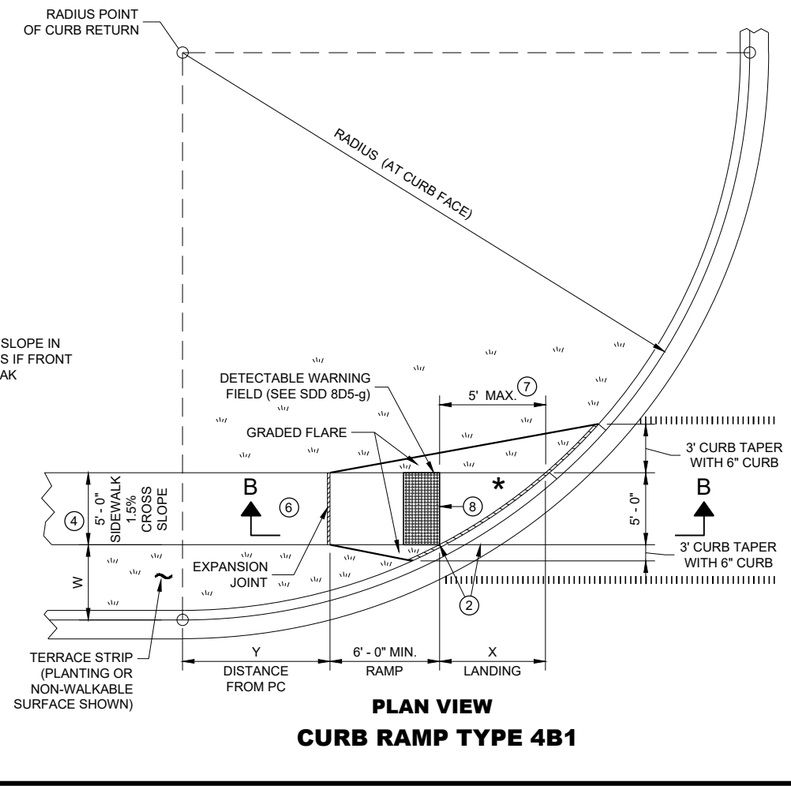
SECTION A - A FOR TYPE 4B



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

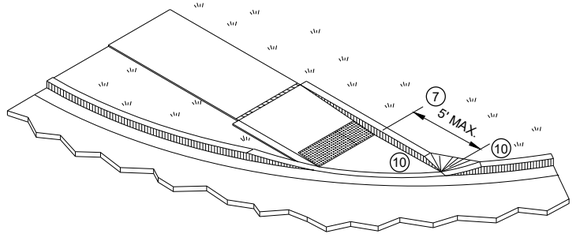
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

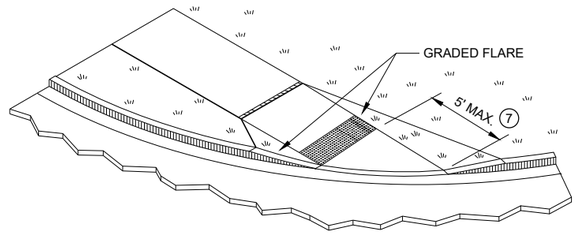


PLAN VIEW

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

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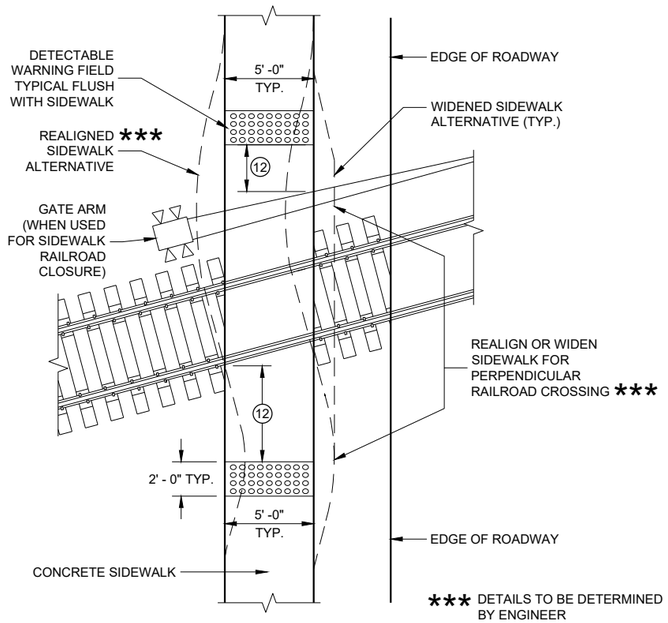
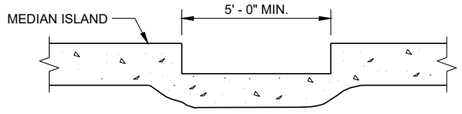
SDD 08D05 - 20d

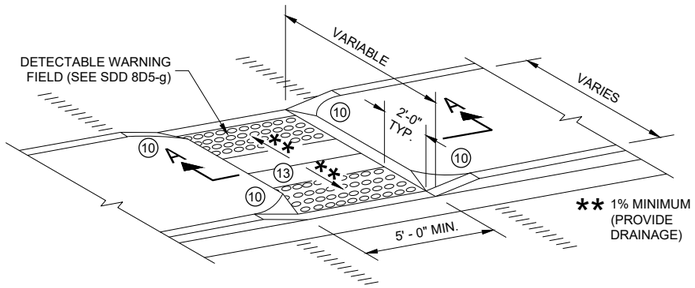


CURB RAMP TYPE 8

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.

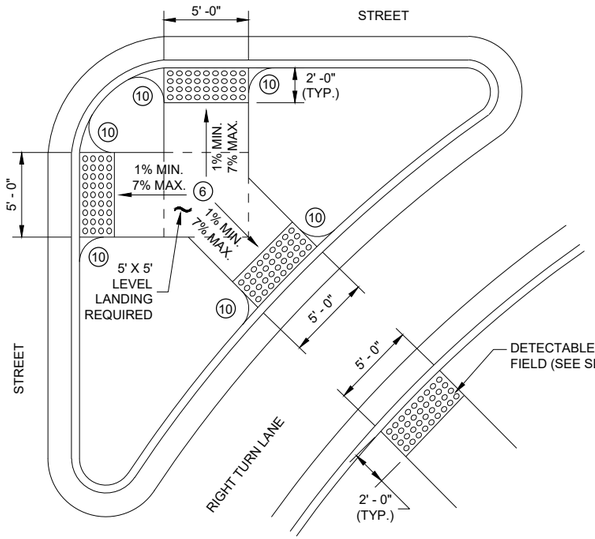
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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

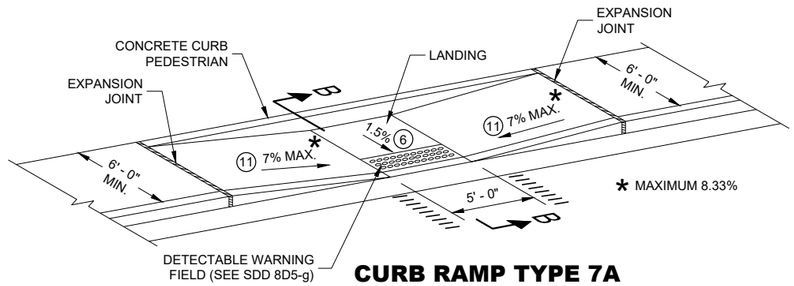
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

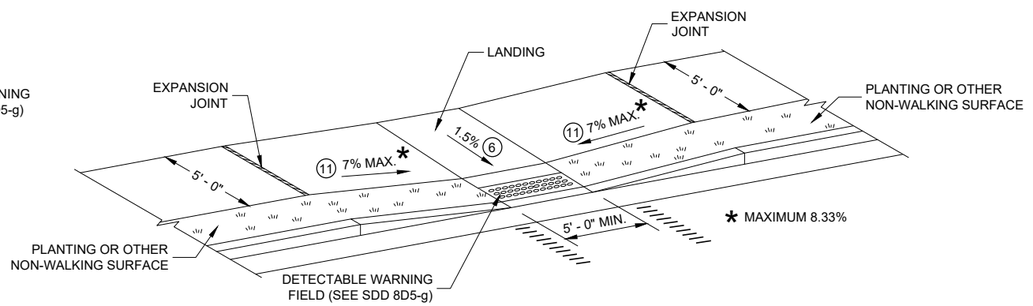
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

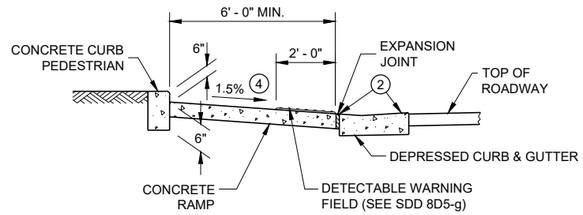
MID BLOCK CROSSING



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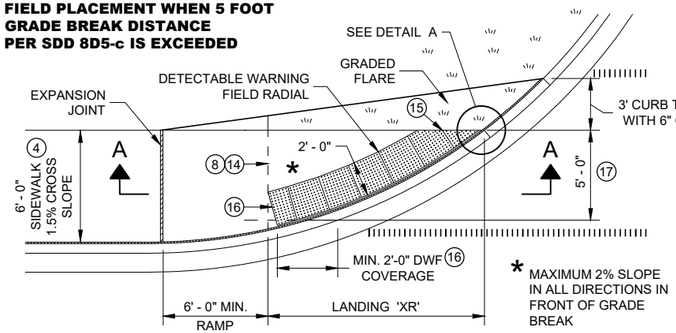
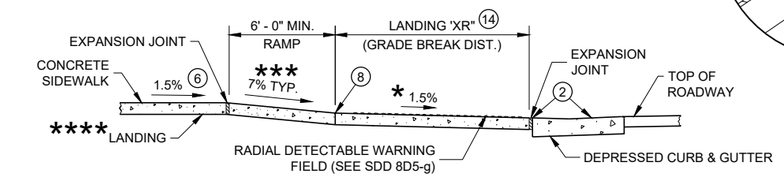
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

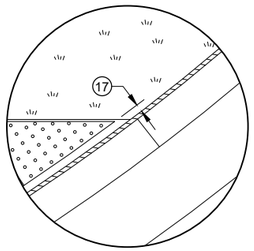
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** 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.

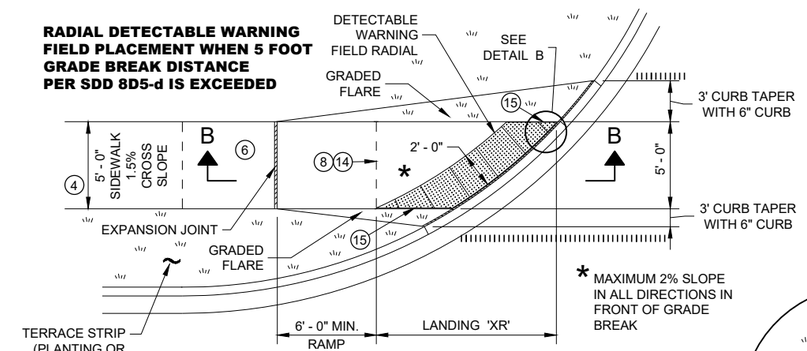
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

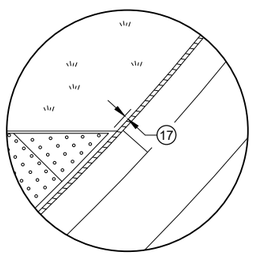
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



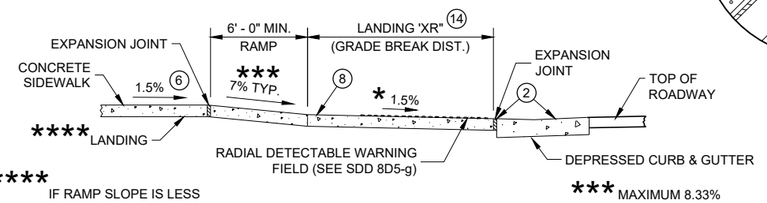
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

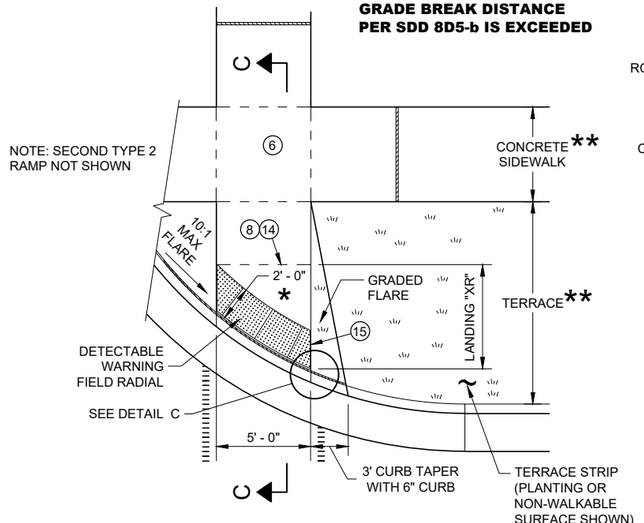


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** 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

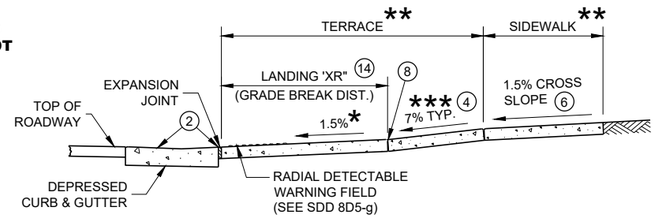


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

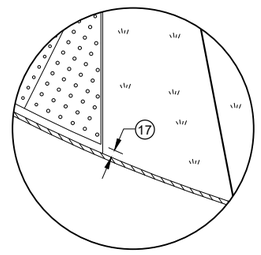


SECTION C - C FOR TYPE 2

* 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

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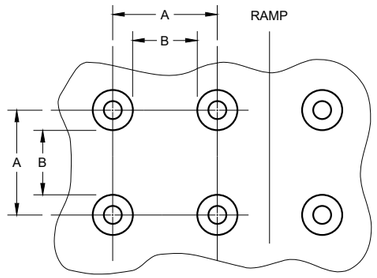
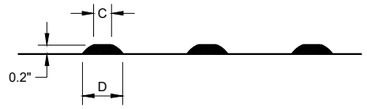
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

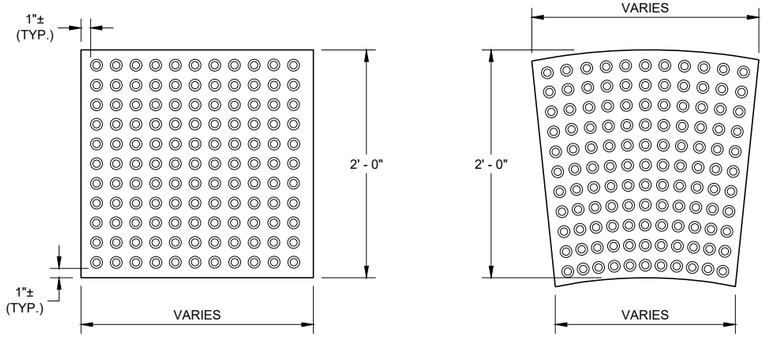


PLAN VIEW



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.

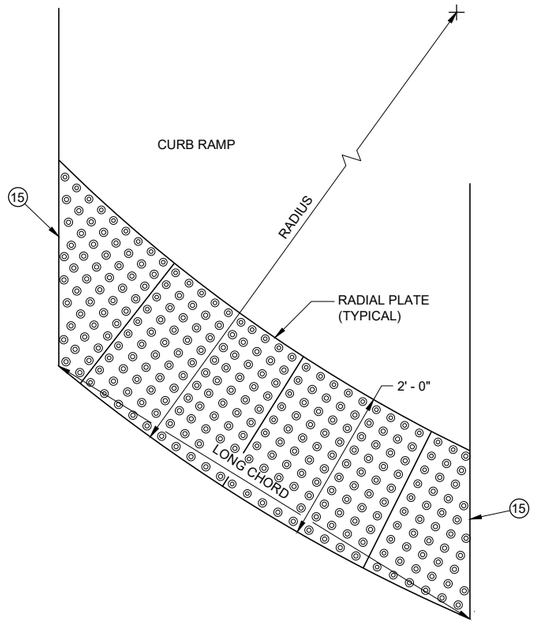
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

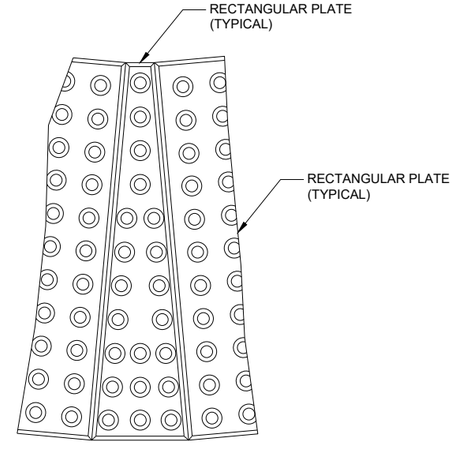
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

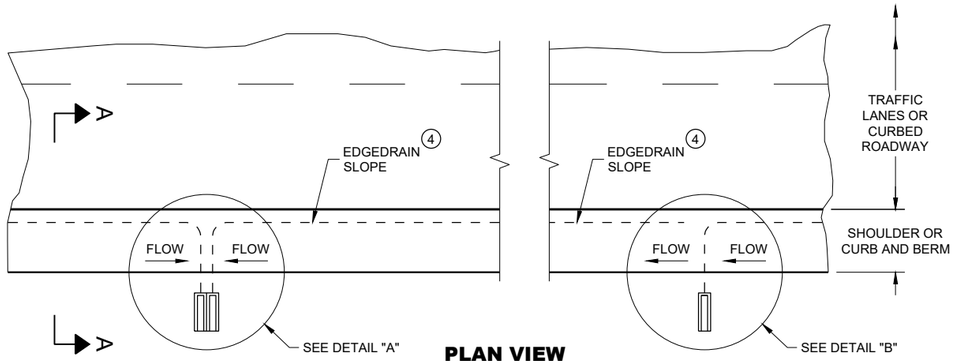
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

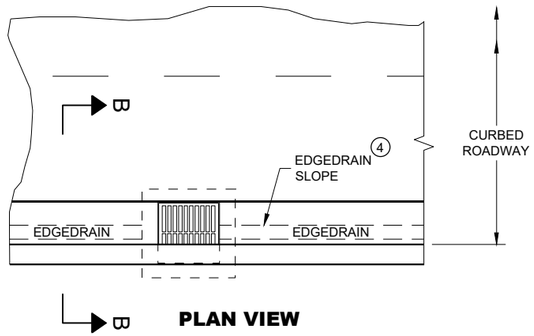
FHWA

6
SDD 08D05 - 20g



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) (2)



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

GENERAL NOTES

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

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

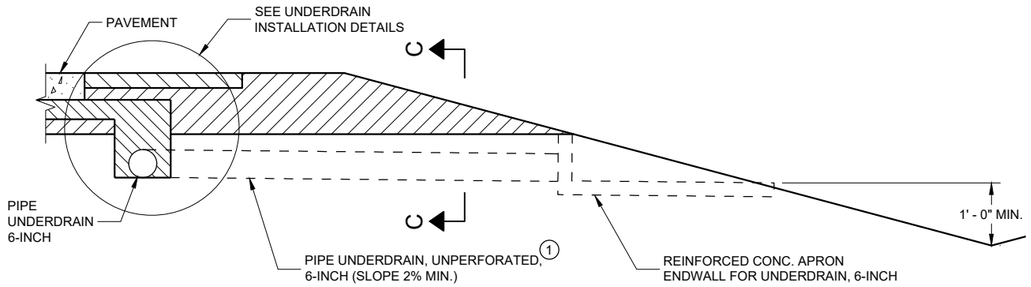
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

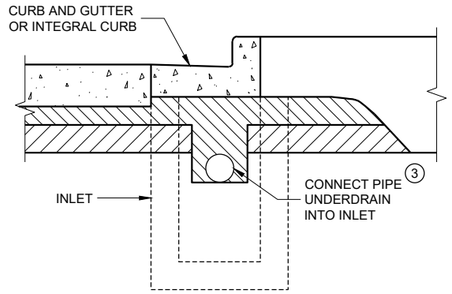
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



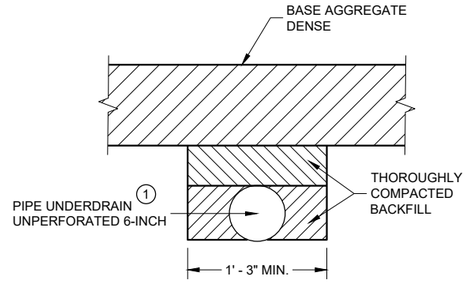
SECTION A - A

RURAL CROSS SECTION



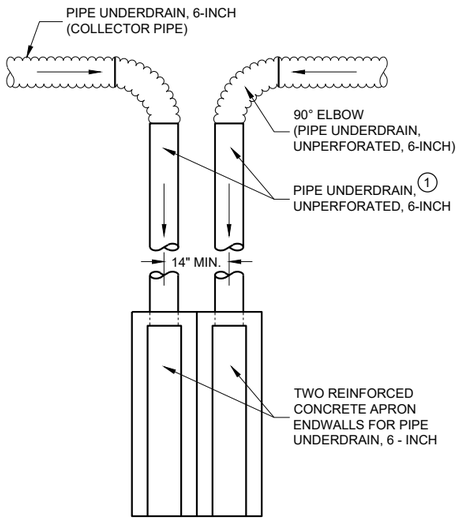
SECTION B - B

URBAN CROSS SECTION

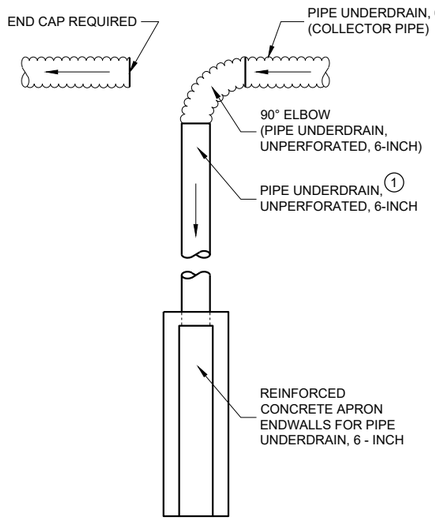


SECTION C - C

TRENCH FOR OUTFALL PIPE

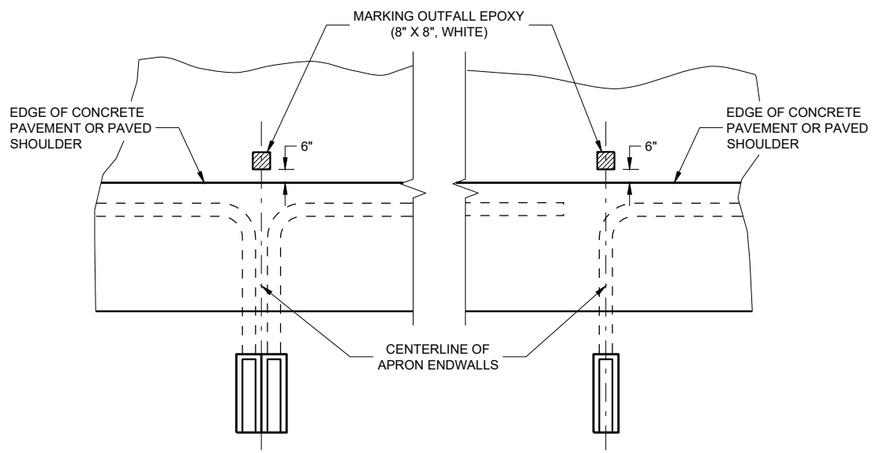


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

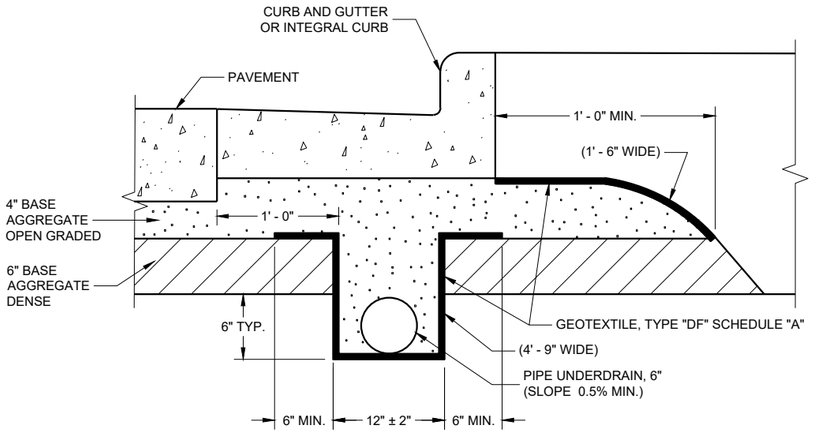
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD08D15 - 05a

6

SDD08D15 - 05a



EDGEDRAIN IN URBAN ROADWAY

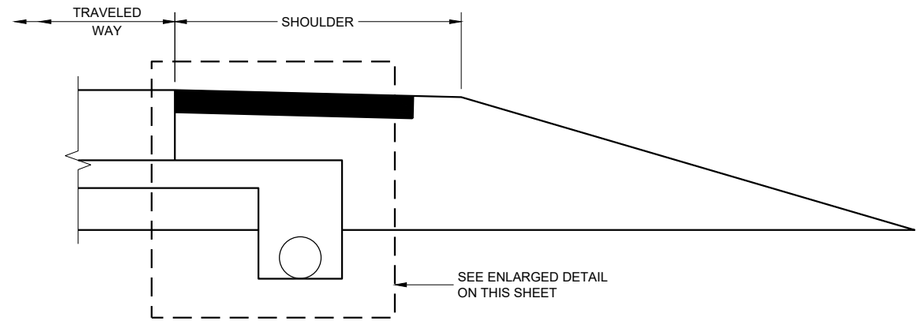
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

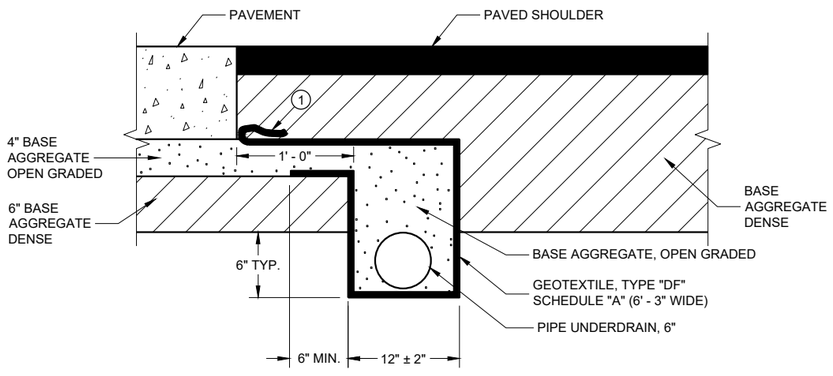
(1) FOLD OVER EXCESS GEOTEXTILE AT THIS LOCATION.

(2) TOTAL GEOTEXTILE WIDTH IS 6'-3" FOR PAYMENT.



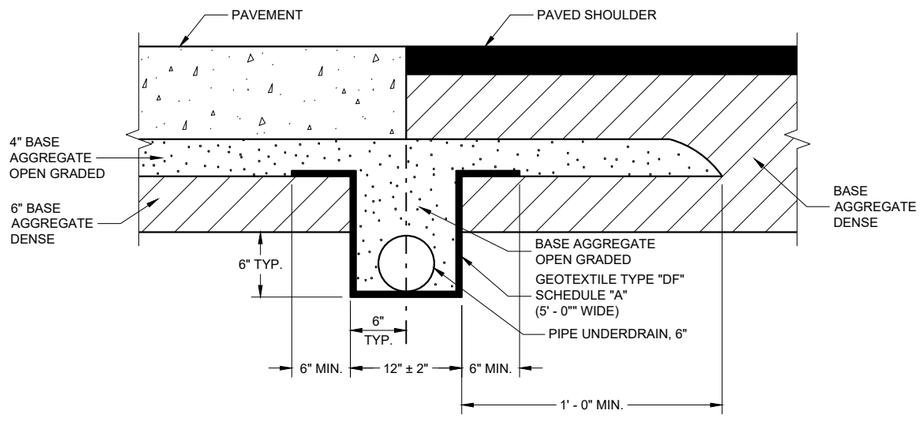
RURAL CROSS SECTION

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

6

SDD 08D15 - 05b

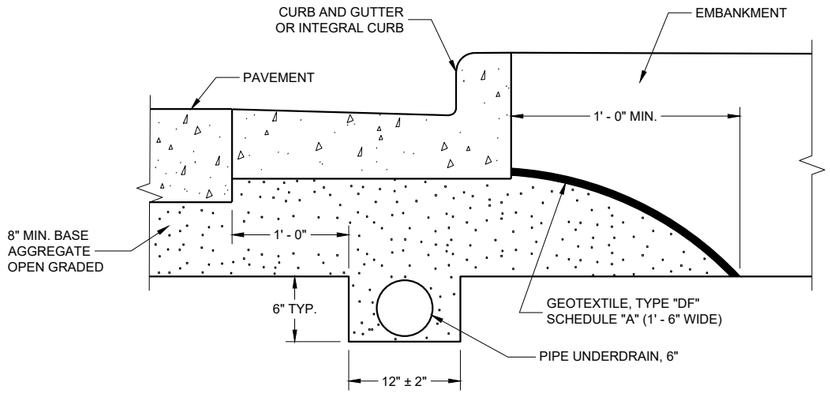
EGEDRAIN AND BASE AGGREGATE OPEN GRADED

SDD 08D15 - 05b

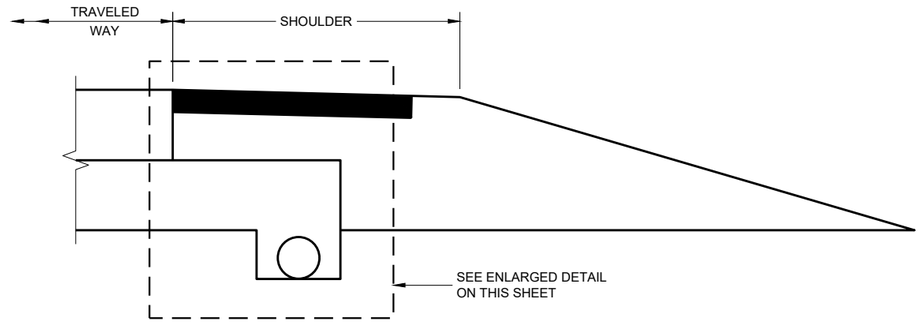
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

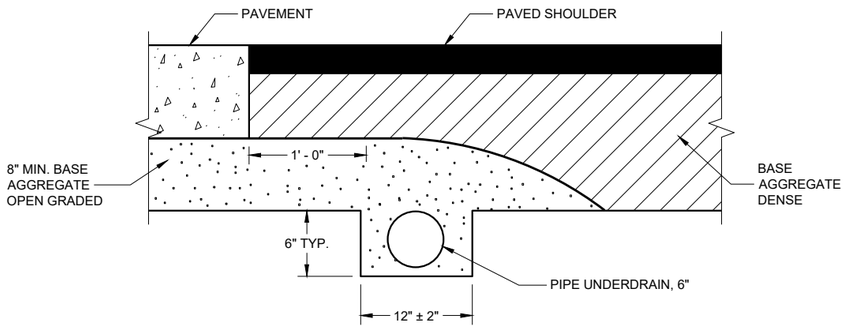


EDGEDRAIN IN URBAN ROADWAY



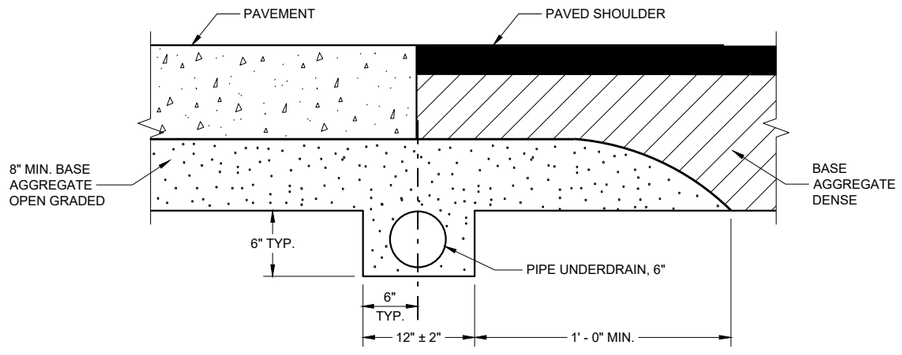
RURAL CROSS SECTION

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

6

SDD 08D15 - 05c

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

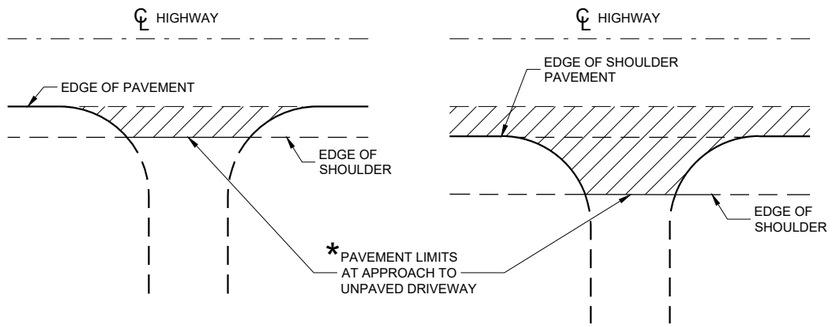
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2015
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

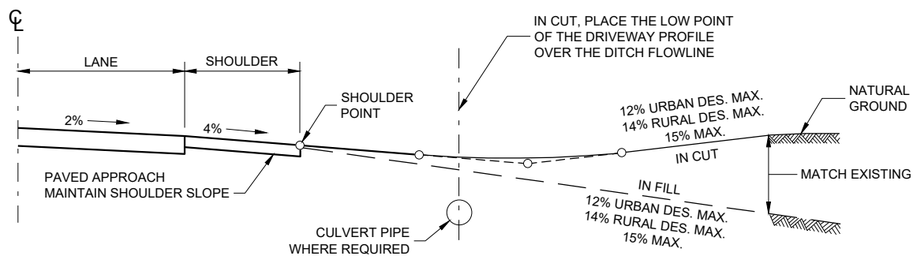
SDD 08D15 - 05c



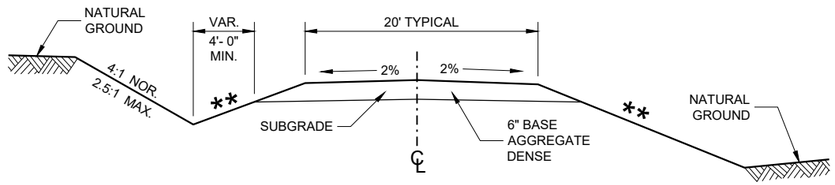
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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



TYPICAL DRIVEWAY PROFILES

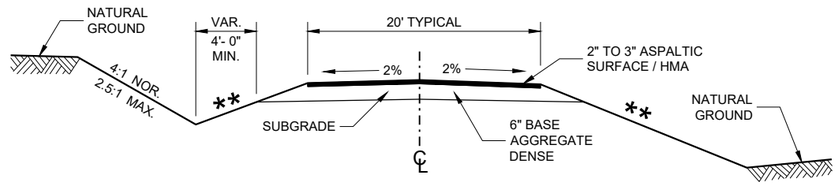


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

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

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



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

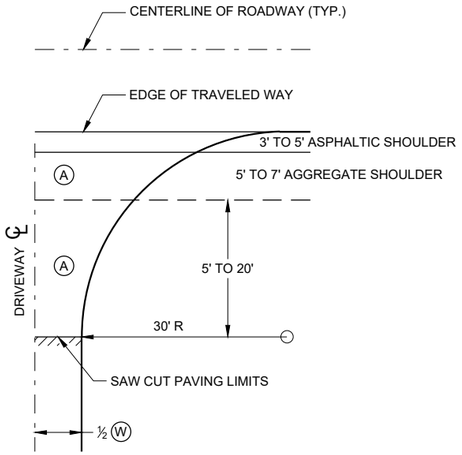
FHWA

6

SDD 08D21 - 01

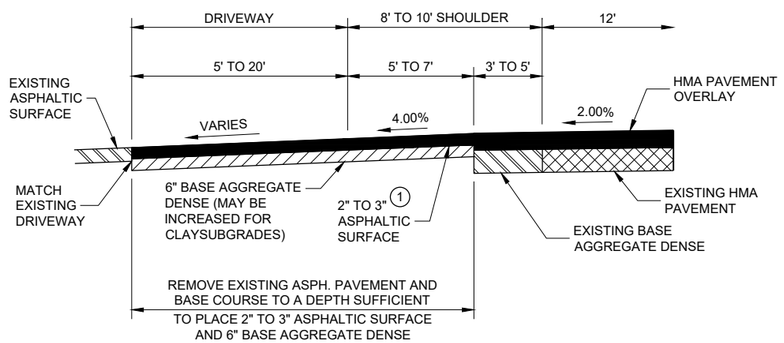
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



PROFILE VIEW

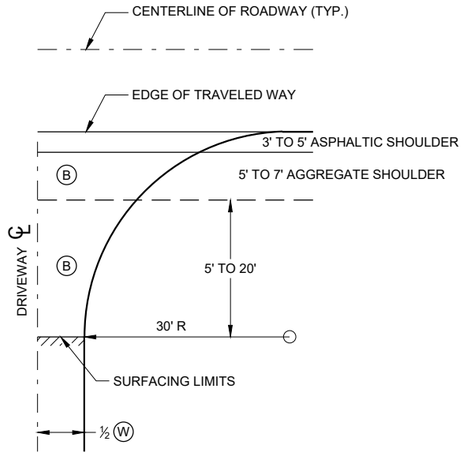
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

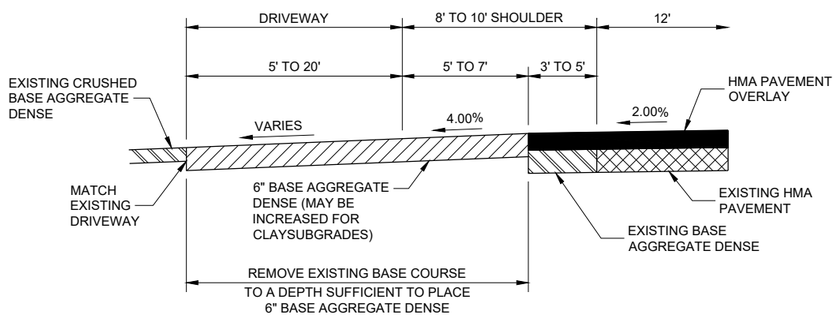
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

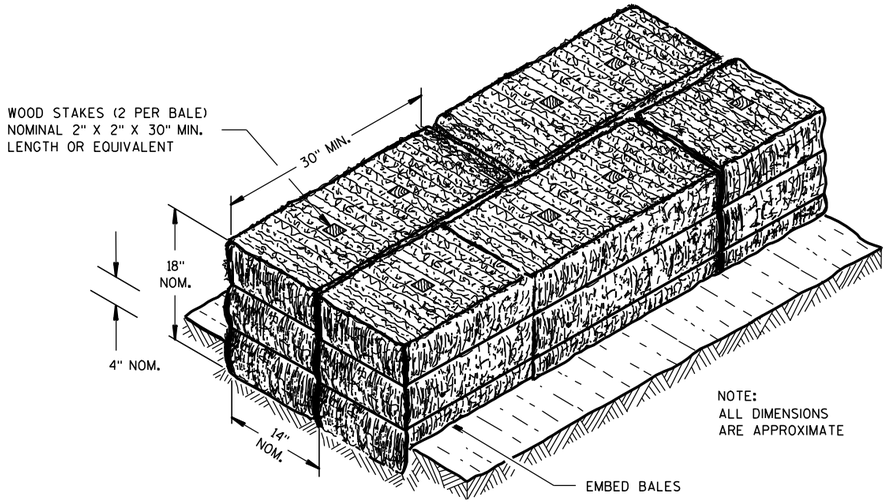
DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

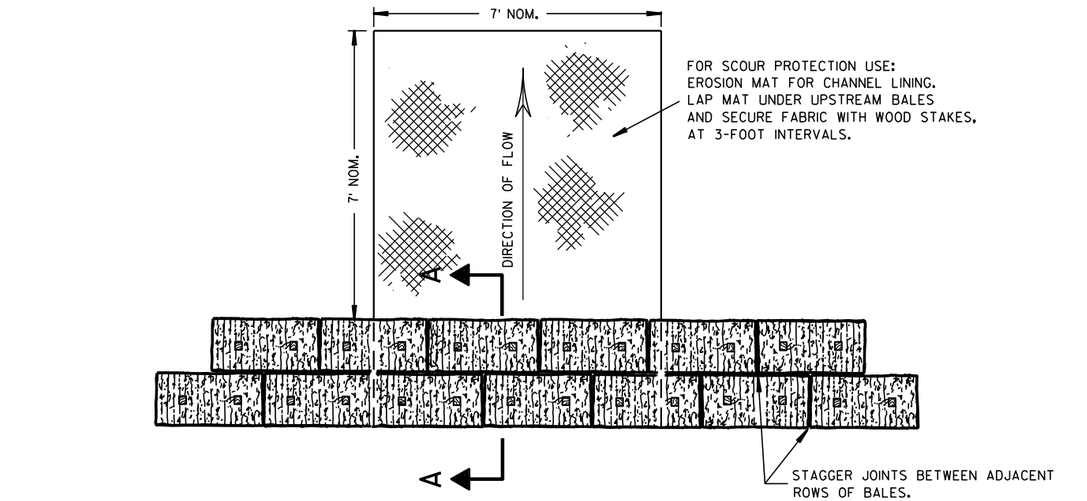
APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

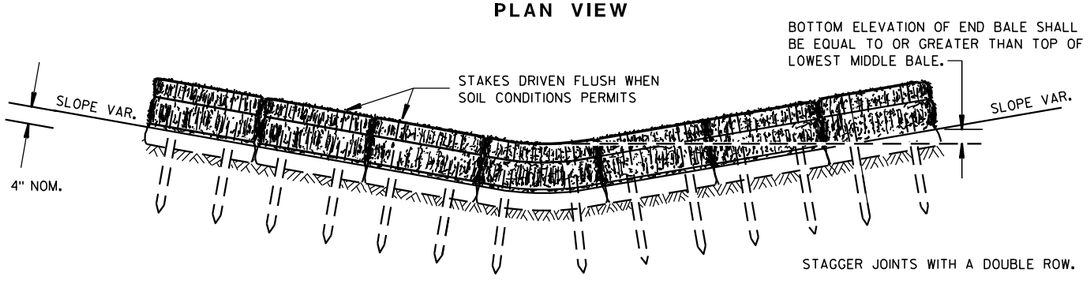
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



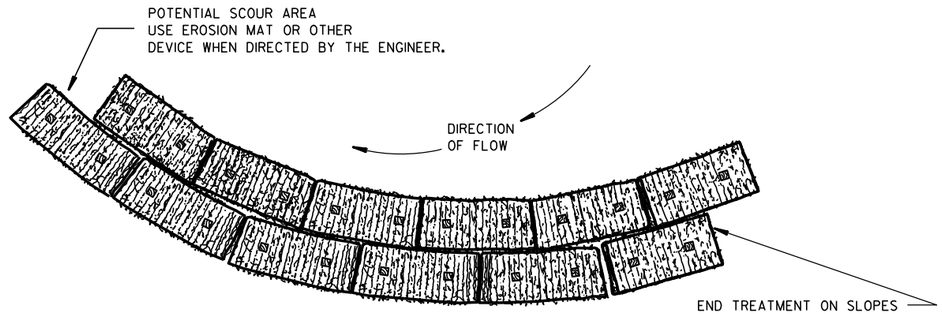
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

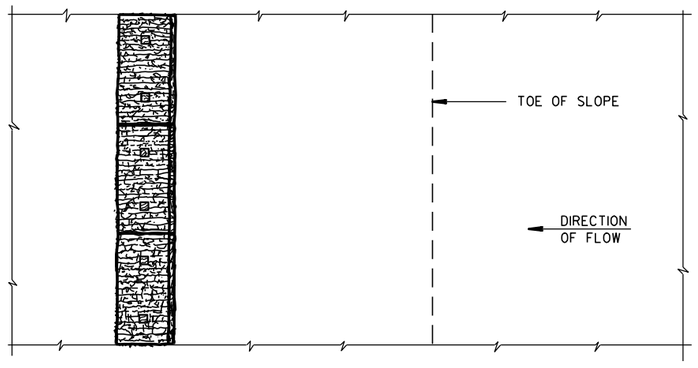
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

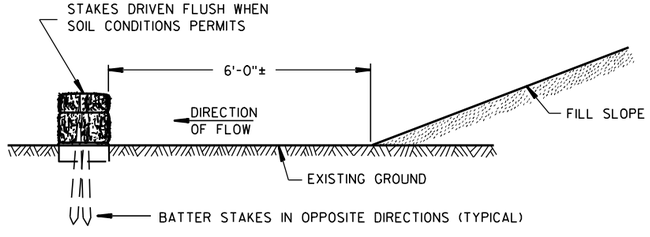


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

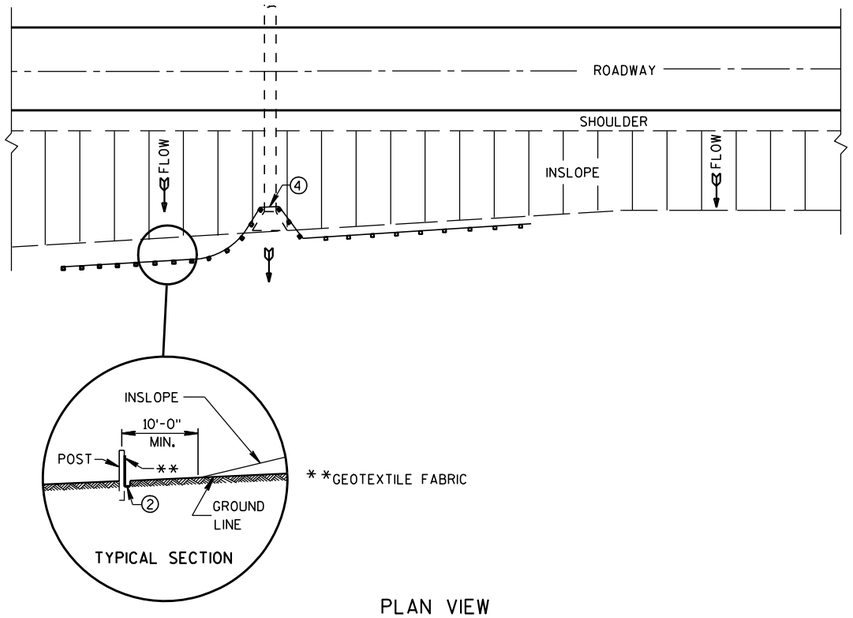
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

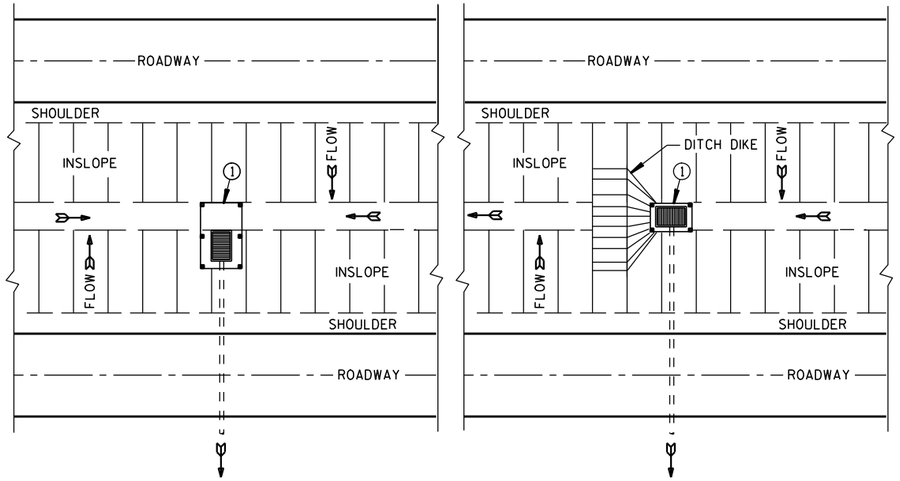
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



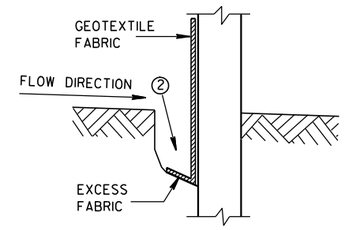
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

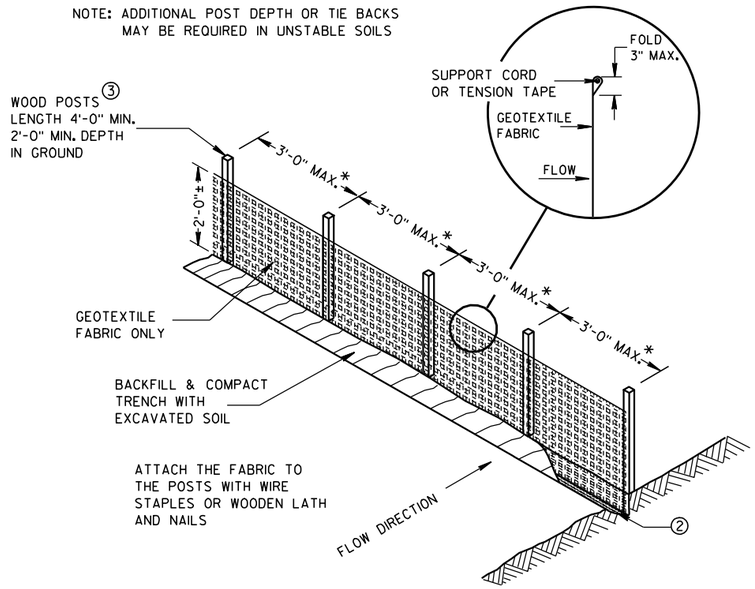
GENERAL NOTES

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

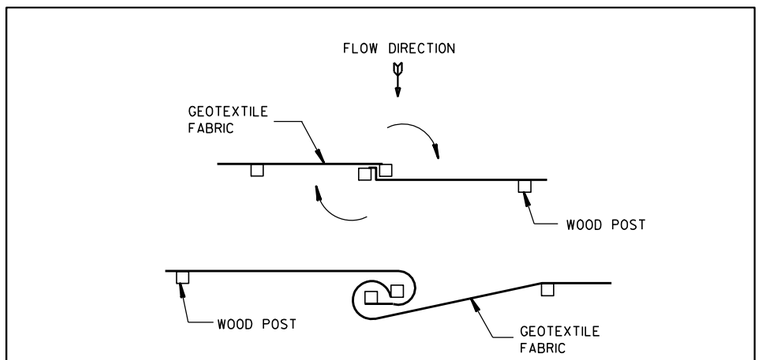
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



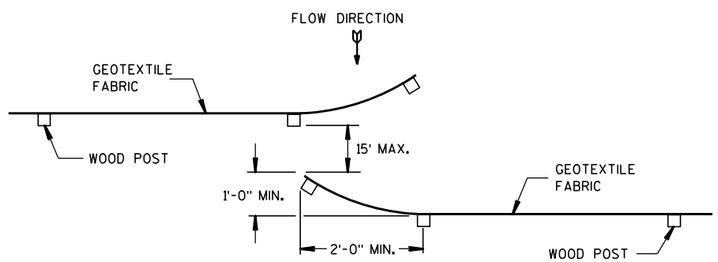
TRENCH DETAIL



SILT FENCE

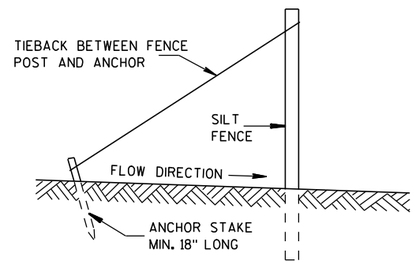


TWIST METHOD



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

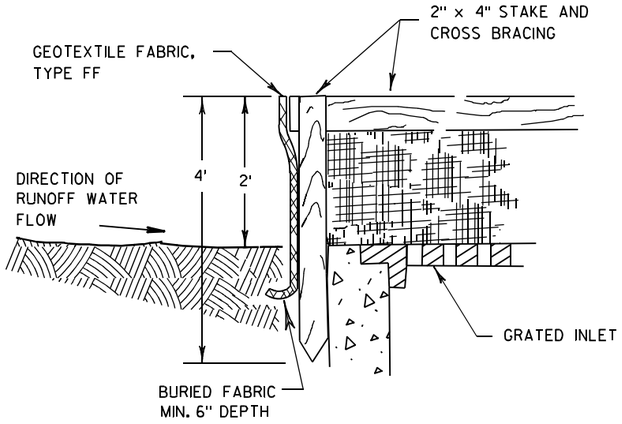
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

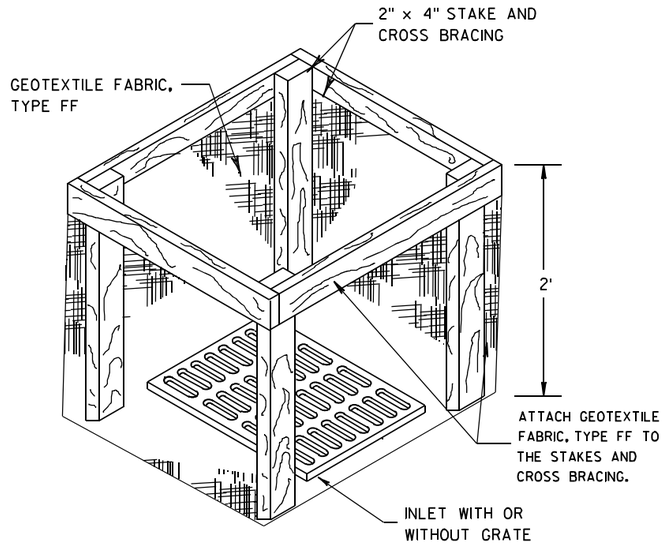
6

S.D.D. 8 E 9-6

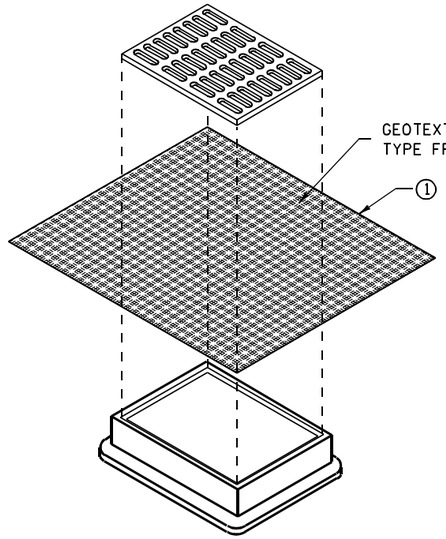
6

S.D.D. 8 E 9-6



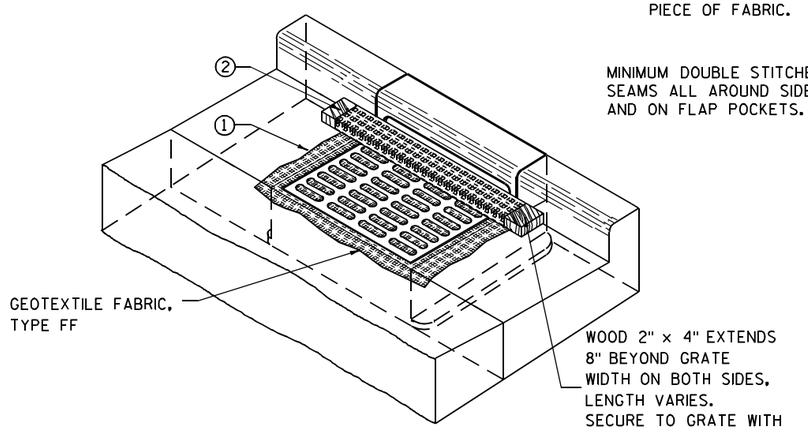


INLET PROTECTION, TYPE A

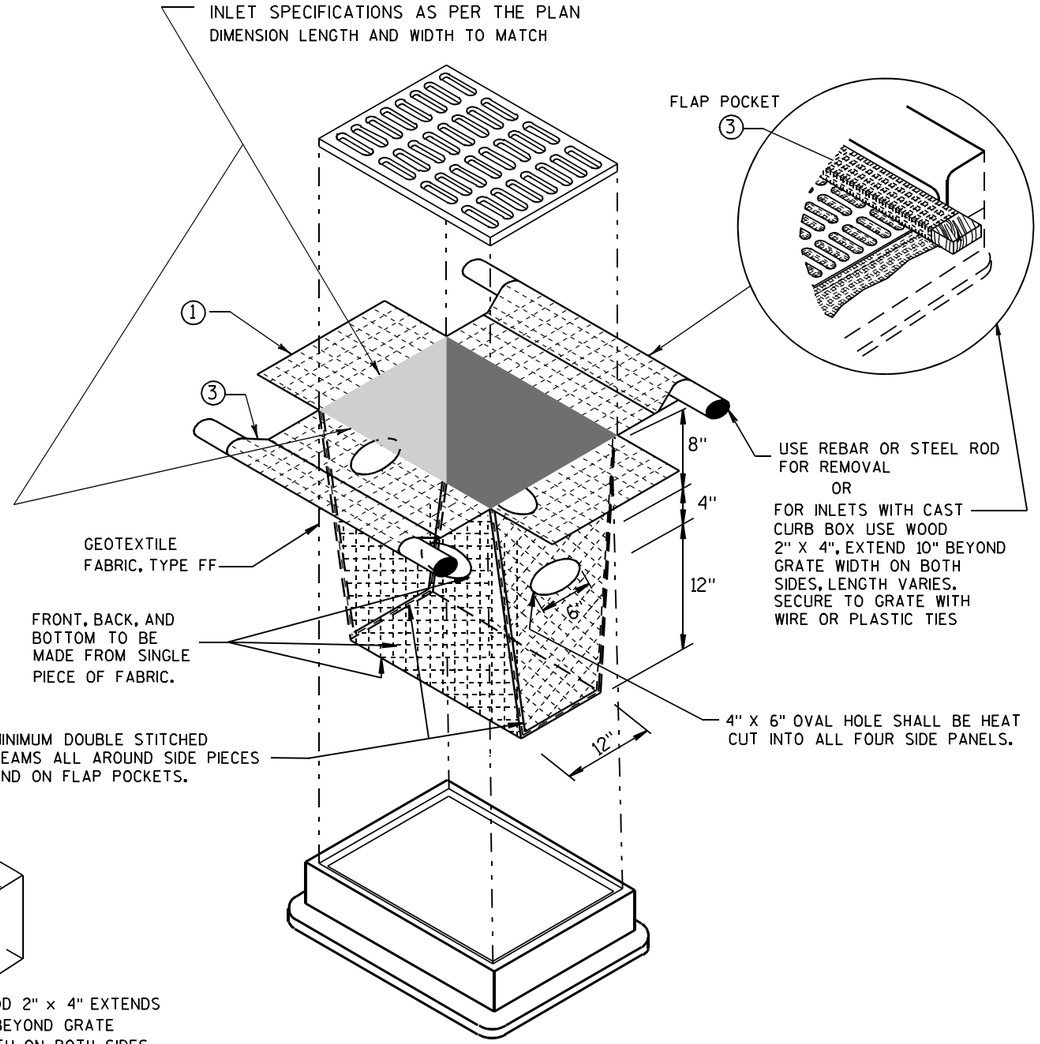


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

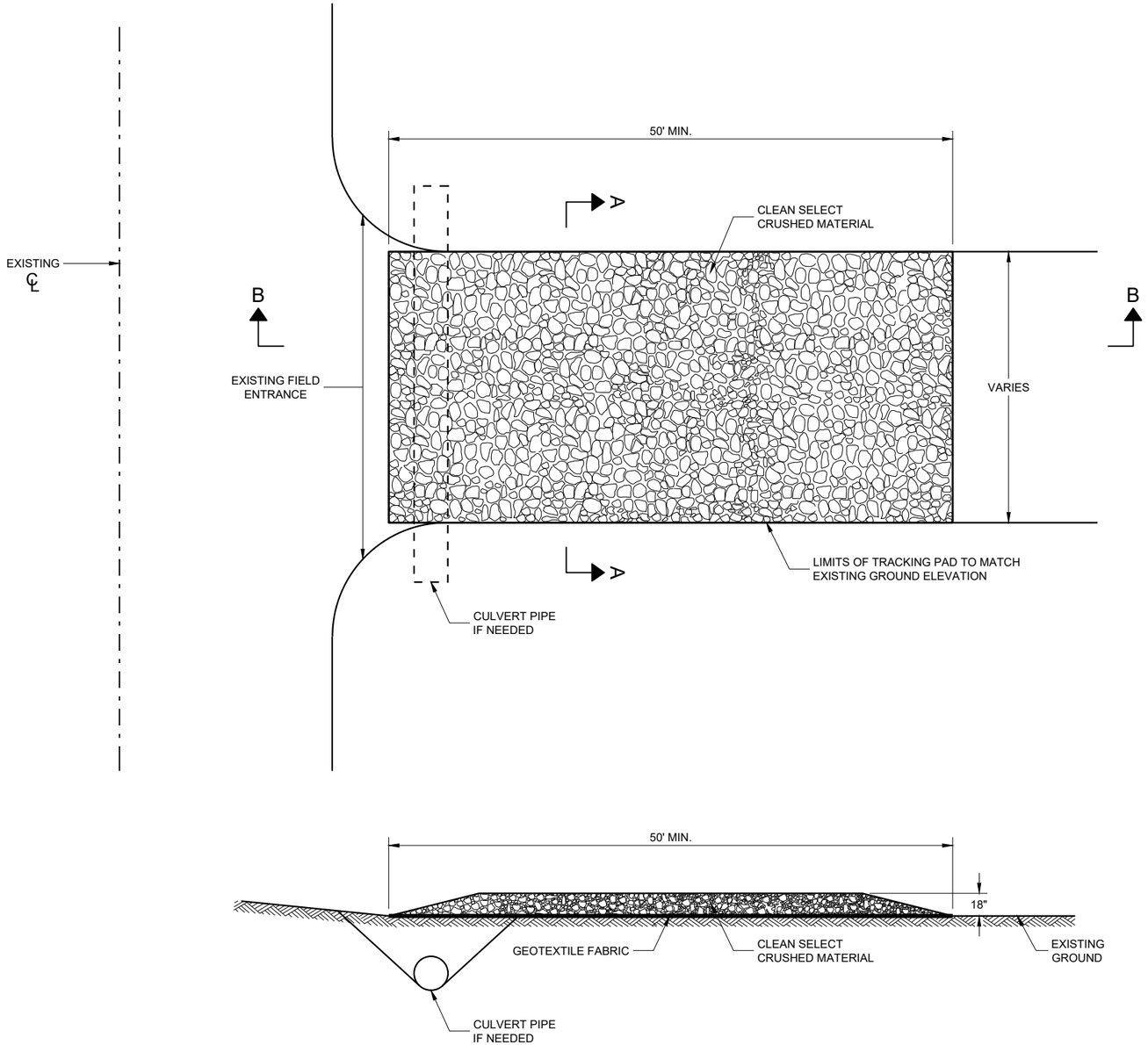
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

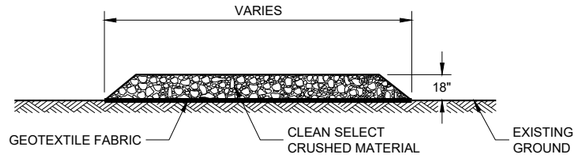
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A - A

6

SDD 08E14 - 01

TRACKING PAD

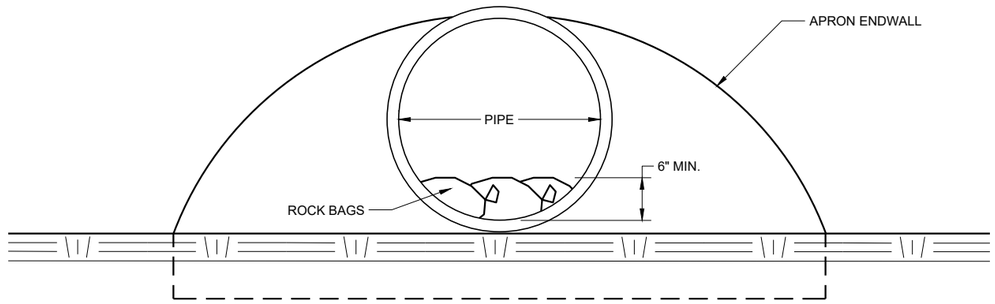
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

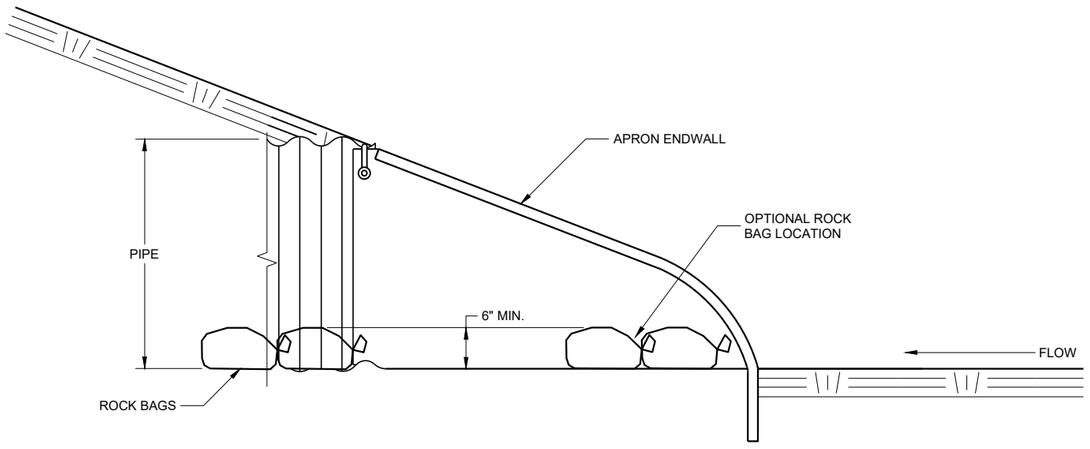
FHWA

6

SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

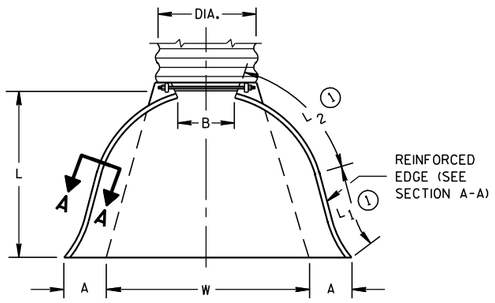
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

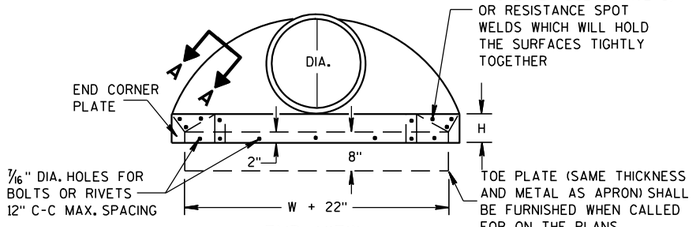
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

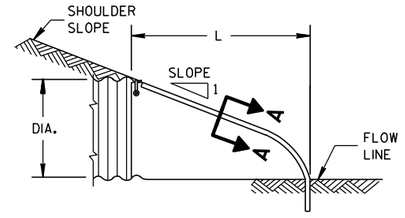
*MINIMUM
**MAXIMUM



PLAN VIEW

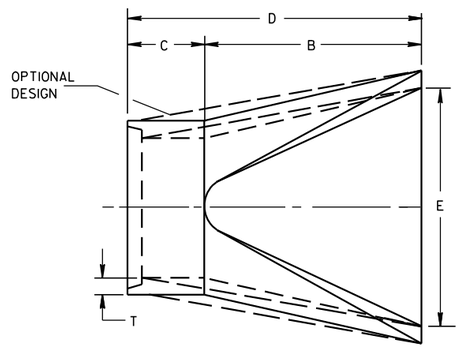


END VIEW

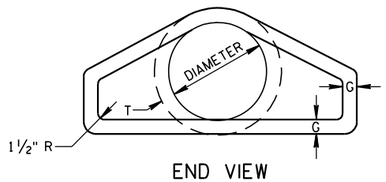


SIDE ELEVATION

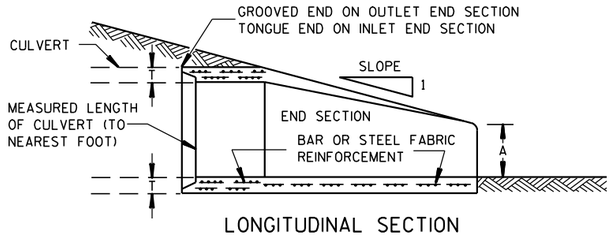
METAL ENDWALLS



PLAN

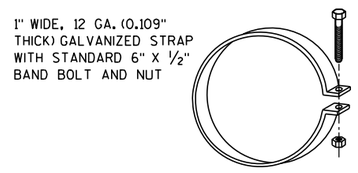


END VIEW



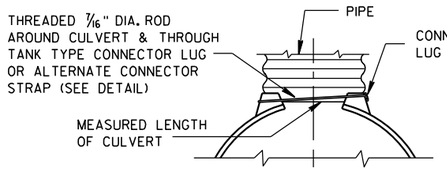
LONGITUDINAL SECTION

CONCRETE ENDWALLS

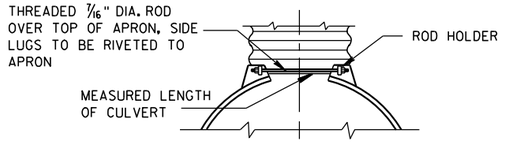


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

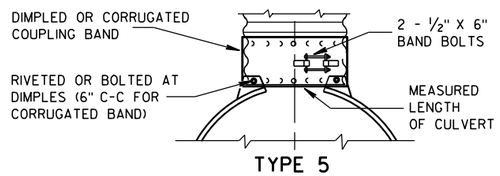


TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE

TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

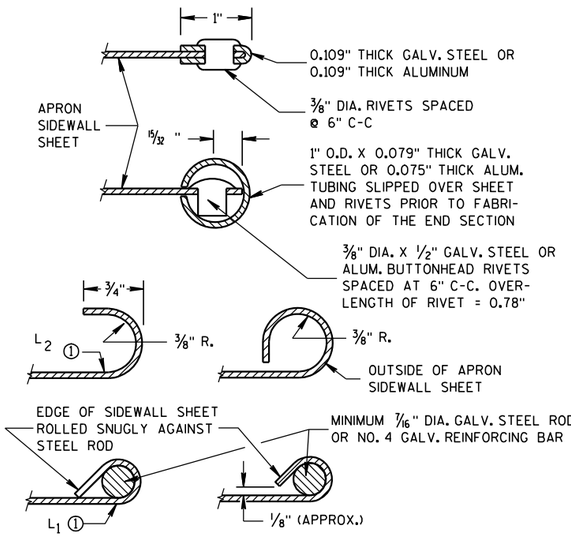
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

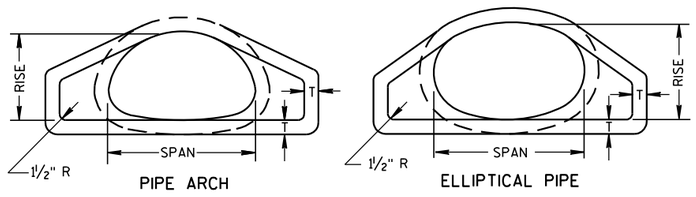
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

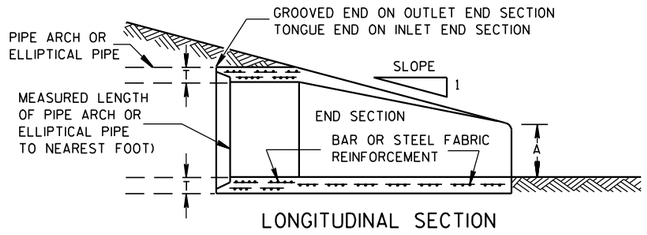
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 255 NEER
FHWA

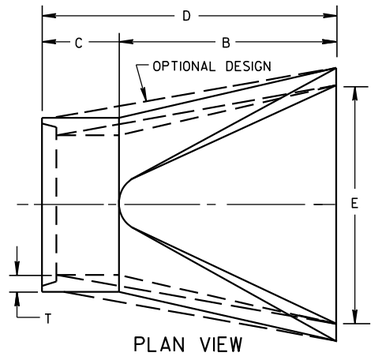
6
S.D.D. 8 F 1-11



END VIEW

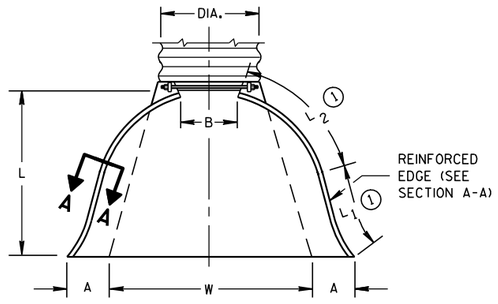


LONGITUDINAL SECTION

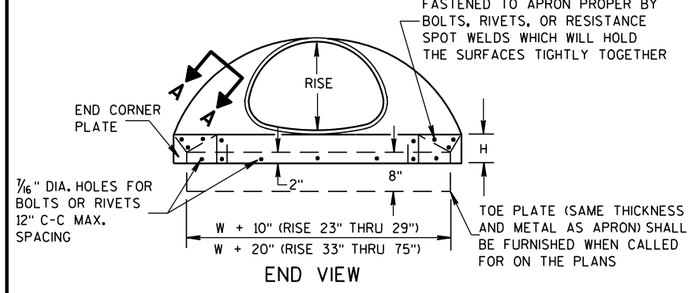


PLAN VIEW

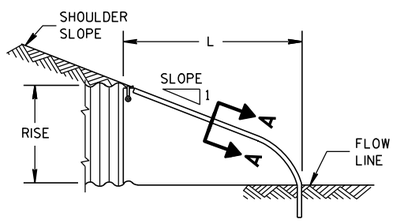
CONCRETE ENDWALLS



PLAN VIEW

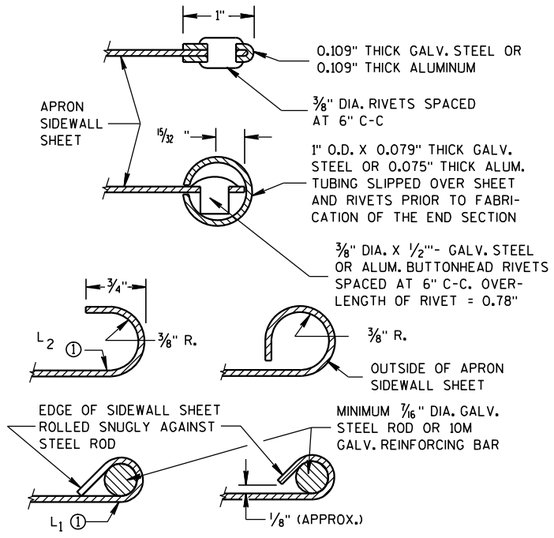


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

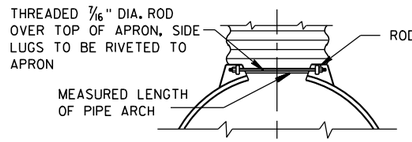
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

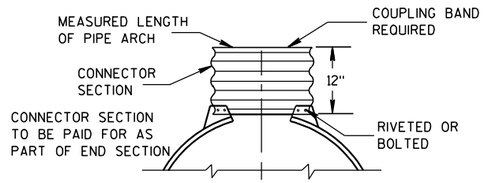
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



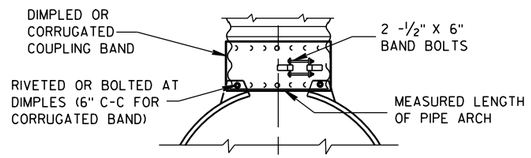
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

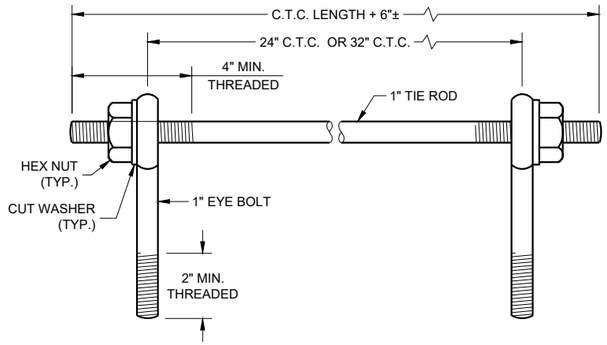
FHWA

6

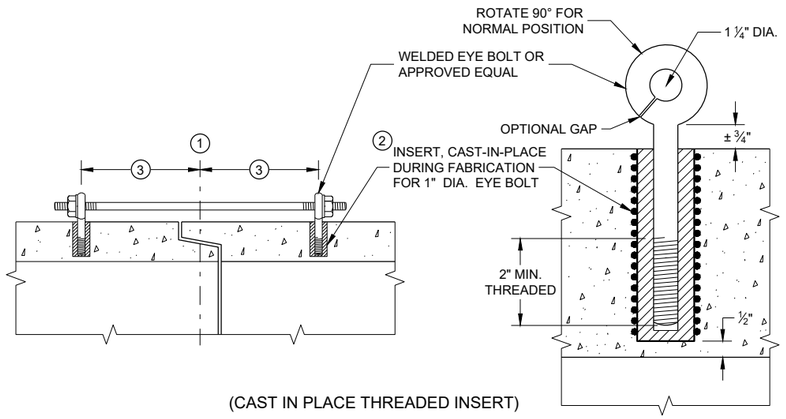
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

(1) 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.

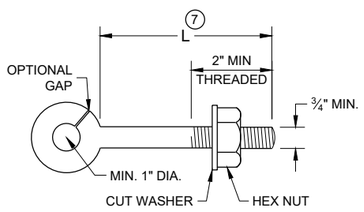
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

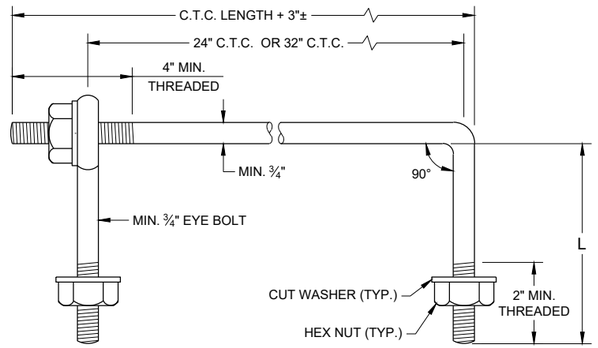
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

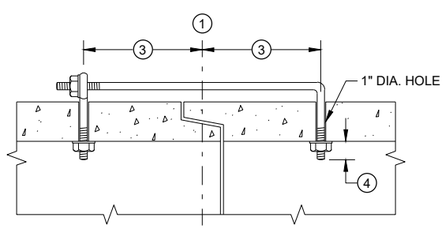


EYE BOLT (7)

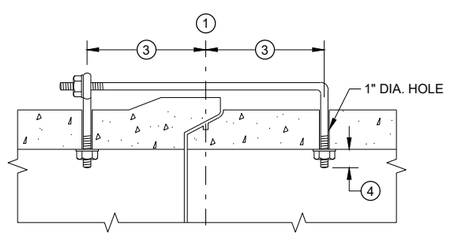
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

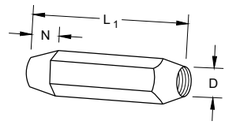
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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



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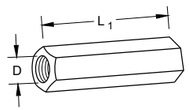
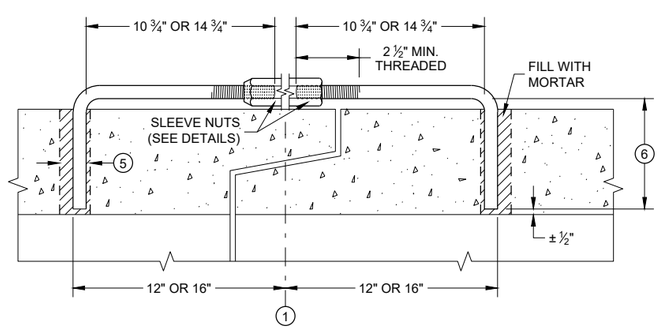


PLAIN

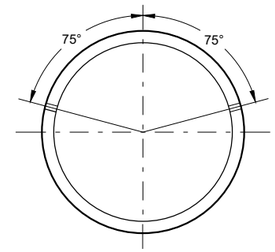
RIGHT AND LEFT THREADS

SLEEVE NUTS



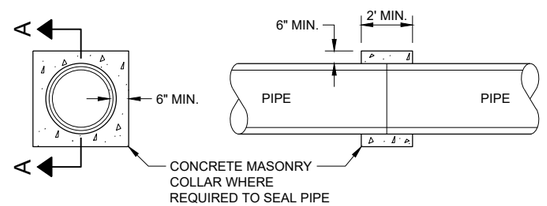
LONGITUDINAL SECTION

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

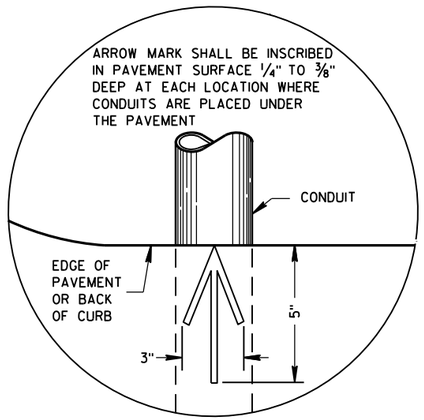
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

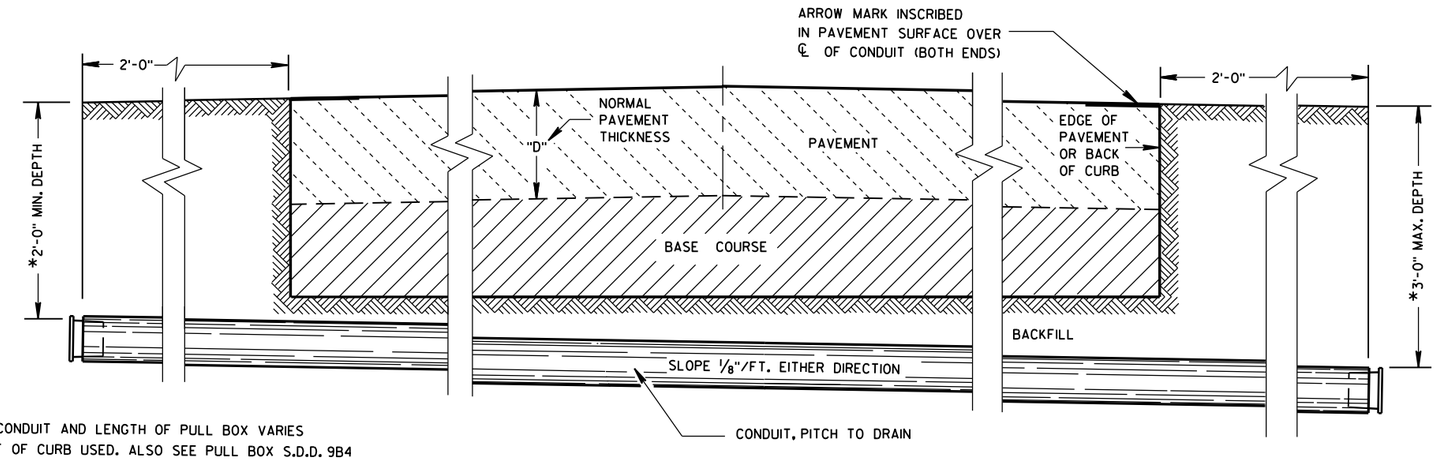
SDD 08F04 - 08

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 258
FHWA

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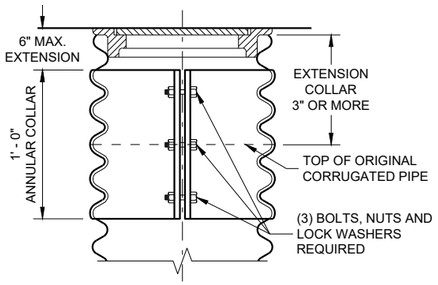
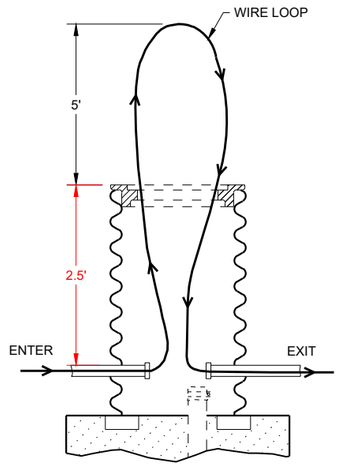
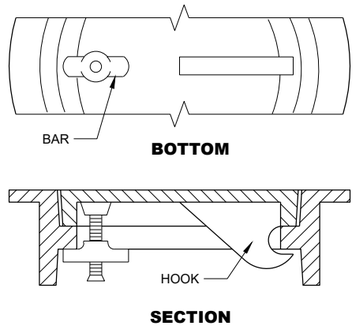


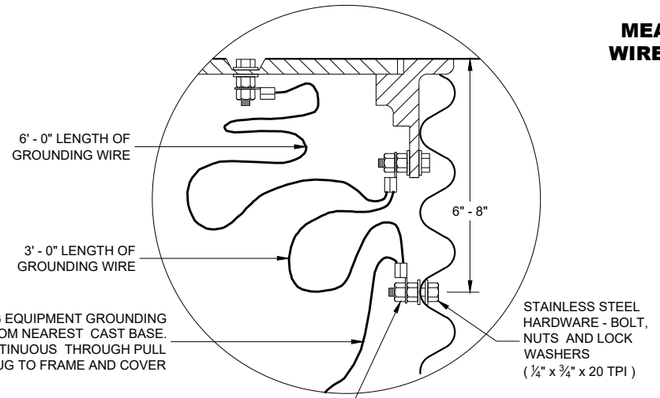
CORRUGATED PIPE EXTENDER



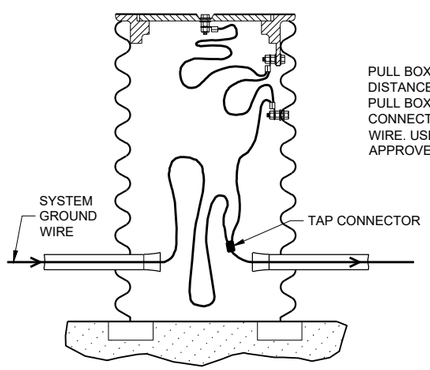
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

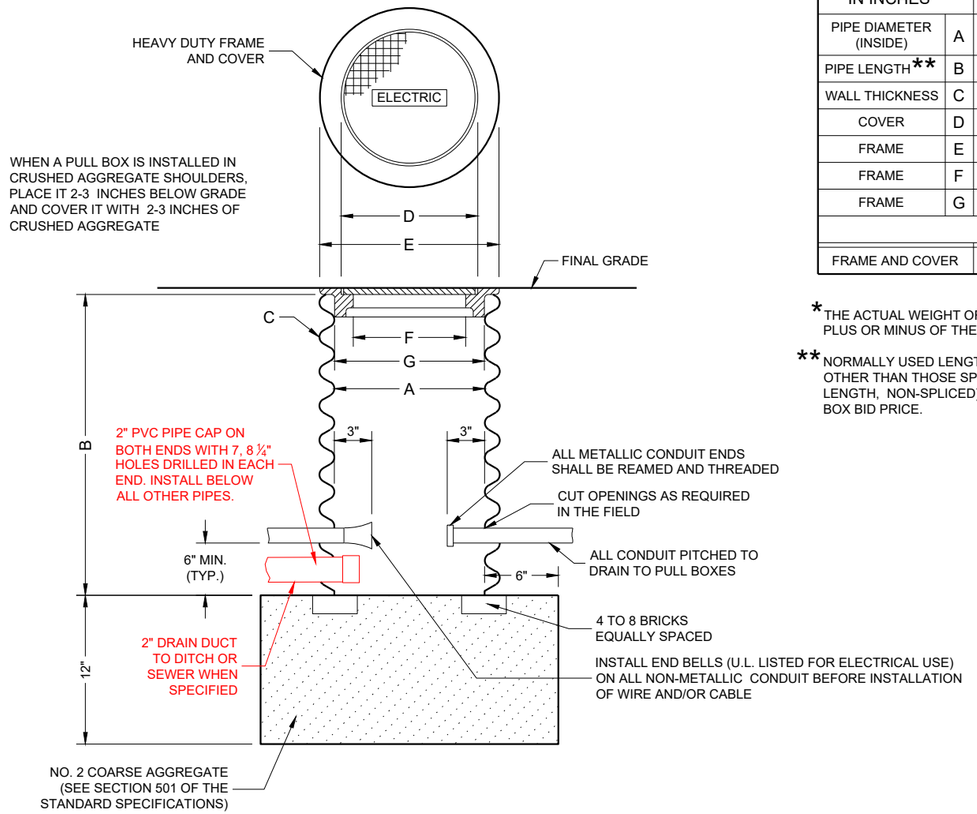


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



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

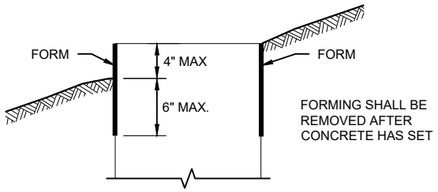
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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.

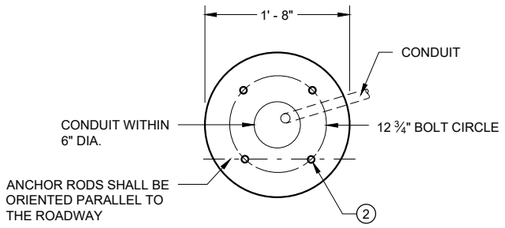
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

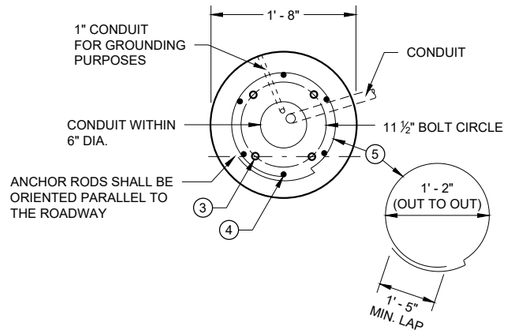
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

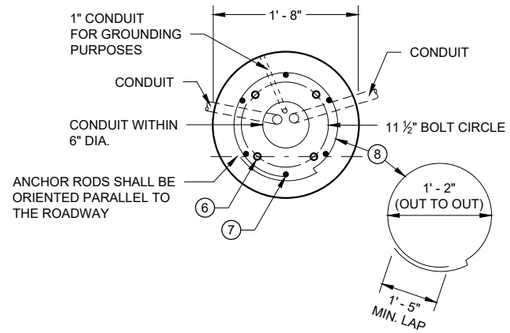
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

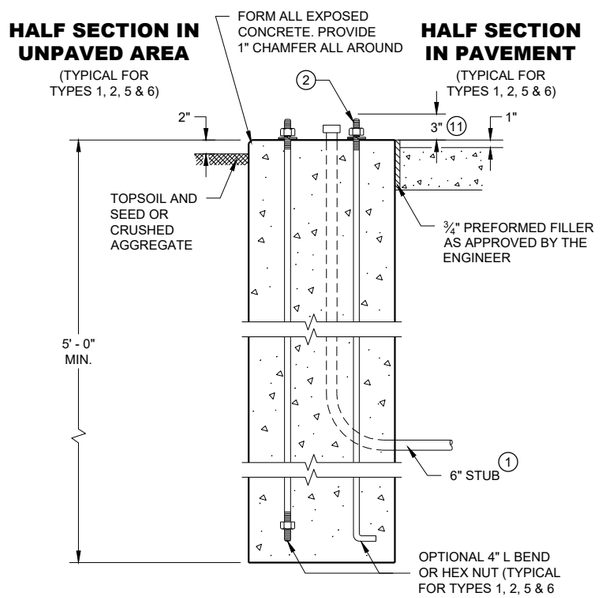
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

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









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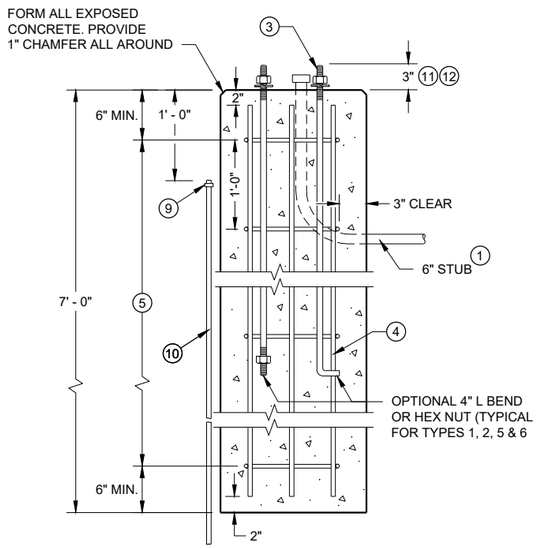

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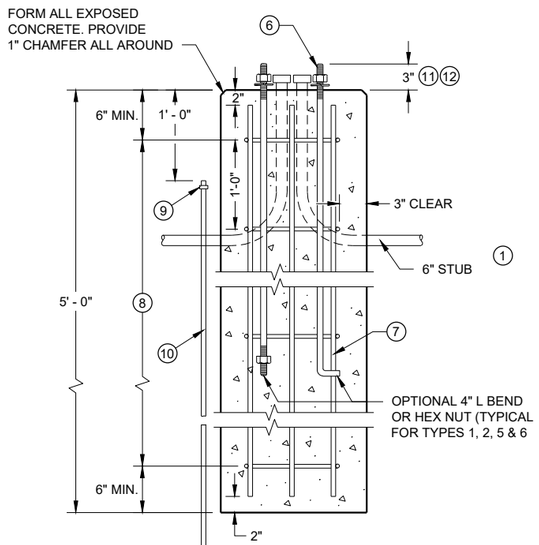

TYPE 5 & 6

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.

