WKE

MAY 2018

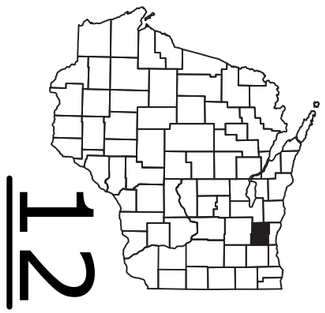
PROJECT ID: 1380-00-70

WITH:

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 = 370



COUNTY: WASHINGTON

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MEQUON RD, VILLAGE OF GERMANTOWN

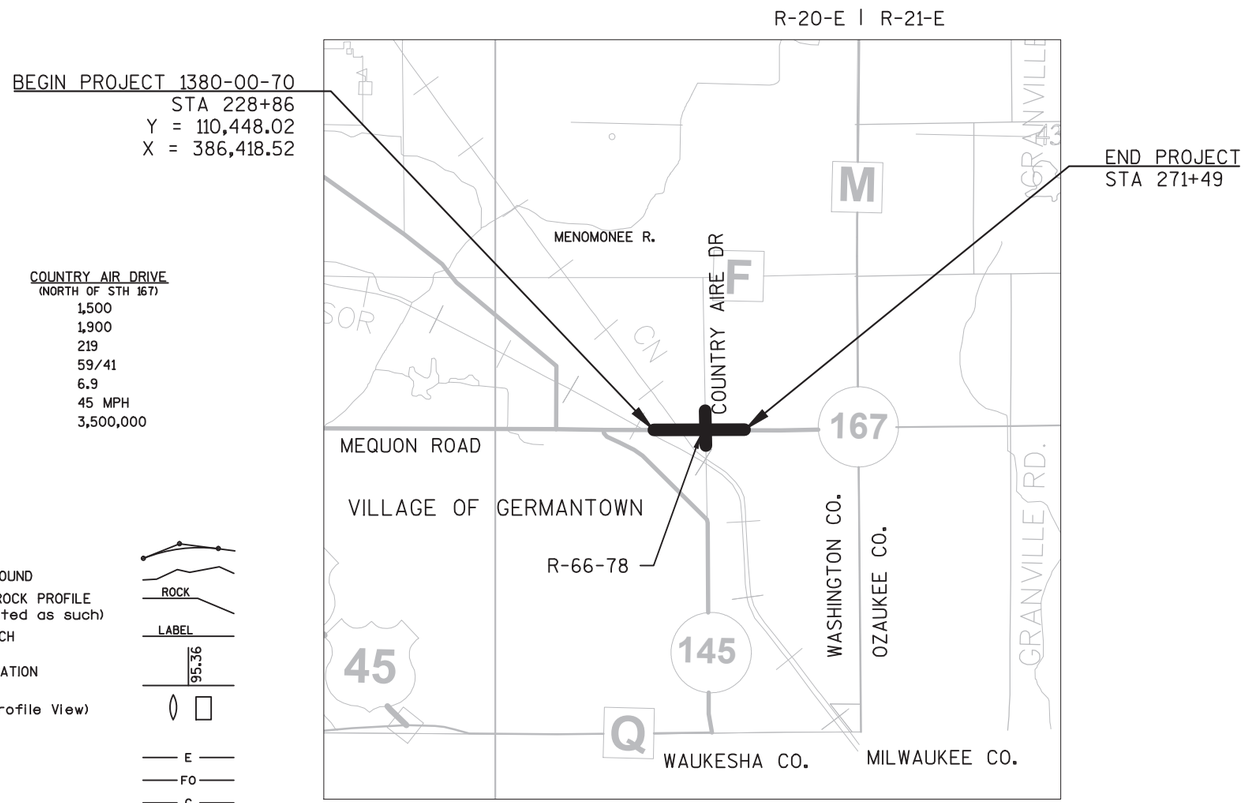
COUNTRY AIRE DRIVE INTERSECTION

STH 167

WASHINGTON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1380-00-70	WISC 2018238	1

STATE PROJECT NUMBER
1380-00-70



DESIGN DESIGNATION 1380-00-70

			STH 167	COUNTRY AIR DRIVE (SOUTH OF STH 167)	COUNTRY AIR DRIVE (NORTH OF STH 167)
A.A.D.T.	2015	=	12,300	1,700	1,500
A.A.D.T.	2038	=	21,400	4,600	1,900
D.H.V.		=	2,461	529	219
D.D.		=	59/41	59/41	59/41
T.		=	6.9	6.9	6.9
DESIGN SPEED		=	50 MPH	45 MPH	45 MPH
ESALS		=	3,500,000	3,500,000	3,500,000

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
- 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

LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.807

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88 (2007).

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY

DAAR ENGINEERING, INC.
www.daarcorp.com
Milwaukee, WI 53202
414-225-9817

WISCONSIN
ANDREW J. SMIEJA
E-31137
WAUKESHA, WI
PROFESSIONAL ENGINEER

2/1/2018 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	DAAR ENGINEERING, INC.
Designer	DAAR ENGINEERING, INC.
Project Manager	NGUYEN LY, P.E.
Regional Examiner	STEVE CHOJNACKI, P.E.
Regional Supervisor	BENEDICT ERUCHALU, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 2/1/2018 (Signature)

E

GENERAL NOTES

CURVE DATA SHOWN ON THE PLAN IS "ARC DEFINITION".

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

DIMENSIONS GIVEN FOR EXISTING FEATURES SHALL BE CONSIDERED AS APPROXIMATE AND MEASURED IN FIELD FOR MATCHING PURPOSE.

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

ALL DISTURBED AREAS WITHIN THE RIGHT OF WAY THAT ARE NOT A RESULT OF CONTRACT WORK ITEMS SHALL BE FERTILIZED SEEDED AND MULCHED AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY OR PUBLIC AGENCY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING ASPHALTIC CONCRETE SURFACE.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK MAY BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AND SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DEEMS THE MEASURE NO LONGER NECESSARY.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY THE EXISTING DRAINAGE SYSTEM CONNECTION LOCATIONS AND ELEVATIONS.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN (14) CALENDAR DAYS, TEMPORARY SEED AND MULCH THOSE AREAS.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, TEMPORARY SEED AND MULCH THE STOCKPILE.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND WASHINGTON COUNTY, AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

UNLESS NOTED ON THE PLAN, ALL RADII ARE GIVEN TO THE FLANGE LINE.

CURB & GUTTER GRADES ARE GIVEN AT THE FLANGE LINE.

HMA PAVEMENT LAYER INFORMATION

ALL HMA PAVEMENT LOCATIONS SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

PAVEMENT LOCATION	TOTAL PAVEMENT THICKNESS	LAYERS	TYPE
STH 167 & COUNTRY AIRE DR	6"	2" UPPER	4 MT 58-28 S
		4" LOWER	3 MT 58-28 S

ORDER OF DETAIL SHEETS

GENERAL NOTES

PROJECT OVERVIEW

TYPICAL SECTIONS

CONSTRUCTION DETAILS

REMOVAL PLAN

PLAN DETAILS

PAVEMENT GRADES

EROSION CONTROL

STORM SEWER PLAN

SIGNING REMOVAL PLAN

PERMANENT SIGNING

TRAFFIC SIGNAL PLAN

PAVEMENT MARKING

TRAFFIC CONTROL

DETOUR PLAN

ALIGNMENT DETAILS

SURVEY CONTROL

DIGGERS HOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

OTHER CONTACTS

WISDOT PROJECT MANAGER
NGUYEN LY
141 NW BARSTOW
PO BOX 798
WAUKESHA, WI 53187
PHONE 262-548-8739
nguyen.ly@dot.wi.gov

WISDNR
KRISTINA BETZOLD
2300 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
PHONE 414-263-8517
kristina.betzold@wisconsin.gov

SEWRPC
JOHN WASHBURN
W239 N1812 ROCKWOOD DRIVE
PO BOX 1607
WAUKESHA, WI 53187
PHONE: 262-547-6721
jwashburn@sewrpc.org

CONSULTANT PROJECT MANAGER
ANDY SMIEJA
325 E. CHICAGO STREET
SUITE 300
MILWAUKEE, WI 53202
PHONE 414-935-4350
andy.smieja@daarcorp.com

VILLAGE OF GERMANTOWN
JOHN LANING
N112W17001 MEQUON ROAD
PO BOX 337
GERMANTOWN, WI 53022
PHONE 262-250-4720
FAX 262-253-8255
jlaning@village.germantown.wi.us

WASHINGTON COUNTY SURVEYOR
TED DUMKE
900 LANG STREET
WEST BEND, WI 53090
PHONE 262-335-4436
ted.dumke@co.washington.wi.us

RAILROAD

CANADIAN NATIONAL
JACKIE MACEWICZ
1625 DEPOT STREET
STEVENS POINT, WI 54481
PHONE 715-345-2503
jackie.macewicz@cn.ca

WISCONSIN & SOUTHERN
ROGER SCHAALMA
1890 E JOHNSON STREET
MADISON, WI 53704
PHONE 608-620-2044
rschaalma@watcocompanies.com

UTILITY CONTACTS

AT&T WISCONSIN
JEFF OLDENBURG
2005 PEWAUKEE RD
WAUKESHA, WI 53188
PHONE 262-896-7522
jo2376@att.com

KOCH PIPELINE COMPANY
MERCEDES MALLINGER
6438 85TH STREET
COTTAGE GROVE, MN 55016
PHONE 651-437-0877
mercedes.mallinger@kochpipeline.com

VILLAGE OF GERMANTOWN
WATER UTILITY
JIM DRIVER
N122 W17177 FOND DU LAC AVE
GERMANTOWN, WI 53022
PHONE 262-253-8254
jdriver@village.germantown.us

WE ENERGIES FIELD CONTACT - ELECTRIC
STEVE SCHECHER
500 S 116 ST
WEST ALLIS, WI 53214
PHONE 414-944-5639
steve.schecher@we-energies.com

WEST SHORE PIPELINE COMPANY - FIELD CONTACT
CASEY SCHWANDT
2119 N QUINCY ST
GREEN BAY, WI 54302
PHONE 920-229-4368
cschwandt@buckeye.com

WISDOT - SIGNALS - FIELD CONTACT
PARWINDER VIRK
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE 262-548-6717
parwinder.virk@dot.wi.gov

CHARTER
STEVEN CRAMER
1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE 414-277-4045
wis.engineering@charter.com

KOCH PIPELINE COMPANY FIELD CONTACT
DREW SUYDAM
N 4240 HWY 26
WAUPUN, WI 53963
PHONE 920-948-4655
drew.suydam@kochpipeline.com

VILLAGE OF GERMANTOWN
WATER UTILITY FIELD CONTACT
PAUL HAUGEN
N122 W17001 MEQUON ROAD
GERMANTOWN, WI 53022
PHONE 262-253-8254
phaugen@village.germantown.wi.us

WE ENERGIES FIELD CONTACT - GAS
NICK ERNSTER
500 S 116 ST
WEST ALLIS, WI 53214
PHONE 414-944-5574
nicholas.ernster@we-energies.com

WINDSTREAM NTI, INC.
MARY FISHER
13935 BISHOPS DR
BROOKFIELD, WI 53005
PHONE 262-792-7938
mary.b.fisher@windstream.com

CHARTER FIELD CONTACT
PETE KRUZELA
1320 N. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
PHONE 414-908-1339
pete.kruzela@charter.com

SPRINT COMMUNICATIONS, L.P.
GERRY CRAIN
1901 N. ROSELLE ROAD
SCHAUMBURG, IL 60195
PHONE 847-445-1869
gerry.A.crain@sprint.com

WE ENERGIES (GAS & ELECTRIC)
NICOLE SMULLEN
333 W. EVERETT ST. – A299
MILWAUKEE, WI 53203
PHONE 414-221-5617
nicole.smullen@wecenergyroup.com

WEST SHORE PIPELINE COMPANY
DAVID JONES
FIVE TEK PARK, 9999 HAMILTON BLVD
BREININGSVILLE, PA 18031
PHONE 610-904-4409
DAJones@buckeye.com

WISDOT - SIGNALS
DAVE BRANTNER
141 NW BARSTOW ST
PO BOX 798
WAUKESHA, WI 53187
PHONE 262-548-8736
david.brantner@dot.wi.gov