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
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/S/ Ahmet Demirbilek
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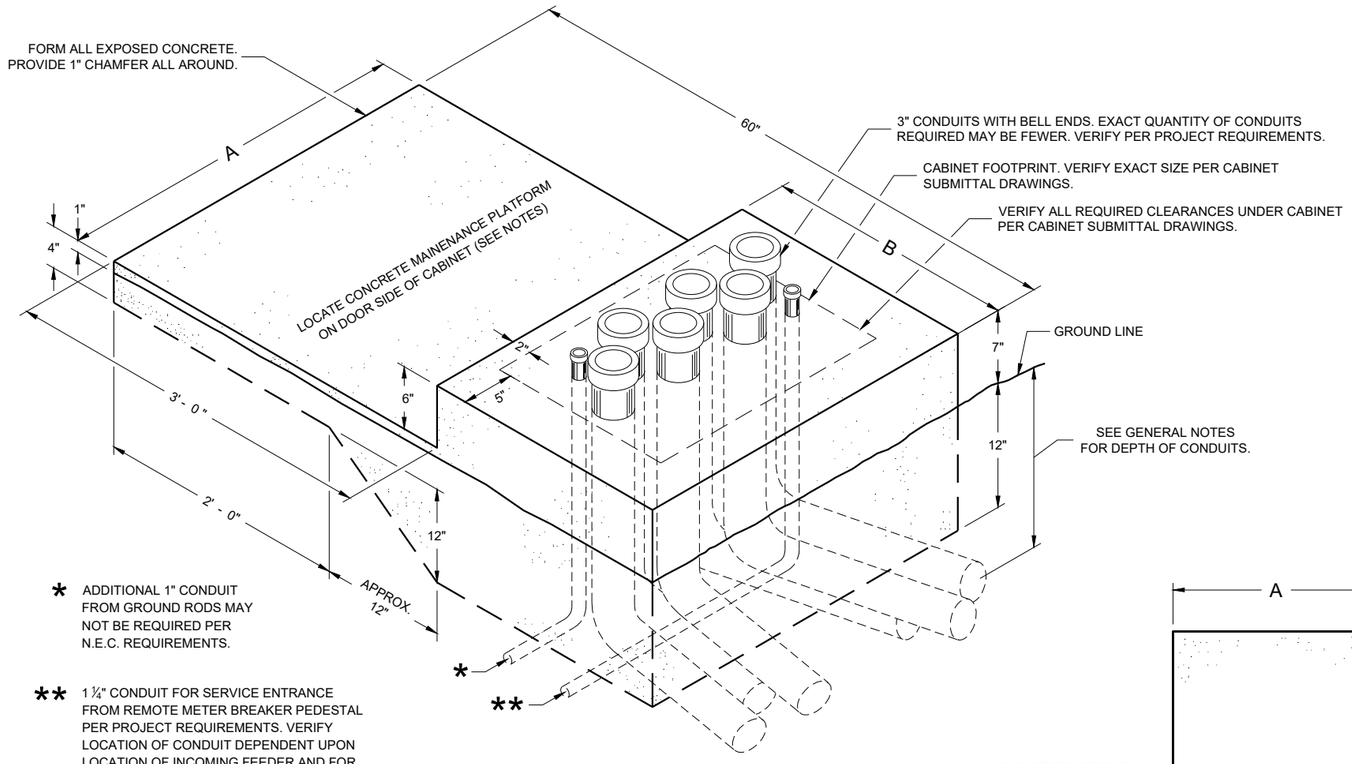


* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

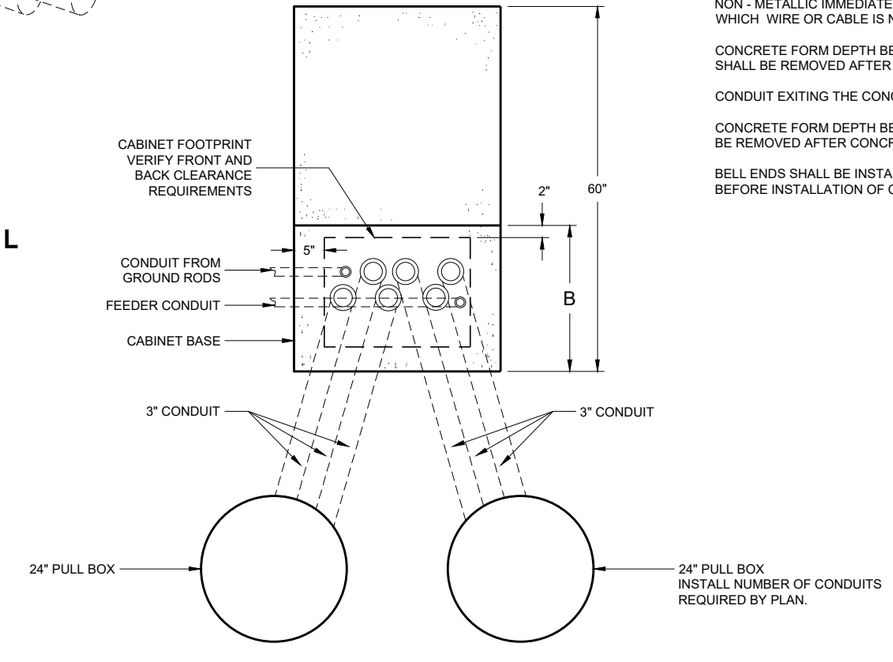
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
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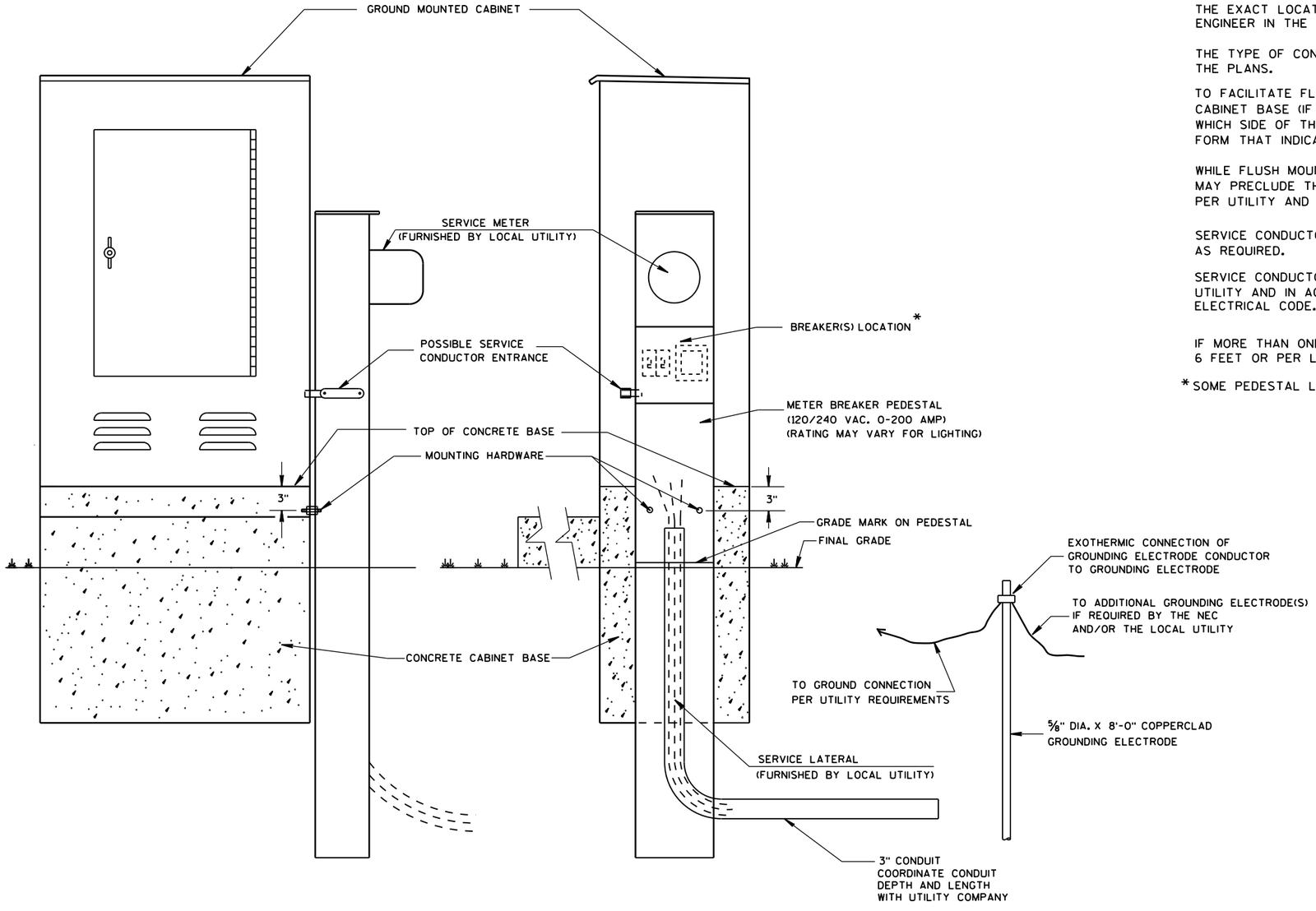

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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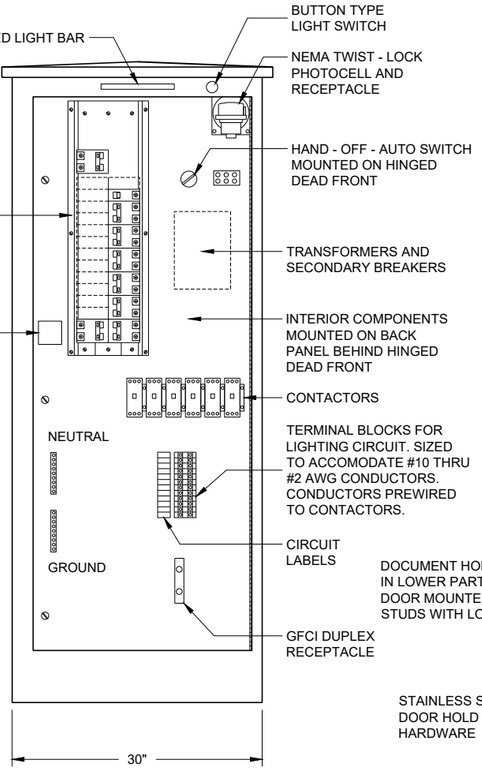
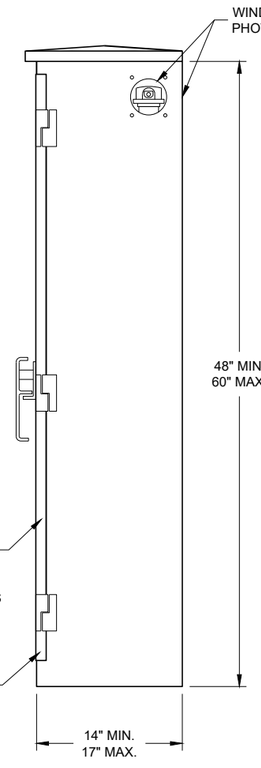
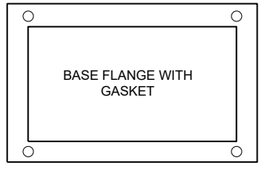
FRONT INTERIOR ELEVATION

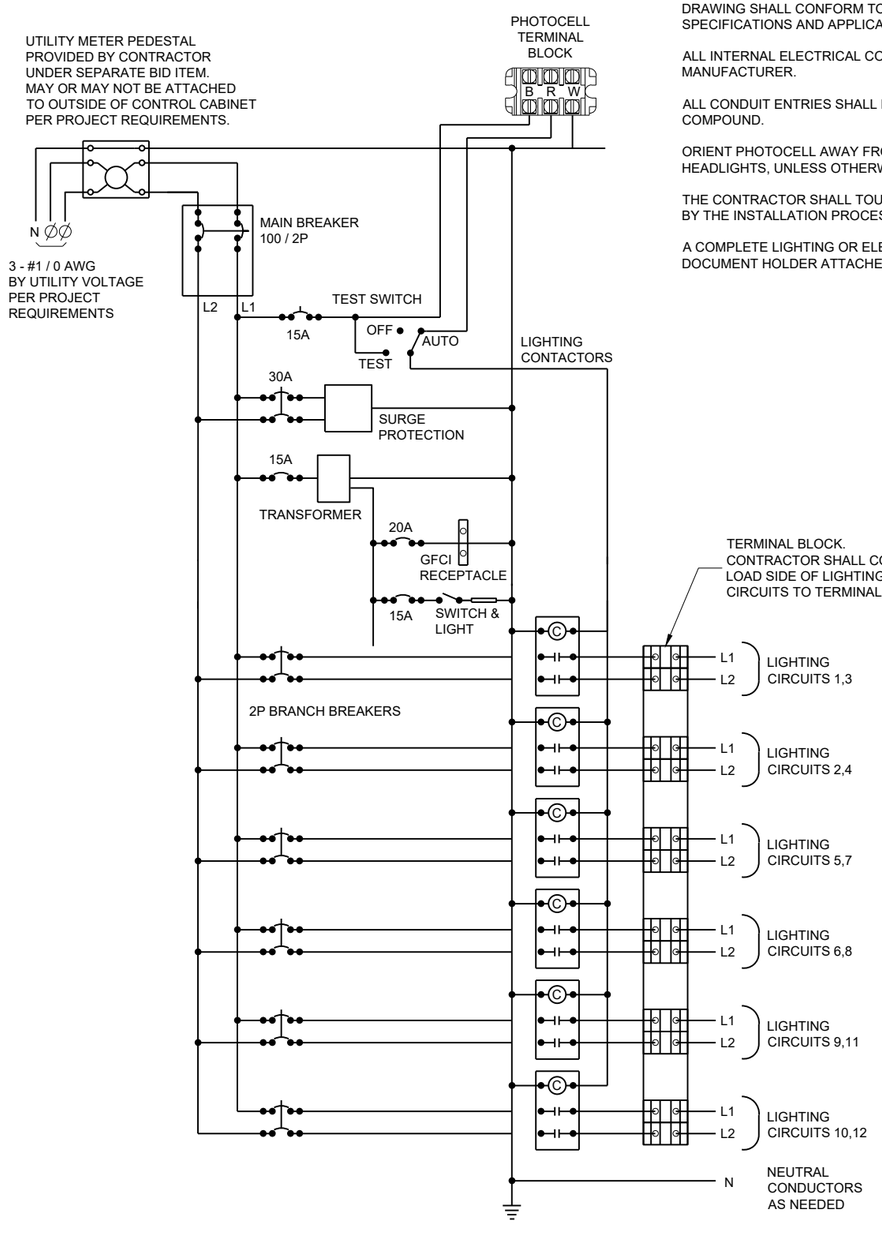


SIDE VIEW





LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

L30
LIGHTING CONTROL CABINET
240 / 480 VOLT

STATE OF WISCONSIN
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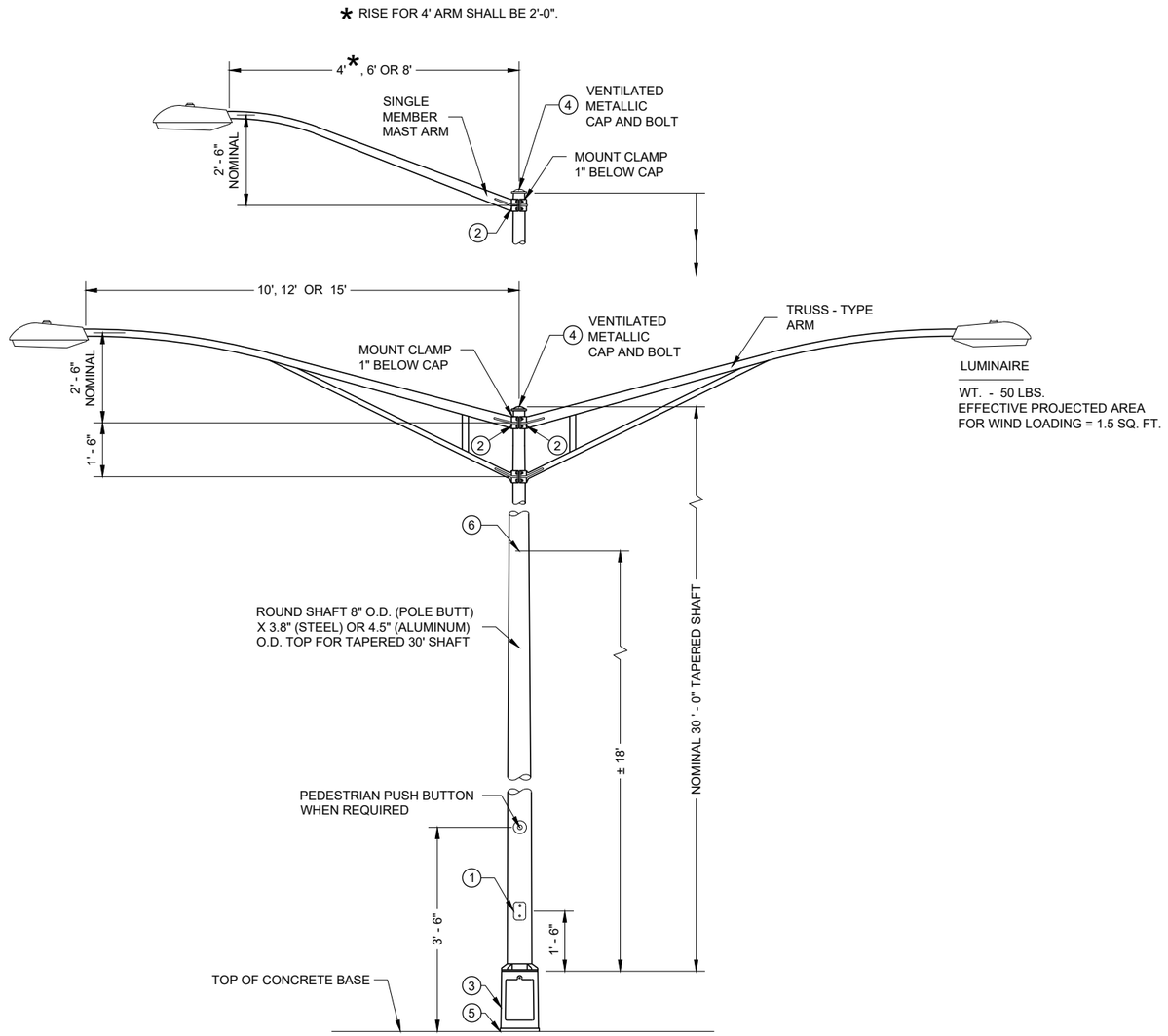


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

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.

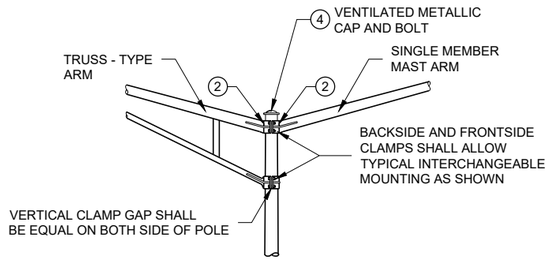
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(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)

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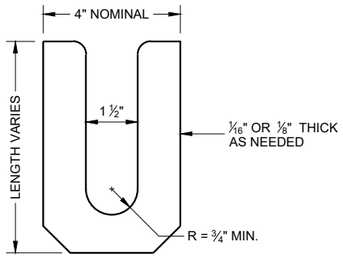
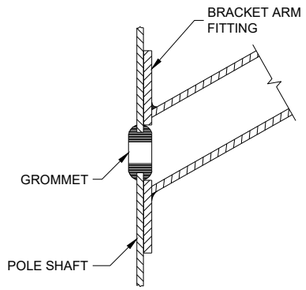
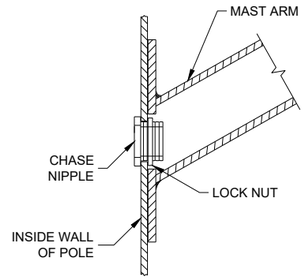


LEVELING SHIM (1)
SHALL BE ALUMINUM



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.

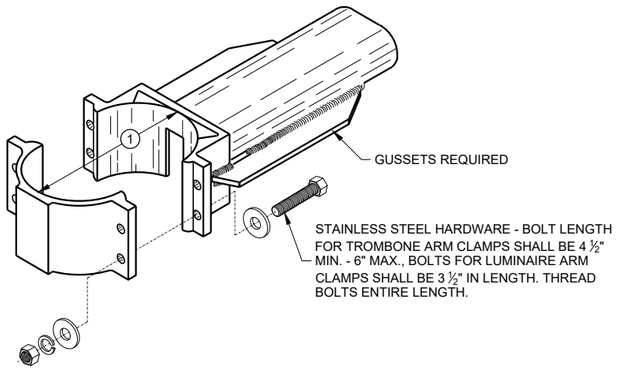
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

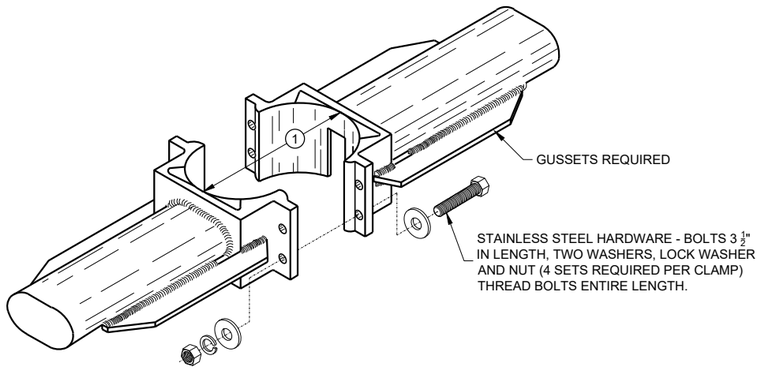
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

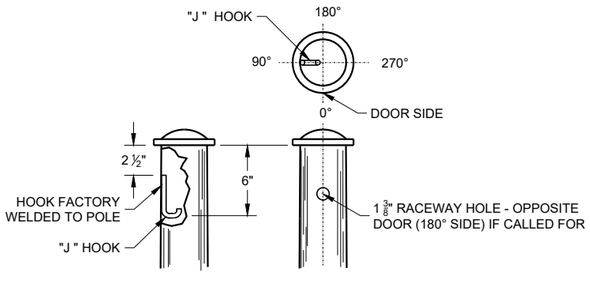
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



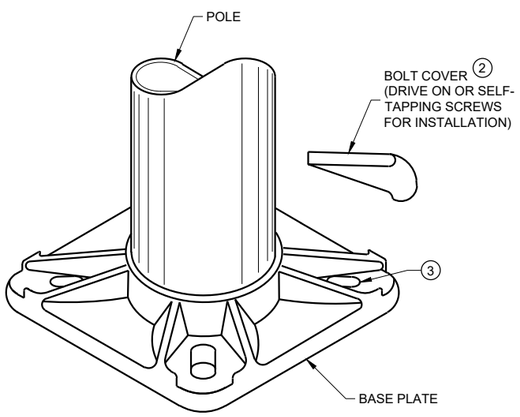
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



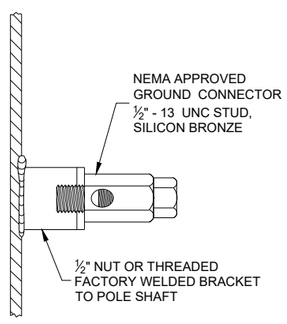
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

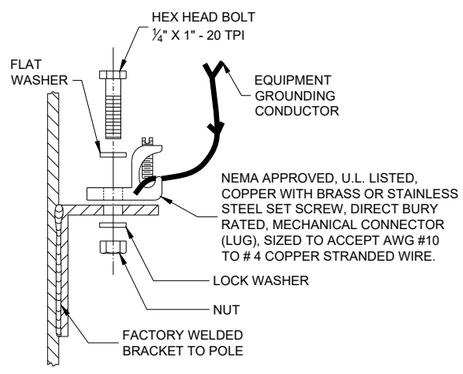


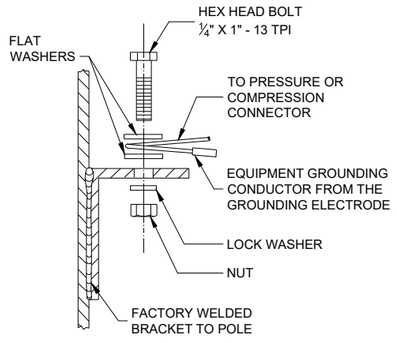
TYPICAL "J" HOOK LOCATION



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
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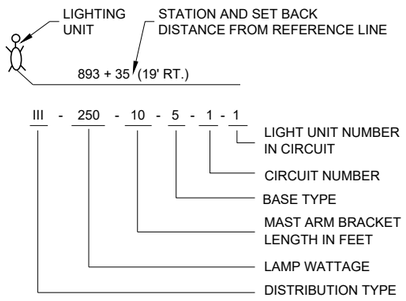
GENERAL NOTES

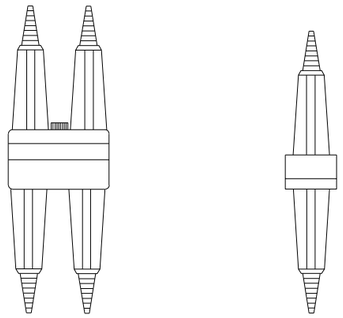
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

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

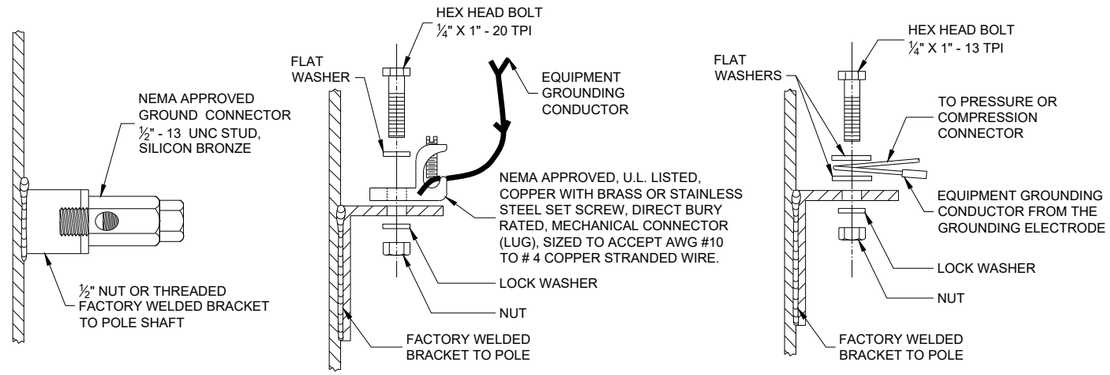


LIGHTING UNIT CODE
(TYPICAL)

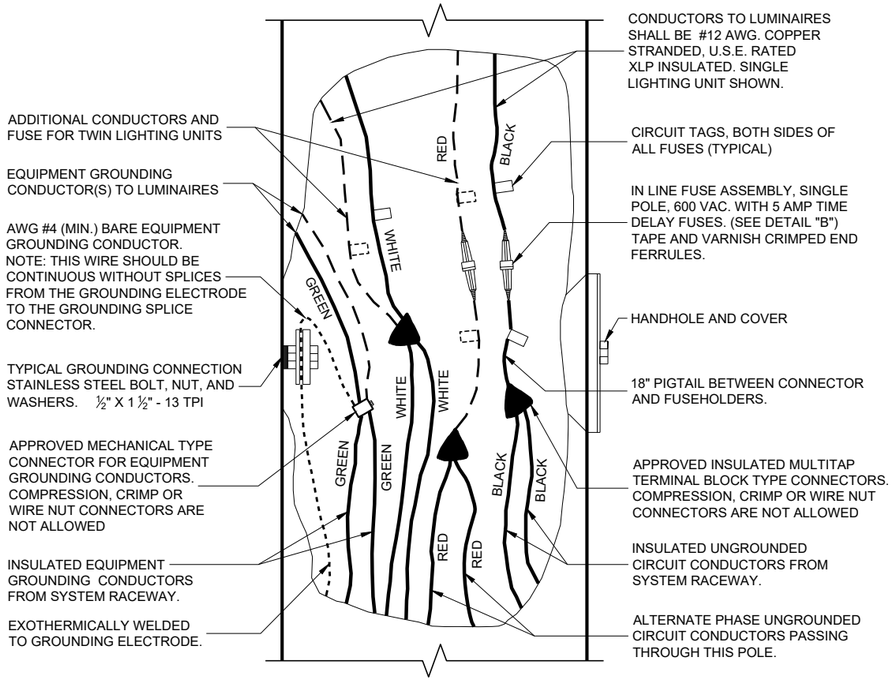


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

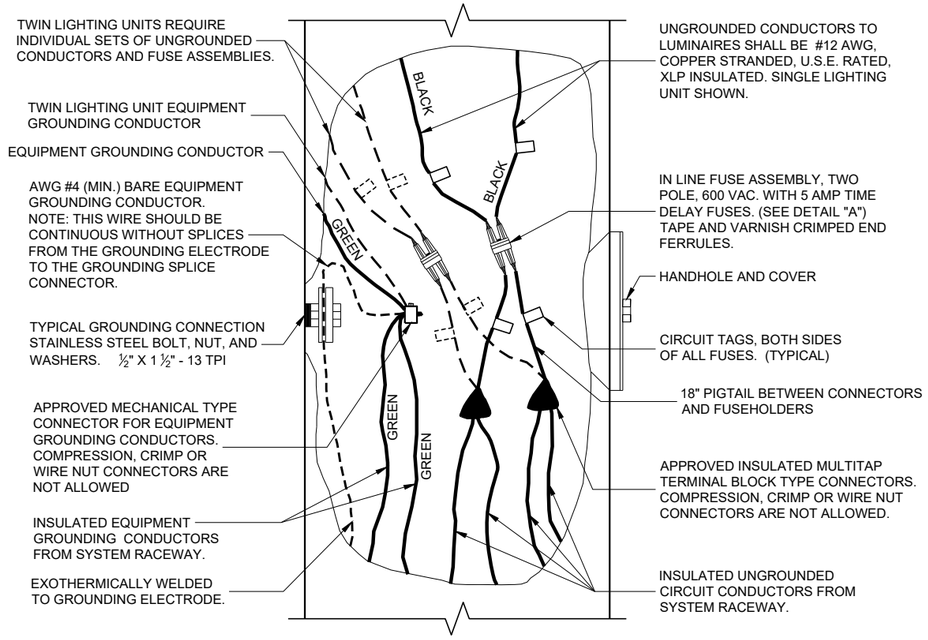
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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



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



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

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 266

FHWA

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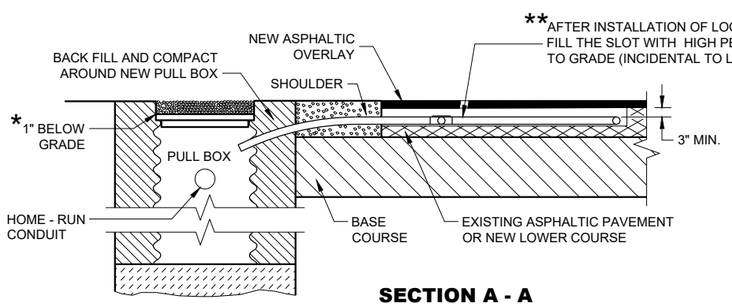
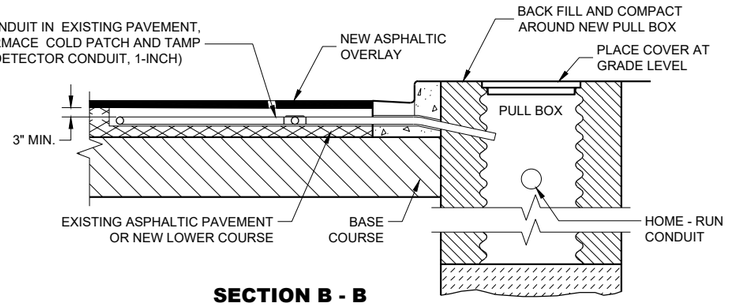
SDD 09E03 - 06



SECTION A - A
NO CURB AND GUTTER

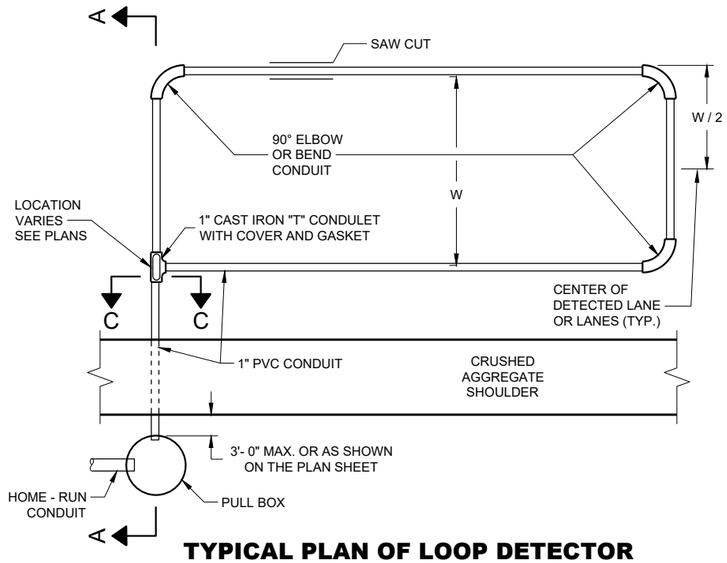
LOOP DETECTOR INSTALLATION DETAIL



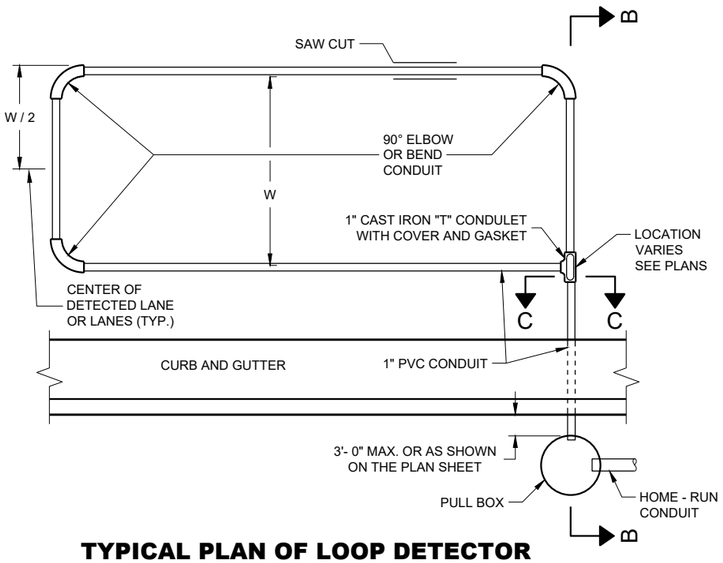
SECTION B - B
CURB AND GUTTER

LOOP DETECTOR INSTALLATION DETAIL

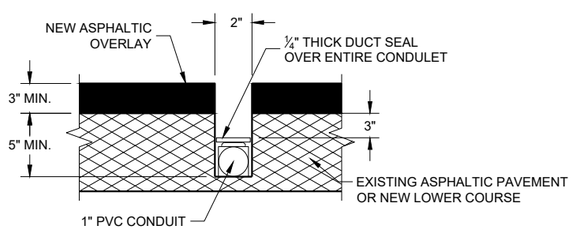
* RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR



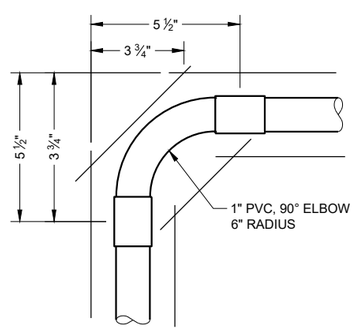
TYPICAL PLAN OF LOOP DETECTOR



SIDE VIEW
SECTION C - C

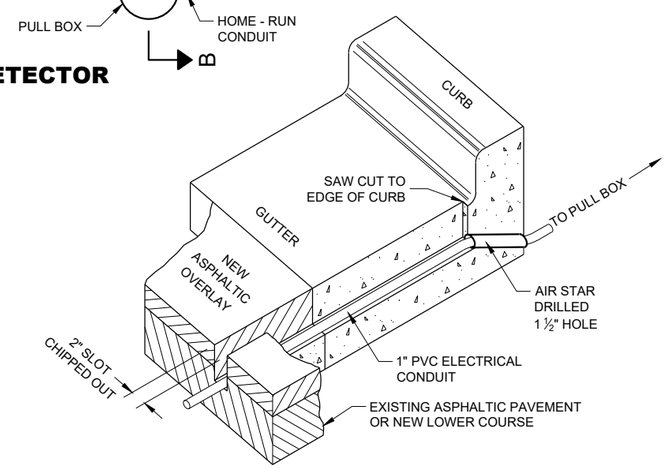
IF PAVEMENT IS LESS THAN 4 INCHES THICK, CONDUIT SHALL BE PLACED IN BASE COURSE.

LOOP DETECTOR SLOT DETAIL



TOP VIEW

CORNER SAW SLOT DETAIL



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

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

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

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

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

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY ½ INCH. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.

LOOP DETECTOR INSTALLED IN EXISTING OR NEW ASPHALTIC PAVEMENT WITH NEW ASPHALTIC OVERLAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 267
FHWA

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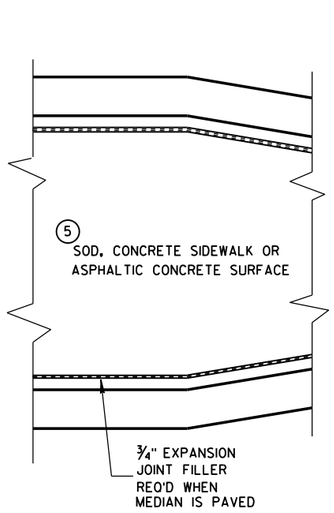
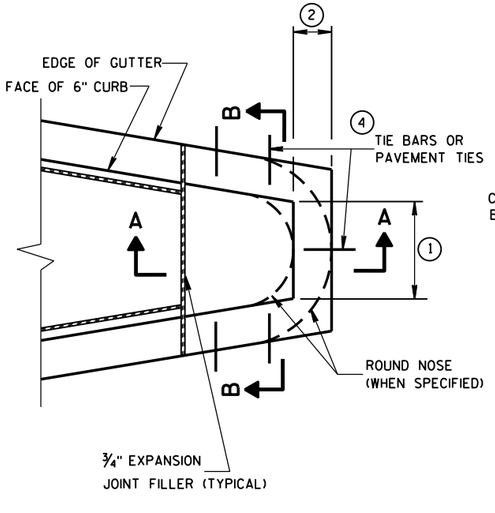
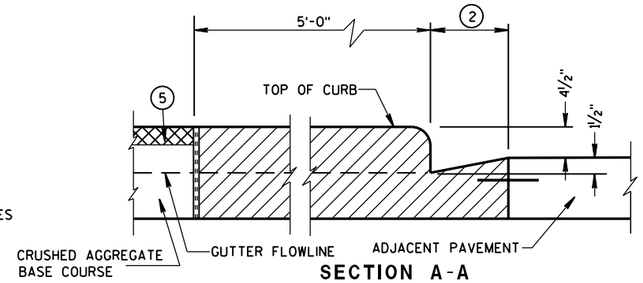
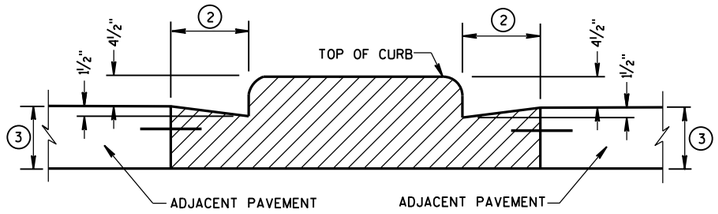
SDD 09F10 - 04







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

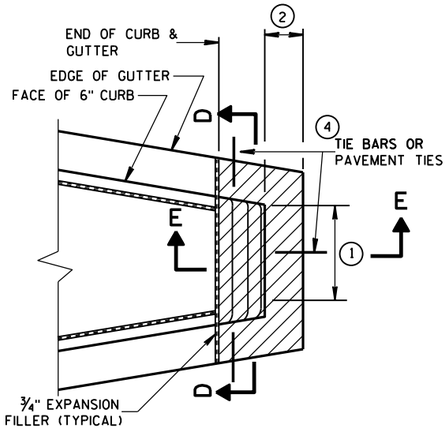
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

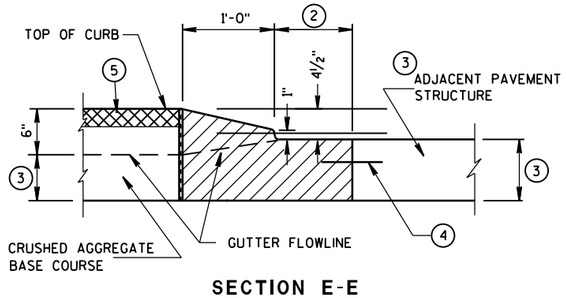
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

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

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

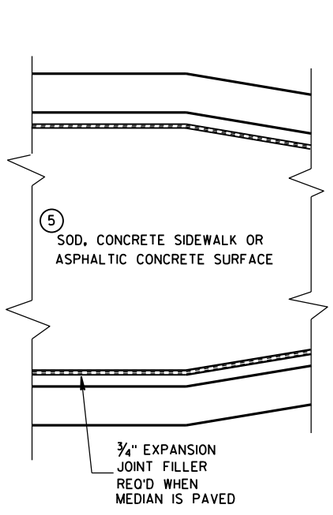
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

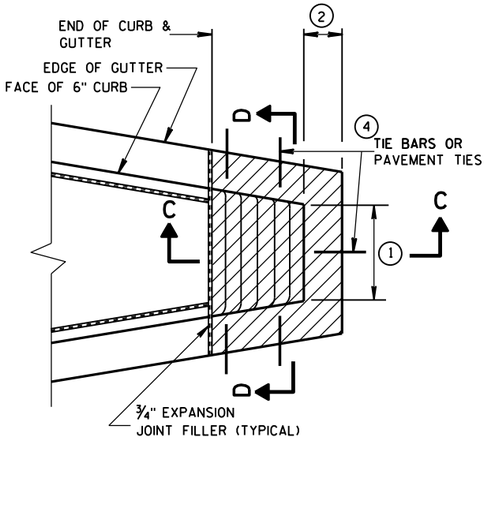


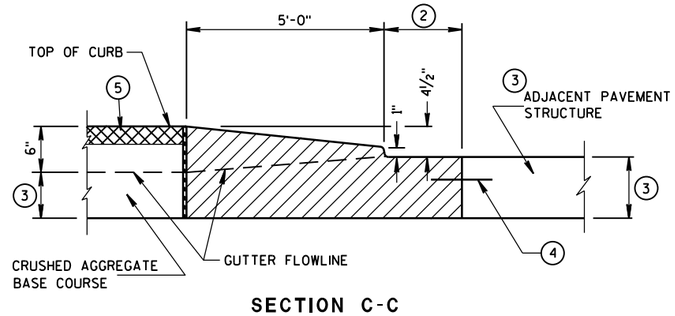


SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2

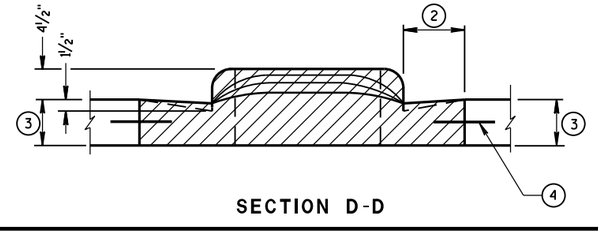






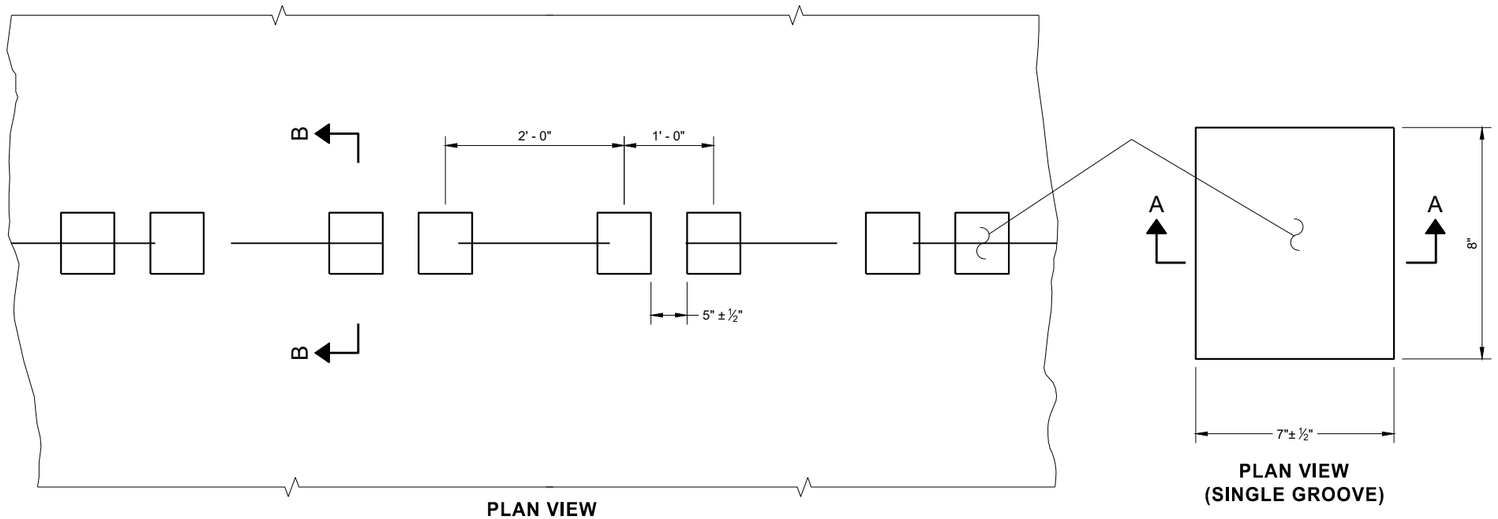
SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS D ENGINEER



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

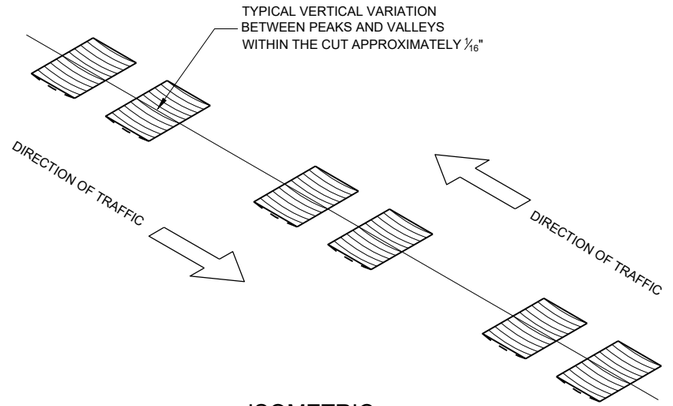
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



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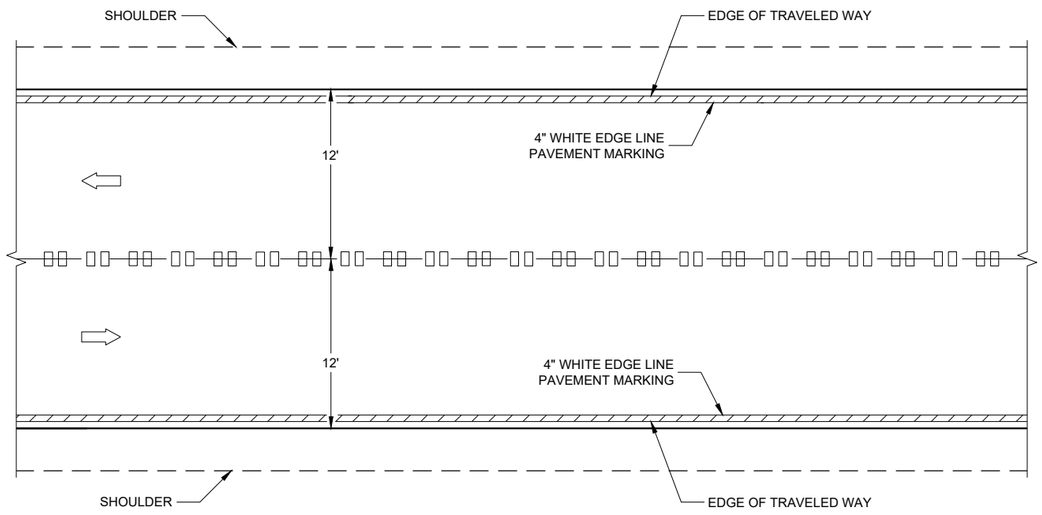
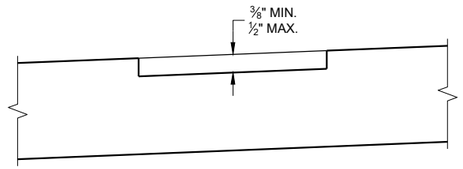
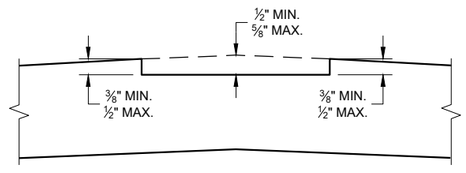


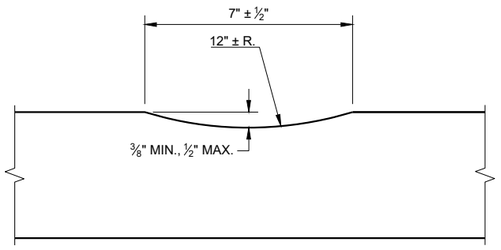
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

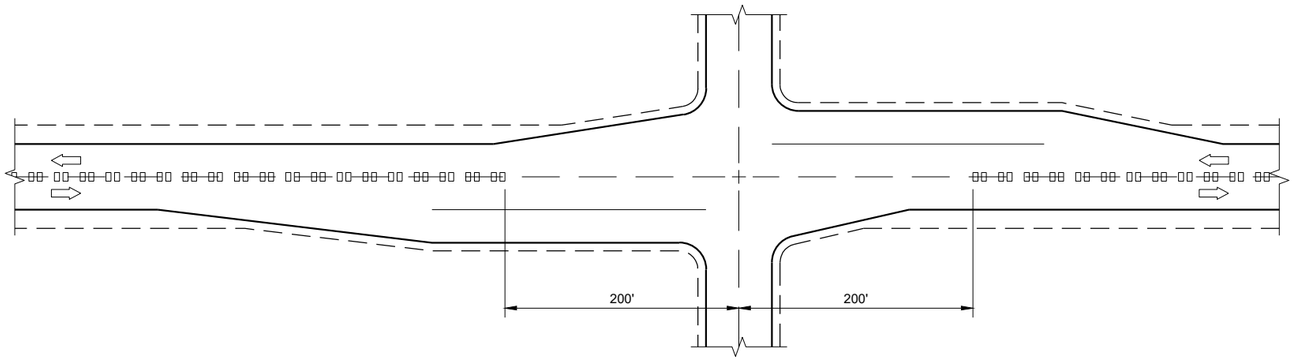
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

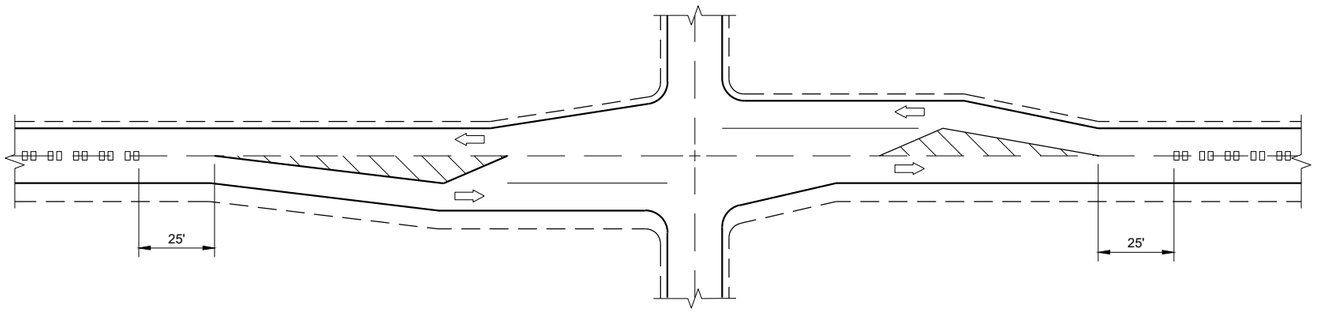
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

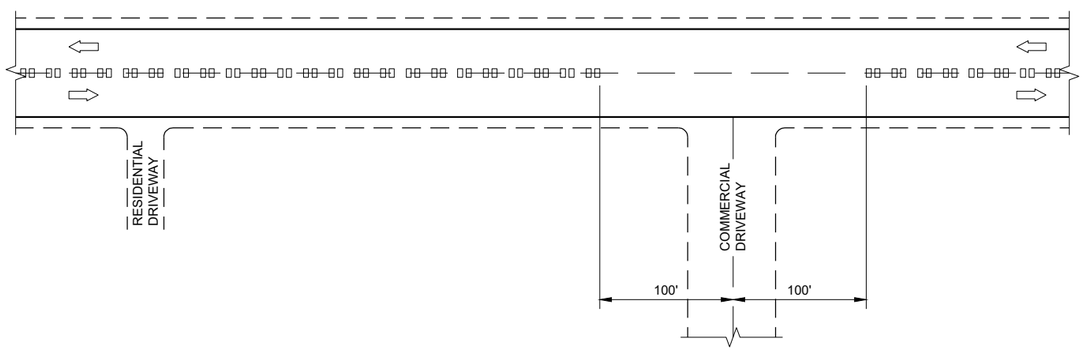
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



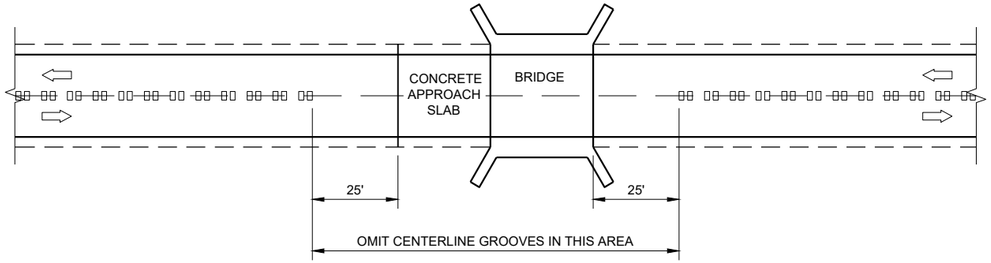
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



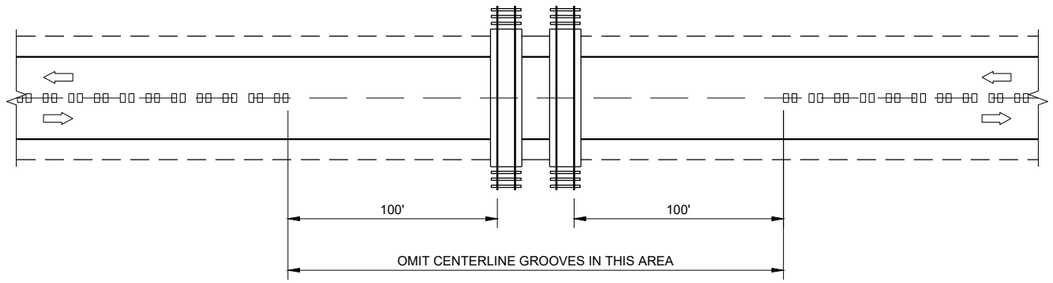
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

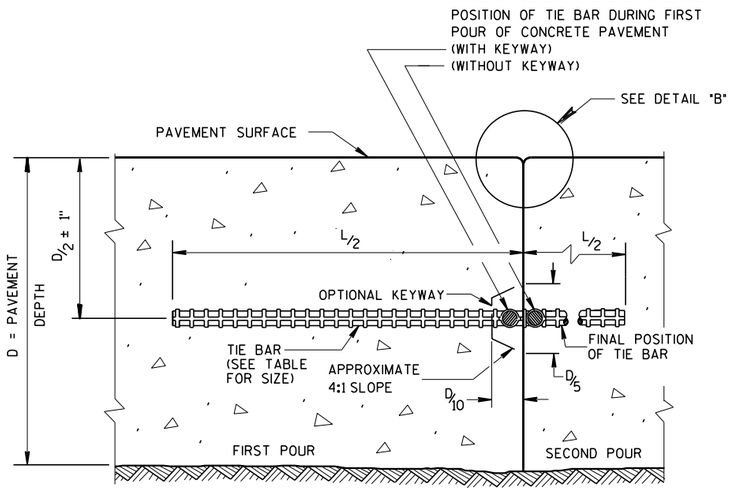
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

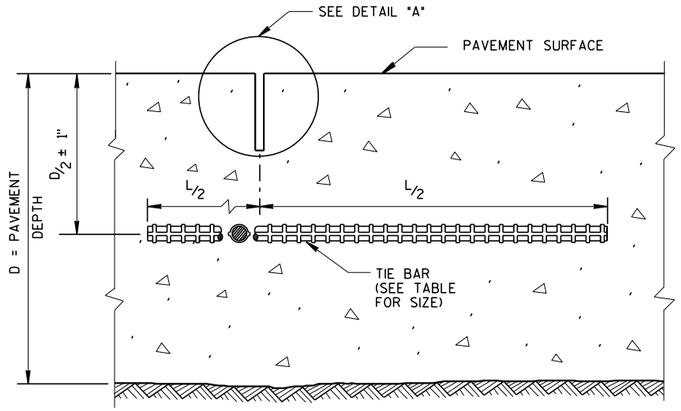
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 13A11 - 03b



CONSTRUCTION JOINT



SAWED JOINT

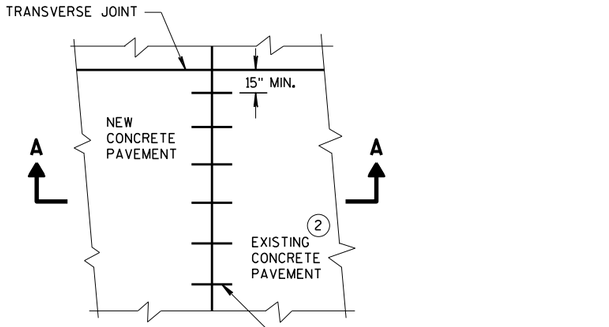
GENERAL NOTES

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

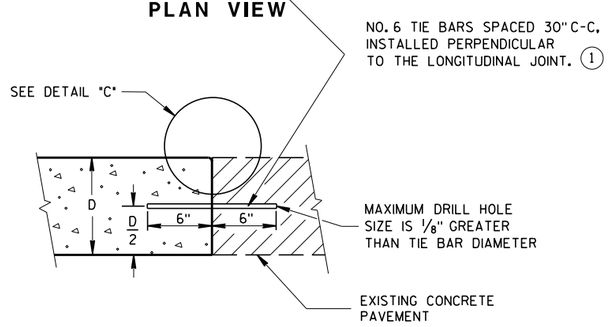
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

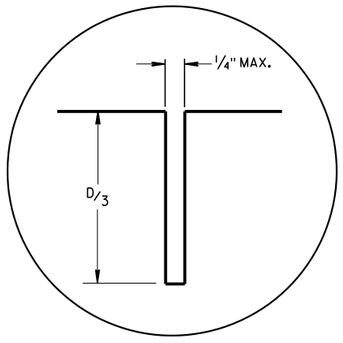


PLAN VIEW

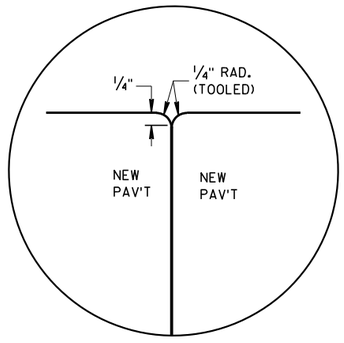


SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



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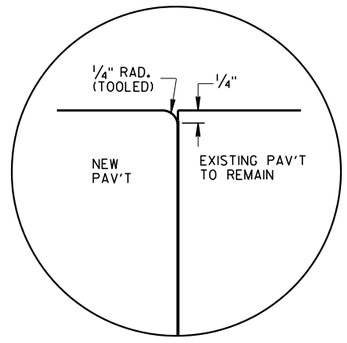


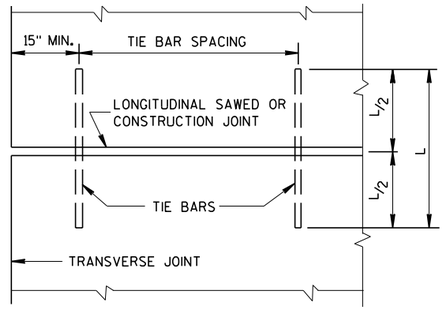
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 13 C 1-19

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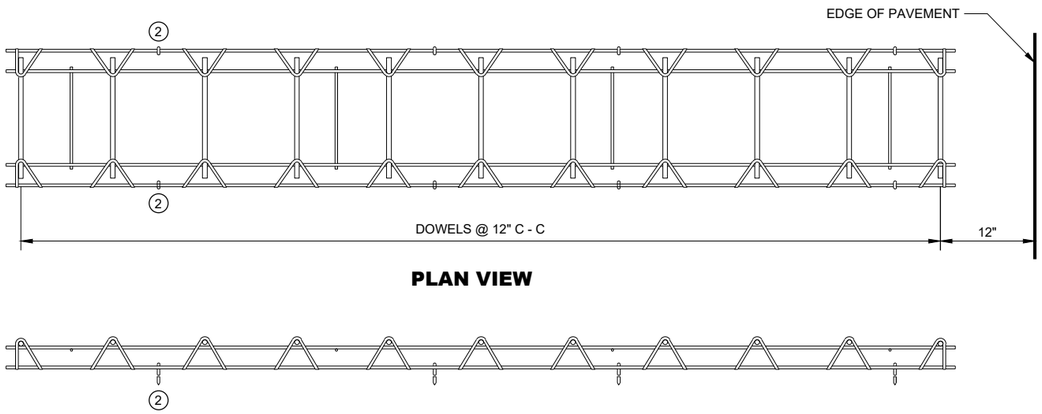
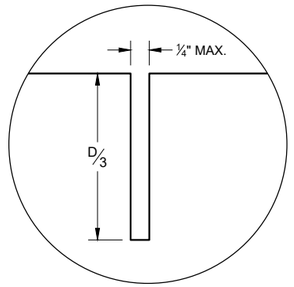
S.D.D. 13 C 1-19



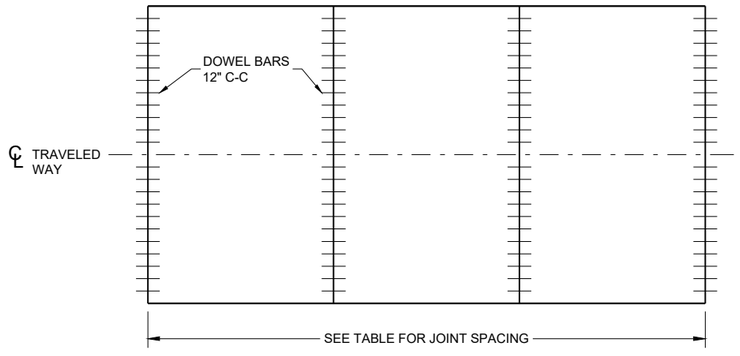
PLAN VIEW

SIDE VIEW

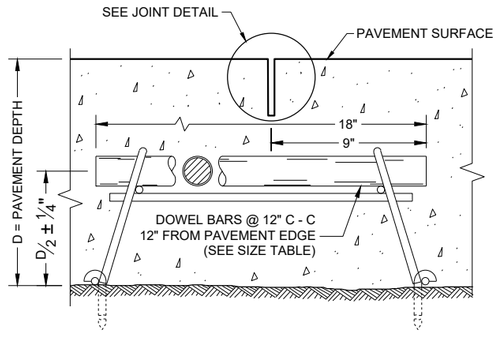
CONTRACTION JOINT DOWEL ASSEMBLY (1)



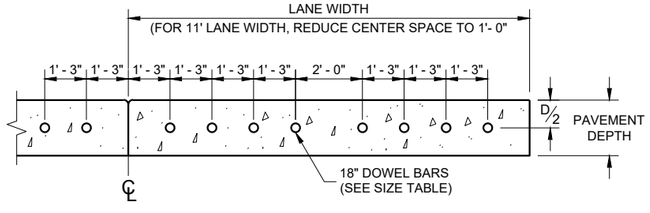
JOINT DETAIL



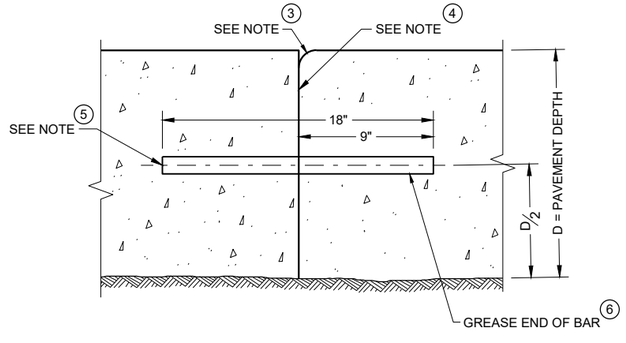
CONTRACTION JOINT LOCATIONS



DOWELED CONTRACTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

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

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9" & ABOVE	1 ¼"	15'

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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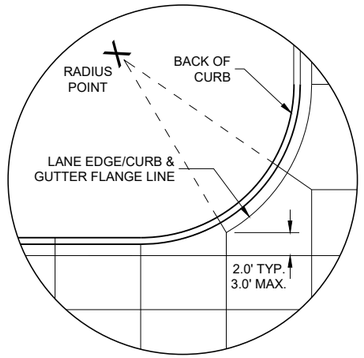
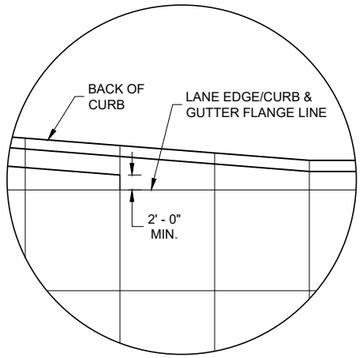
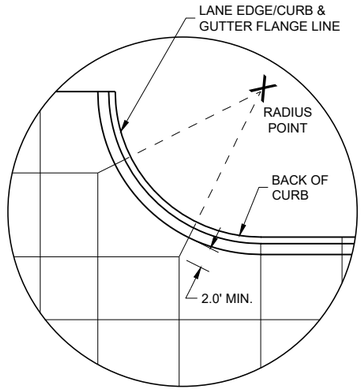
SDD 13C13 - 10



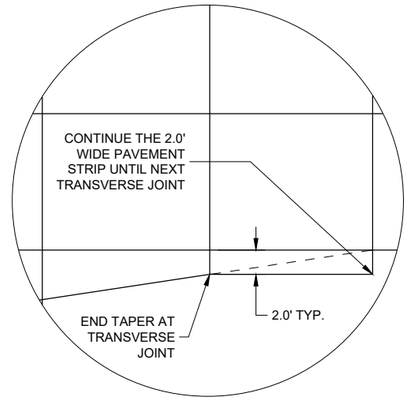
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

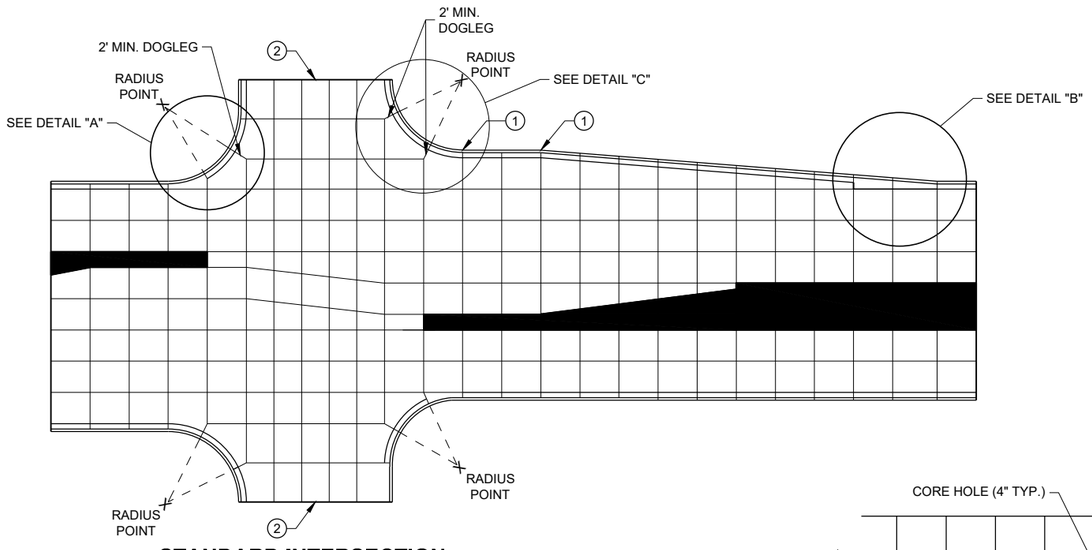
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

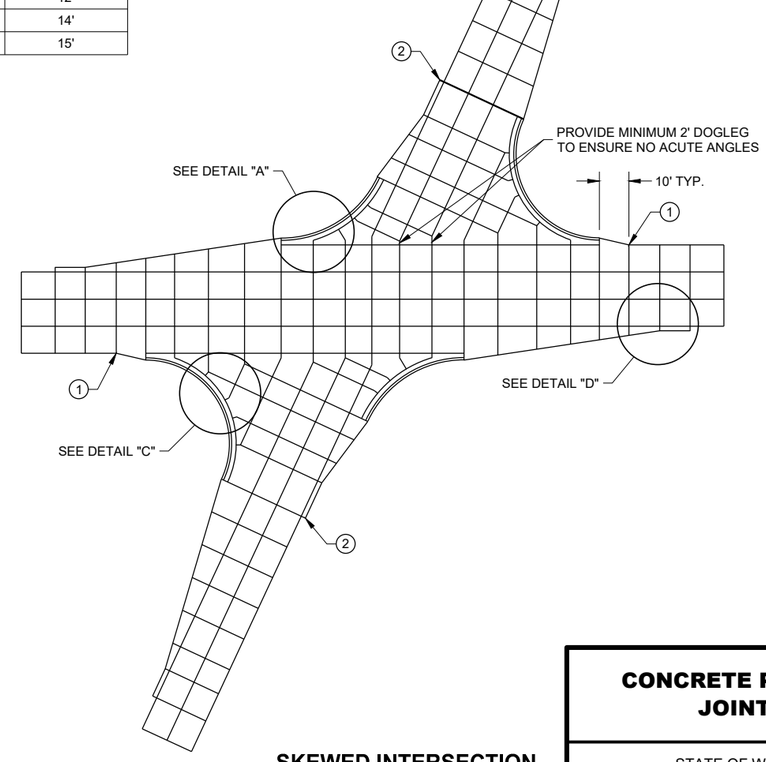
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



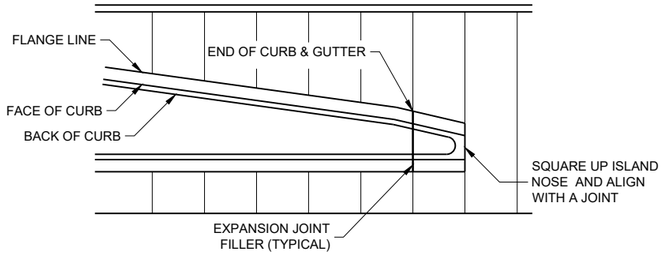
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

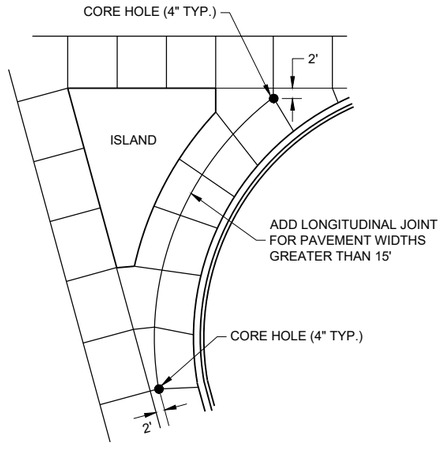
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

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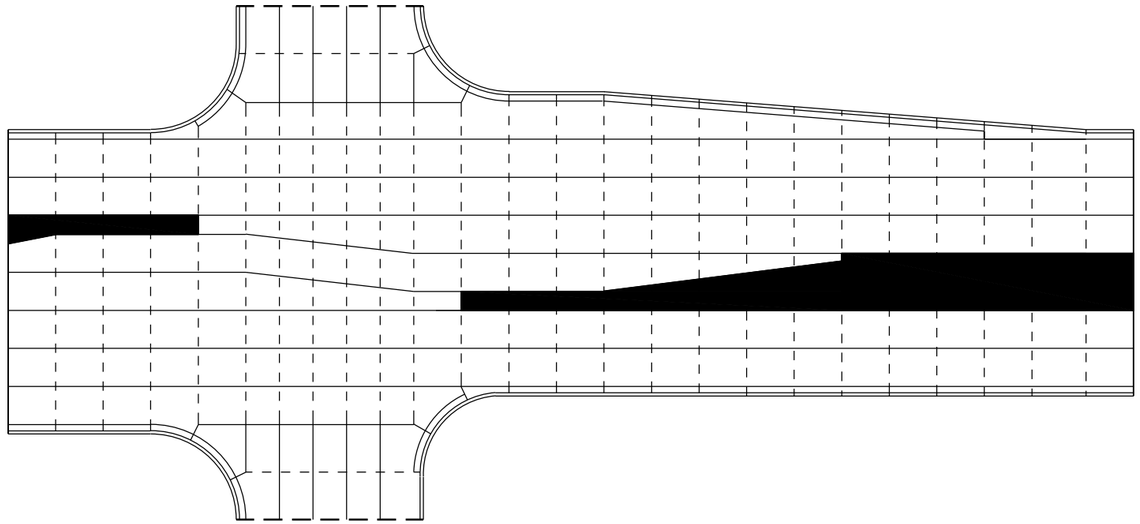
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

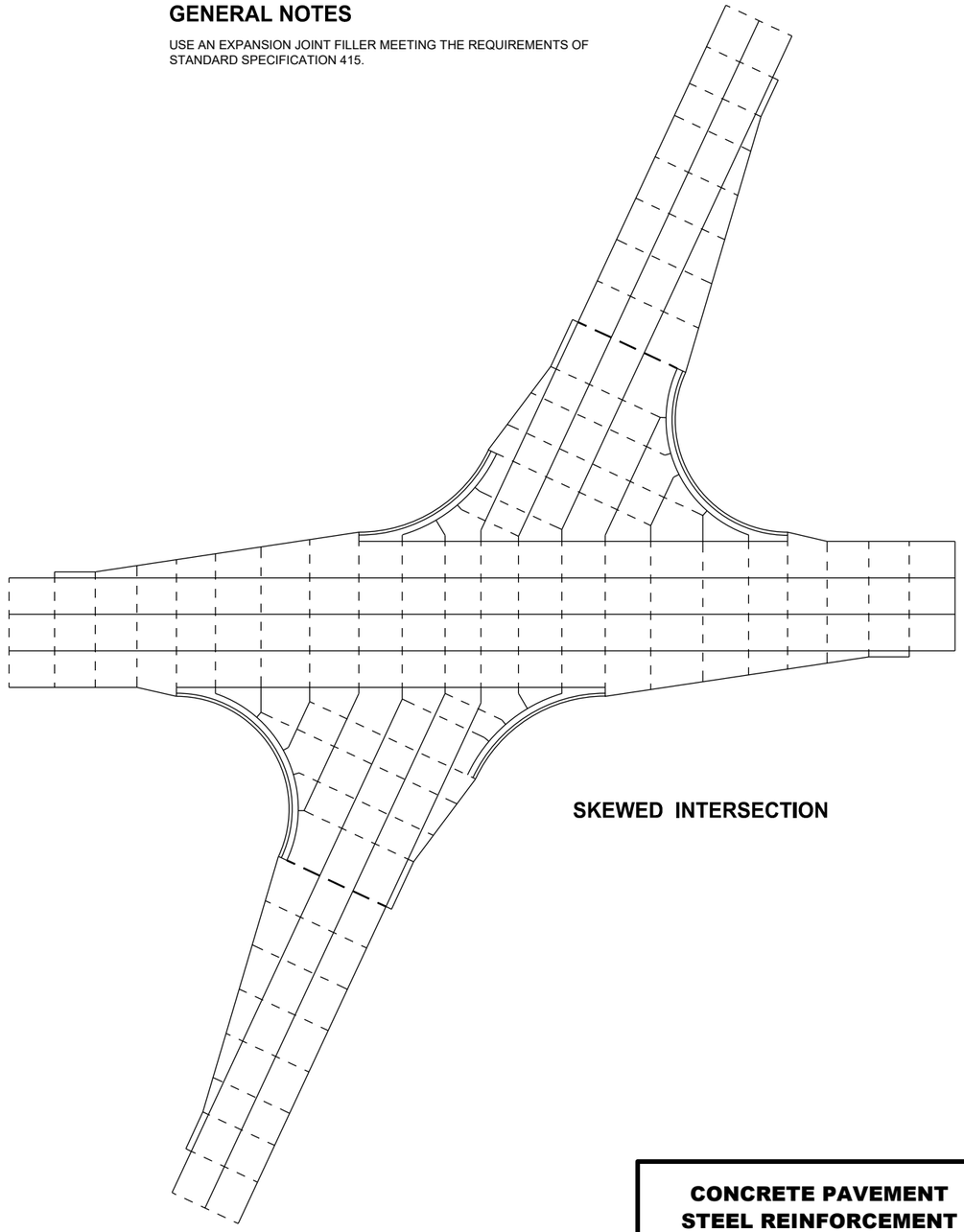
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

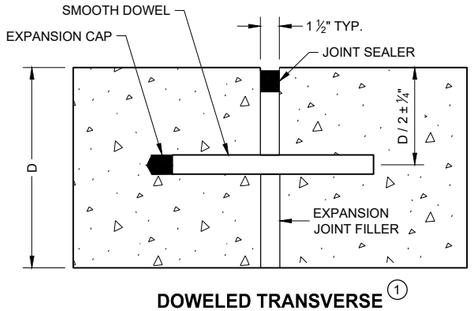
SDD 13C18 - 07b

CONCRETE PAVEMENT STEEL REINFORCEMENT

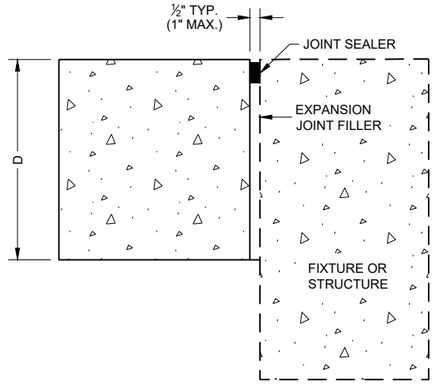
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

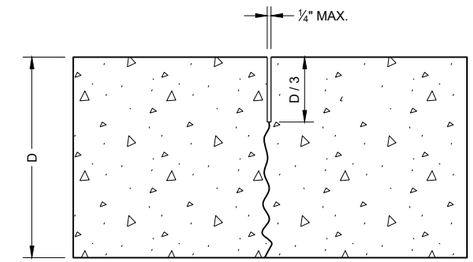
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

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

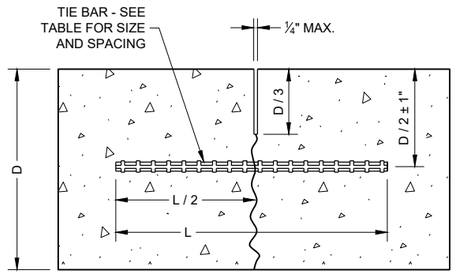
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

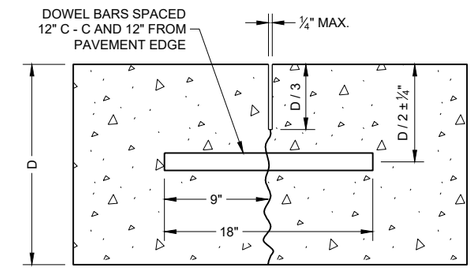
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM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



UNDOWELED TRANSVERSE

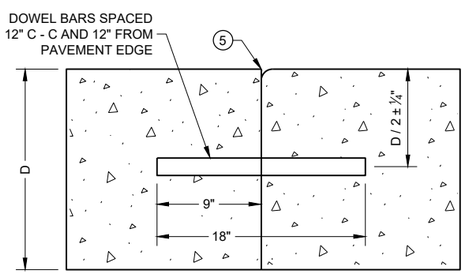


TIED LONGITUDINAL

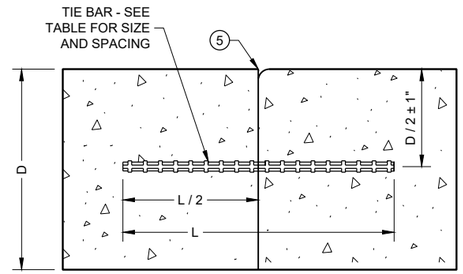


DOWELED TRANSVERSE

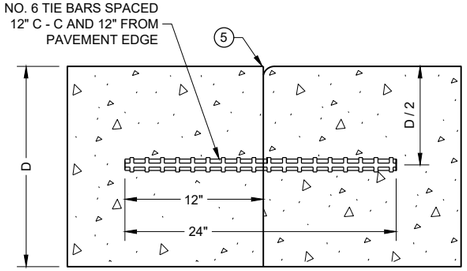
CONTRACTION JOINTS (2)



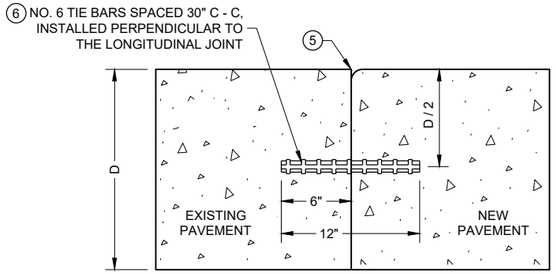
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



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



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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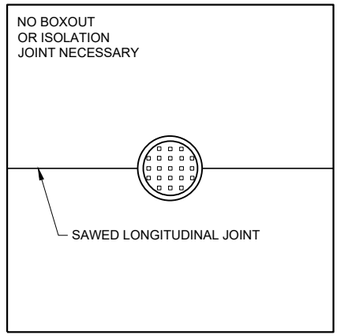
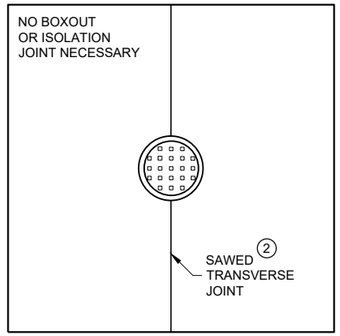
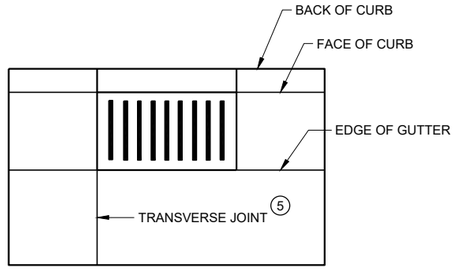
SDD 13C18 - 07c
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



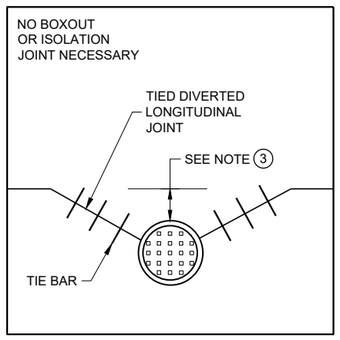
MANHOLE WITH TRANSVERSE JOINT



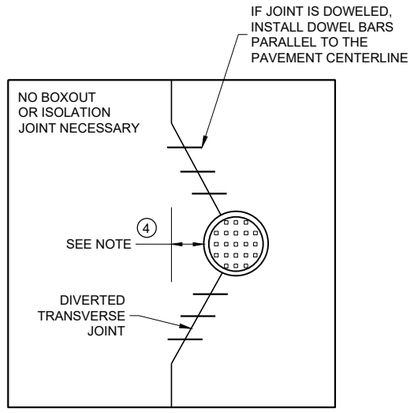
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

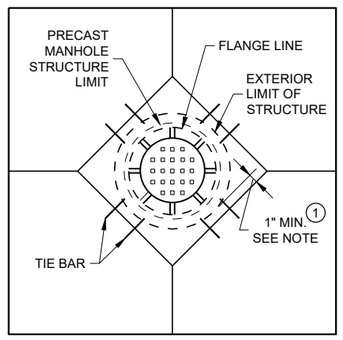
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF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



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD13C18 - 07d

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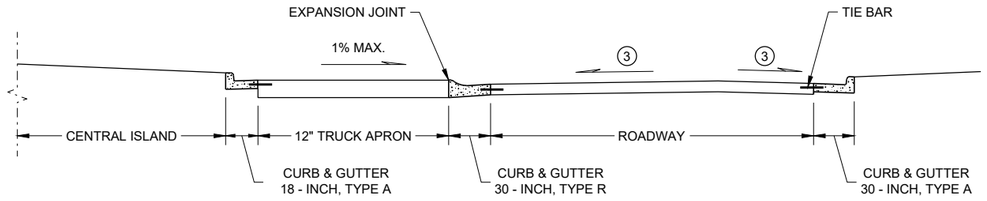
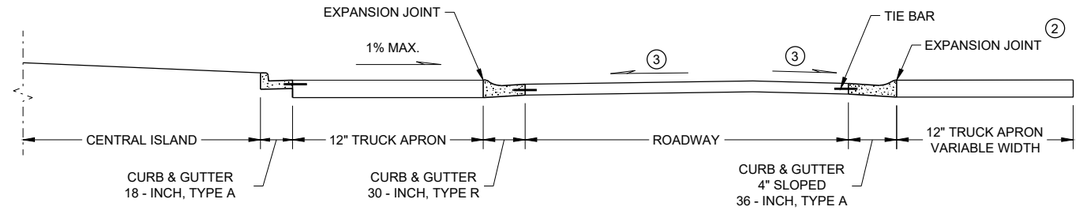
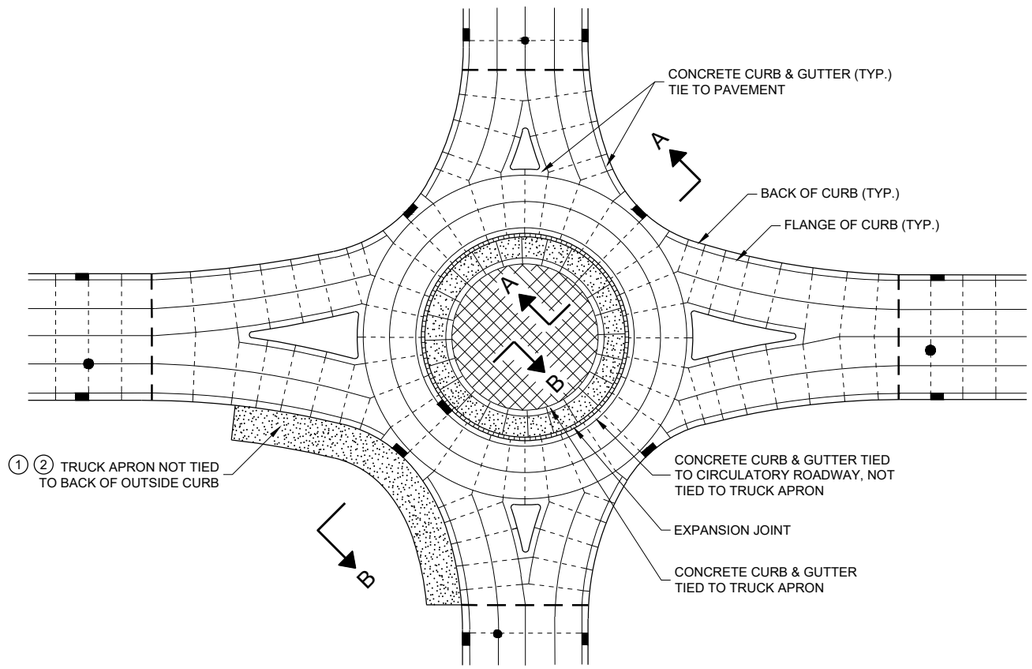
SDD13C18 - 07d



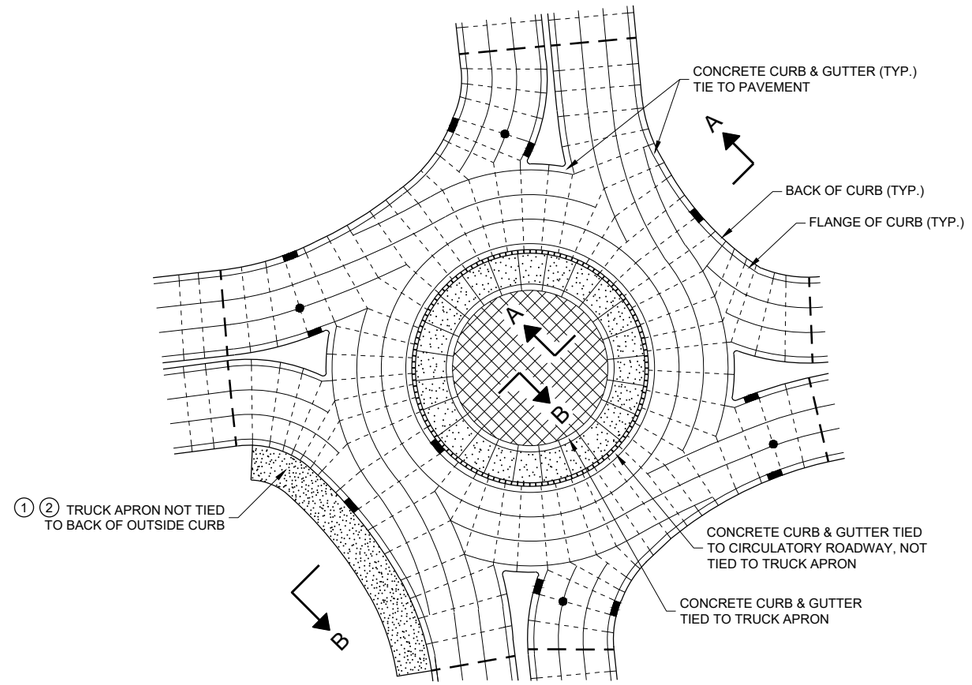
SECTION A - A



SECTION B - B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

277

FHWA

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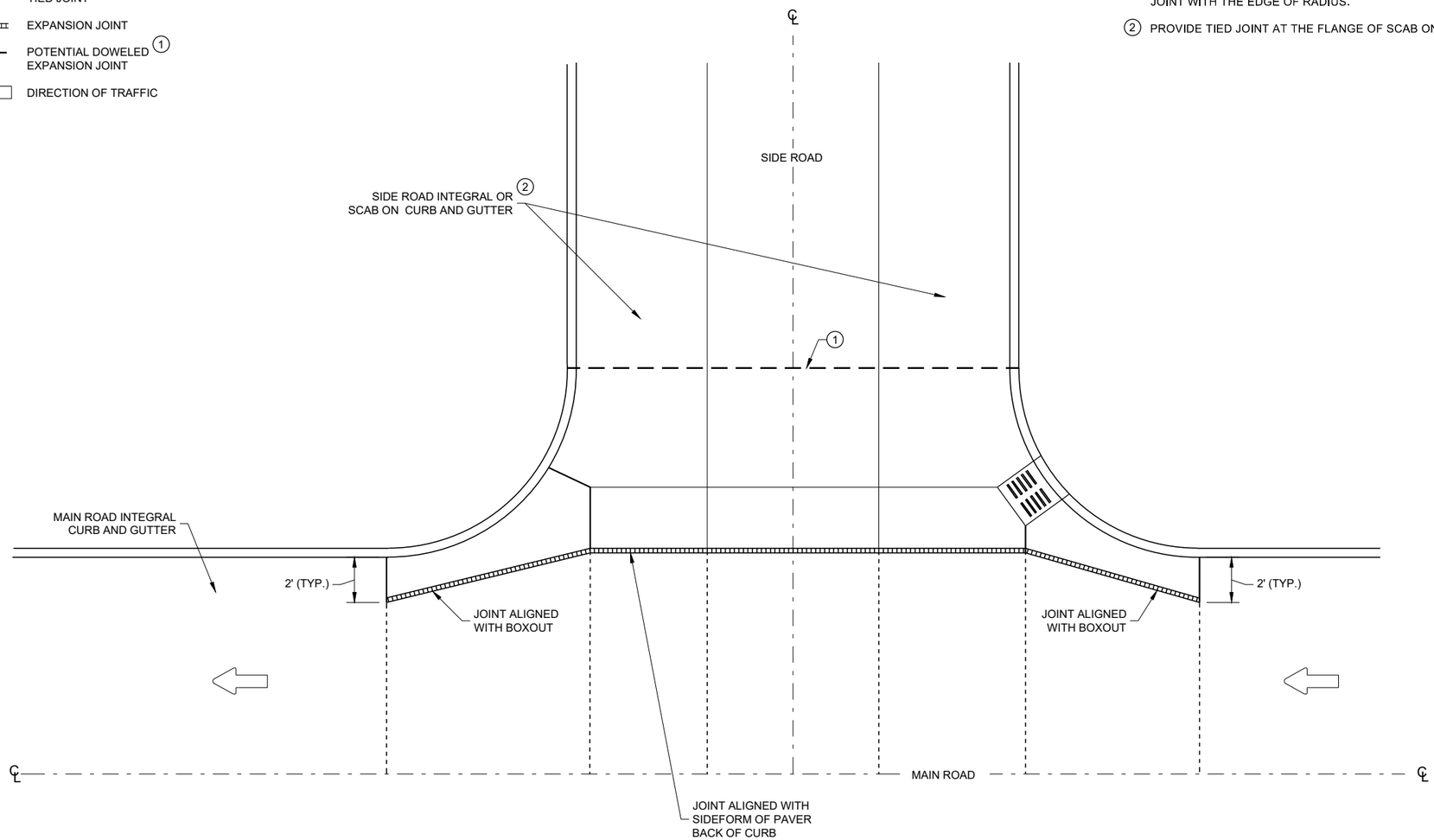
SDD 13C18 - 07e

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

6

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CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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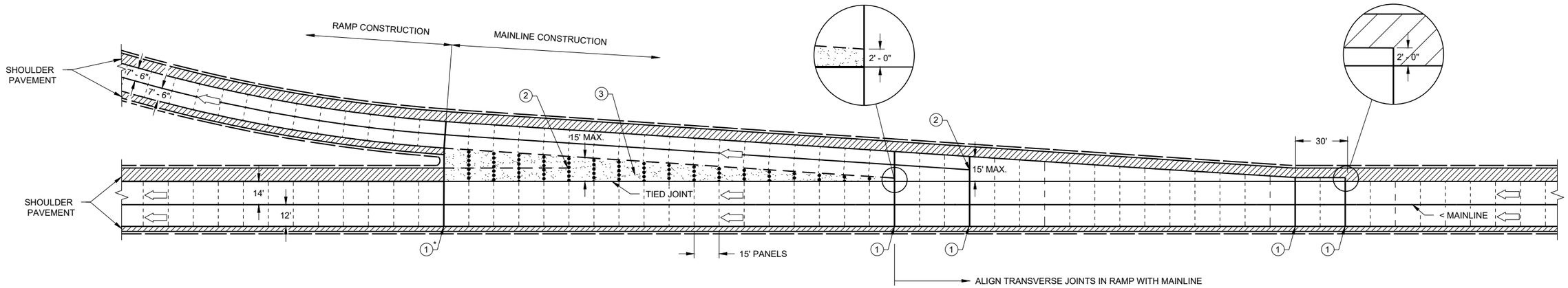
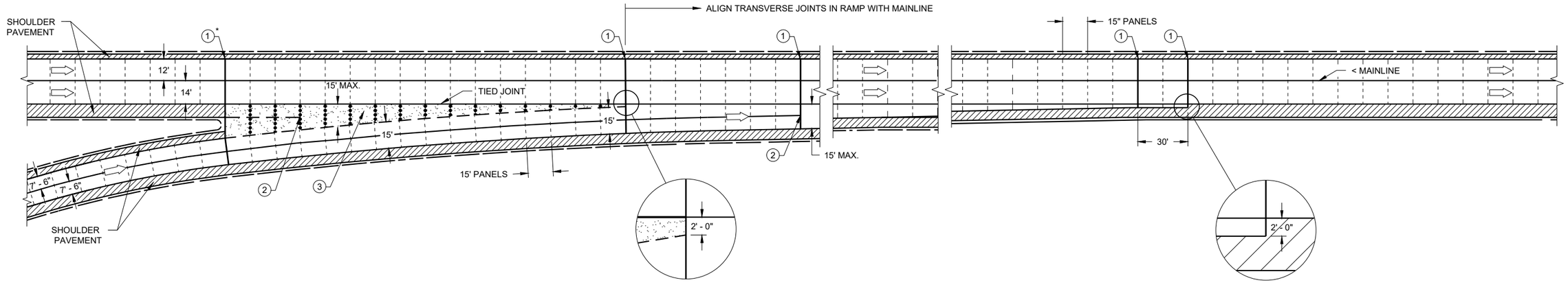


DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES. ((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

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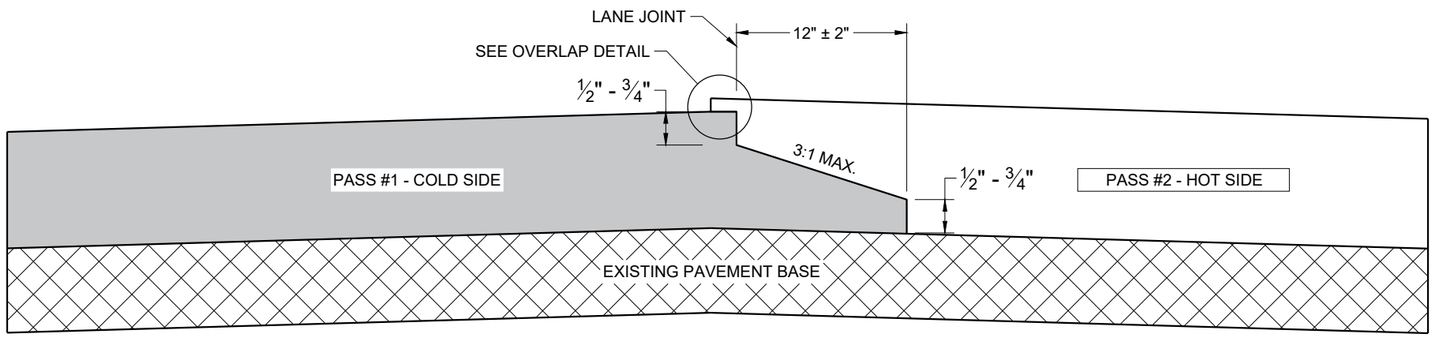
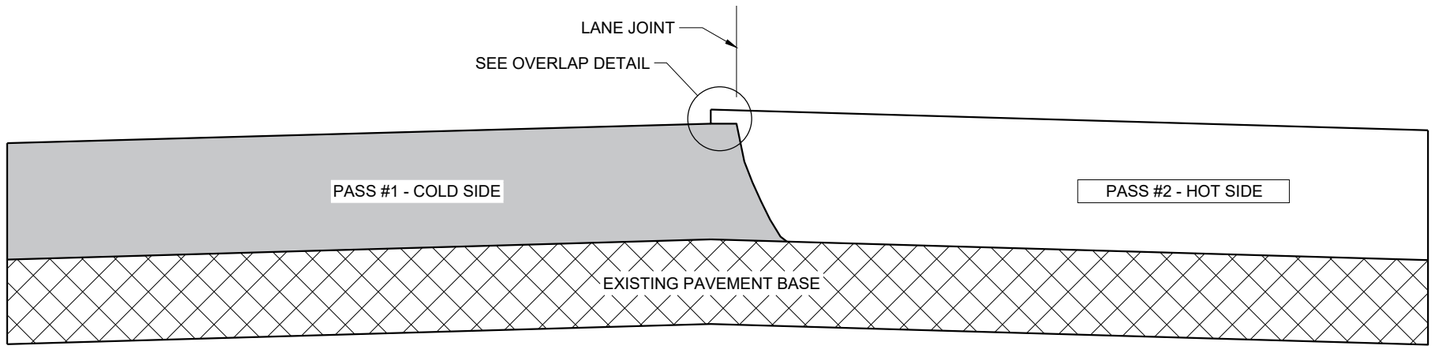
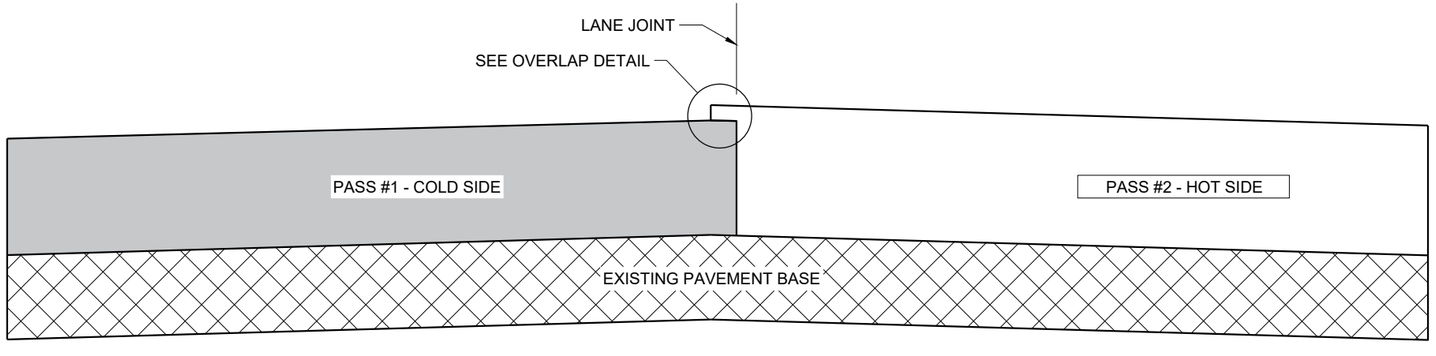
SDD13C18 - 07g



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

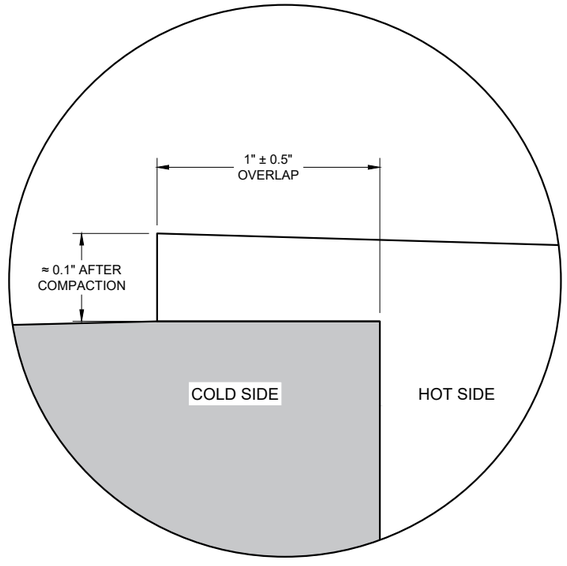
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

280

FHWA

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

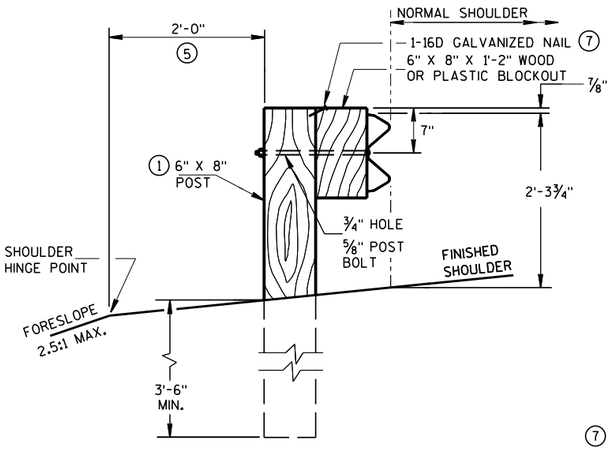
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

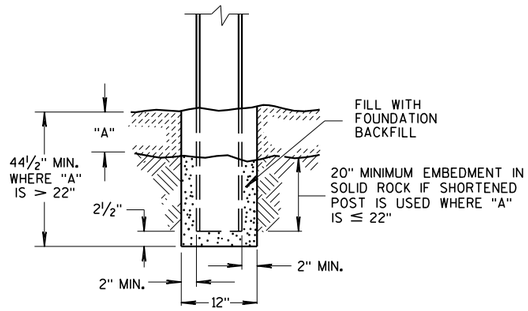
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

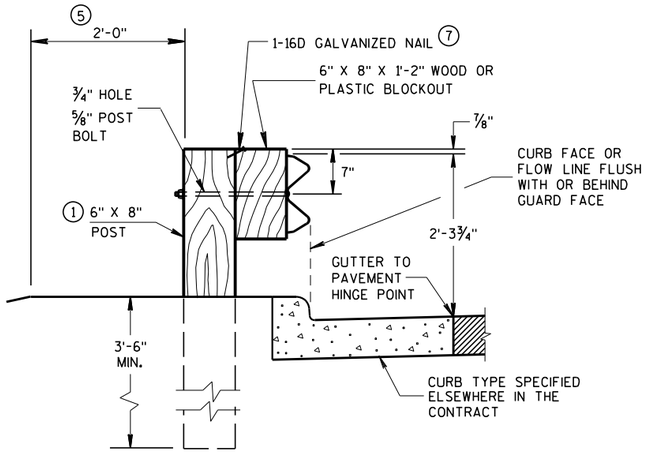
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



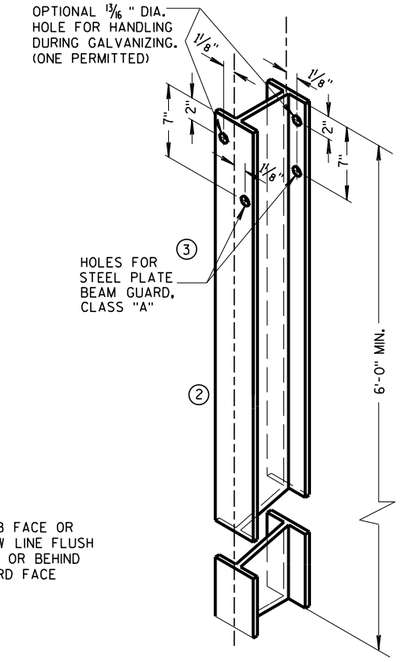
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

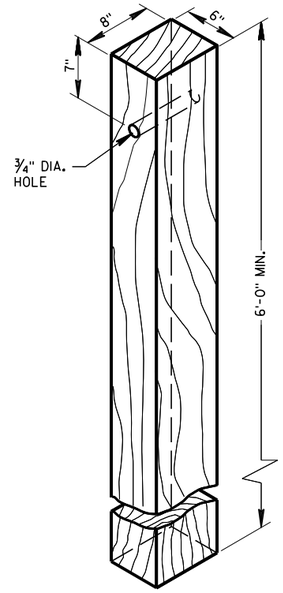


END VIEW
LOCATED ALONG A CURBED ROADWAY

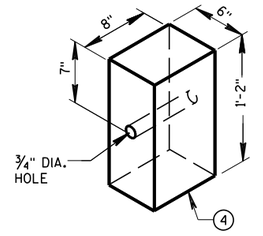


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

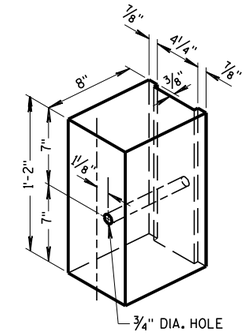
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



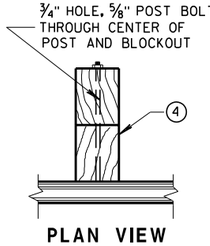
WOOD POST
(6"X8") NOMINAL



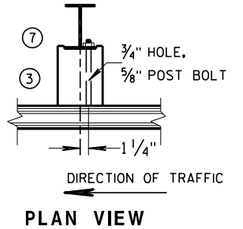
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



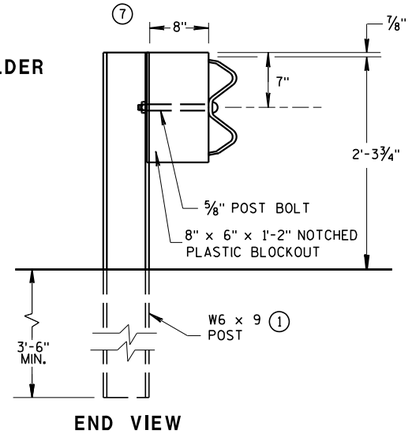
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



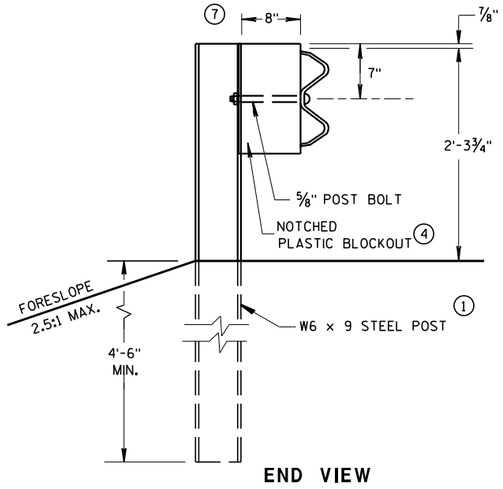
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



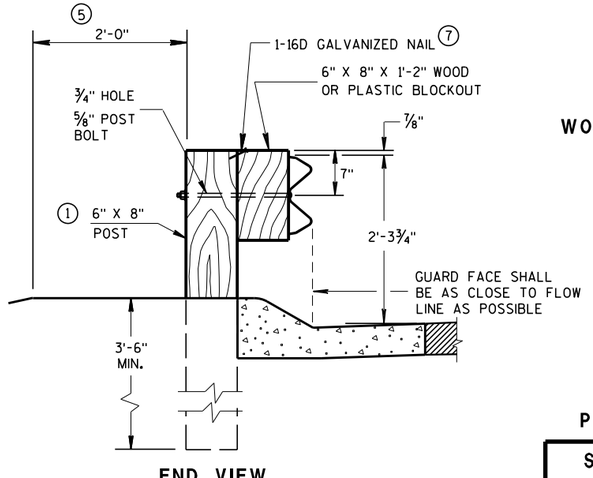
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

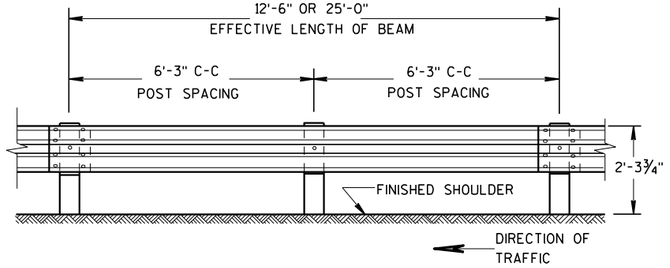
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

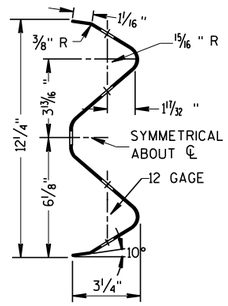
S.D.D. 14 B 15-11a

S.D.D. 14 B 15-11a

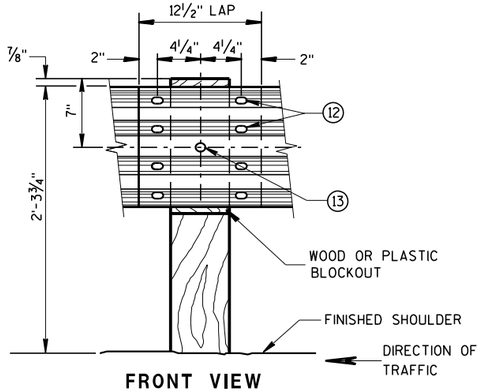


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

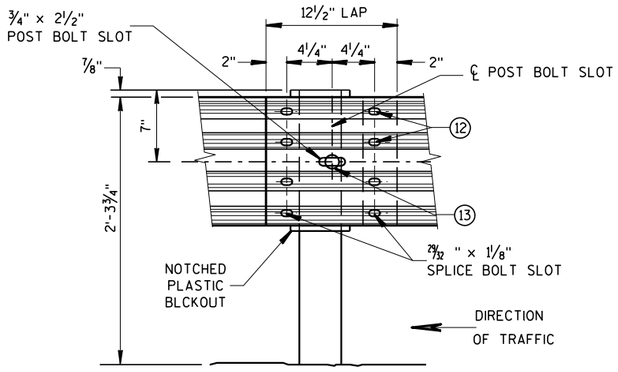
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

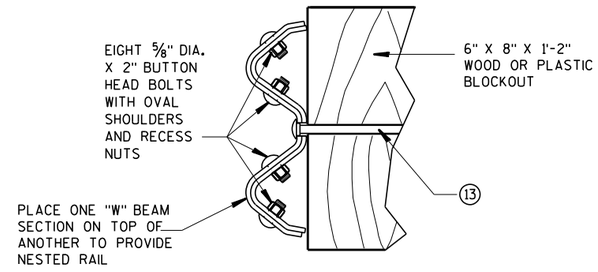
FRONT VIEW

POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

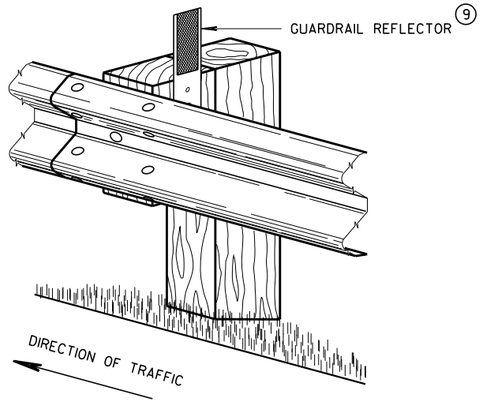


NESTED W BEAM (NW)

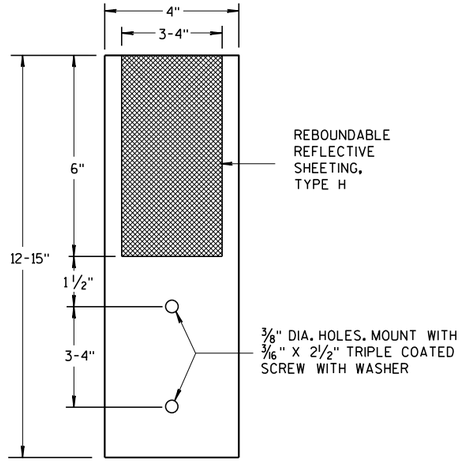
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCO 282
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 15-11b

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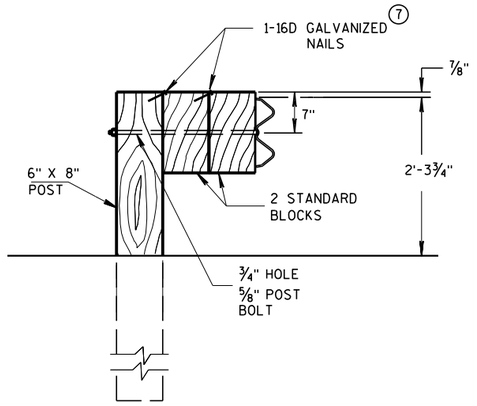
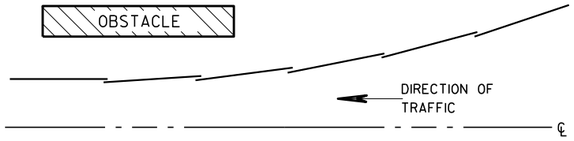
S.D.D. 14 B 15-11b

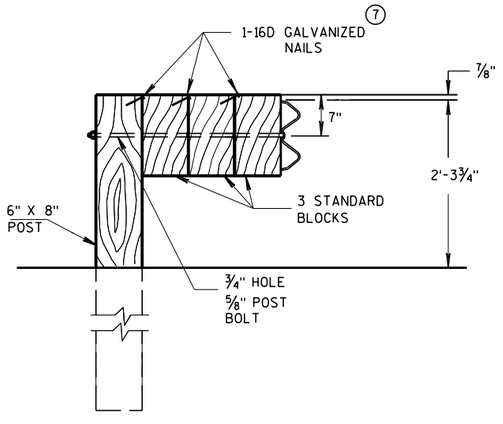


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

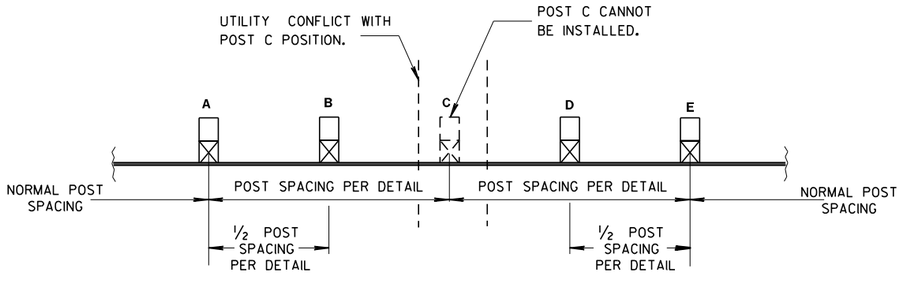


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR

283

FHWA

6
S.D.D. 14 B 15-11c

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

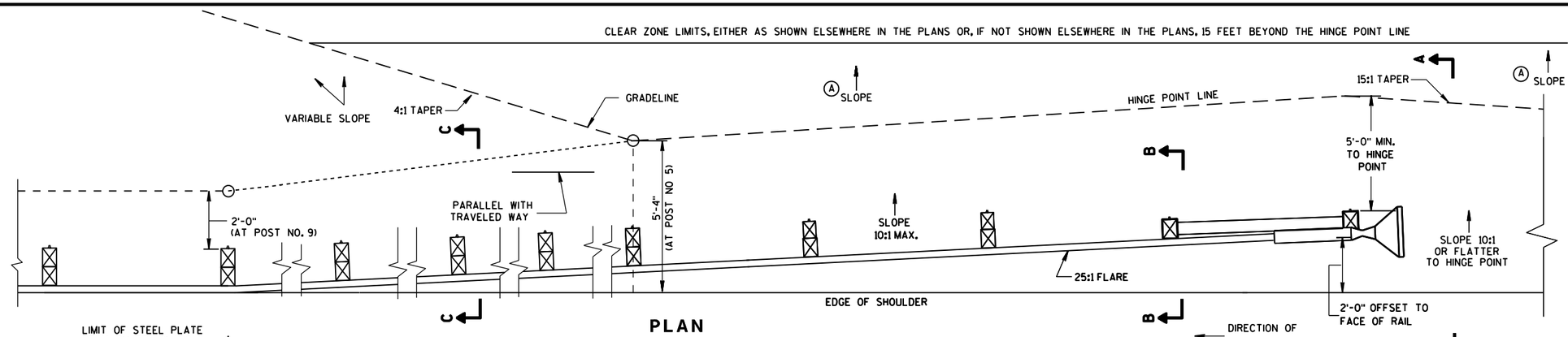
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

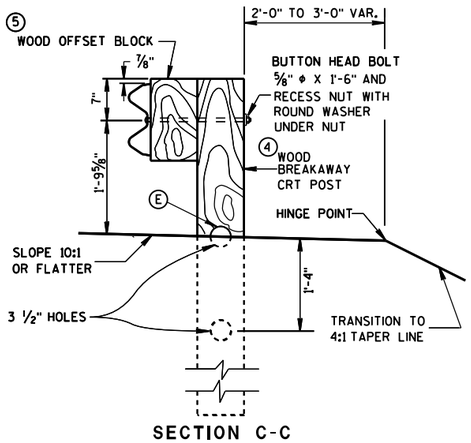
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

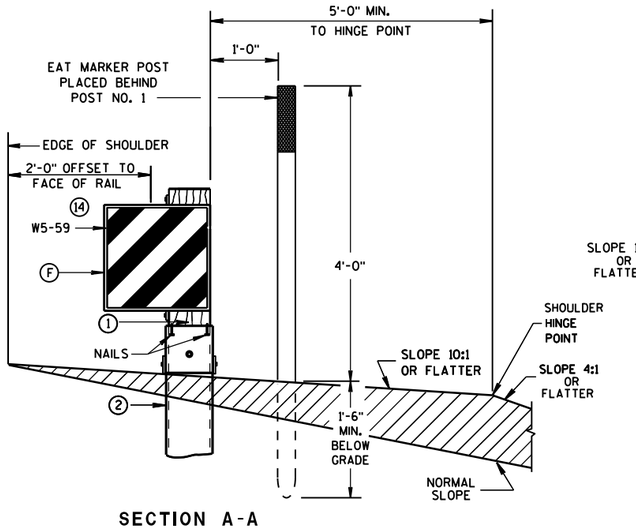
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

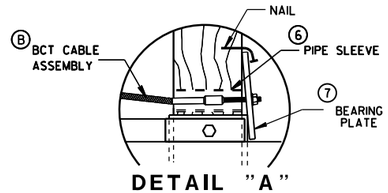




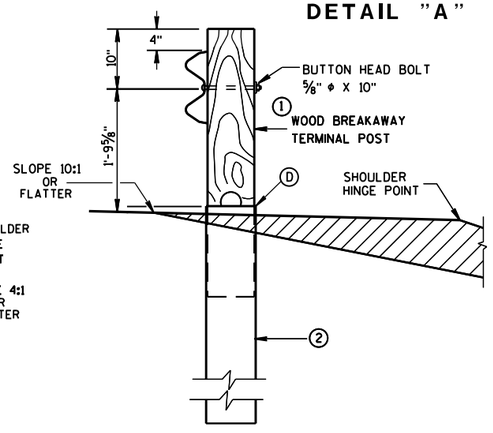
SECTION C-C
TYPICAL AT POST NOS. 6, 8



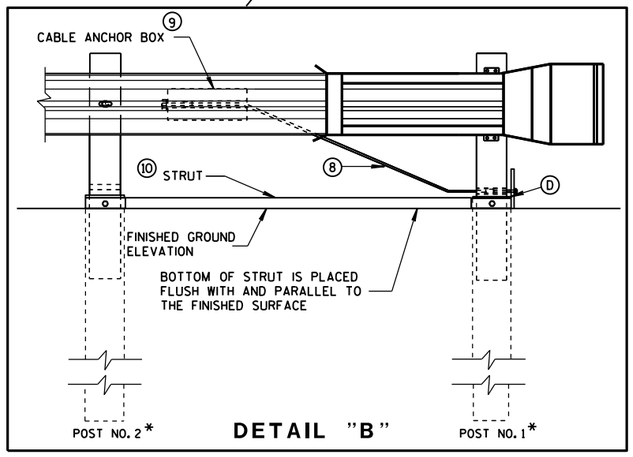
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



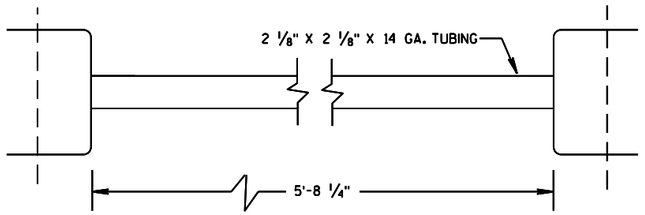
DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

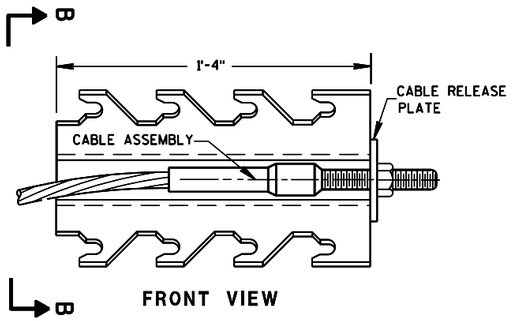
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

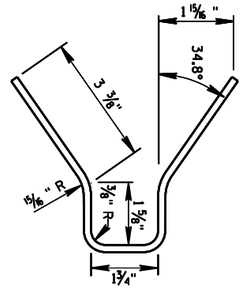
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

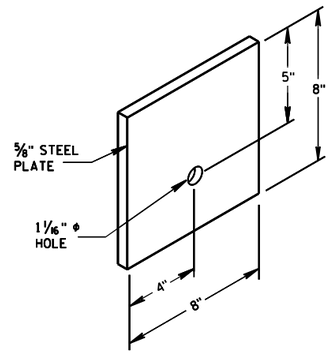


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

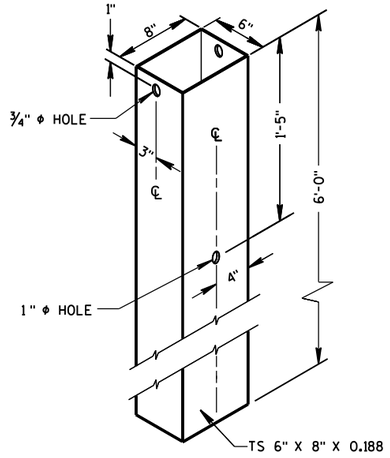
6

S.D.D. 14 B 24-9b

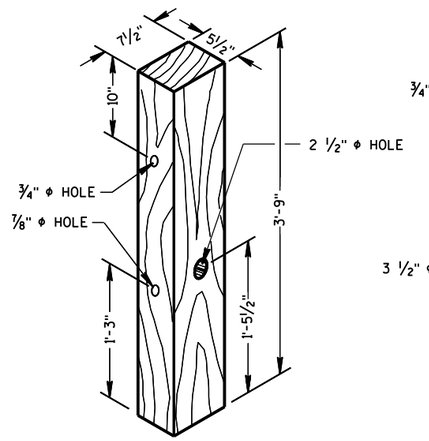
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

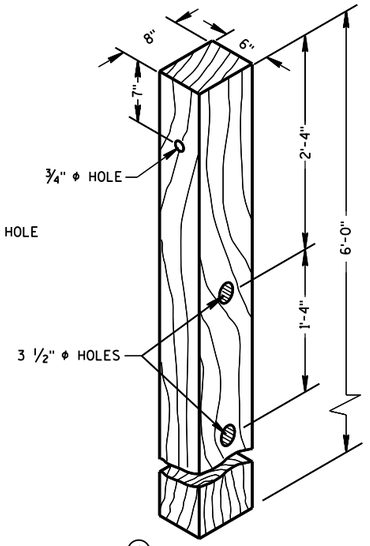
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

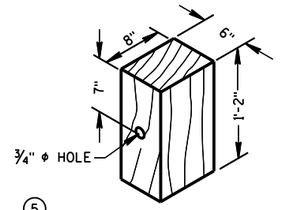


④ CRT POST
(POSTS NO'S 5-8)

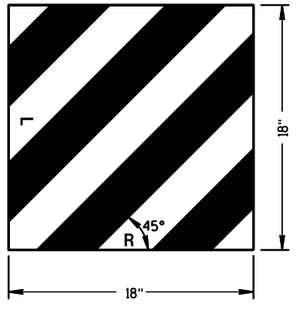
WOOD BREAKAWAY POSTS

GENERAL NOTES

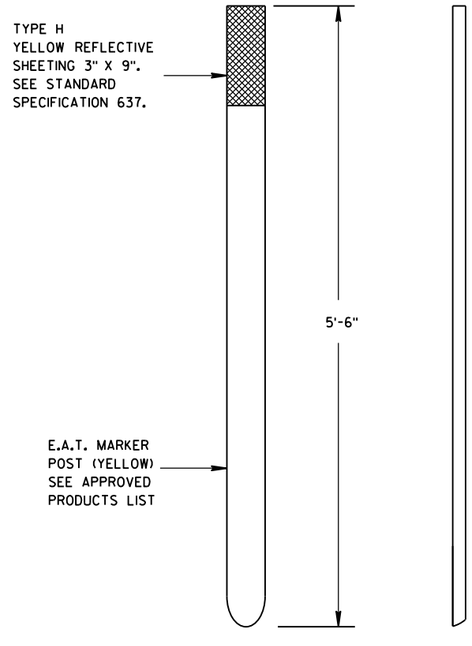
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

286

ENT

6

S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

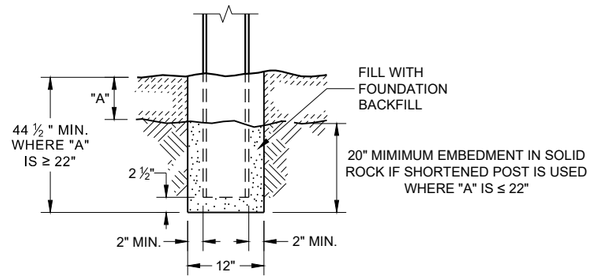
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

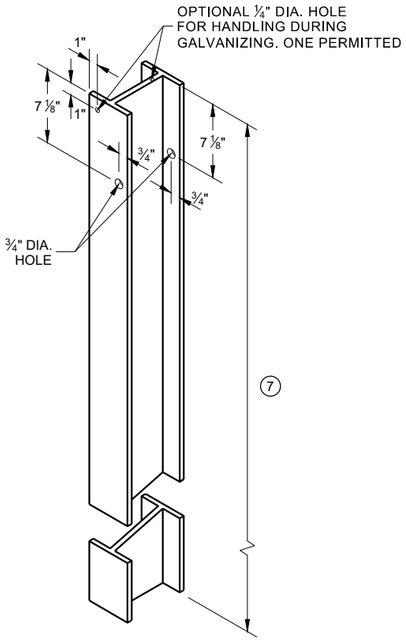
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

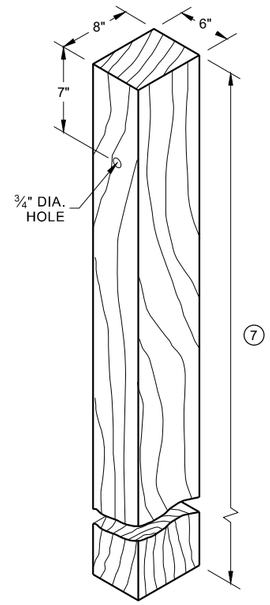
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



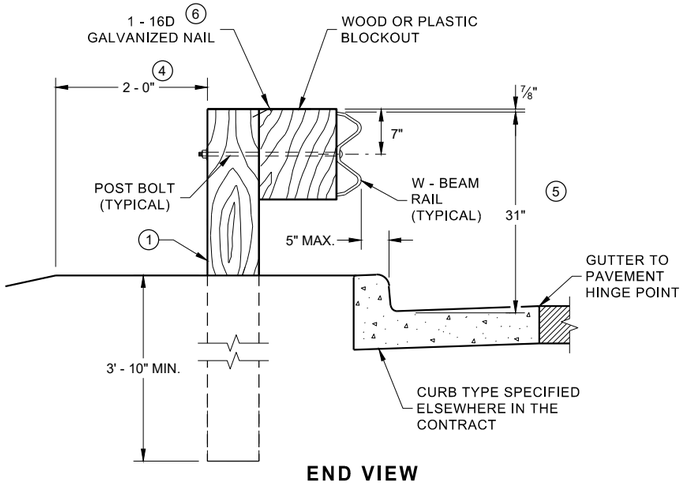
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



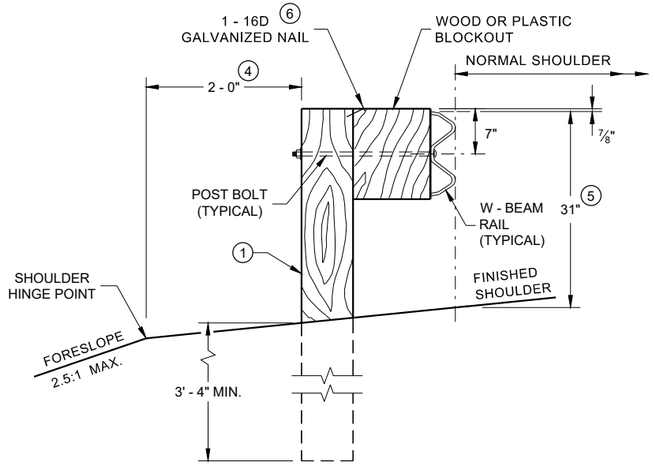
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



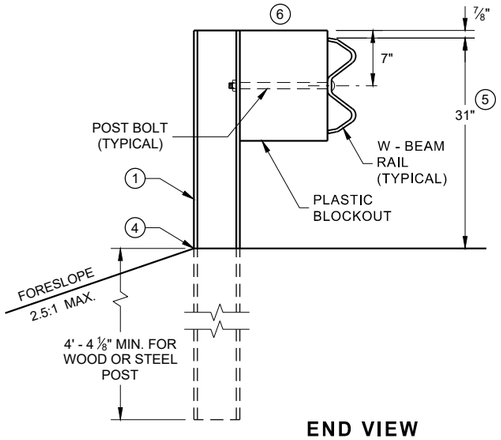
WOOD POST (6" X 8") NOMINAL (1)



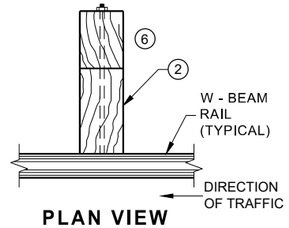
END VIEW
LOCATED ALONG A CURBED ROADWAY



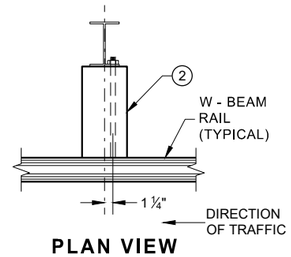
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



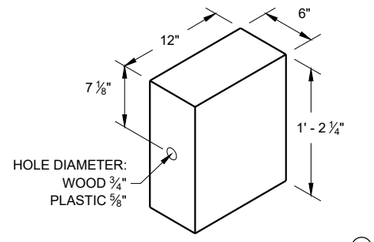
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

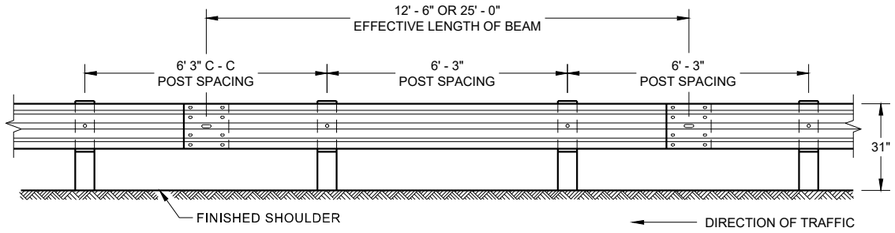
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

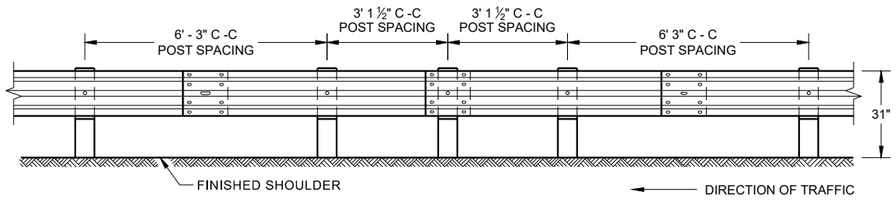
SDD 14B42 - 07a

6

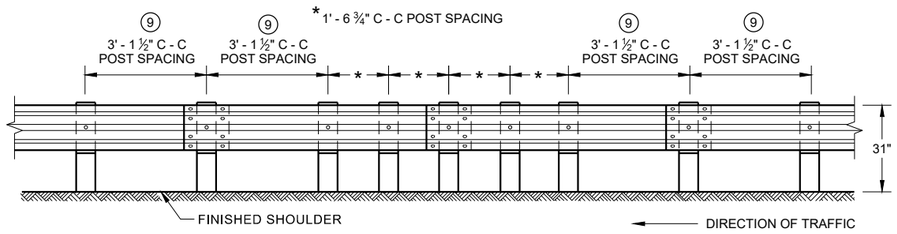
SDD 14B42 - 07a



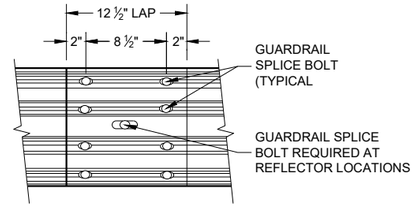
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

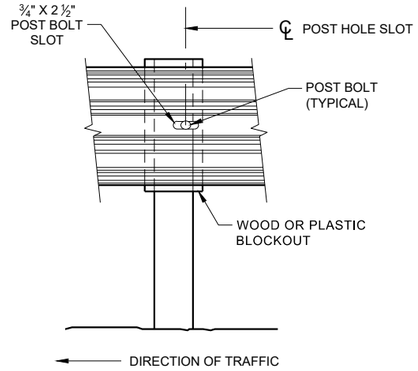
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

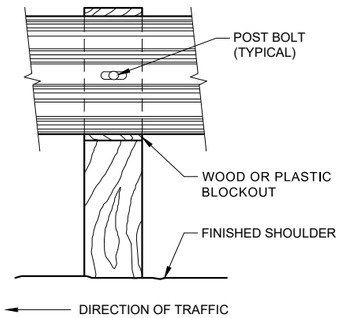
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

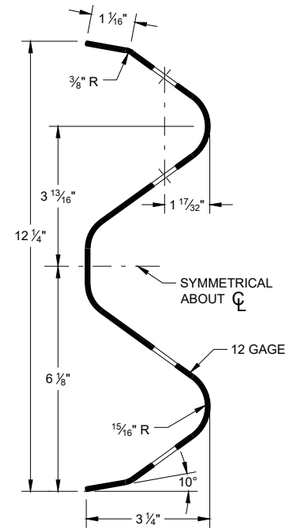
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



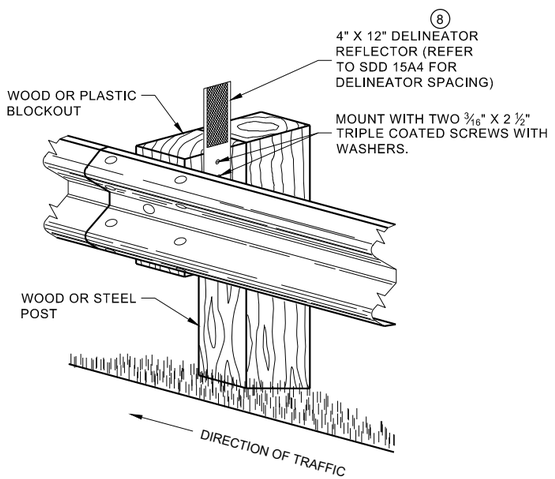
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



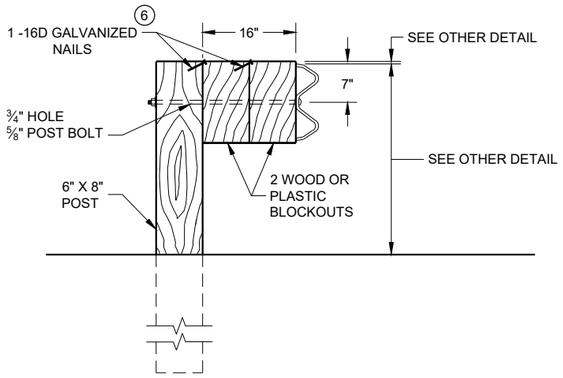
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

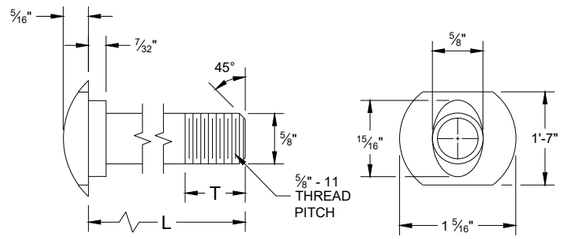


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

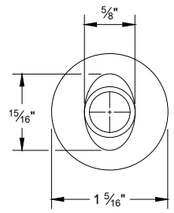
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

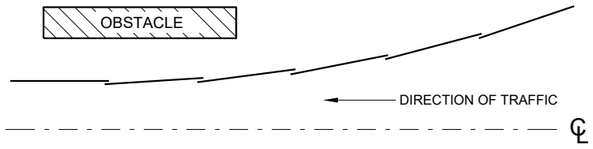


POST BOLT TABLE

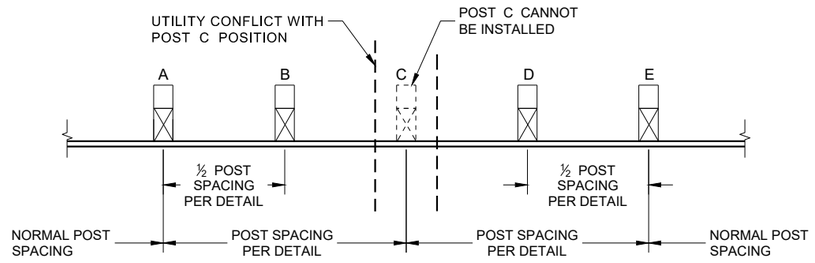
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



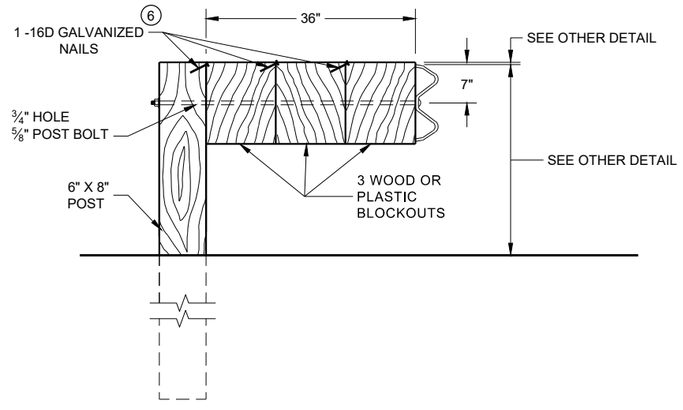
ALTERNATE BOLT HEAD



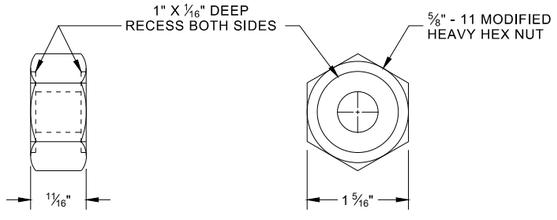
PLAN VIEW
BEAM LAPPING DETAIL



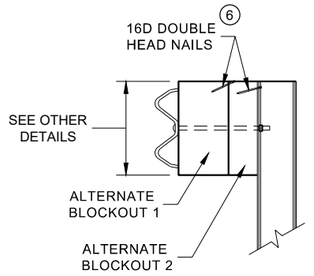
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



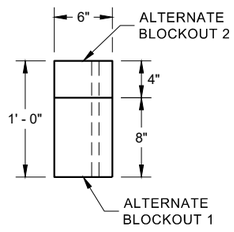
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

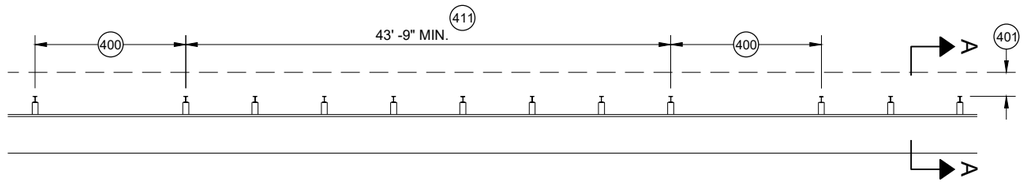
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

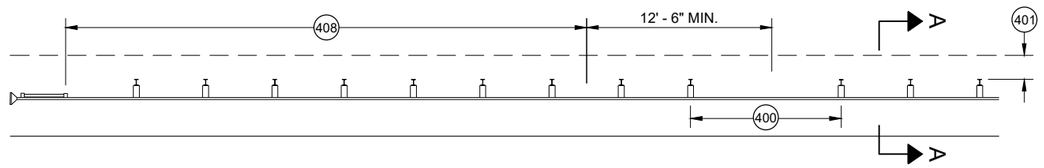
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

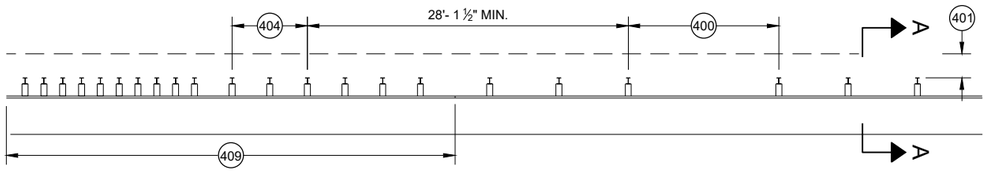
SDD 14B42 - 07c



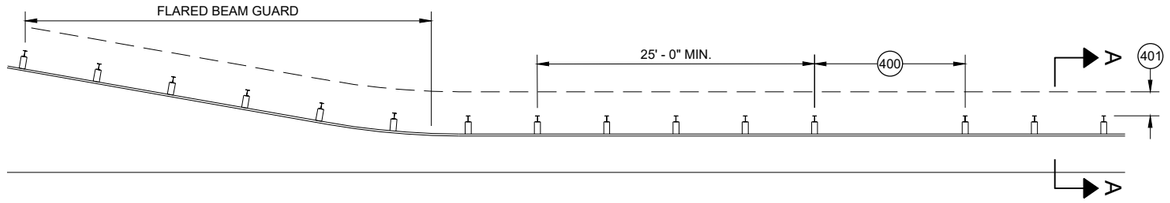
MISSING POST IN MGS GUARDRAIL



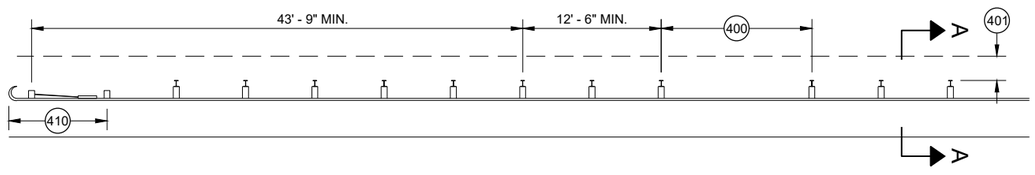
MISSING POST IN MGS GUARDRAIL NEAR EAT



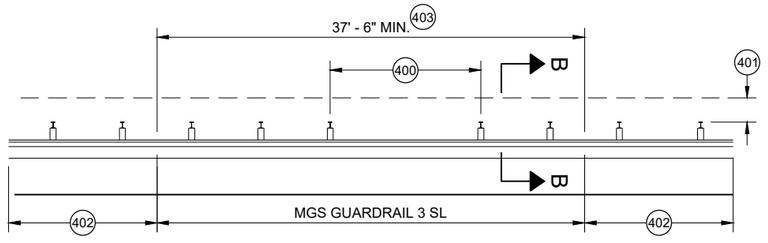
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

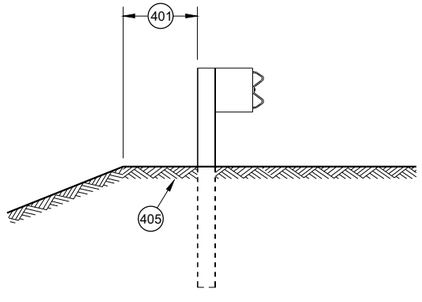


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

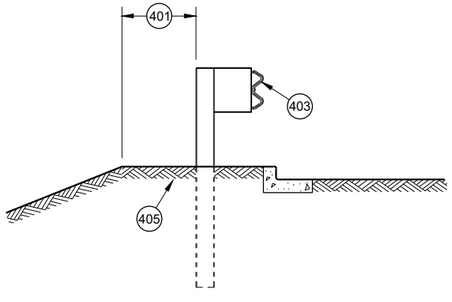


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

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SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

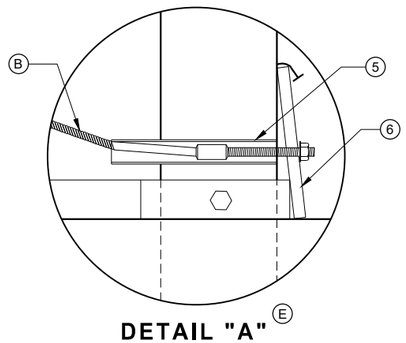
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

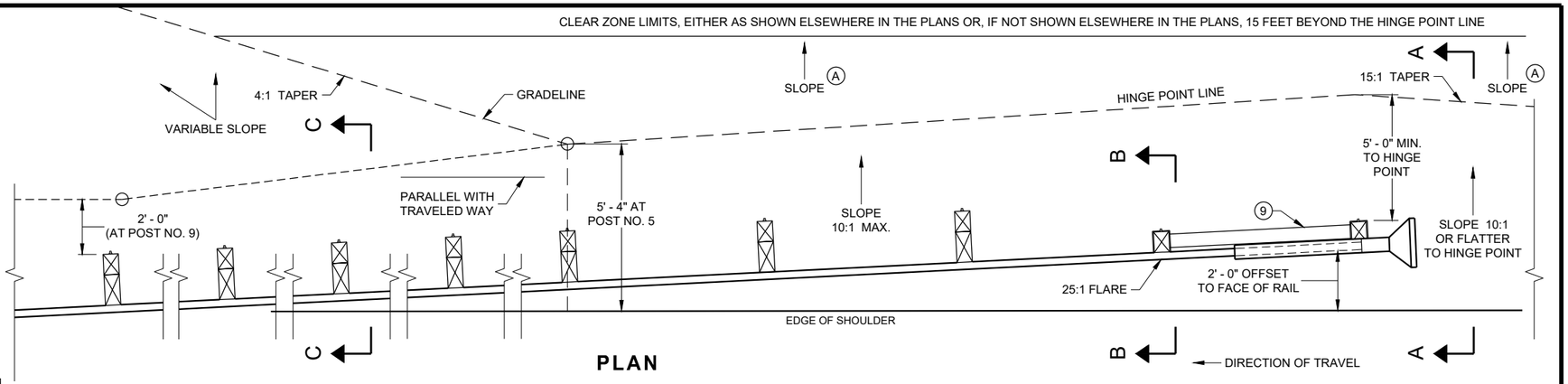
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

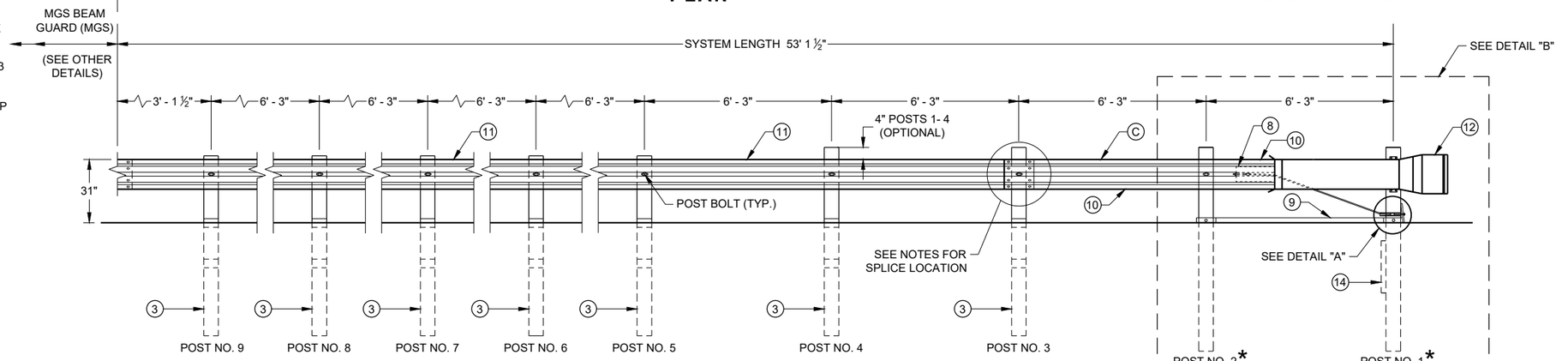
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



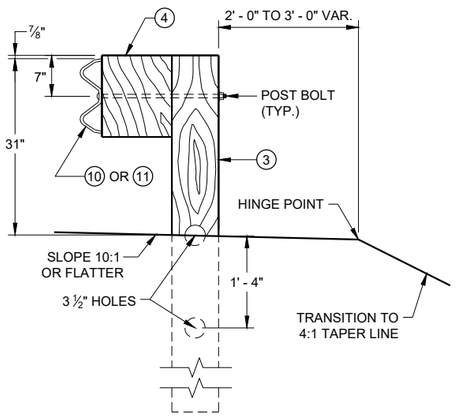
DETAIL "A" (E)



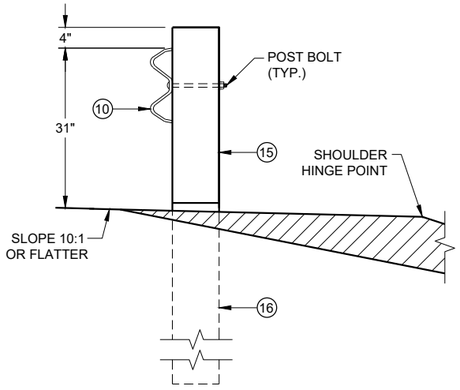
PLAN



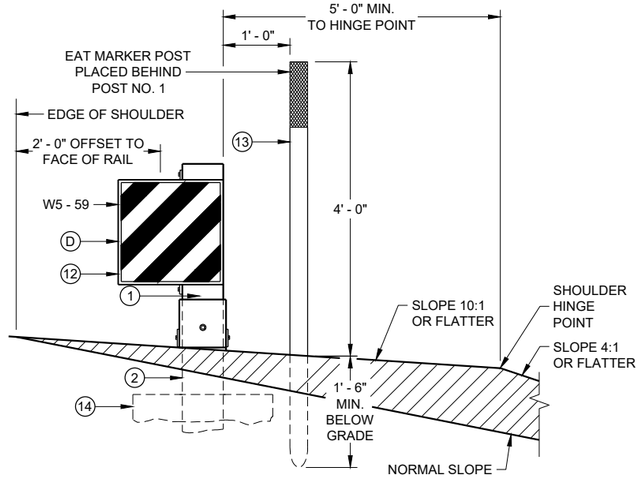
ELEVATION



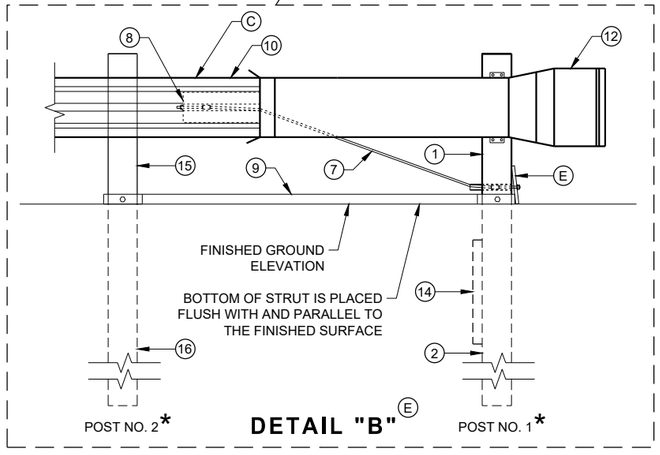
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

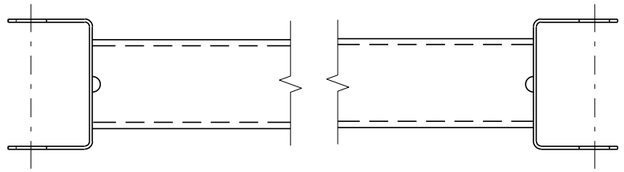
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

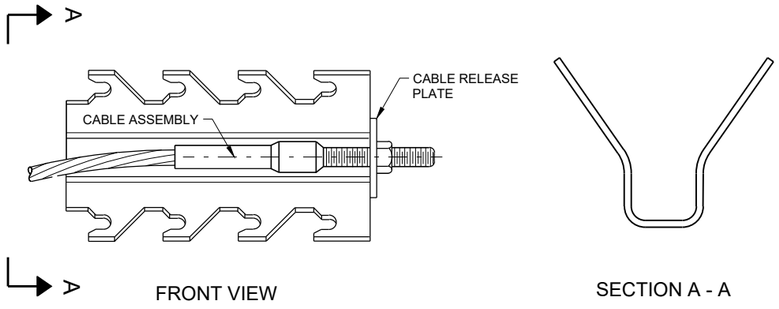
SDD 14B44 - 04a

BILL OF MATERIALS

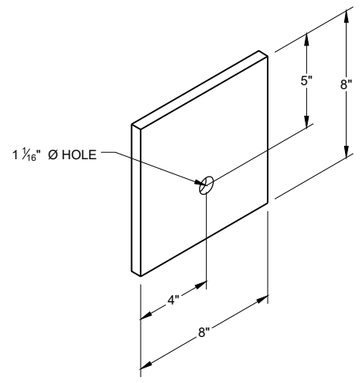
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC GROUND STRUT ⑨ Ⓔ



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



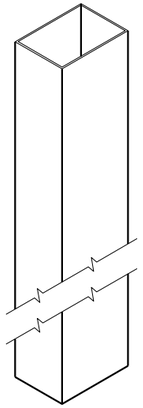
BEARING PLATE ⑥ Ⓔ

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

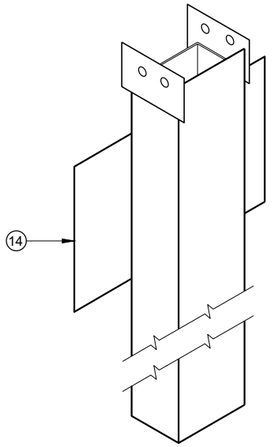
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

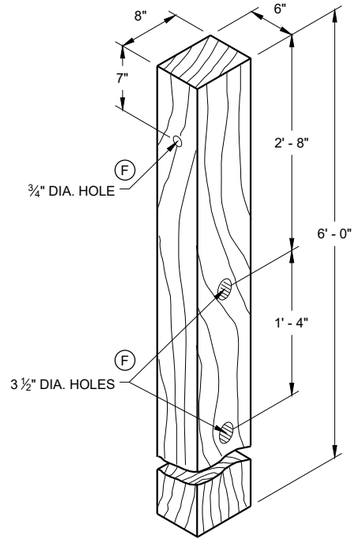
SDD 14B44 - 04b



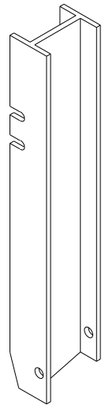
UPPER POST NO. 1 (1) (E)



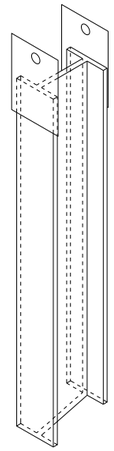
LOWER POST NO. 1 (2) (E)



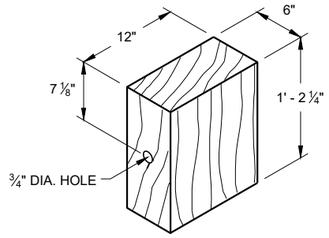
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



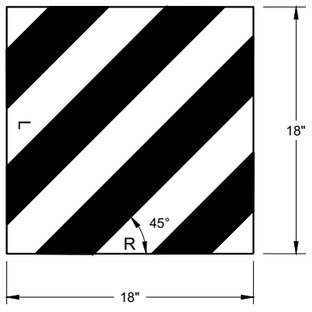
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

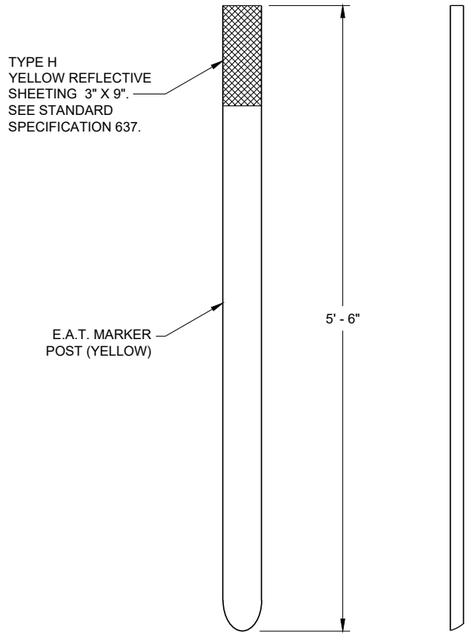


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



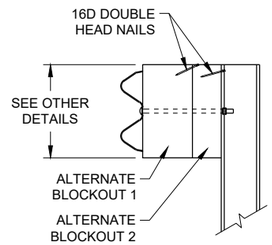
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

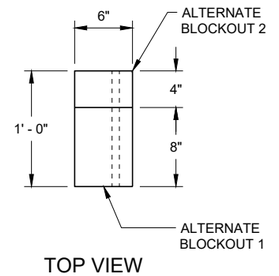


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

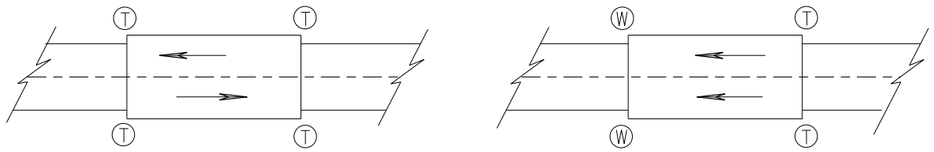
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

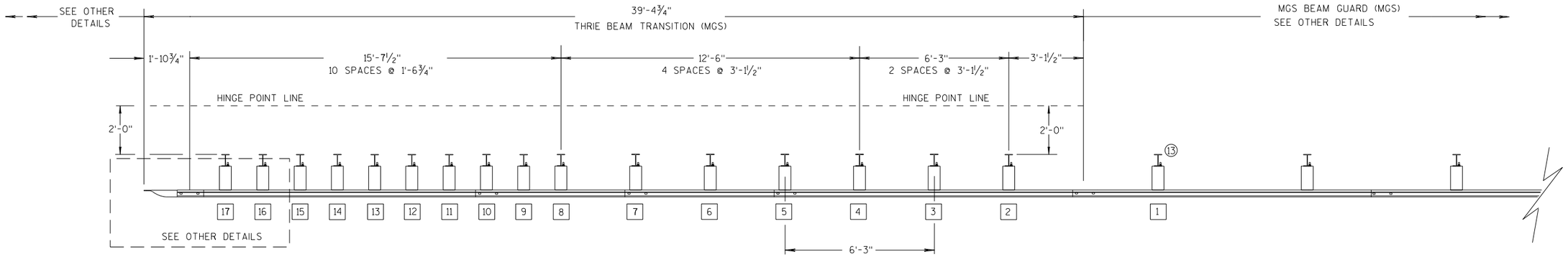
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

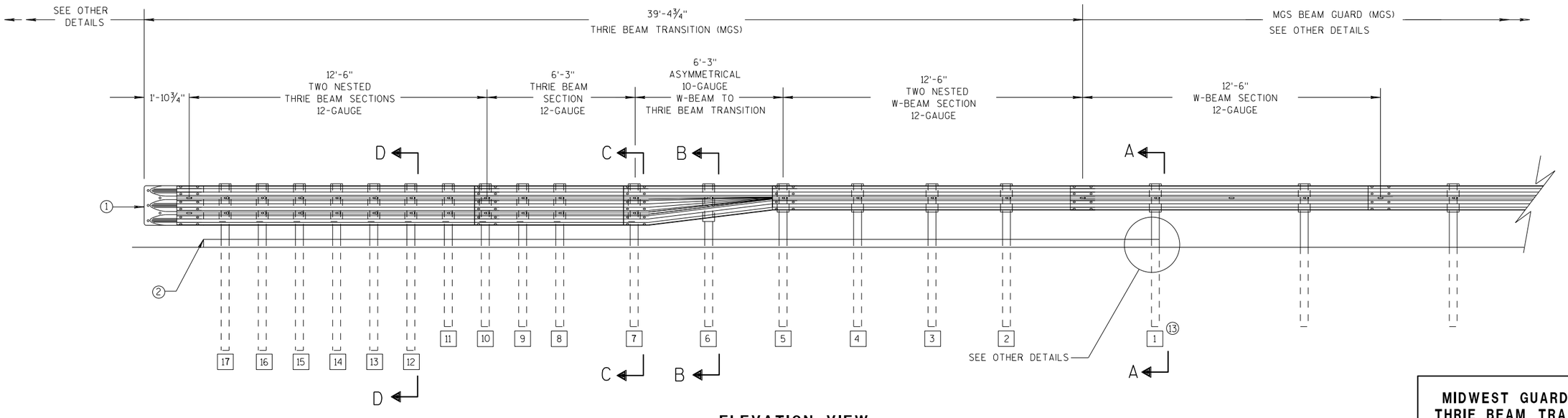
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

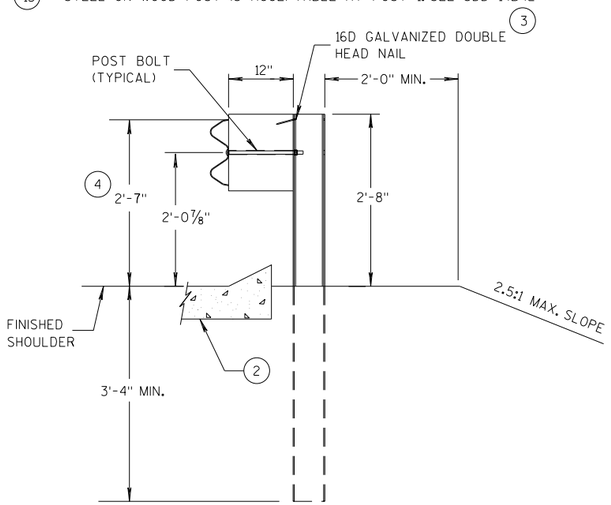
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

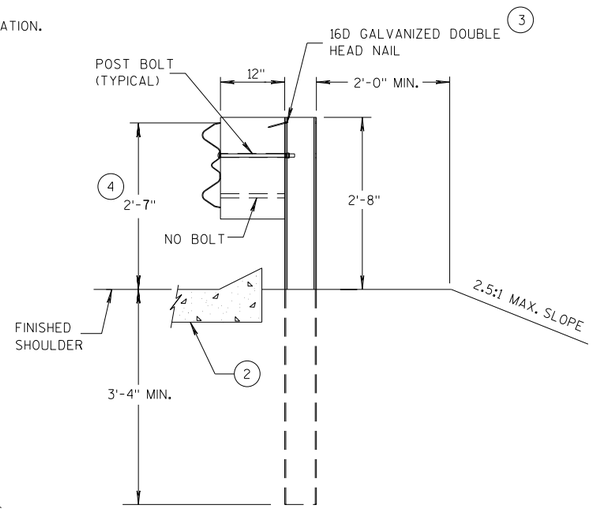
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



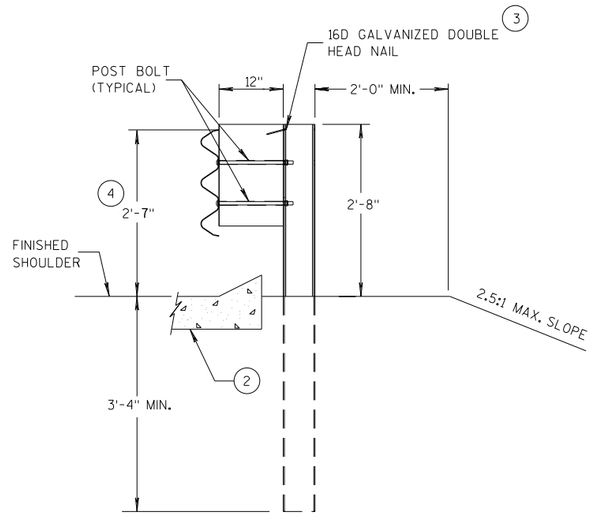
SECTION A-A (13)

POSTS 1-5



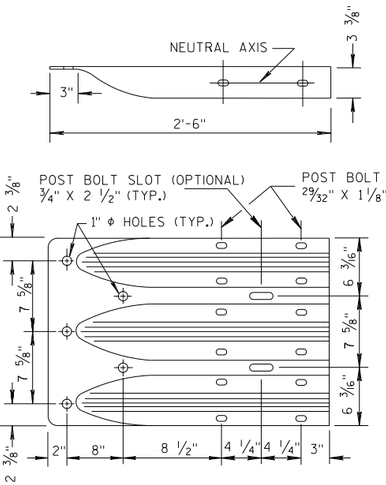
SECTION B-B

POST 6

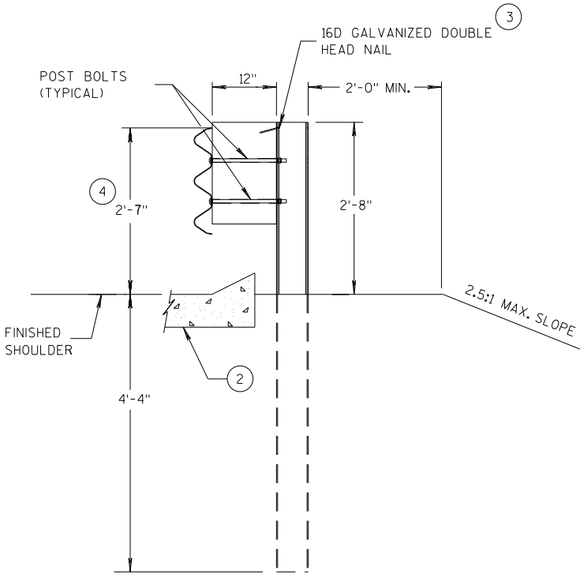


SECTION C-C

POSTS 7-11

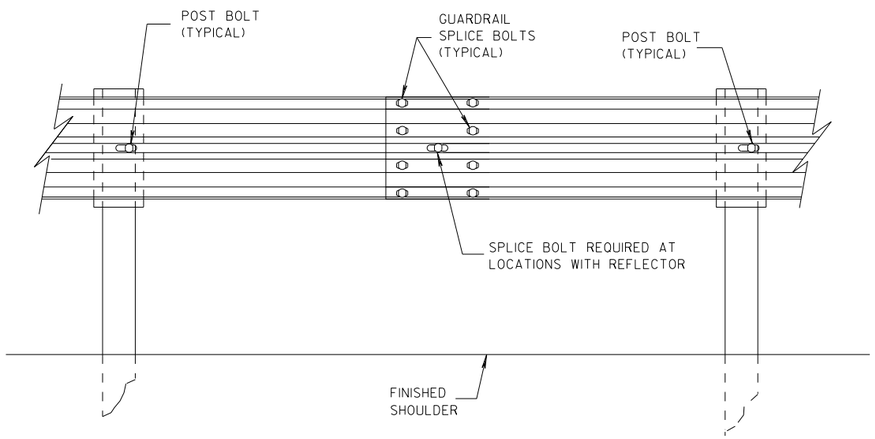


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

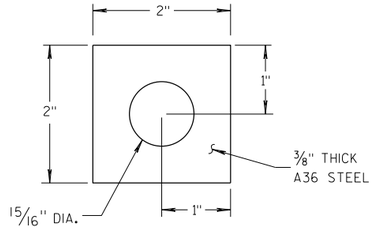
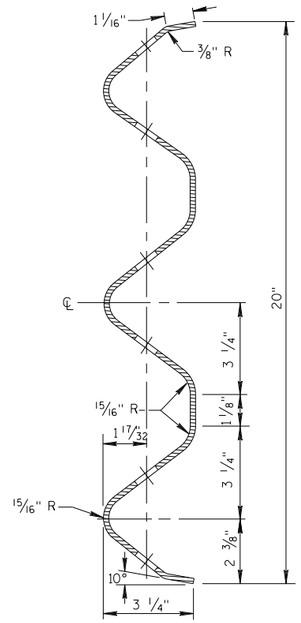


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

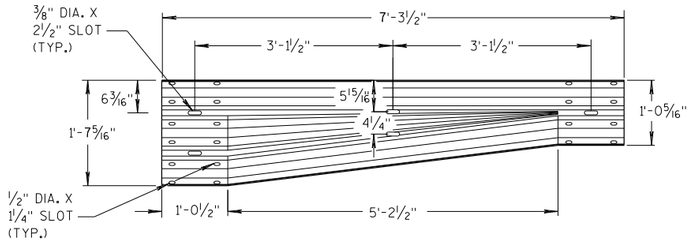
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 295

6

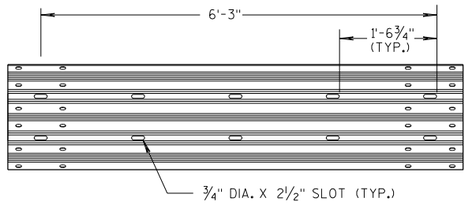
S.D.D. 14 B 45-5b

6

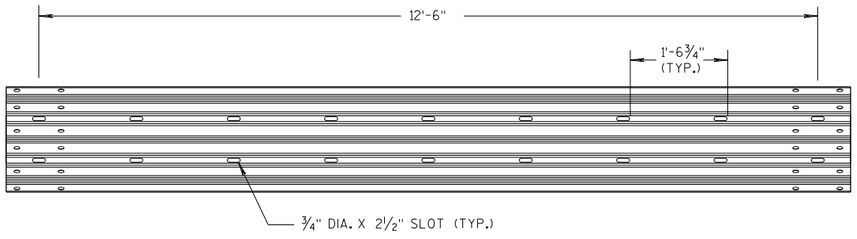
S.D.D. 14 B 45-5b



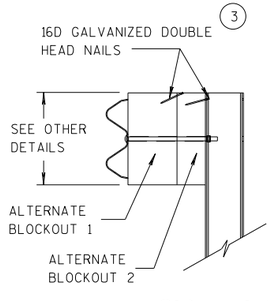
W-BEAM TO THRIE BEAM TRANSITION SECTION



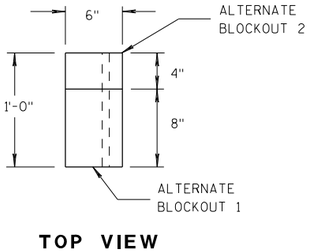
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

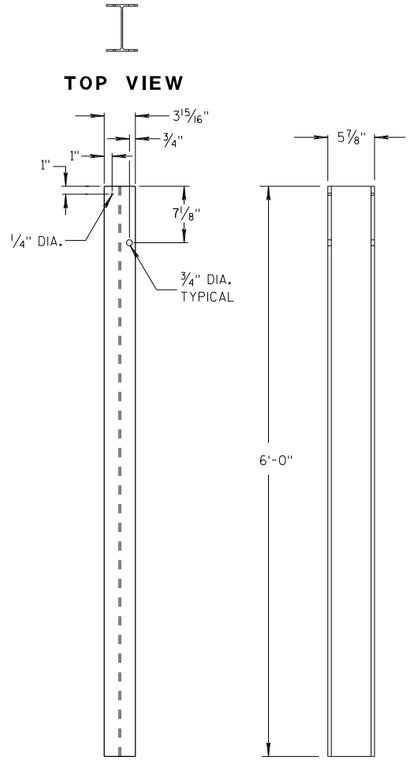


SIDE VIEW



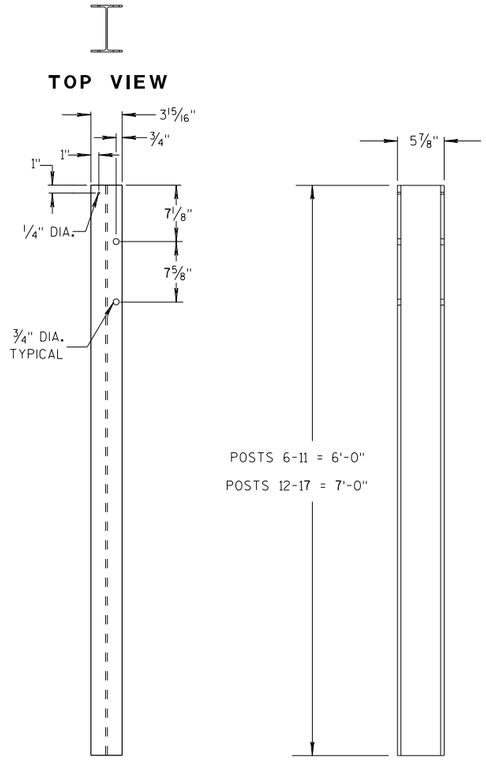
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



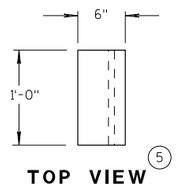
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

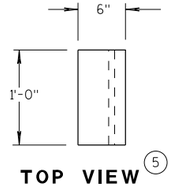


FRONT VIEW SIDE VIEW

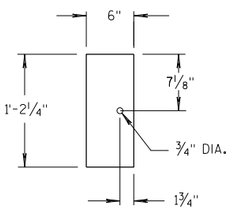
STEEL POSTS 6-17



TOP VIEW (5)

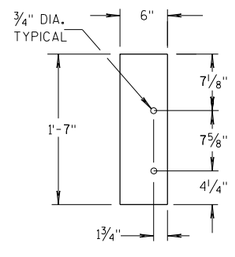


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

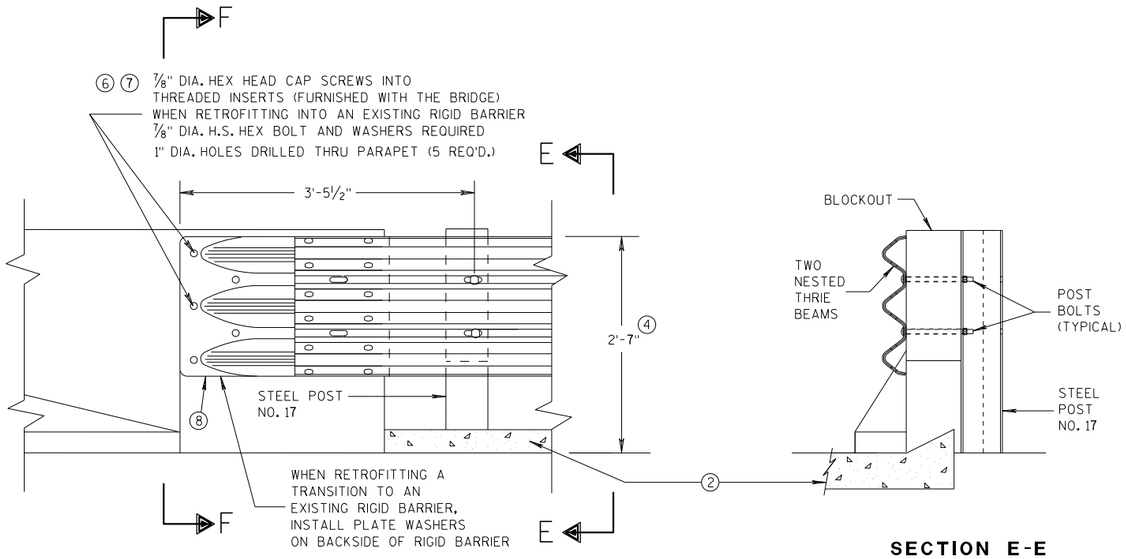
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

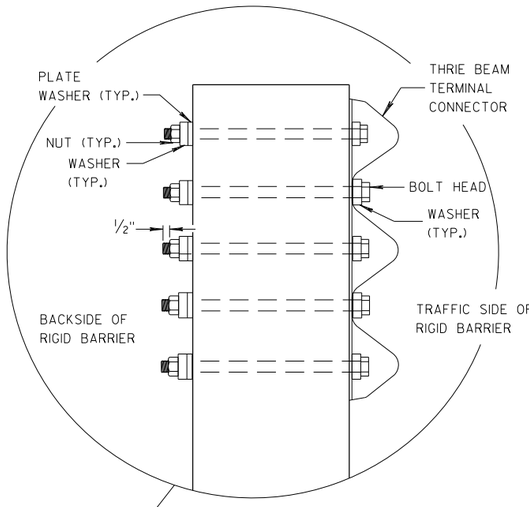
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

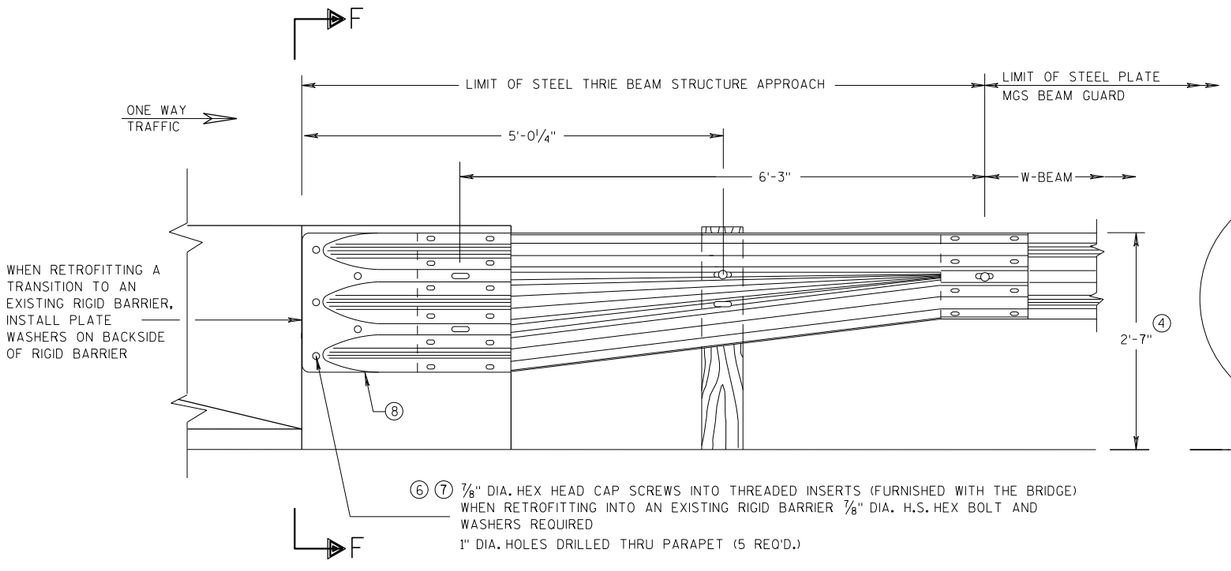
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

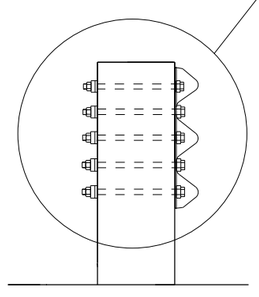
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

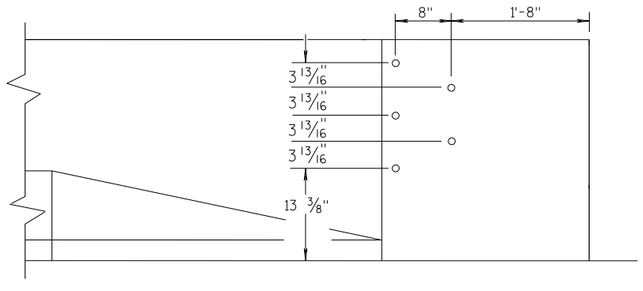




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[UNIT SUPERVIS
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FHWA

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S.D.D. 14 B 45-5d

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GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

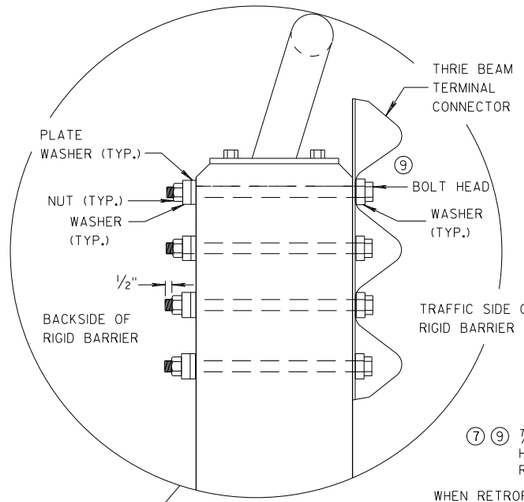
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

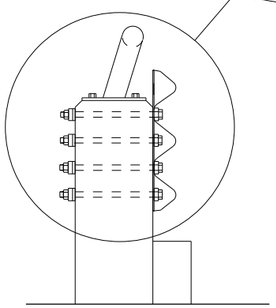
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

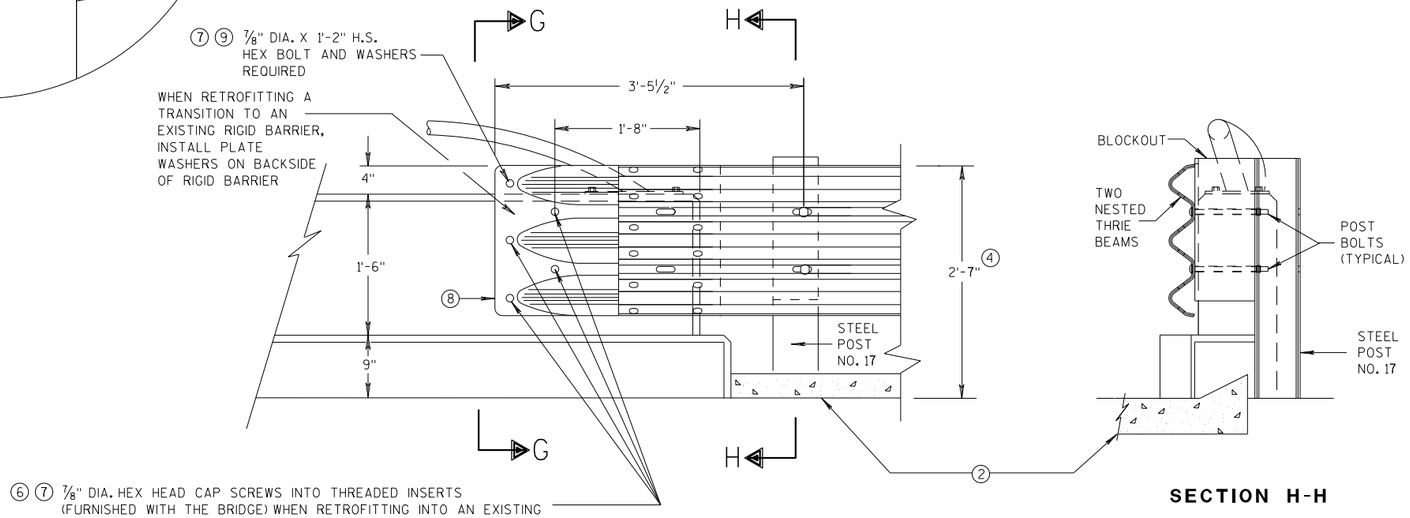
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





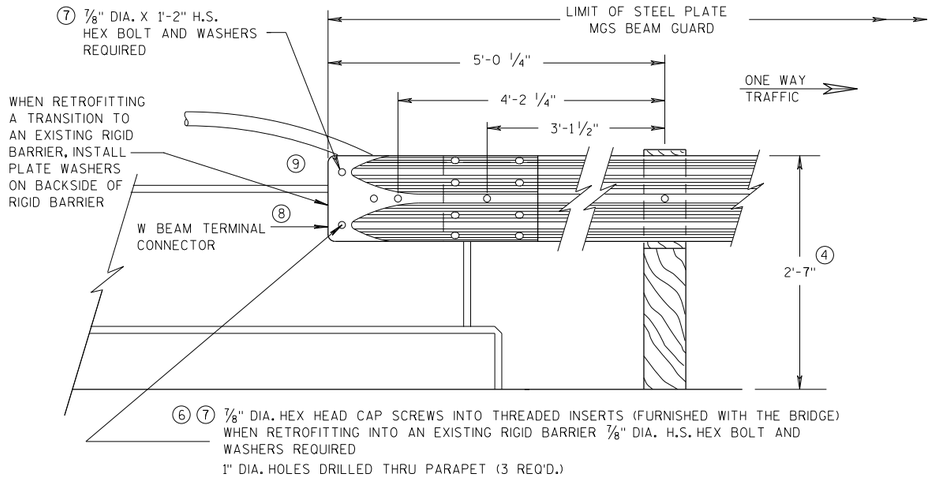
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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07/2018 — DATE
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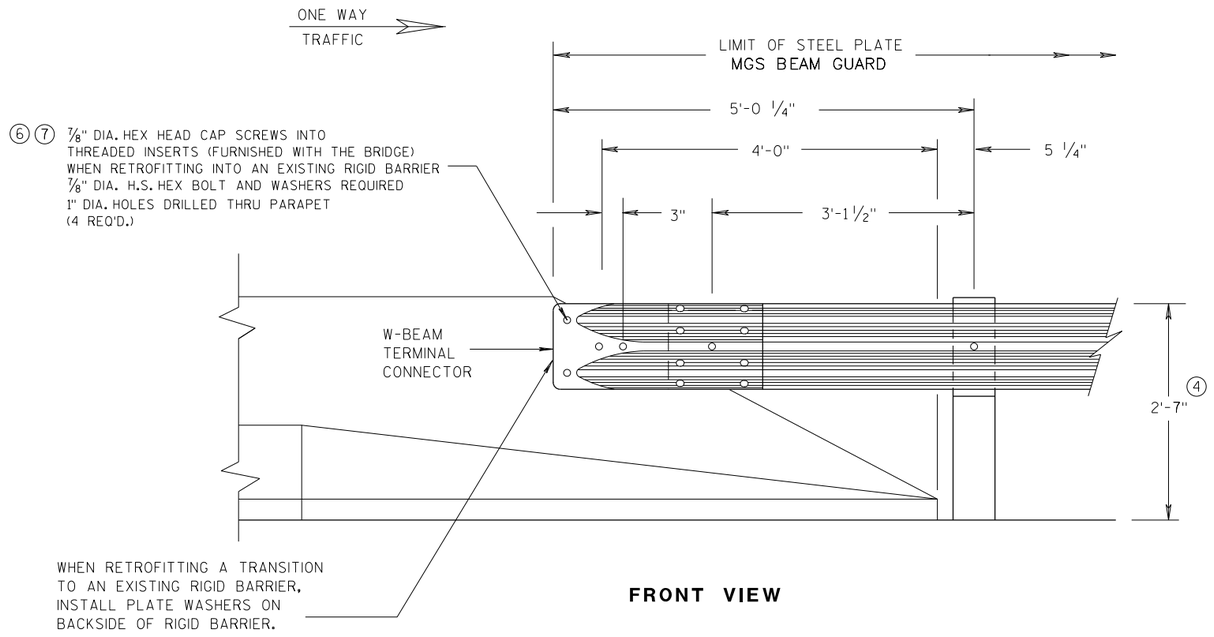


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

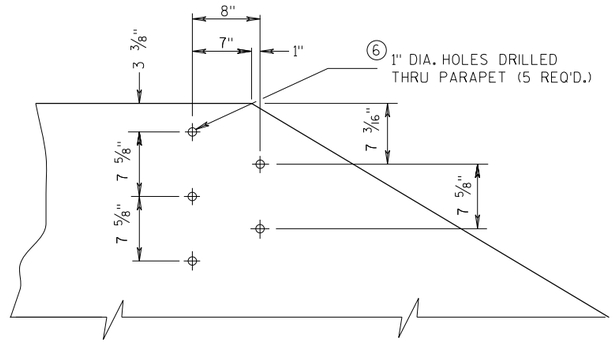
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

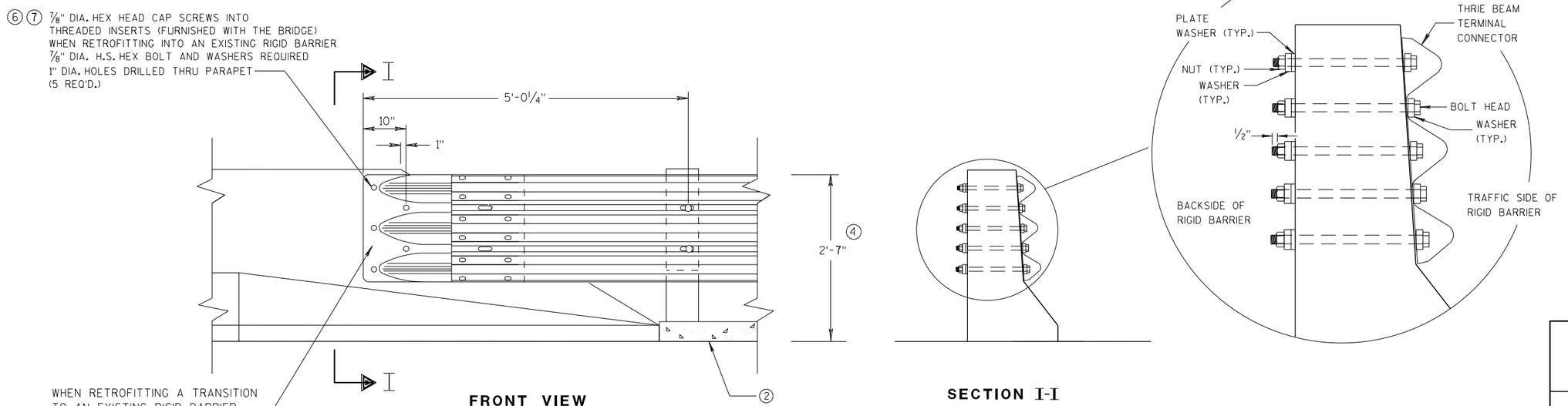
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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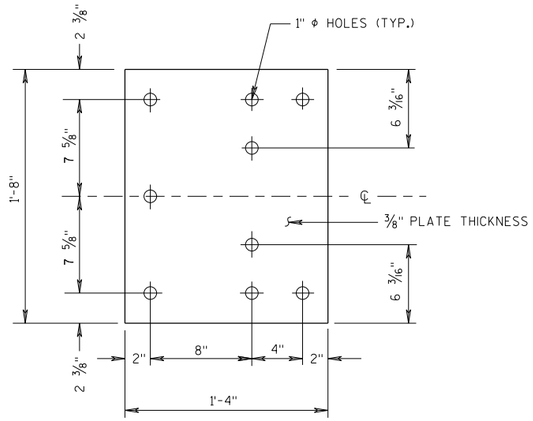
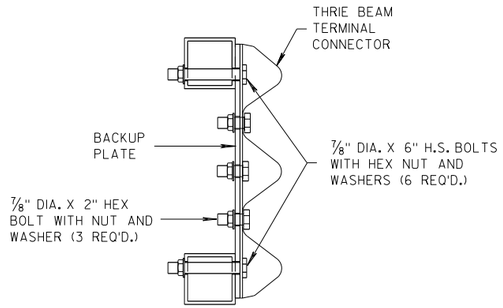
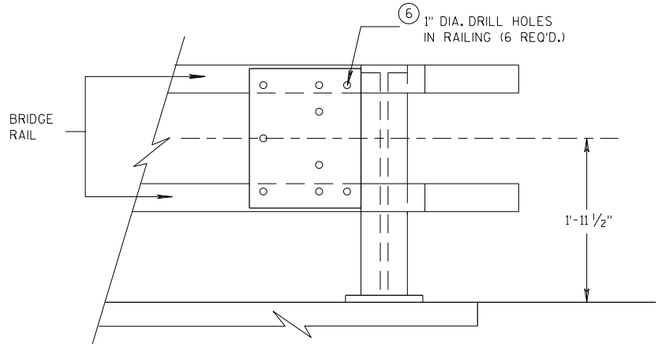


BACK-UP PLATE DETAIL



SECTION J-J

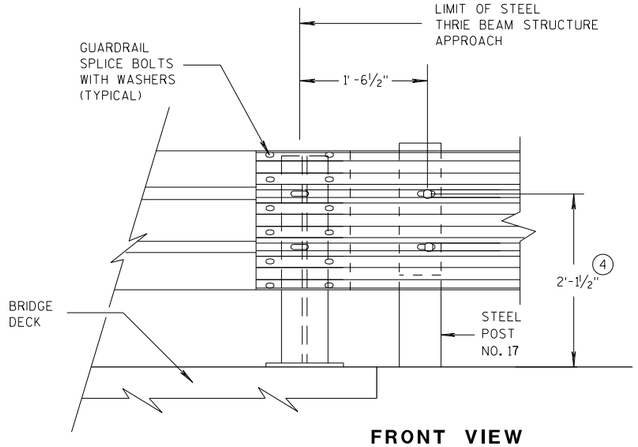


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

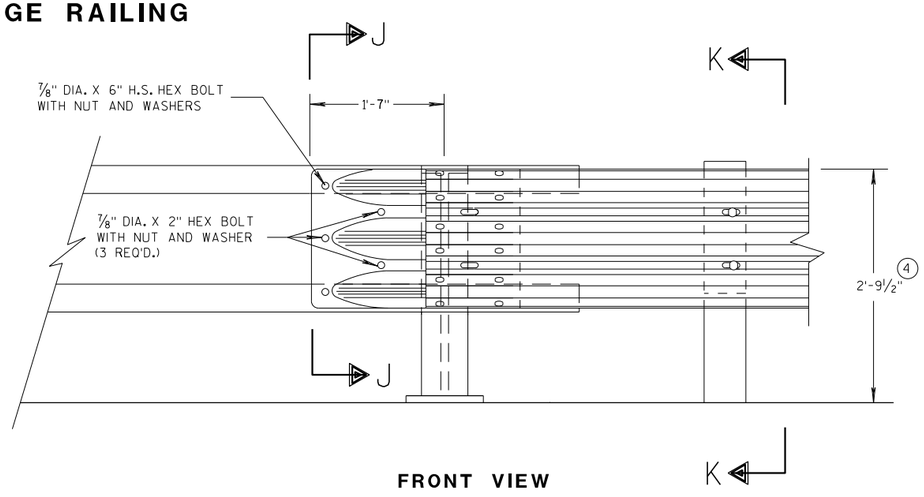
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