DIGGERS HOTLINE
Dial 811 or (800) 242-8511
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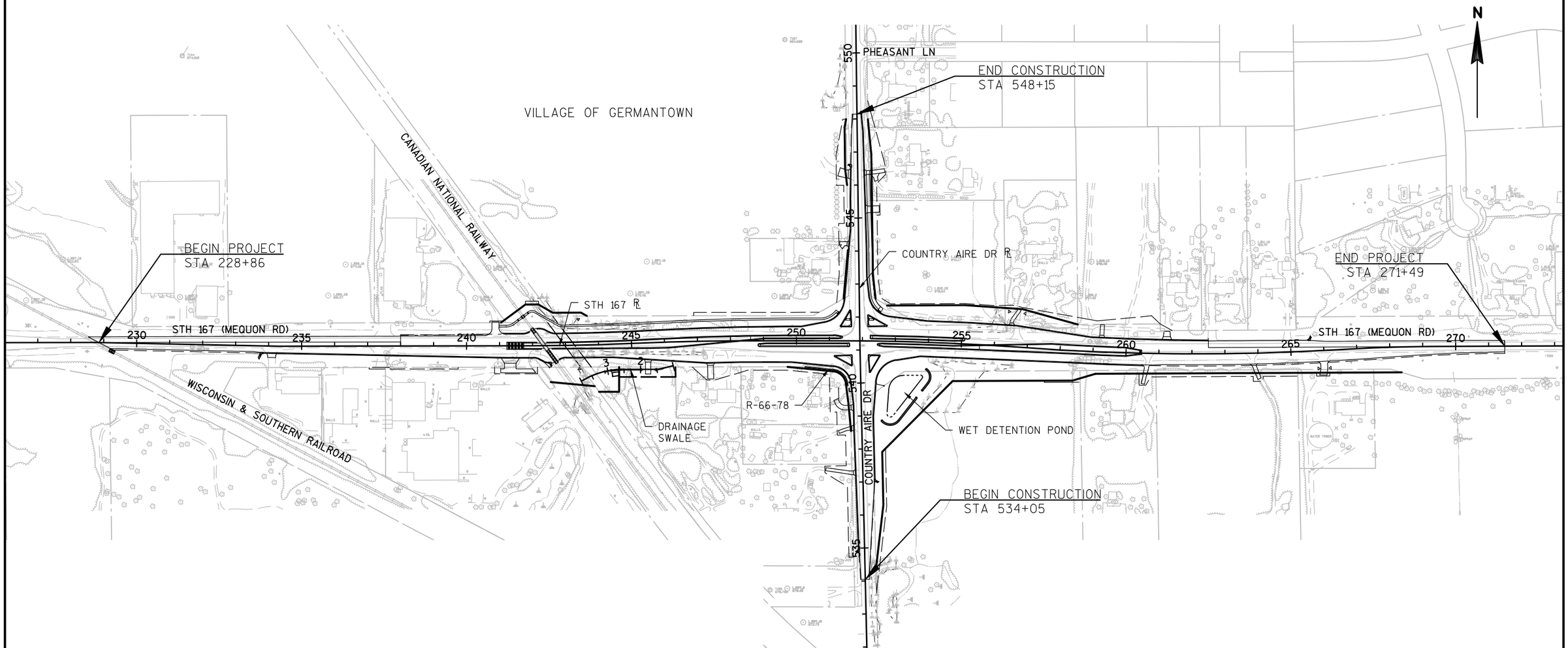

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PROJECT OVERVIEW	SHEET 4	E

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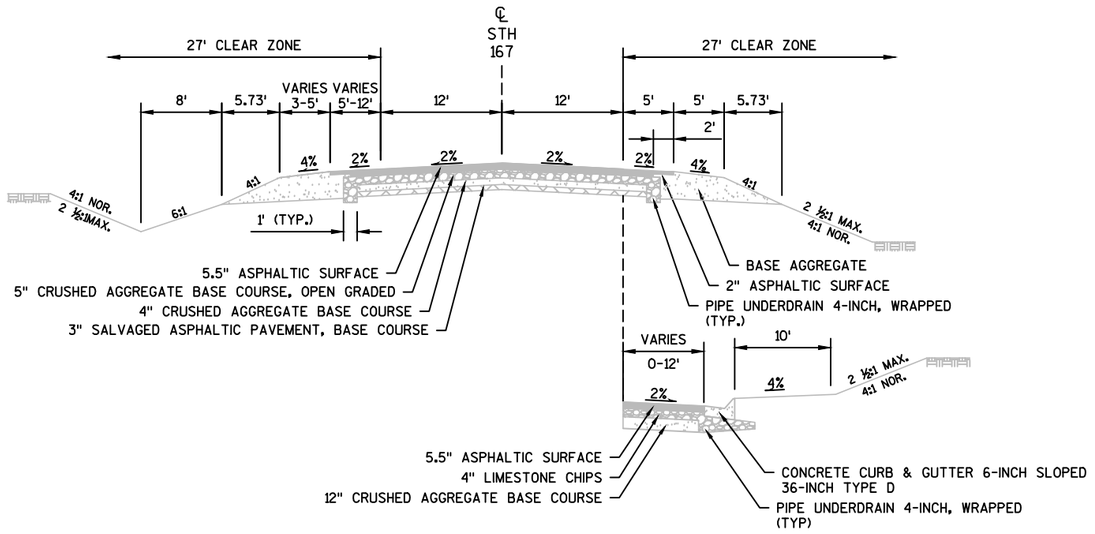
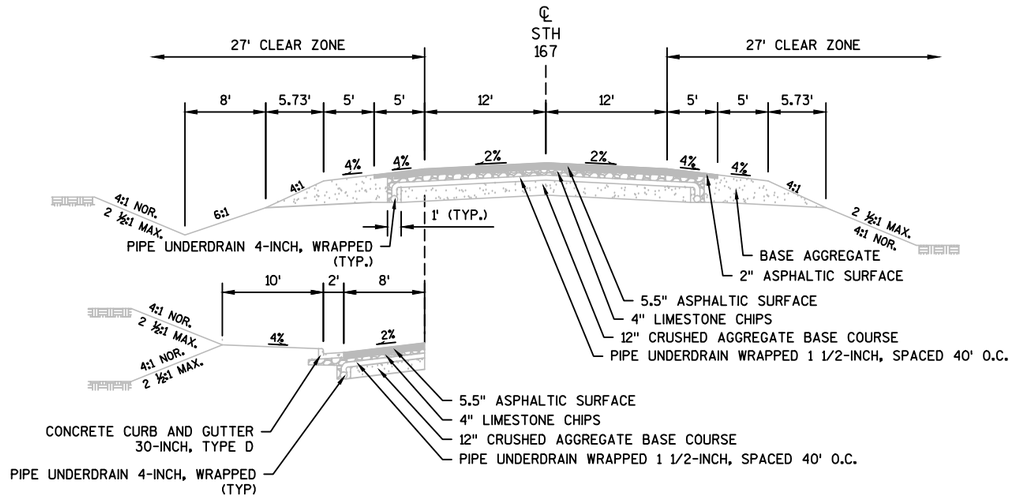


STA 249+20 TO STA 252+50

TYPICAL EXISTING SECTION
STH 167 (MEQUON ROAD)
STA 228+86 TO STA 257+15



STA 260+98 TO STA 265+50

TYPICAL EXISTING SECTION
STH 167 (MEQUON ROAD)
STA 257+15 TO STA 271+49

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (EXISTING)	SHEET 5	E

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WISDOT/CADDS SHEET 42

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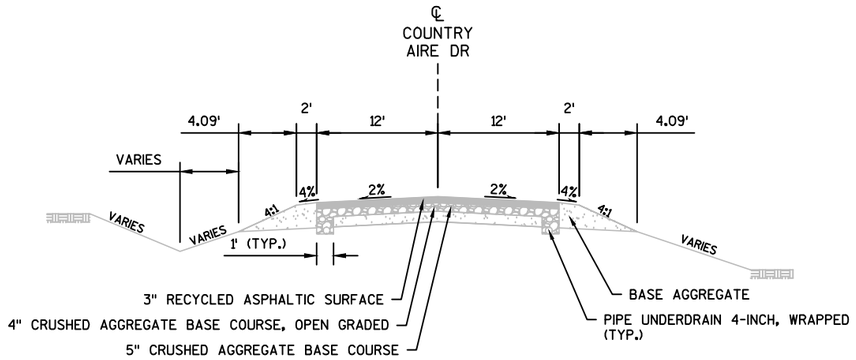

TYPICAL EXISTING SECTION
COUNTRY AIRE DRIVE
STA 534+05 TO 548+15

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (EXISTING)	SHEET 6	E

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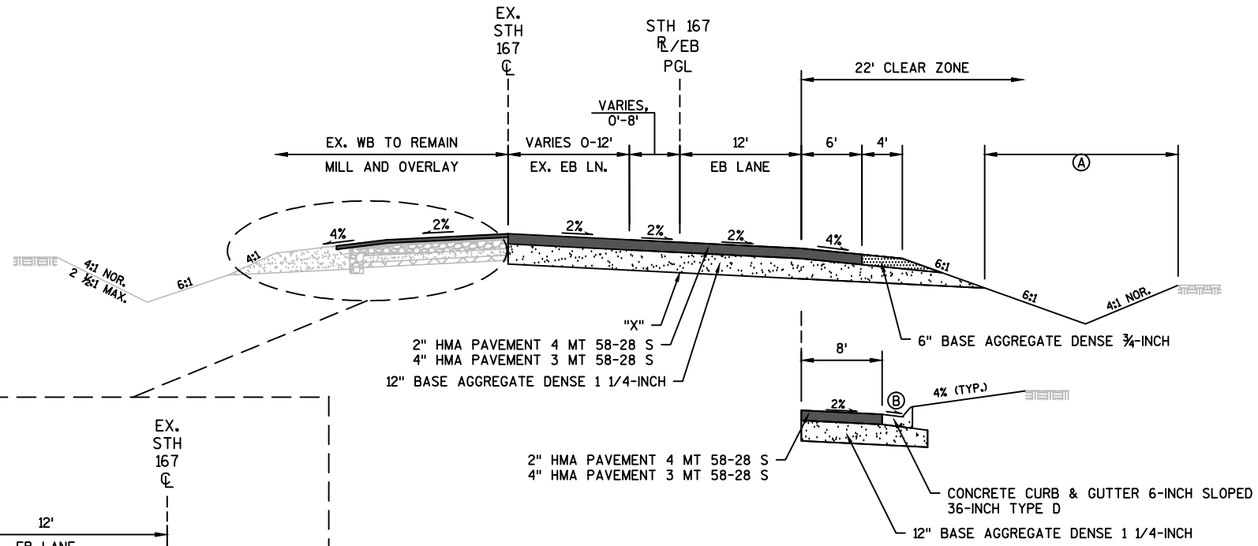
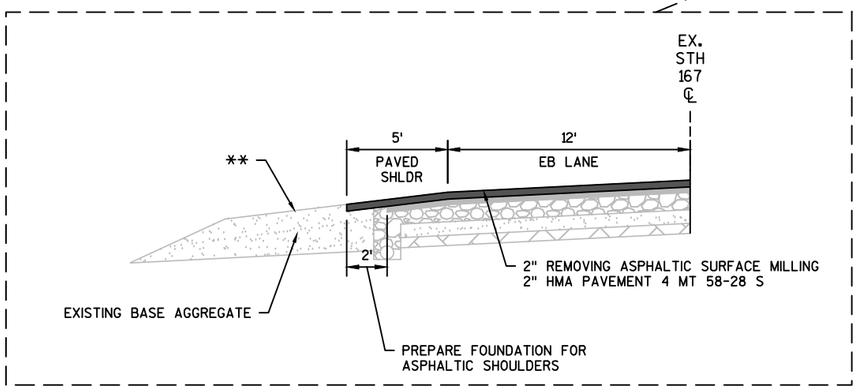
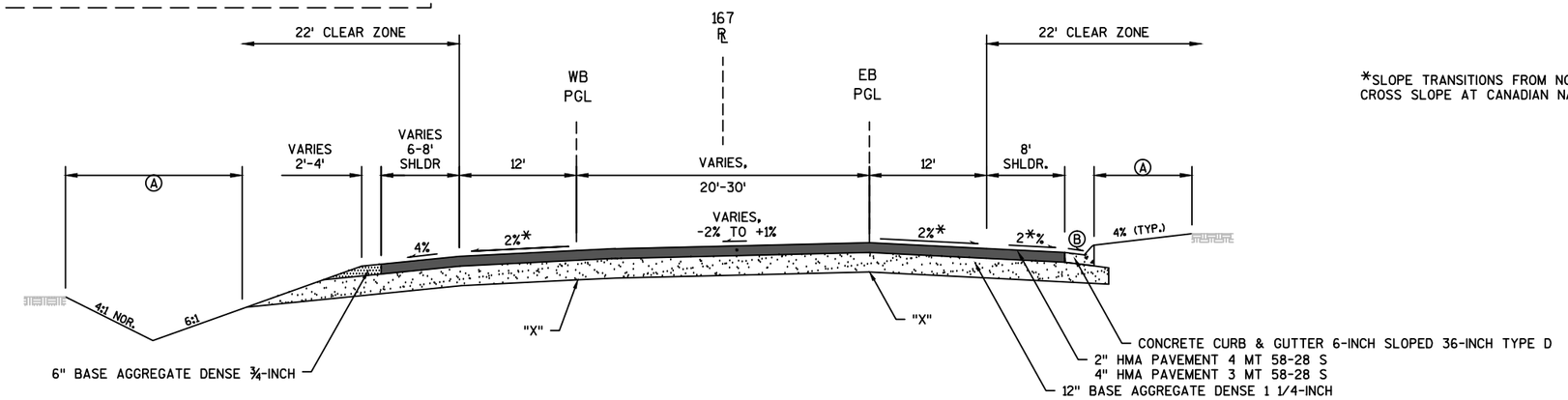


STA 234+25 TO STA 238+00

**EXISTING SHOULDERS TO BE SUPPLEMENTED WITH ¾" BASE AGG. TO BRING SHOULDERS UP TO SAME LEVEL AS THE MILLED AND REPAVED SHOULDER.



TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 228+86 TO STA 238+00



*SLOPE TRANSITIONS FROM NORMAL CROWN TO 0.30% CROSS SLOPE AT CANADIAN NATIONAL RAILWAY CROSSING

TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 238+00 TO STA 241+00

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

LEGEND:

Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 7	E

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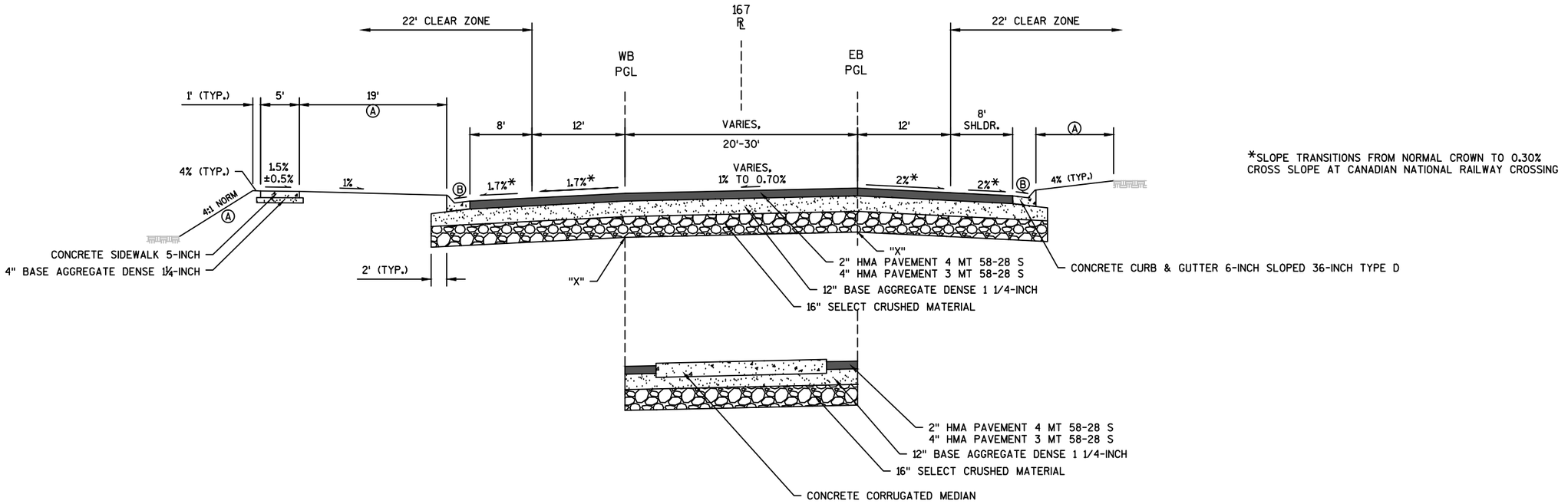

*SLOPE TRANSITIONS FROM NORMAL CROWN TO 0.30% CROSS SLOPE AT CANADIAN NATIONAL RAILWAY CROSSING

TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 241+00 TO STA 241+70

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

LEGEND:

Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 8	E

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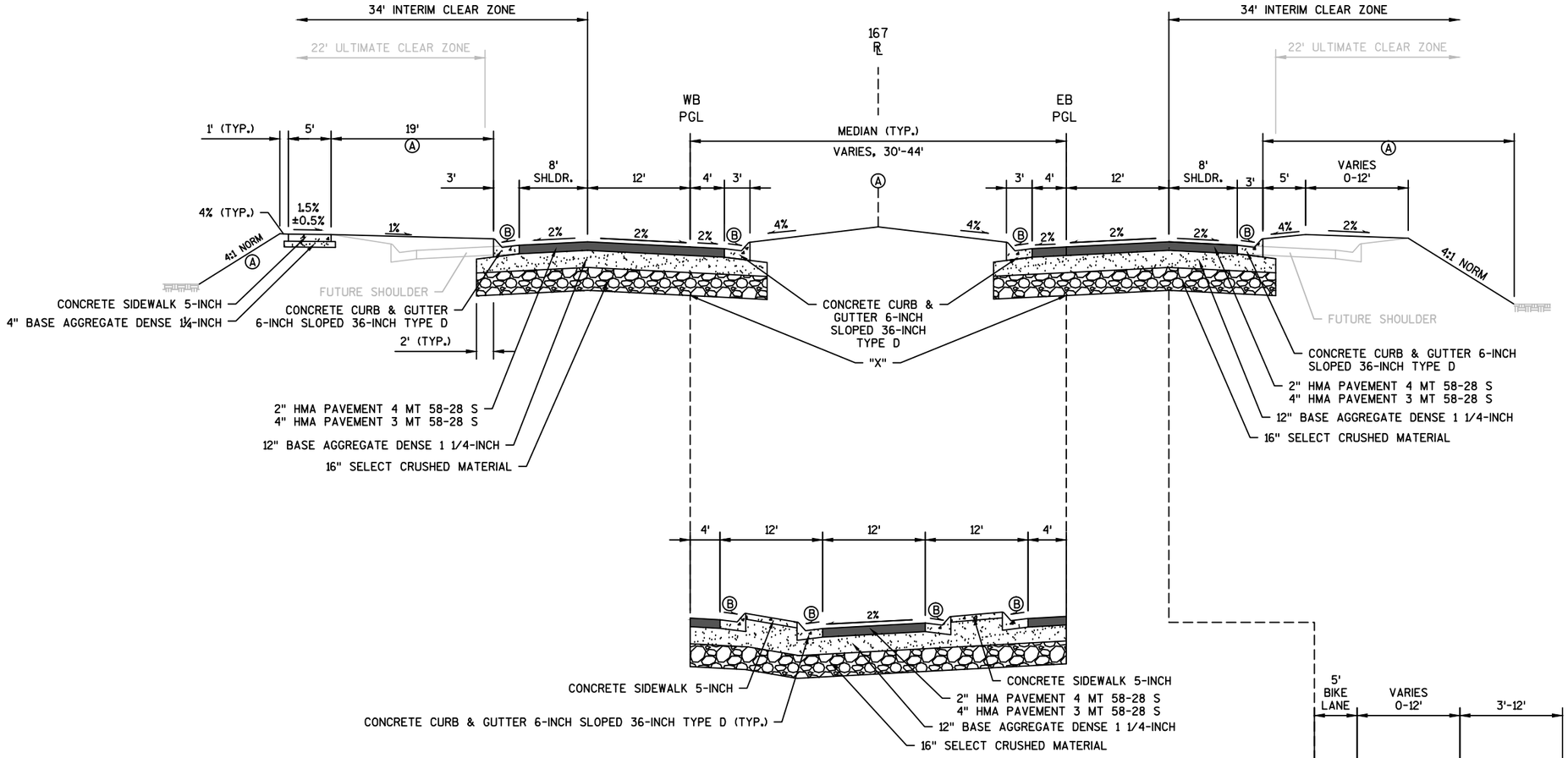
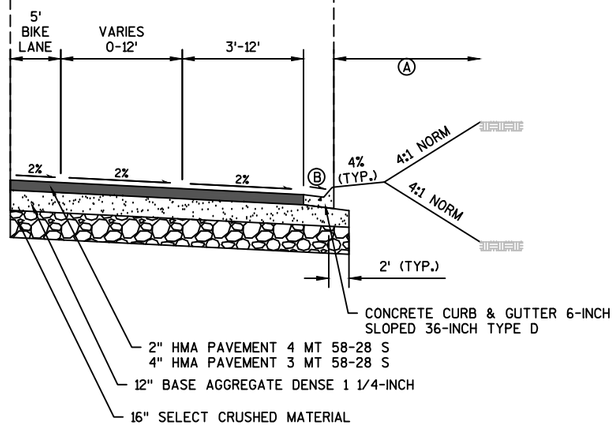


LEFT TURN LANE
STA 246+12 TO STA 251+92

TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 241+70 TO STA 251+92

MODULAR BLOCK GRAVITY WALL
R-66-78
STA 250+25.50 TO STA 251+57.39



RIGHT TURN LANE
STA 248+44 TO STA 249+86

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

LEGEND:

Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 9	E

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WISDOT/CADDS SHEET 42

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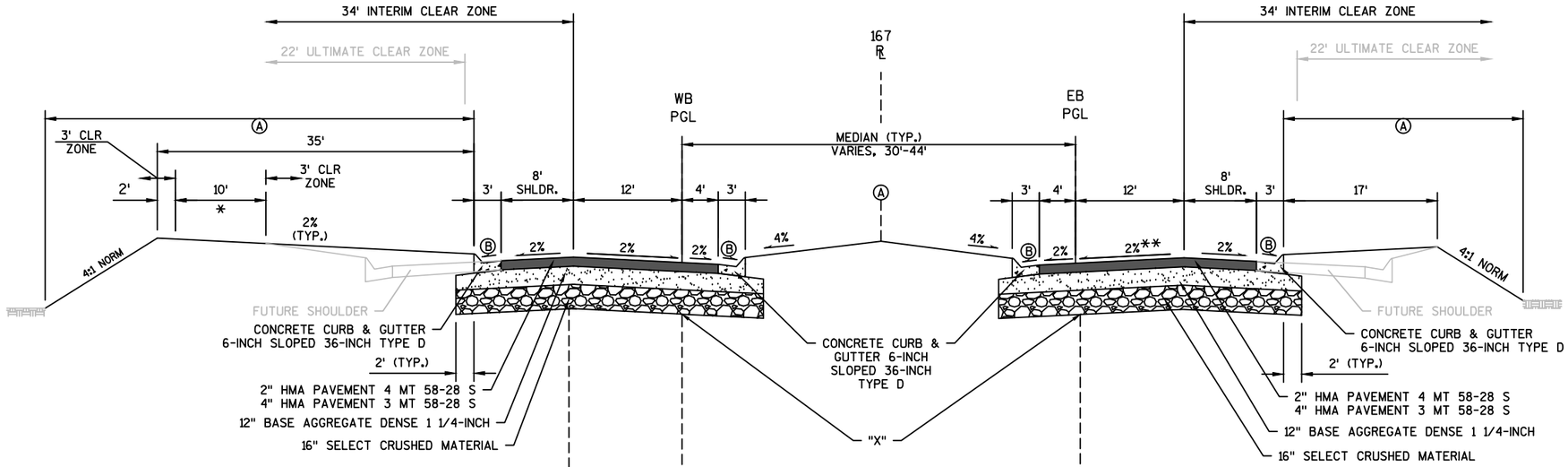
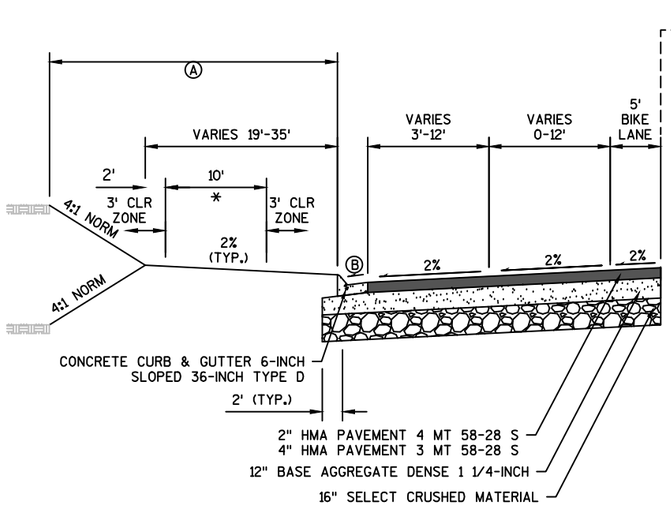
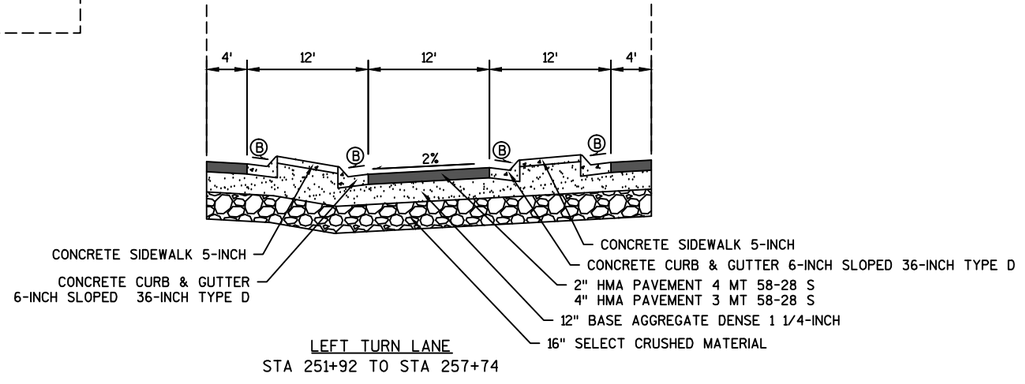




RIGHT TURN LANE
STA 253+95 TO STA 258+90



LEFT TURN LANE
STA 251+92 TO STA 257+74

TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 251+92 TO STA 260+75

*PROVIDE GRADING FOR FUTURE SHARED USE PATH

**LANE SLOPE TRANSITIONS FROM 2% TO -2% STA 259+40 TO 260+40

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

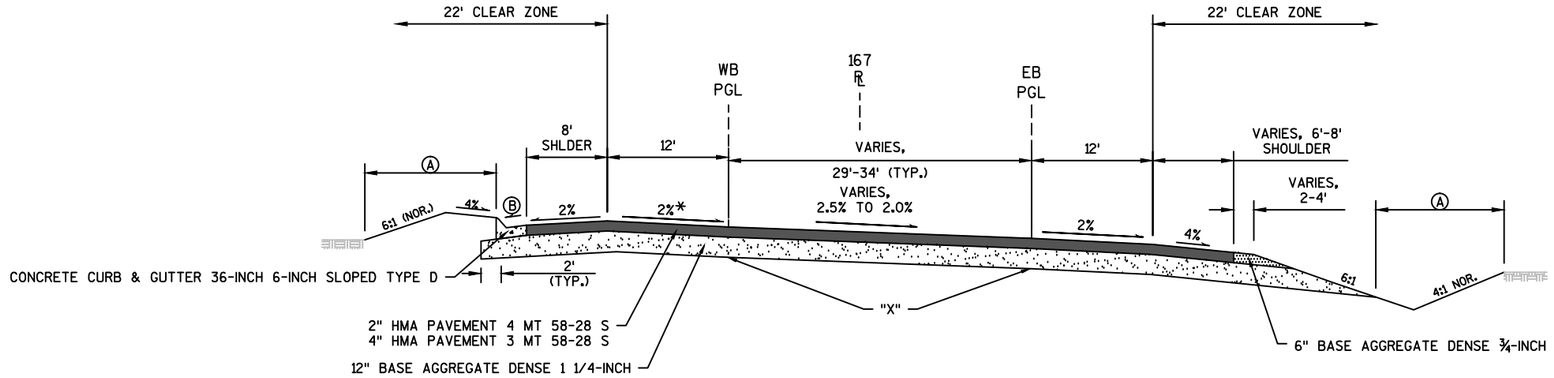
LEGEND:

Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 10	E

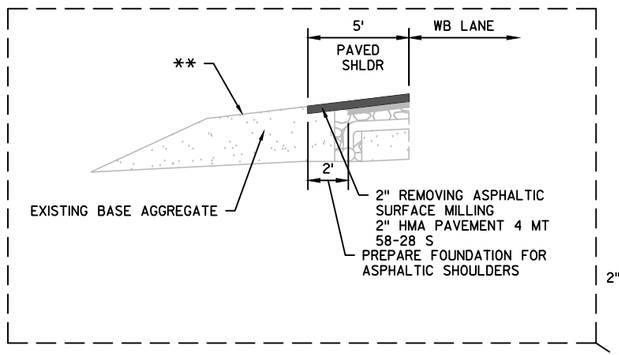
2



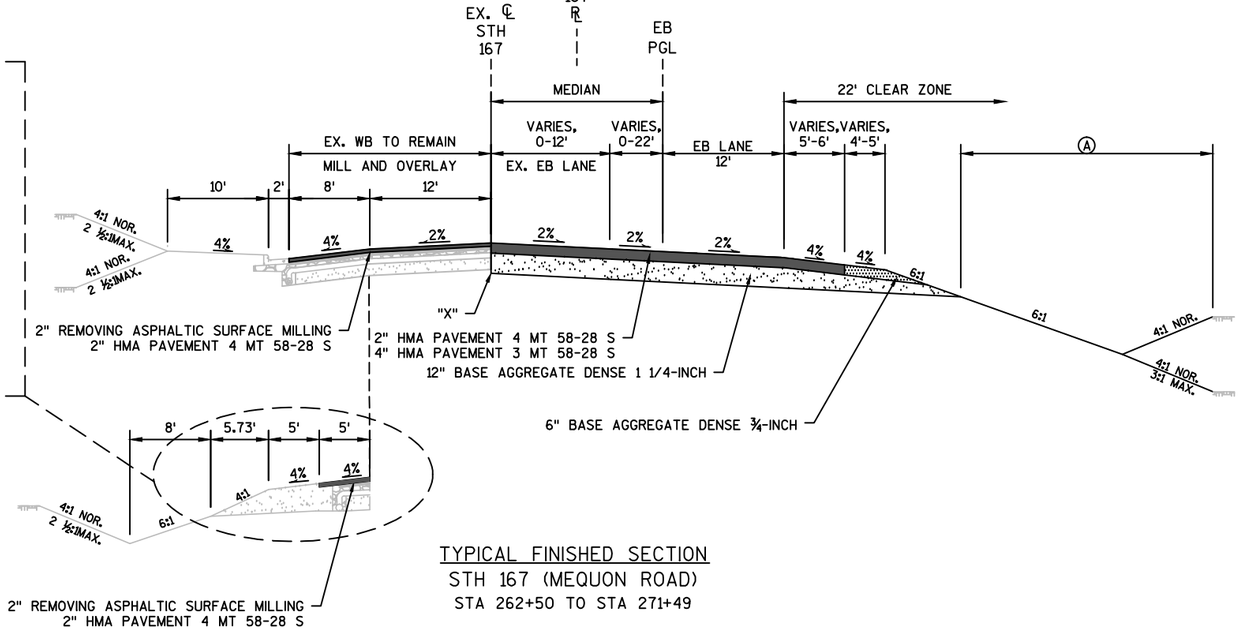
TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 260+75 TO STA 262+50

*LANE SLOPE TRANSITIONS FROM +2% TO -2% STA 260+75 TO 261+75

**EXISTING SHOULDERS TO BE SUPPLEMENTED WITH ¾" BASE AGG. TO BRING SHOULDERS UP TO SAME LEVEL AS THE MILLED AND REPAVED SHOULDER.



RURAL RESURFACING
STA 265+50 TO STA 271+49



TYPICAL FINISHED SECTION
STH 167 (MEQUON ROAD)
STA 262+50 TO STA 271+49

NOTES:

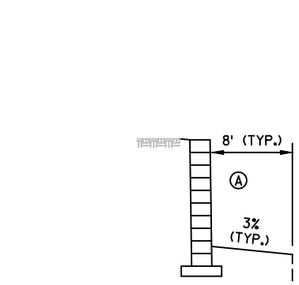
PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

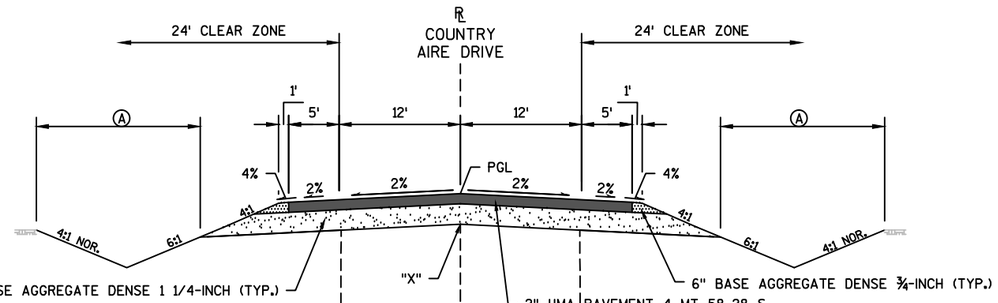
LEGEND:

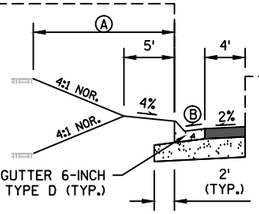
Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)



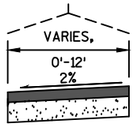
MODULAR BLOCK GRAVITY WALL
R-66-78
STA 539+91 TO STA 540+00



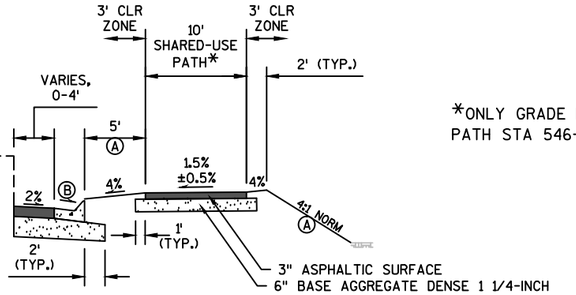


CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D (TYP.)

SHOULDER
STA 537+08 TO STA 539+37
STA 544+73 TO STA 546+54

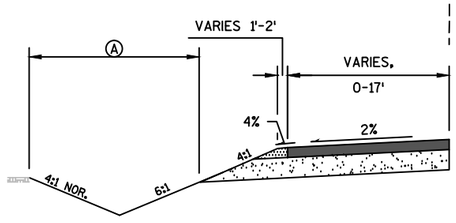


LEFT TURN LANE
STA 534+98 TO 540+00
STA 542+72 TO 547+62

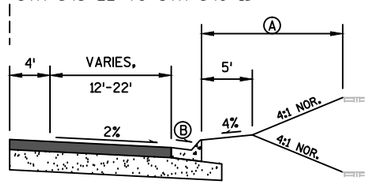


*ONLY GRADE FOR FUTURE SHARED USE
PATH STA 546+43 TO STA 548+15

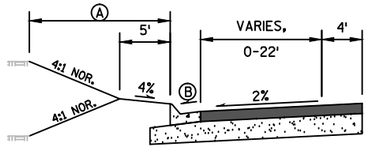
SHOULDER
STA 543+22 TO STA 548+15*



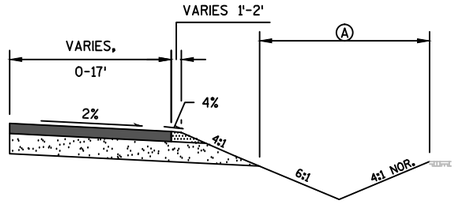
RIGHT TURN LANE
STA 546+54 TO STA 548+15



RIGHT TURN LANE
STA 537+08 TO STA 540+00



RIGHT TURN LANE
STA 542+72 TO STA 544+73



RIGHT TURN LANE
STA 534+05 TO STA 537+08

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

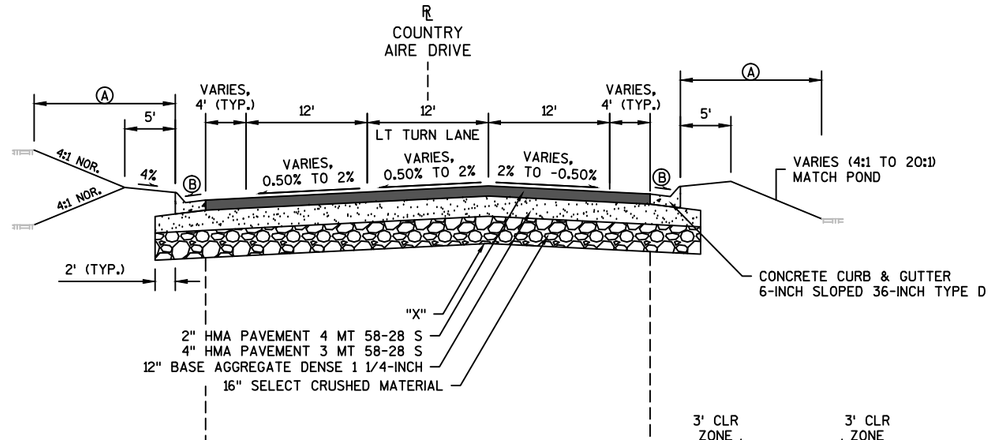
LEGEND:

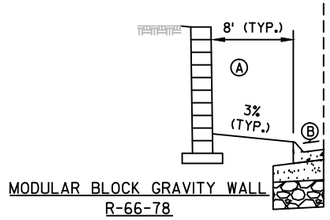
Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

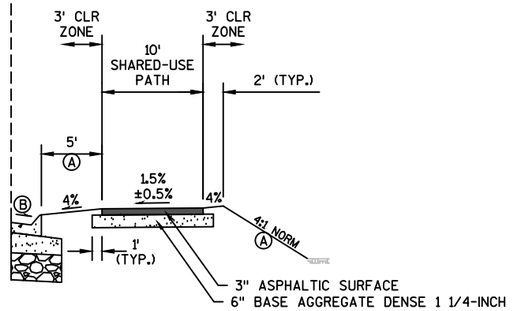
TYPICAL FINISHED SECTION
COUNTRY AIRE DRIVE
STA 534+05 TO STA 540+00
STA 542+72 TO STA 548+15

PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 12	E





MODULAR BLOCK GRAVITY WALL
R-66-78
STA 540+00 TO STA 540+49



SHARED USED PATH
STA 539+91.47 TO STA 540+48.74

TYPICAL FINISHED SECTION
COUNTRY AIRE DRIVE
(WITH SELECT CRUSHED)
STA 540+00 TO STA 540+85
STA 541+70 TO STA 542+72

NOTES:

PGL = POINT REFERRED TO ON PROFILE

"X" = SUBGRADE POINT REFERRED TO ON CROSS SECTION

LEGEND:

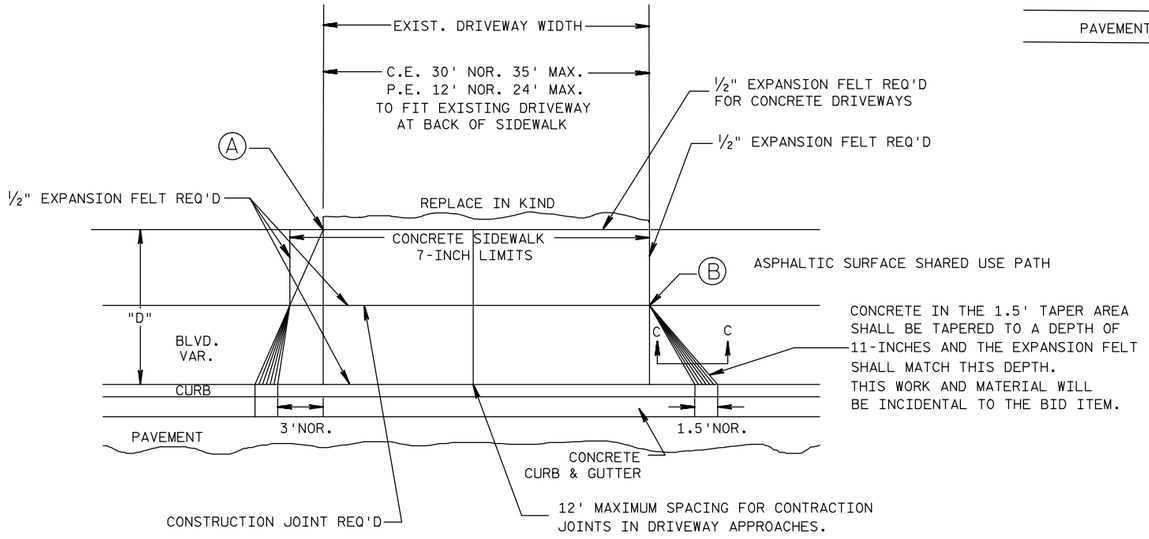
Ⓐ 6" SALVAGED TOPSOIL, SEED, EROSION MAT, AND FERTILIZER TYPE B

Ⓑ 6.25% GUTTER PAN SLOPE (TYP.)

PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	TYPICAL SECTIONS (FINISHED)	SHEET 13	E

NOTE: REFERENCE SDD FOR ADDITIONAL DRIVEWAY DETAILS NOT SHOWN

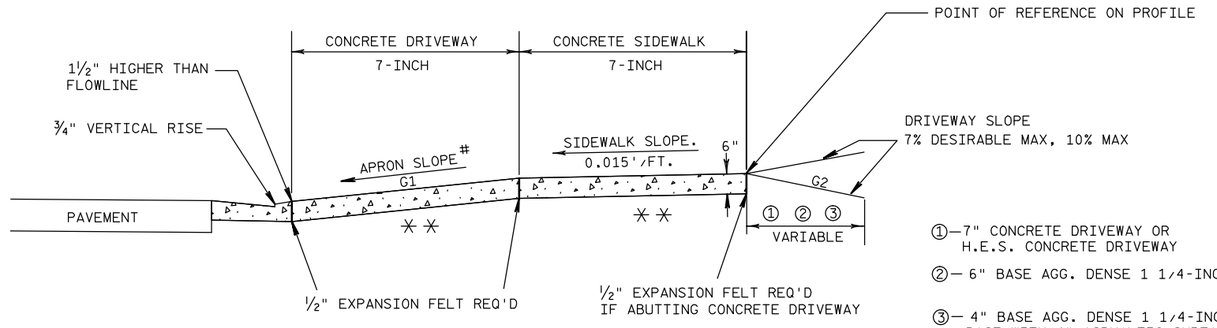
DRIVEWAY ENTRANCE DETAIL WITH PATH, CURB & GUTTER



PLAN VIEW

Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF PATH

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF PATH



TYPICAL PATH SECTION

① — 7" CONCRETE DRIVEWAY OR H.E.S. CONCRETE DRIVEWAY

② — 6" BASE AGG. DENSE 1 1/4-INCH

③ — 4" BASE AGG. DENSE 1 1/4-INCH BASE WITH 4" ASPHALTIC SURFACE

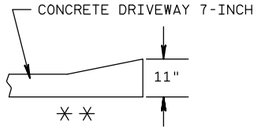
** = 6" BASE AGG. DENSE 1 1/4-INCH REQ'D UNDER CONCRETE DRWY

\#

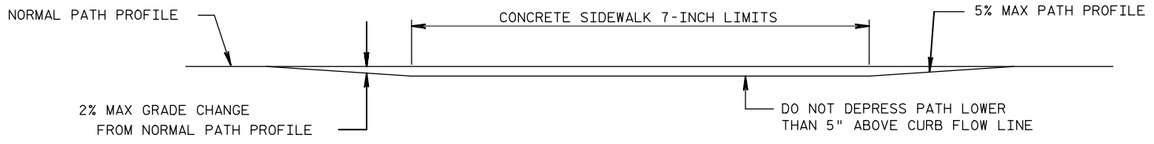
TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

DEPRESS PATH PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE

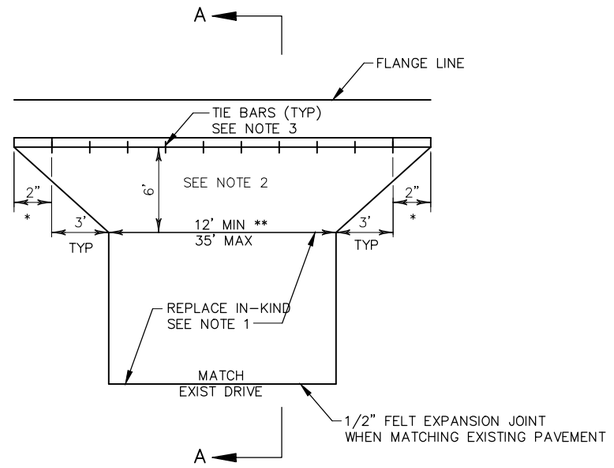


SECTION C-C



DEPRESSED PATH PROFILE DETAIL

2



PLAN VIEW

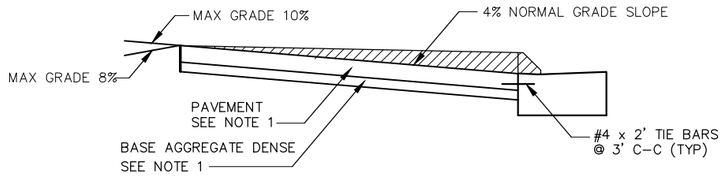
* TAPER CURB HEAD (1.5" TO 6")
** SEE PAVING DETAILS FOR WIDTH REQUIRED

NOTES:

1. DRIVEWAY SURFACE BEYOND APRON TO BE REPLACED IN-KIND WITH MINIMUM OF: ASPHALTIC SURFACE (SEE PLAN FOR DEPTH) DRIVEWAYS AND FIELD ENTRANCES OVER BASE AGGREGATE DENSE 1 1/4-INCH (6-INCH) OR CONCRETE DRIVEWAY 7-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH (6-INCH) OR CONCRETE DRIVEWAY 9-INCH OVER BASE AGGREGATE DENSE 1 1/4-INCH (6-INCH) OR BASE AGGREGATE DENSE 3/4-INCH (6-INCH).

2. ALL URBAN DRIVEWAYS TO BACK OF APRON TO BE PAID AS CONCRETE DRIVEWAY 7-INCH OR 9-INCH.

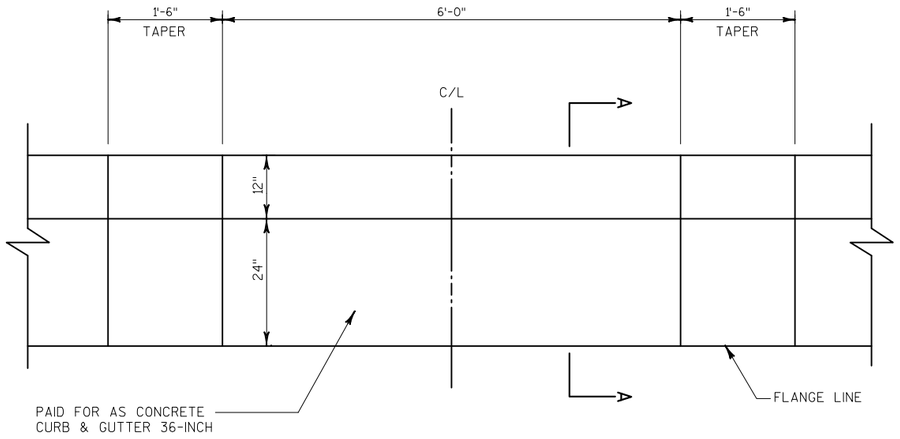
3. TIE BARS INCIDENTAL TO THE BID ITEM "CONCRETE DRIVEWAY 7-INCH" AND CONCRETE DRIVEWAY 9-INCH."



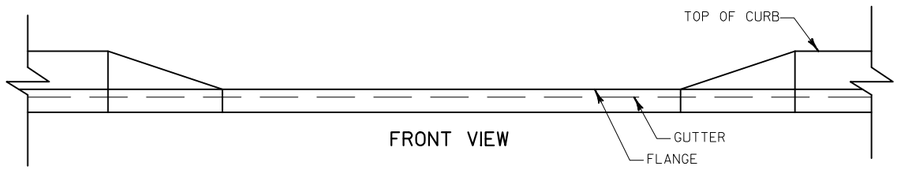
SECTION A–A

URBAN DRIVEWAY

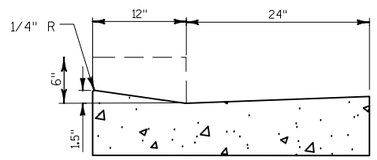
2



PLAN VIEW



FRONT VIEW



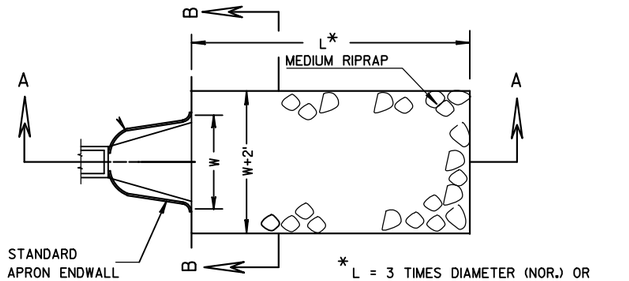
END VIEW

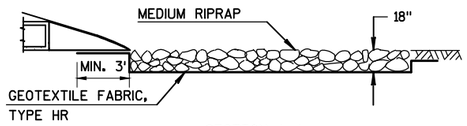
SECTION A-A

MAINTENANCE OPENING

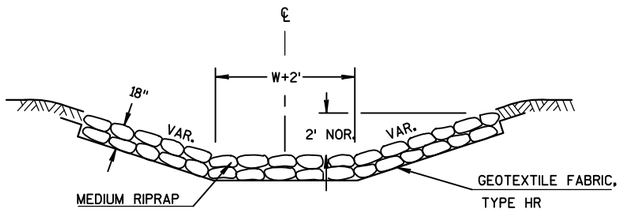
LOCATIONS SHOWN ON PLAN DETAILS

NOTE
PAID FOR AS CURB AND GUTTER.
MEASURED ALONG FLOWLINE.



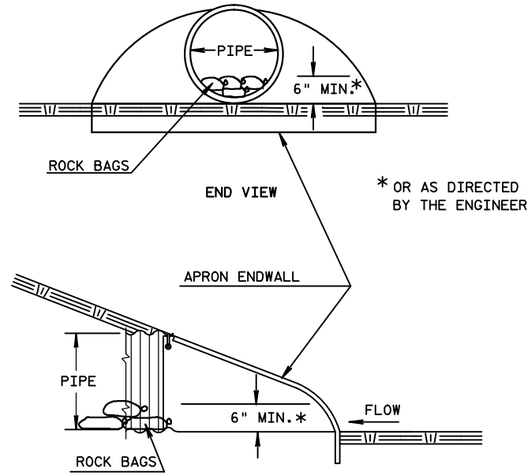


SECTION A-A



SECTION B-B

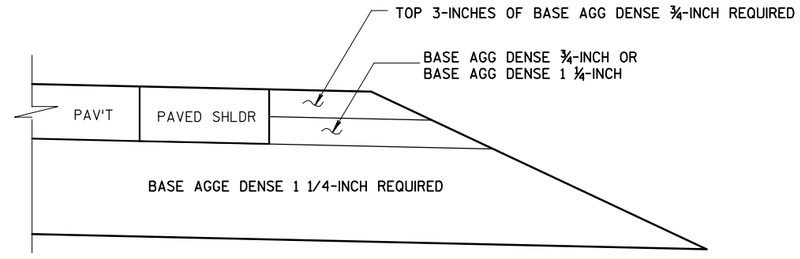
MEDIUM RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALL