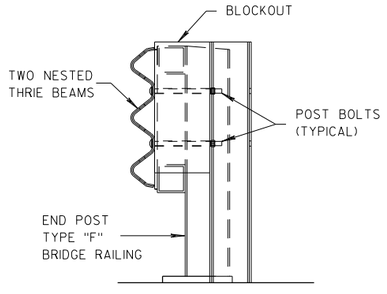


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
/S/ Rodney Taylor 300 — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
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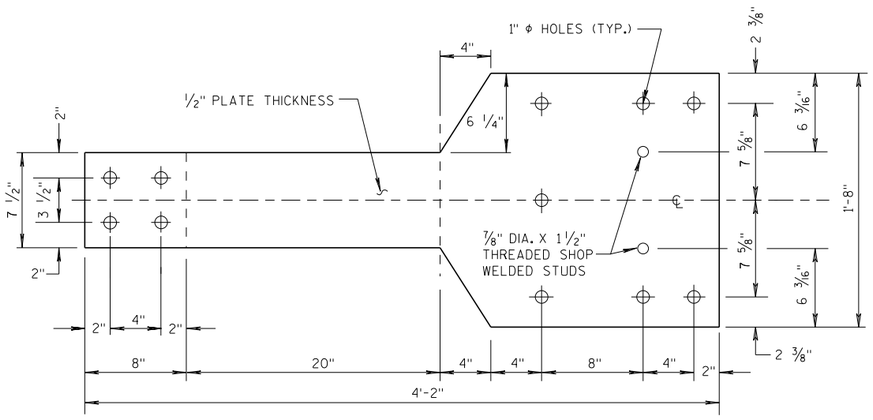
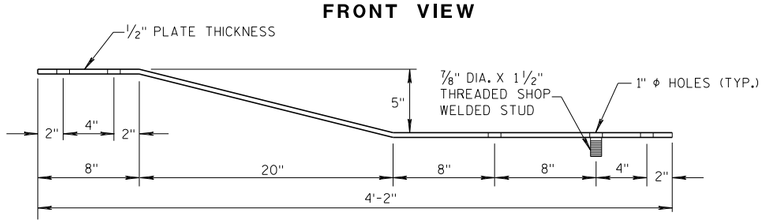
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

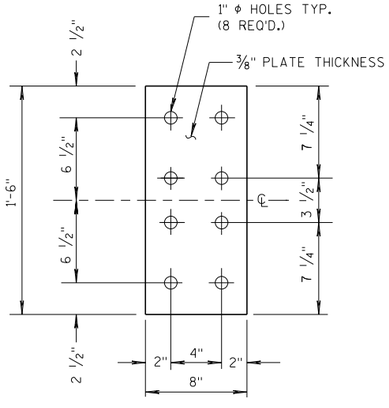


FRONT VIEW



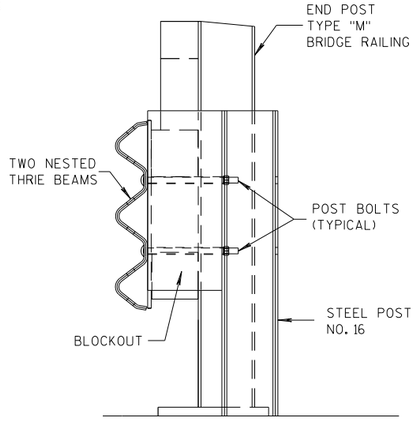
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

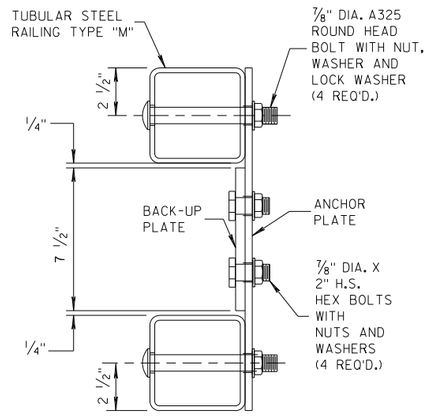


FRONT VIEW

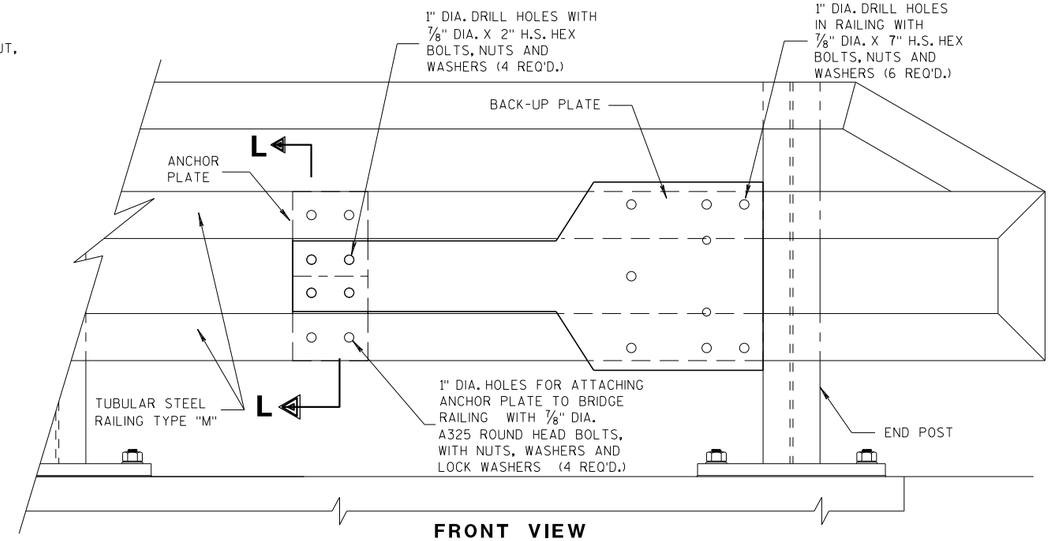
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

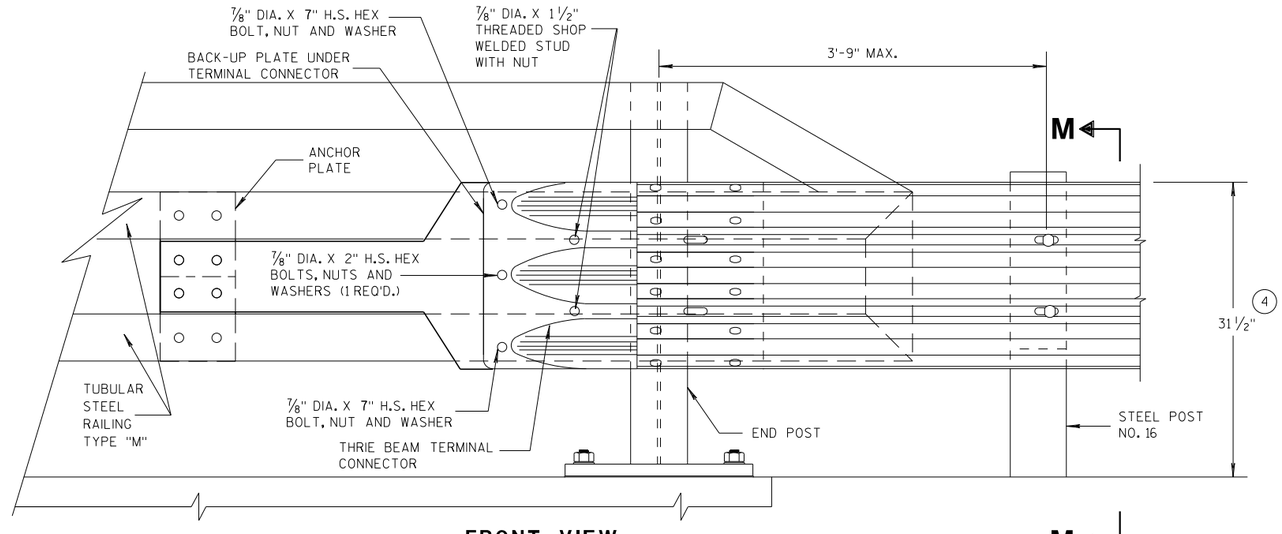


SECTION L-L

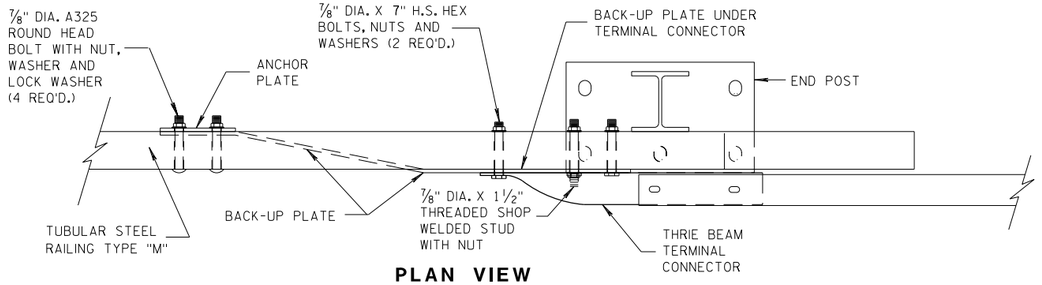


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
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GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

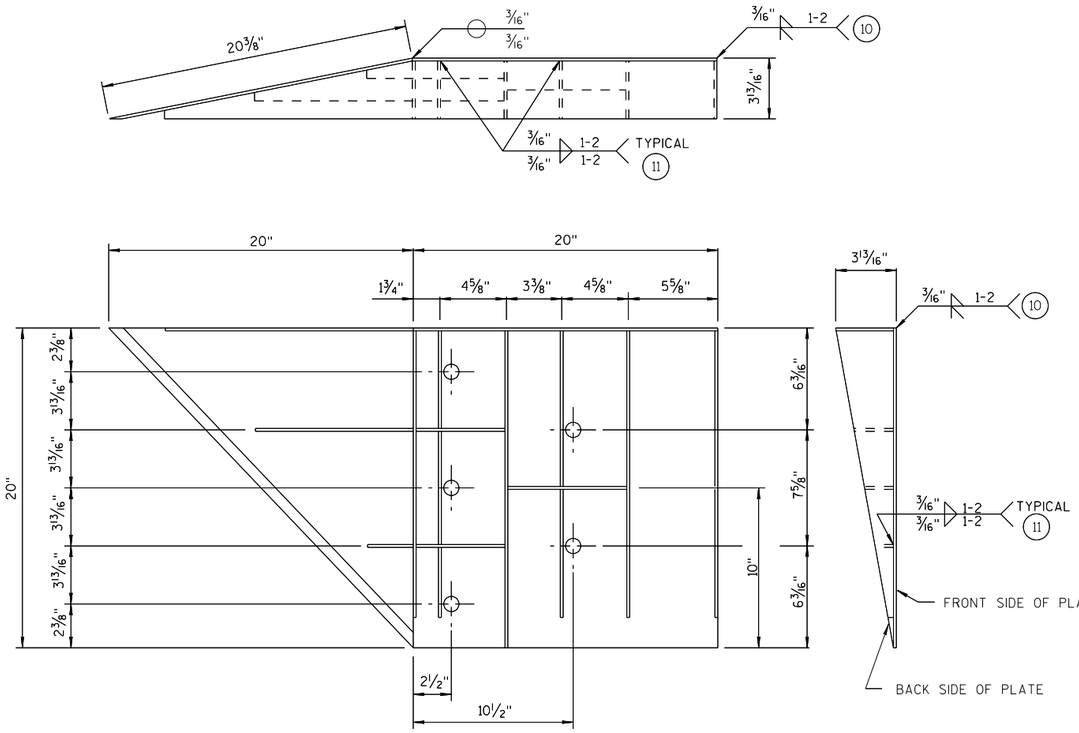
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

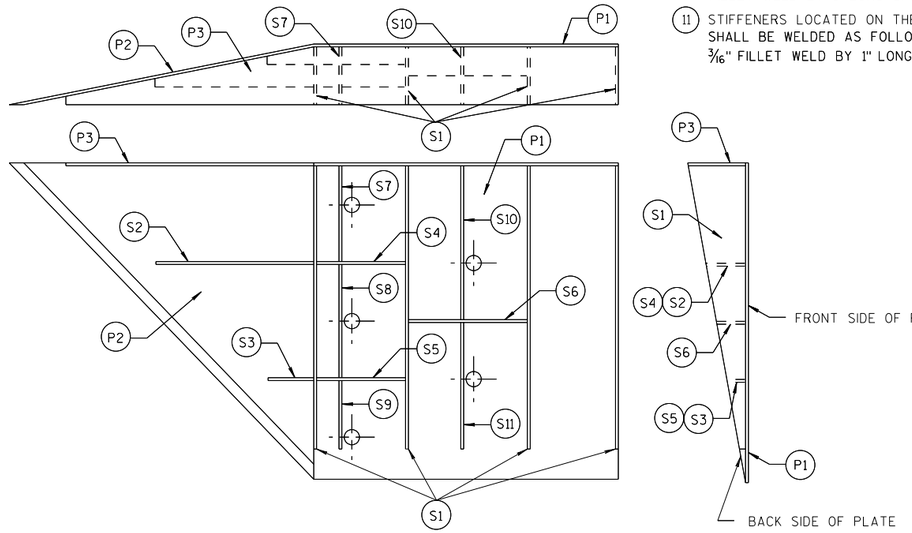


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

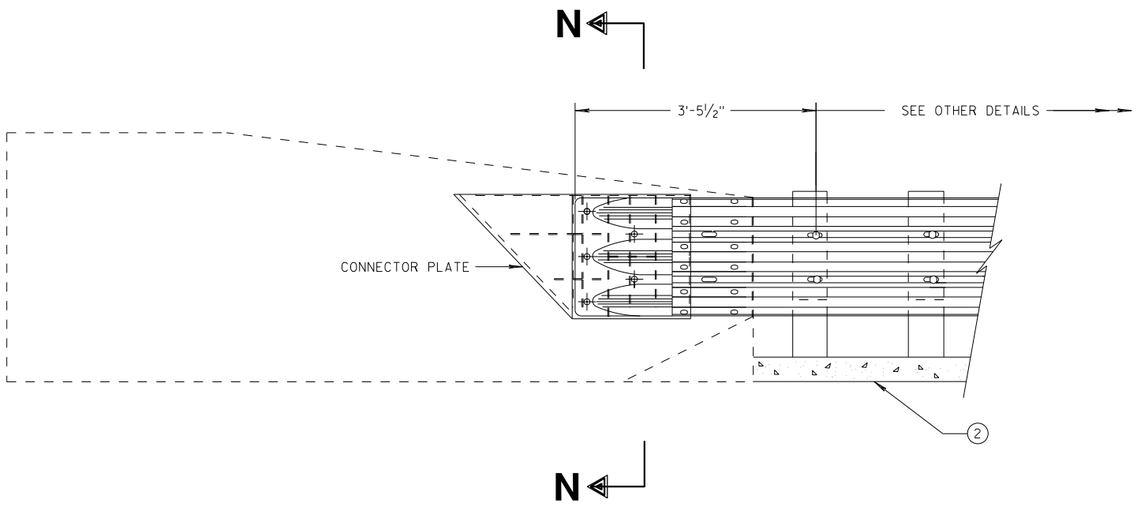
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

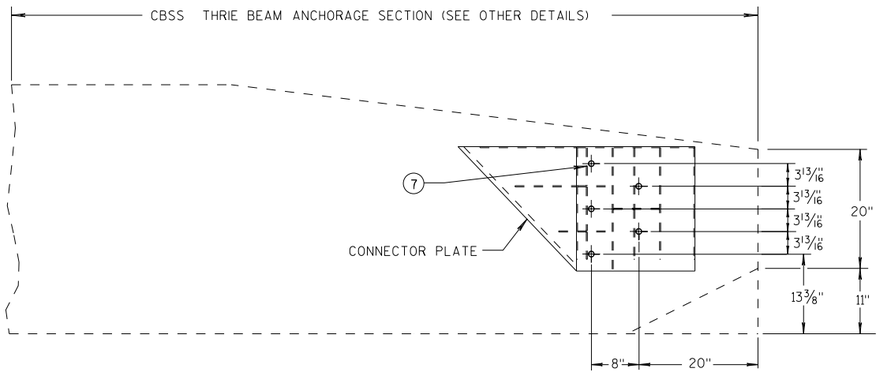
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6

S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



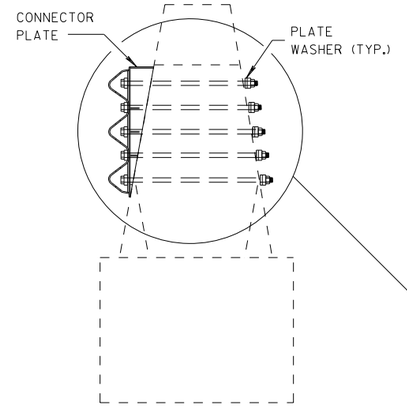
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

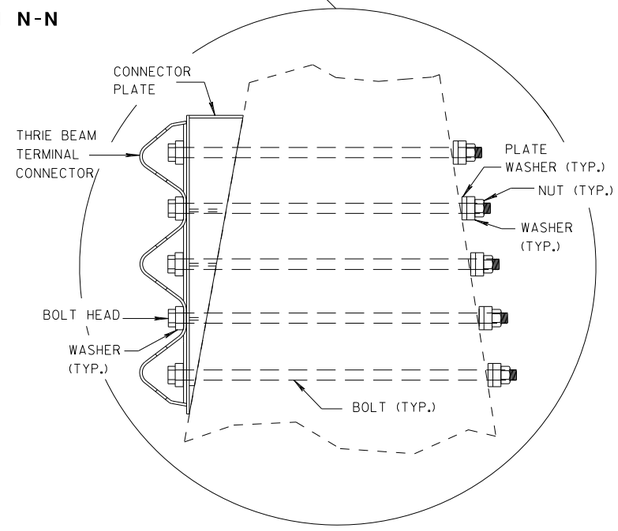
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
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FHWA

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S.D.D. 14 B 45-5j

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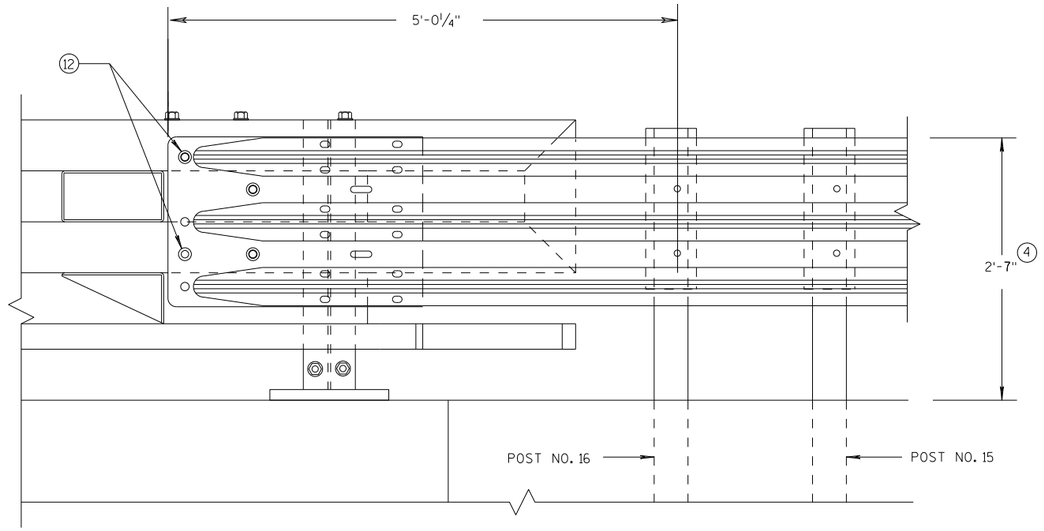
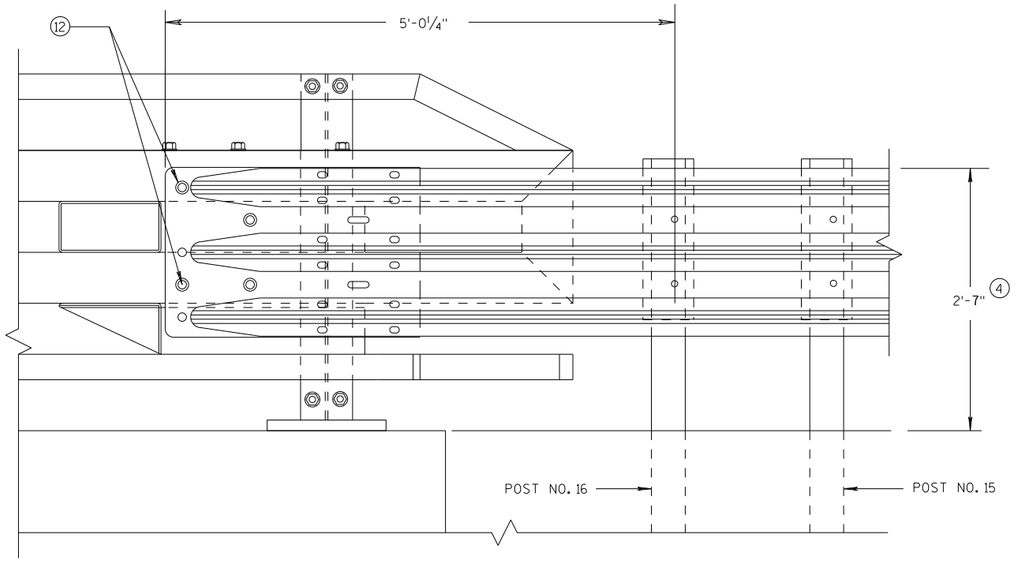
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
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UNIT SUPERVIS
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FHWA

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S.D.D. 14 B 45-5k

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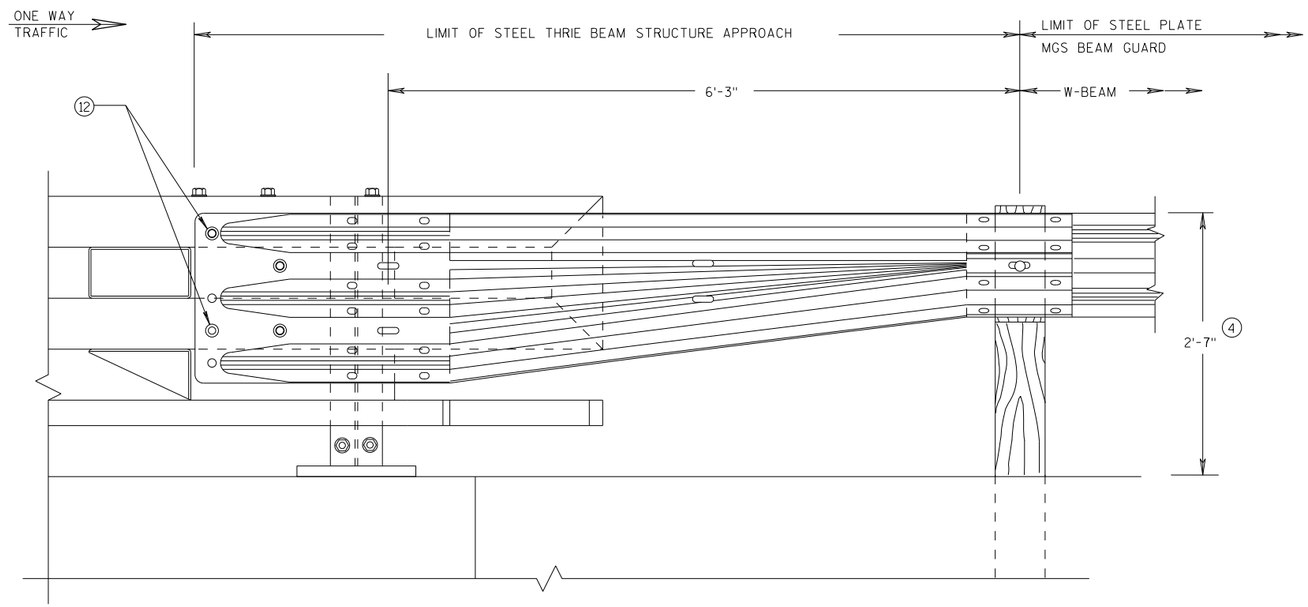
S.D.D. 14 B 45-5k



FRONT VIEW

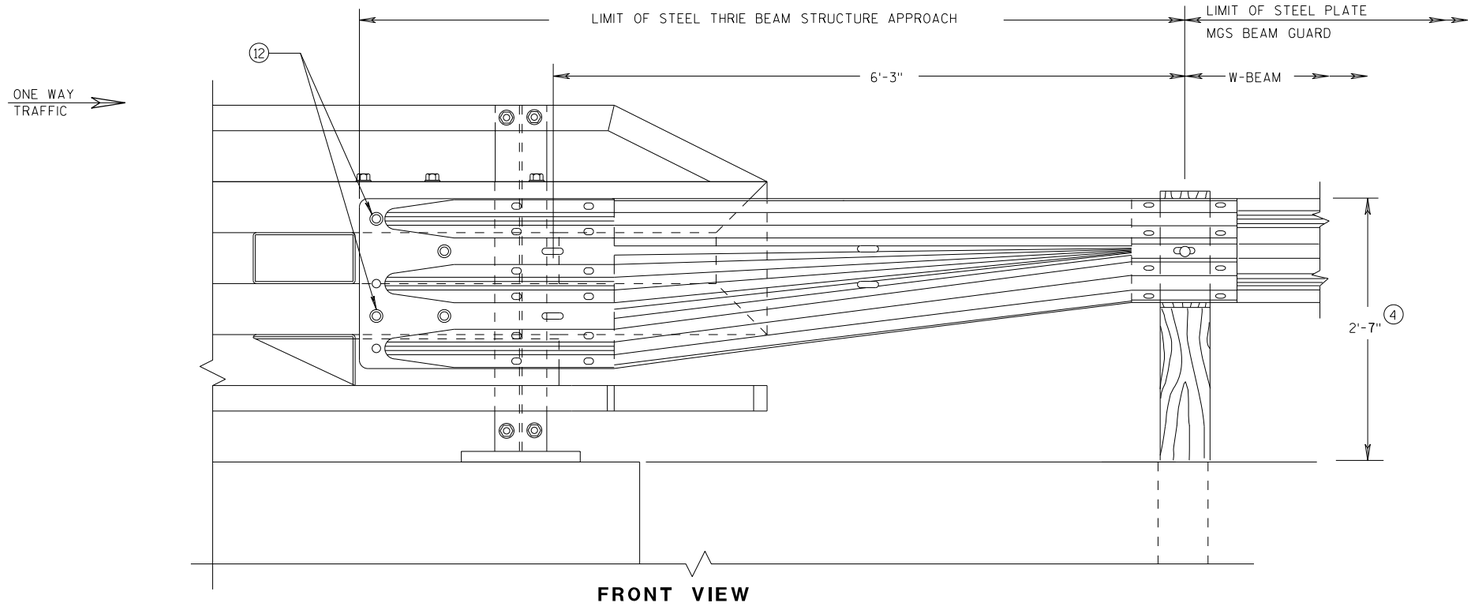
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS
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S.D.D. 14 B 45-5L

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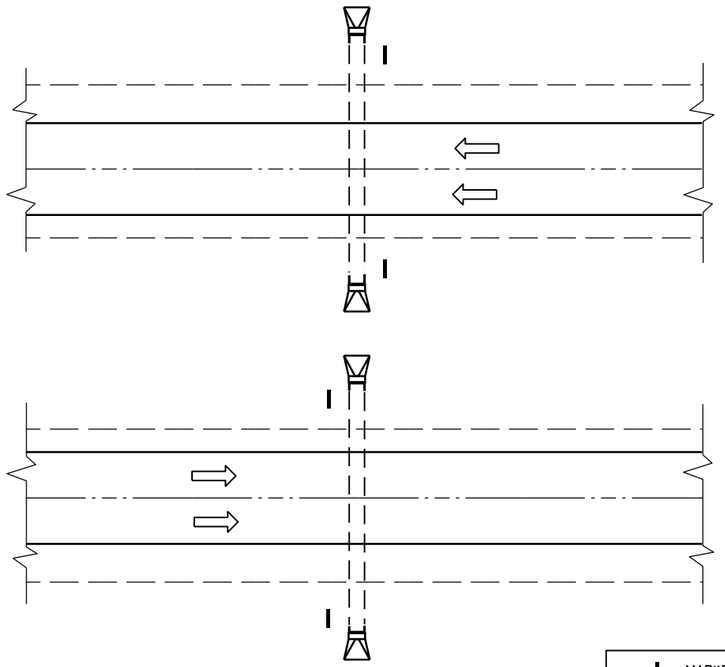
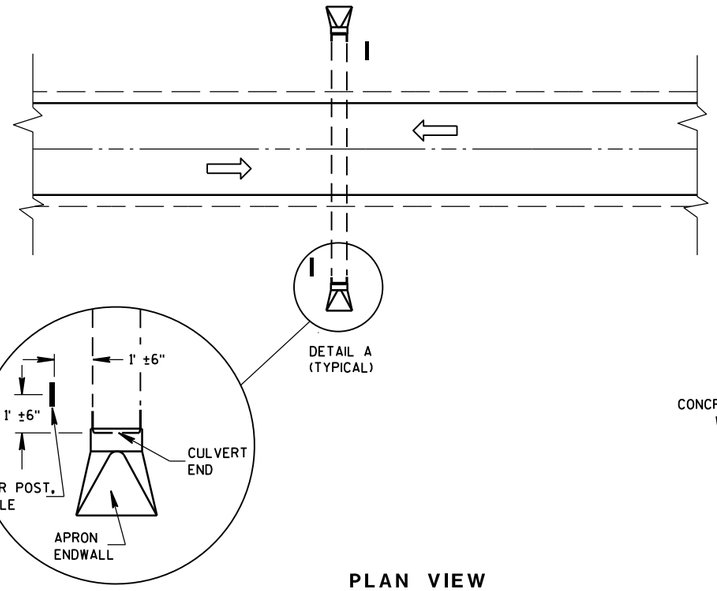
S.D.D. 14 B 45-5L



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

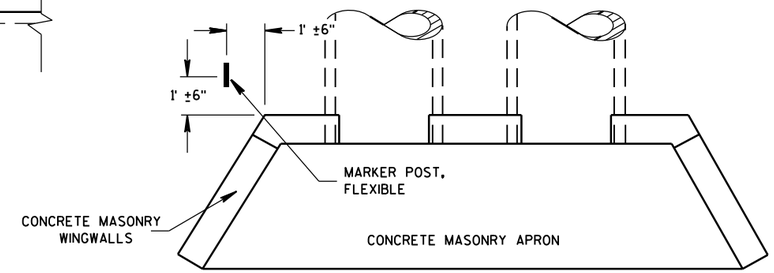
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

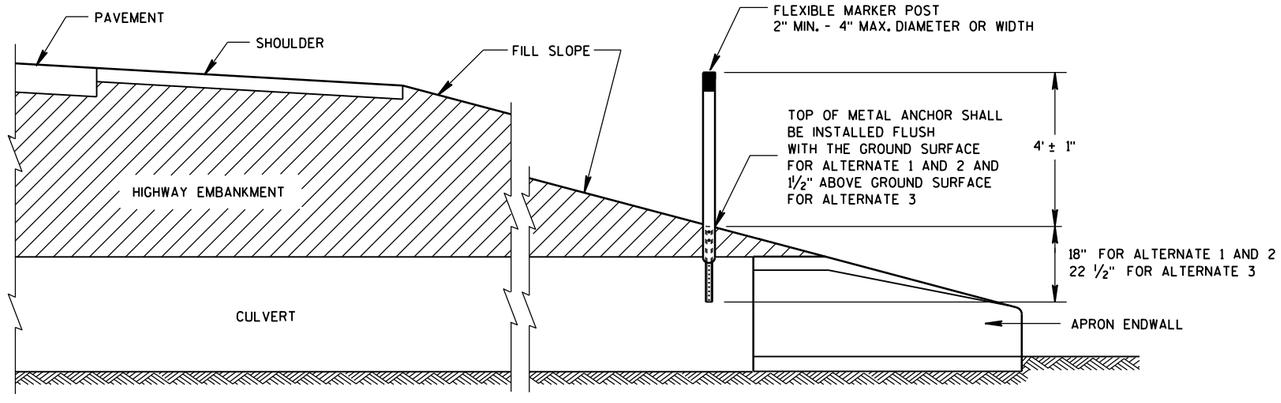
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

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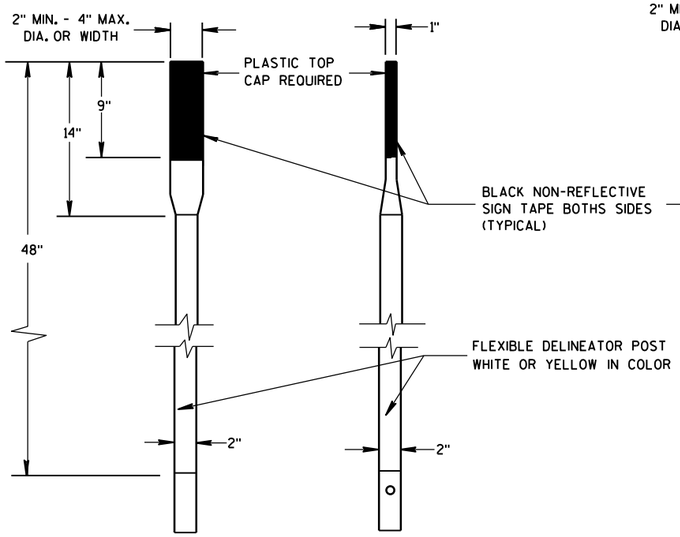
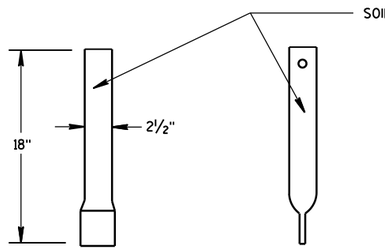
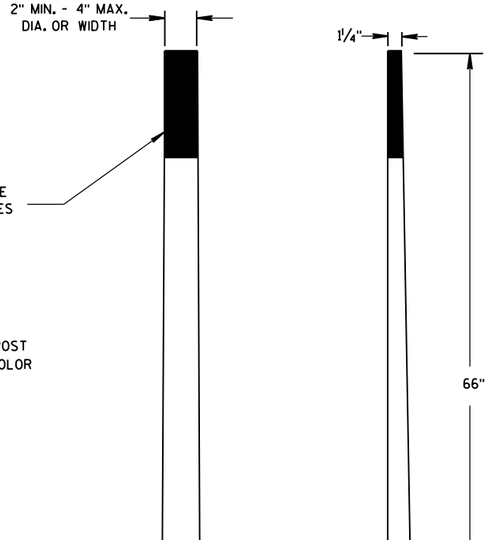
S.D.D. 15 A 3-2a





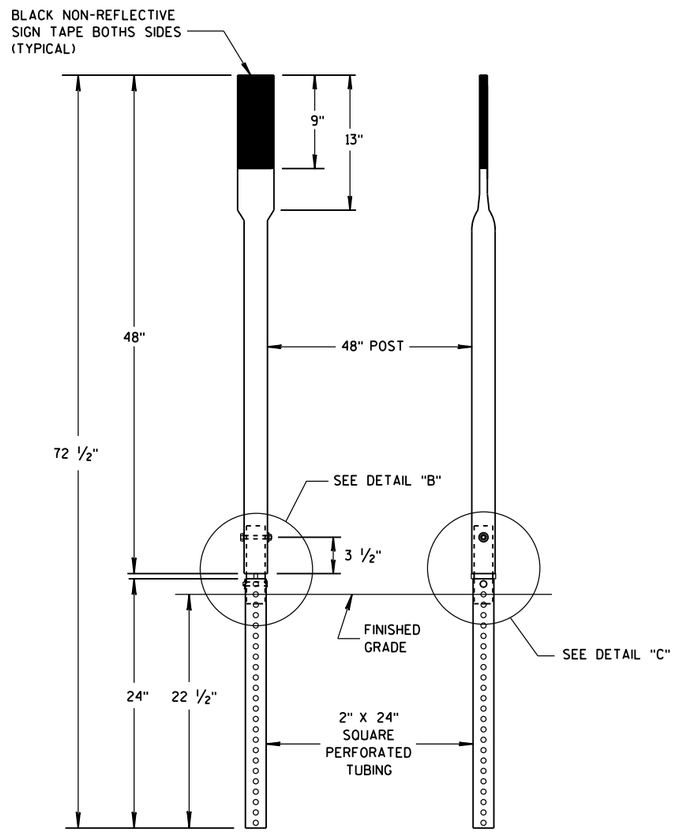
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

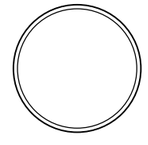
ALTERNATE 2



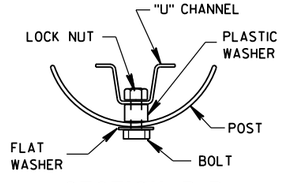
FRONT VIEW SIDE VIEW

ALTERNATE 3

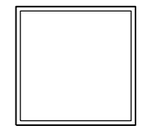
FLEXIBLE MARKER POSTS



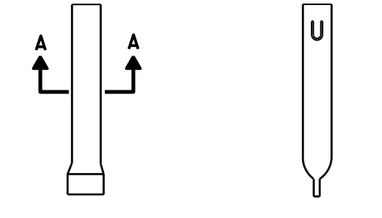
SECTION A-A



SECTION B-B

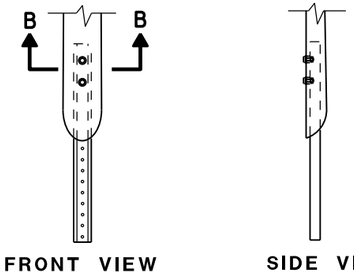


SECTION C-C



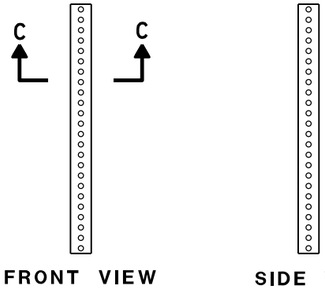
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

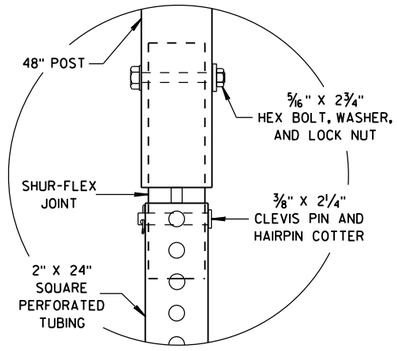
ALTERNATE 2



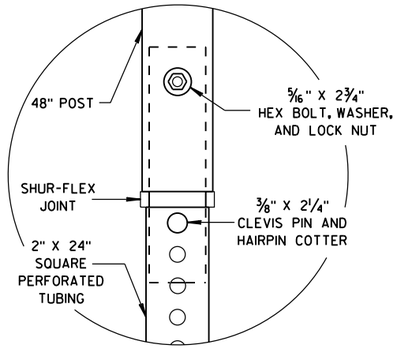
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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

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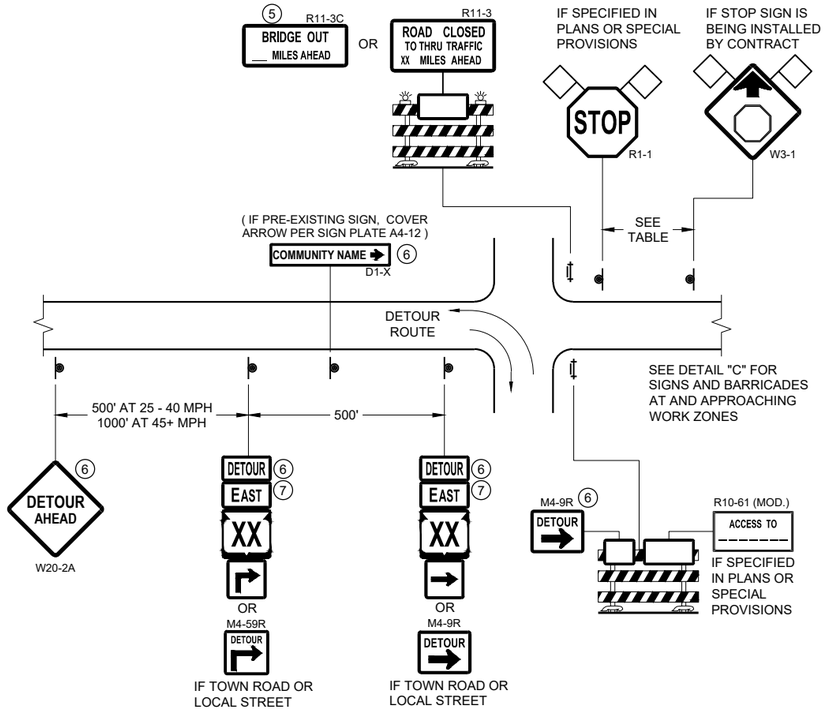
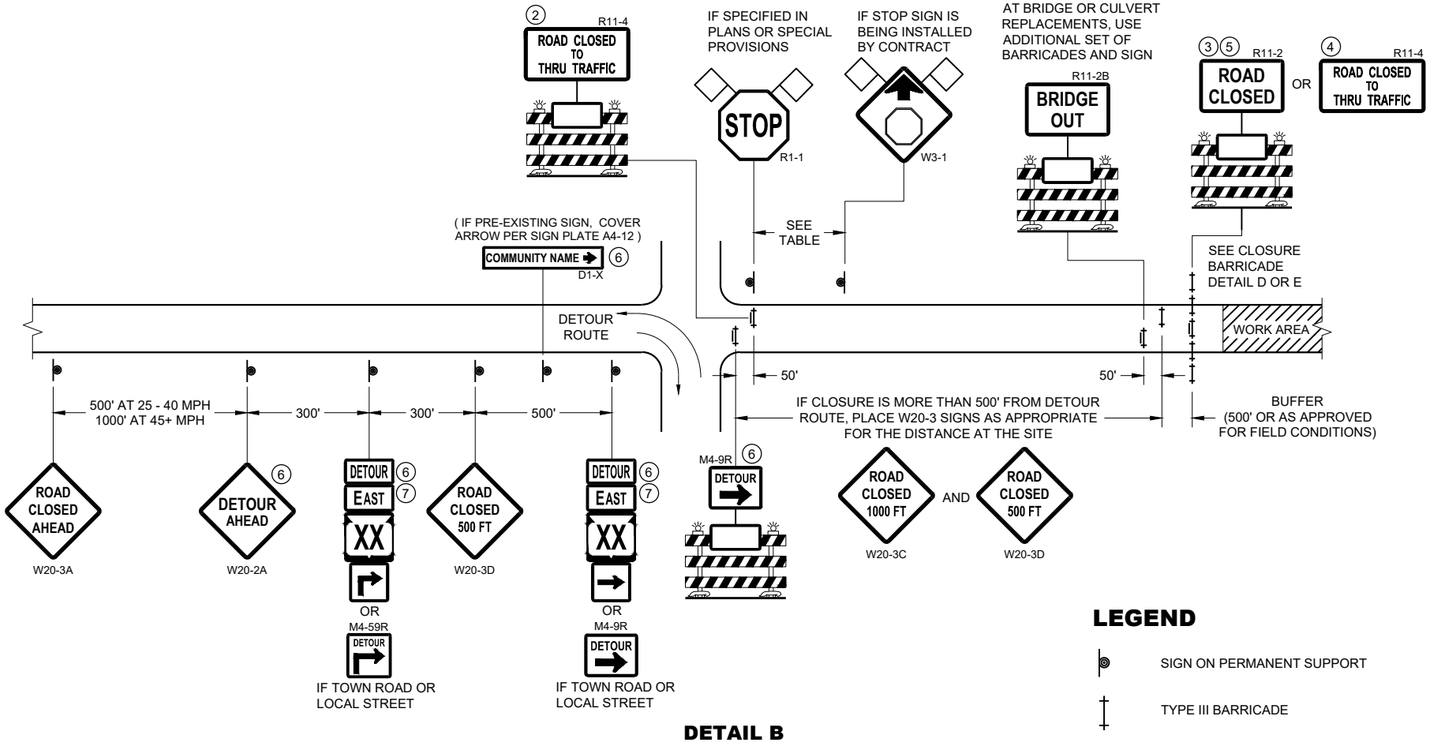
S.D.D. 15 A 3-2b



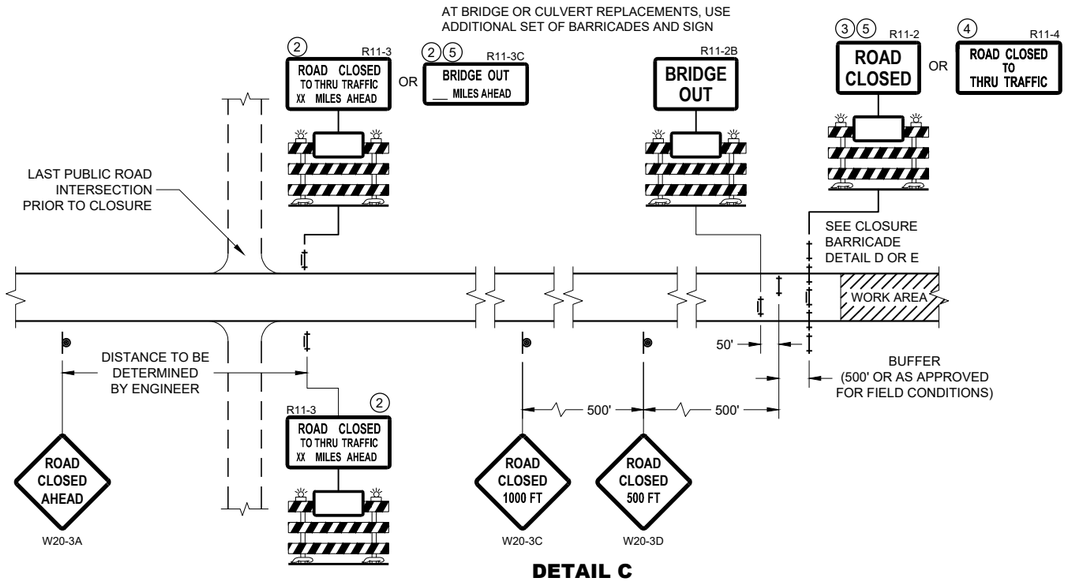
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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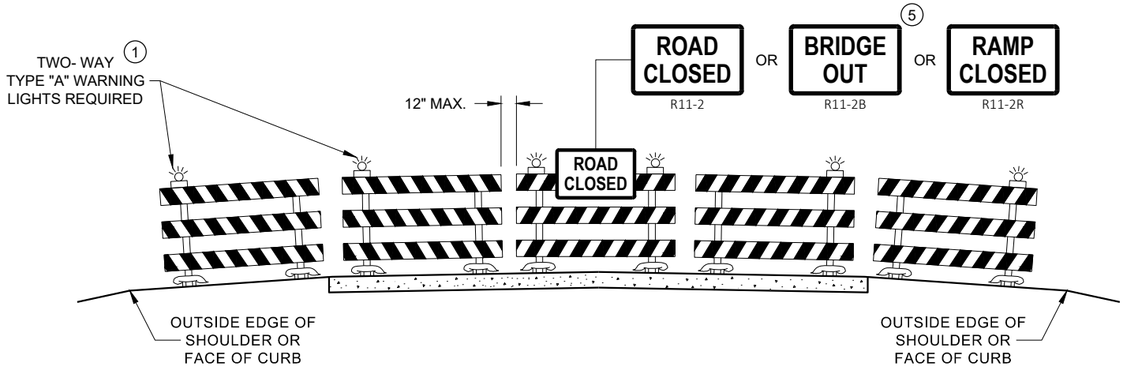
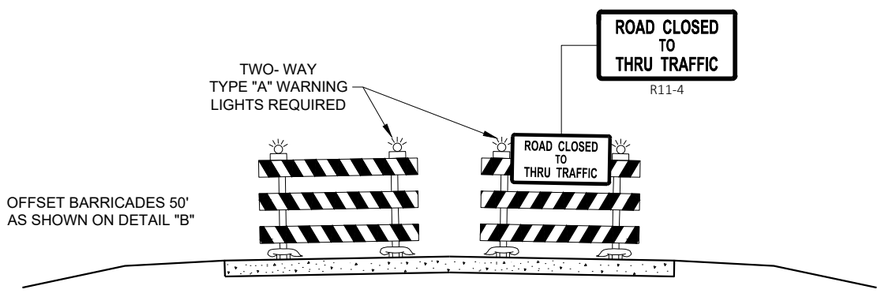
SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- 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 EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

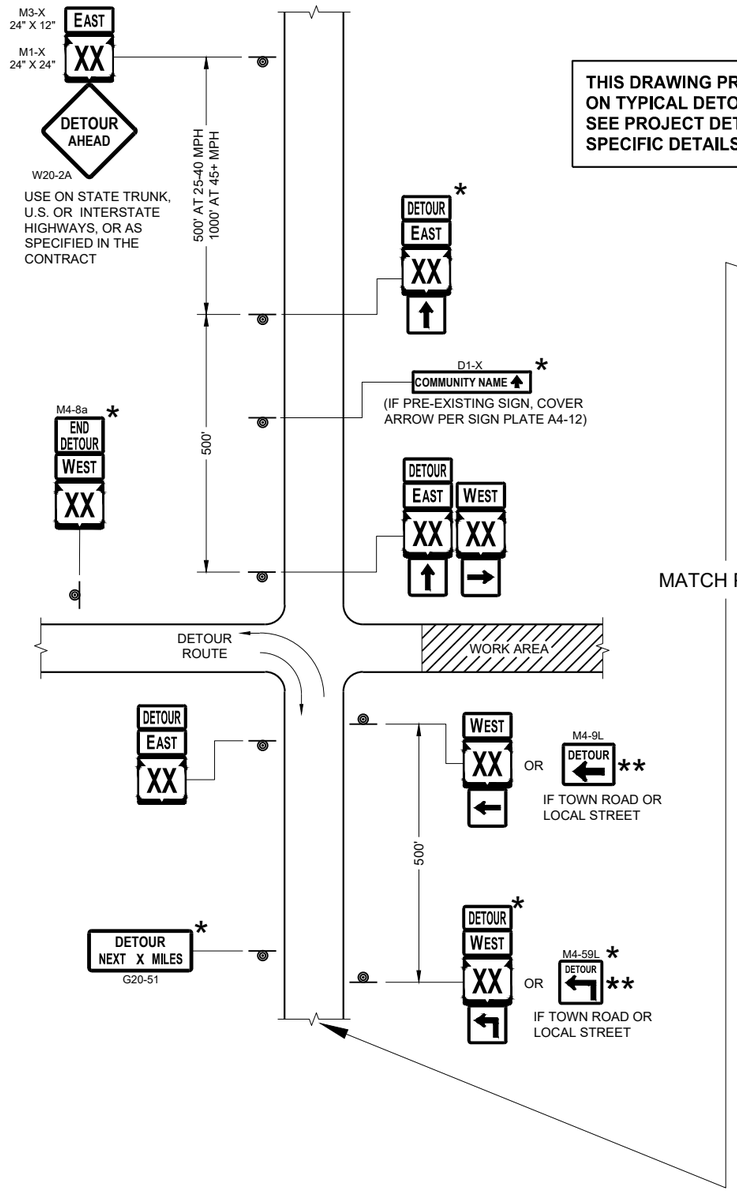
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

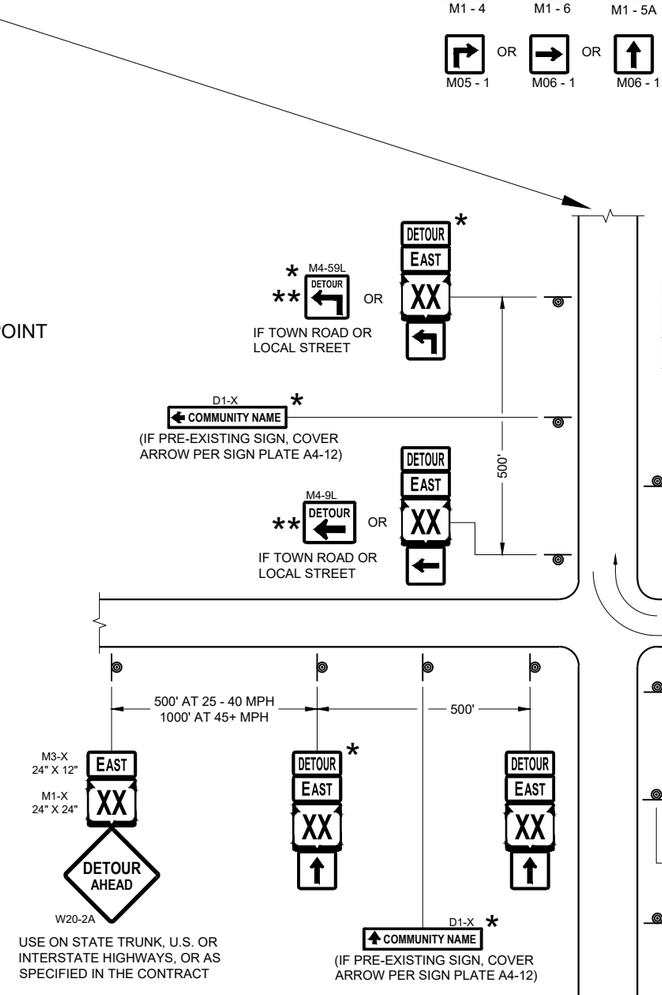
SIGN SIZES SHALL BE AS FOLLOWS:

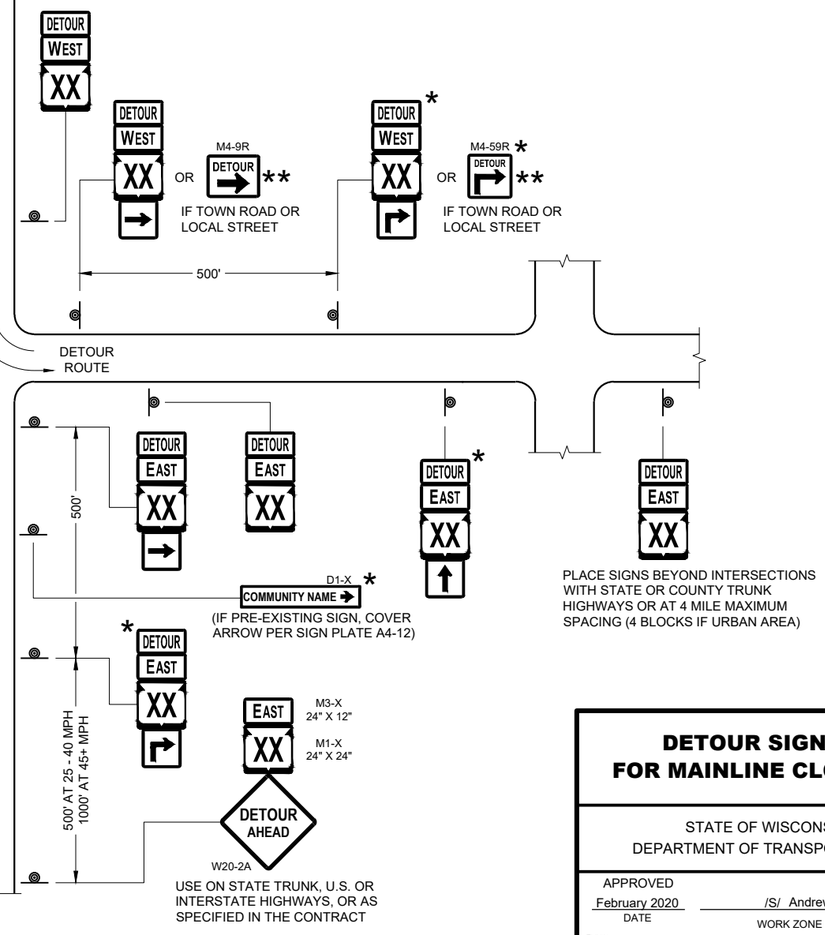
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.







SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

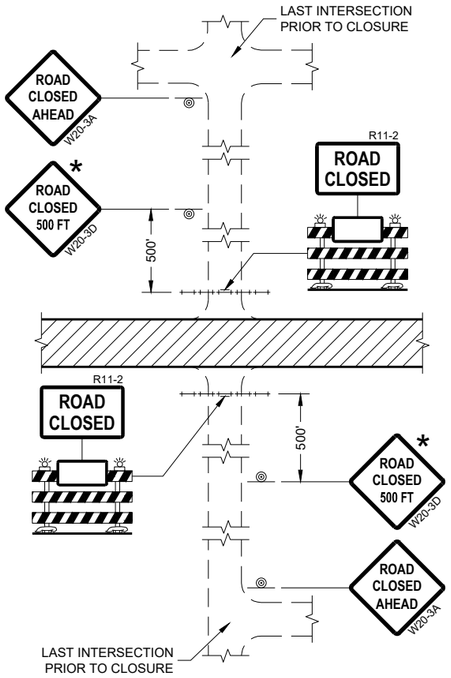
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

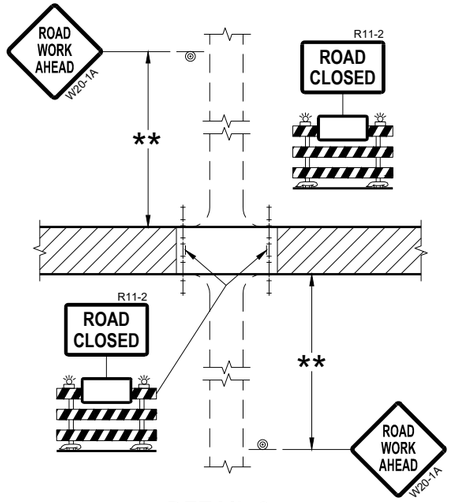
FHWA

6

SDD 15C02 - 08c



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.

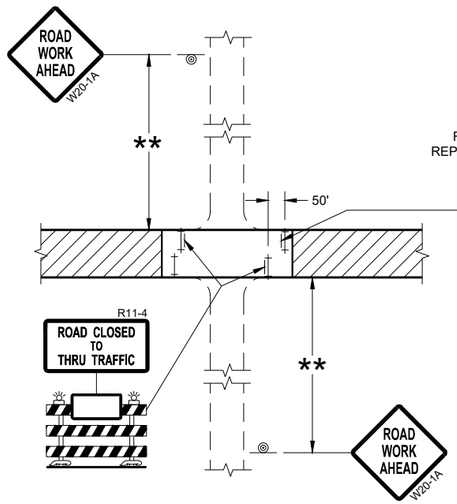
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

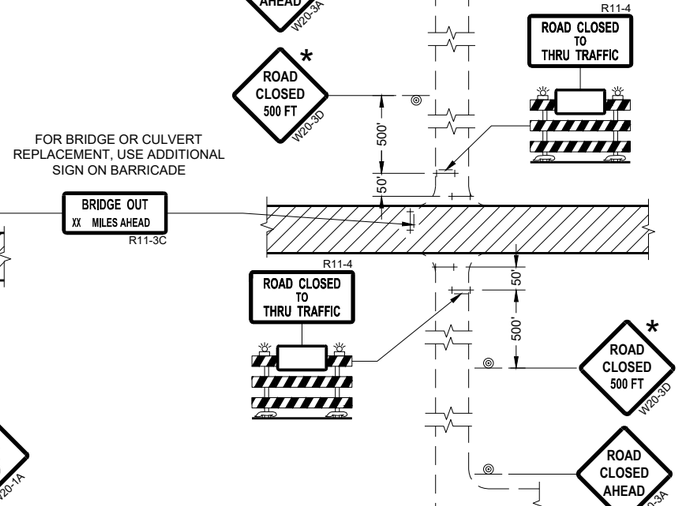
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

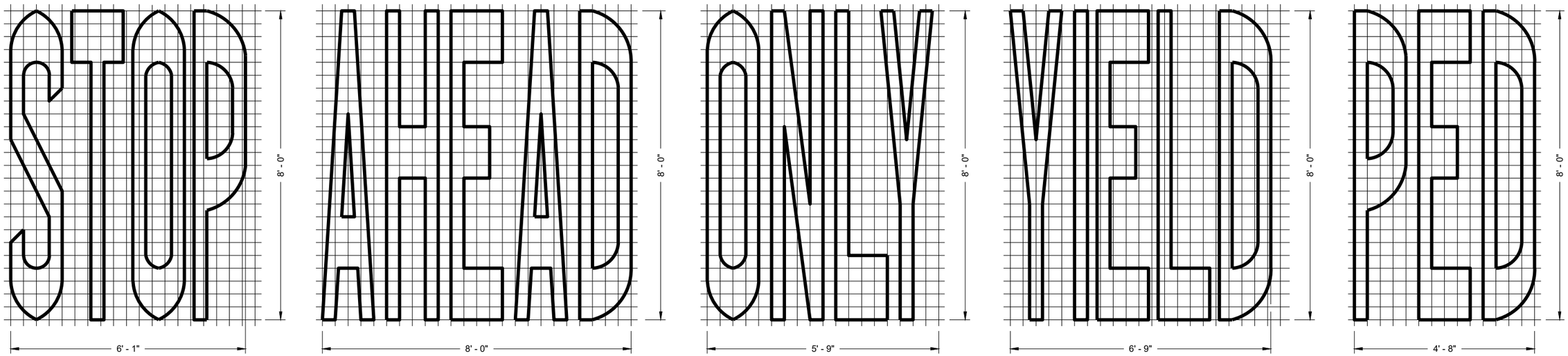
APPROVED
July 2018
DATE

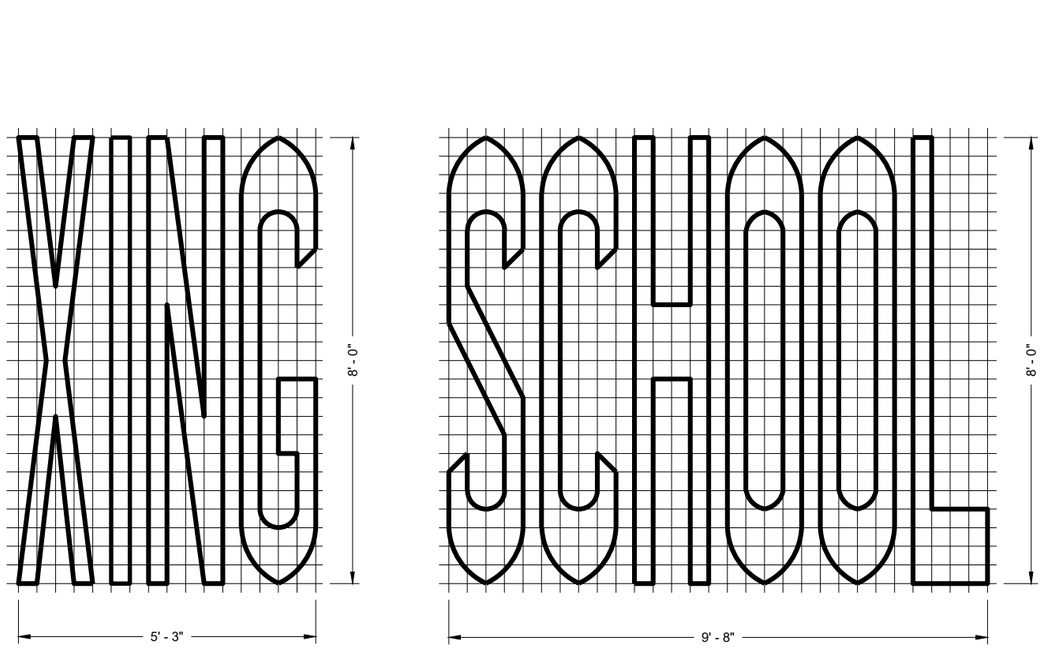
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

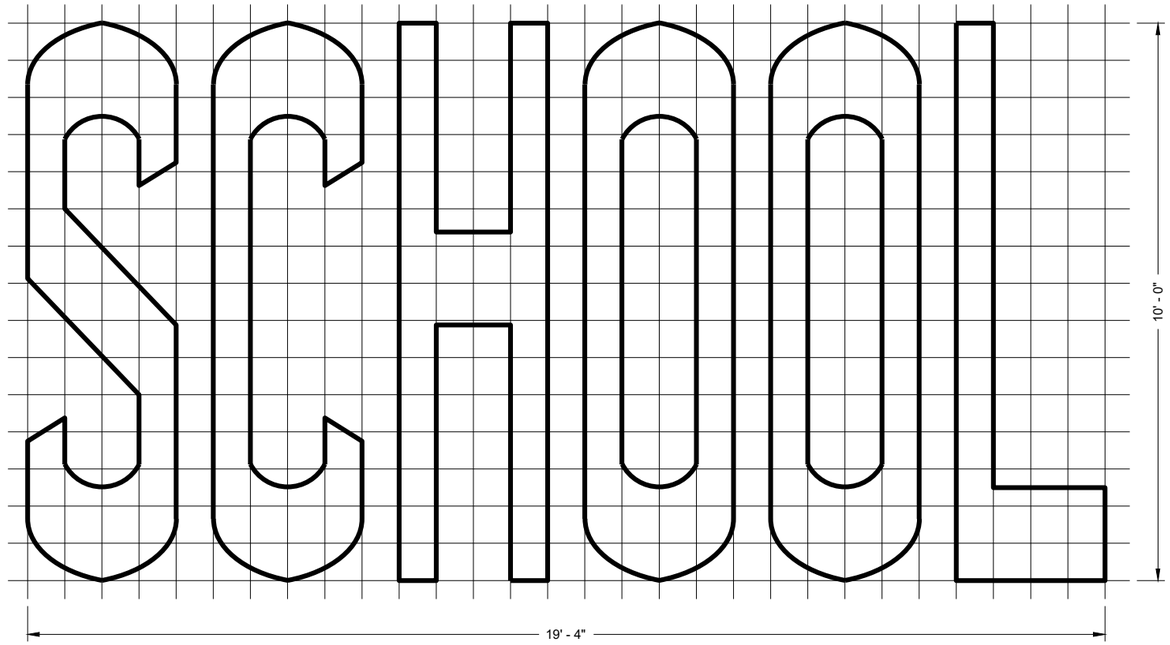
6

SDD 15C03 - 05





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

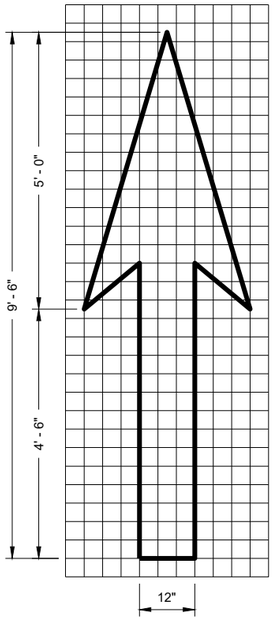
6

SDD 15C07 - 15b

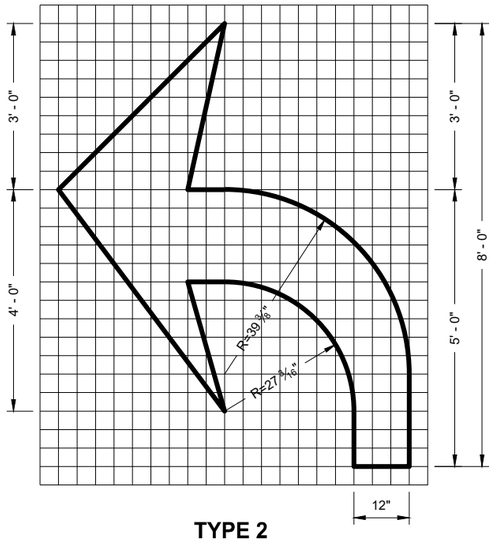
SDD 15C07 - 15b

GENERAL NOTES

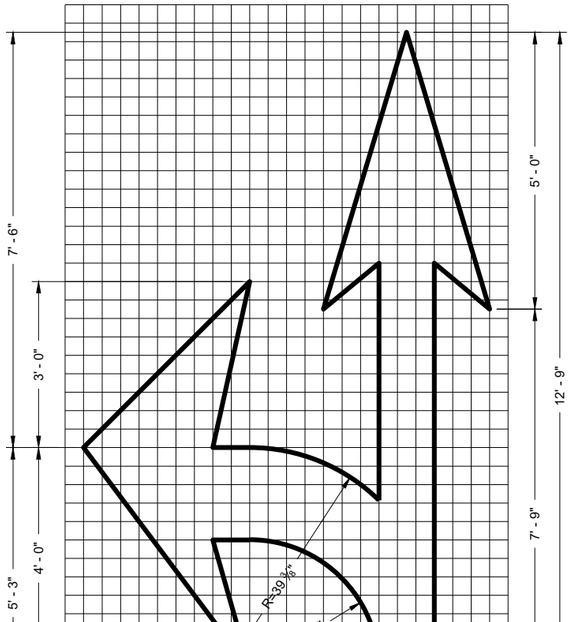
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 1



TYPE 2



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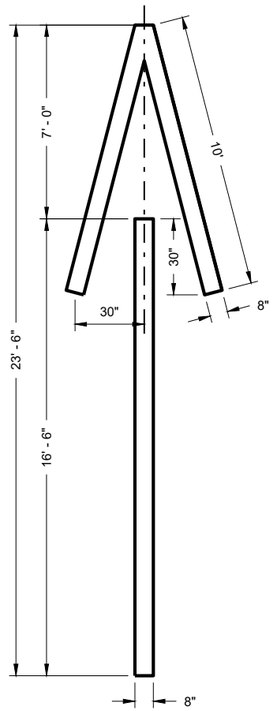
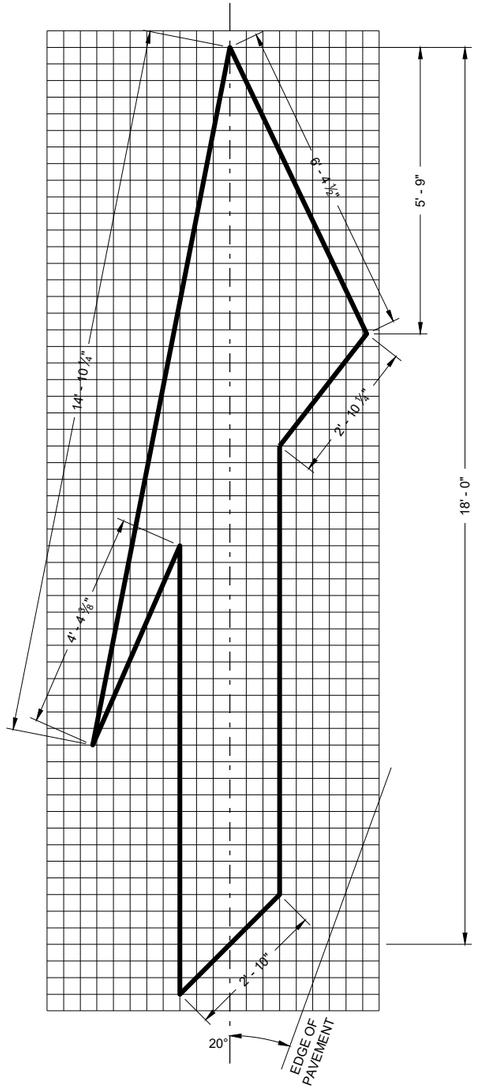
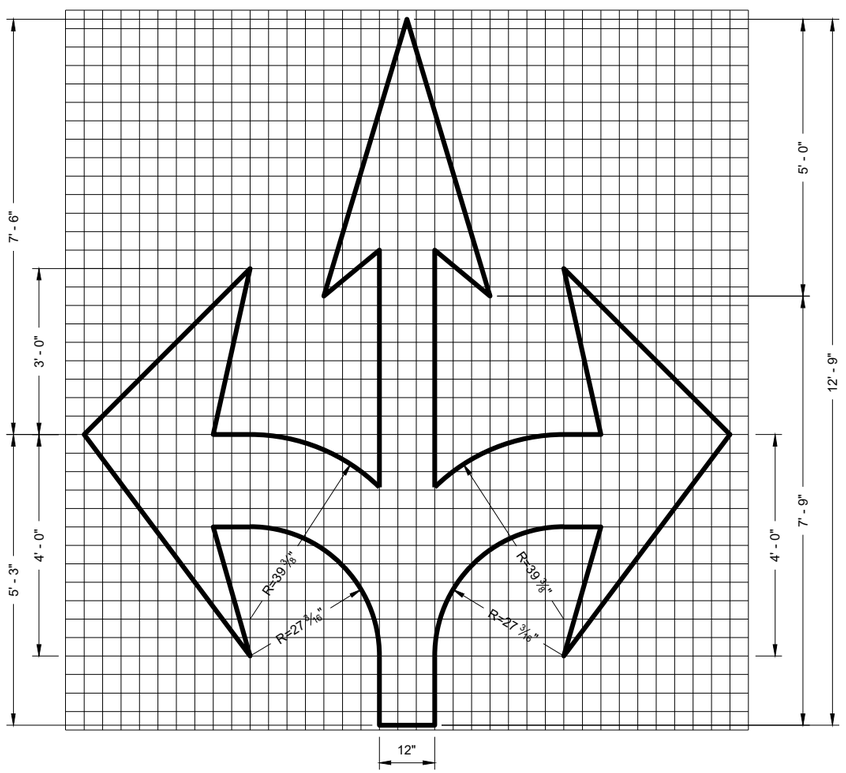


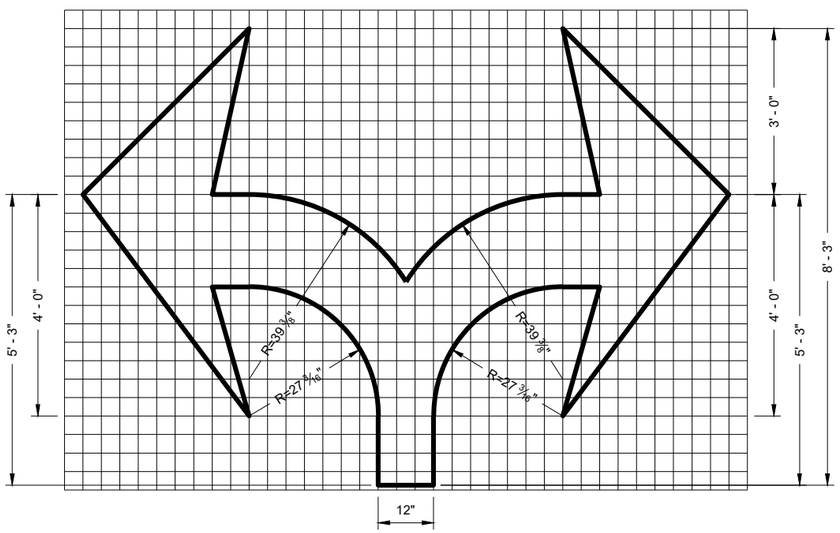
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

313

6

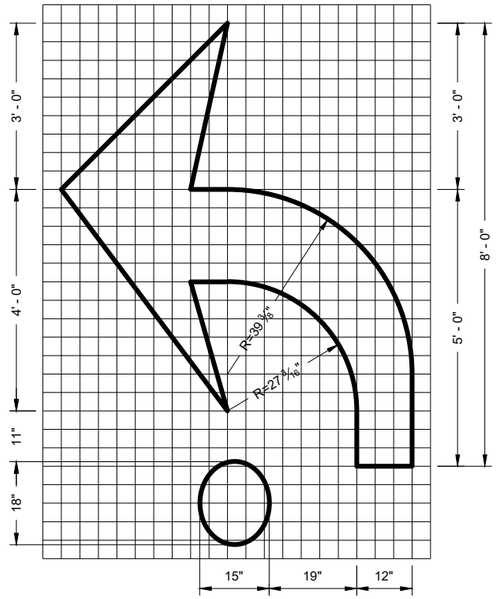
SDD 15C07 - 15c

6

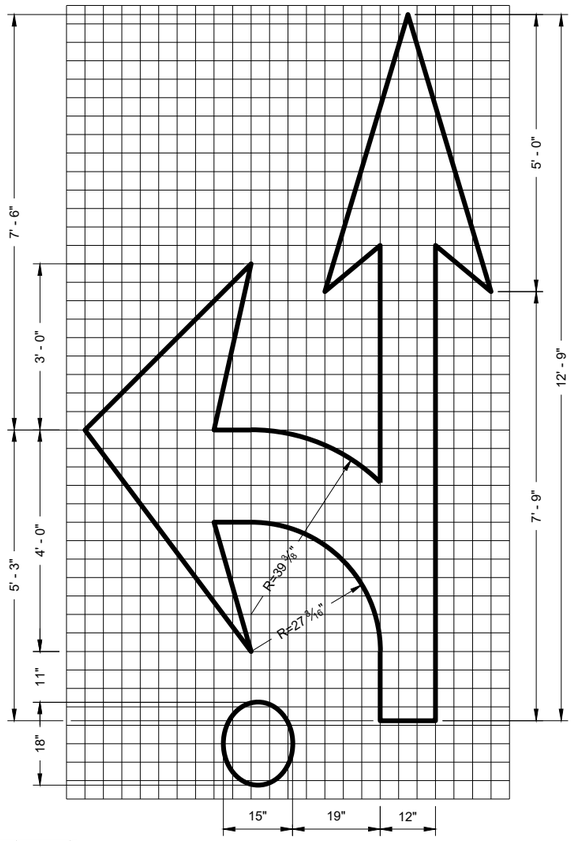
SDD 15C07 - 15c

GENERAL NOTES

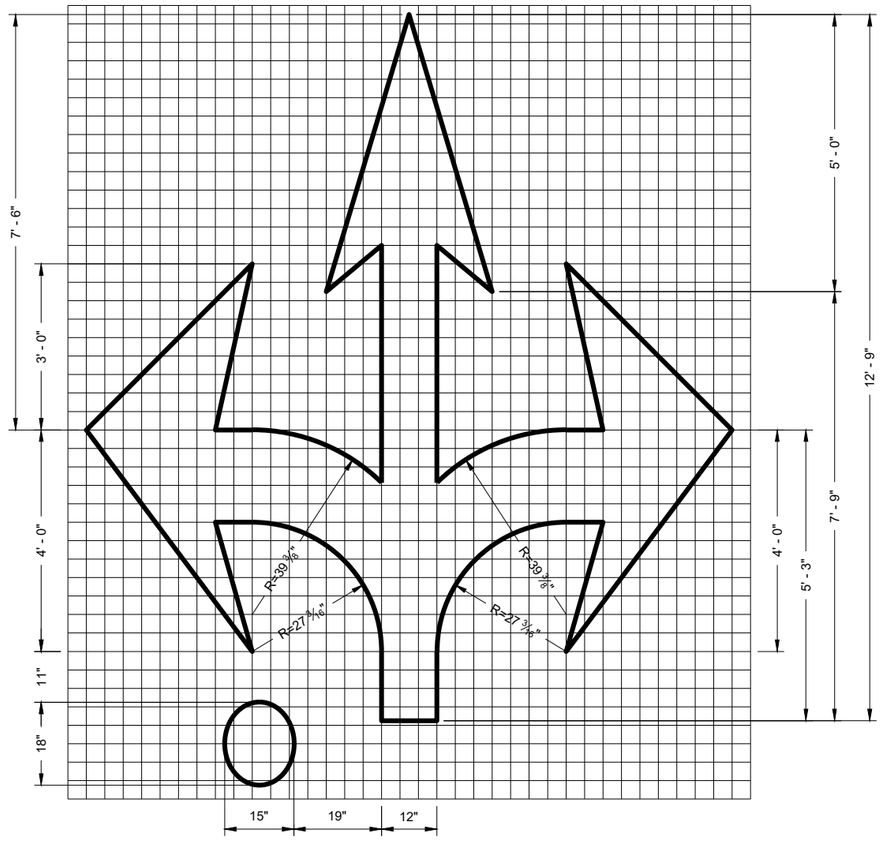
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



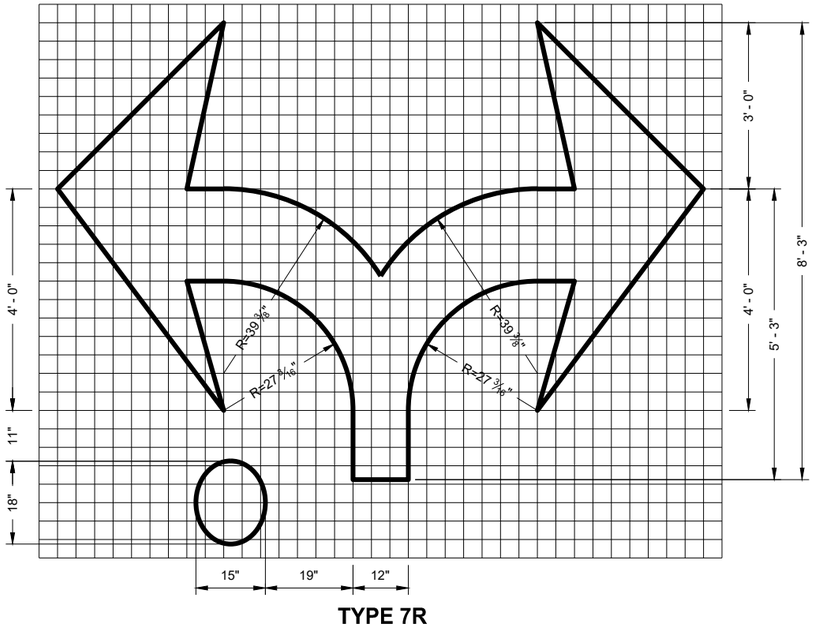
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15d

6

SDD15C07 - 15d

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

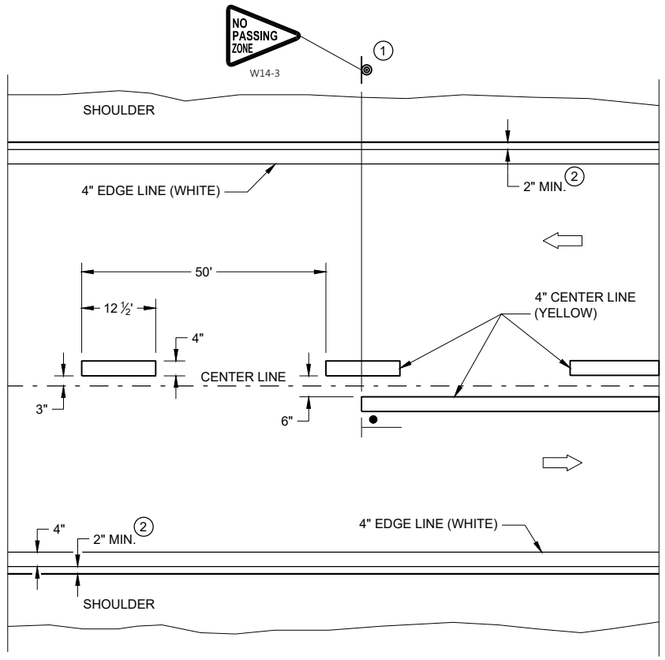
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

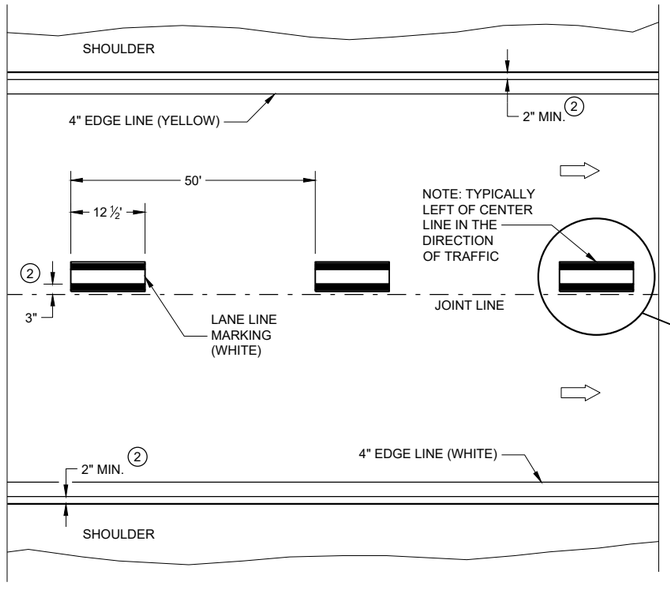
"T" MARKING

SIGN ON PERMANENT SUPPORT

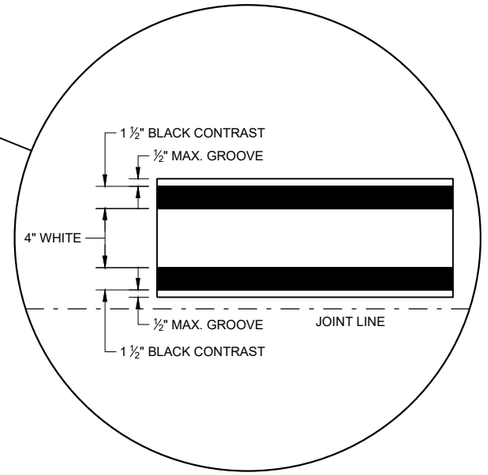
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

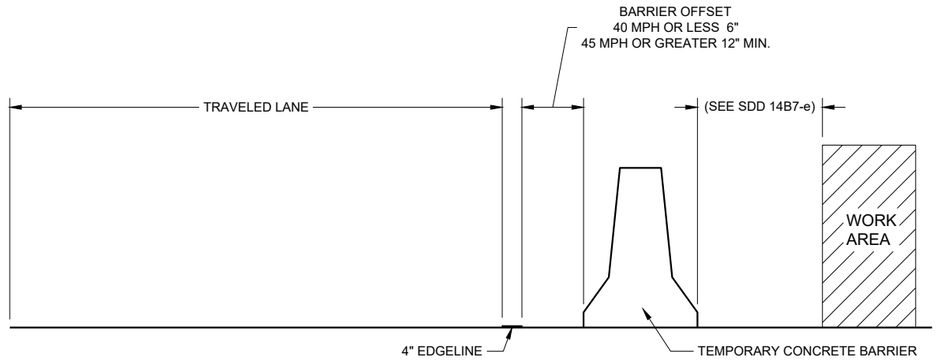
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

SDD 15C08 - 21a

SDD 15C08 - 21a



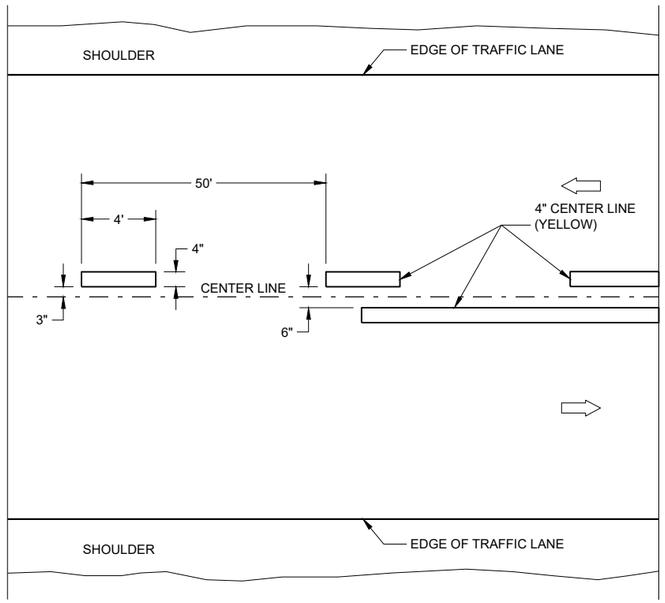
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

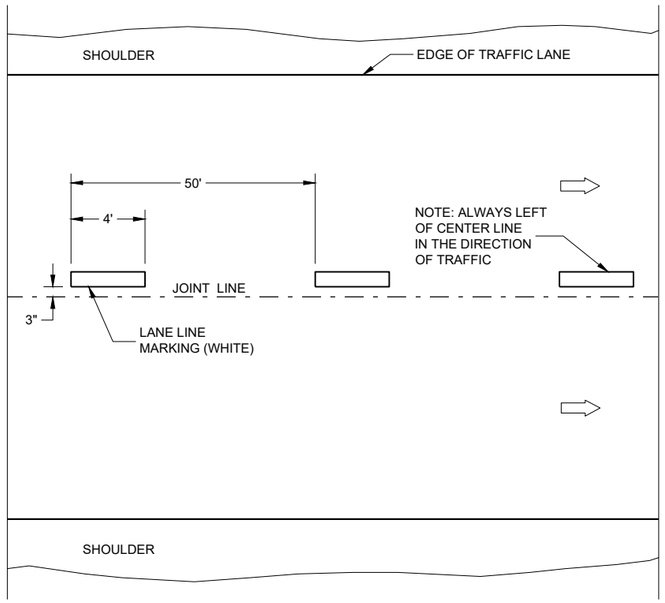
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

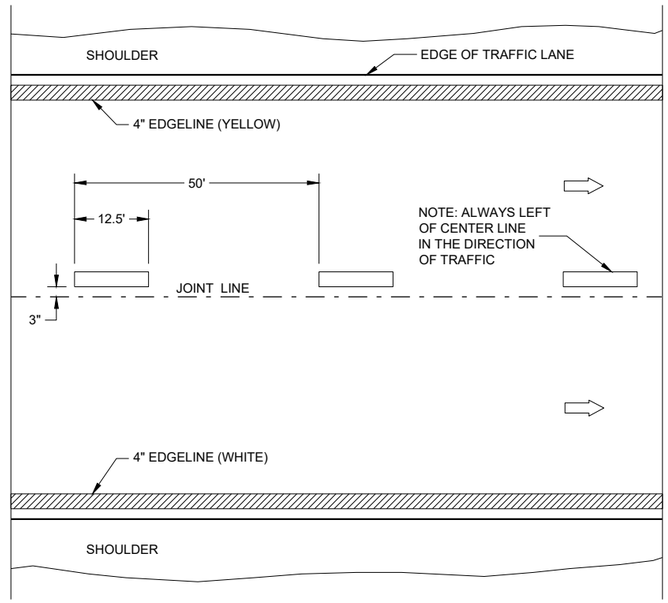
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

6

SDD 15C08 - 21b

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Jeannie Silver STATEWIDE SIGNING AND M ENGINEER
FHWA	316

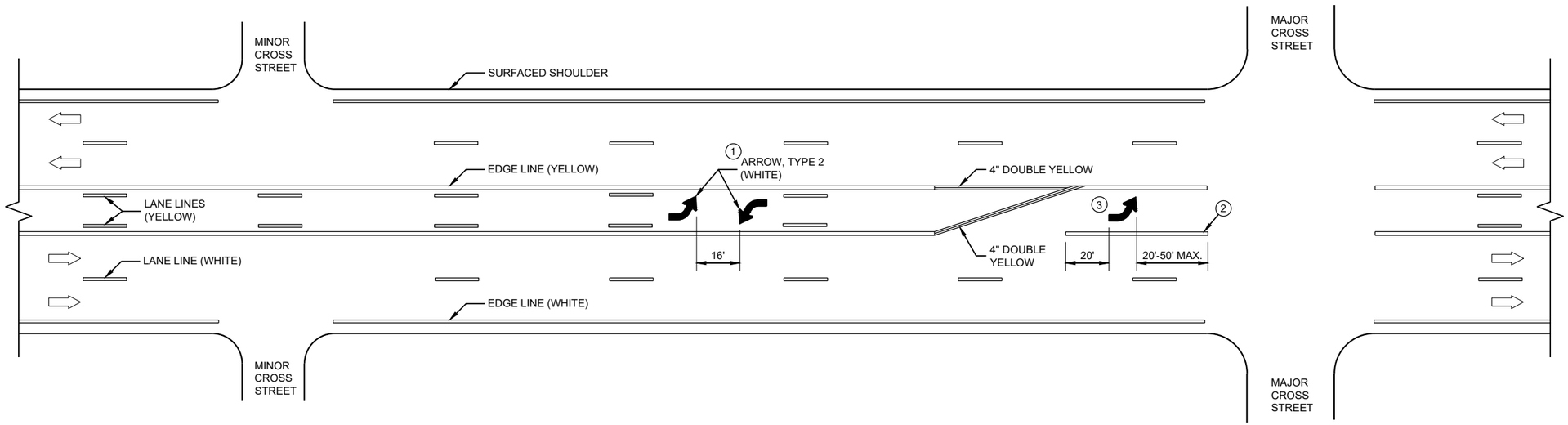
6

SDD 15C08 - 21b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

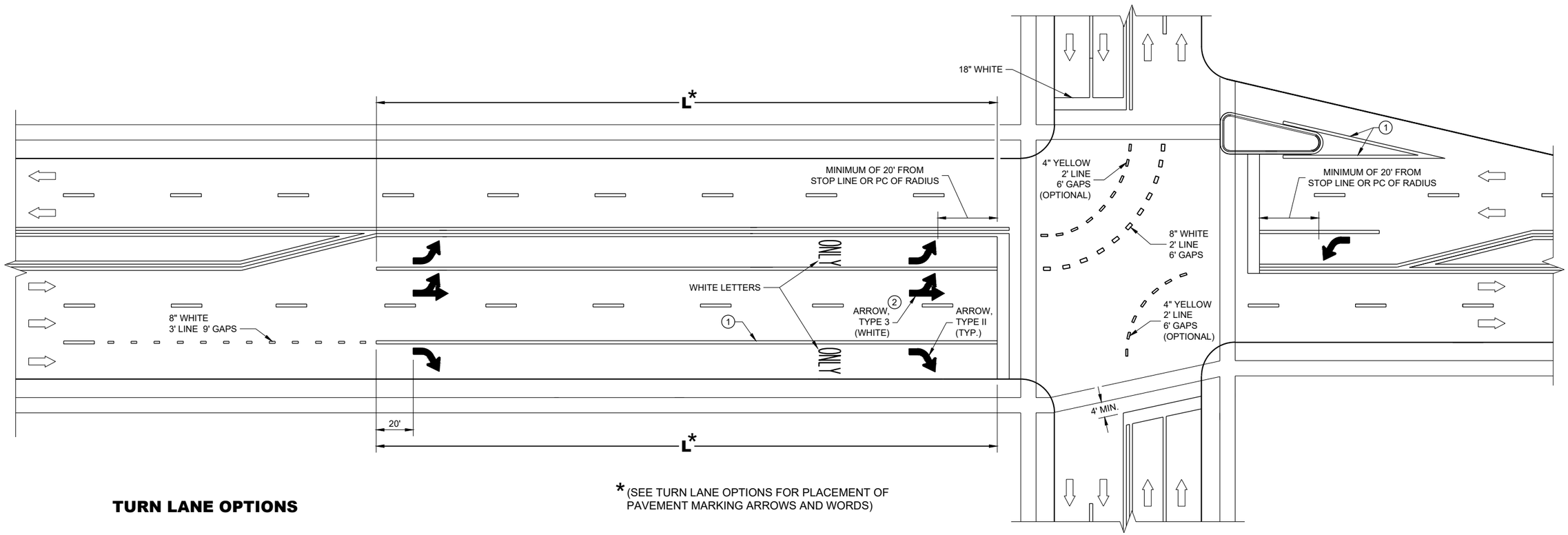
SDD 15C08 - 21c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

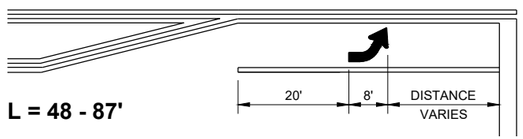
SDD 15C08 - 21c



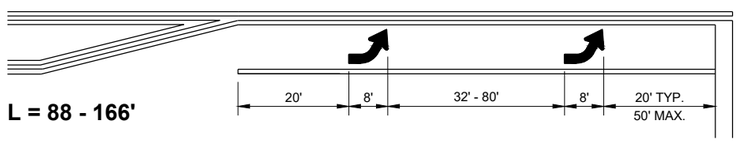
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

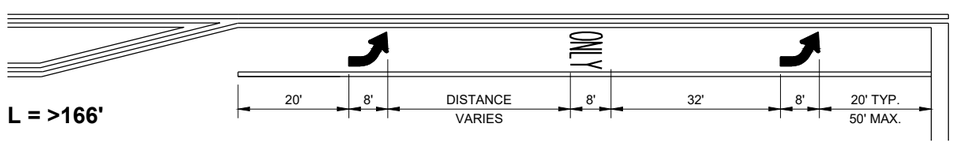
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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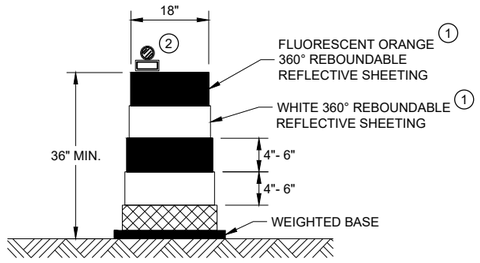
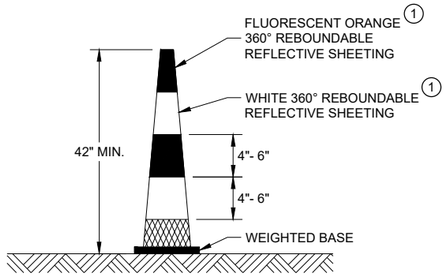
SDD 15C08 - 21d

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

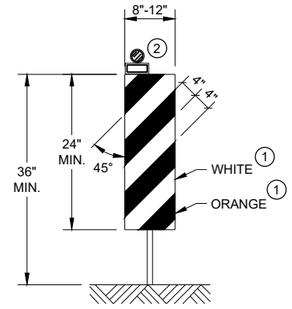


DRUM



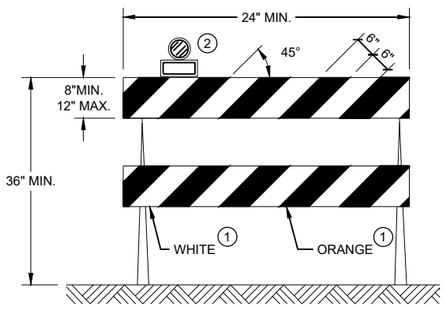
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



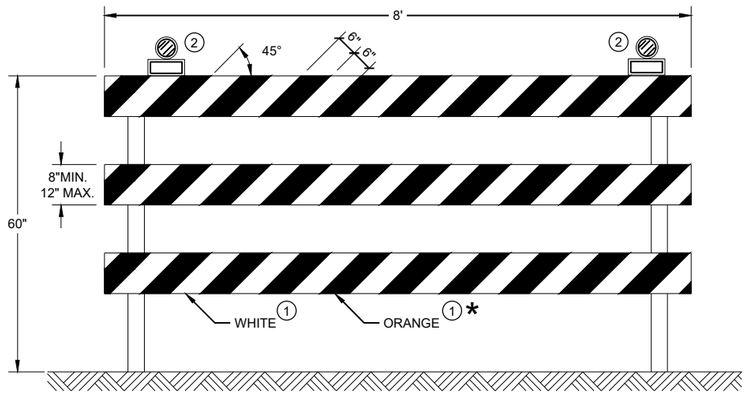
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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SDD15C11 - 09b

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SDD15C11 - 09b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

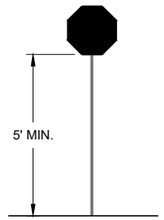
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



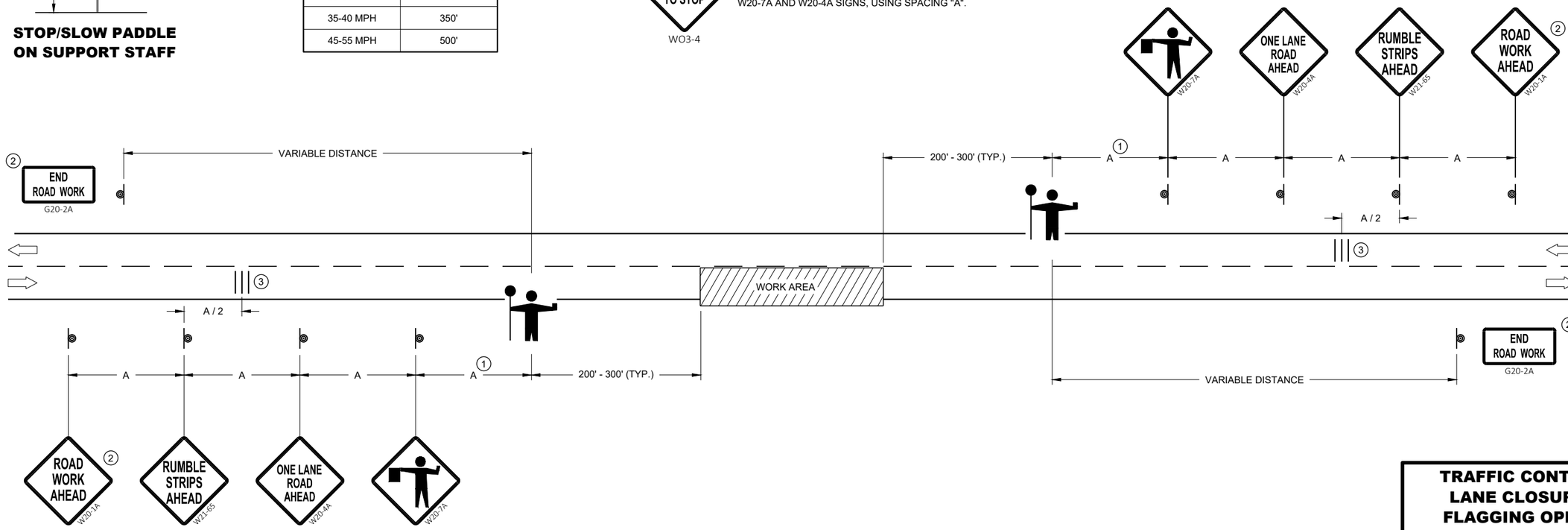
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C12 - 09a

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GENERAL NOTES

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL CONE 42-INCH
- TRAFFIC CONTROL DRUM
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

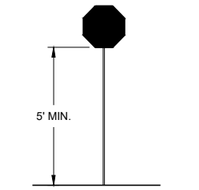
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

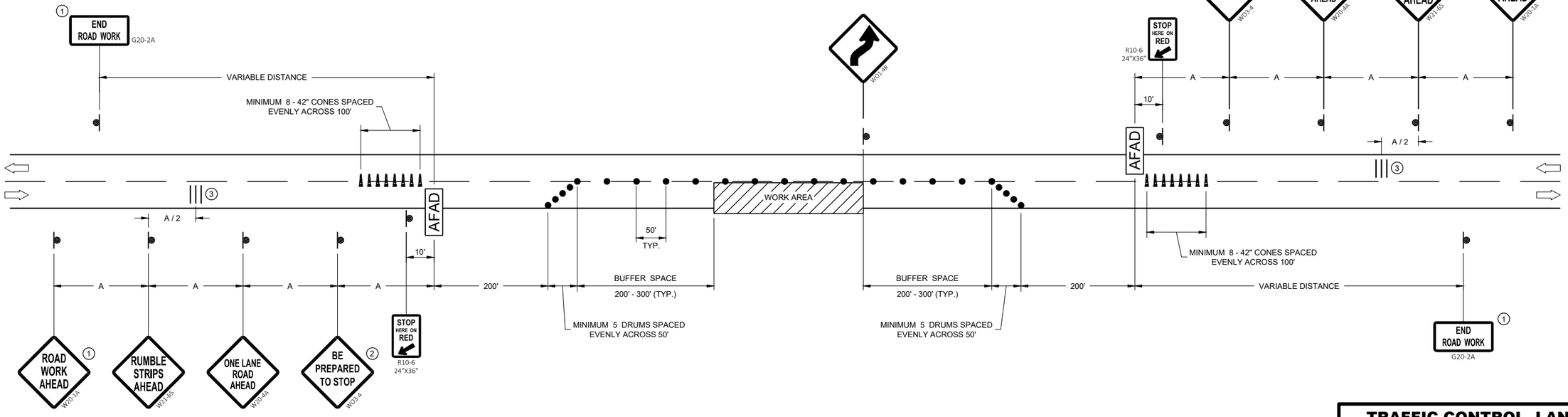
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

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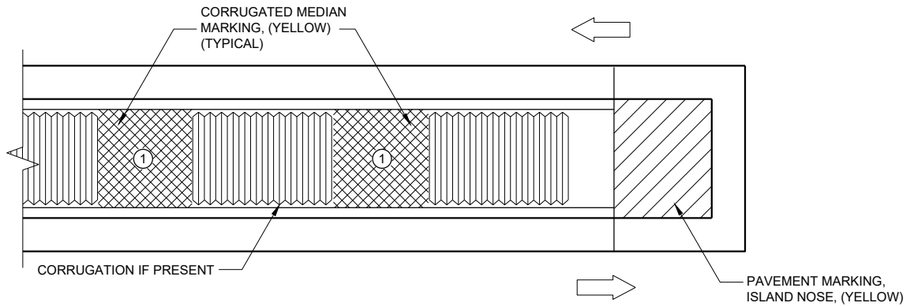
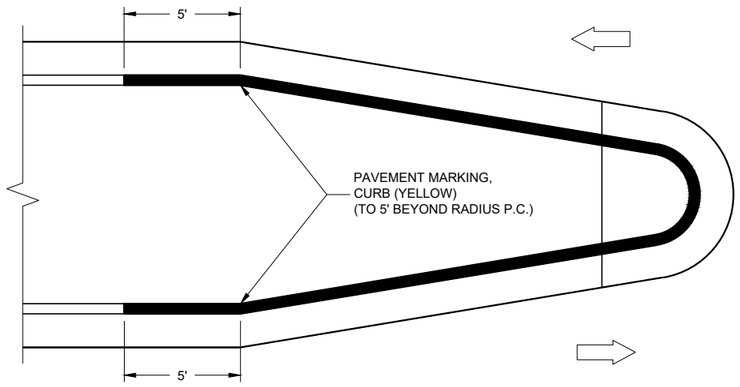
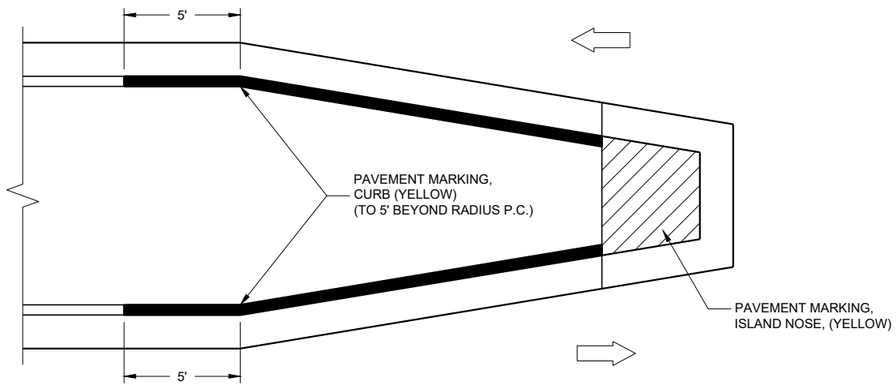


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



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 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAR
ENGINEER

FHWA

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SDD 15C18 - 06b

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SDD15C18 - 06b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

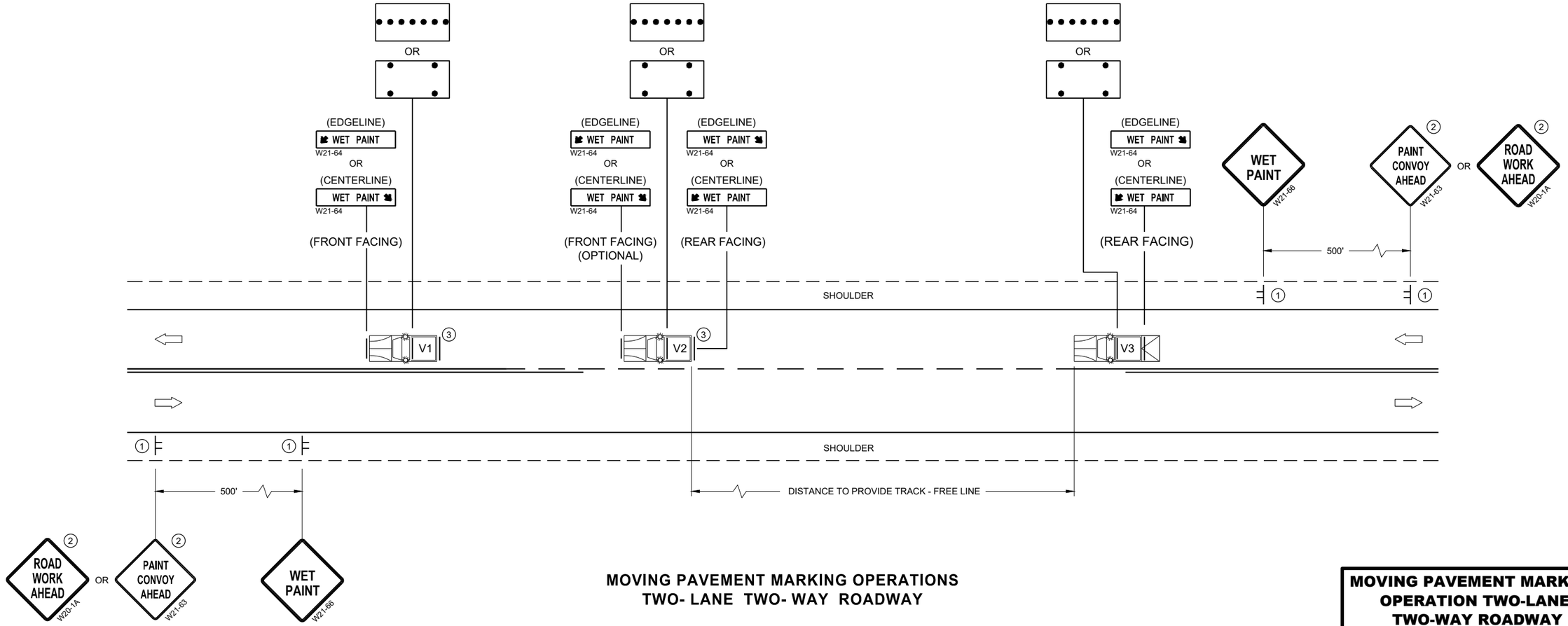
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

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

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

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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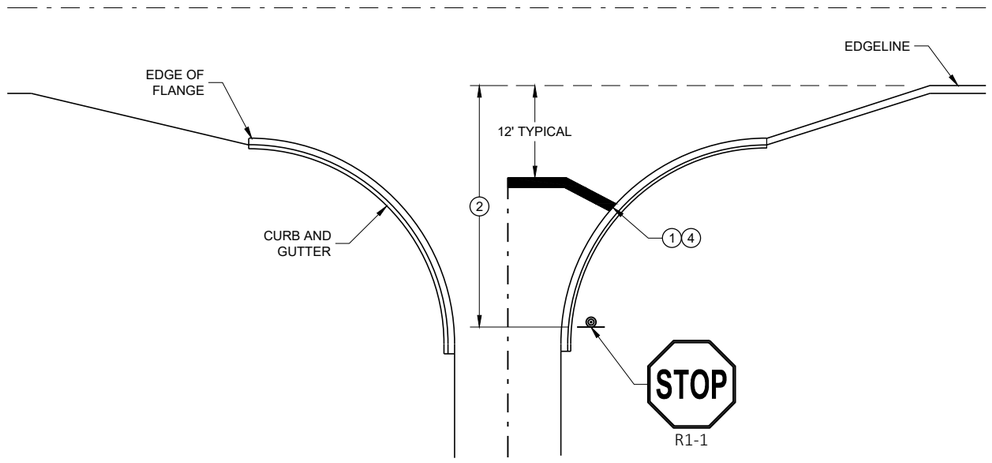
SDD 15C19 - 07a

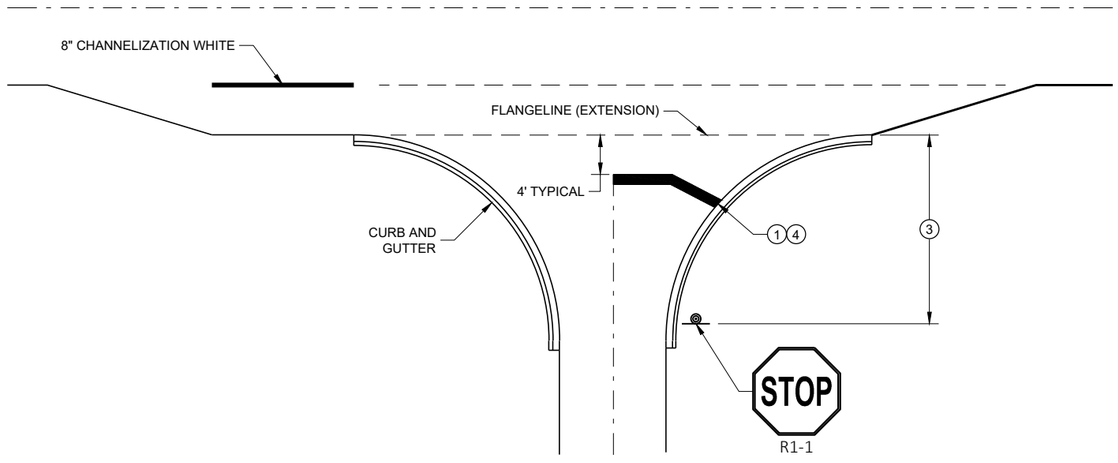
GENERAL NOTES

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

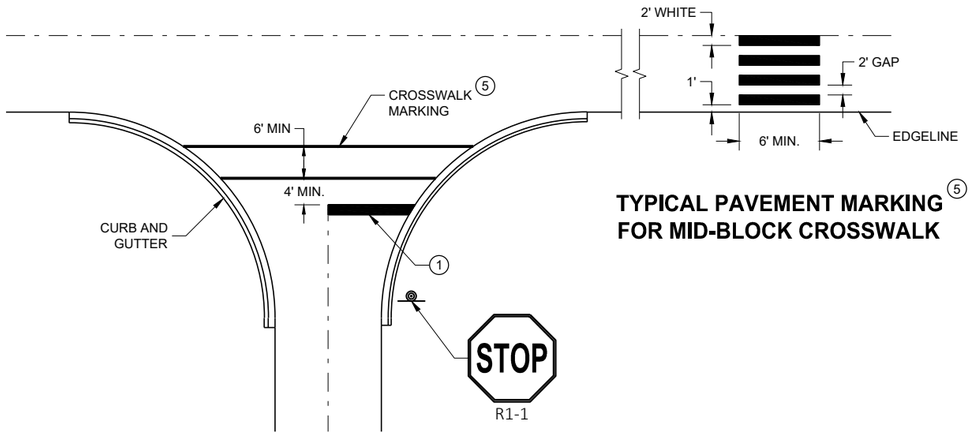
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

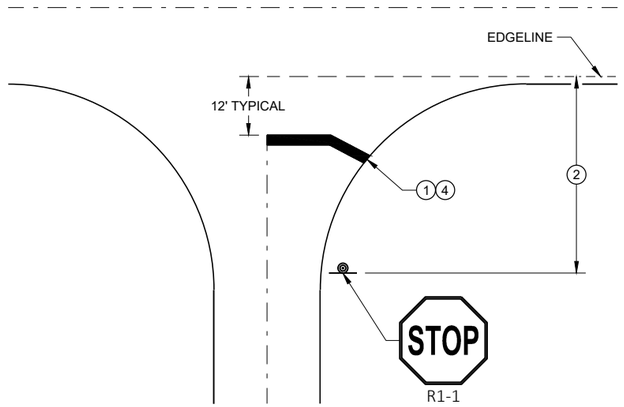


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04

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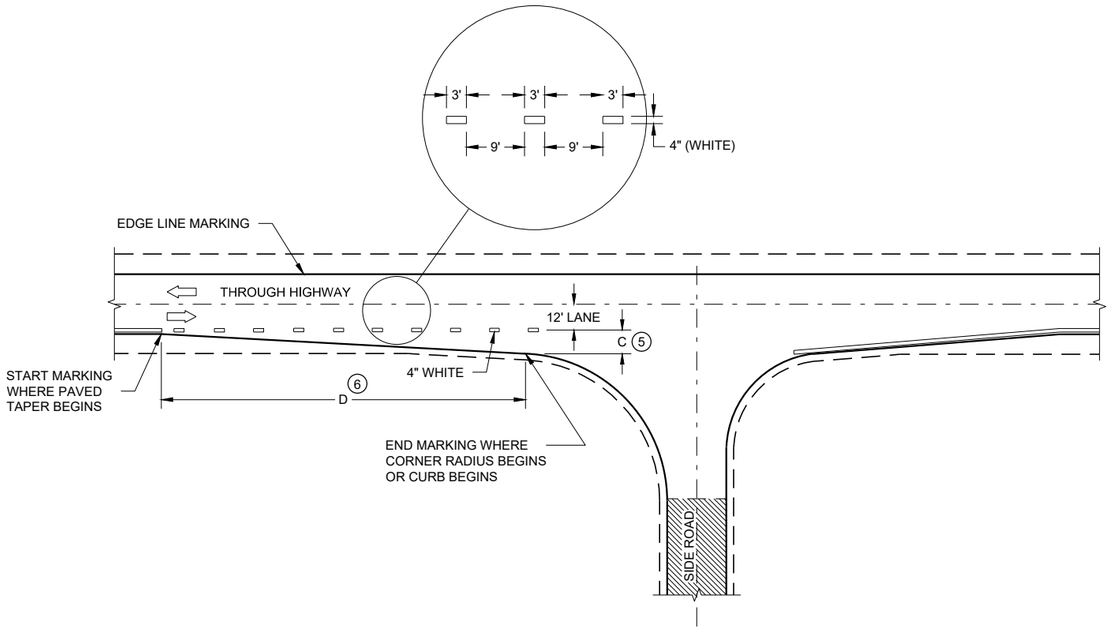
SDD 15C33 - 04



MINOR INTERSECTION

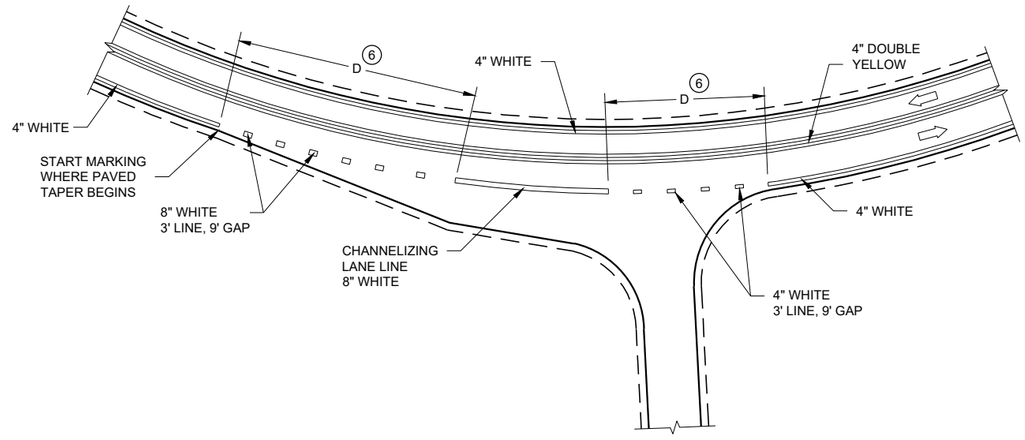
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

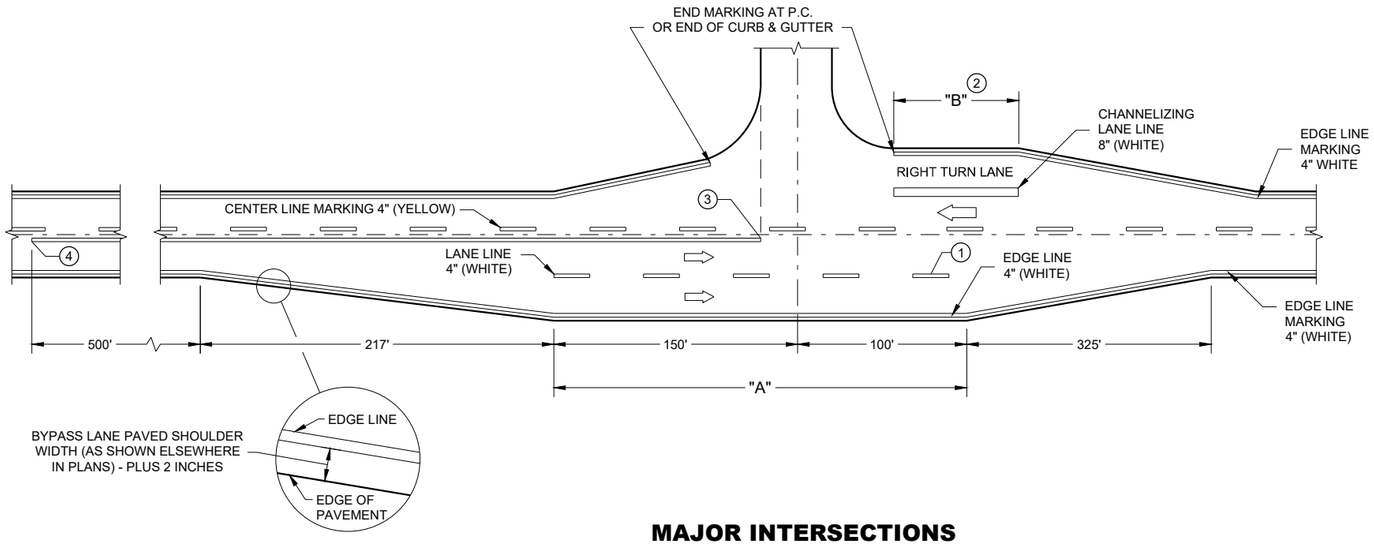
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



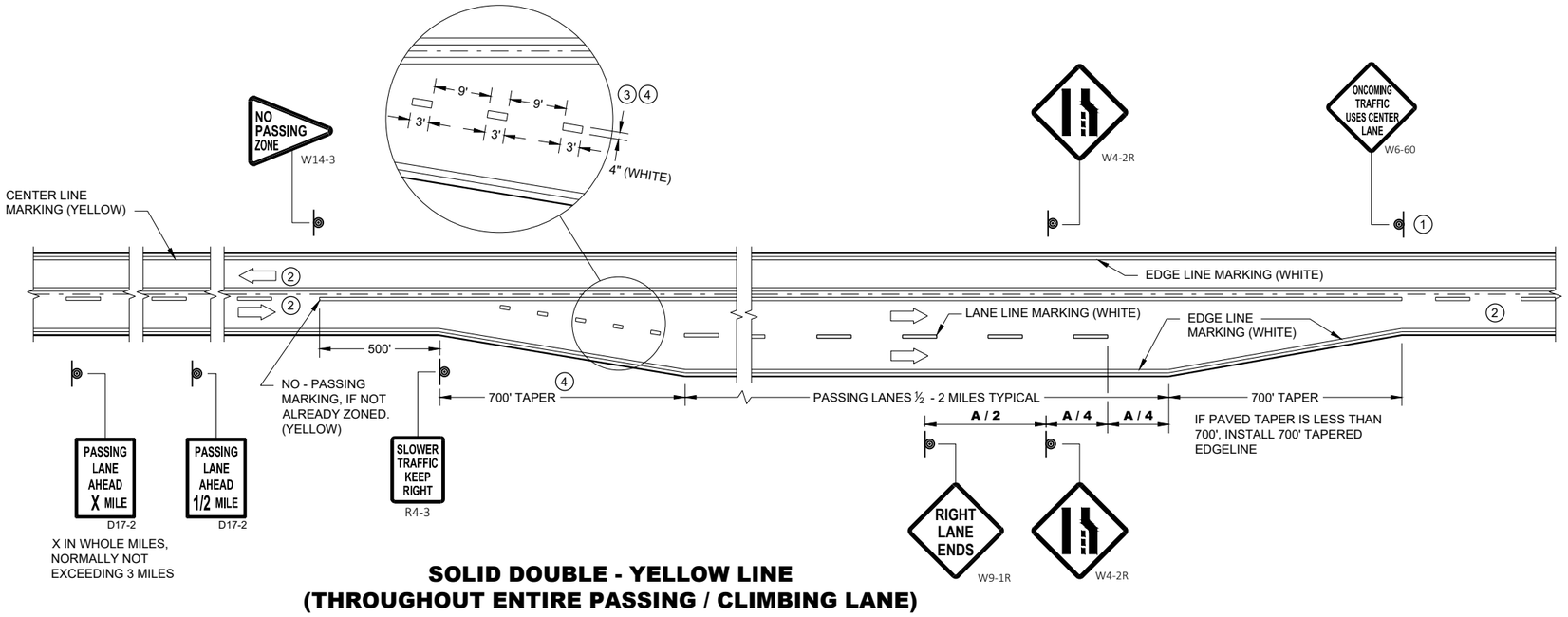
INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

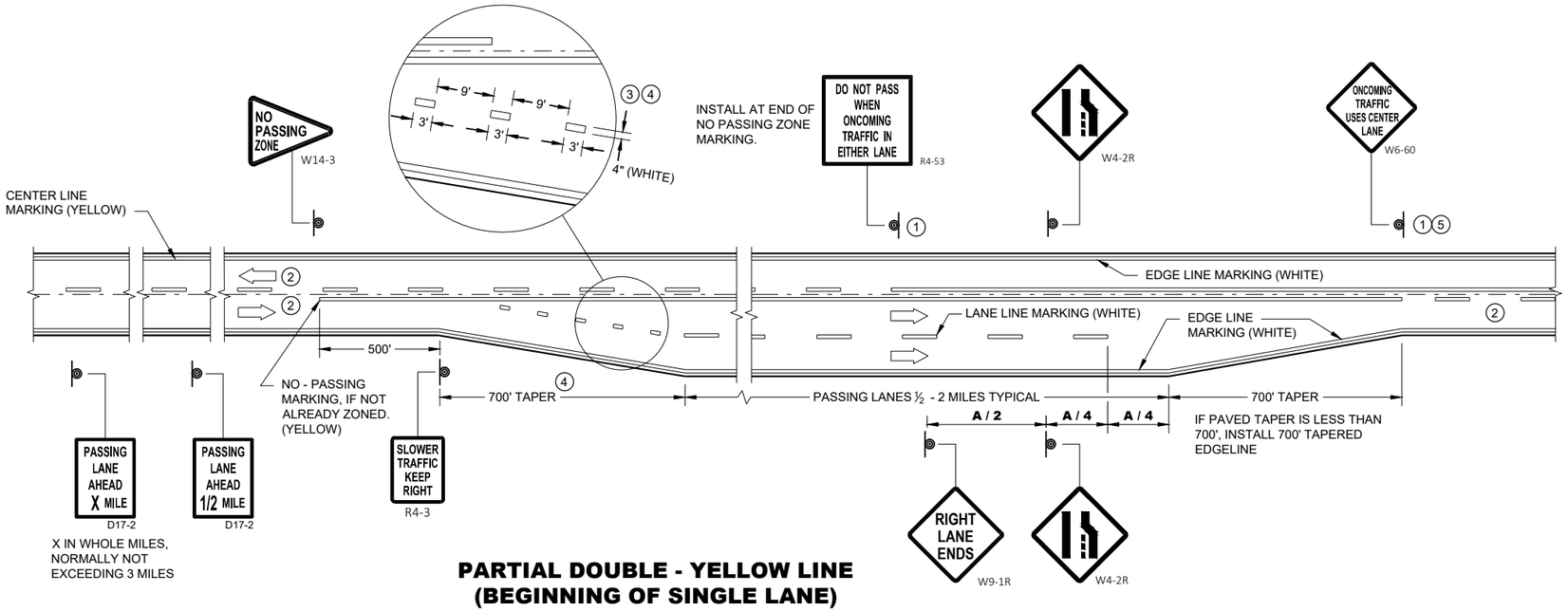
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



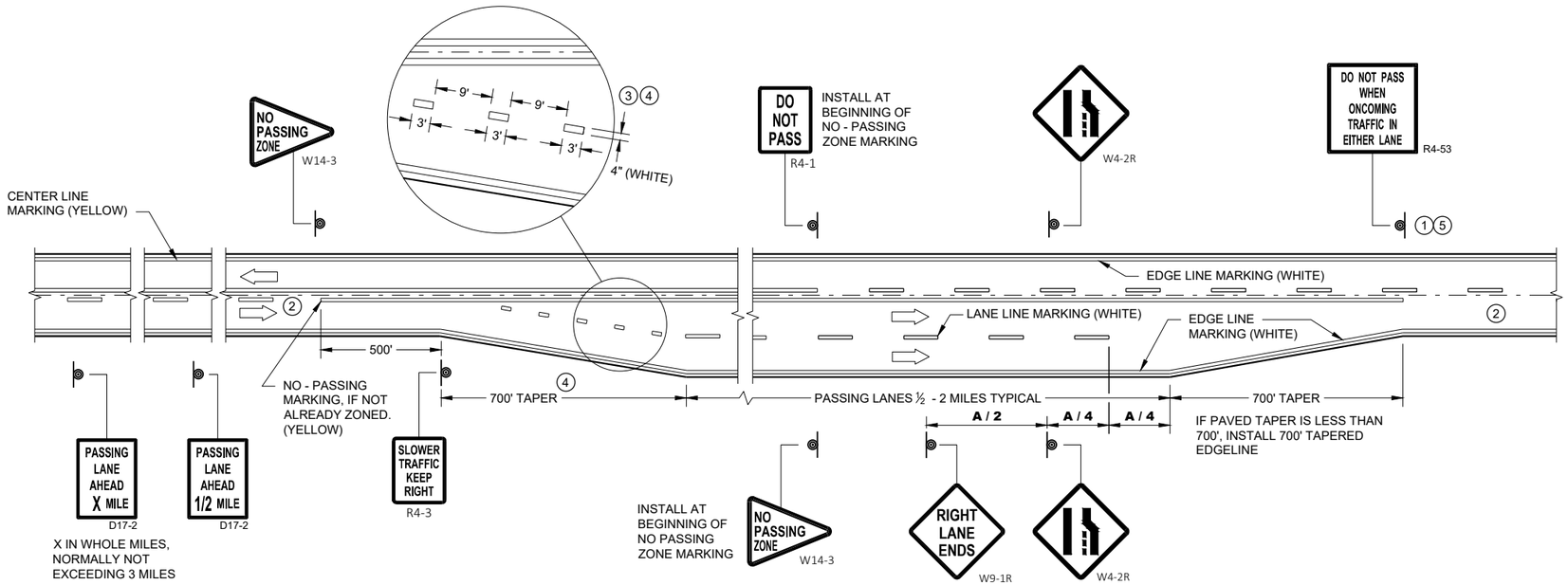
PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

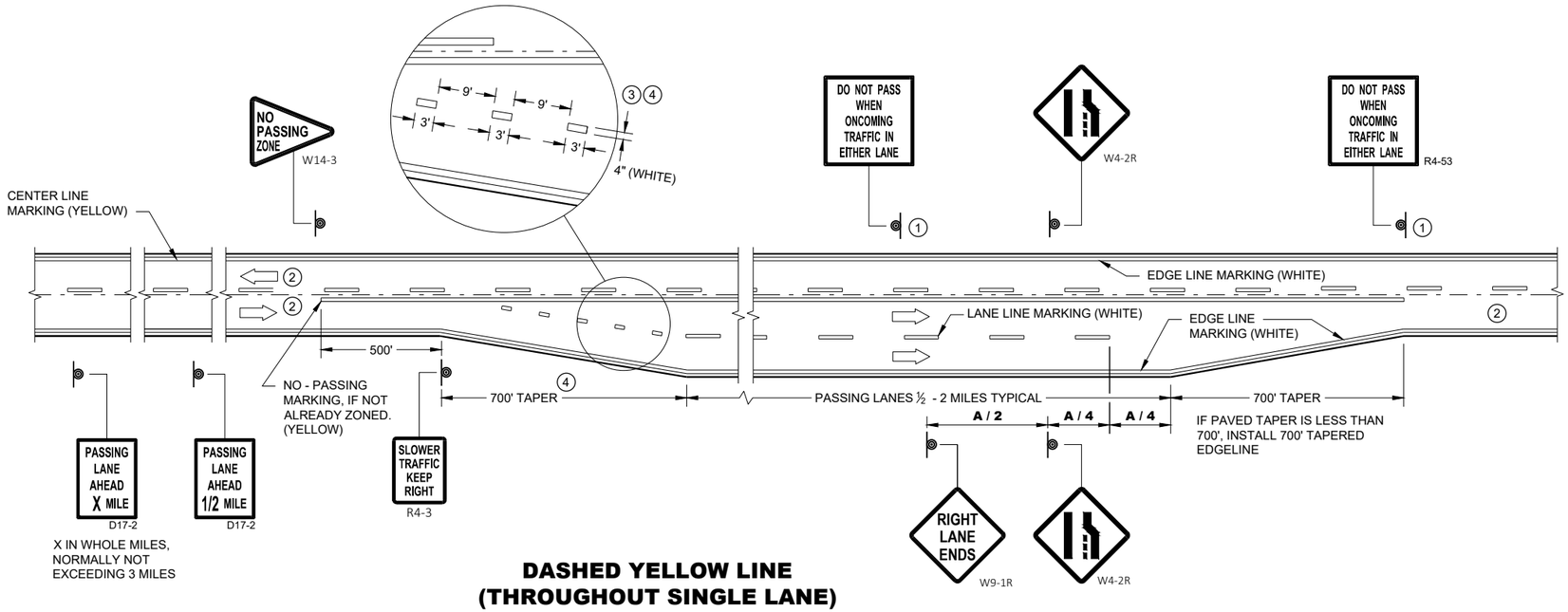
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 05b
SDD 15C35 - 05b



SOLID DOUBLE - YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW LINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER
FHWA

SDD 15C35 - 05c

SDD 15C35 - 05c

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

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

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

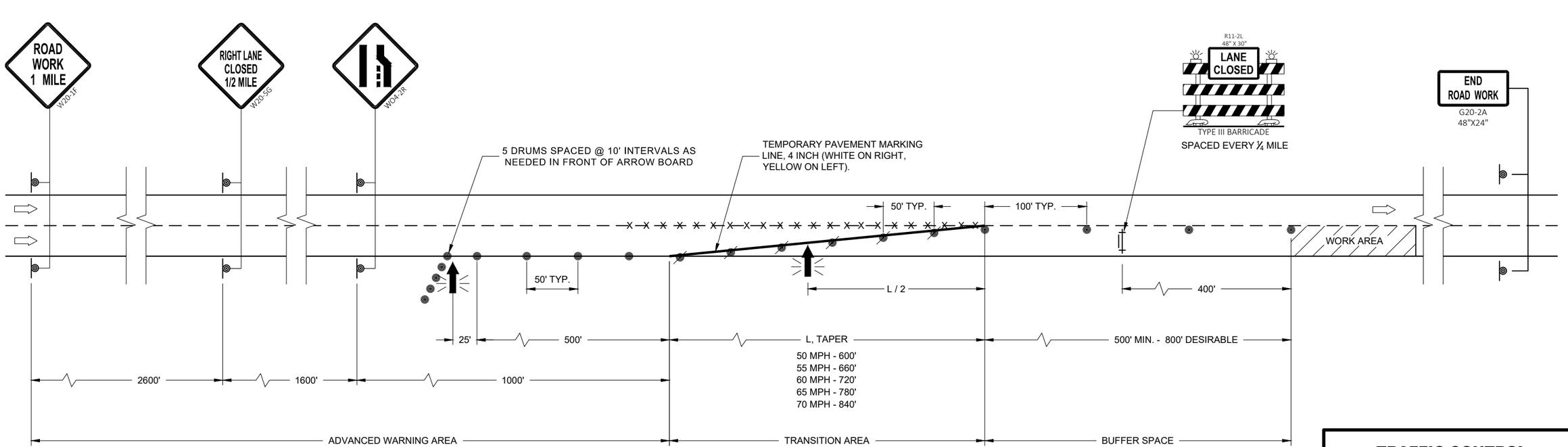
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 10a

6

SDD 15D12 - 10a

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.

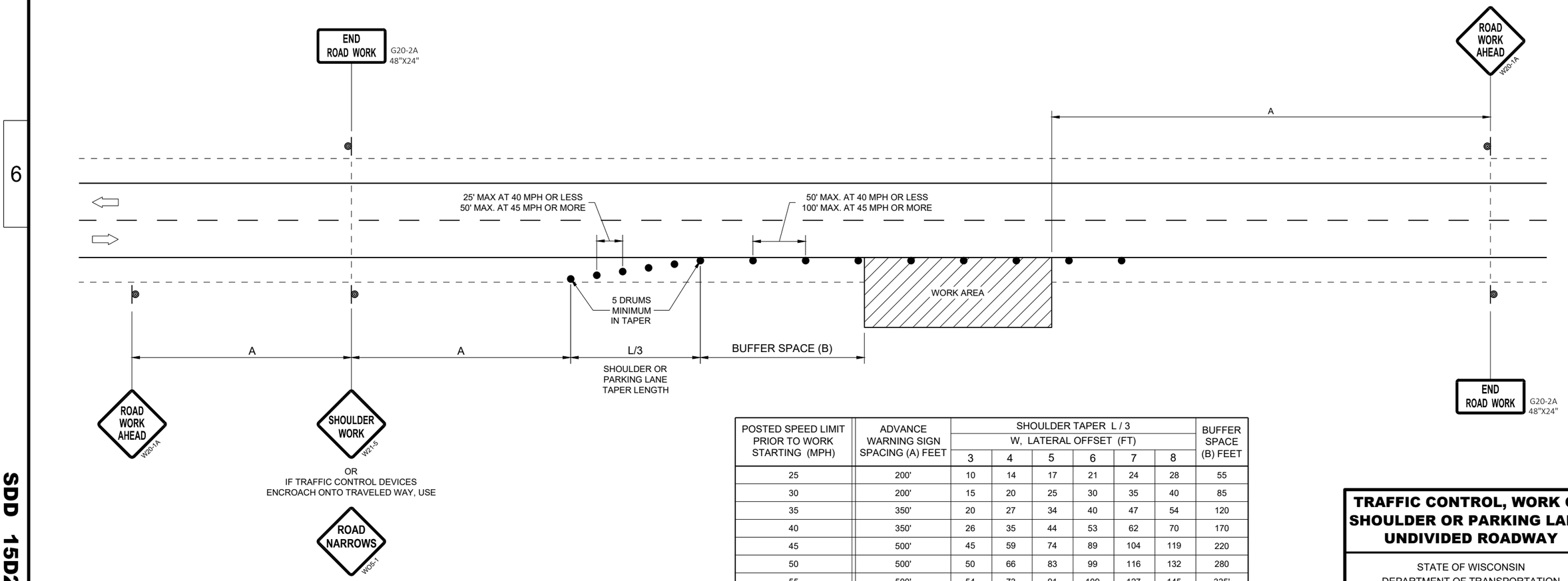
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

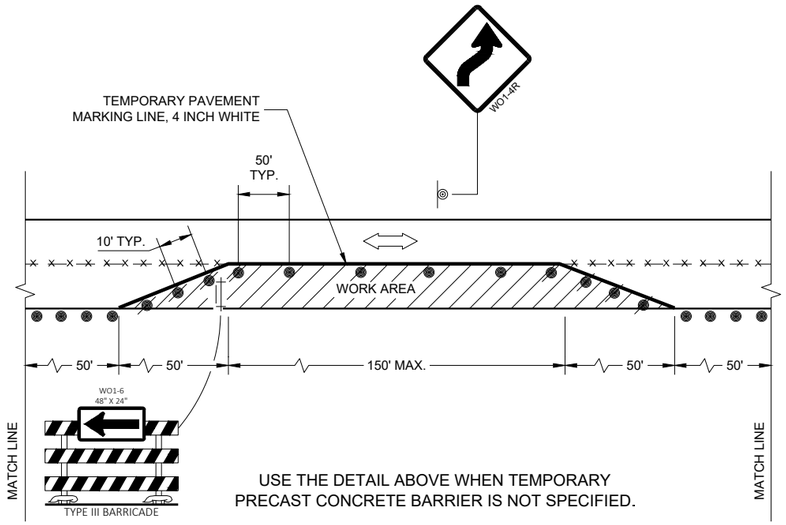
FHWA

6

SDD 15D28 - 04

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

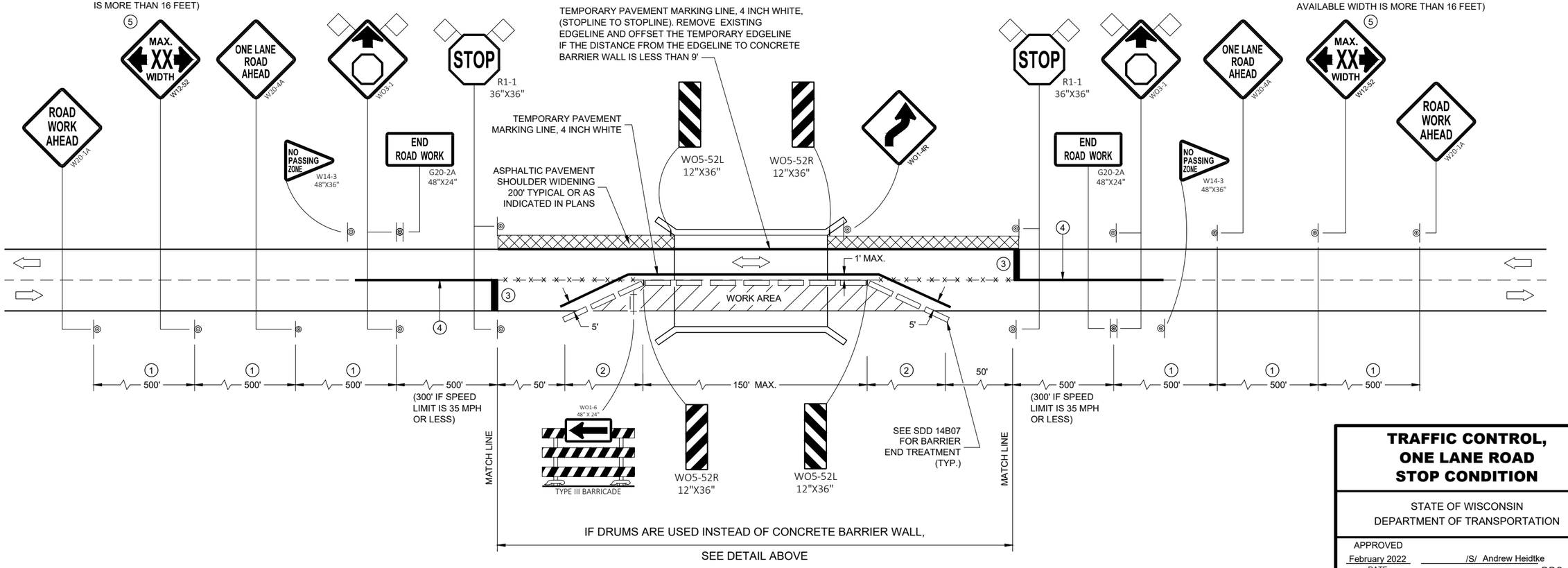
ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

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

1. 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY 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.
2. DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
3. TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
4. 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 4 INCH DOUBLE YELLOW. WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
5. SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

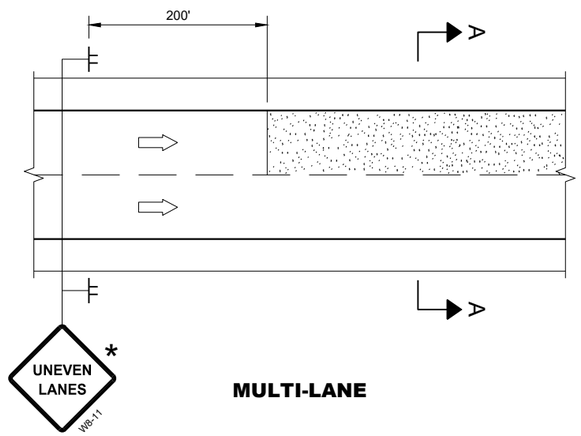
APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

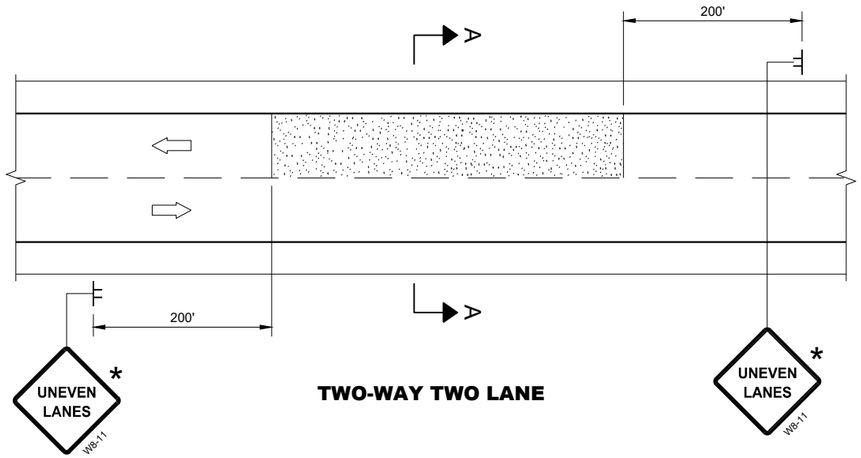
FHWA

SDD 15D32 - 06

SDD 15D32 - 06



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

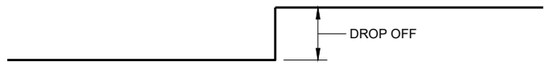
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

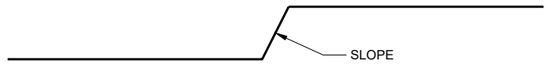
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

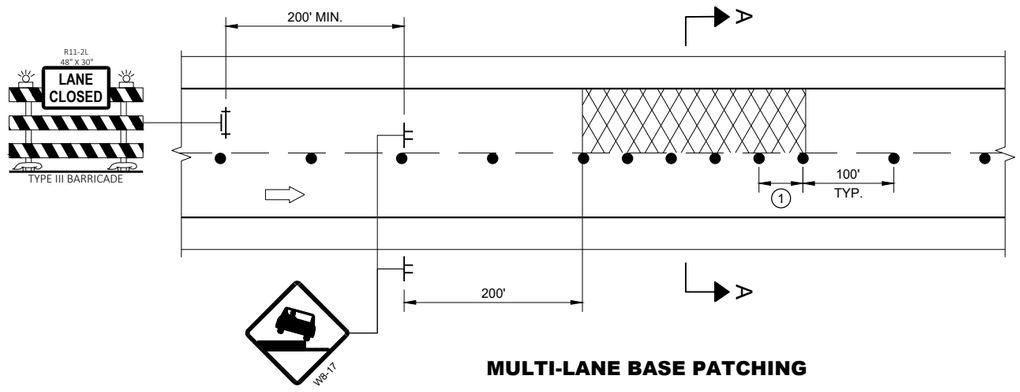


SECTION A - A

OR

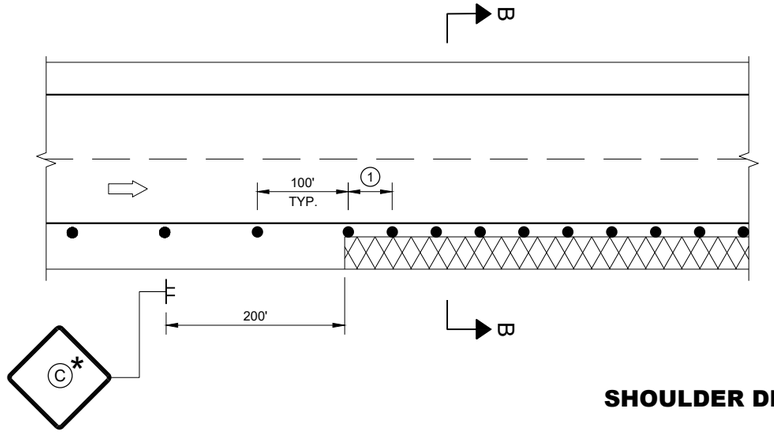


SECTION A - A

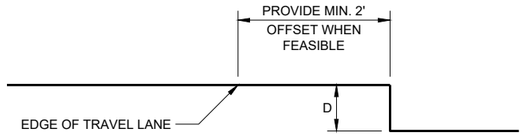


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

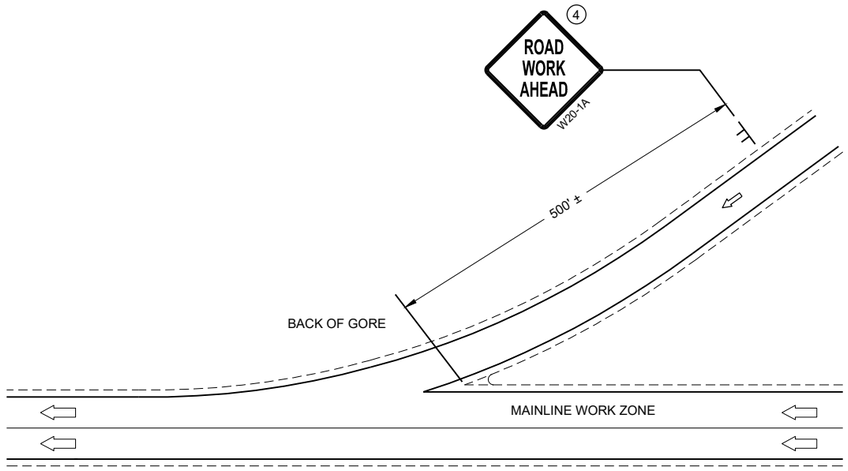
SDD 15D39 - 02

6

SDD 15D39 - 02

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

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

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

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

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

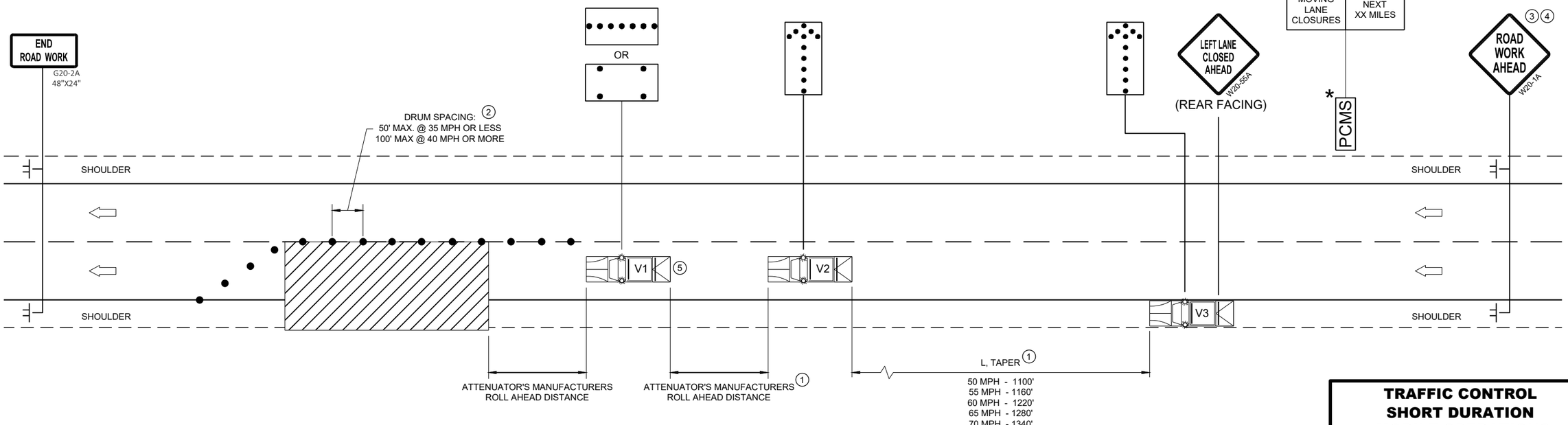
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D43 - 02

6

SDD 15D43 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

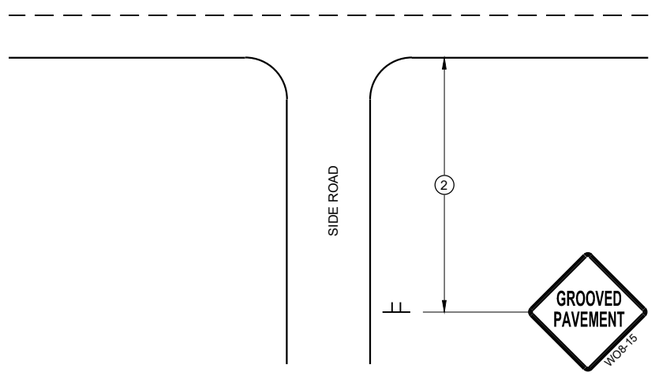
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

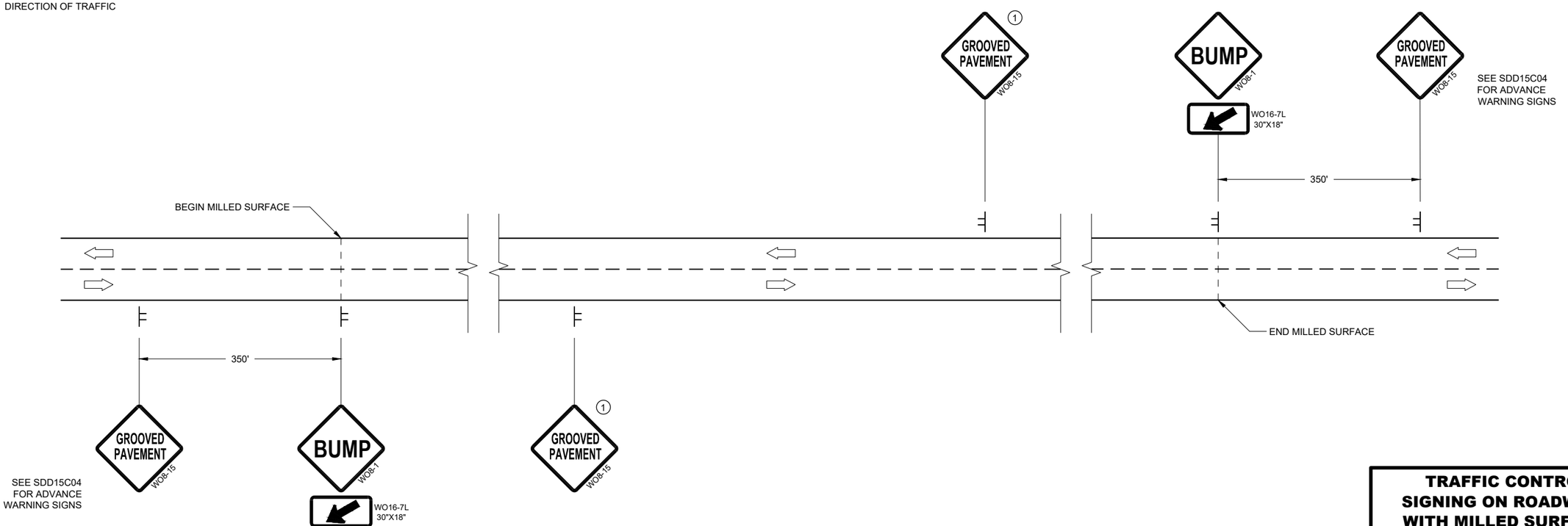
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D44 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

(1) PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

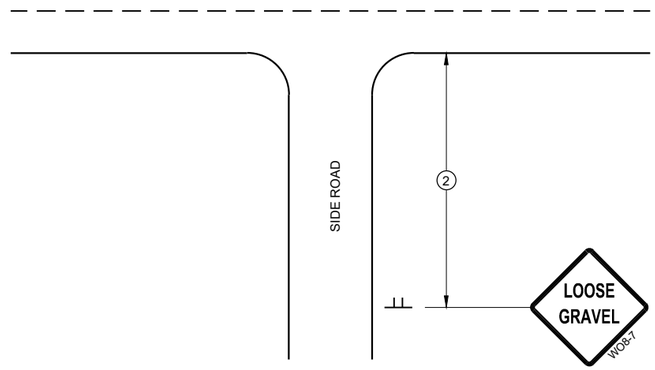
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

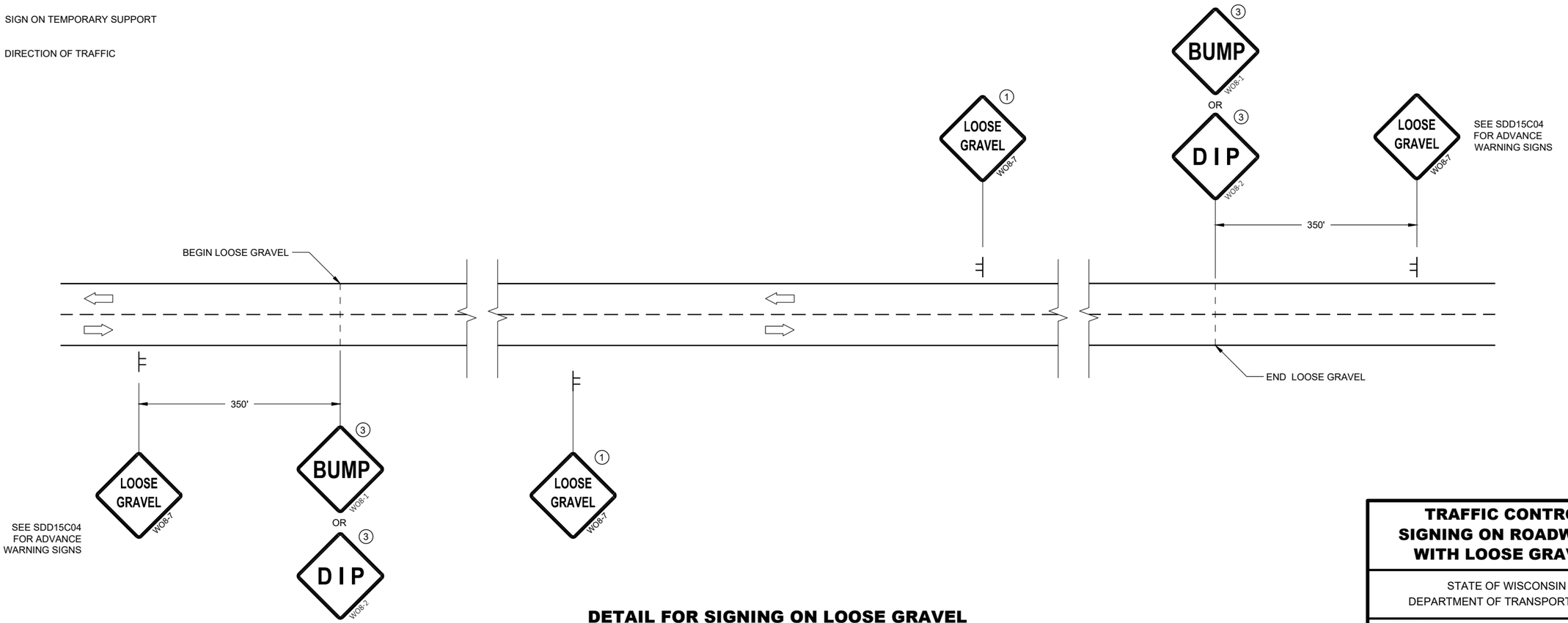
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

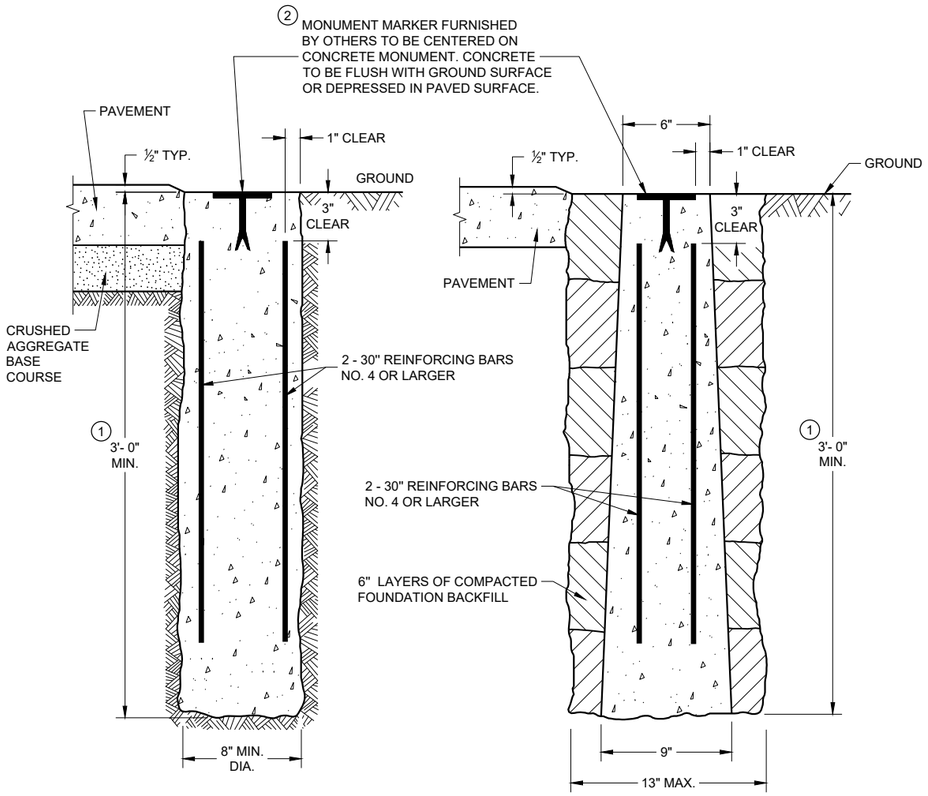
APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

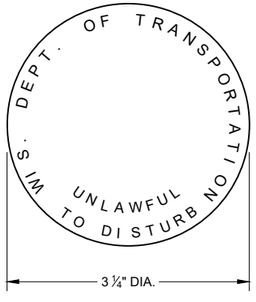
6

SDD 15D45 - 03



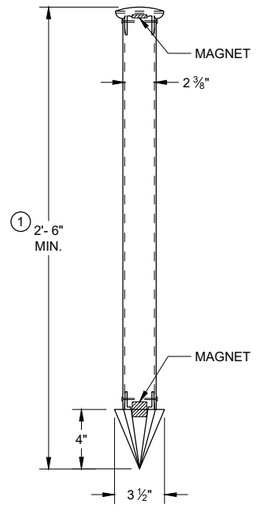
CAST-IN-PLACE **PRECAST**

CONCRETE MONUMENTS
TYPE A

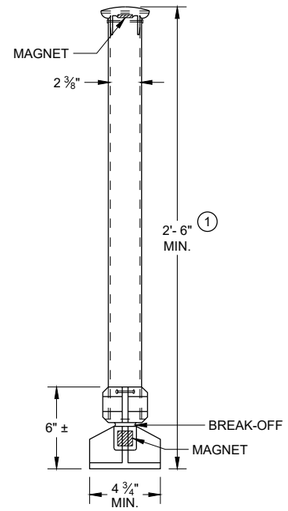


② **WIS DOT MONUMENT MARKER LOGO**

FOR TYPES "A", "C" & "D"

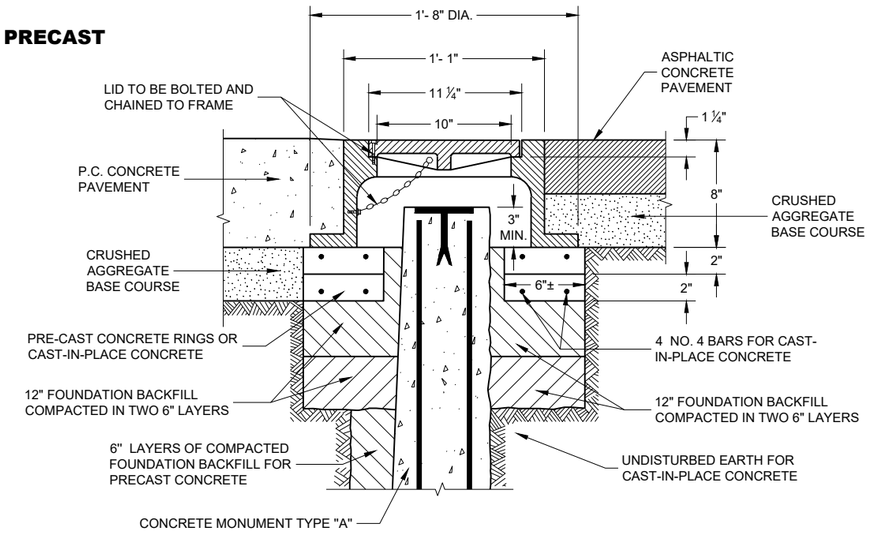


TYPE C
DRIVEN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)



CAST IRON MONUMENT COVER
(APPROXIMATE WEIGHT 95 LBS)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

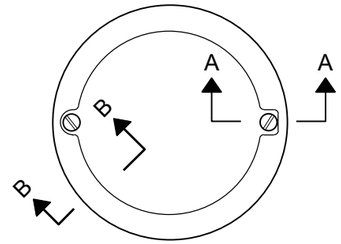
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

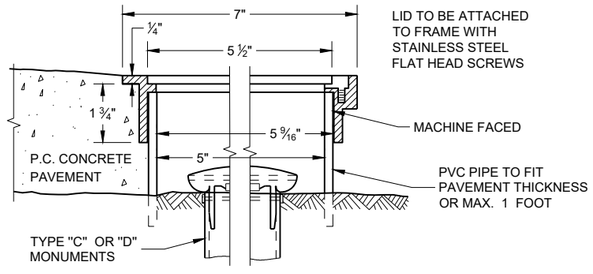
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.



TOP VIEW



SECTION B-B **SECTION A-A**

ALUMINUM MONUMENT COVER
(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

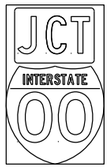
/S/ Raymond A. Kumapayii
CHIEF SURVEYING AND MA
ENGINEER

FHWA

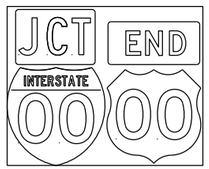
6

SDD 16A01 - 07

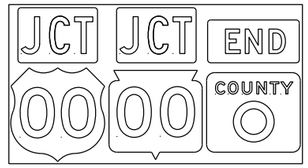
TYPICAL ASSEMBLIES



J1-1



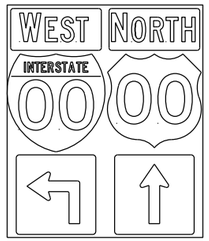
J1-2



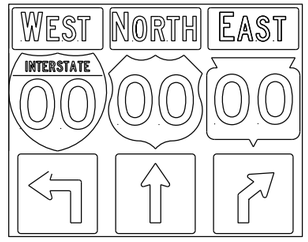
J1-3

JR1-1

J2-1

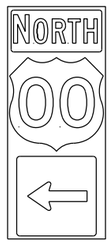


J2-2

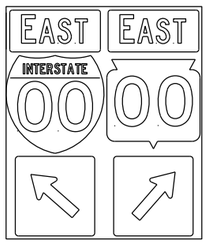


J2-3

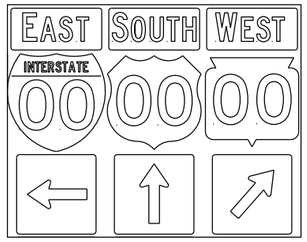
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



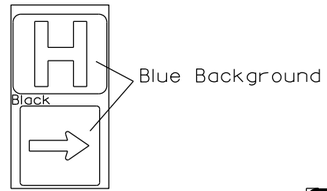
J3-1



J3-2

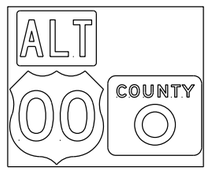


J3-3

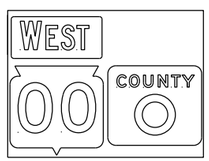


JH-1

J4-1

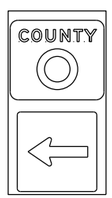


J4-2



J4-2

J12-1



J13-1

J32-1

J33-1

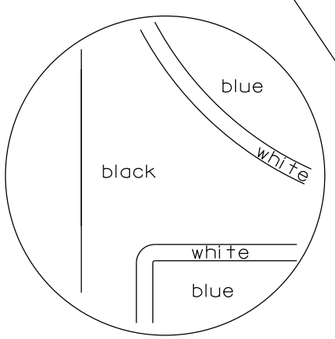
J22-1

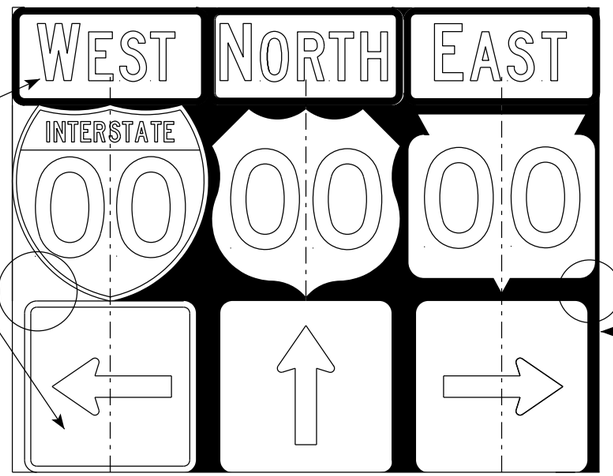
J23-1

JR13-1

JR23-1

JR99-1





NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

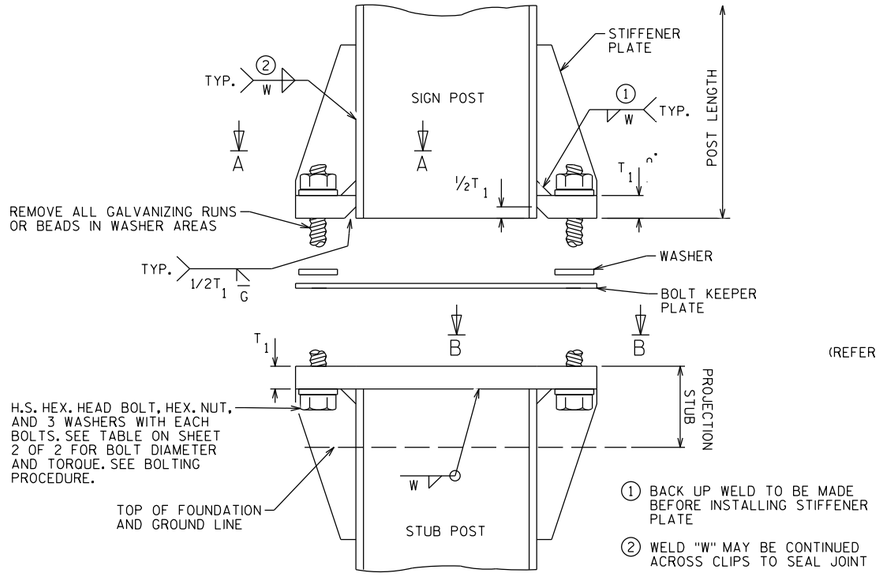
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/21 PLATE NO. A2-1S.9

PROJECT NO:

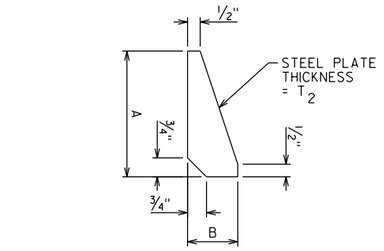
SHEET NO: 336 E



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

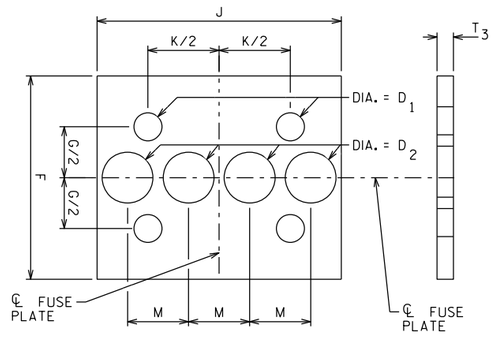
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

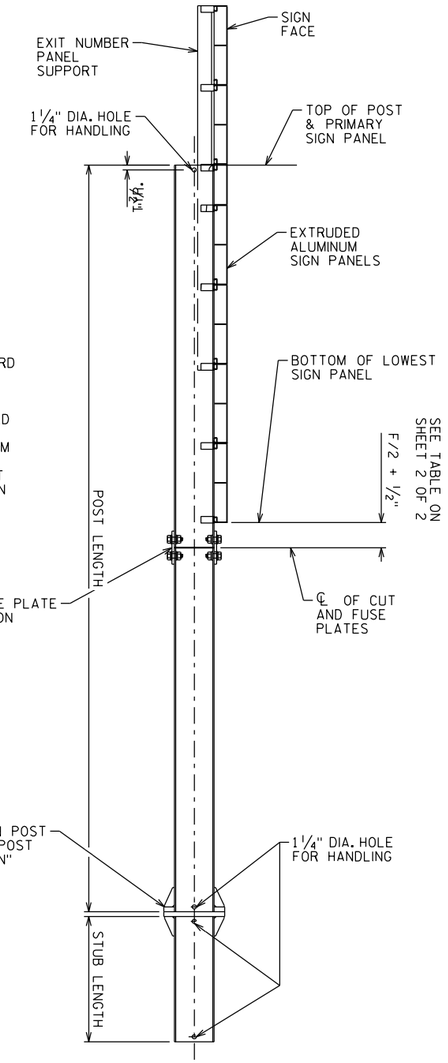
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

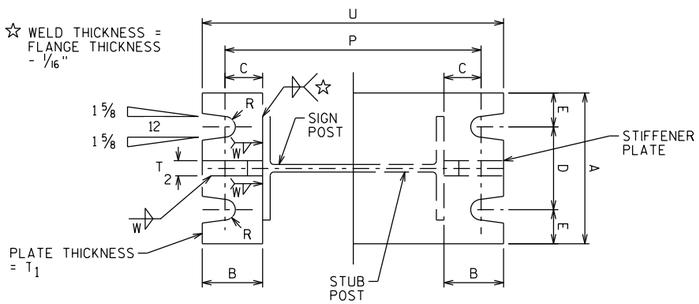
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



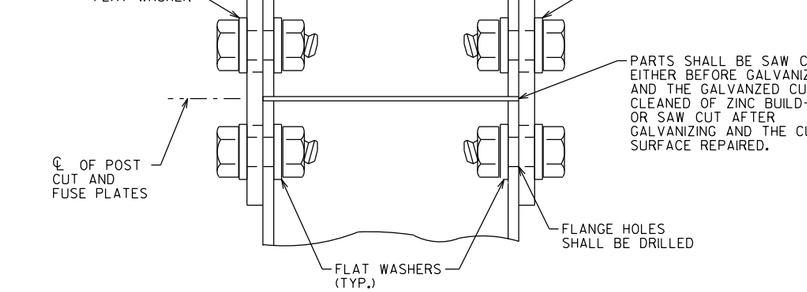
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

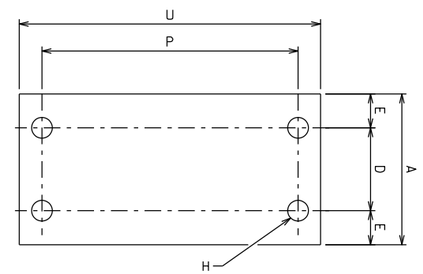


SECTION A-A

SECTION B-B



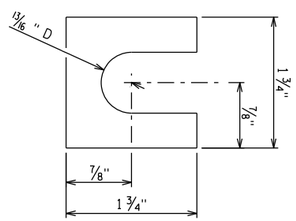
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

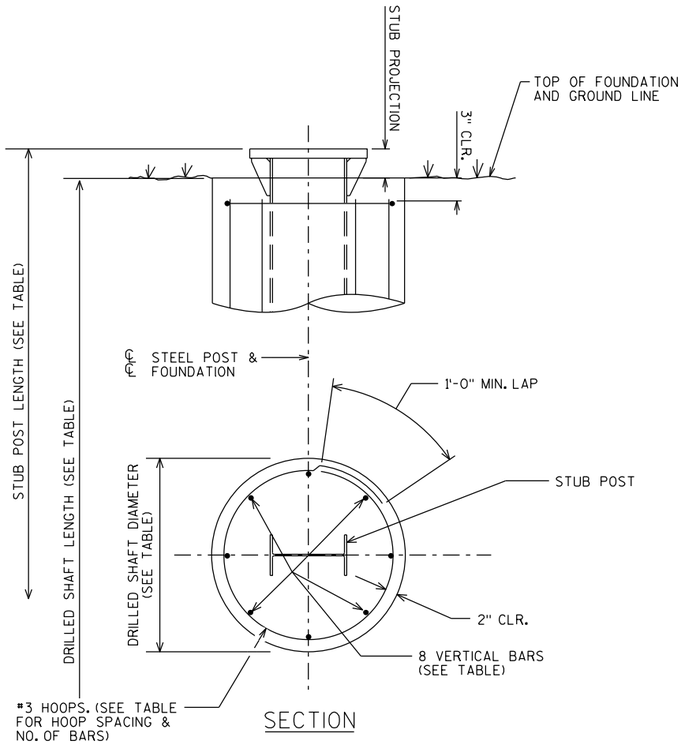
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

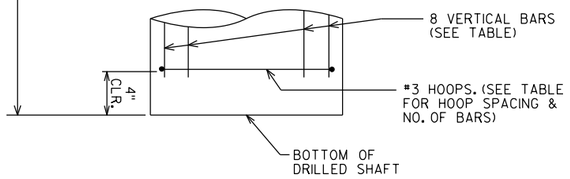
337

7

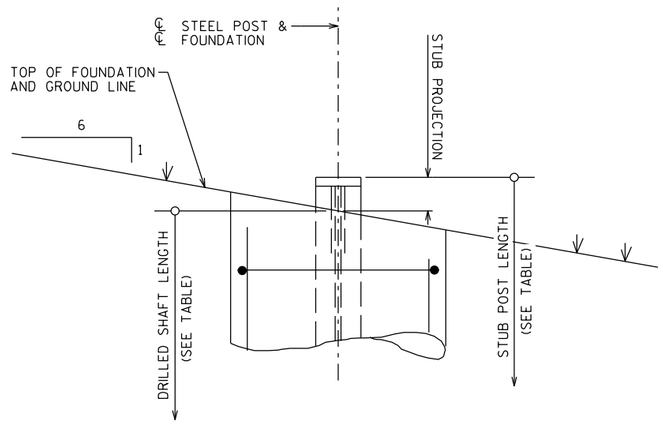
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

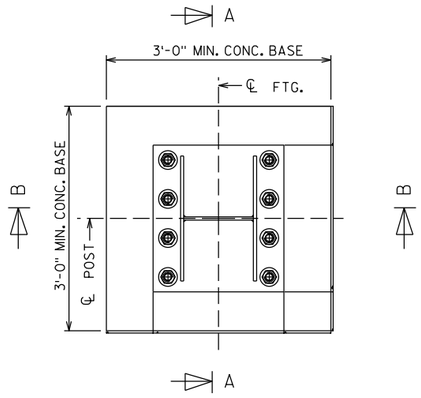
DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

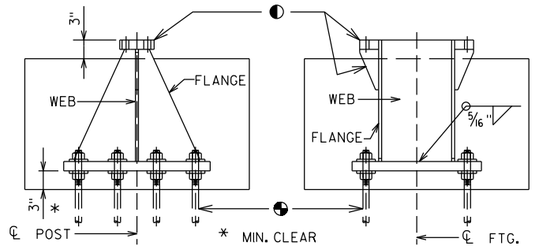
SHEET A3-1.20

338

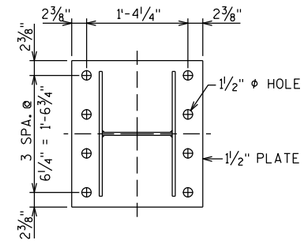
STUB AND ADHESIVE ANCHOR DETAILS



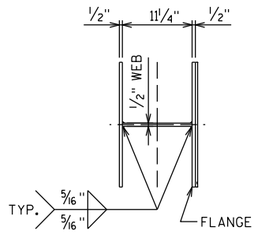
STUB SECTION



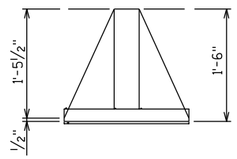
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

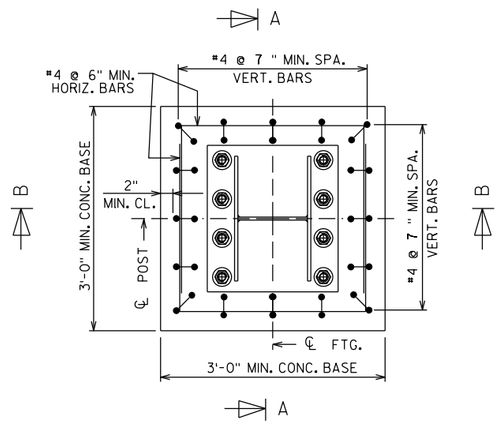
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

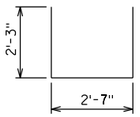
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

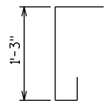
CONCRETE BASE DETAILS



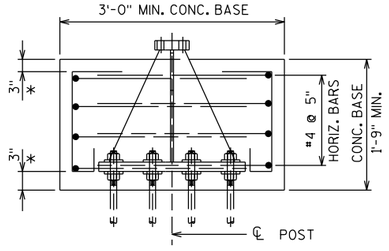
CONCRETE BASE PLAN



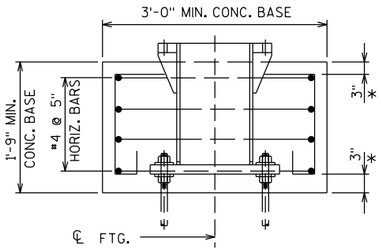
HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH



VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

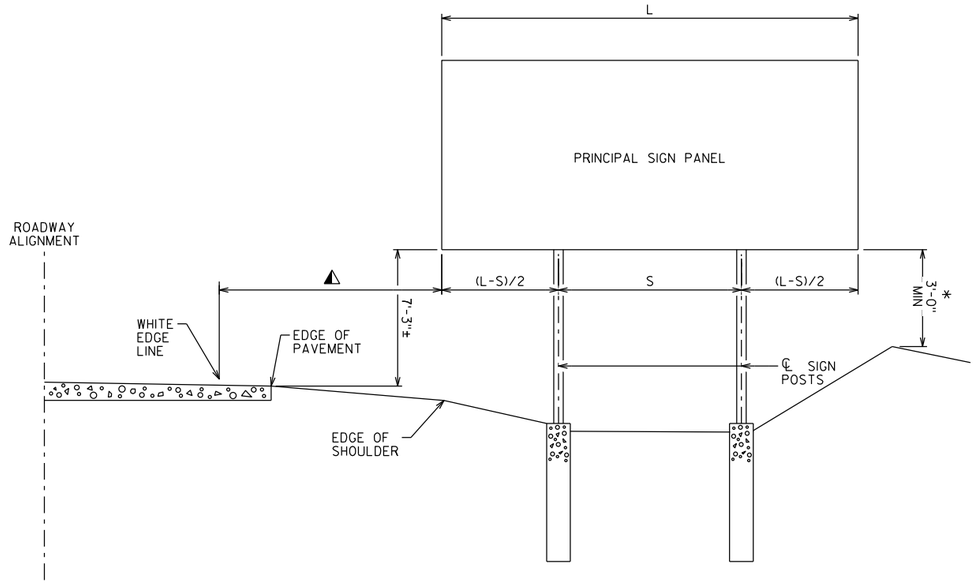
STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

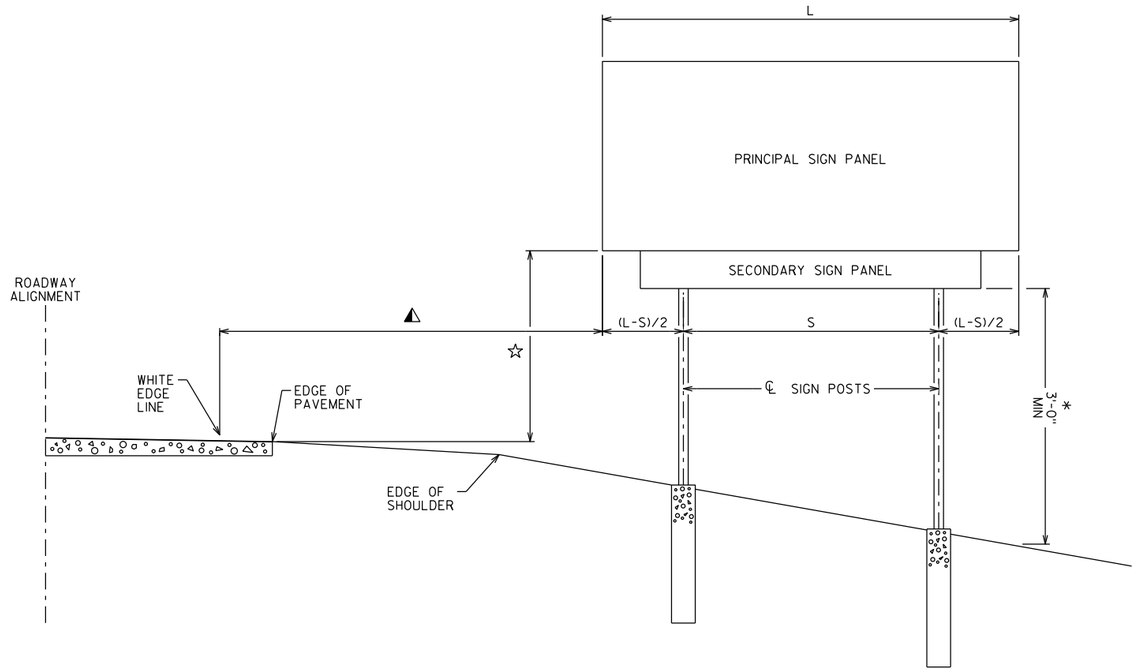
ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

339



INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

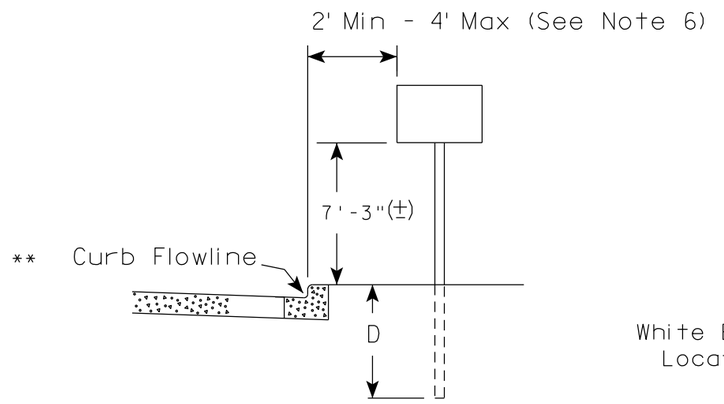
DRAWN BY | PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

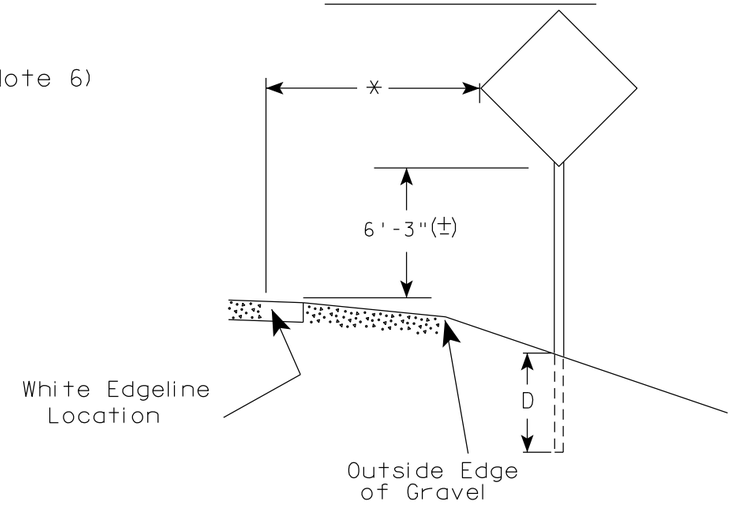
SHEET A4-1.10

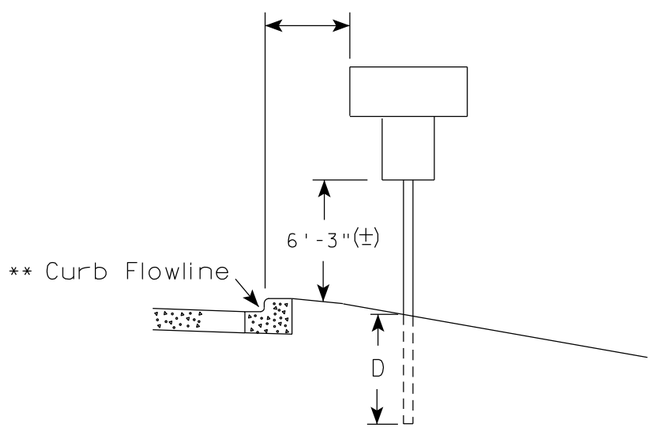
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 340	E

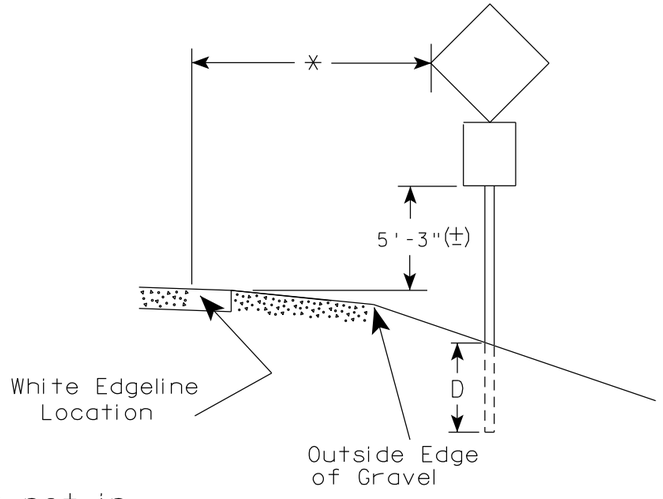
URBAN AREA



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.