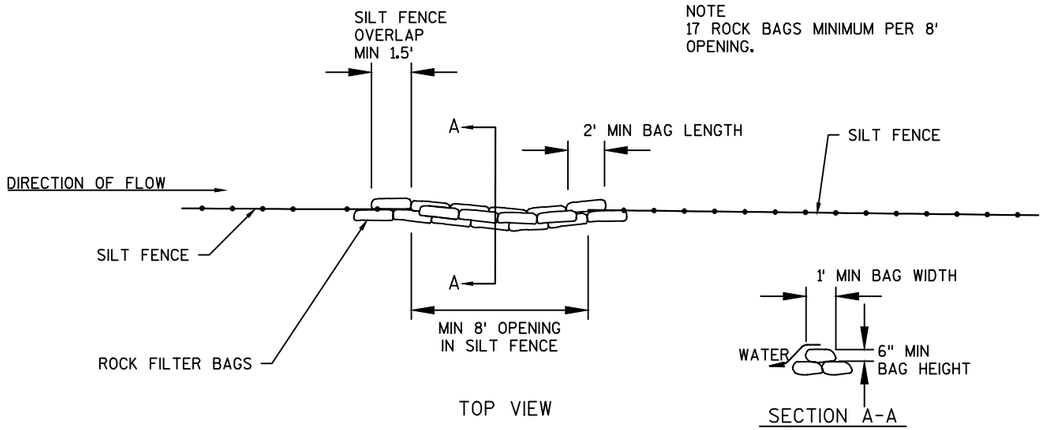
SIDE VIEW

ESTIMATED BAG SIZE = 18" X 12" X 6"	
PIPE SIZE	ESTIMATED NO. OF BAGS
18"	2
24"	3
21"X15"	4
24"X38"	7

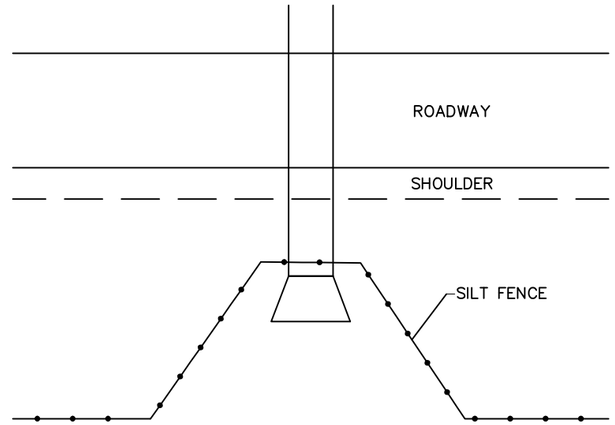
CULVERT PIPE CHECKS



CONTRACTOR OPTION TO USE BASE AGG 3/4-INCH OR 1 1/4-INCH



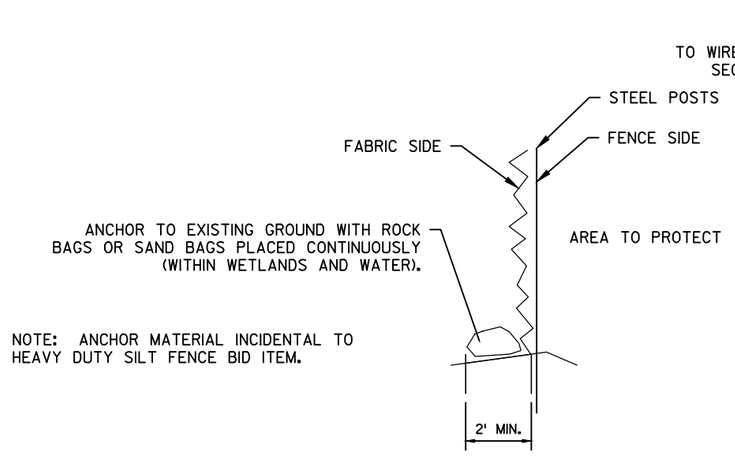
ROCK BAGS USED FOR SILT FENCE RELIEF

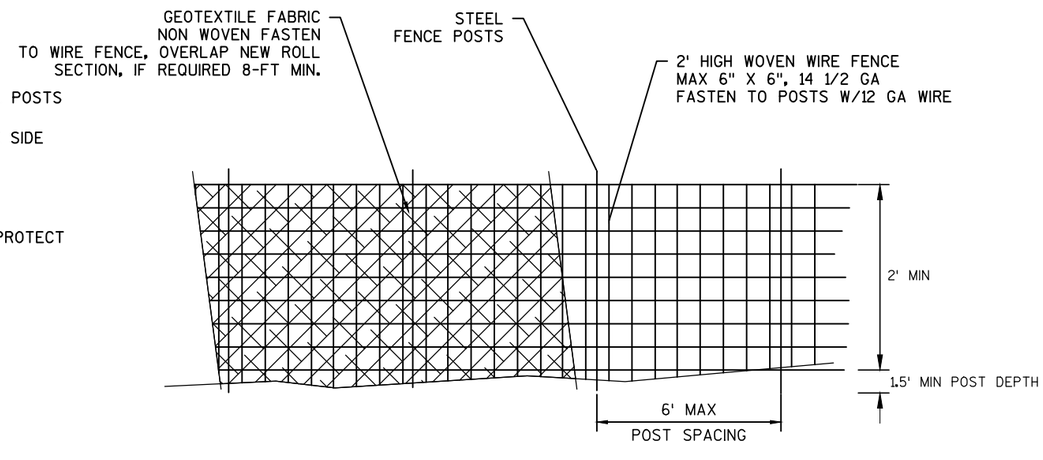


NOTE

SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

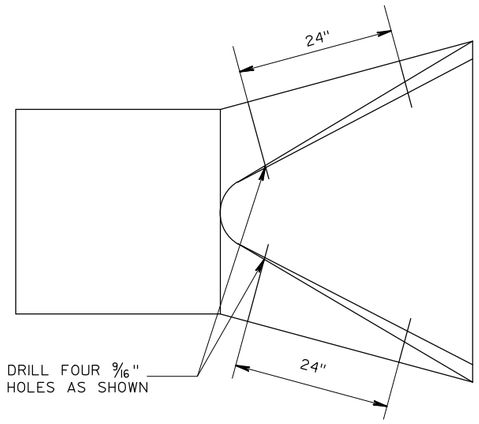
TYPICAL SILT FENCE DETAIL AT PIPE INLET

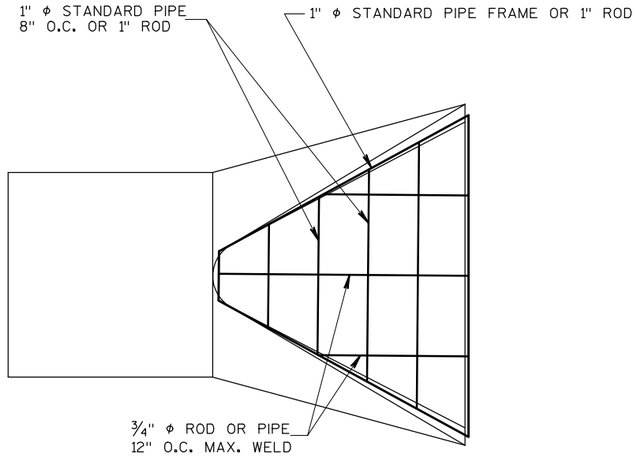




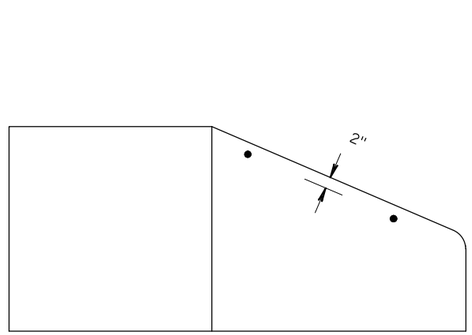
HEAVY DUTY SILT FENCE

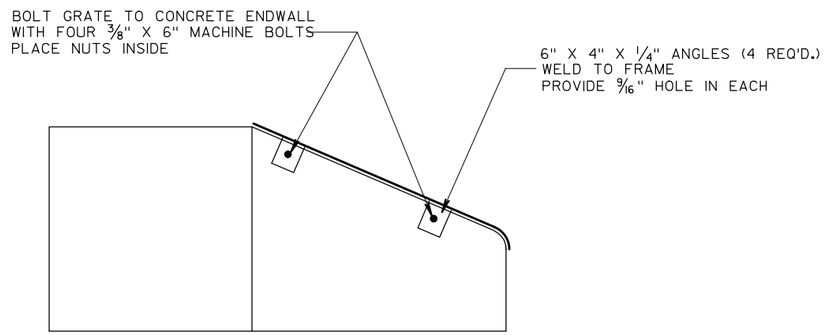
NOTE: ANCHOR GEOTEXTILE FABRIC A MINIMUM OF 6" BELOW GRADE. TRENCH, ANCHOR AND BACKFILL SIMILAR TO REGULAR SILT FENCE INSTALLATION OUTSIDE OF WETLANDS OR WHEN THE GROUND IS DRY ENOUGH FOR TRENCHING. THE CONTRACTOR SHALL NOT BE REQUIRED TO TRENCH IF THE HEAVY DUTY SILT FENCE IS WITHIN STANDING WATER AT THE TIME OF INSTALLATION.

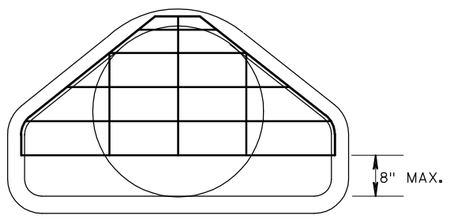




AT EACH PIPE





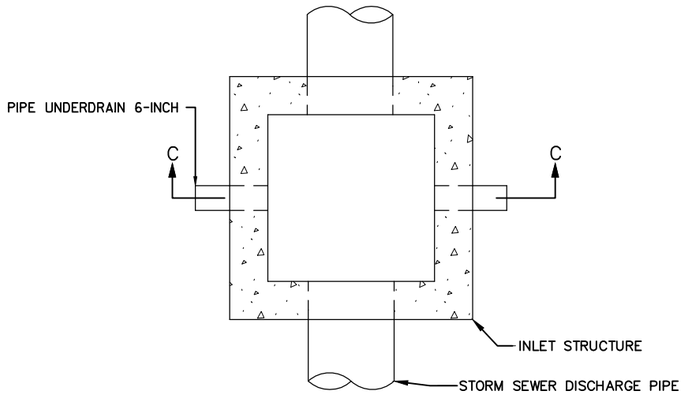


PIPE GRATE DETAIL

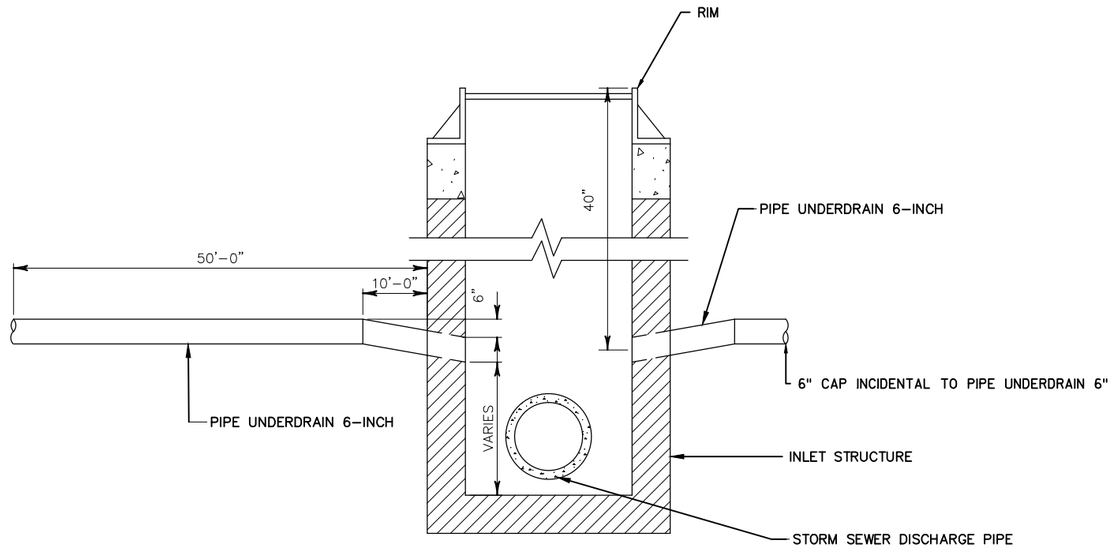
PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CONSTRUCTION DETAILS	SHEET 19	E

NOTES

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6–INCH.
2. PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF 40" BELOW THE RIM ELEVATION.
3. SEE PLAN DETAILS FOR PIPE UNDERDRAIN LOCATIONS.



PLAN VIEW

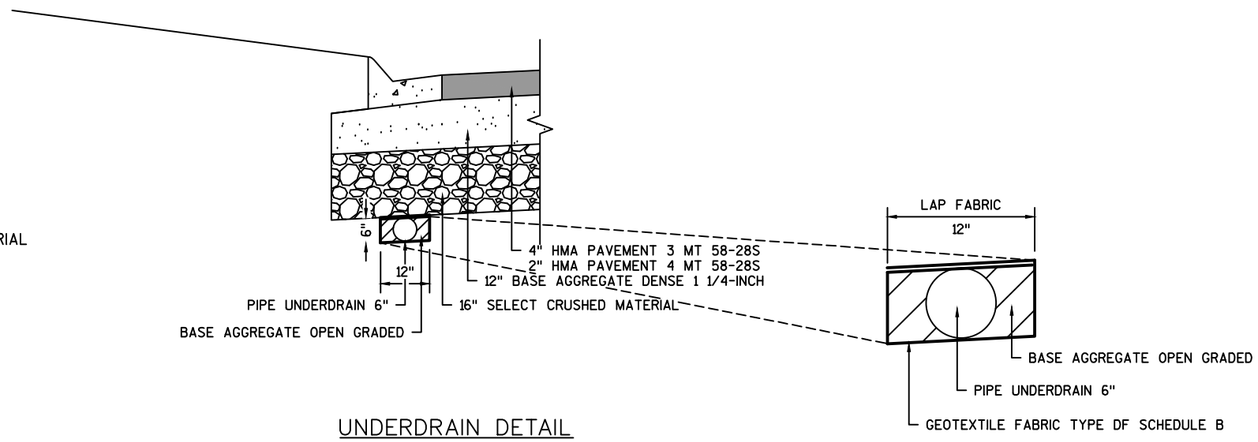


SECTION C–C

UNDERDRAIN OUTFALL AT INLET

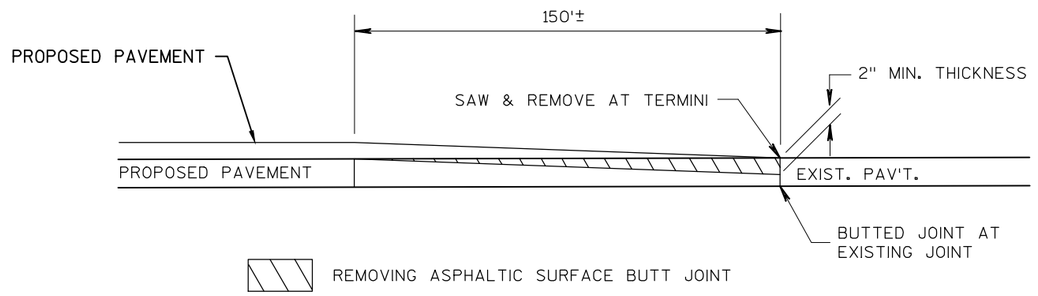
NOTE:

PLACE PIPE UNDERDRAIN AT EDGE OF SELECT CRUSHED MATERIAL WHEN CONFLICT WITH STORM SEWER. INSTALL 90° ELBOW TO CONNECT TO INLET (INCIDENTAL TO PIPE UNDERDRAIN 6").