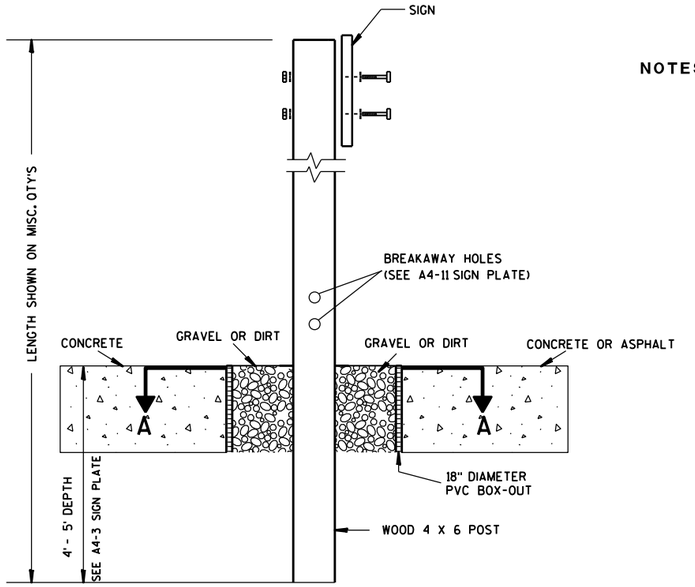
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

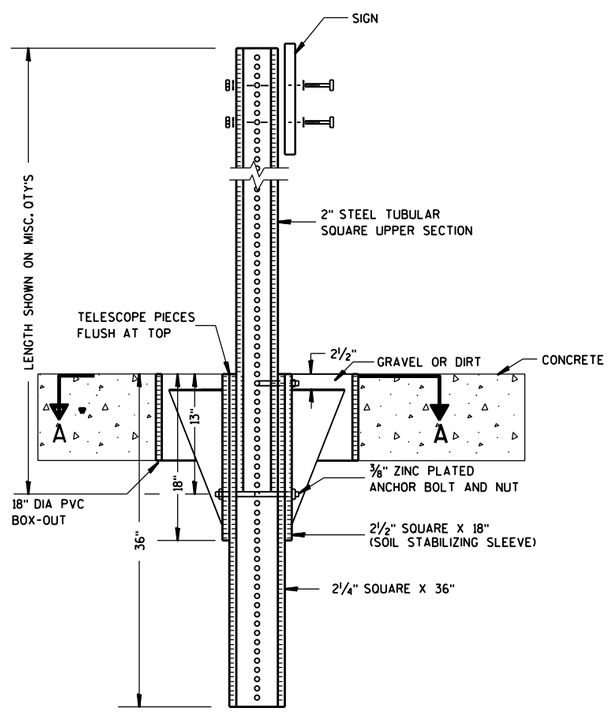
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 341	E



ELEVATION VIEW

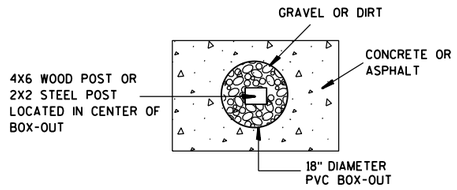
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

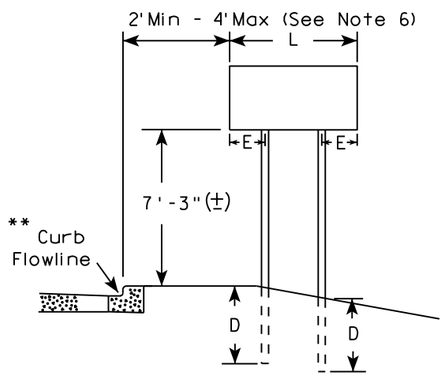
APPROVED Matthew R Rauch
for State Traffic Engineer

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

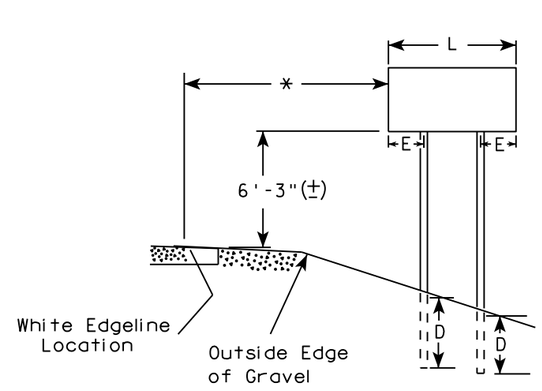
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

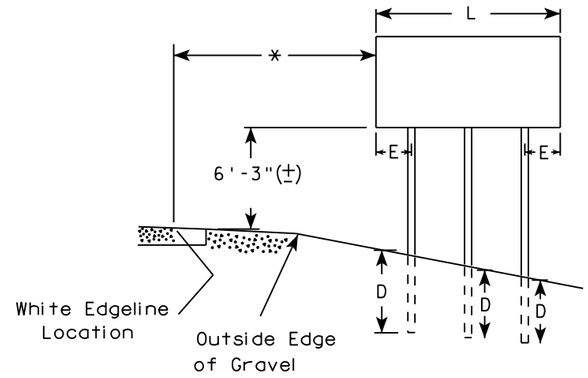
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

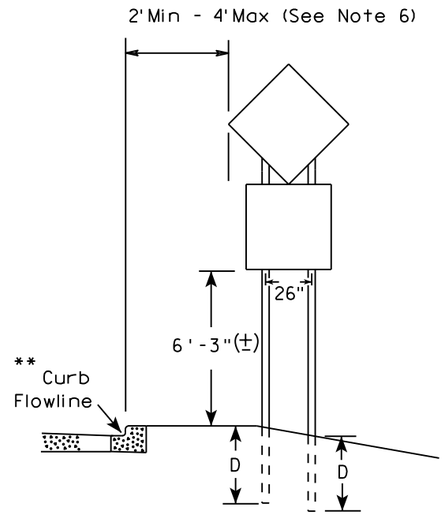
URBAN AREA



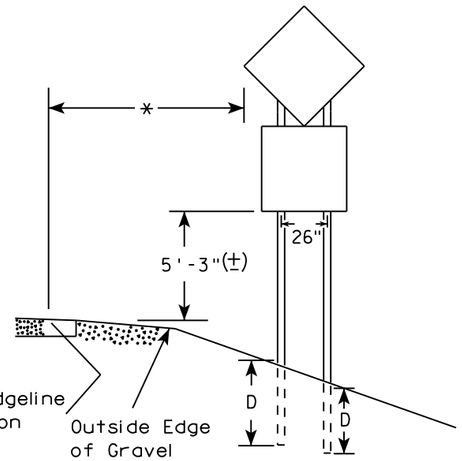
RURAL AREA (See Note 3)







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

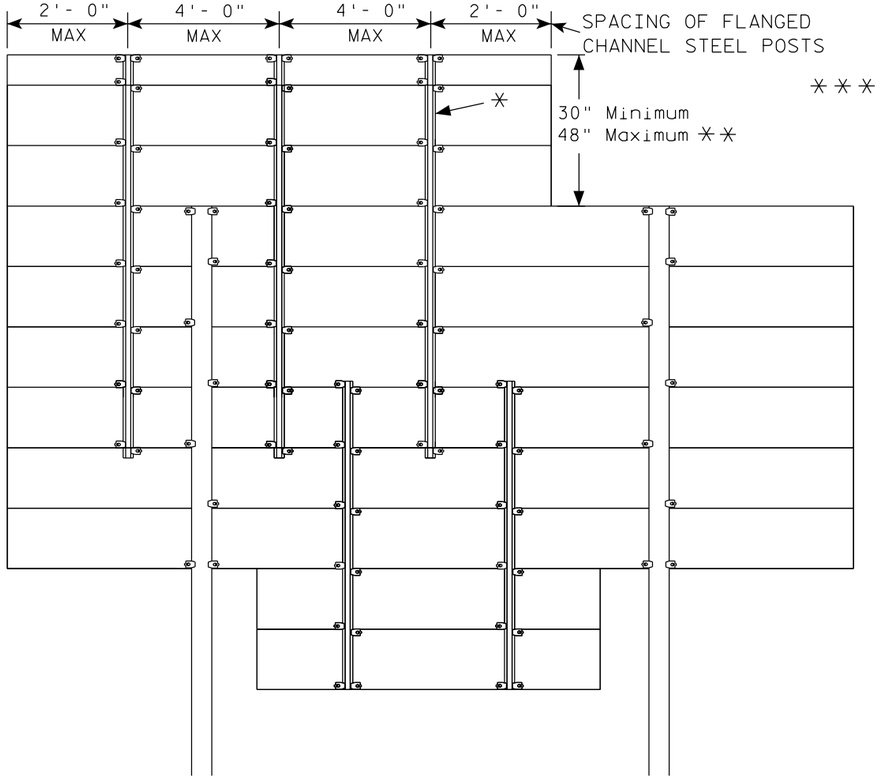
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 343	E

GROUND MOUNTED SIGN



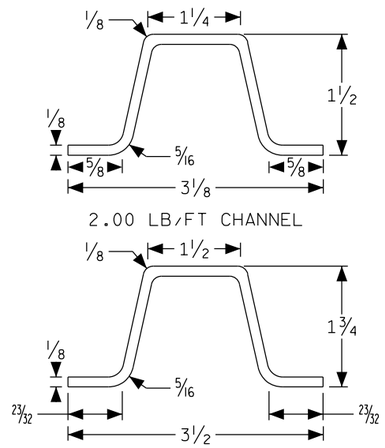
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

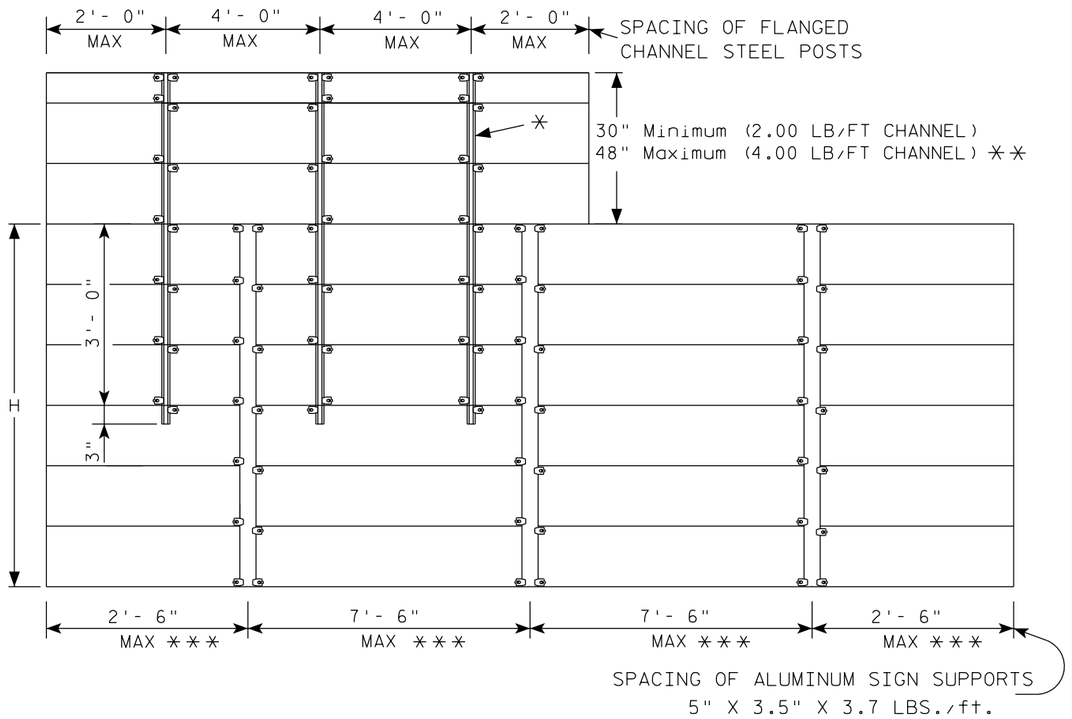
NOT TO SCALE



2.00 LB/FT CHANNEL

4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.

2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.

3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.

4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.

5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)

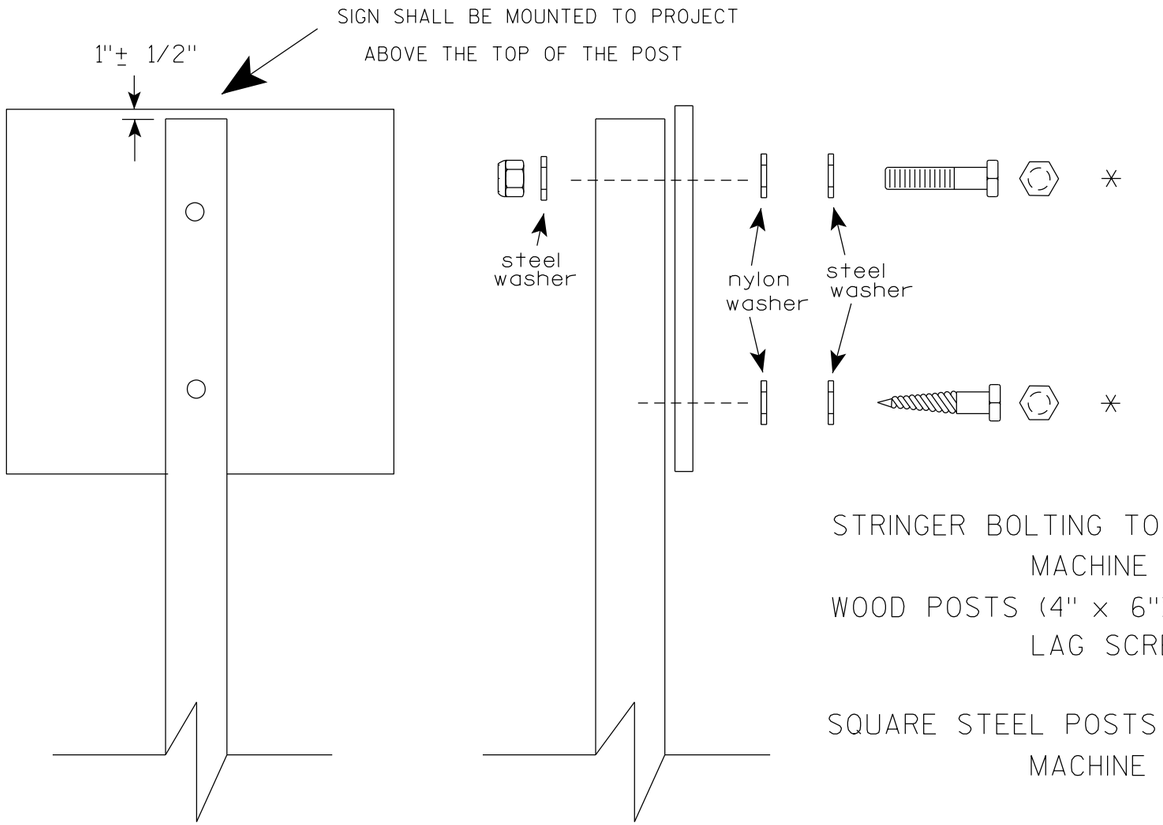
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12



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

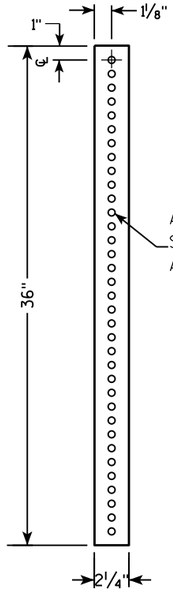
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

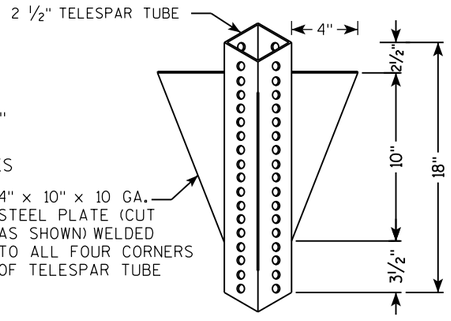
SHEET NO: 345 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

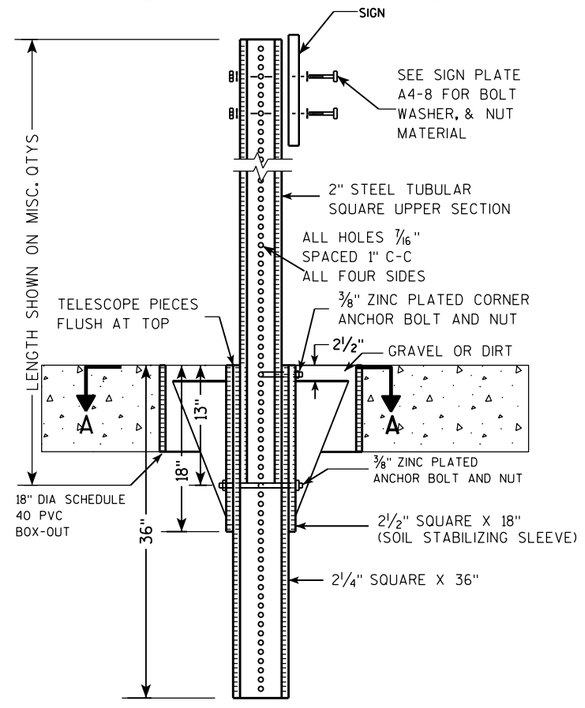
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



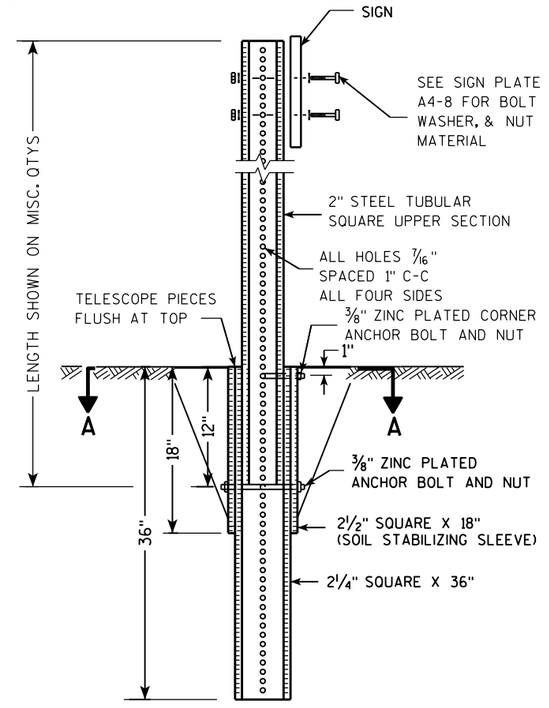
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

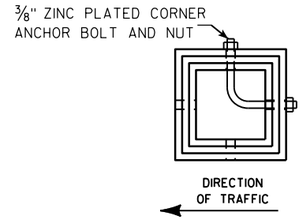


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

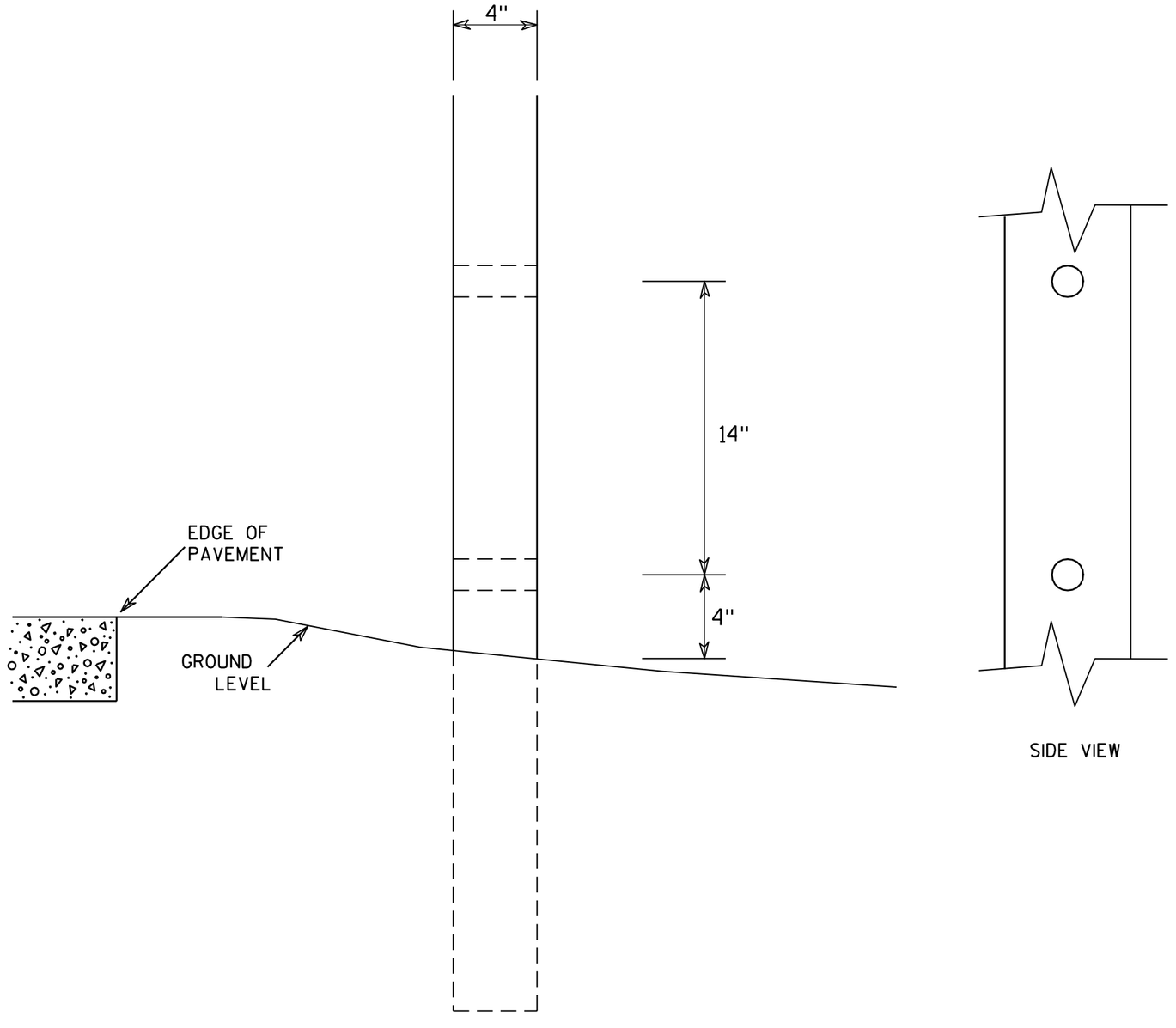
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 346 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.

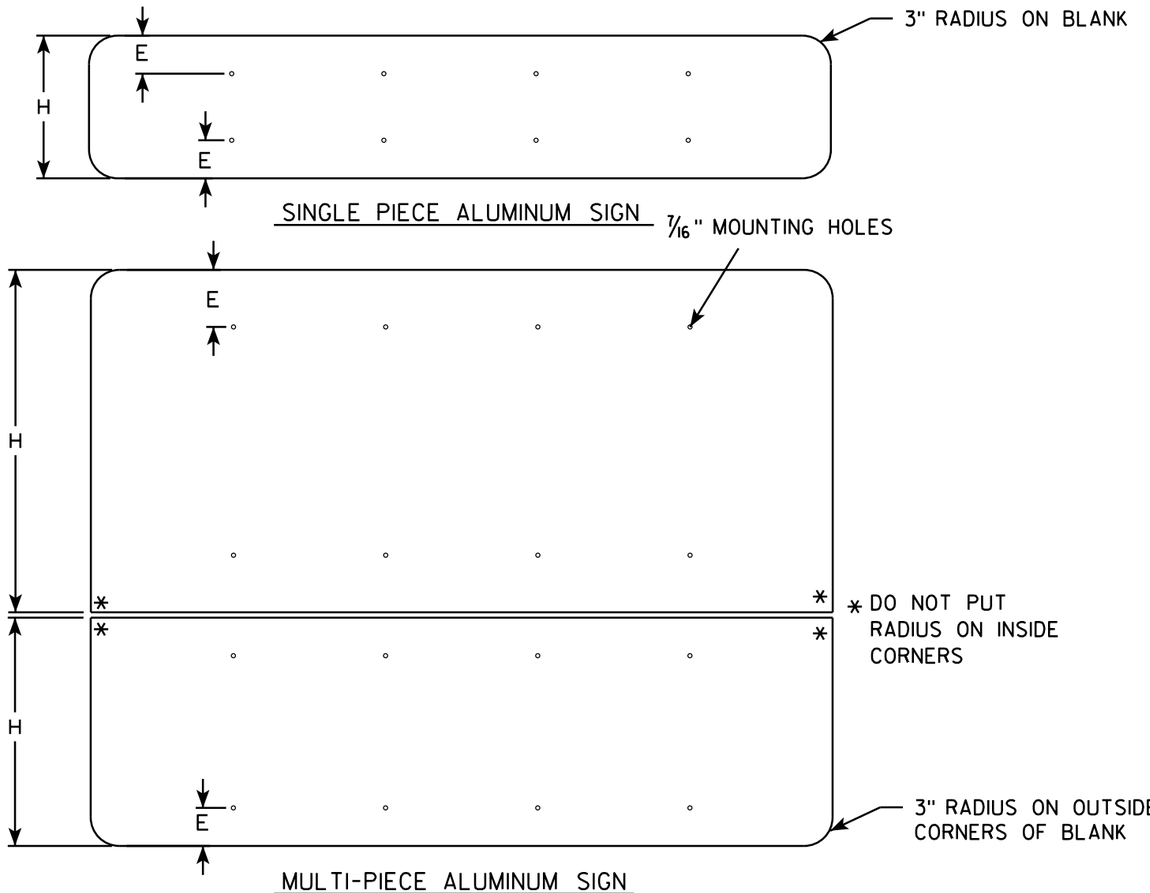
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

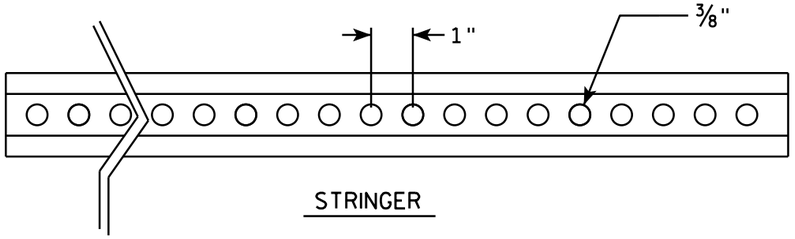
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 347	E



GENERAL NOTES

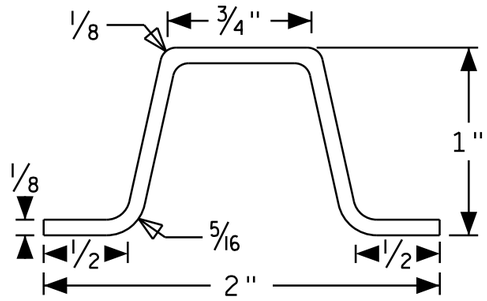
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

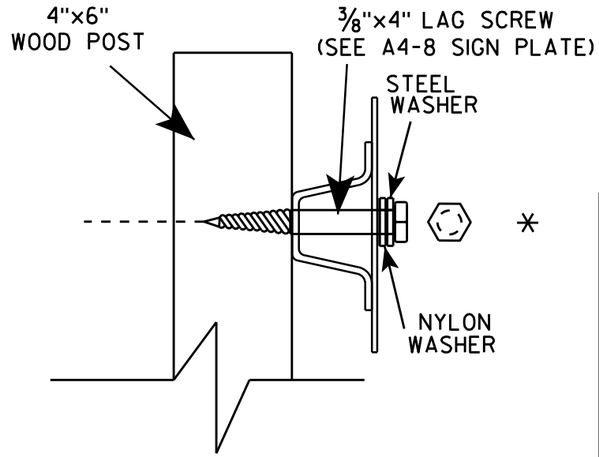


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

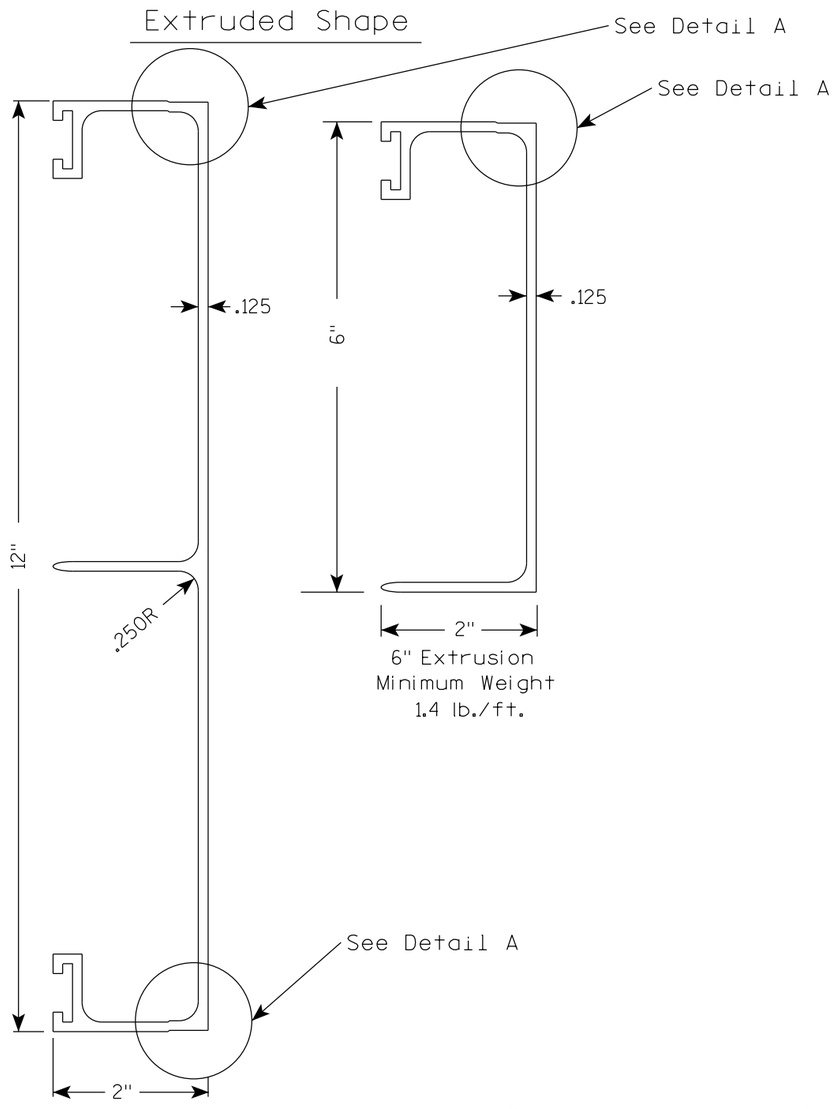
for State Traffic Engineer

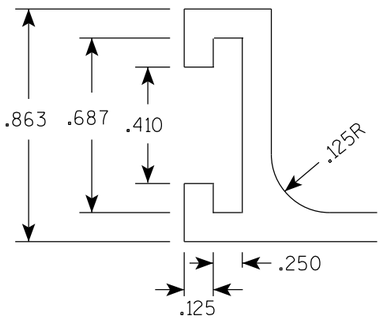
DATE 4/26/16 PLATE NO A4-18.1

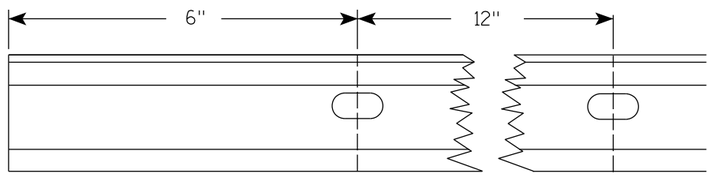
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape







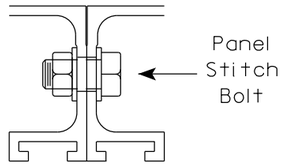
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

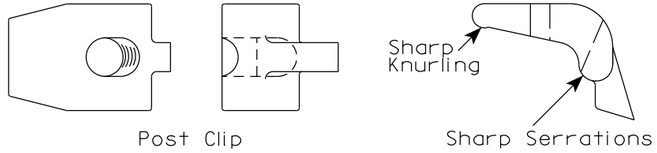
The hardware includes:

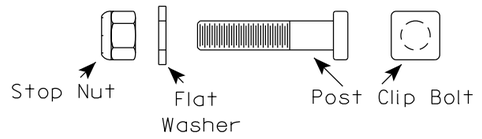
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

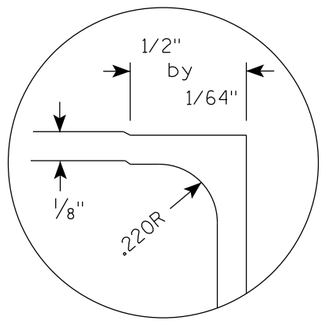
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

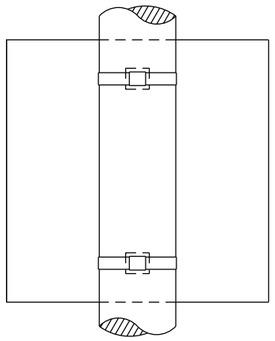
DATE 1/07/20 PLATE NO. A5-2.10

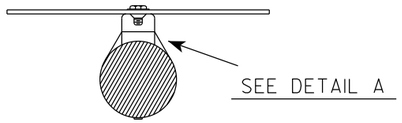
PROJECT NO:

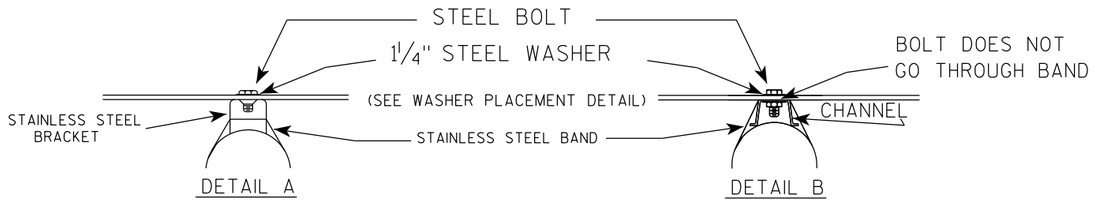
SHEET NO: 349 E

BANDING

SINGLE SIGN



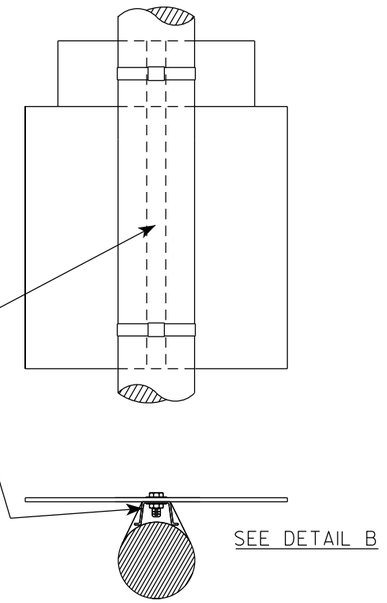




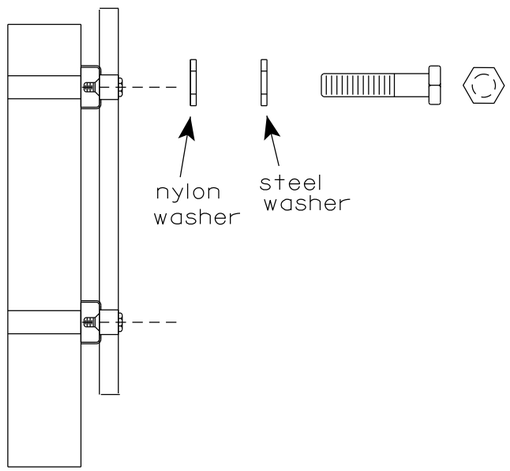
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

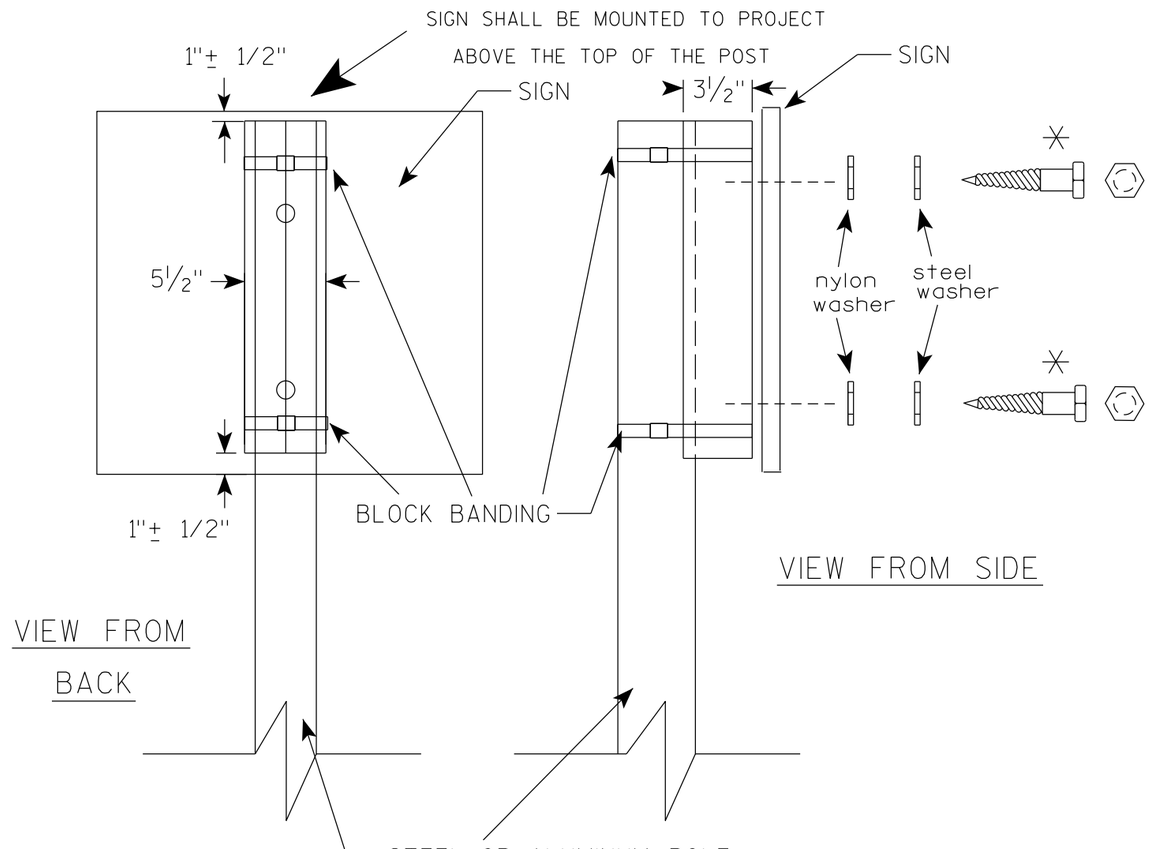
WISCONSIN DEPT OF TRANSPORTATION

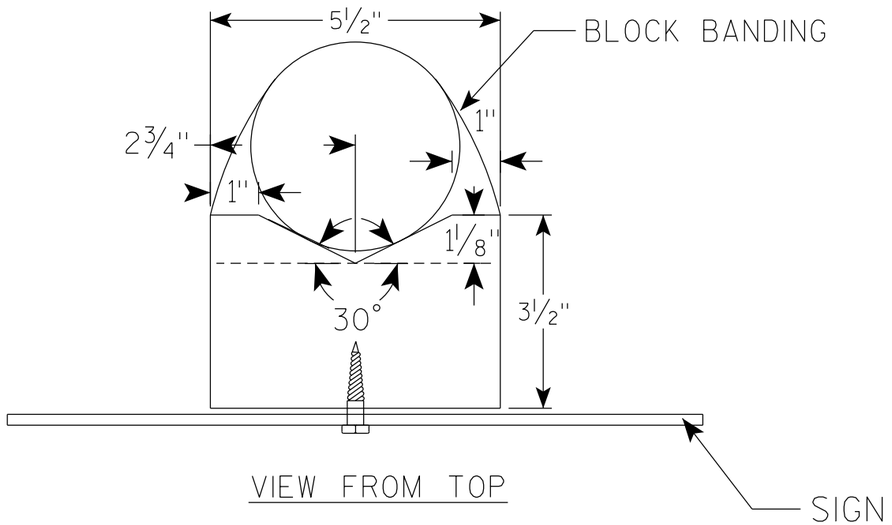
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 350	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

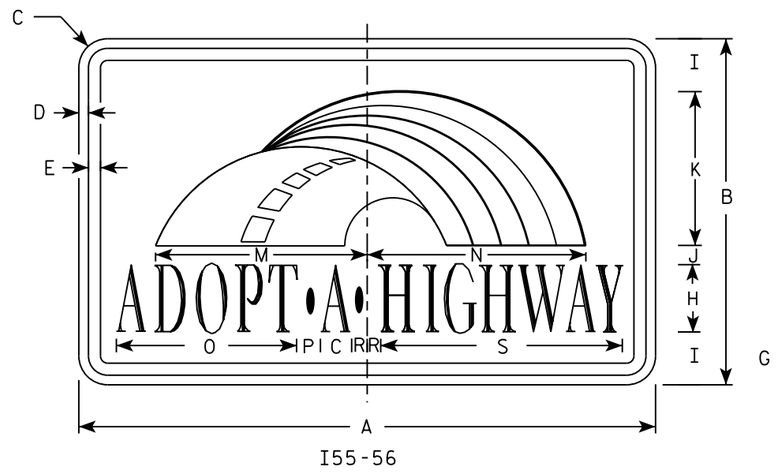
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

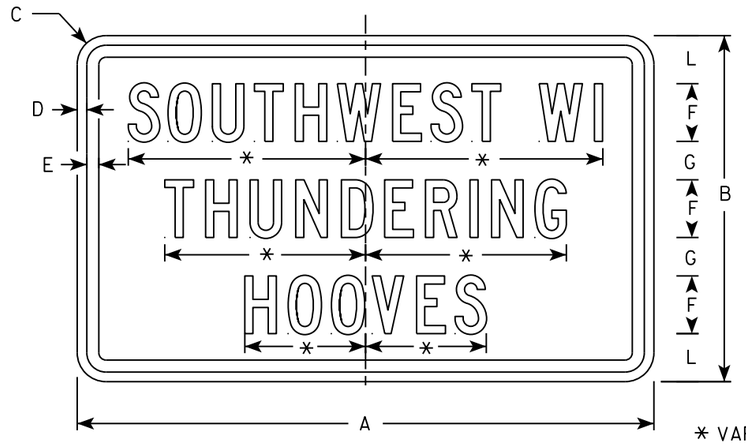
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 351 E



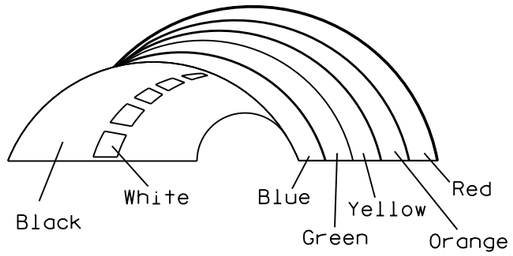
I55-56



I55-56P

* VARIES

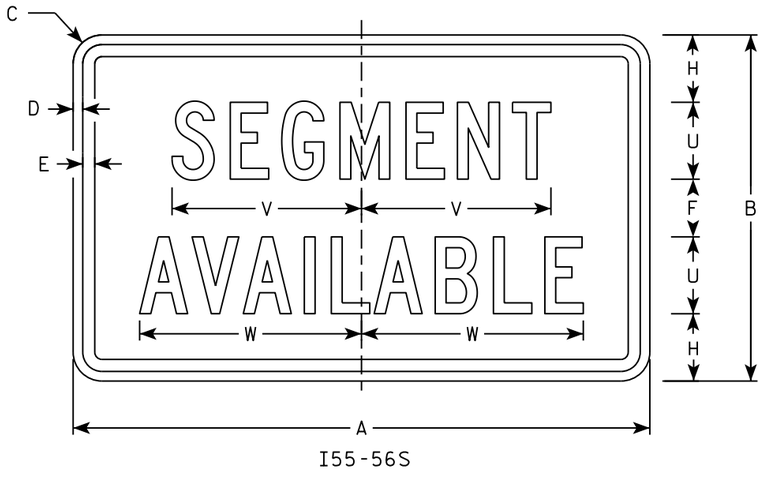
Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - (See Note 4)
3. Message Series - (See Note 5)
4. Border - Blue
   Adopt a Highway - Red
   All other Text - Blue
5. Adopt a Highway - Dutch 8011L
   All other Text - Series C
6. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.



I55-56S

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	18	1 1/2	1/2	5/8	3	2	3 1/2	2 3/4	1	8	2 1/2	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2	4	9 7/8	11 1/2				3.75
3																											
4																											
5																											

STANDARD SIGN
I55-56

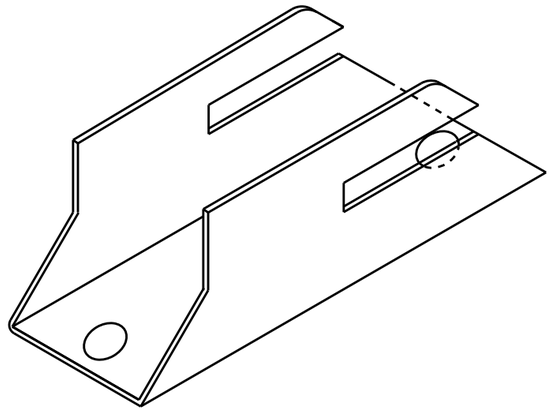
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

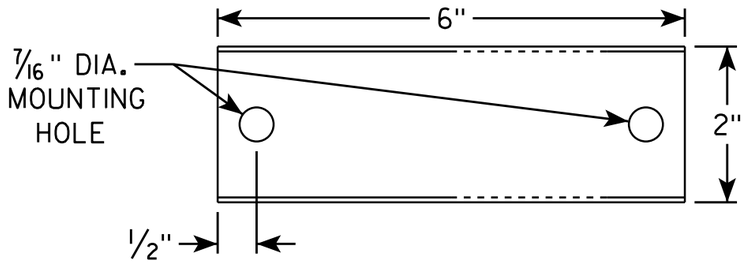
DATE 2/20/18 PLATE NO. I55-56.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 352 | E

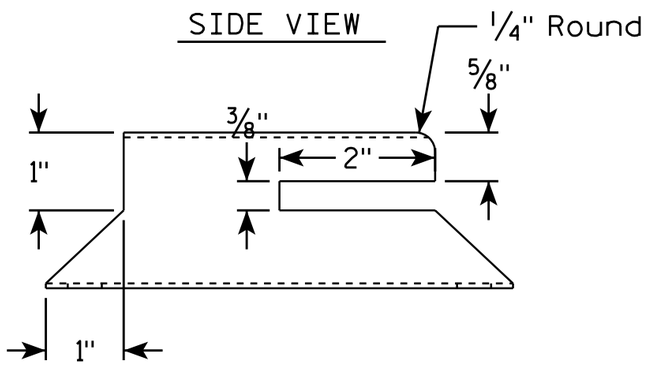
ISOMETRIC VIEW



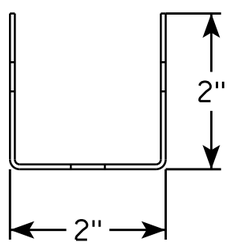
TOP VIEW



SIDE VIEW



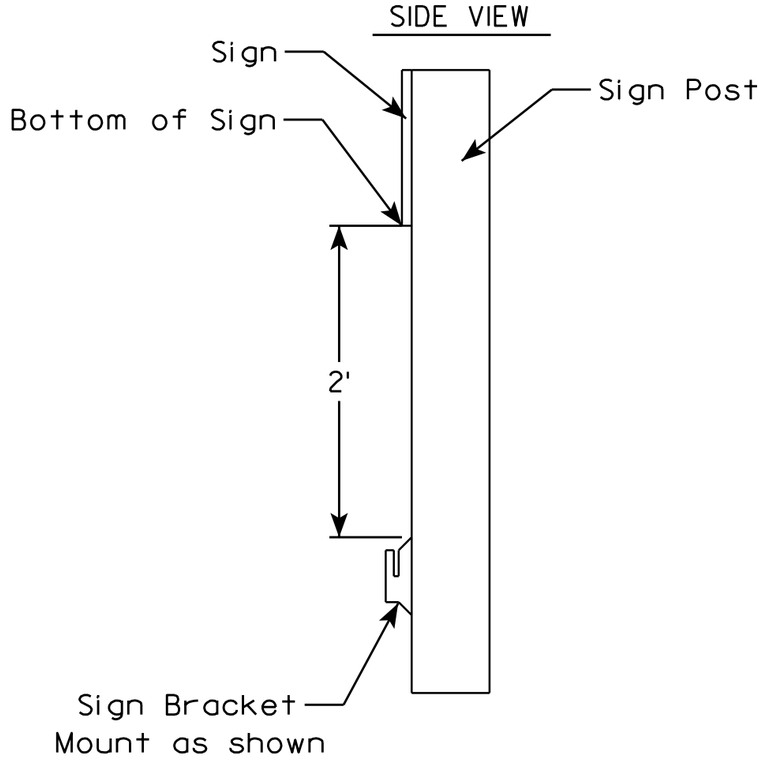
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

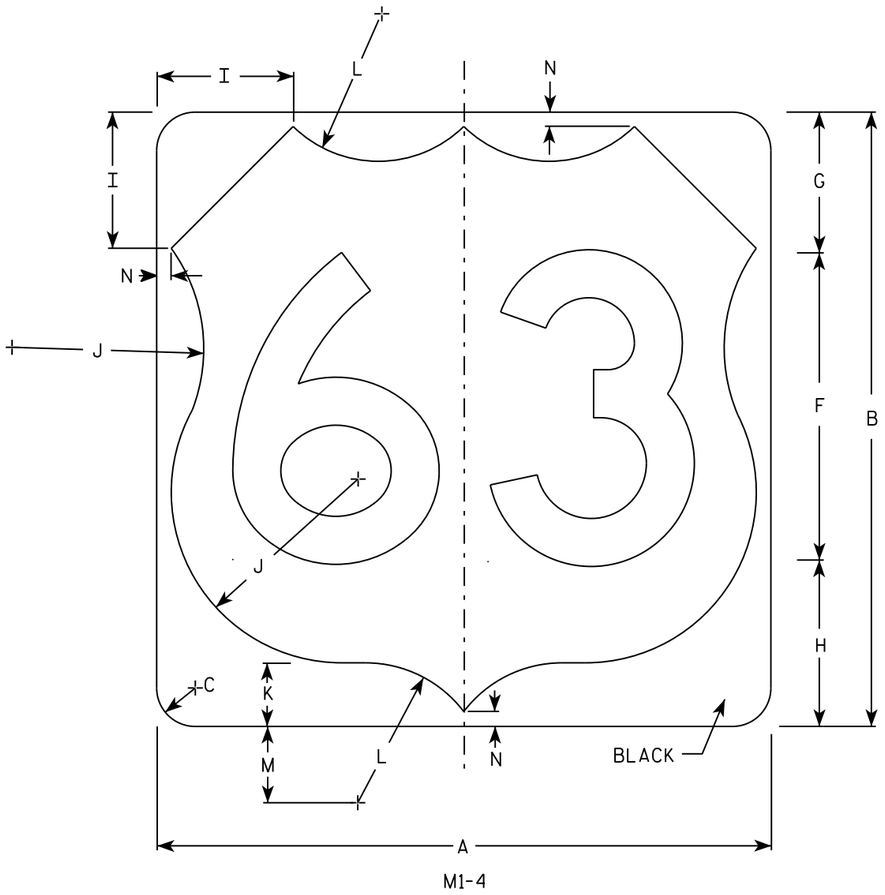
DATE 4/26/16 PLATE I55-56B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

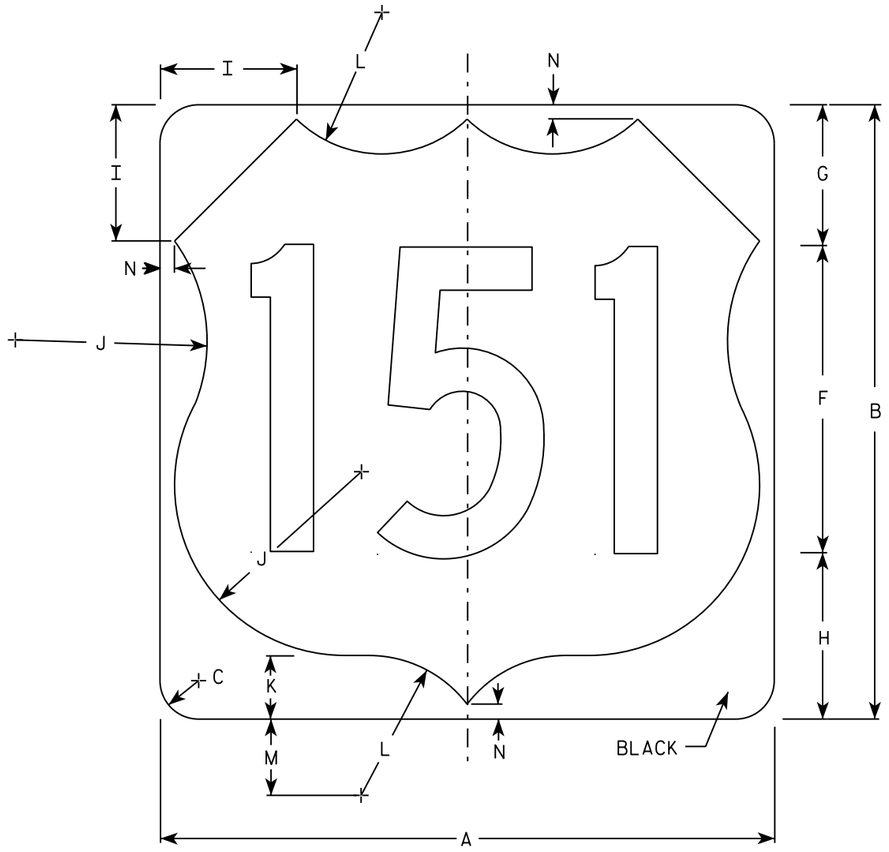
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42

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

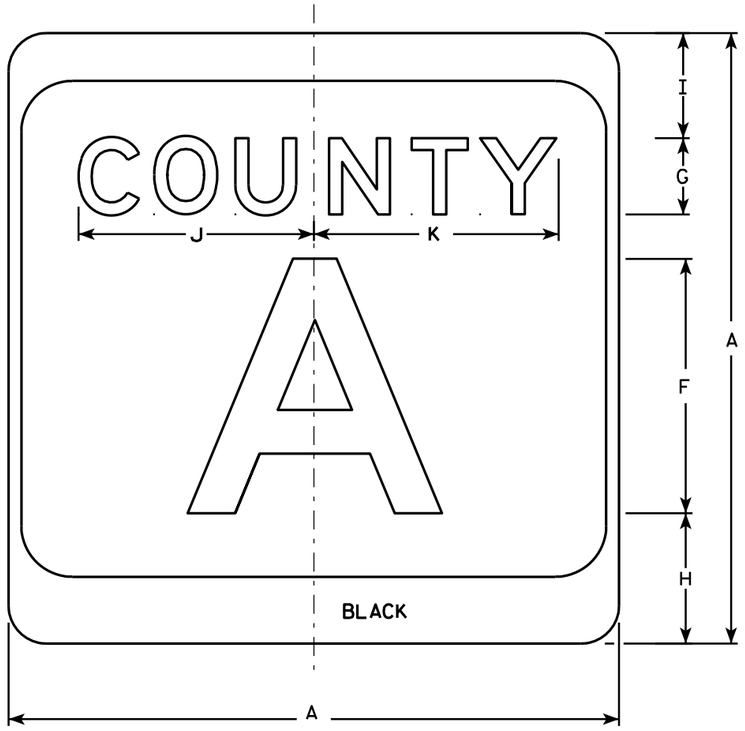
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

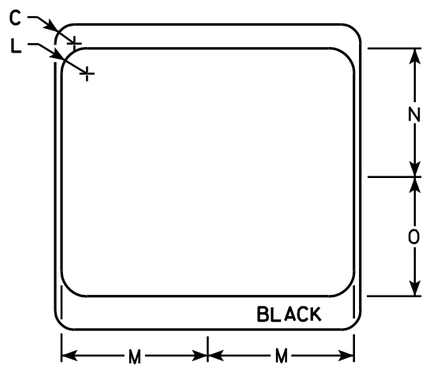
APPROVED Matthew R Rauch
for State Traffic Engineer

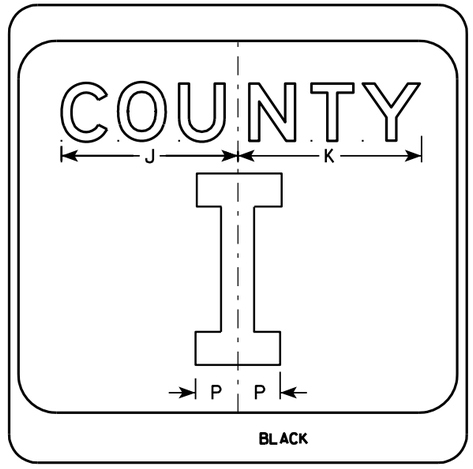
DATE 3/16/18 PLATE NO. M1-4.10

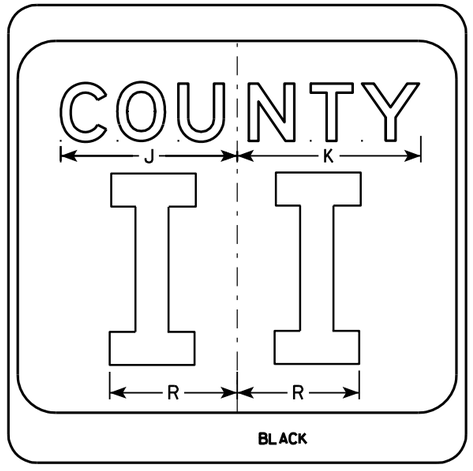
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 354 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

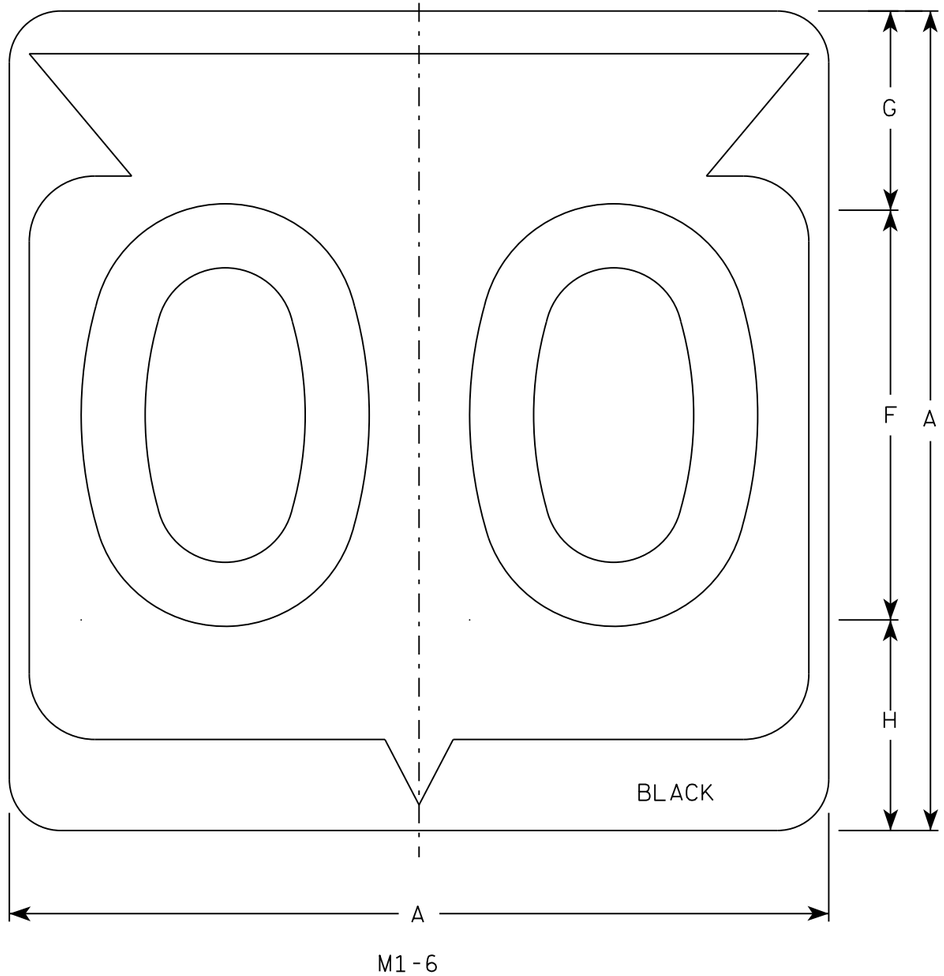
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

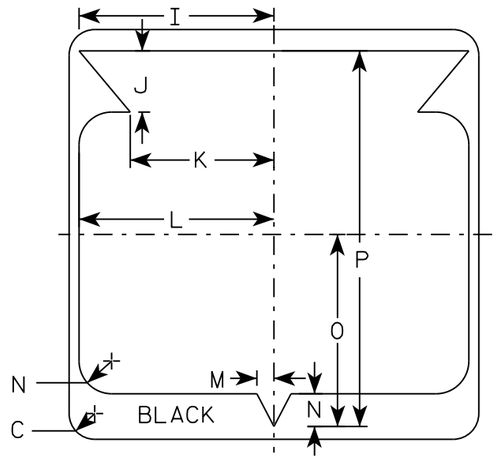
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 355	E



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

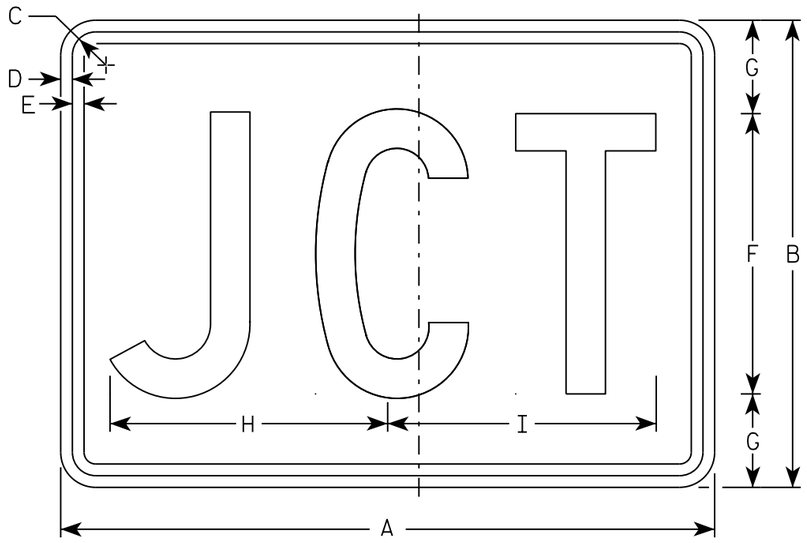
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

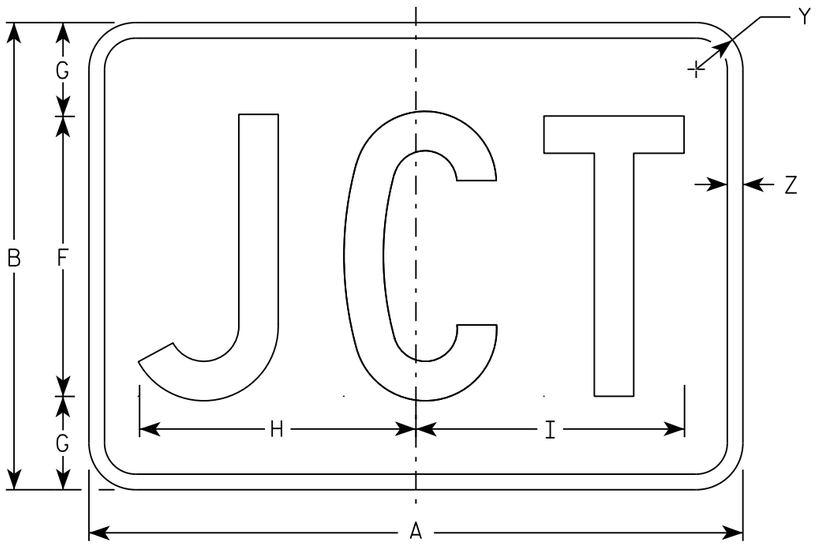
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 356 E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

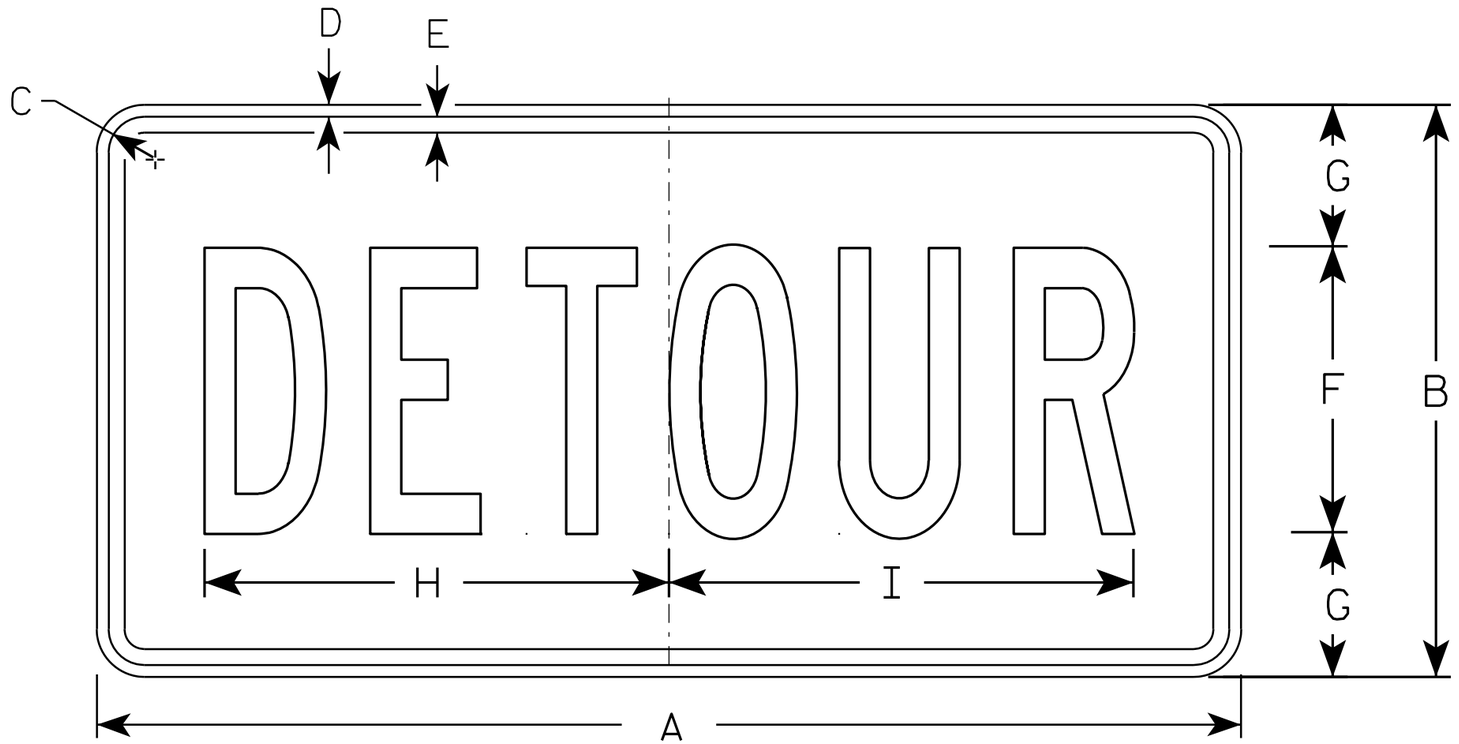
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 357 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

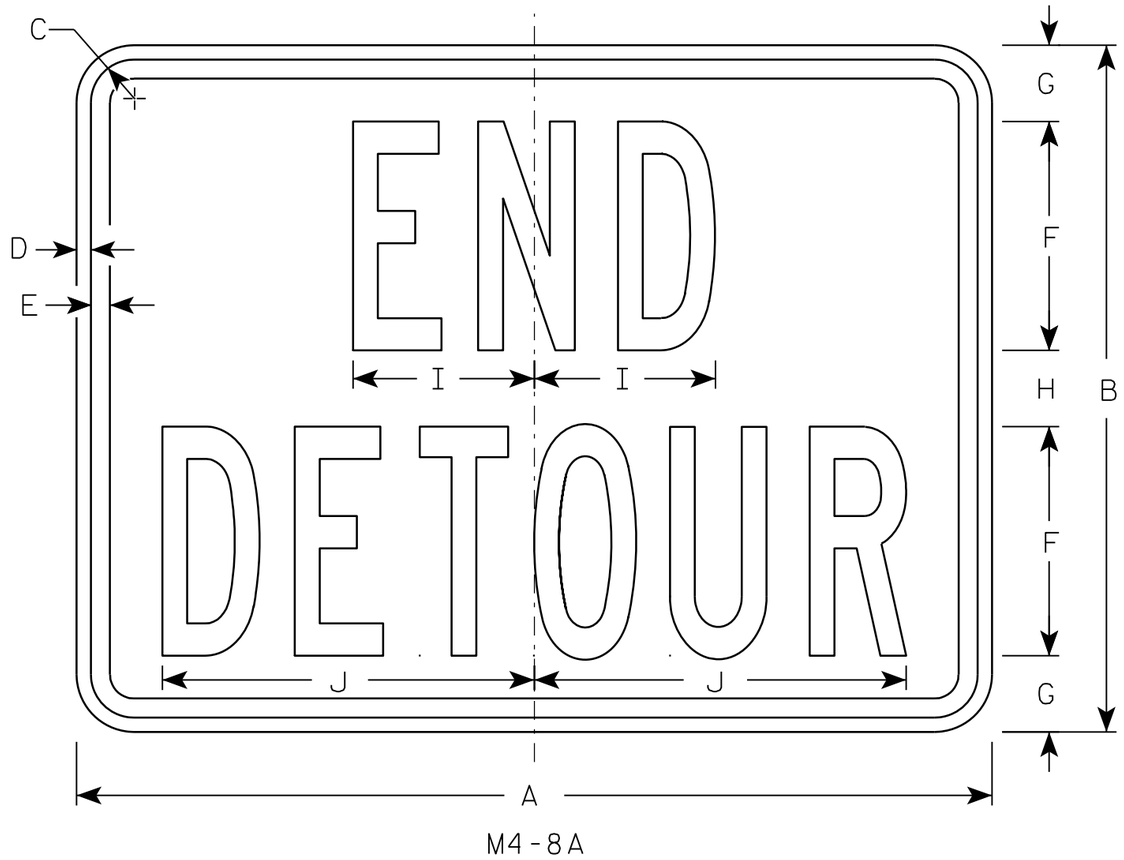
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 358	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

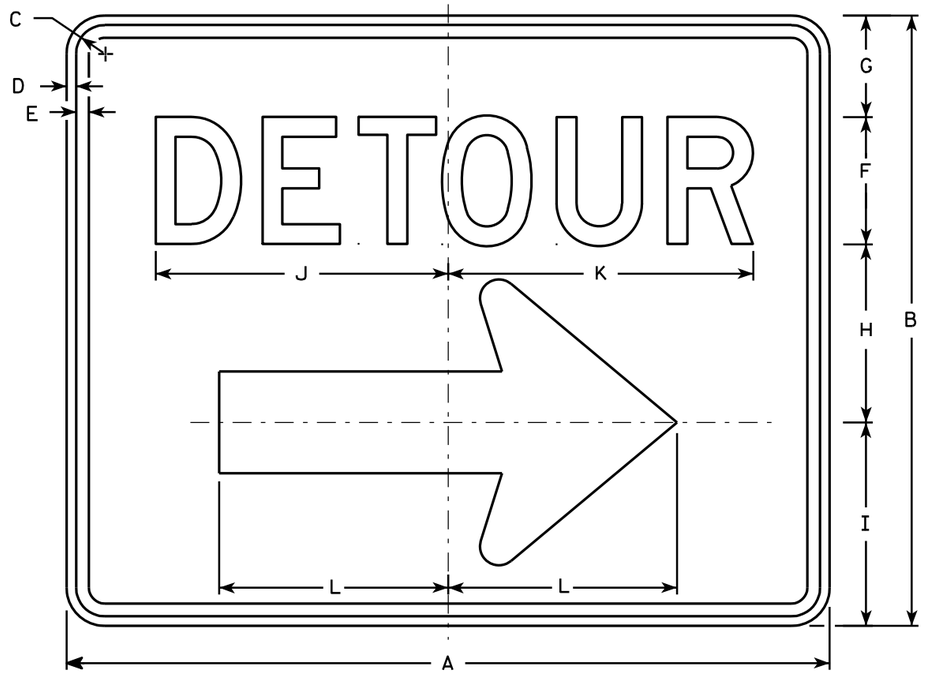
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

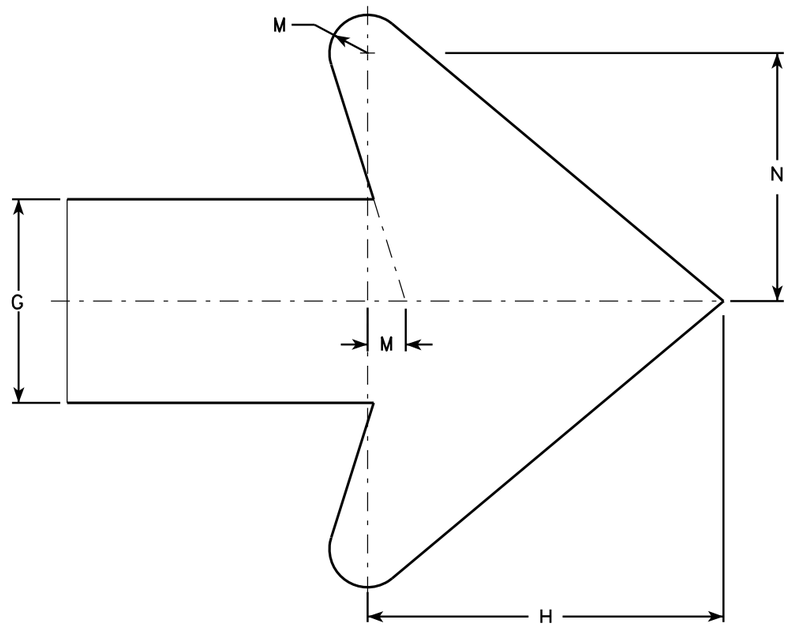
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 359	E



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

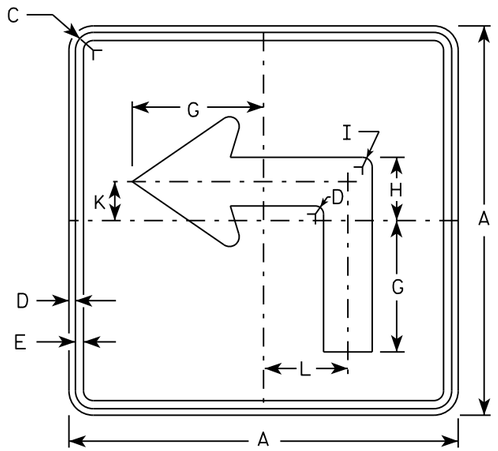
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

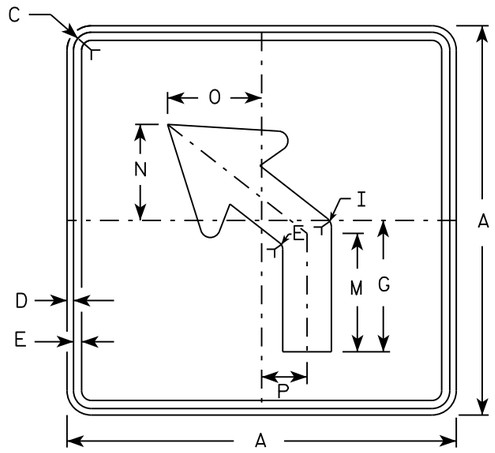
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

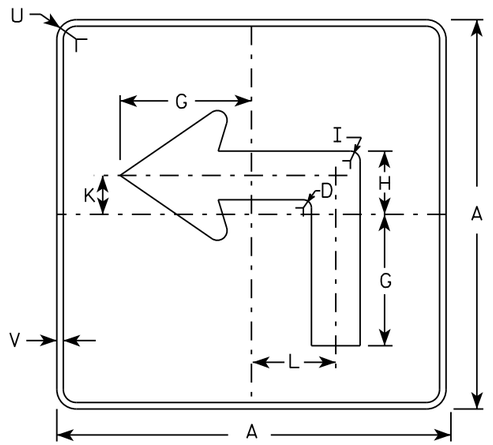
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 360 | E



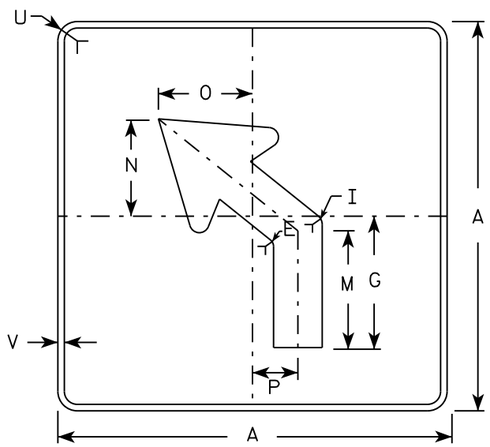
M5-1L
MM5-1L
MO5-1L
MP5-1L



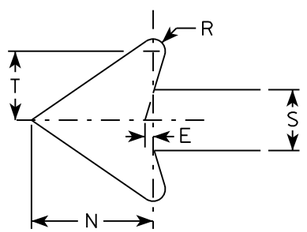
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

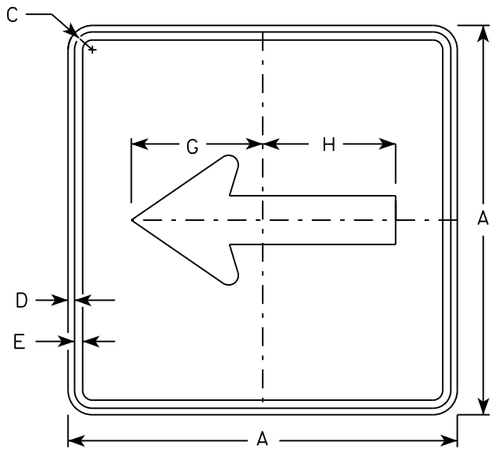
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

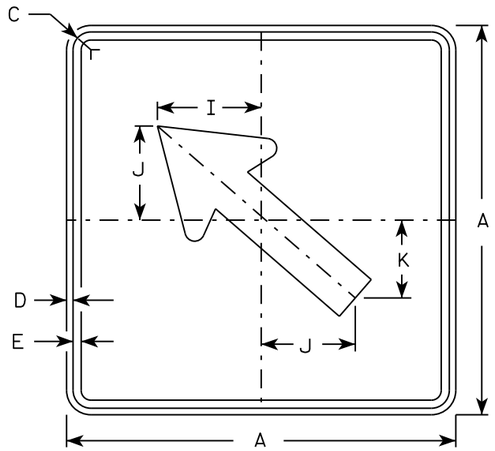
DATE 10/15/15 PLATE NO. M5-1.13

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



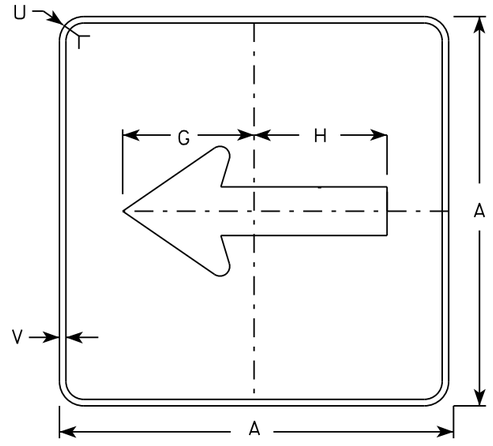
M6-1
MM6-1
MO6-1
MP6-1



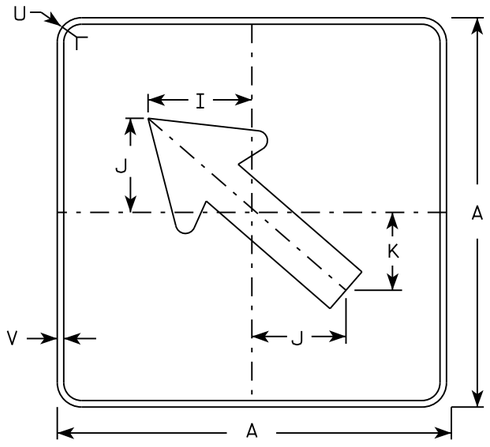
M6-2
MM6-2
MO6-2
MP6-2

NOTES

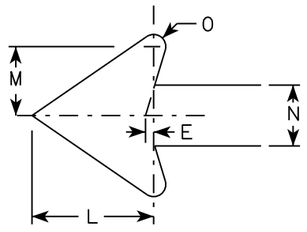
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

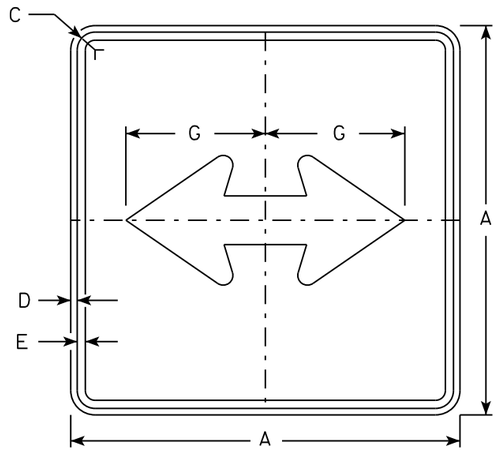
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

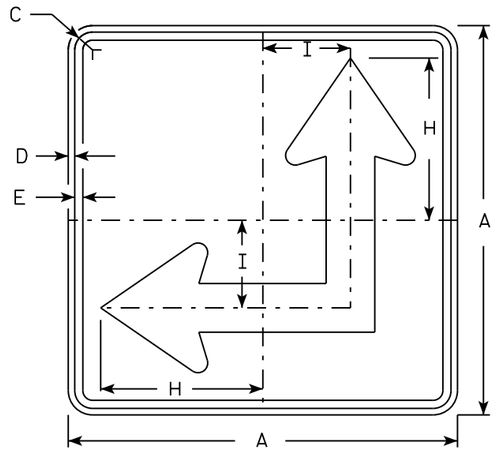
DATE 10/15/15 PLATE 362 M6-1.15

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



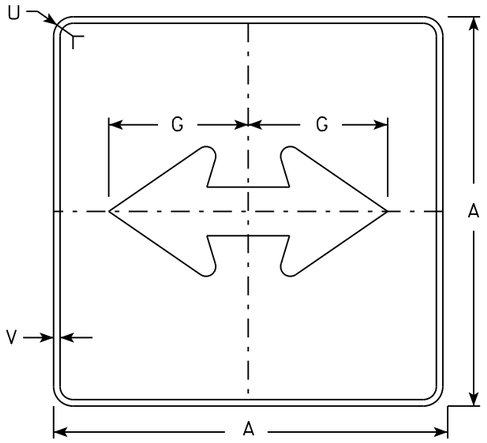
M6-4
MM6-4
MO6-4
MP6-4



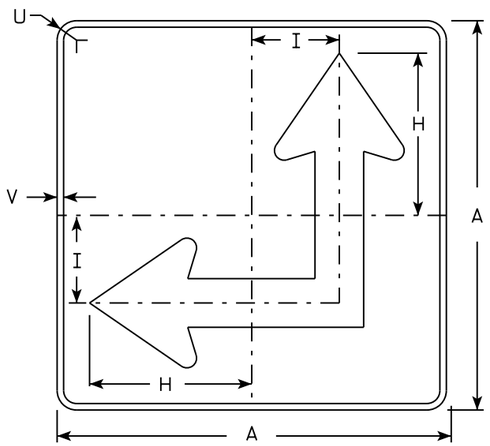
M6-6
MM6-6
MO6-6
MP6-6

NOTES

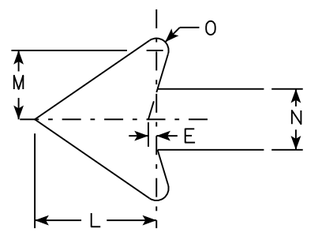
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - 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

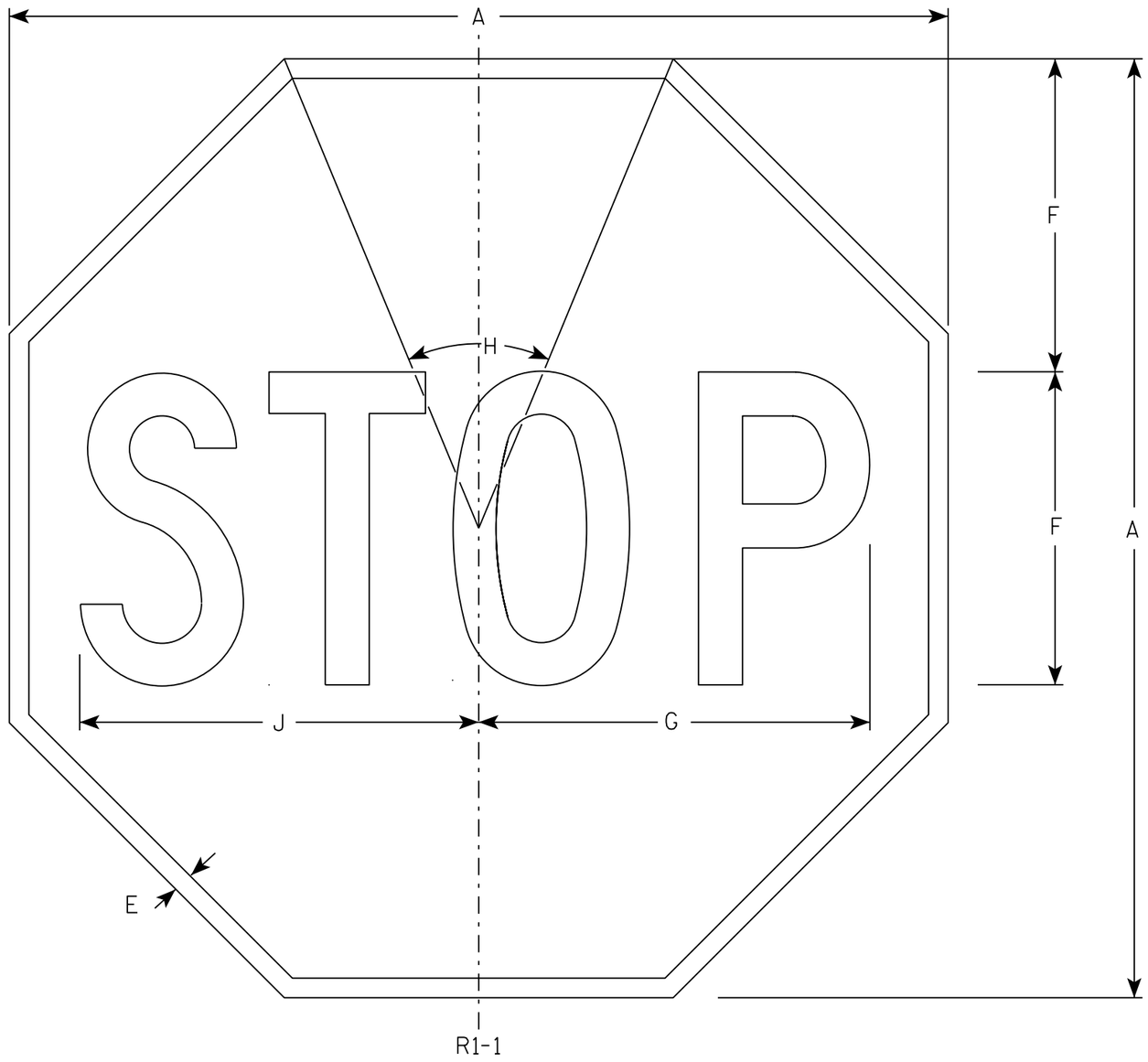
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 363 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

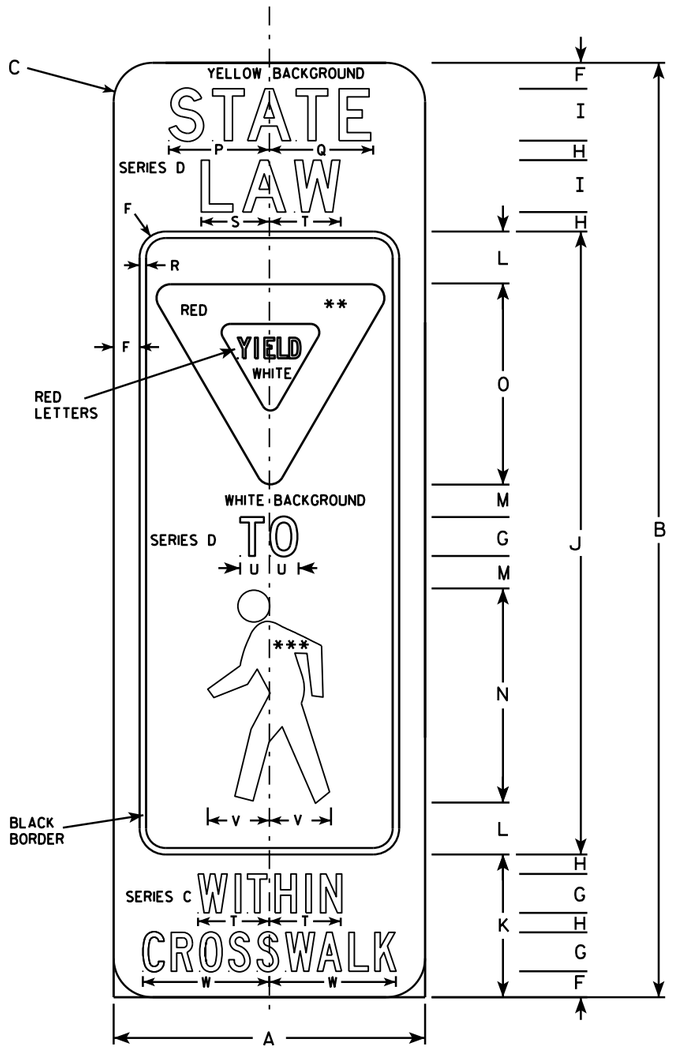
STANDARD SIGN
R1-1

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: 364	E



R1-6

** INSERT R1-2 AND SIZE TO FIT

*** INSERT W11-2 AND SIZE TO FIT

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - YELLOW
   Message - BLACK
   YIELD SYMBOL - RED ON WHITE
   PED SYMBOL - BLACK ON WHITE
3. Message Series - AS SHOWN AND IN TABLE
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	12	36	1 ½			1	1 ½C	¾	2 D	24	5 ½	2	1 ¼	8 ¼	7 ¾	3 ⅞	4	¼	2 ⅝	2 ¾	1 ⅛	2 ⅜	4 ⅞				3.0
2M	12	36	1 ½			1	1 ½C	¾	2 D	24	5 ½	2	1 ¼	8 ¼	7 ¾	3 ⅞	4	¼	2 ⅝	2 ¾	1 ⅛	2 ⅜	4 ⅞				3.0
3																											
4																											
5																											

STANDARD SIGN
R1-6

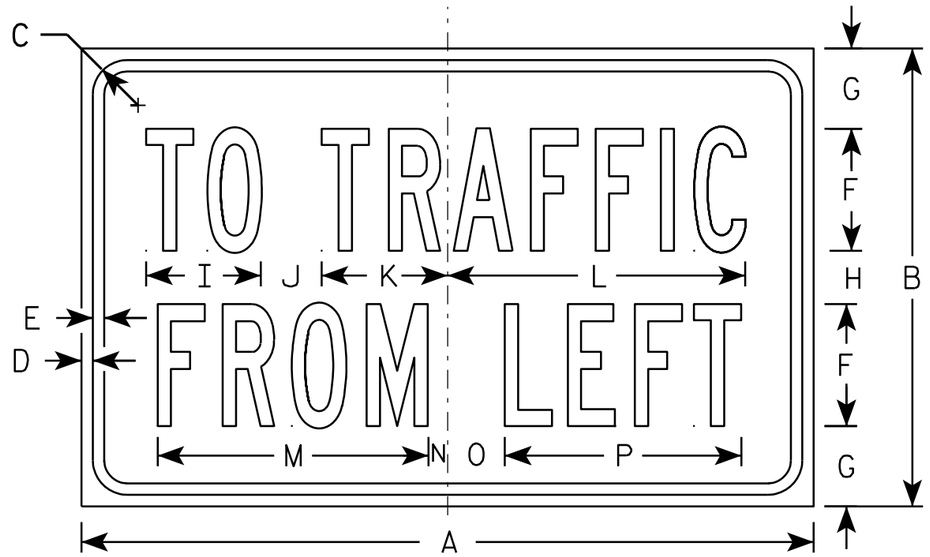
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/29/14 PLATE NO. R1-6.3

PROJECT NO:

SHEET NO: E



R1-54

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 - B

R1-54

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	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

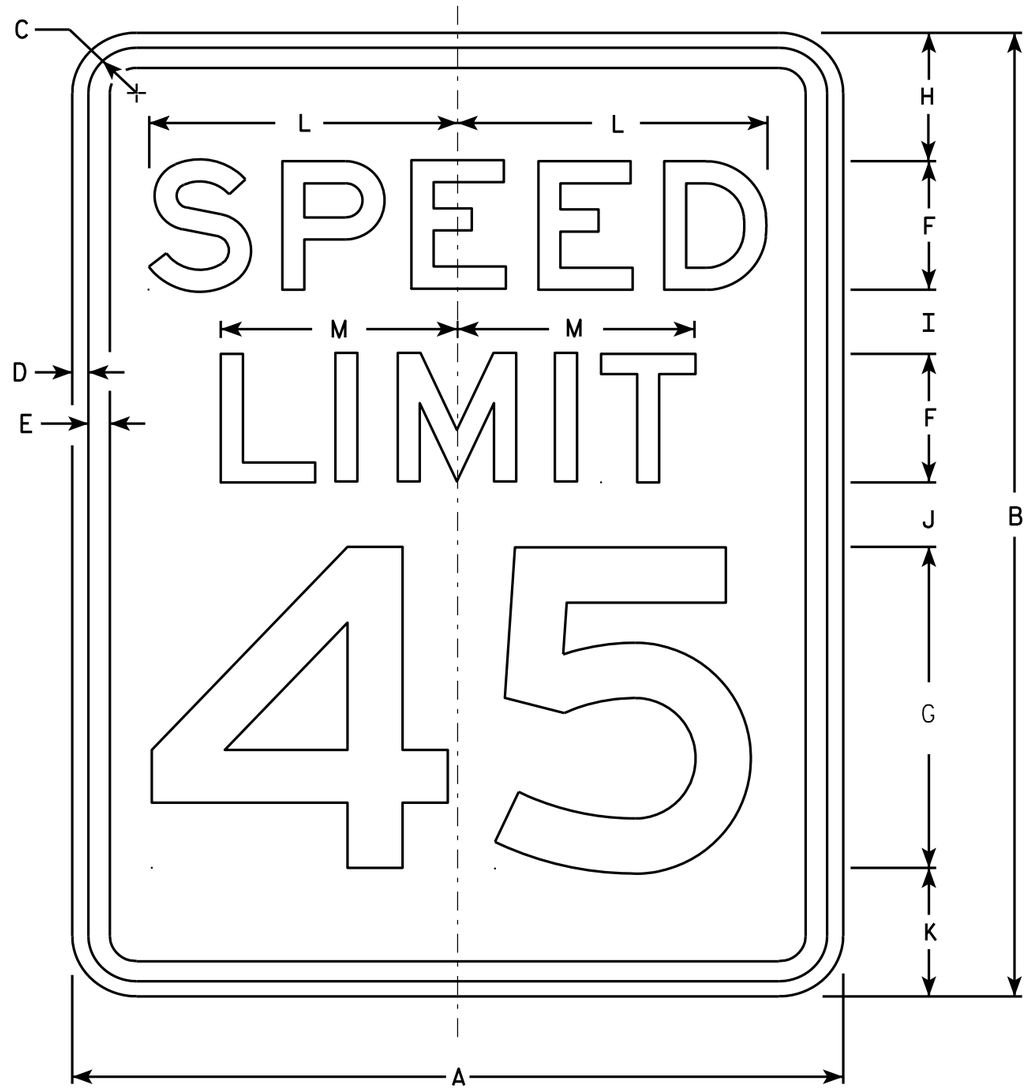
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 366	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

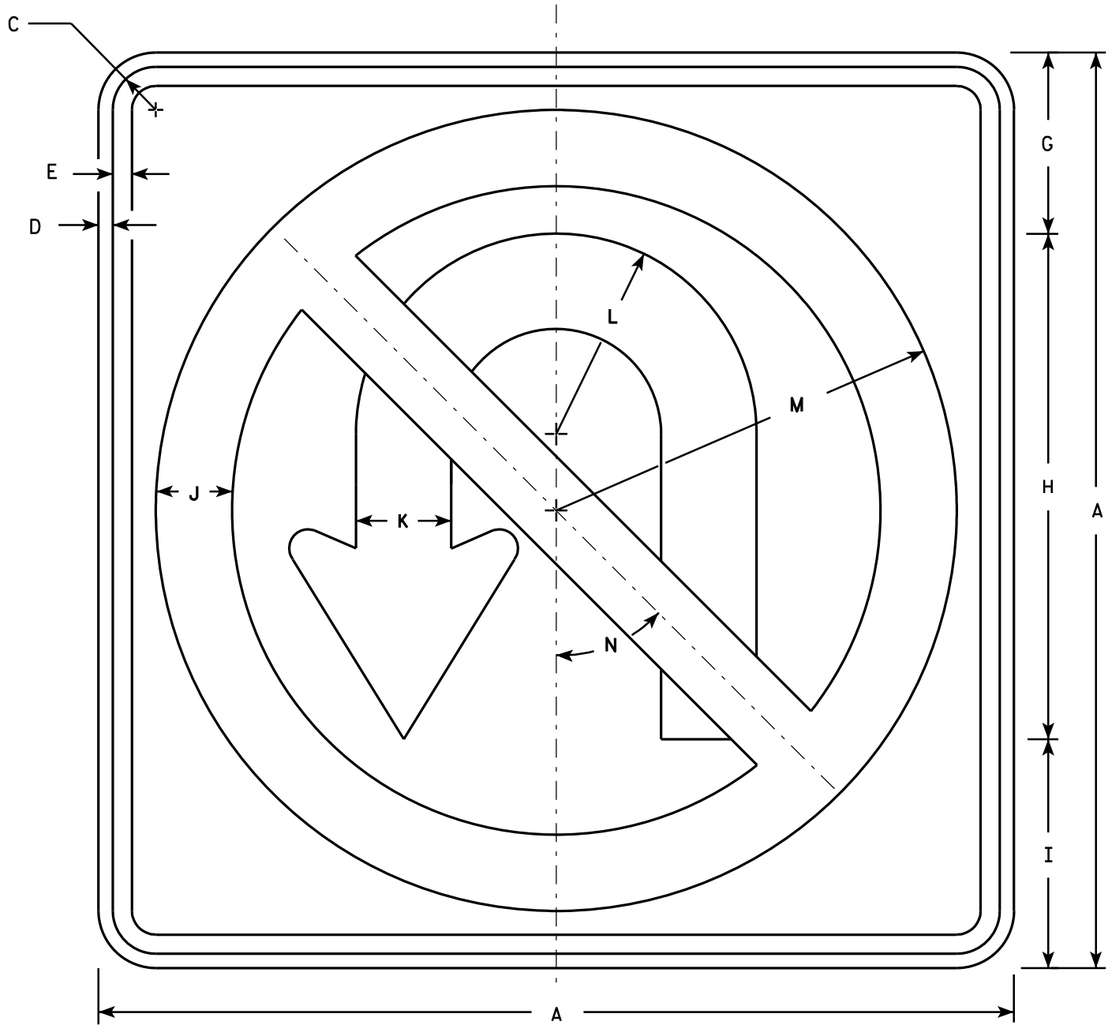
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

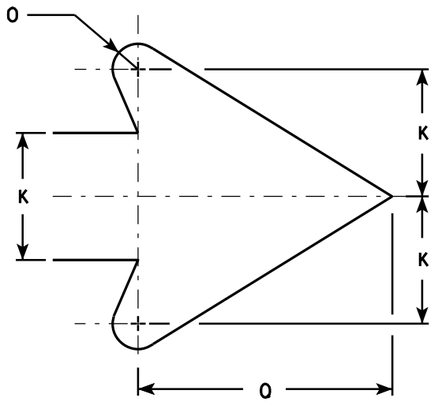
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 367 | E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

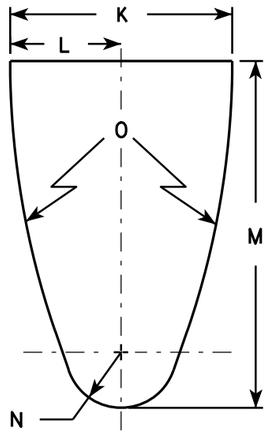
STANDARD SIGN
R3-4

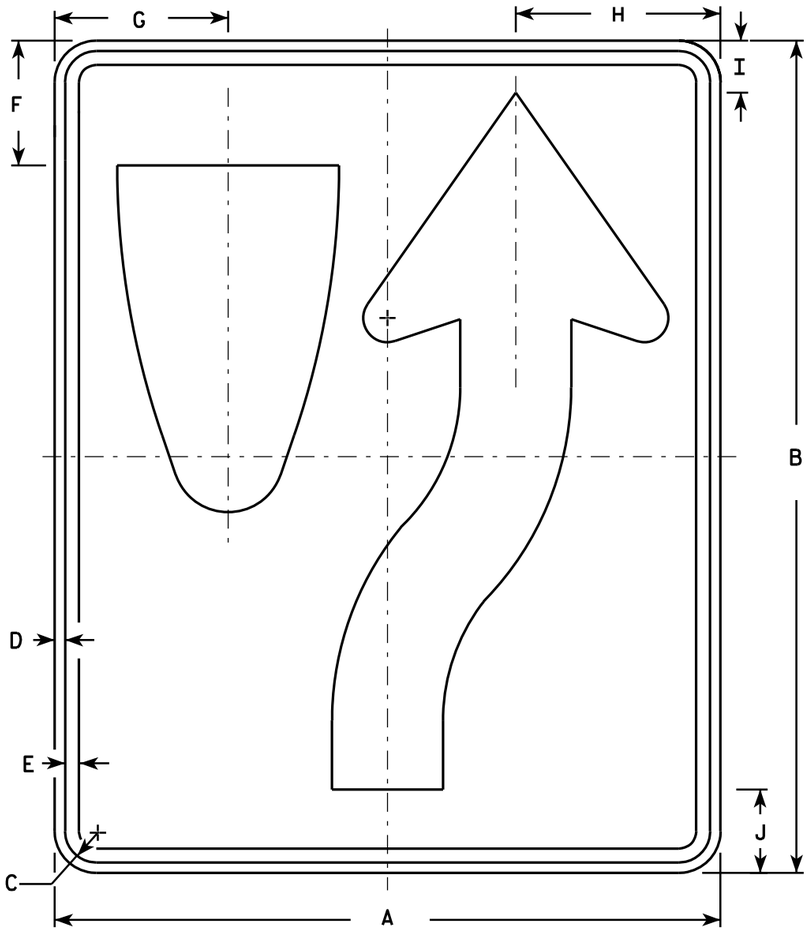
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 368	E

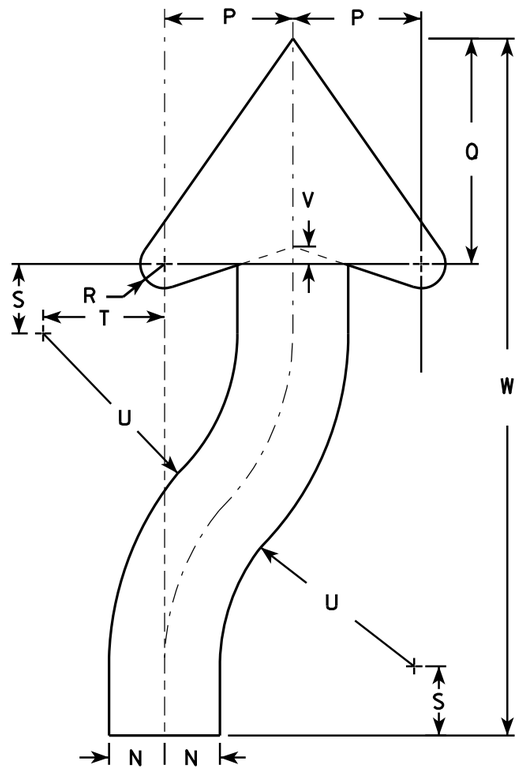




R4-7

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

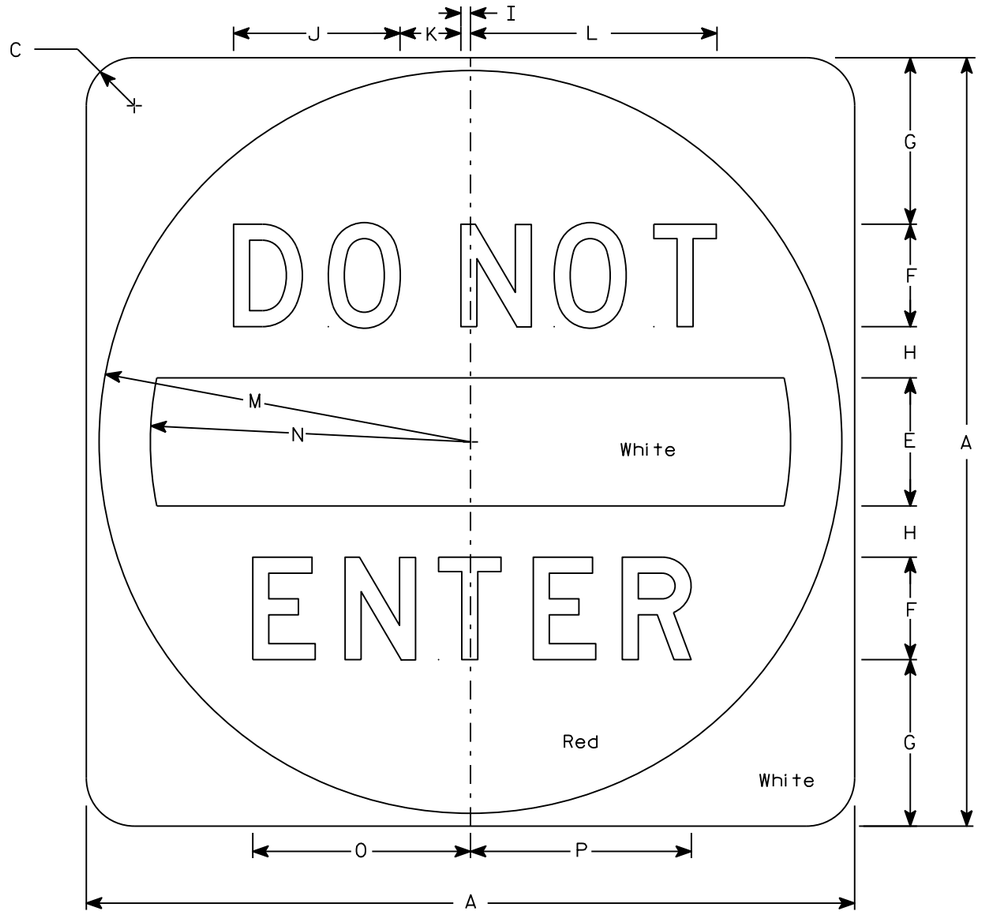
STANDARD SIGN
R4-7 & R4-8

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: 369	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

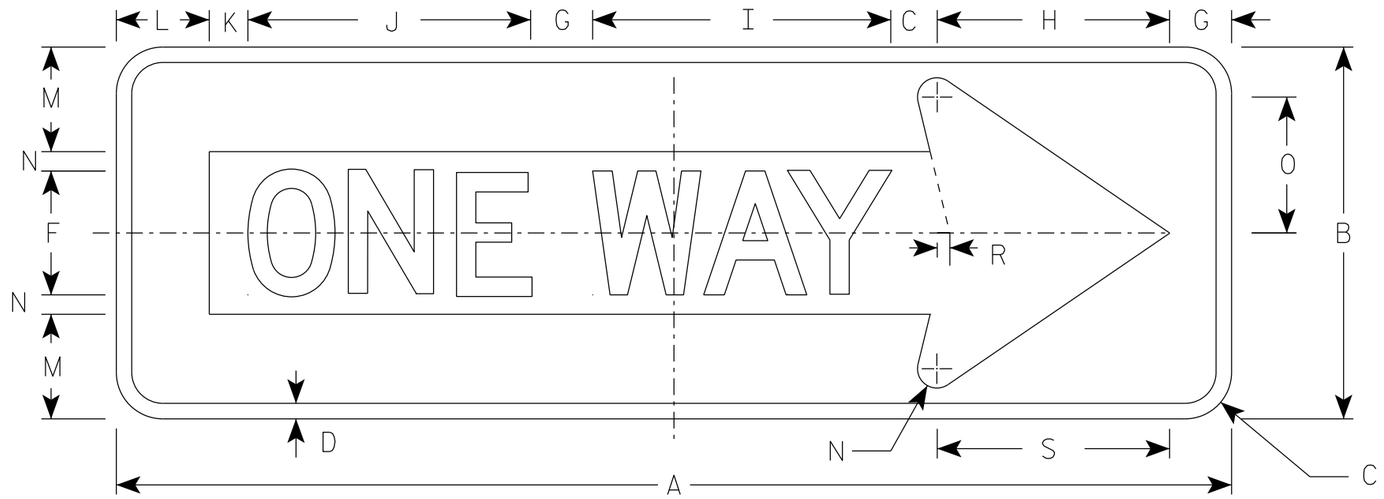
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

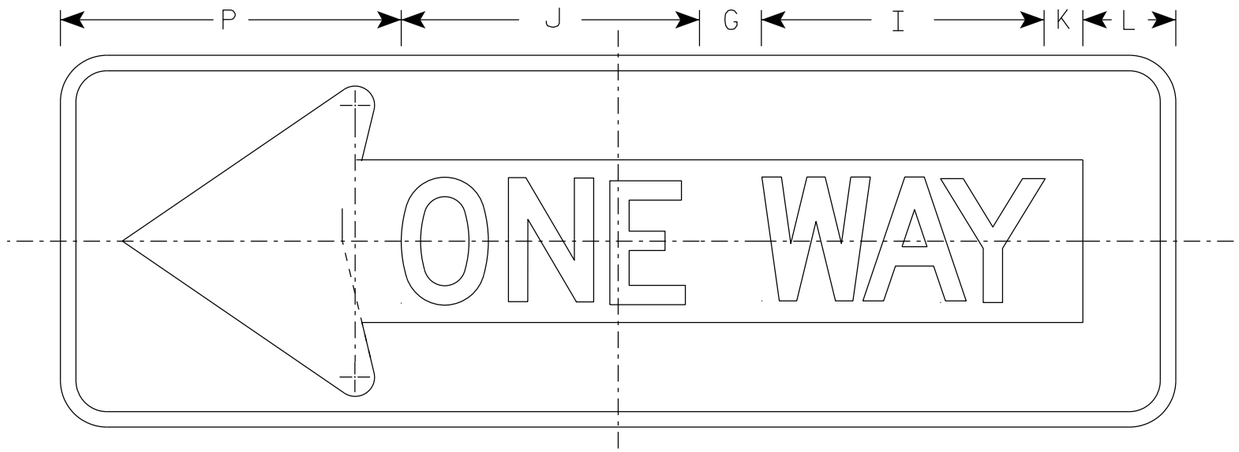
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 370 | E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

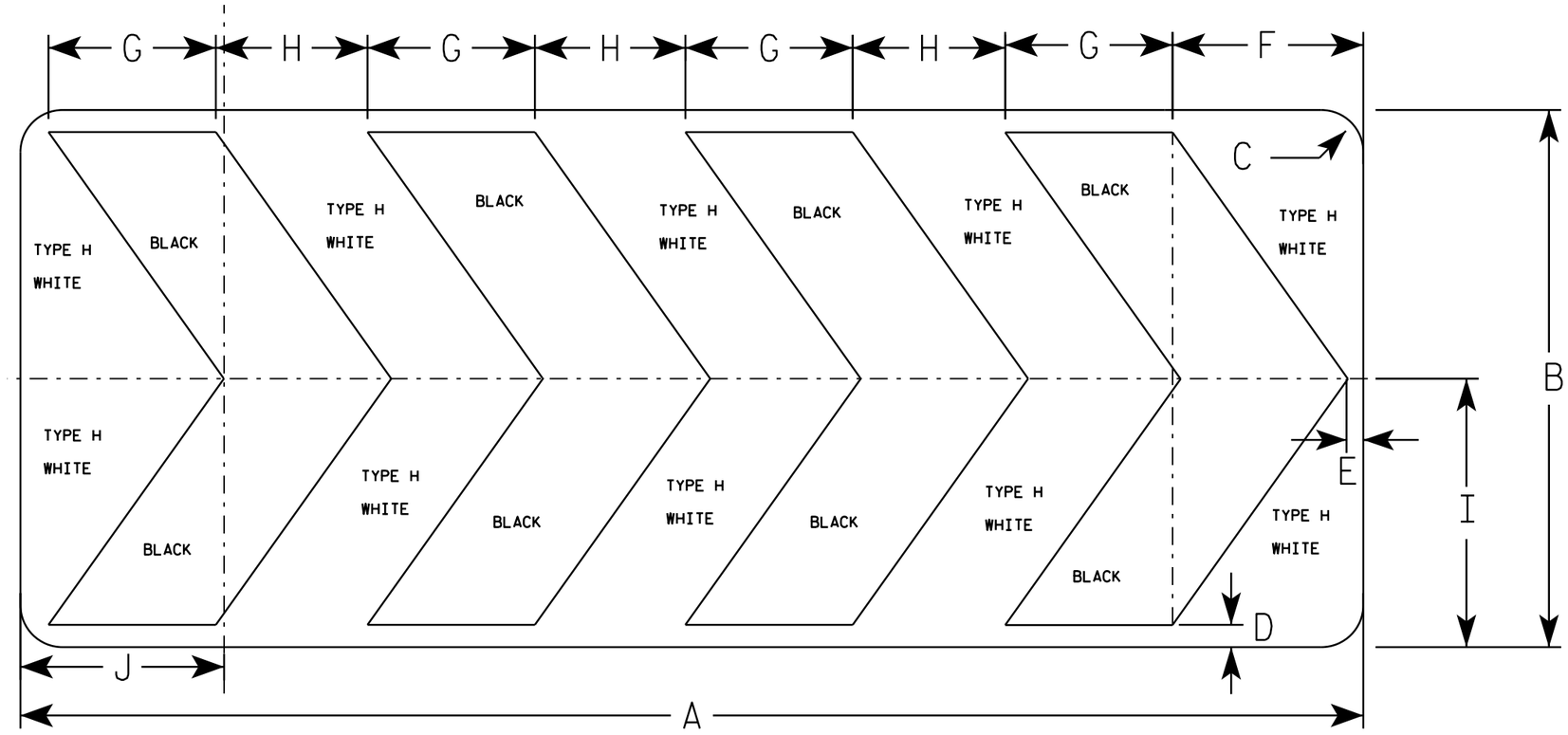
DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

SHEET NO: 371 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   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.



R6-4B

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	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

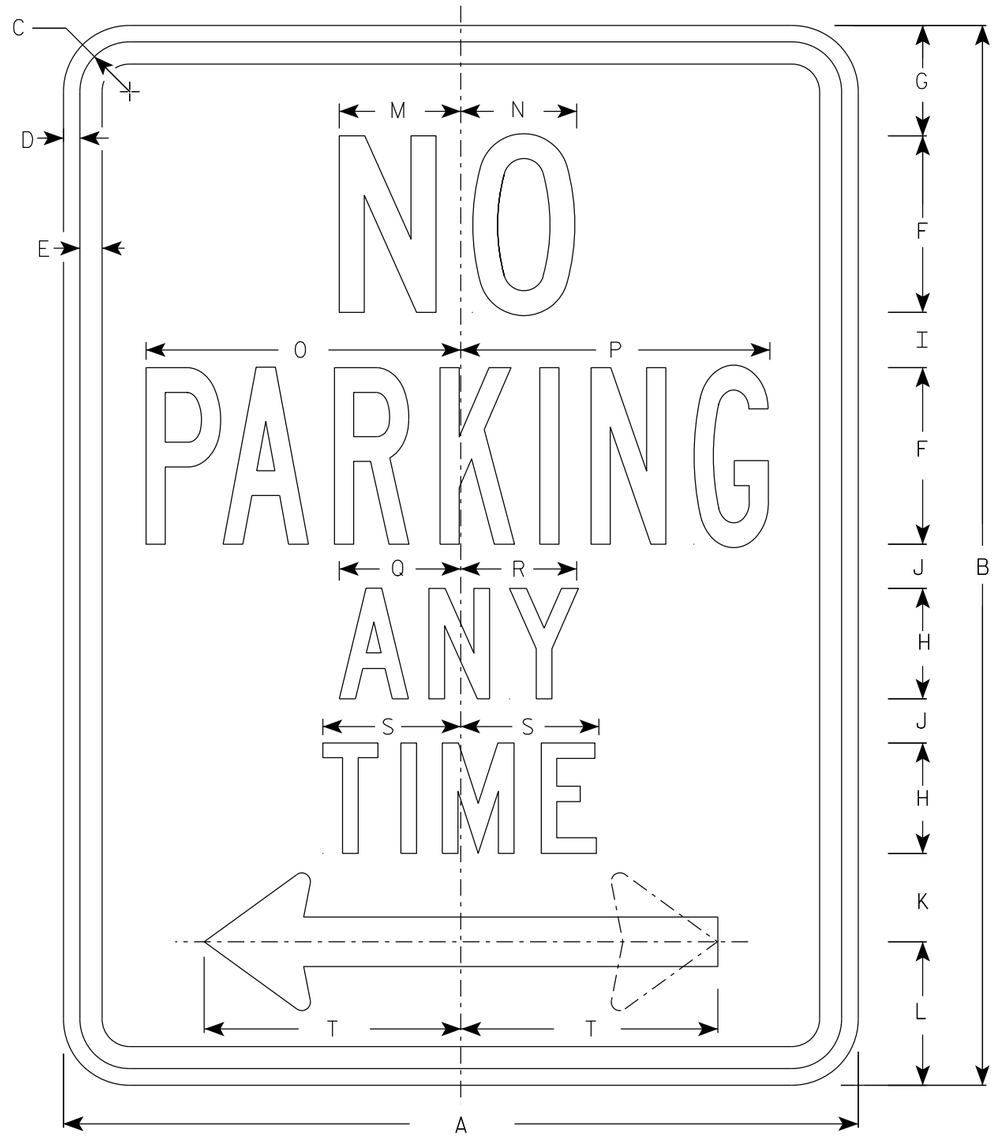
STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

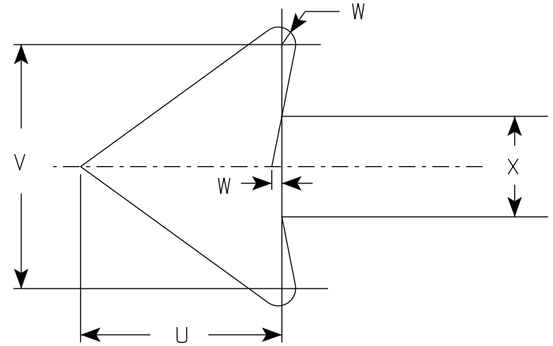
PROJECT NO: SHEET NO: E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

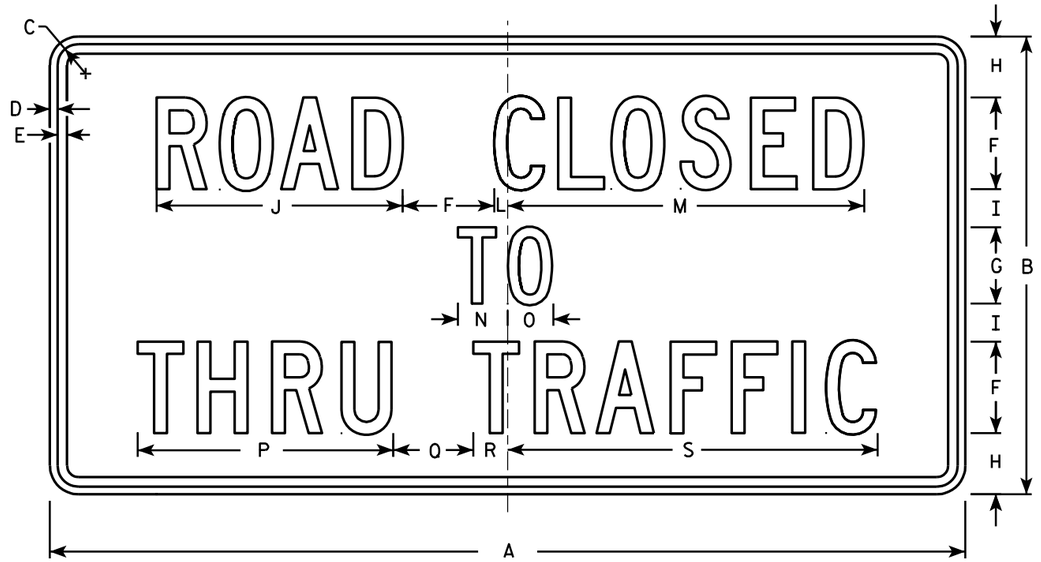
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 373 E

7

7



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																											

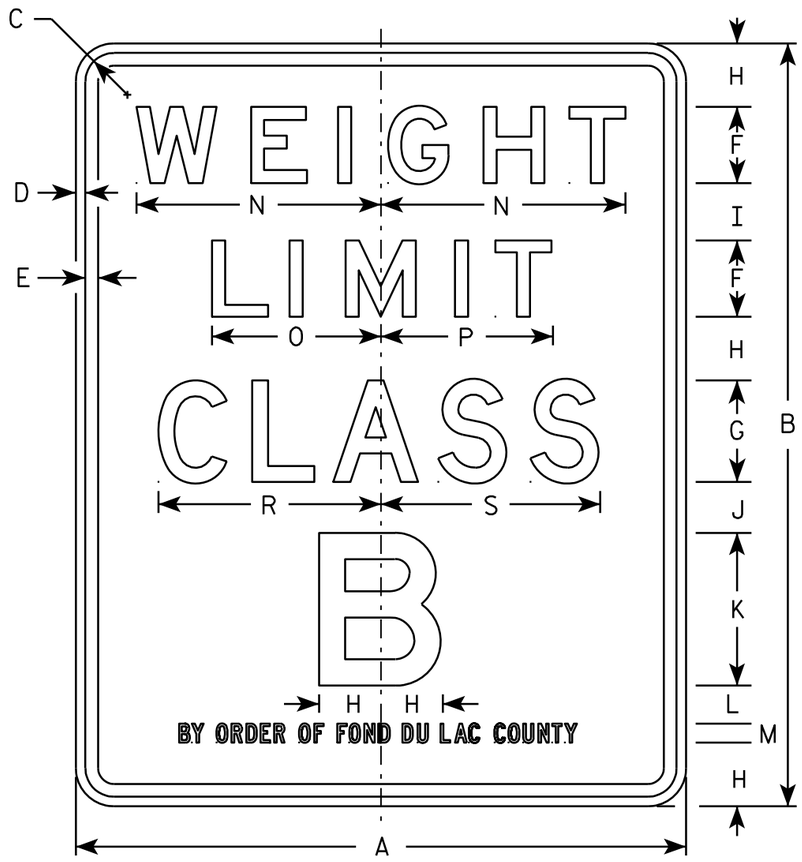
STANDARD SIGN
R11 - 4

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: 374 | E



R12-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 2 & 4 are Series E.
   Line 3 is Series D.
   Line 5 is Series C.
6. Line 5 of the sign shall vary with the name of the maintaining authority.

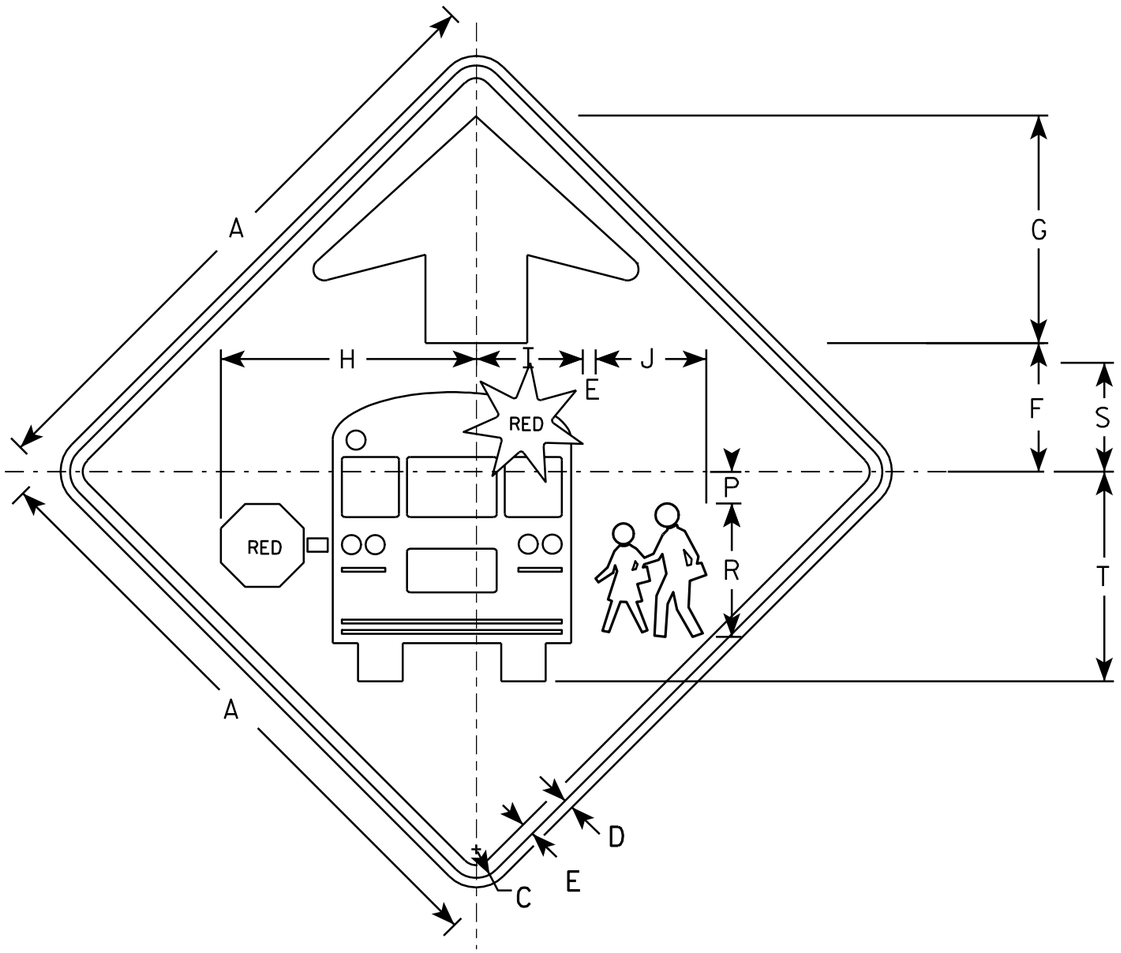
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	3	4	2 1/2	2 1/4	2	6	1 1/2	3/4	9 5/8	6 5/8	6 3/4		8 3/4	8 5/8								5.0
2M	24	30	1 1/8	3/8	1/2	3	4	2 1/2	2 1/4	2	6	1 1/2	3/4	9 5/8	6 5/8	6 3/4		8 3/4	8 5/8								5.0
3																											
4																											
5																											

STANDARD SIGN
R12-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R12-53.3

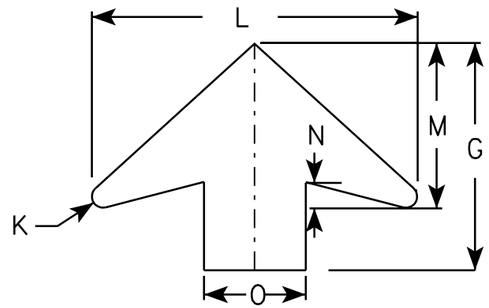
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 375 | E



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

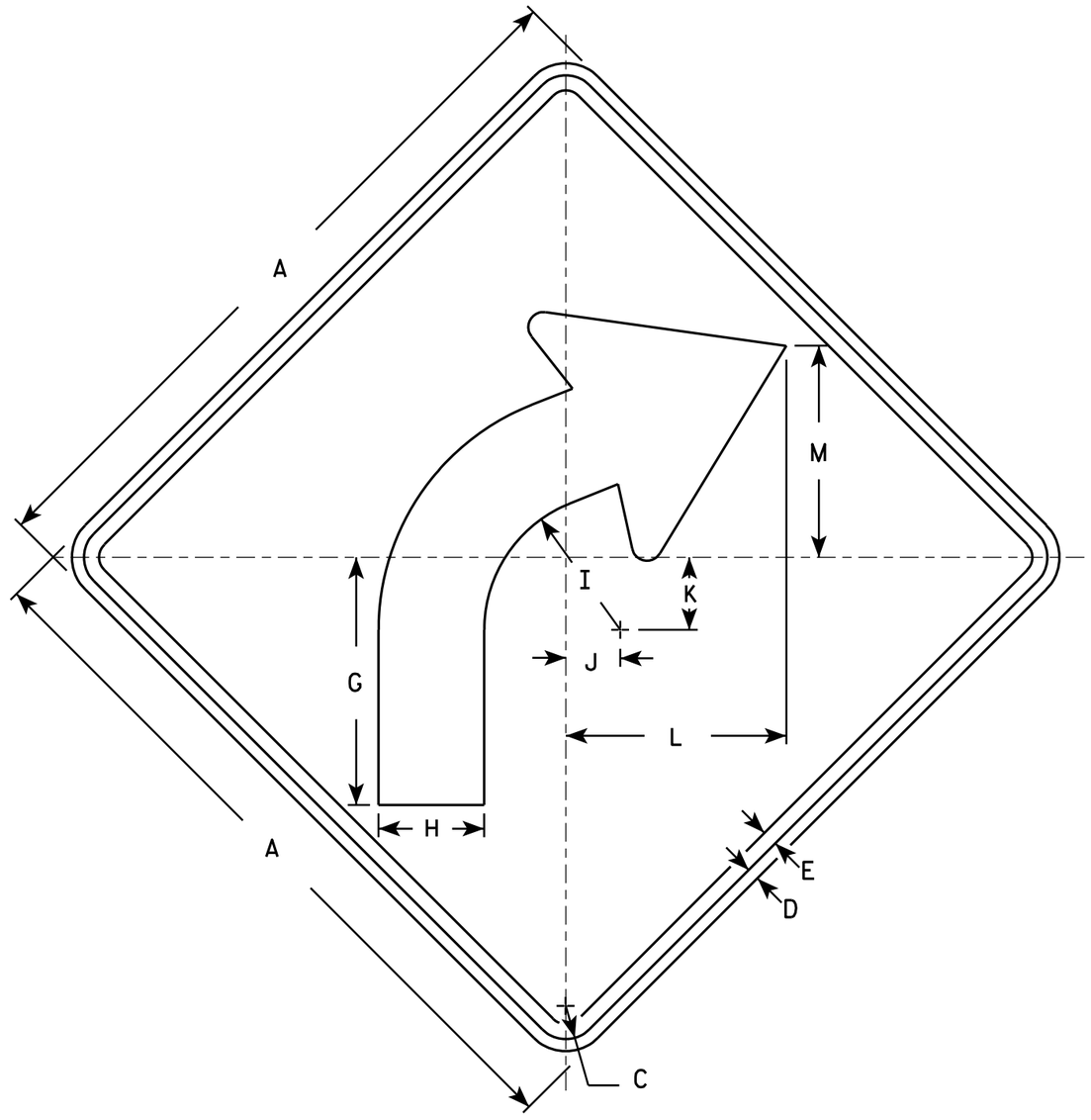
DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

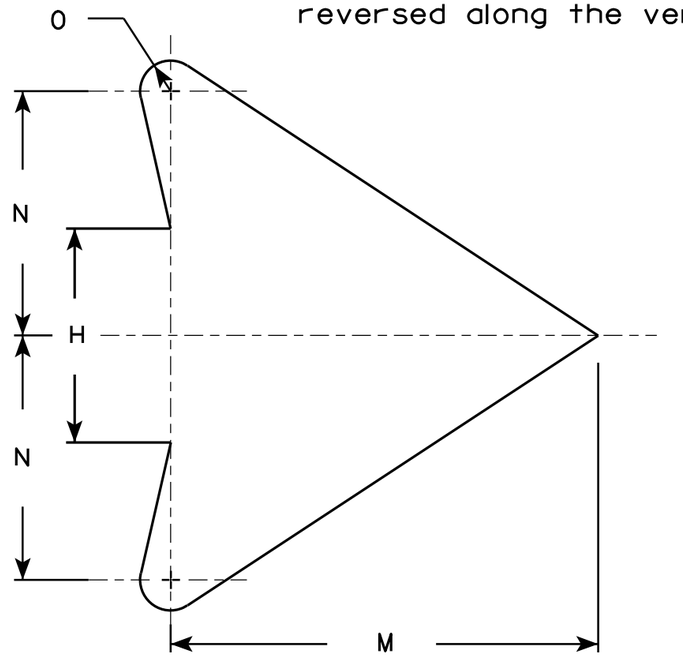
SHEET NO: 376 E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



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		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

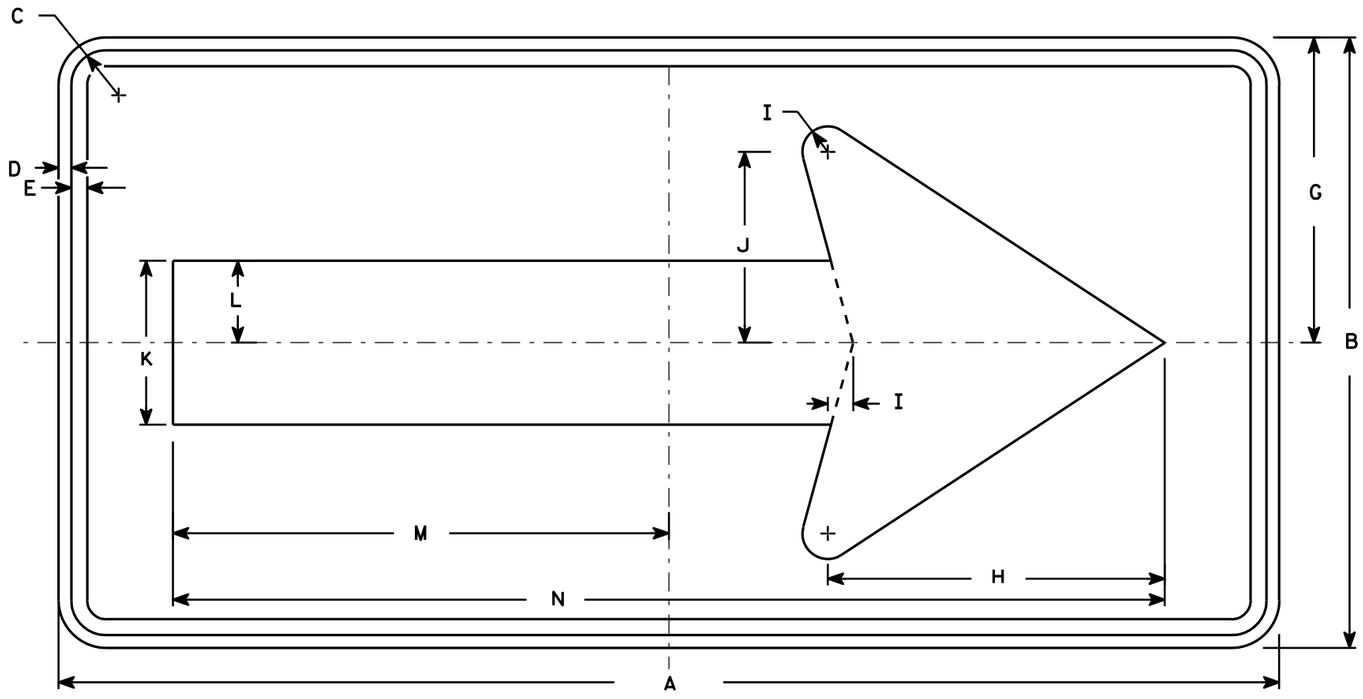
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 377	E



W1-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
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	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

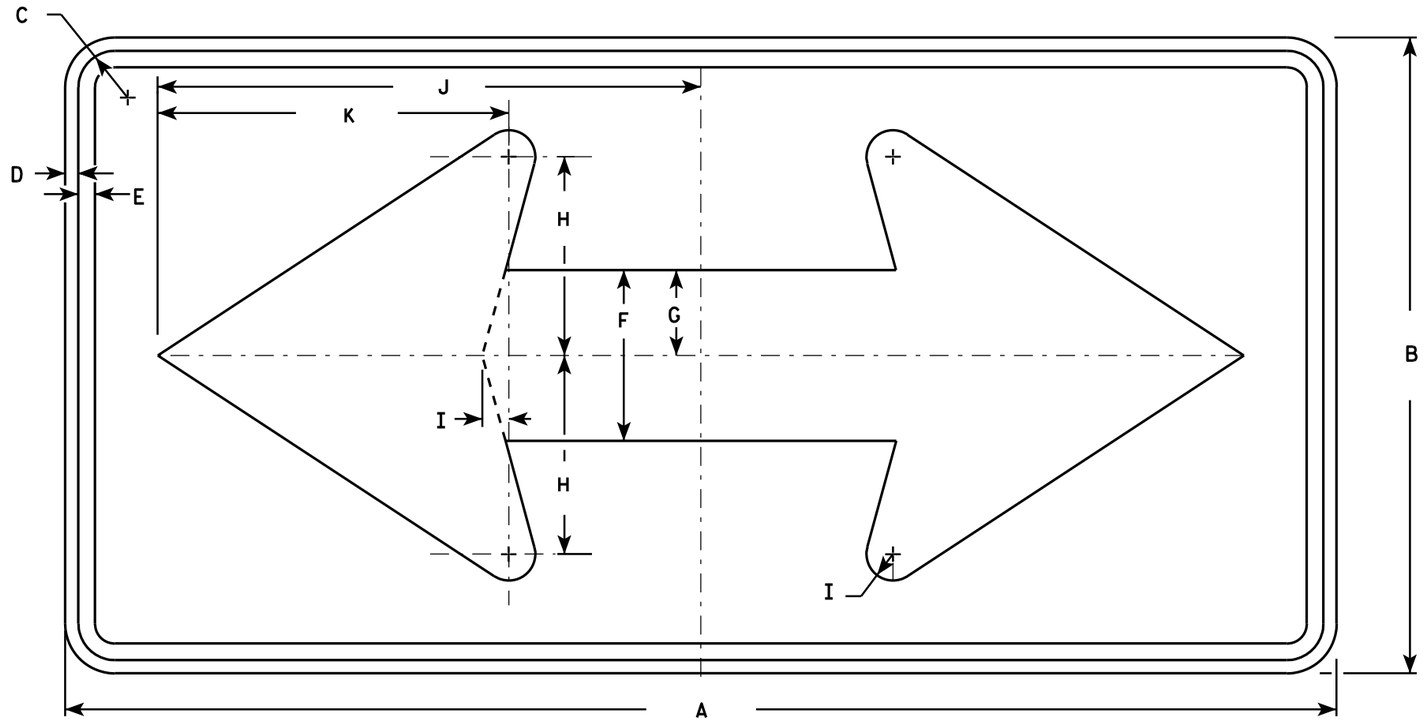
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 378



W1-7

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

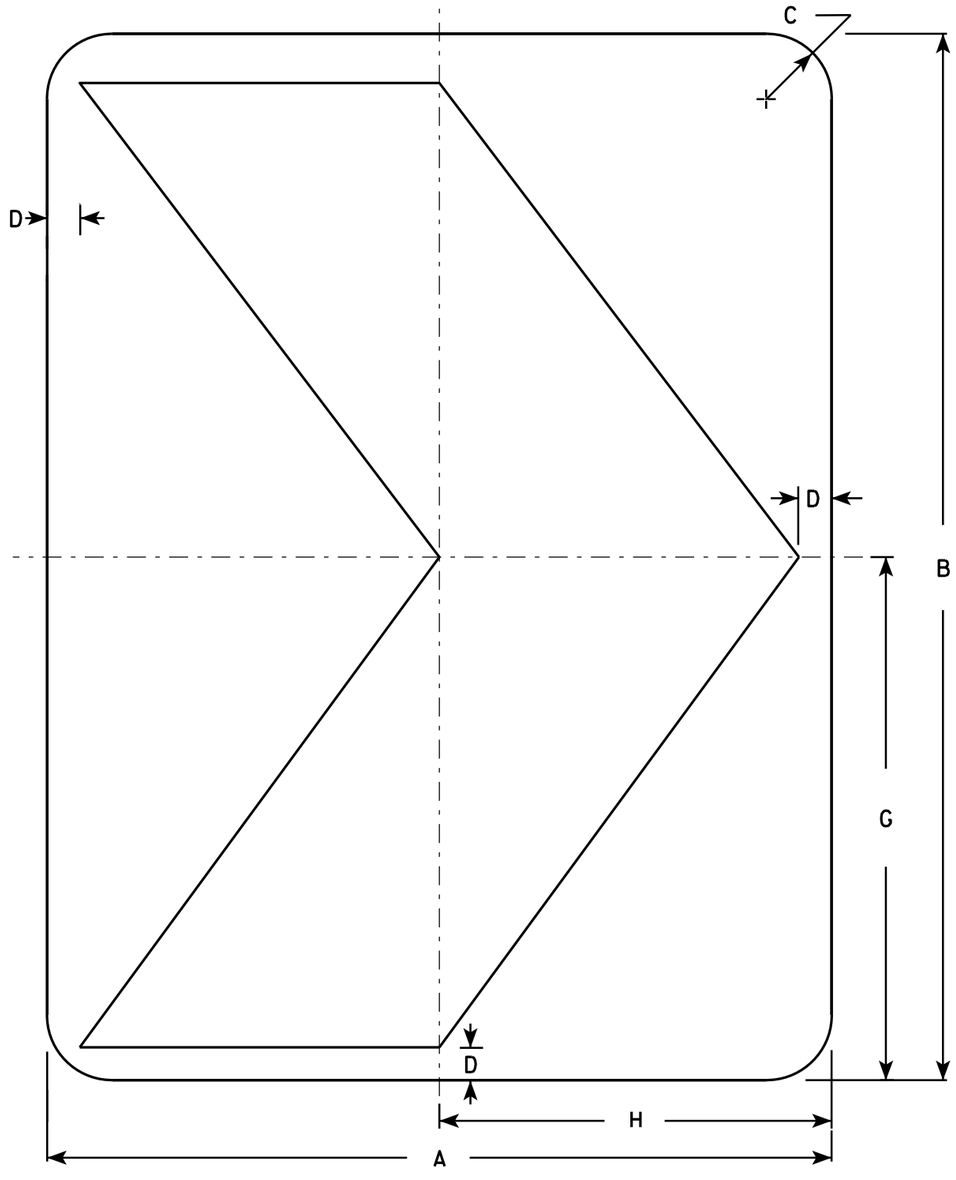
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 379 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

W1-8

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	12	18	1 ½	½			9	6																			1.5
2S	18	24	1 ½	¾			12	9																			3.0
2M	18	24	1 ½	¾			12	9																			3.0
3	24	30	1 ½	1			15	12																			5.0
4	30	36	1 ⅞	1 ¼			18	15																			7.5
5	36	48	2 ¼	1 ½			24	18																			12.0

STANDARD SIGN
W1-8

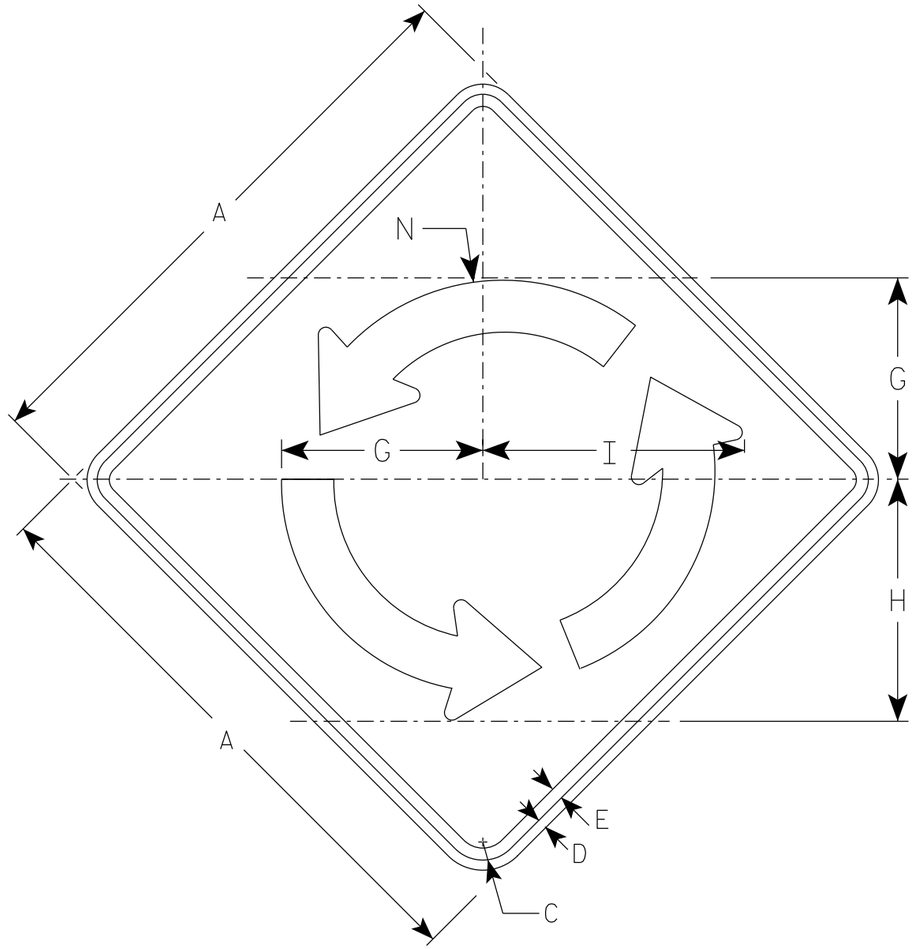
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

SHEET NO: 380 E

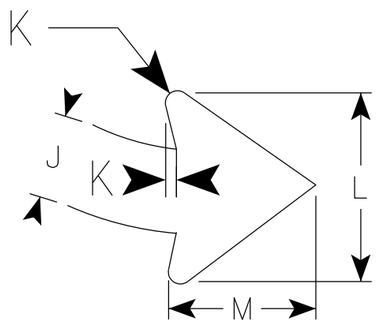


W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

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	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									

STANDARD SIGN
W2-6

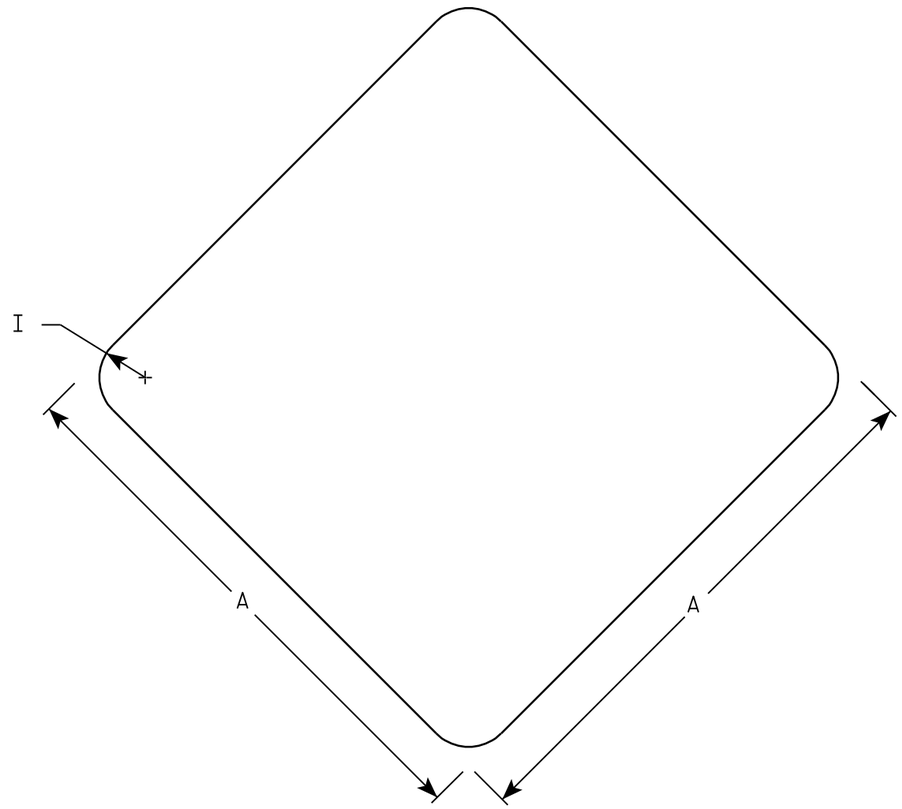
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/21 PLATE NO. W2-6.7

PROJECT NO:

SHEET NO: 381 E



W5-54

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
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners 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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

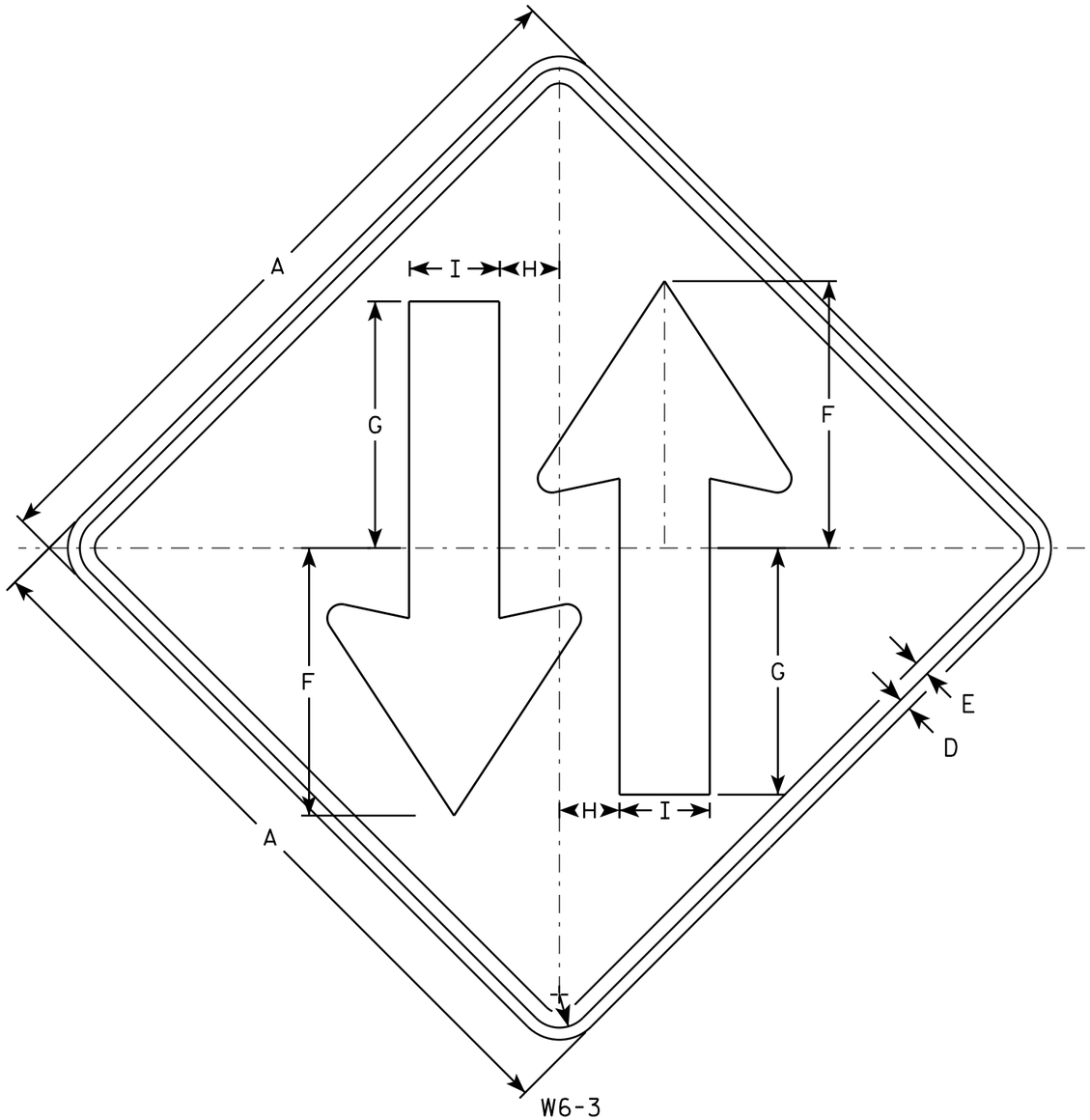
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

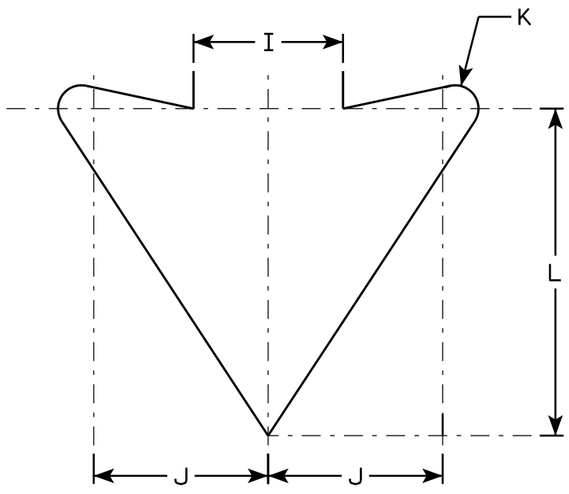
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 382 | E



W6-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

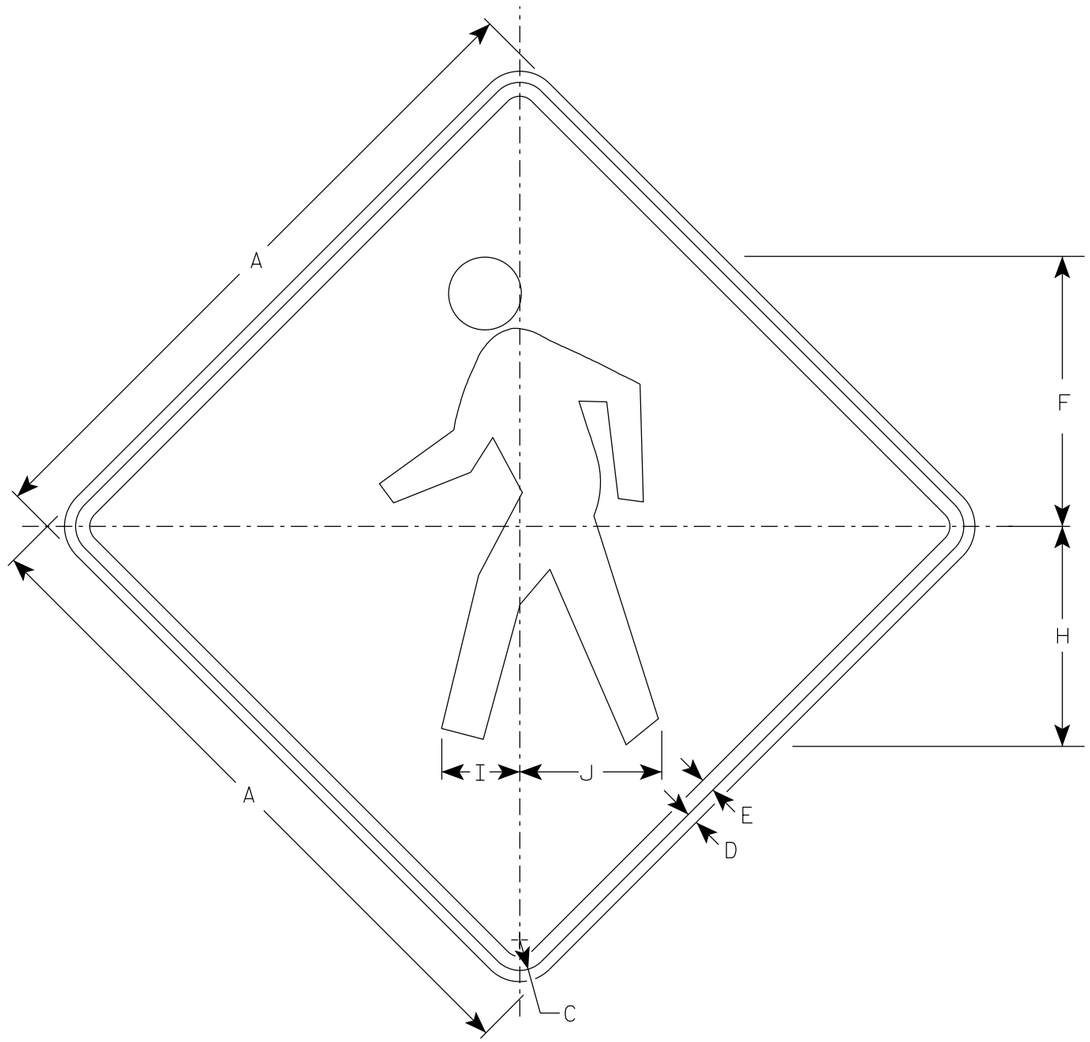
DATE 3/10/16 PLATE W6-3.11

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W63.DGN PLOT DATE : 10-MAR-2016 14:01 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.080757:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



W11-2

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	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

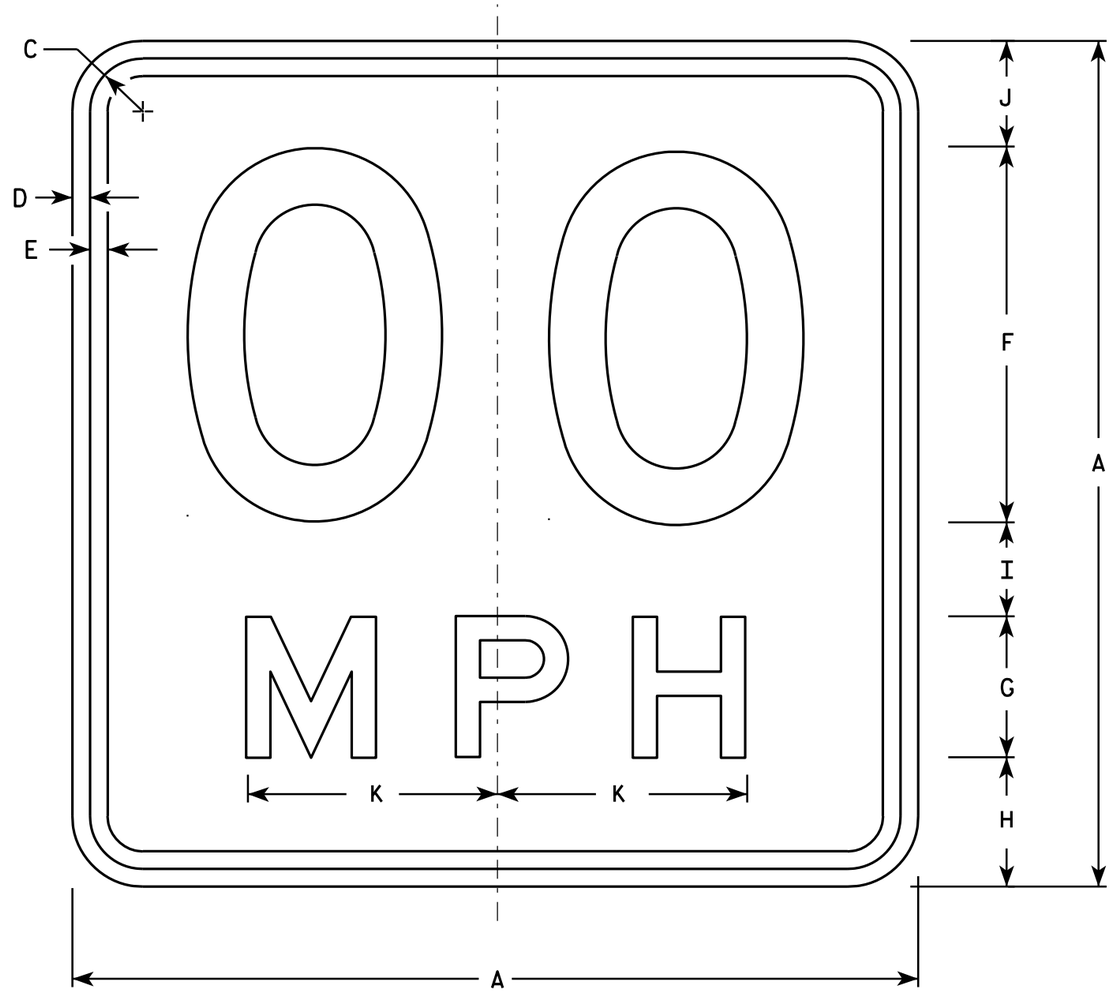
DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 384 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W112.DGN PLOT DATE : 08-APRIL-2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

7 7



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

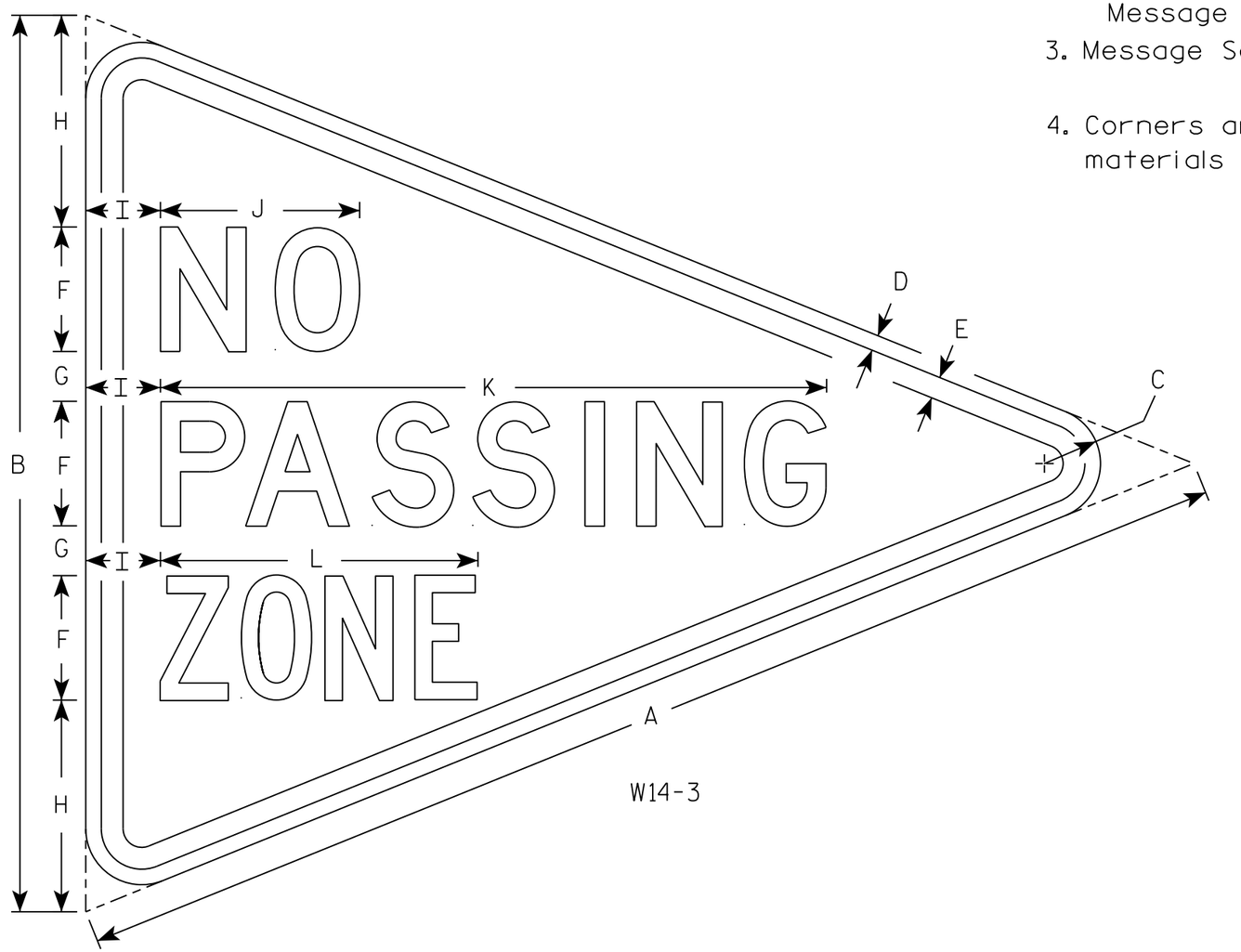
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 385 | E

NOTES

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



W14-3

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

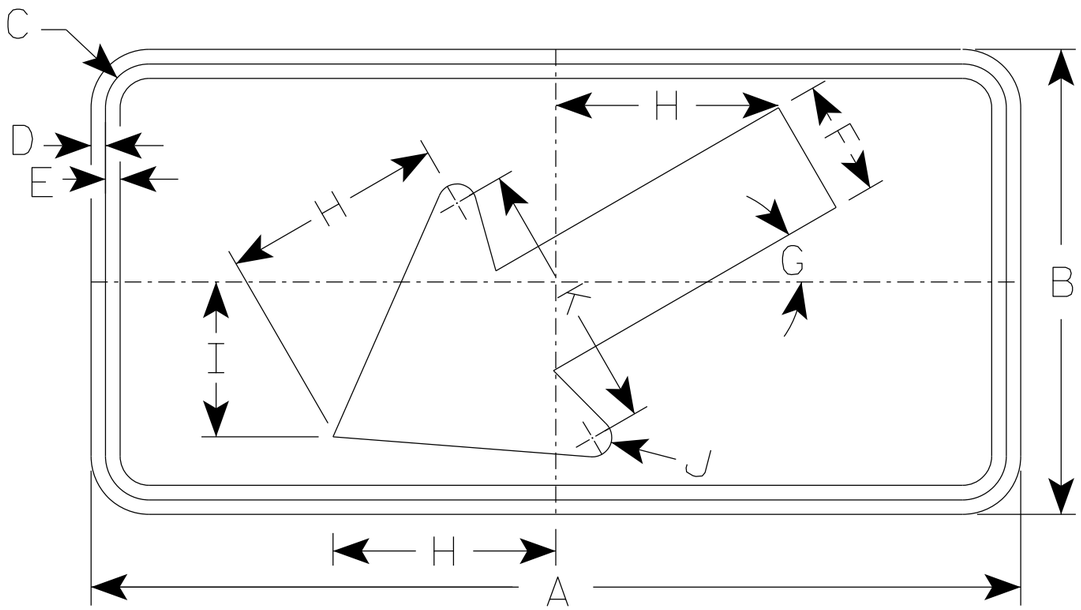
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 386	E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L except the arrow is reversed along the vertical centerline.

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

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 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
* 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																											

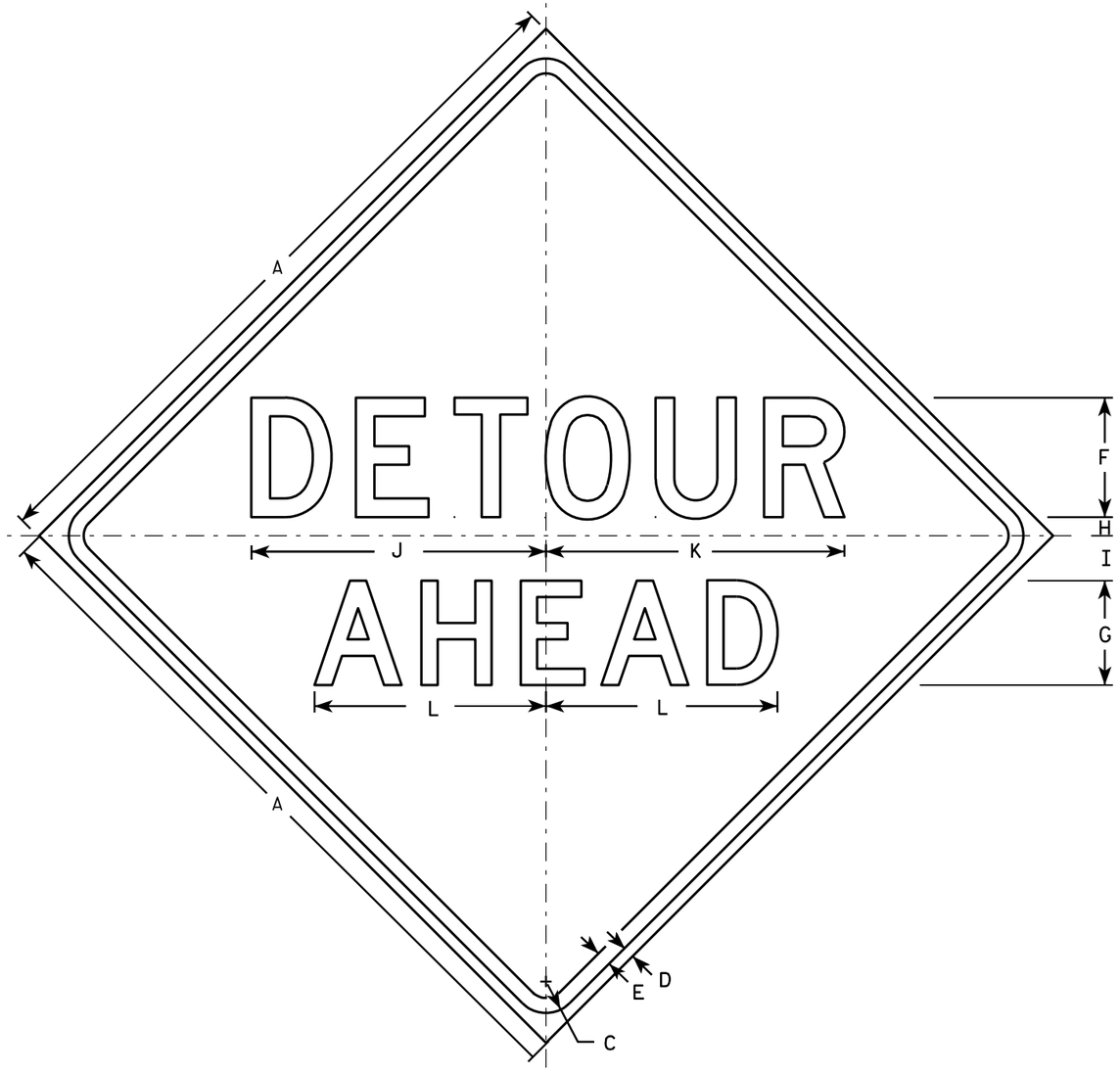
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

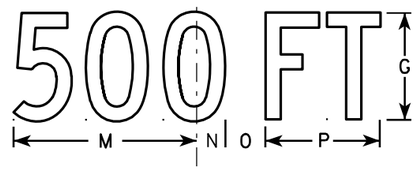
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/2021 PLATE NO. W16-7.8

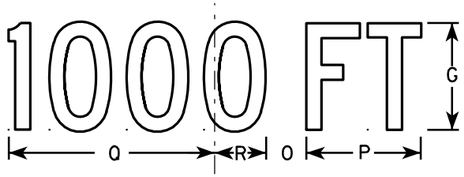
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 387	E



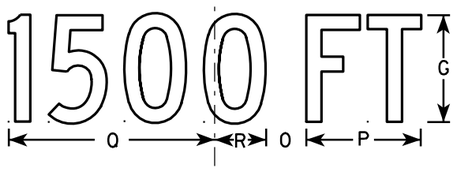
W20-2A



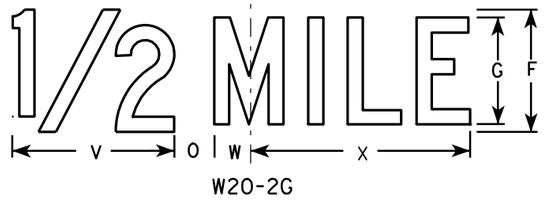
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	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

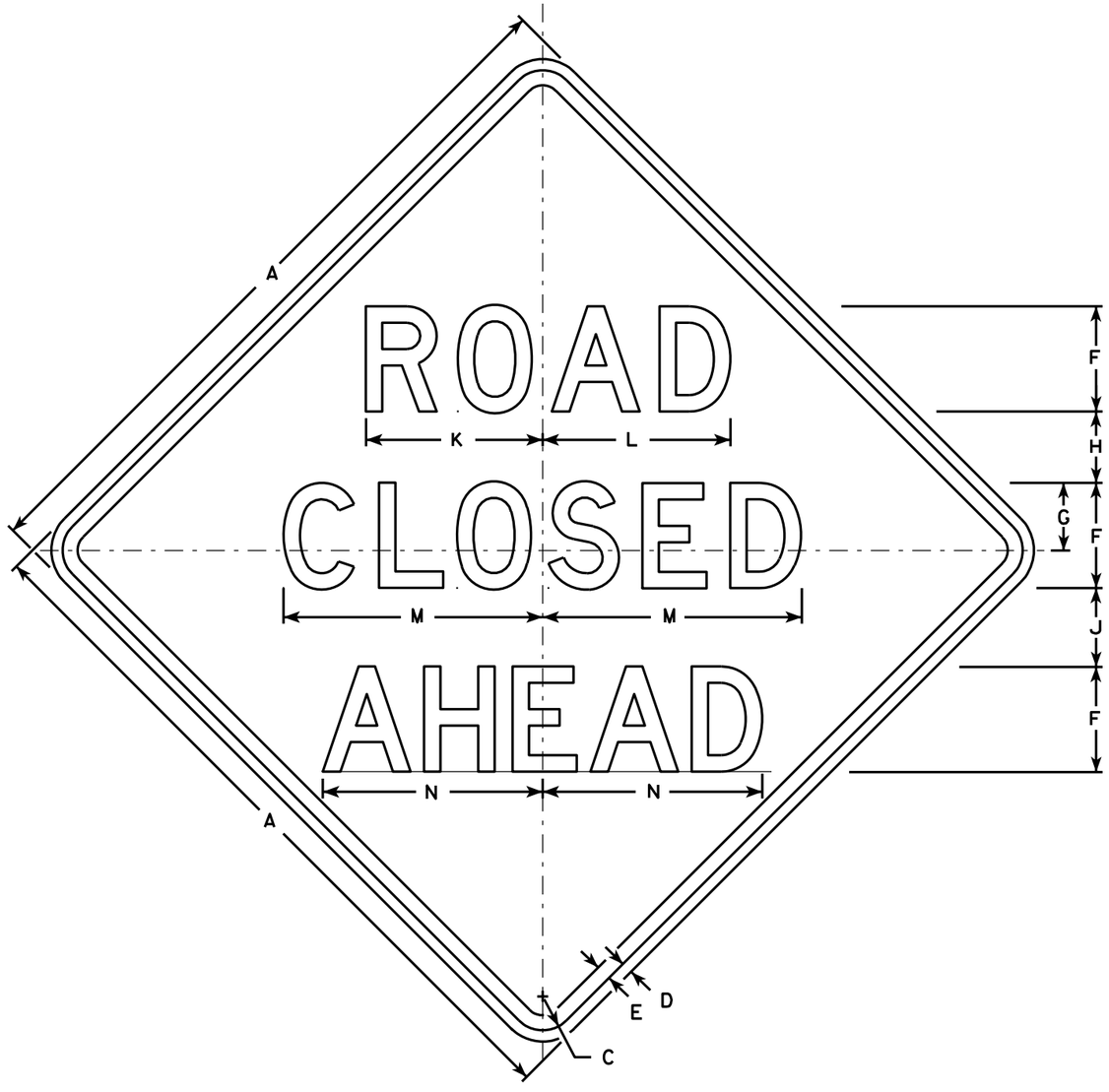
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

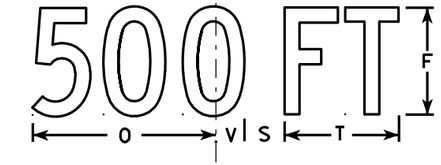
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

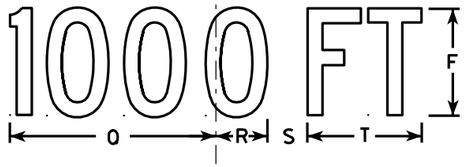
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 388	E



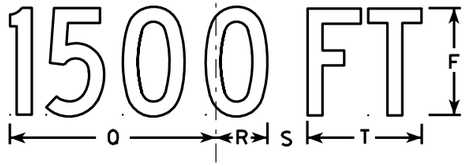
W20-3A



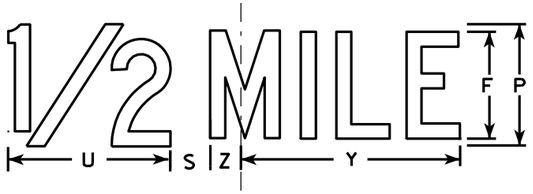
W20-3D



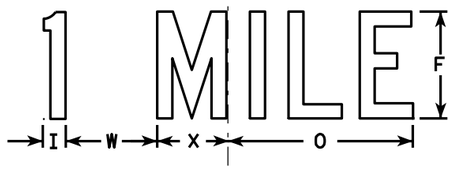
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

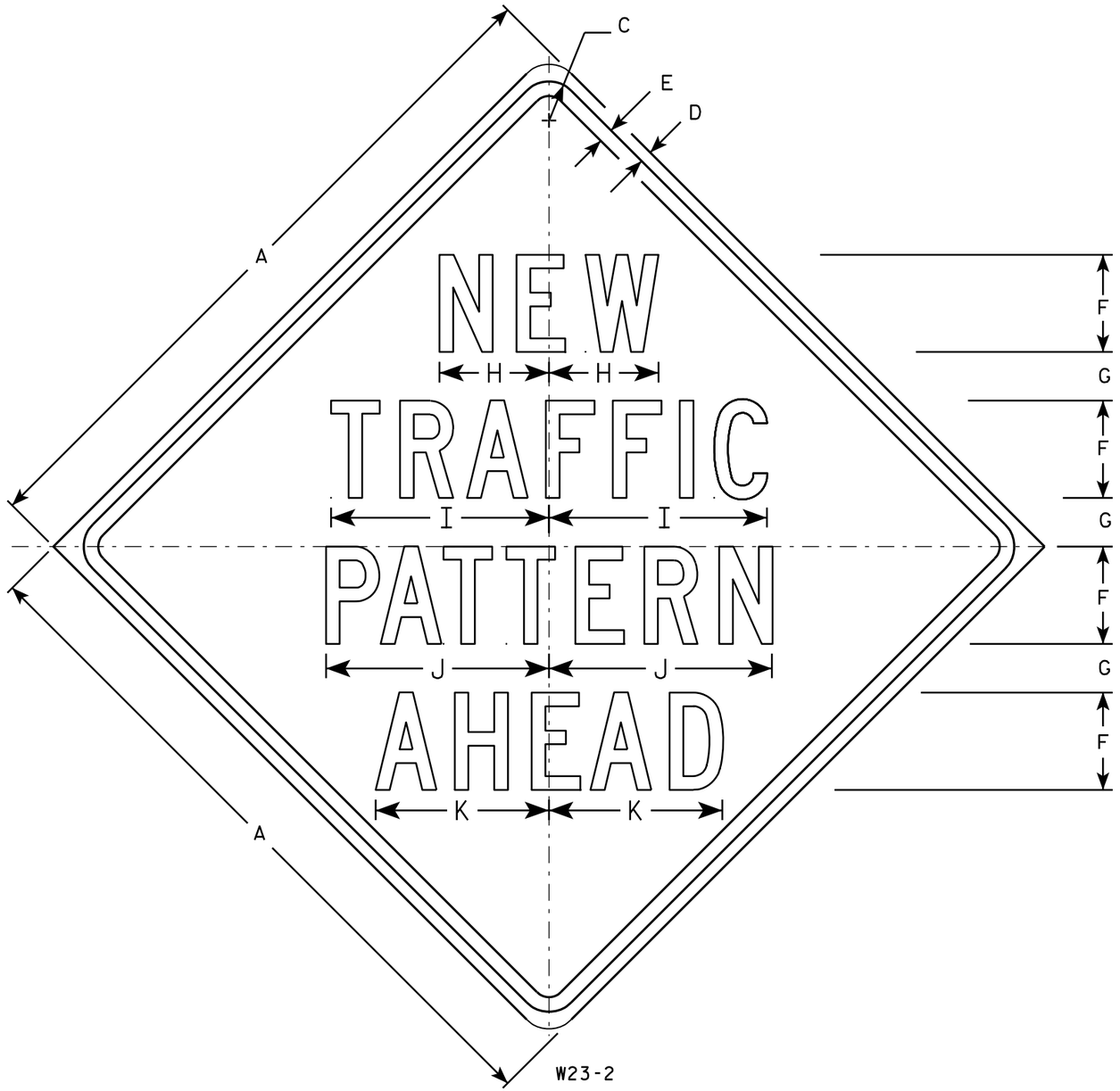
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 389 | E



NOTES

1. Sign isType II - Type F Reflective - reference WIS DOT Standard Specification forHIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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	36		1 5/8	5/8	3/4	5	2 1/2	5 5/8	11 1/4	11 1/2	8 7/8																9.0
2M	36		1 5/8	5/8	3/4	5	2 1/2	5 5/8	11 1/4	11 1/2	8 7/8																9.0
3																											
4																											
5																											

STANDARD SIGN
W23-2

WISCONSIN DEPT OF TRANSPORTATION

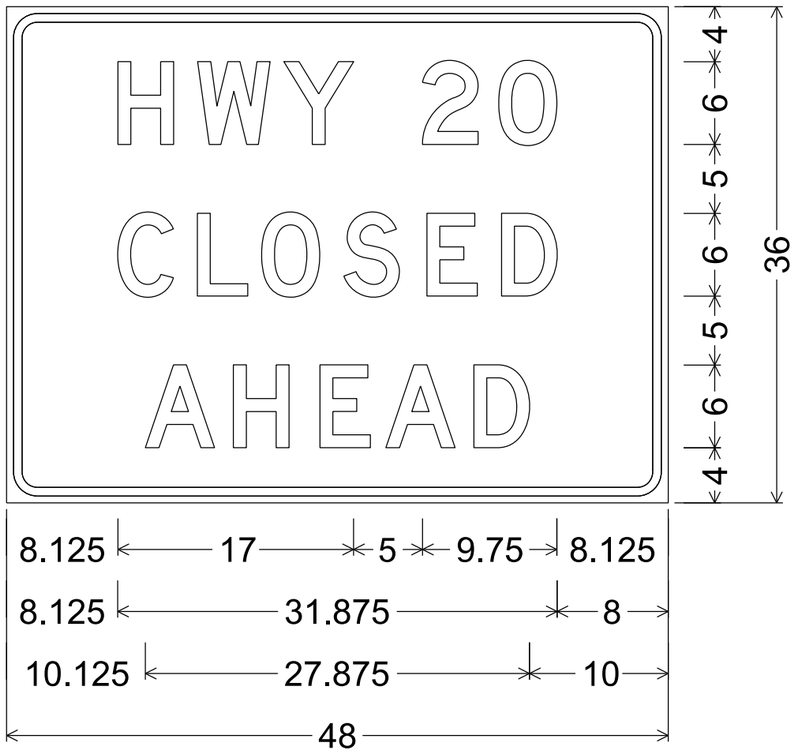
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W23-2.2

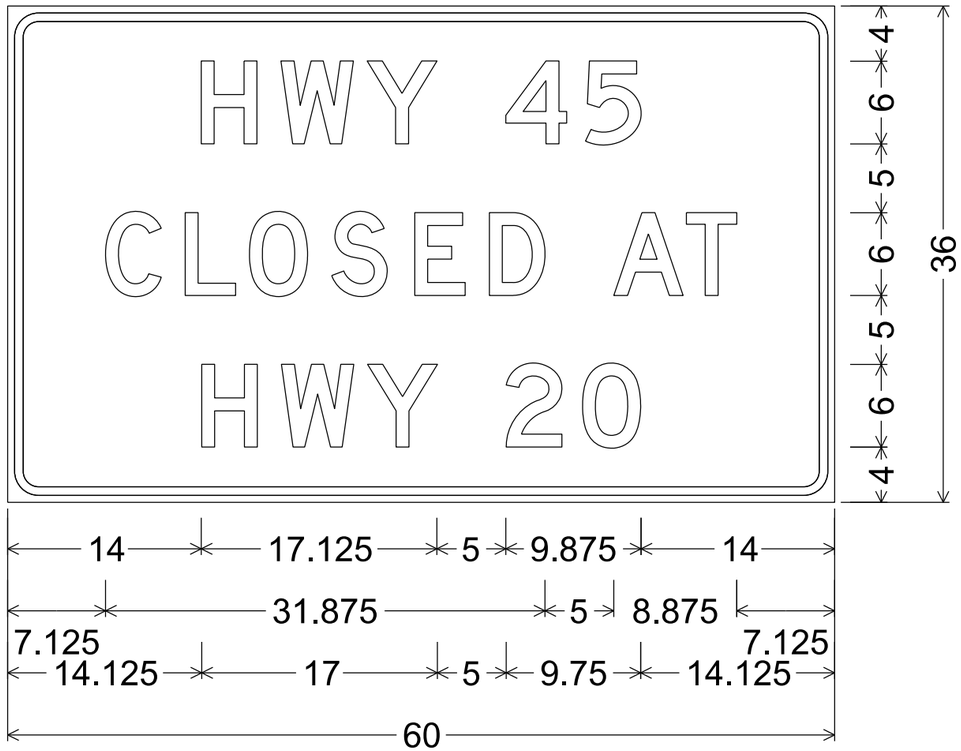
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 390 | E

NOTES

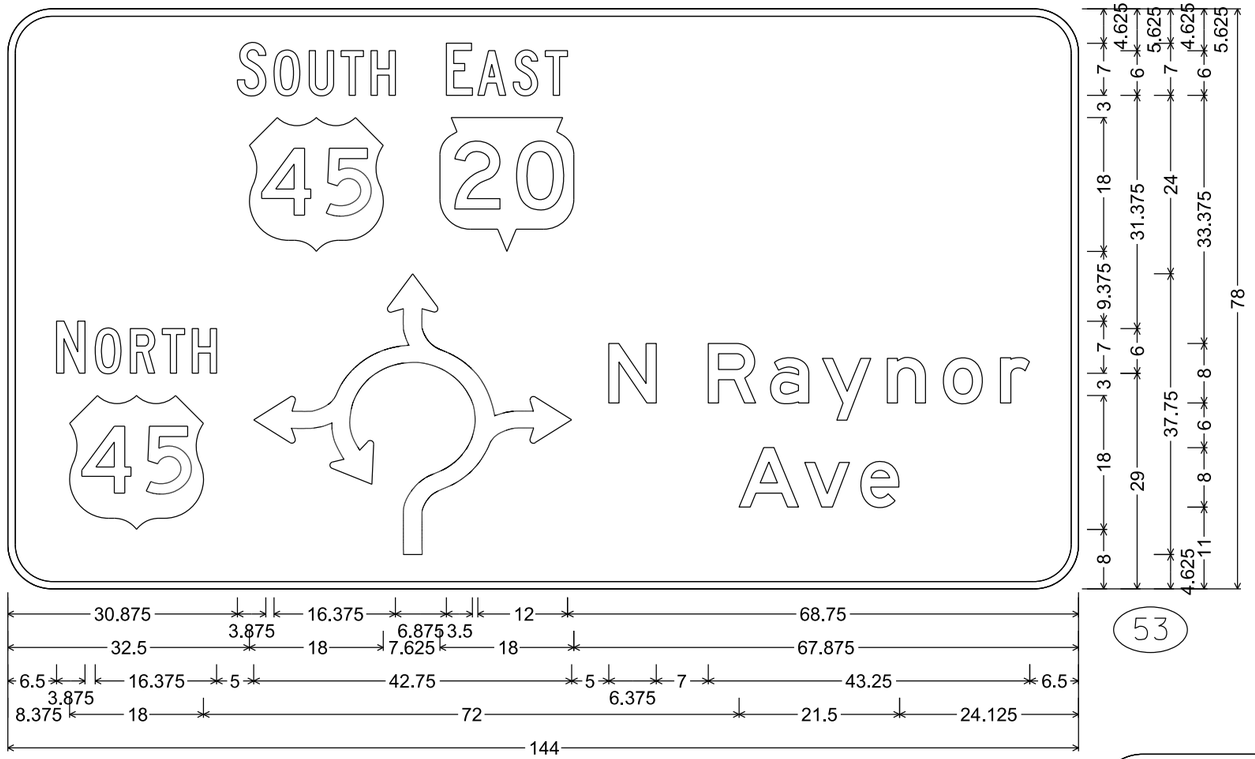
1. Fixed Message Signs - Type II Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



2.250" Radius, 0.625" Border, 0.500" Indent



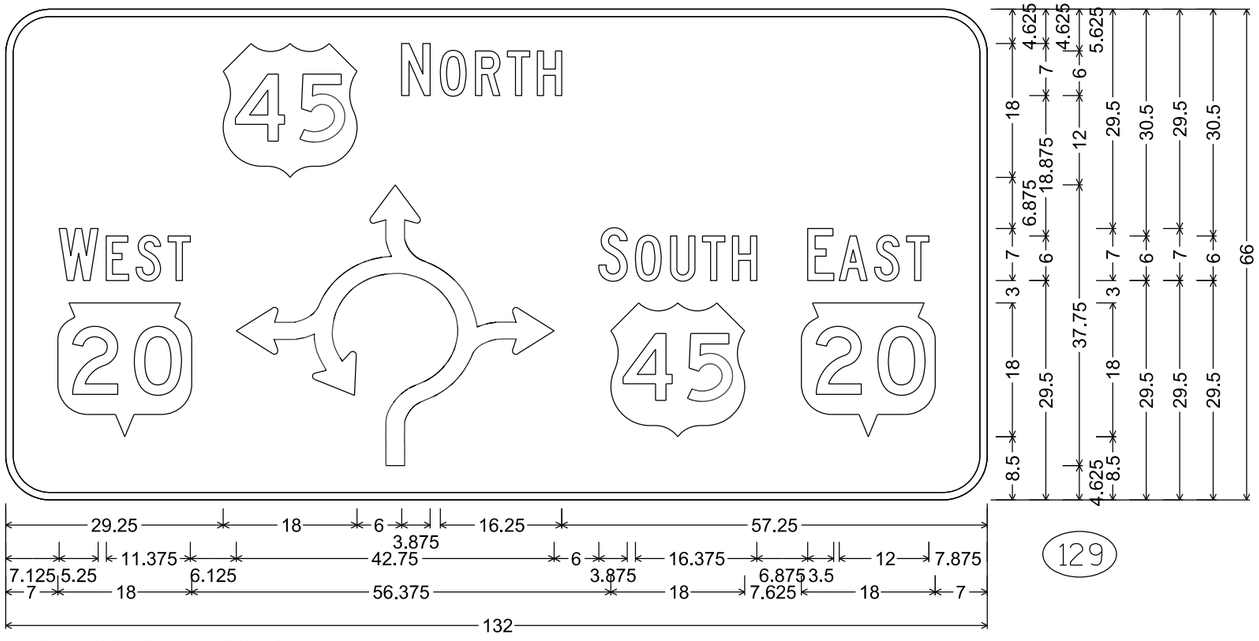
2.250" Radius, 0.625" Border, 0.500" Indent



D1-62; 6.000" Radius, 1.000" Border,
"SOUTH", C; "EAST", C; "NORTH", C; "N", E; "Raynor", E; "Ave", E

NOTES

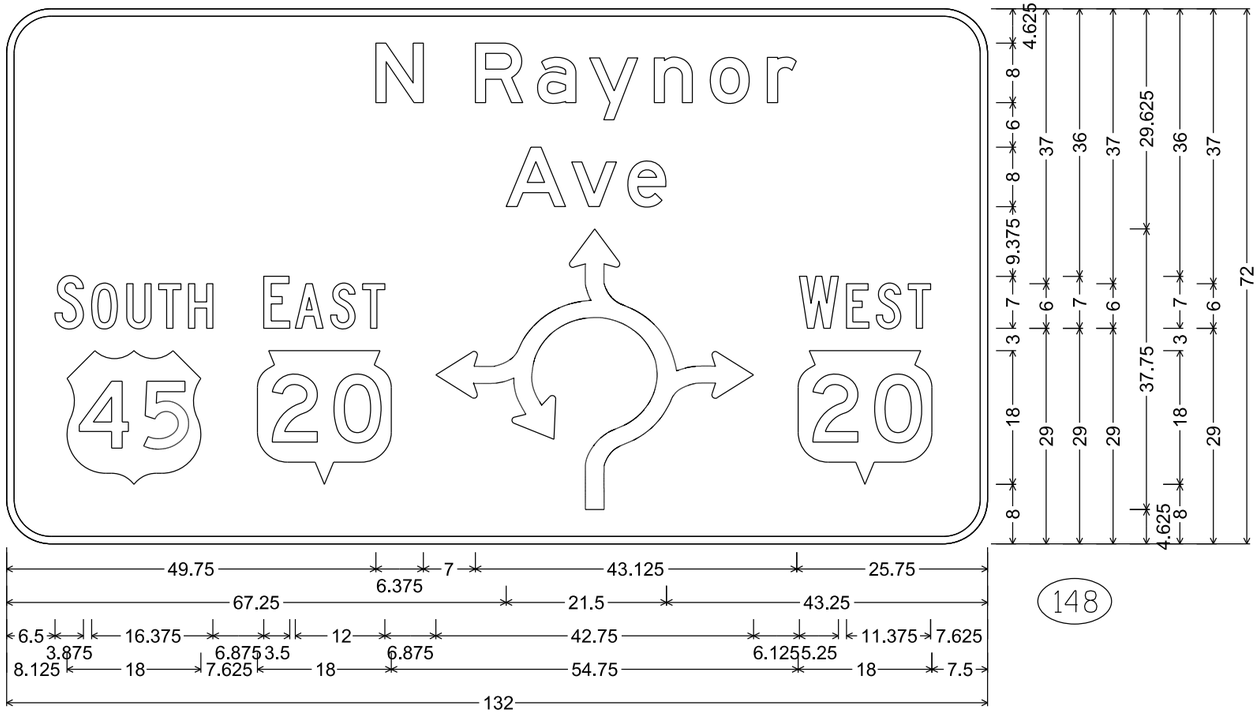
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted



D1-62; 6.000" Radius, 1.000" Border,
"NORTH", C; "WEST", C; "SOUTH", C; "EAST", C

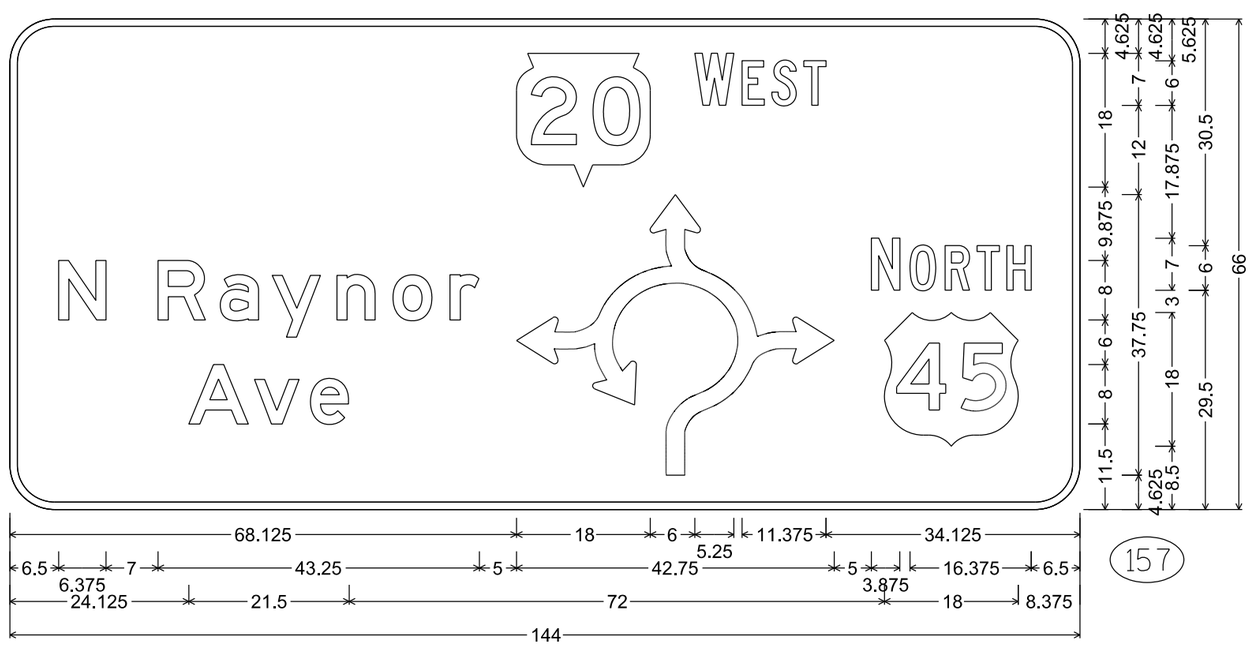
NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - As noted