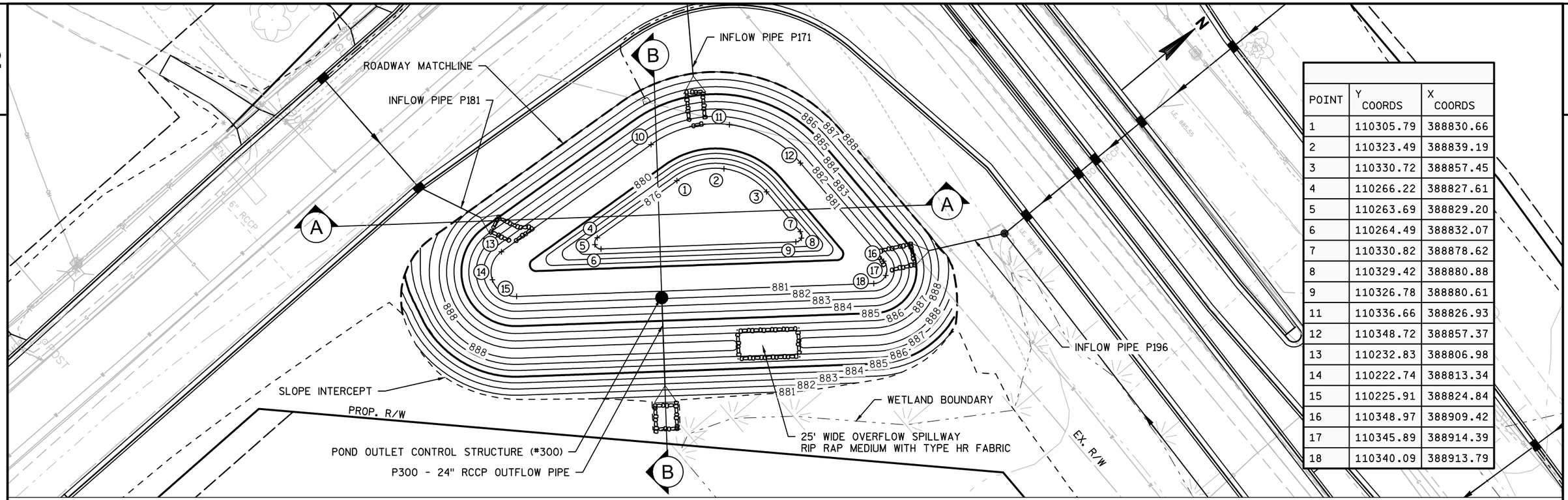


UNDERDRAIN DETAIL

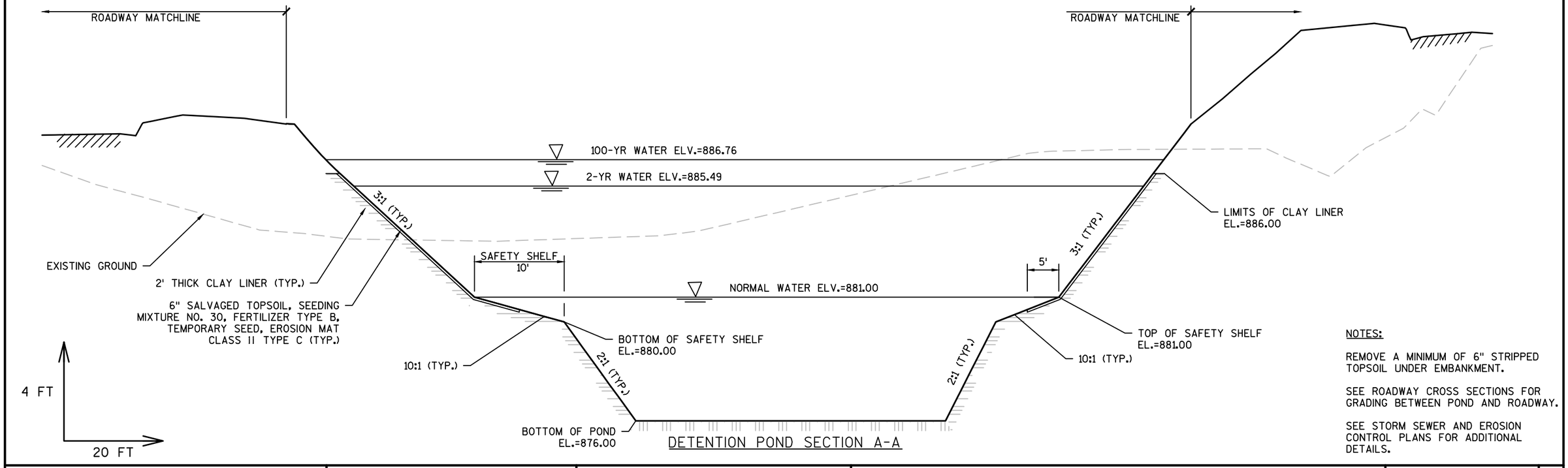
2



BUTT JOINT DETAIL



POINT	Y COORDS	X COORDS
1	110305.79	388830.66
2	110323.49	388839.19
3	110330.72	388857.45
4	110266.22	388827.61
5	110263.69	388829.20
6	110264.49	388832.07
7	110330.82	388878.62
8	110329.42	388880.88
9	110326.78	388880.61
11	110336.66	388826.93
12	110348.72	388857.37
13	110232.83	388806.98
14	110222.74	388813.34
15	110225.91	388824.84
16	110348.97	388909.42
17	110345.89	388914.39
18	110340.09	388913.79



DETENTION POND SECTION A-A

NOTES:

REMOVE A MINIMUM OF 6" STRIPPED TOPSOIL UNDER EMBANKMENT.

SEE ROADWAY CROSS SECTIONS FOR GRADING BETWEEN POND AND ROADWAY.

SEE STORM SEWER AND EROSION CONTROL PLANS FOR ADDITIONAL DETAILS.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CONSTRUCTION DETAILS - DETENTION POND	SHEET 22	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 2/1/2018 11:24 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

NOTES:
1) REFER TO STANDARD DETAIL DRAWING FOR MANHOLES 5-FT FOR ADDITIONAL INFORMATION.

2) OUTLET STRUCTURE WILL BE PAID FOR AS POND OUTLET CONTROL STRUCTURE. ANTI-SEEP COLLAR TO BE PAID SEPARATELY AS CLAY ANTI-SEEPAGE COLLAR.

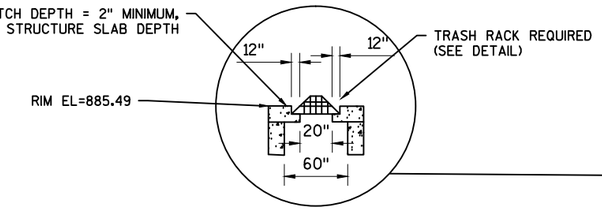
3) TRASH RACK WILL BE GALVANIZED OR SIMILARLY PROTECTED FROM CORROSION AND APPROVED BY THE ENGINEER. TRASH RACK IS INCIDENTAL TO OUTLET STRUCTURE.

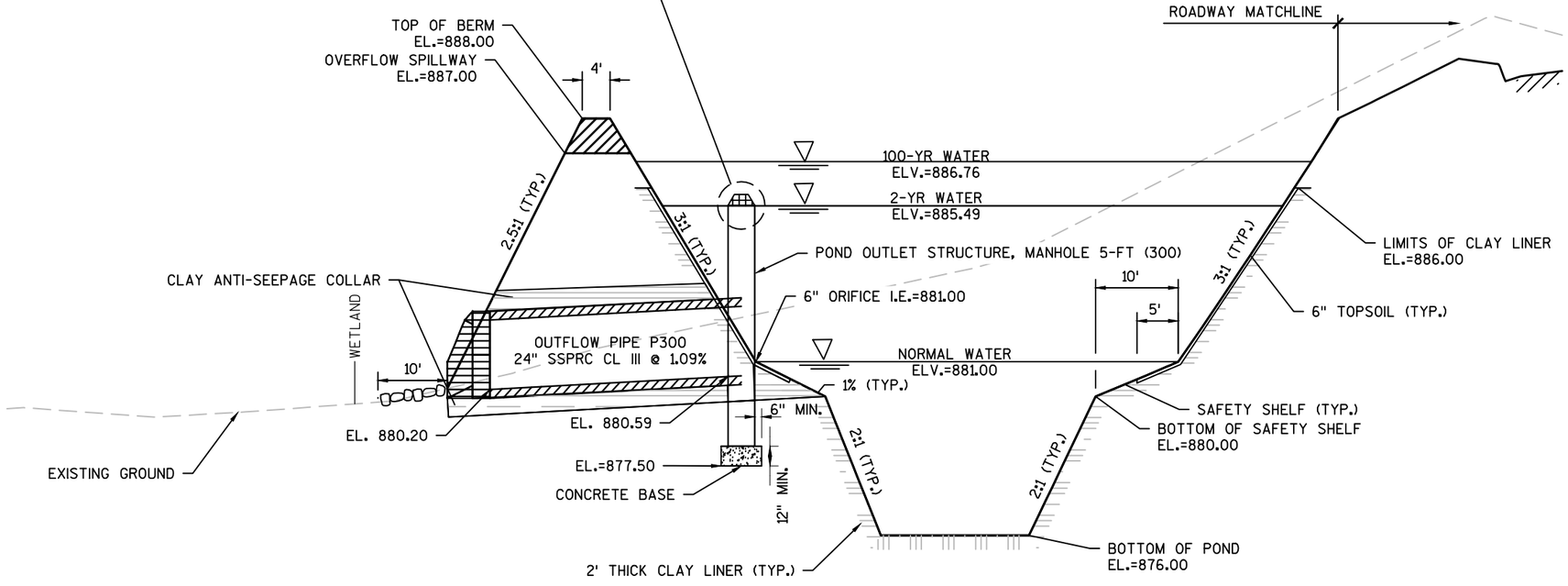
4) CONNECTOR DEVICE WILL BE REMOVABLE AND APPROVED BY THE ENGINEER.

5) CLAY ANTI-SEEPAGE COLLAR REQUIRED AROUND POND OUTLET DISCHARGE PIPE TO PREVENT WATER SEEPAGE THROUGH THE STORM SEWER TRENCH. CLAY ANTI-SEEPAGE COLLAR MUST EXTEND FROM 1-FOOT ABOVE THE TOP OF THE PIPE TO THE BOTTOM OF THE EXCAVATED TRENCH AND BE CONNECTED WITH THE CLAY POND LINER.

6) CLAY ANTI-SEEPAGE COLLAR TO EXTEND A MINIMUM OF 2 FEET BEYOND STORM SEWER/PIPE ENDWALL JOINT.