148

D1-62; 6.000" Radius, 1.000" Border,
"N", E; "Raynor", E; "Ave", E; "SOUTH", C; "EAST", C; "WEST", C



157

D1-62; 6.000" Radius, 1.000" Border,
"WEST", C; "N", E; "Raynor", E; "Ave", E; "NORTH", C

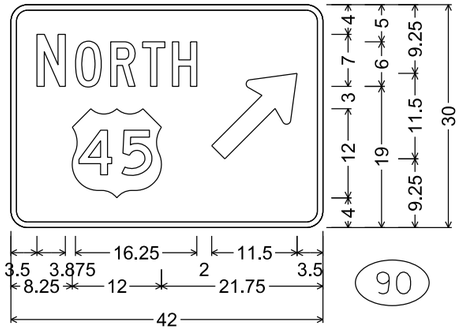
7

7

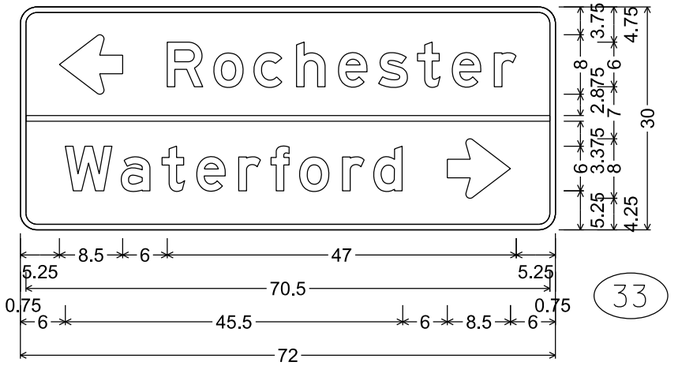
NOTES

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

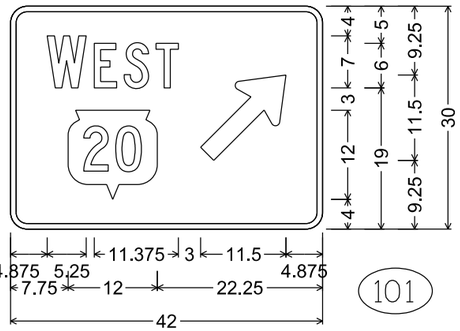
D1-1; 2.250" Radius, 0.750" Border



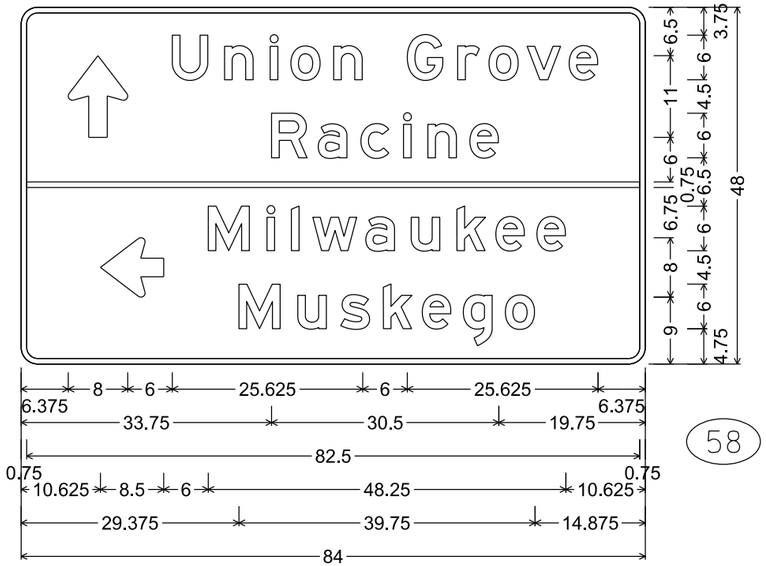
D1-1; 2.250" Radius, 0.750" Border
"NORTH", C



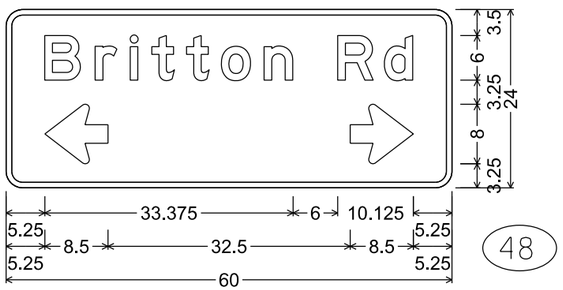
D1-2; 2.250" Radius, 0.750" Border



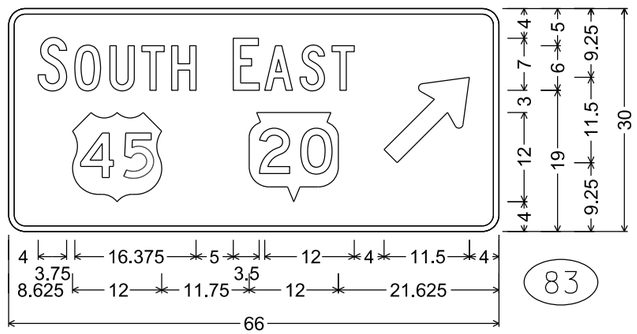
D1-1; 2.250" Radius, 0.750" Border
"WEST", C



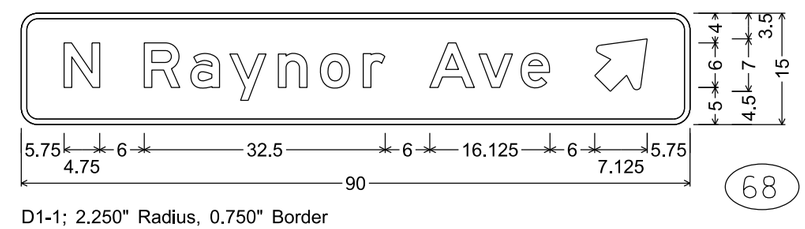
D1-4; 2.250" Radius, 0.750" Border



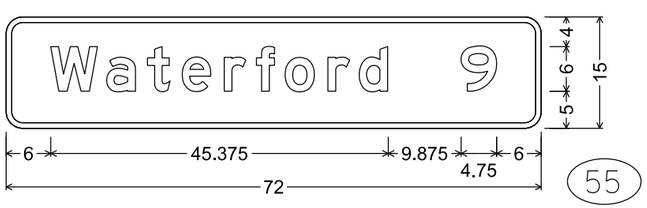
D1-61; 2.250" Radius, 0.750" Border



D1-2; 2.250" Radius, 0.750" Border,
"SOUTH", C; "EAST", C



D1-1; 2.250" Radius, 0.750" Border



D2-1; 2.250" Radius, 0.750" Border

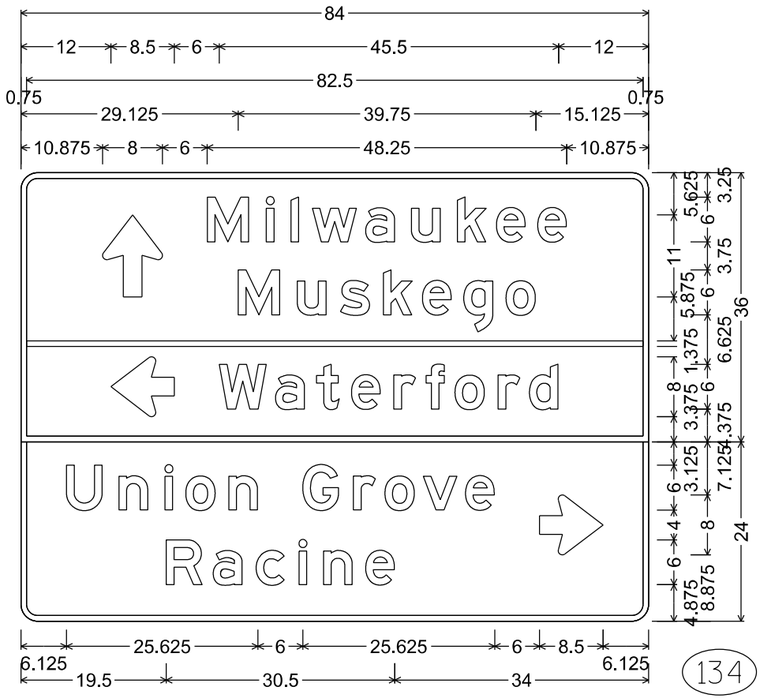
7

7

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	PERMANENT SIGNING	SHEET NO: 394	E

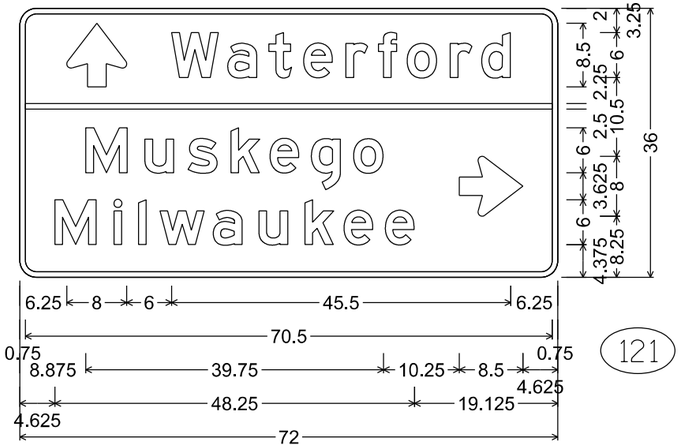
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



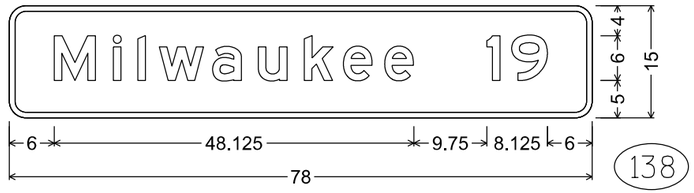
134

2.250" Radius, 0.750" Border



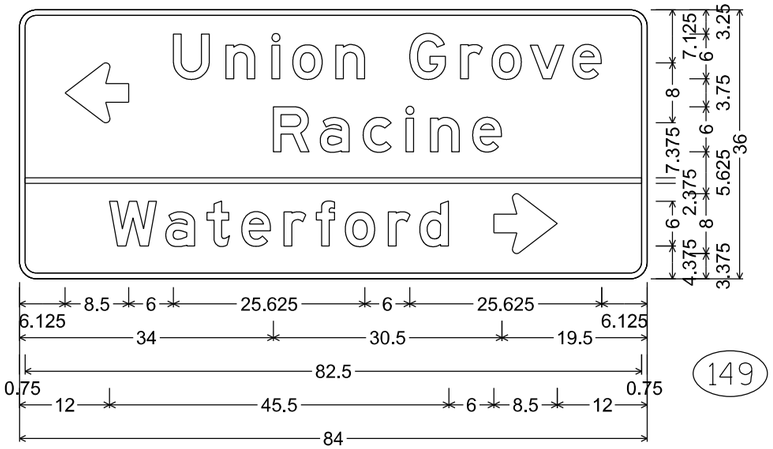
121

D1-3; 2.250" Radius, 0.750" Border



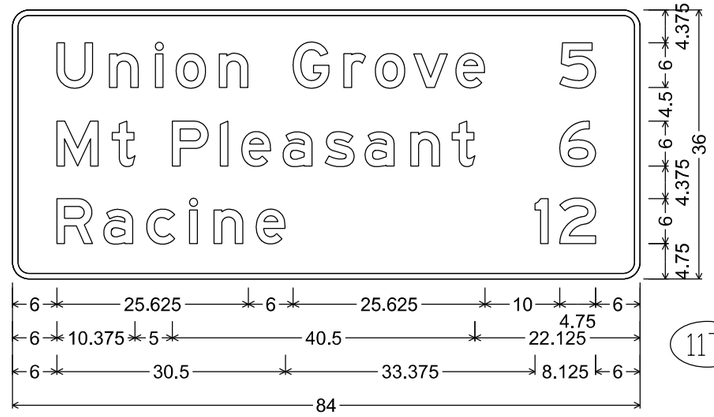
138

D2-1; 2.250" Radius, 0.750" Border



149

D1-3; 2.250" Radius, 0.750" Border



117

D2-3; 2.250" Radius, 0.750" Border

WEST LEG

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut Note 1	Incremental Vol Fill Note 3	Cumulative Vol (CY) Expanded Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Cumulative Vol (CY) Expanded Mass Ordinate Note 8
10+00.4	1000.40	0.00	127.34	2.14	0	0	0	0	0
10+50	1050.00	49.60	120.98	2.92	228	5	228	7	222
11+00	1100.00	50.00	114.31	5.03	218	7	446	16	430
11+50	1150.00	50.00	115.26	6.05	213	10	659	29	630
12+00	1200.00	50.00	114.28	8.14	213	13	872	46	827
12+50	1250.00	50.00	114.09	12.37	211	19	1,083	70	1,013
13+00	1300.00	50.00	112.70	18.16	210	28	1,293	107	1,186
13+50	1350.00	50.00	107.16	20.05	204	35	1,497	152	1,345
14+00	1400.00	50.00	113.16	14.25	204	32	1,701	194	1,507
14+50	1450.00	50.00	113.54	10.57	210	23	1,911	224	1,687
15+00	1500.00	50.00	147.99	1.75	242	11	2,153	238	1,915
15+50	1550.00	50.00	135.66	3.23	263	5	2,416	244	2,172
16+00	1600.00	50.00	147.45	1.88	262	5	2,678	251	2,427
16+50	1650.00	50.00	171.92	1.75	296	3	2,974	255	2,719
17+00	1700.00	50.00	186.37	0.36	332	2	3,306	257	3,049
17+50	1750.00	50.00	206.69	0.02	364	0	3,670	257	3,413
18+00	1800.00	50.00	217.78	0.56	393	1	4,063	259	3,804
18+50	1850.00	50.00	217.60	7.96	403	8	4,466	269	4,197
19+00	1900.00	50.00	214.26	8.72	400	15	4,866	289	4,577

EAST LEG

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut Note 1	Incremental Vol Fill Note 3	Cumulative Vol (CY) Expanded Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Cumulative Vol (CY) Expanded Mass Ordinate Note 8
21+50	2150.00	0.00	45.05	90.34	0	0	0	0	0
22+00	2200.00	50.00	49.76	83.66	88	161	88	209	-121
22+50	2250.00	50.00	63.79	63.85	105	137	193	387	-194
23+00	2300.00	50.00	108.14	40.35	159	96	352	512	-160
23+50	2350.00	50.00	127.16	3.68	218	41	570	566	4
24+00	2400.00	50.00	108.90	30.44	219	32	789	607	182
24+50	2450.00	50.00	139.10	8.46	230	36	1,019	654	365
25+00	2500.00	50.00	165.13	3.69	282	11	1,301	668	633
25+50	2550.00	50.00	107.48	17.34	252	19	1,553	693	860
26+00	2600.00	50.00	94.61	15.48	187	30	1,740	732	1,008
26+50	2650.00	50.00	91.58	15.74	172	29	1,912	770	1,142
27+00	2700.00	50.00	92.12	16.93	170	30	2,082	809	1,273
27+50	2750.00	50.00	97.11	10.39	175	25	2,257	841	1,416
28+00	2800.00	50.00	101.97	6.28	184	15	2,441	861	1,580
28+50	2850.00	50.00	101.82	2.77	189	8	2,630	871	1,759
29+00	2900.00	50.00	104.93	0.09	191	3	2,821	875	1,946
29+50	2950.00	50.00	110.25	0.27	199	0	3,020	875	2,145
30+00	3000.00	50.00	119.33	0.14	213	0	3,233	875	2,358
30+11.589	3011.59	11.59	123.49	0.06	52	0	3,285	875	2,410

SOUTH LEG

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut Note 1	Incremental Vol Fill Note 3	Cumulative Vol (CY) Expanded Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Cumulative Vol (CY) Expanded Mass Ordinate Note 8
44+61.355	4461.35	0.00	130.31	0.00	0	0	0	0	0
45+00	4500.00	38.65	178.47	0.00	221	0	221	0	221
45+50	4550.00	50.00	168.67	0.00	321	0	542	0	542
46+00	4600.00	50.00	167.57	0.31	311	0	853	0	853
46+50	4650.00	50.00	168.82	0.00	311	0	1,164	0	1,164
47+00	4700.00	50.00	158.42	0.23	303	0	1,467	0	1,467
47+50	4750.00	50.00	162.17	0.07	297	0	1,764	0	1,764
48+00	4800.00	50.00	167.20	0.01	305	0	2,069	0	2,069
48+50	4850.00	50.00	185.49	0.00	327	0	2,396	0	2,396
49+00	4900.00	50.00	208.51	0.00	365	0	2,761	0	2,761
49+50	4950.00	50.00	238.05	0.01	413	0	3,174	0	3,174
50+00	5000.00	50.00	291.32	0.01	490	0	3,664	0	3,664
50+50	5050.00	50.00	347.17	5.05	591	5	4,255	7	4,249

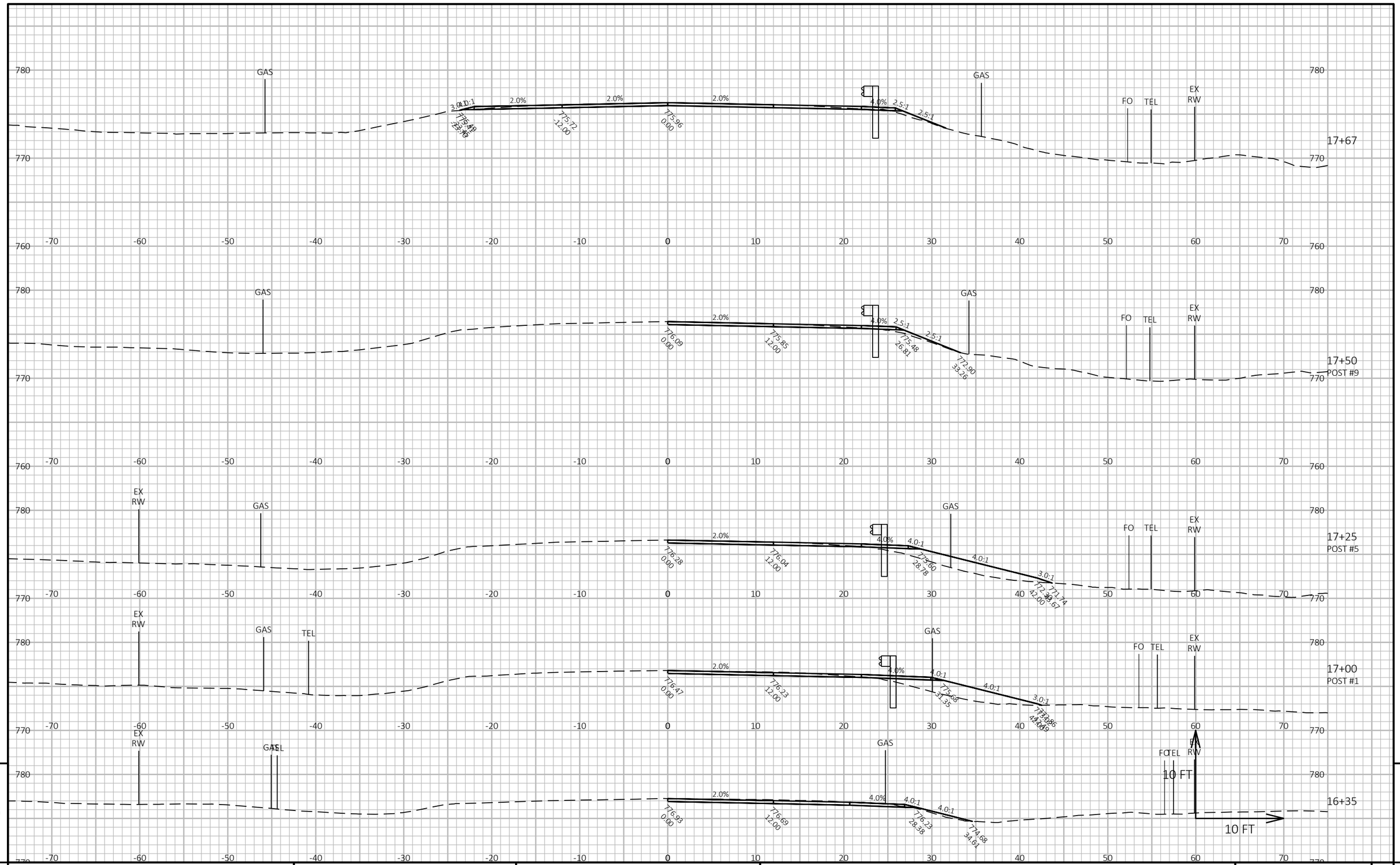
NORTH LEG

STATION	Real Station	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol Cut Note 1	Incremental Vol Fill Note 3	Cumulative Vol (CY) Expanded Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.30	Cumulative Vol (CY) Expanded Mass Ordinate Note 8
53+50	5350.00	0.00	143.57	28.04	0	0	0	0	0
54+00	5400.00	50.00	151.05	3.24	273	29	273	38	235
54+50	5450.00	50.00	182.88	0.91	309	4	582	43	539
55+00	5500.00	50.00	193.53	0.03	349	1	931	44	887
55+50	5550.00	50.00	280.05	3.54	438	3	1,369	48	1,321
56+00	5600.00	50.00	241.48	12.51	483	15	1,852	68	1,784
56+50	5650.00	50.00	198.30	18.19	407	28	2,259	104	2,155
56+90	5690.00	40.00	176.79	39.76	278	43	2,537	160	2,377
57+25	5725.00	35.00	182.19	30.41	233	45	2,770	218	2,552
57+50	5750.00	25.00	186.98	10.08	171	19	2,941	243	2,698
58+00	5800.00	50.00	198.75	1.54	357	11	3,298	257	3,041
58+50	5850.00	50.00	183.80	0.56	354	2	3,652	260	3,392
59+00	5900.00	50.00	189.09	0.72	345	1	3,997	261	3,736
59+40.651	5940.65	40.65	227.55	0.00	314	1	4,311	263	4,048

9

9

PROJECT NO: 2340-10-70 | HWY: STH 20 | COUNTY: RACINE | EARTHWORK: ROUNDABOUT | SHEET 396 E



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9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 397	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

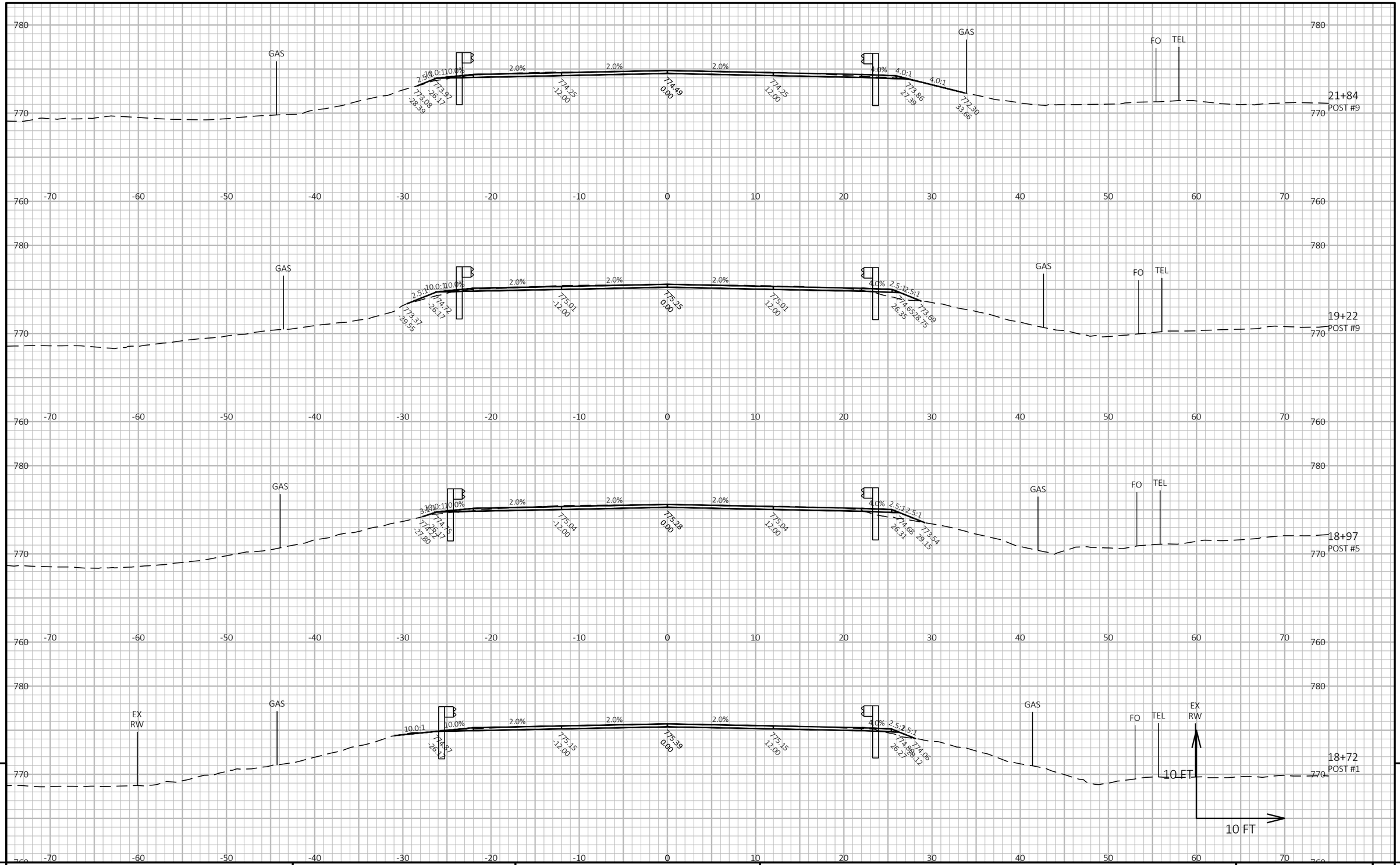
PLOT DATE : 7/12/2022 9:13 AM

PLOT BY : JESSICA LEWIS, PE

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 398	E

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LAYOUT NAME - 02

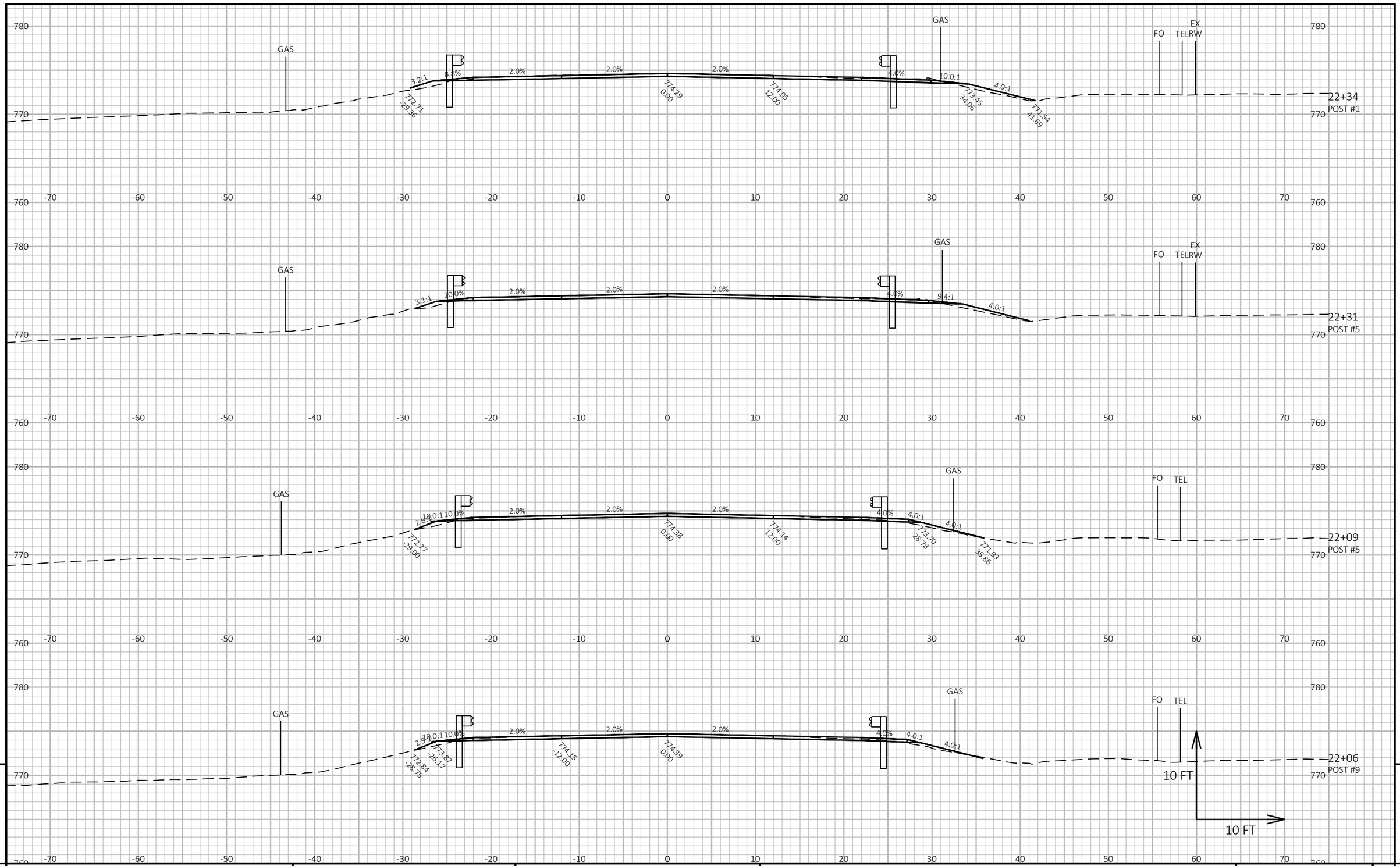
PLOT DATE : 7/12/2022 9:14 AM

PLOT BY : JESSICA LEWIS, PE

PLOT NAME :

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

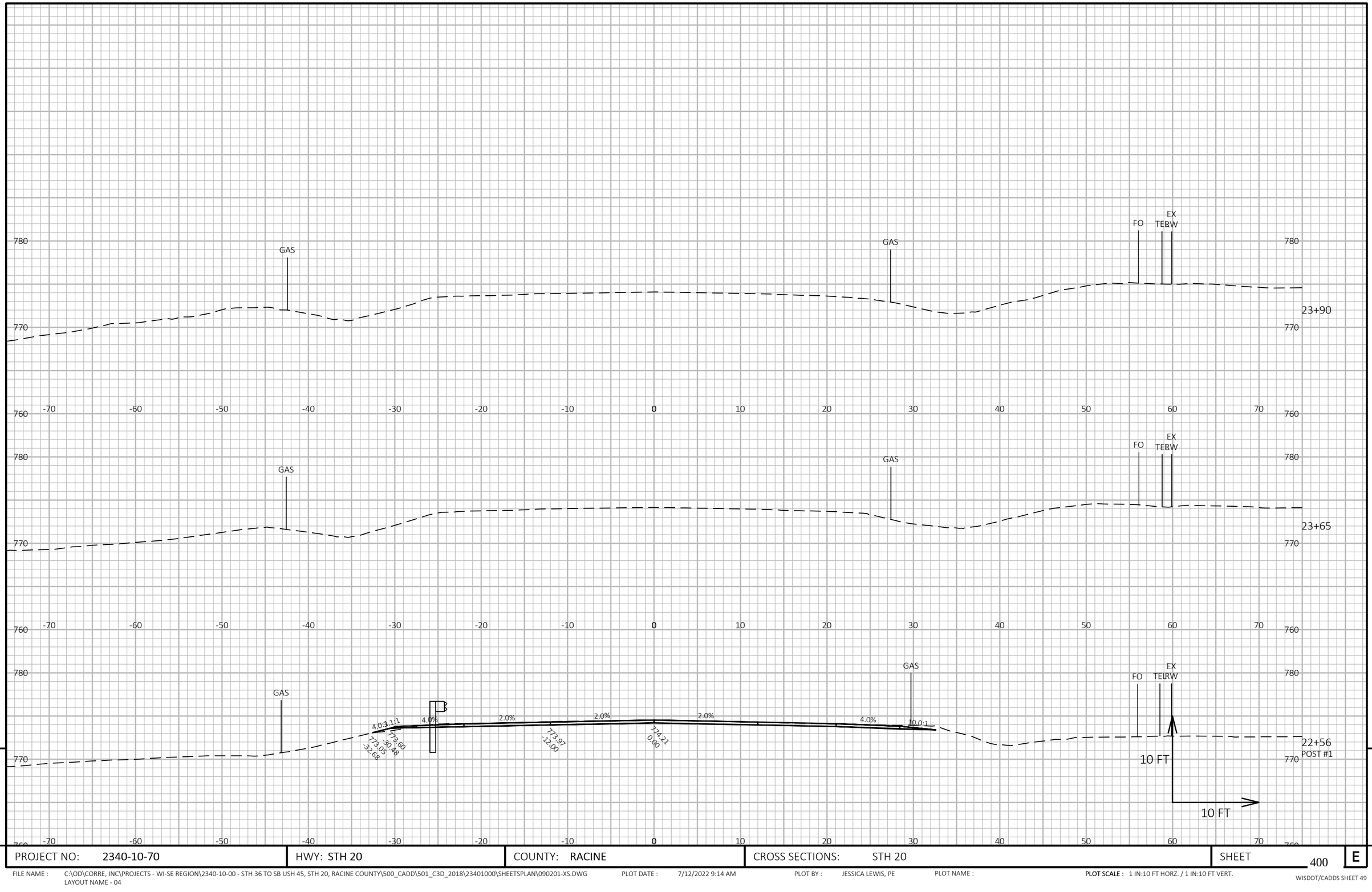
WISDOT/CADDS SHEET 49



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 399 E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SE REGION\2340-10-00 - STH 36 TO SB USH 45, STH 20, RACINE COUNTY\500_CADD\501_C3D_2018\23401000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/12/2022 9:14 AM PLOT BY : JESSICA LEWIS, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE	CROSS SECTIONS: STH 20	SHEET 400	E

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LAYOUT NAME - 04

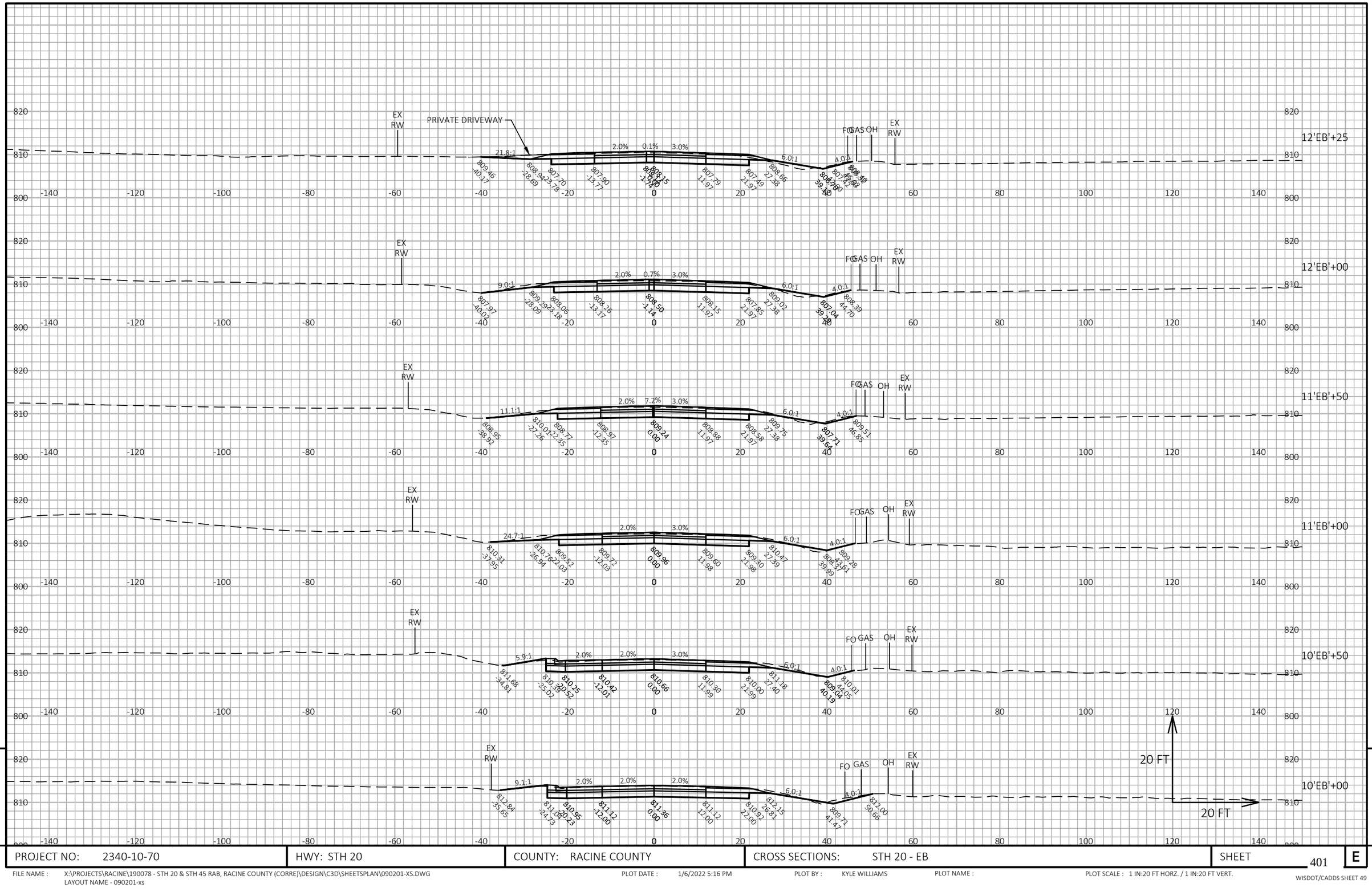
PLOT DATE : 7/12/2022 9:14 AM

PLOT BY : JESSICA LEWIS, PE

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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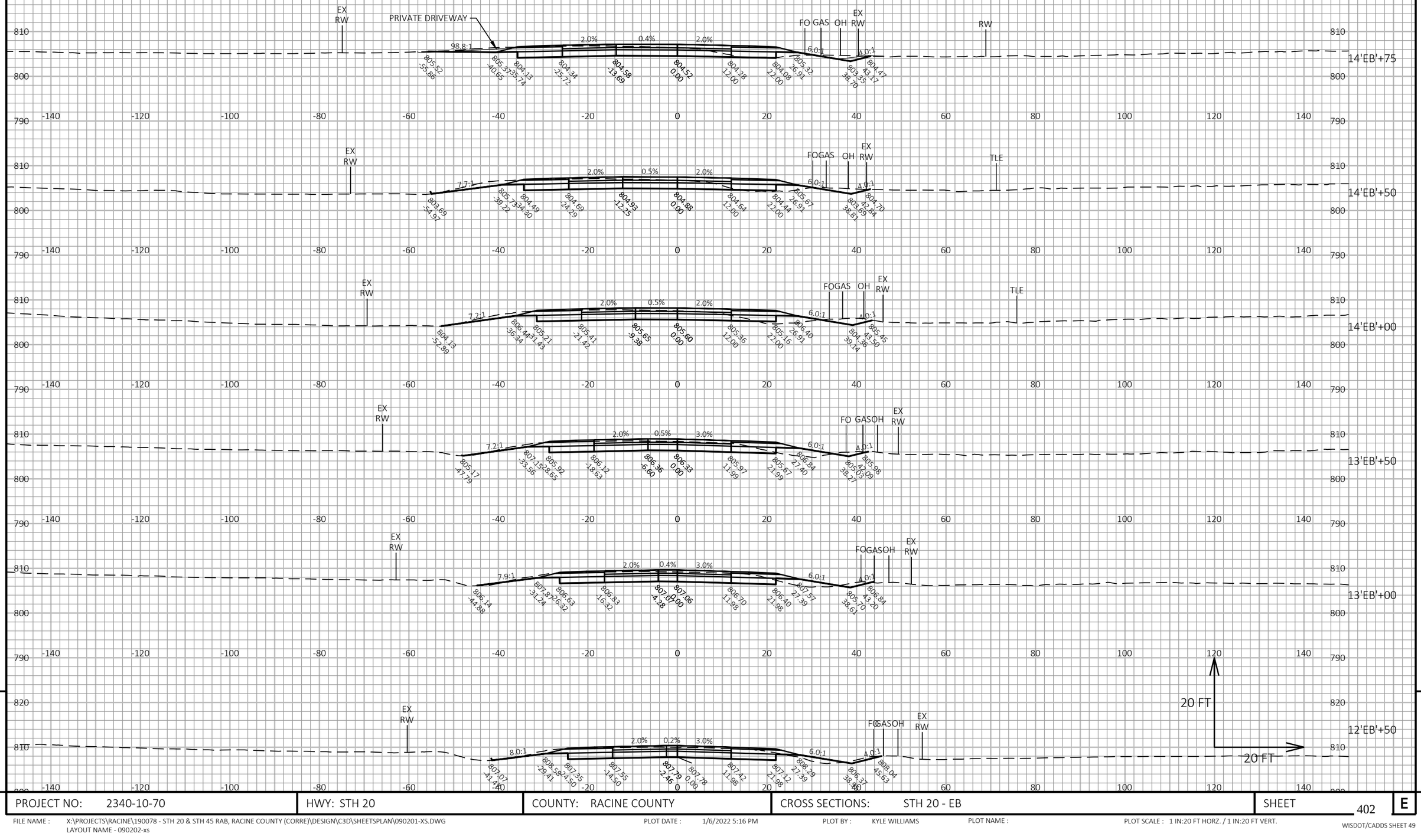
9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 401	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 1/6/2022 5:16 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 402	E

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LAYOUT NAME - 090202-xs

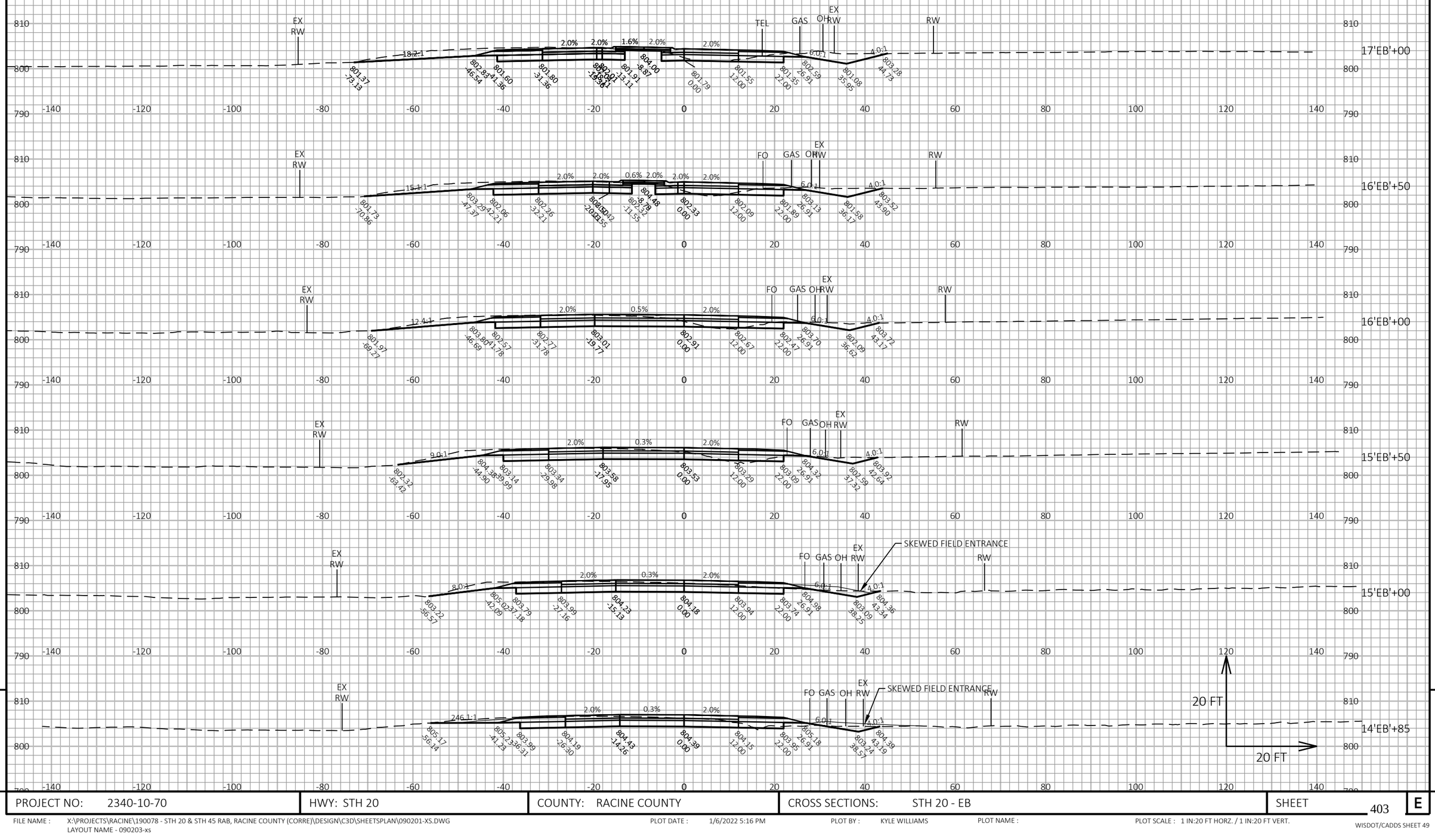
PLOT DATE : 1/6/2022 5:16 PM

PLOT BY : KYLE WILLIAMS

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 403	E

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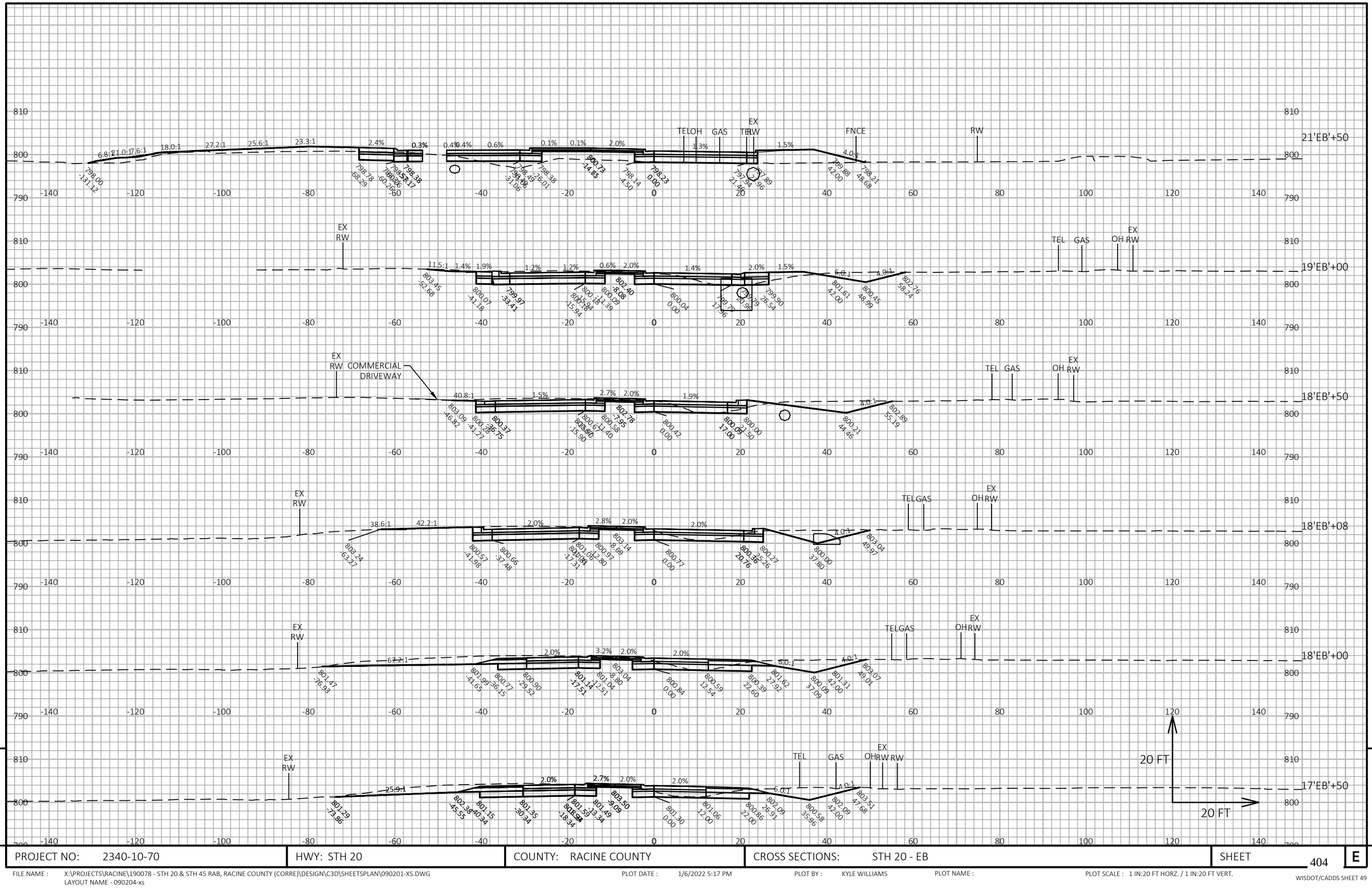
LAYOUT NAME - 090203-xs

PLOT DATE : 1/6/2022 5:16 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

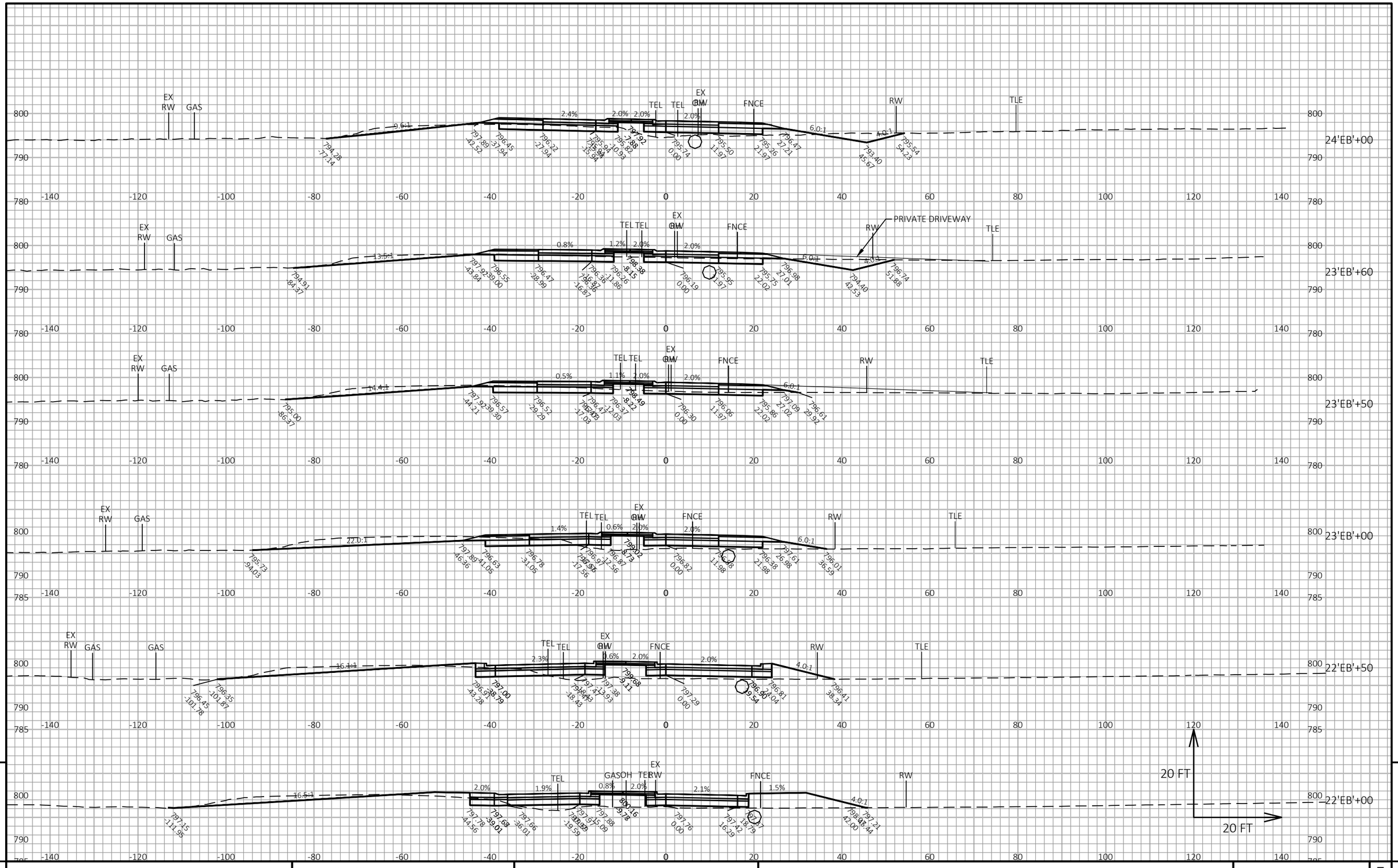
9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 404	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 405 E

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LAYOUT NAME - 090205-xs

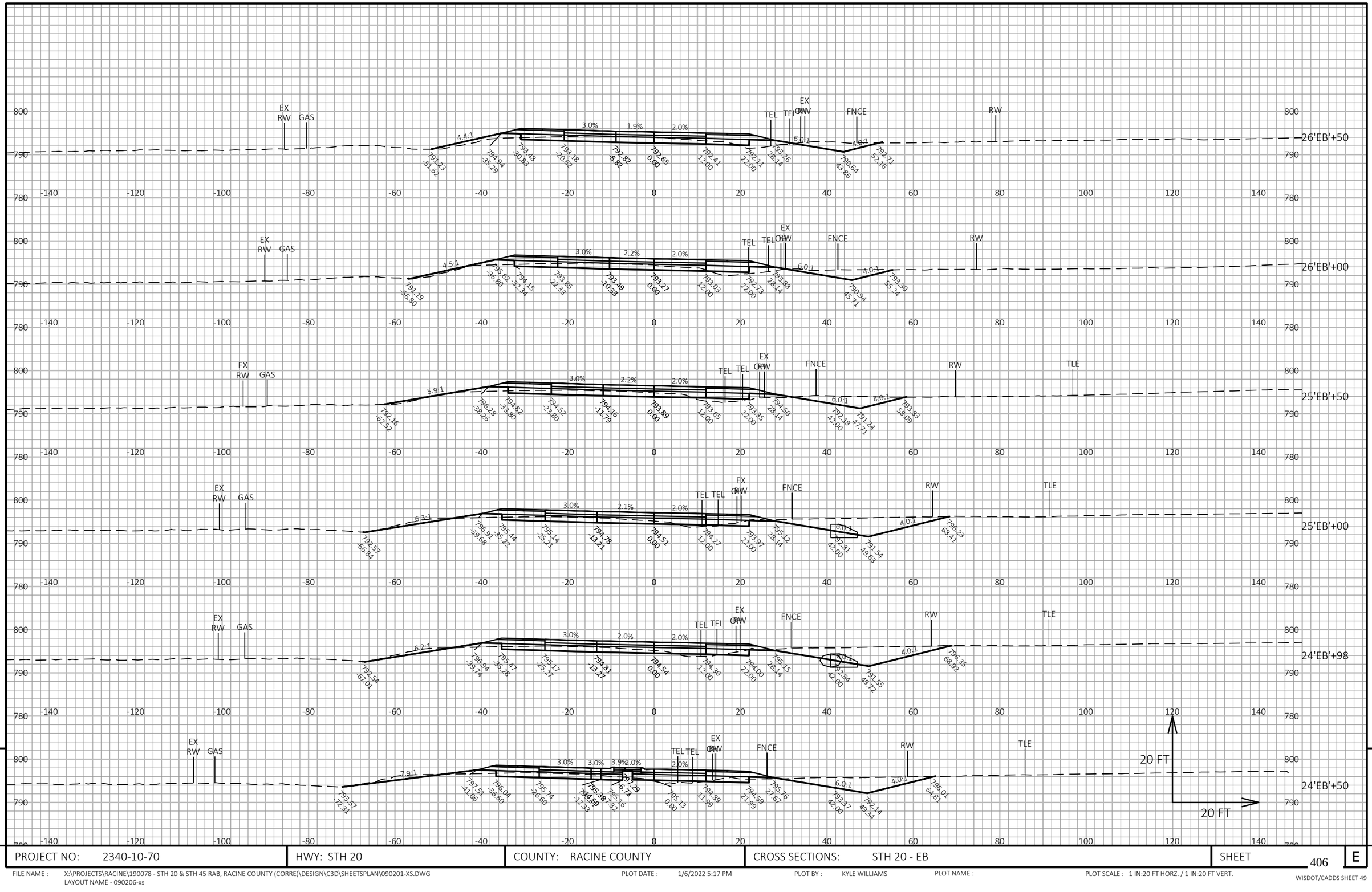
PLOT DATE : 1/6/2022 5:17 PM

PLOT BY : KYLE WILLIAMS

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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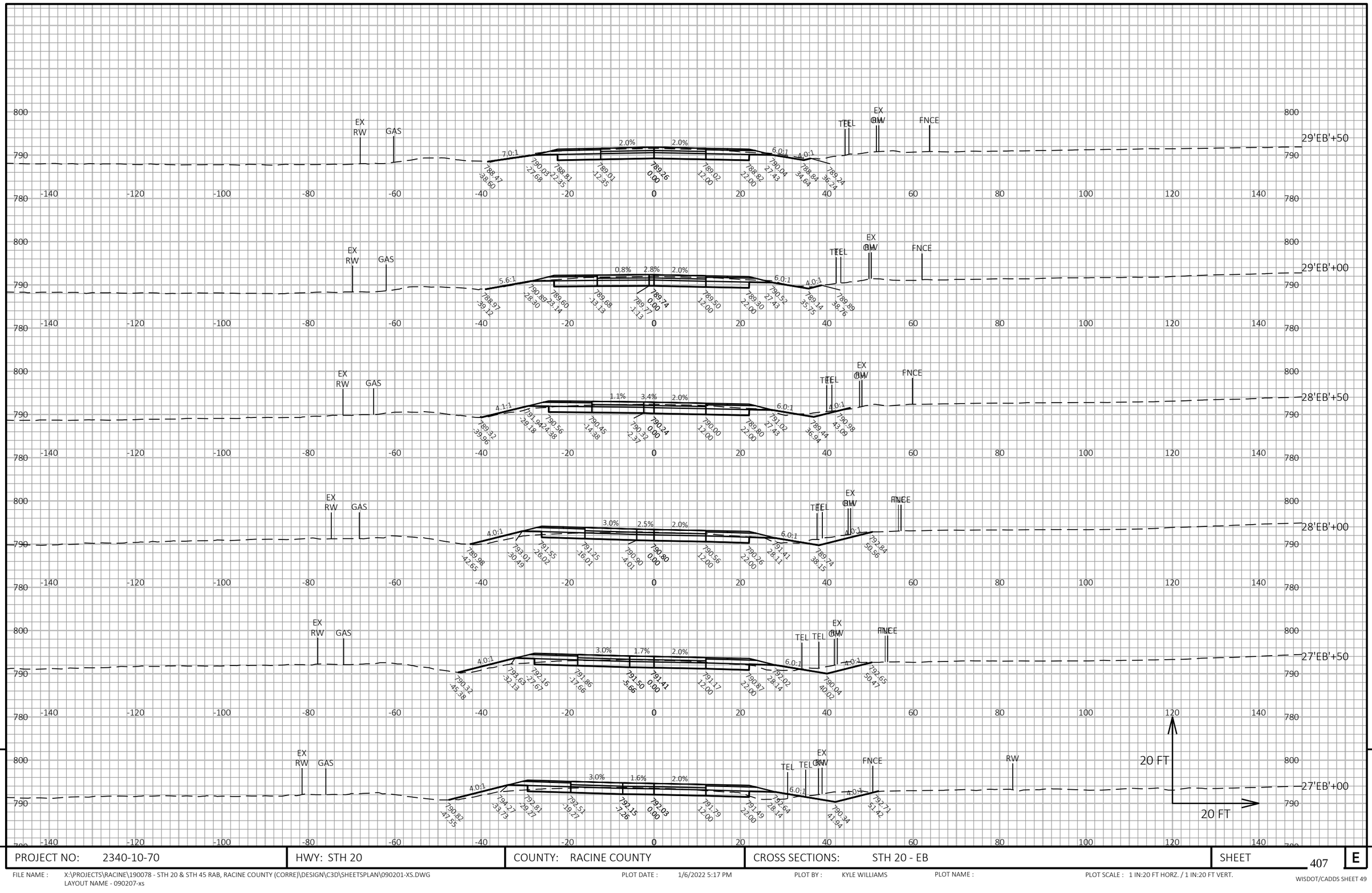
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 406	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090206-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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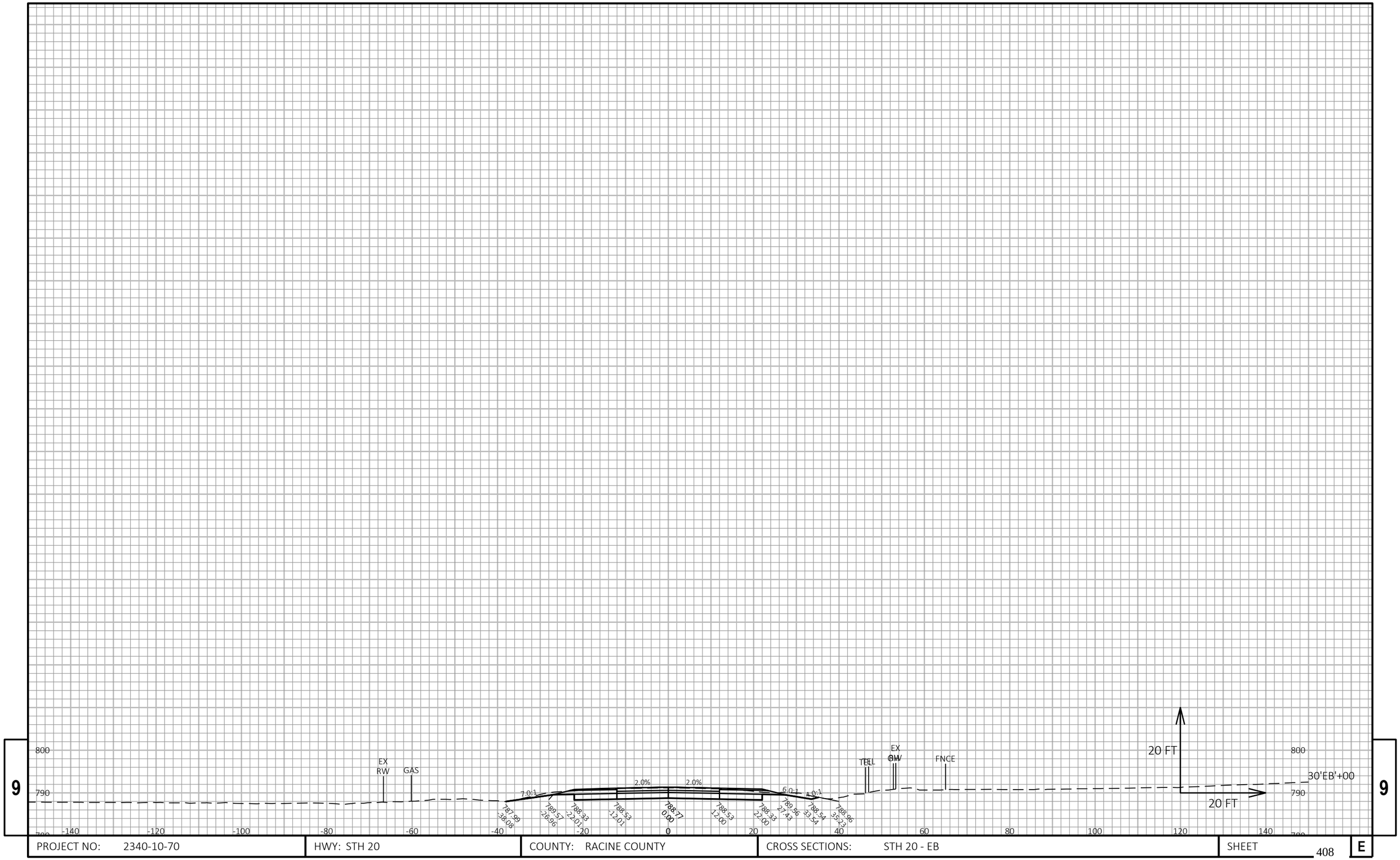
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 407	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090207-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

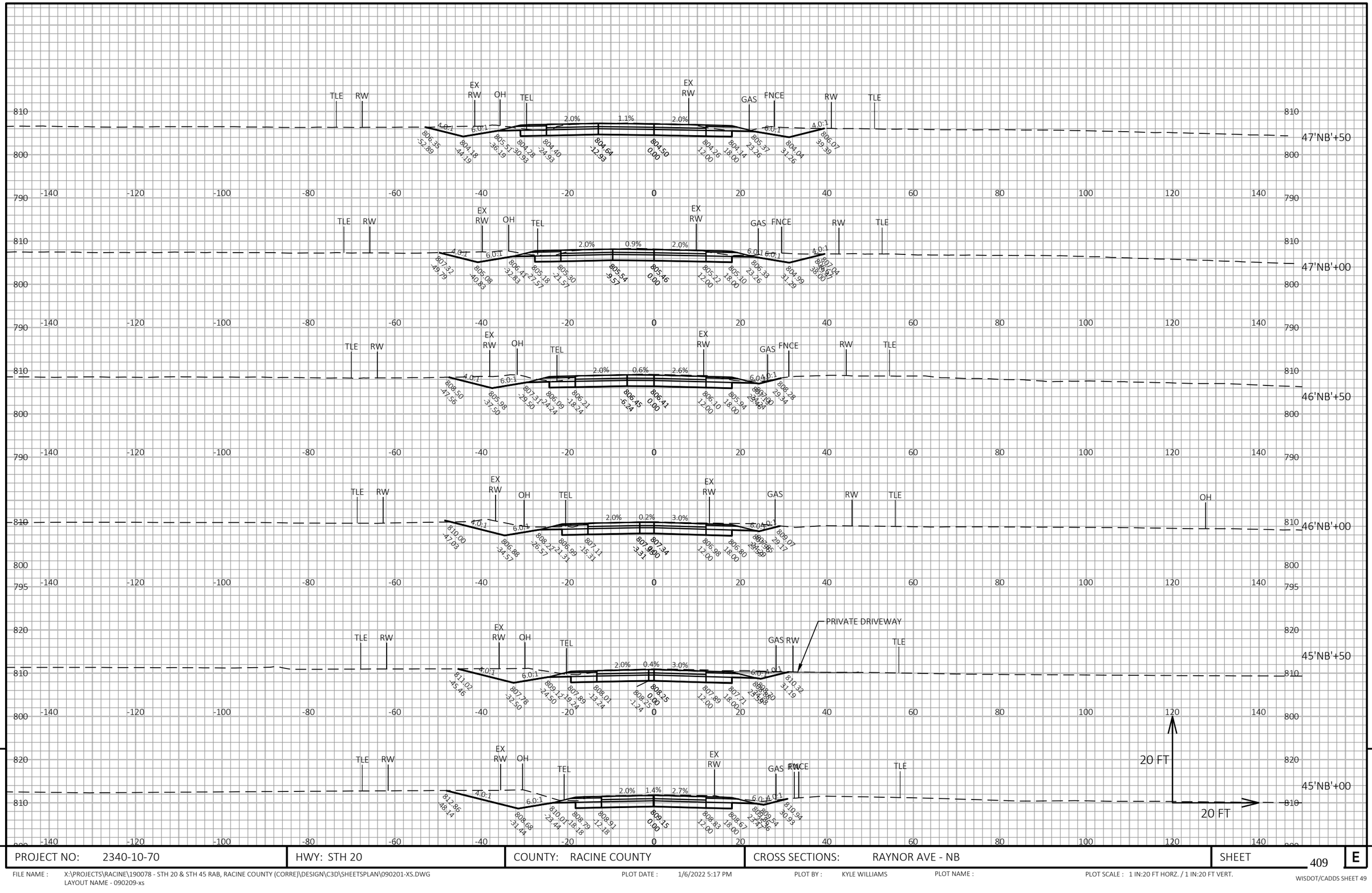


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: STH 20 - EB	SHEET 408	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

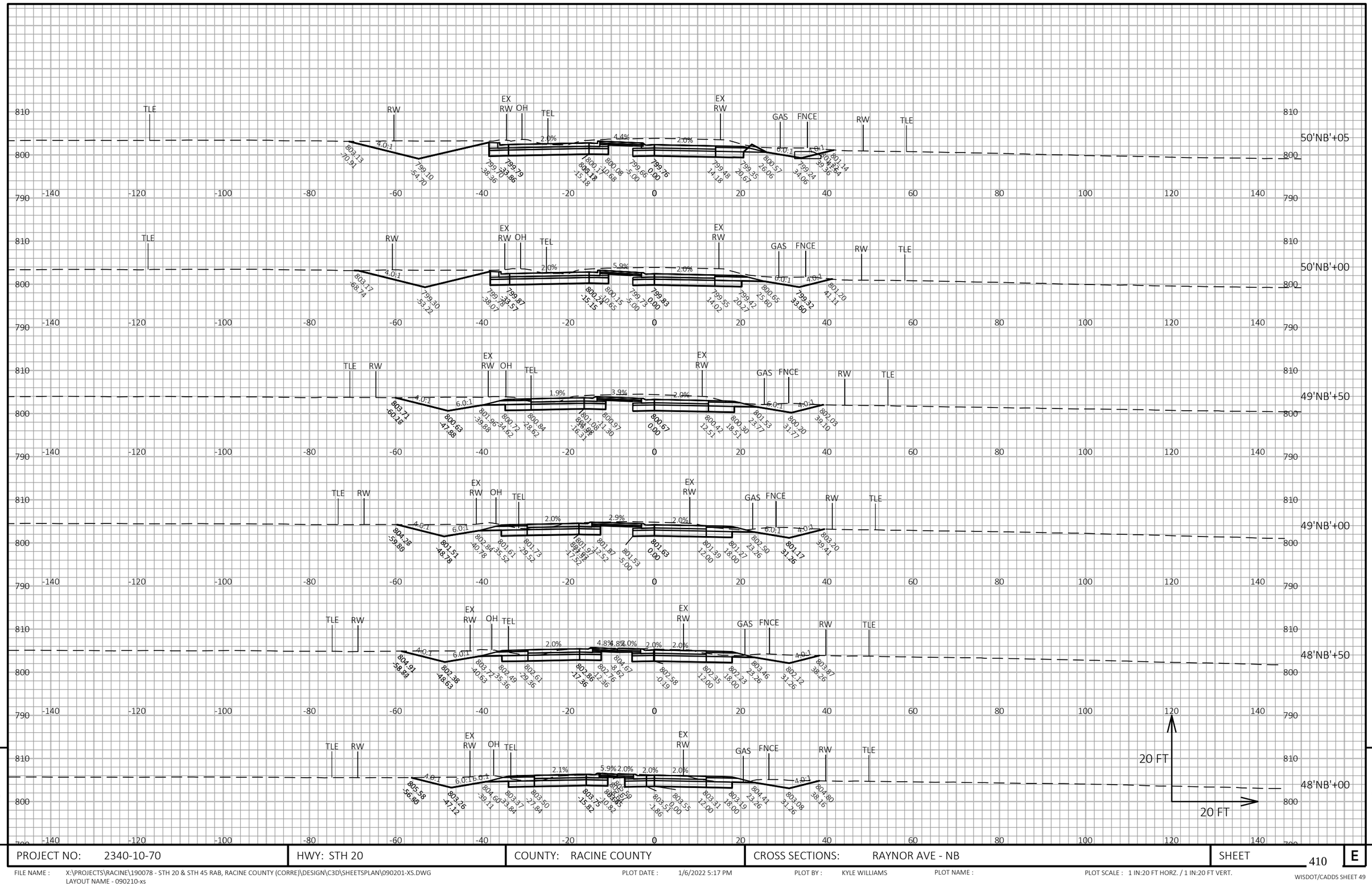


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 409 E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090209-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

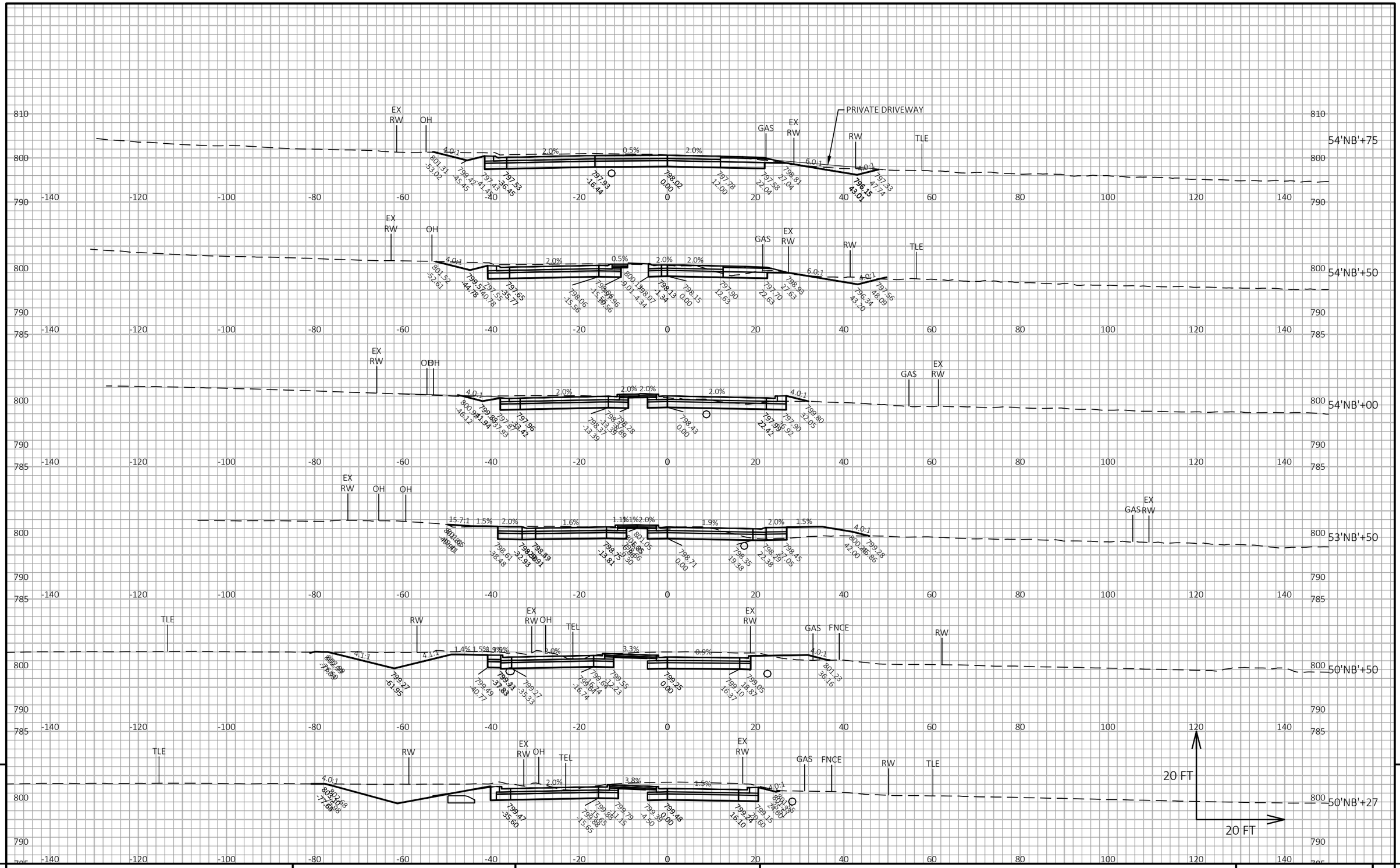


PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 410 E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090210-xs

PLOT DATE : 1/6/2022 5:17 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 411	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090211-xs

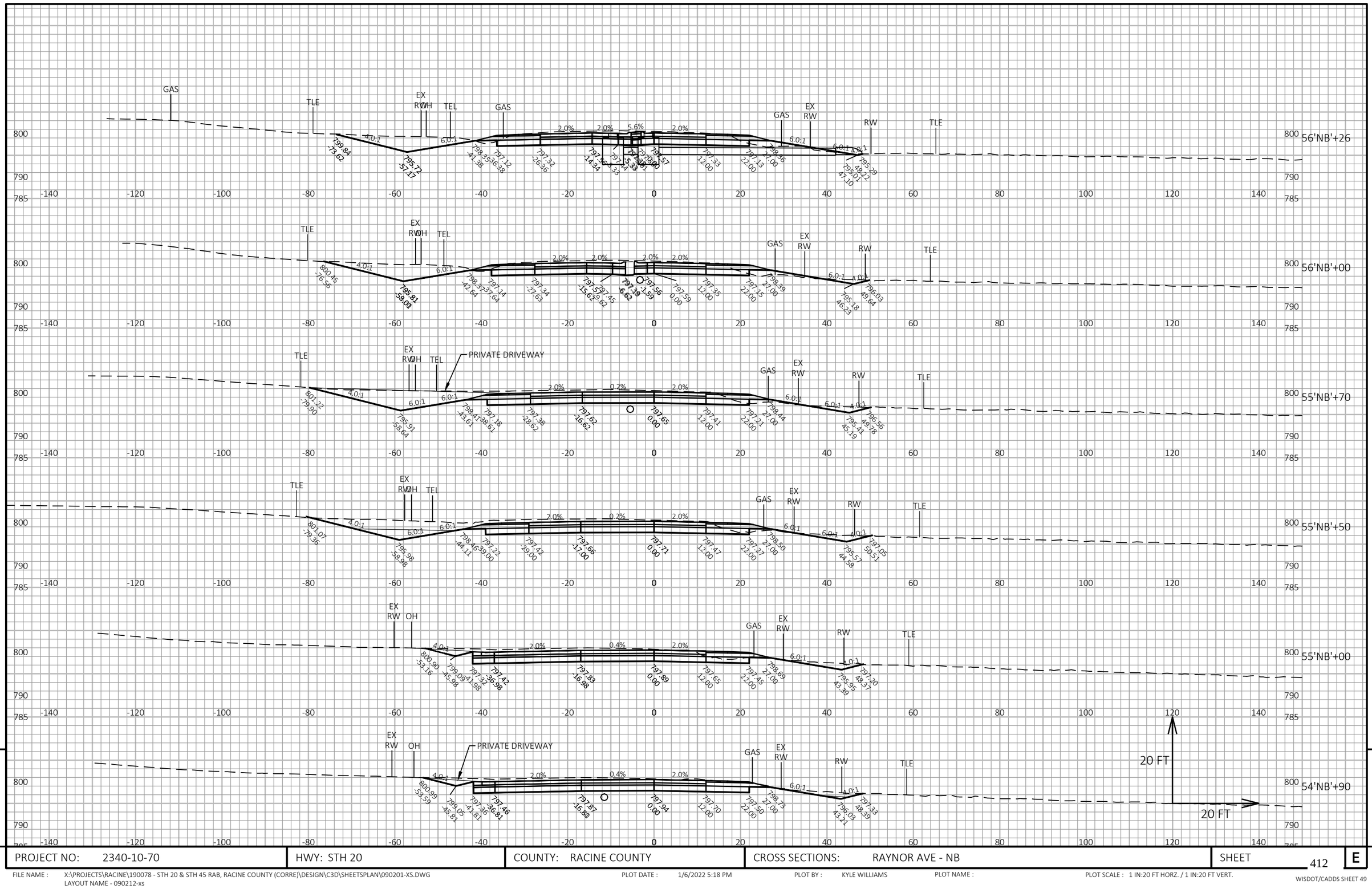
PLOT DATE : 1/6/2022 5:17 PM

PLOT BY : KYLE WILLIAMS

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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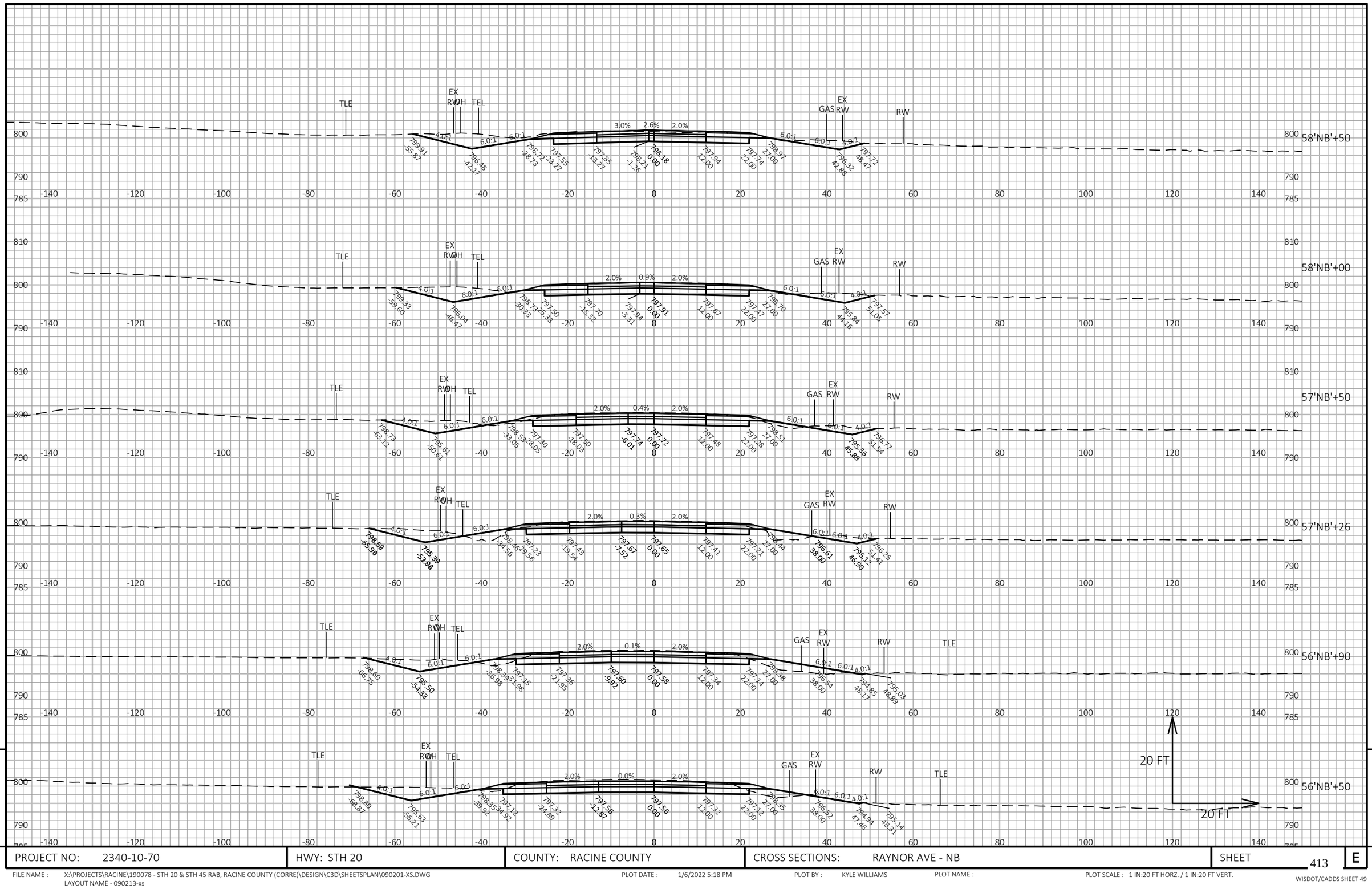
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 412	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090212-xs

PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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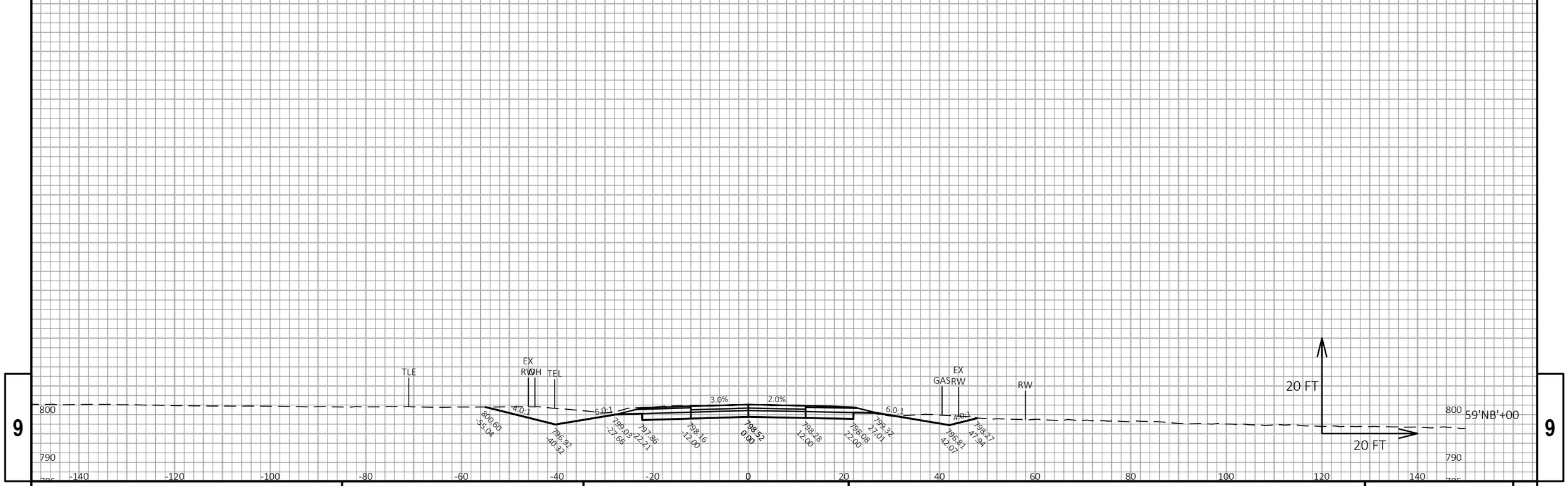
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 413	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090213-xs

PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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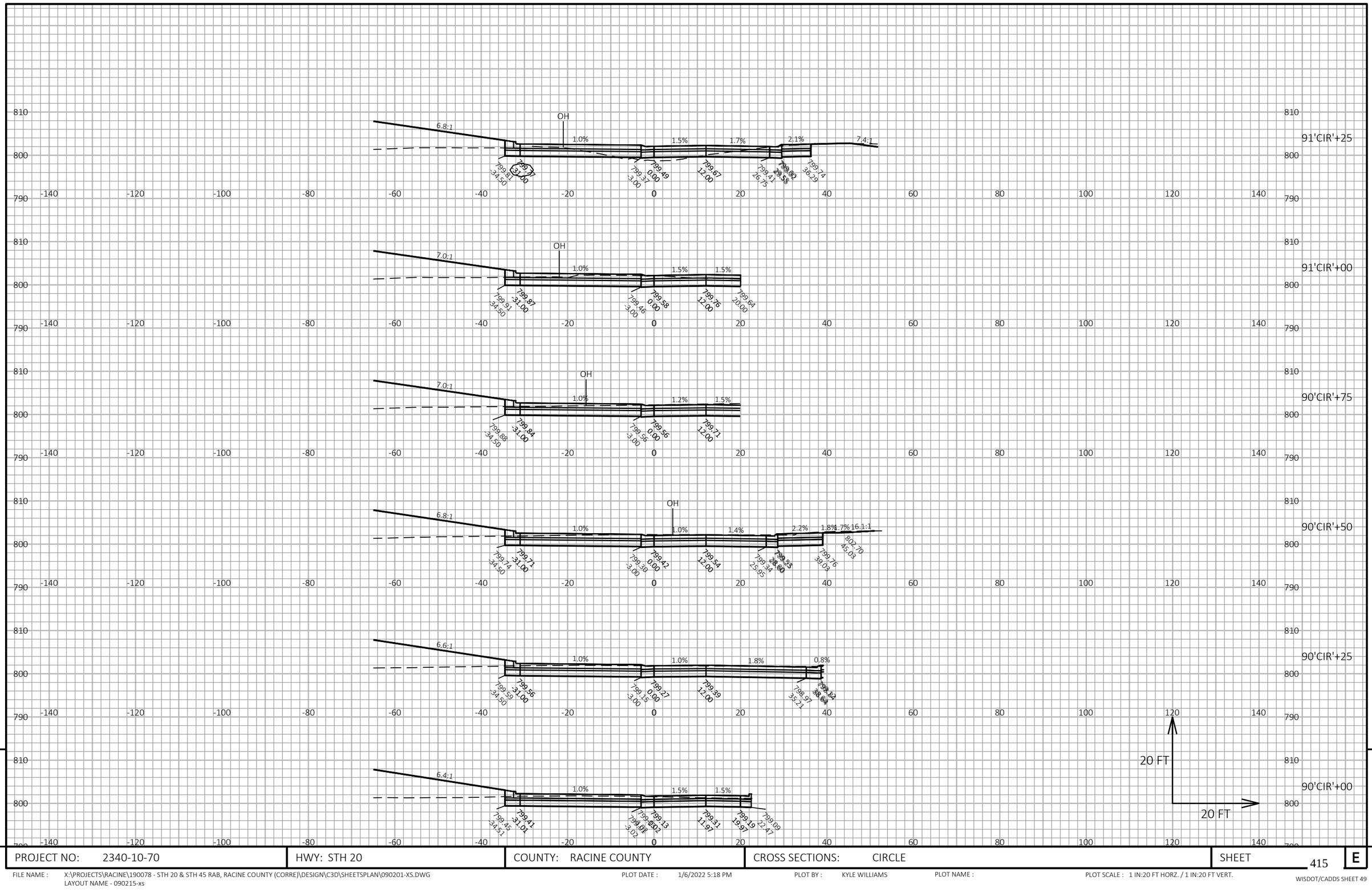
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: RAYNOR AVE - NB	SHEET 414	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090214-xs

PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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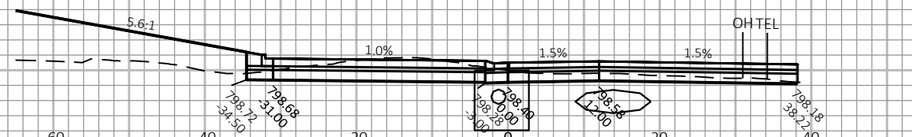
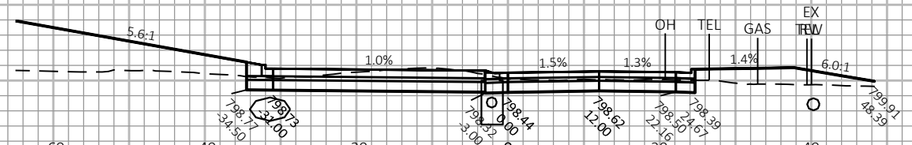
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: CIRCLE	SHEET 415	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090215-xs

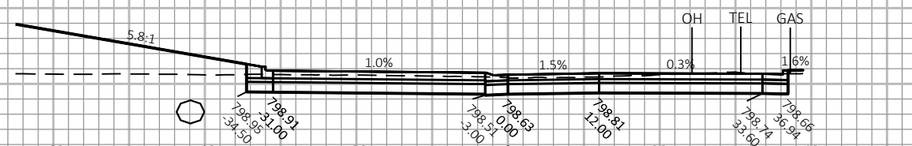
PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



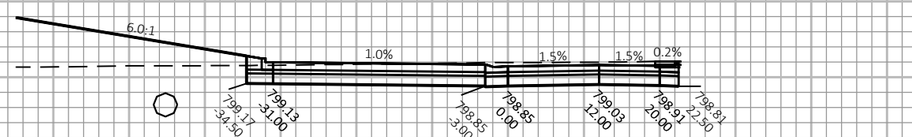
92'CIR'+75



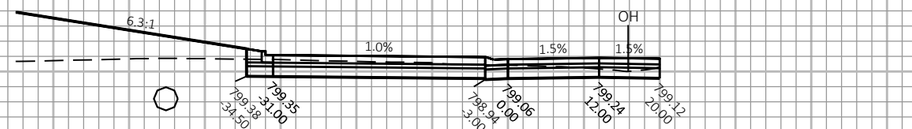
92'CIR'+50



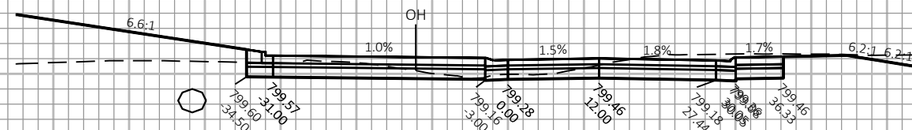
92'CIR'+25



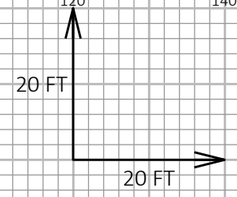
92'CIR'+00



91'CIR'+75



91'CIR'+50



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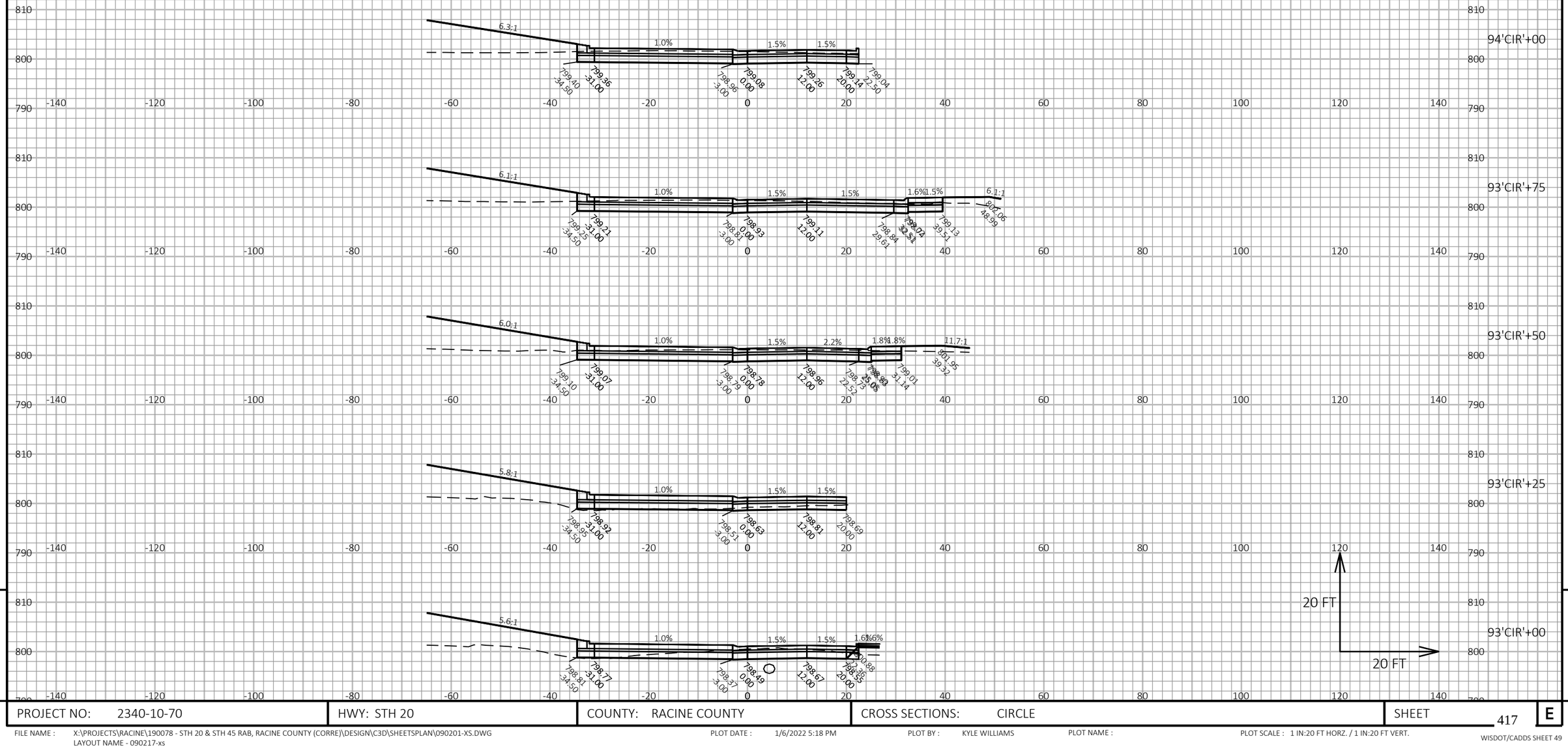
PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: CIRCLE	SHEET 416	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090216-xs

PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 2340-10-70	HWY: STH 20	COUNTY: RACINE COUNTY	CROSS SECTIONS: CIRCLE	SHEET 417	E

FILE NAME : X:\PROJECTS\RACINE\190078 - STH 20 & STH 45 RAB, RACINE COUNTY (CORRE)\DESIGN\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090217-xs

PLOT DATE : 1/6/2022 5:18 PM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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