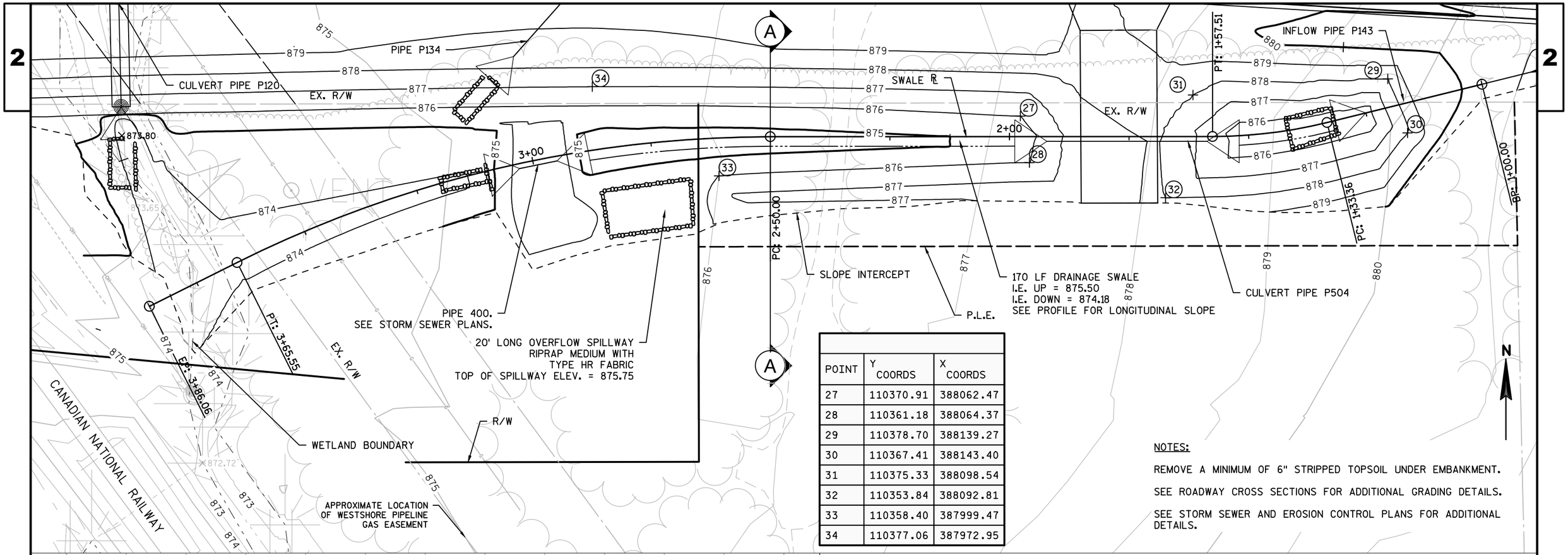
TRASH RACK





DETENTION POND SECTION B-B

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CONSTRUCTION DETAILS - DETENTION POND	SHEET 23	E



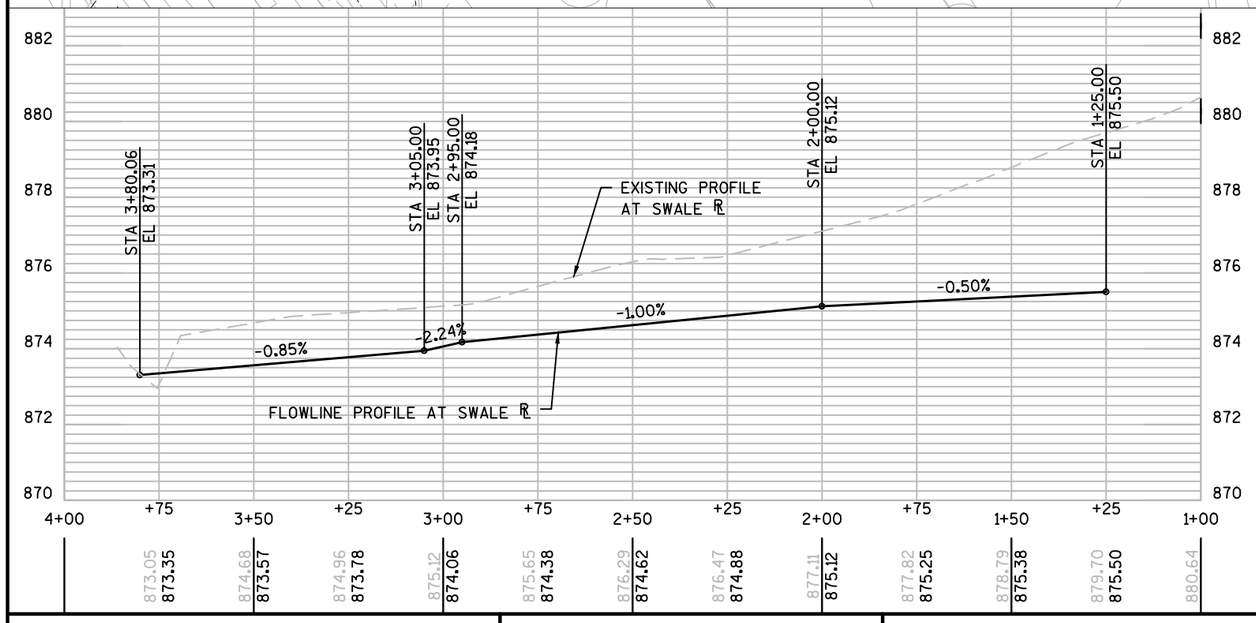
POINT	Y COORDS	X COORDS
27	110370.91	388062.47
28	110361.18	388064.37
29	110378.70	388139.27
30	110367.41	388143.40
31	110375.33	388098.54
32	110353.84	388092.81
33	110358.40	387999.47
34	110377.06	387972.95

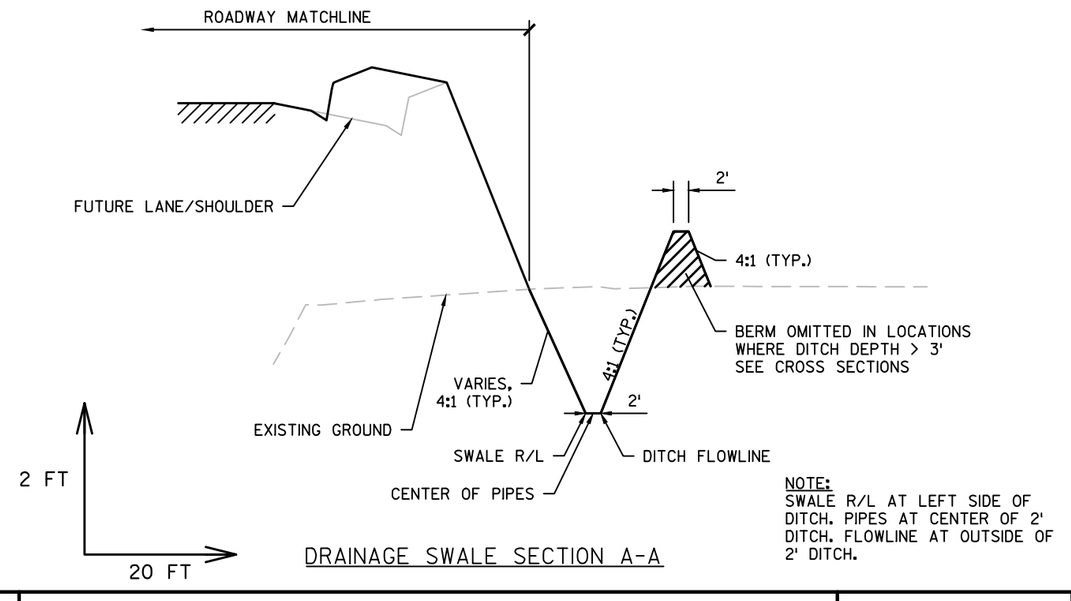
NOTES:

REMOVE A MINIMUM OF 6" STRIPPED TOPSOIL UNDER EMBANKMENT.

SEE ROADWAY CROSS SECTIONS FOR ADDITIONAL GRADING DETAILS.

SEE STORM SEWER AND EROSION CONTROL PLANS FOR ADDITIONAL DETAILS.





DRAINAGE SWALE SECTION A-A

NOTE:
SWALE R/L AT LEFT SIDE OF DITCH. PIPES AT CENTER OF 2' DITCH. FLOWLINE AT OUTSIDE OF 2' DITCH.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CONSTRUCTION DETAILS - DRAINAGE SWALE	SHEET 24	E

LEGEND:

- CLEARING AND GRUBBING (I.D.)
- CLEARING AND GRUBBING (STA)
- REMOVING CURB & GUTTER
- REM — REMOVING CULVERTS
- XXXXXXXX · SAWCUT
- REMOVE ACCESS

N

243+75 MATCH LINE

REMOVE UTILITY POLE
T.L.E.
PROPOSED R/W
REMOVE 18" CMCP
EXISTING R/W
SI
REM
REMOVE 30" RCCP
RETAINING WALL ENCROACHMENT - TO BE REMOVED BY OTHERS
REMOVE ACCESS
GATE ENCROACHMENT - TO BE REMOVED BY OTHERS
RETAINING WALL ENCROACHMENT - TO BE REMOVED BY OTHERS
GATE ENCROACHMENT - TO BE REMOVED BY OTHERS
REMOVE UTILITY POLE
PROPOSED R/W

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	REMOVAL PLAN - STH 167	SHEET 25	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - 01

PLOT DATE : 3/13/2018 7:14 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND:

- CLEARING AND GRUBBING (I.D.)
- CLEARING AND GRUBBING (STA)
- REMOVING CURB & GUTTER
- REM — REMOVING CULVERTS
- XXXXXXXX · SAWCUT
- REMOVE ACCESS

2

2

N

259+00 MATCH LINE

243+75 MATCH LINE

SI

EXISTING R/W

T.L.E.

REMOVE 18" CMCP

REM

REMOVE ACCESS

PROPOSED R/W

P.L.E.

LANDSCAPE BLOCK PLANTER ENCROACHMENT TO BE REMOVED BY CONTRACTOR (INCIDENTAL TO OTHER ITEMS IN THE CONTRACT)

REMOVE 30" RCCP

244 246 248 250 252 254 256 258

540 542 544

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	REMOVAL PLAN - STH 167	SHEET 26 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - 02

PLOT DATE : 1/26/2018 3:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

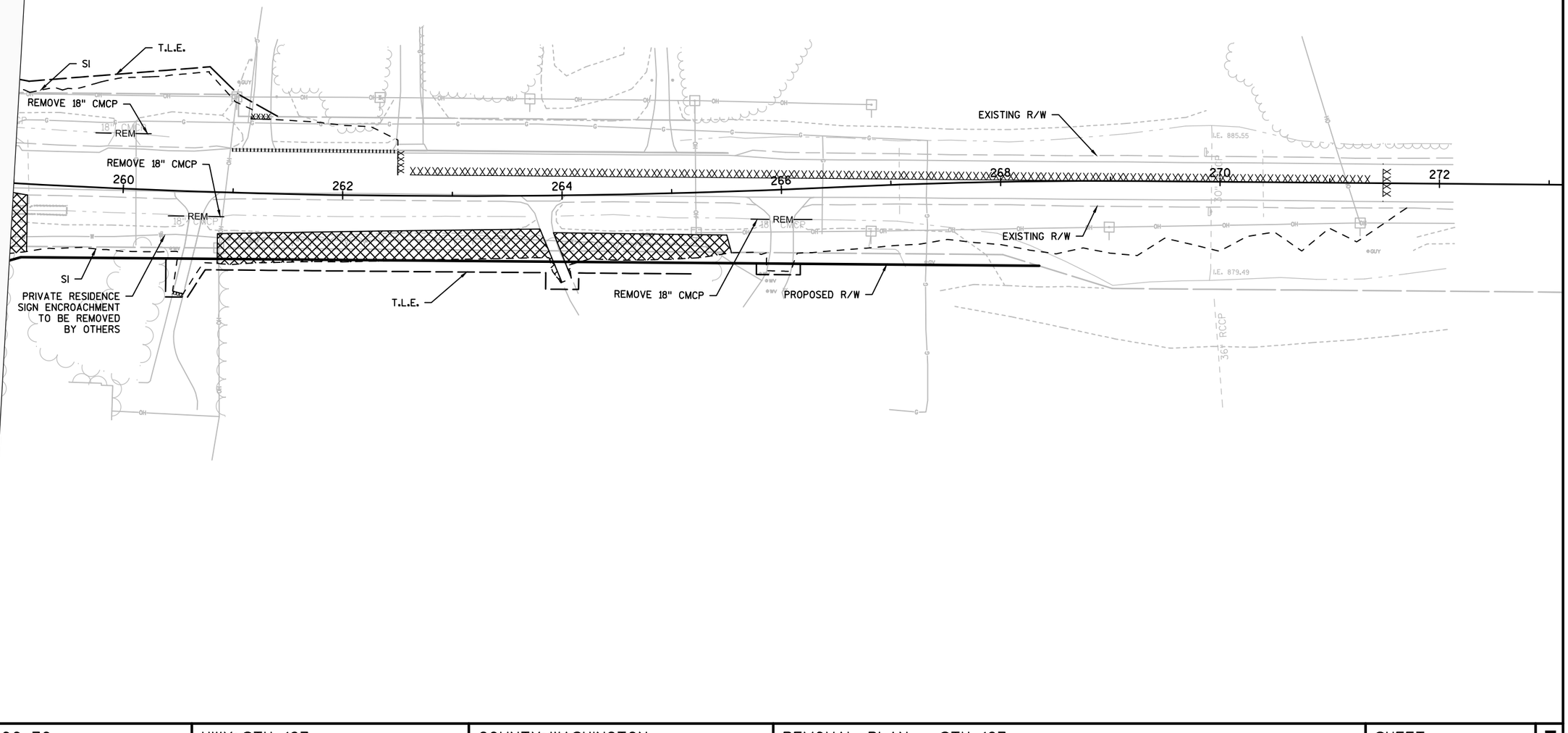
2

2

LEGEND:

- CLEARING AND GRUBBING (I.D.)
- CLEARING AND GRUBBING (STA)
- REMOVING CURB & GUTTER
- REM — REMOVING CULVERTS
- XXXXXXXX SAWCUT
- REMOVE ACCESS

N



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	REMOVAL PLAN - STH 167	SHEET 27	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - 03

PLOT DATE : 1/26/2018 3:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND:

- CLEARING AND GRUBBING (I.D.)
- CLEARING AND GRUBBING (STA)
- REMOVING CURB & GUTTER
- REM — REMOVING CULVERTS
- XXXXXXXX — SAWCUT
- REMOVE ACCESS

CONTRACTOR TO MINIMIZE TREE REMOVAL IN LANDSCAPED AREA TO ONLY WHAT IS NEEDED TO CONSTRUCT REALIGNED DRIVEWAY

EXISTING PRIVATE DISCHARGE PIPE

REMOVE 18" CMCP

REM

EXISTING R/W

T.L.E.

PROPOSED R/W

SI

REMOVE 18" CMCP

SI

T.L.E.

PROPOSED R/W

534 536 538 540 542 544 546 548

248 250 252 254 256

N

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	REMOVAL PLAN - COUNTRY AIRE DR	SHEET 28 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021101-RM.DWG
LAYOUT NAME - 04

PLOT DATE : 1/26/2018 3:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

CROSSING IMPROVEMENTS TO BE COMPLETED BY WISCONSIN & SOUTHERN RAILROAD.
SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

BEGIN PROJECT
STA 228+86
Y = 110,448.02
X = 386,418.52

EXIST. R/W

AG01

AP02

AG01

5'

5'

12'

STH 167

EX. ROAD ℄

STH 167 ℄

AP02

228+00

229+00

230+00

231+00

232+00

233+00

12'

6'

4'

AP01

AP01

AG01

MATCH LINE STA 233+25

SI

EXIST. R/W

GUY

GUY

GUY

GUY

WISCONSIN & SOUTHERN RAILROAD

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 29 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 01

PLOT DATE : 3/13/2018 7:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

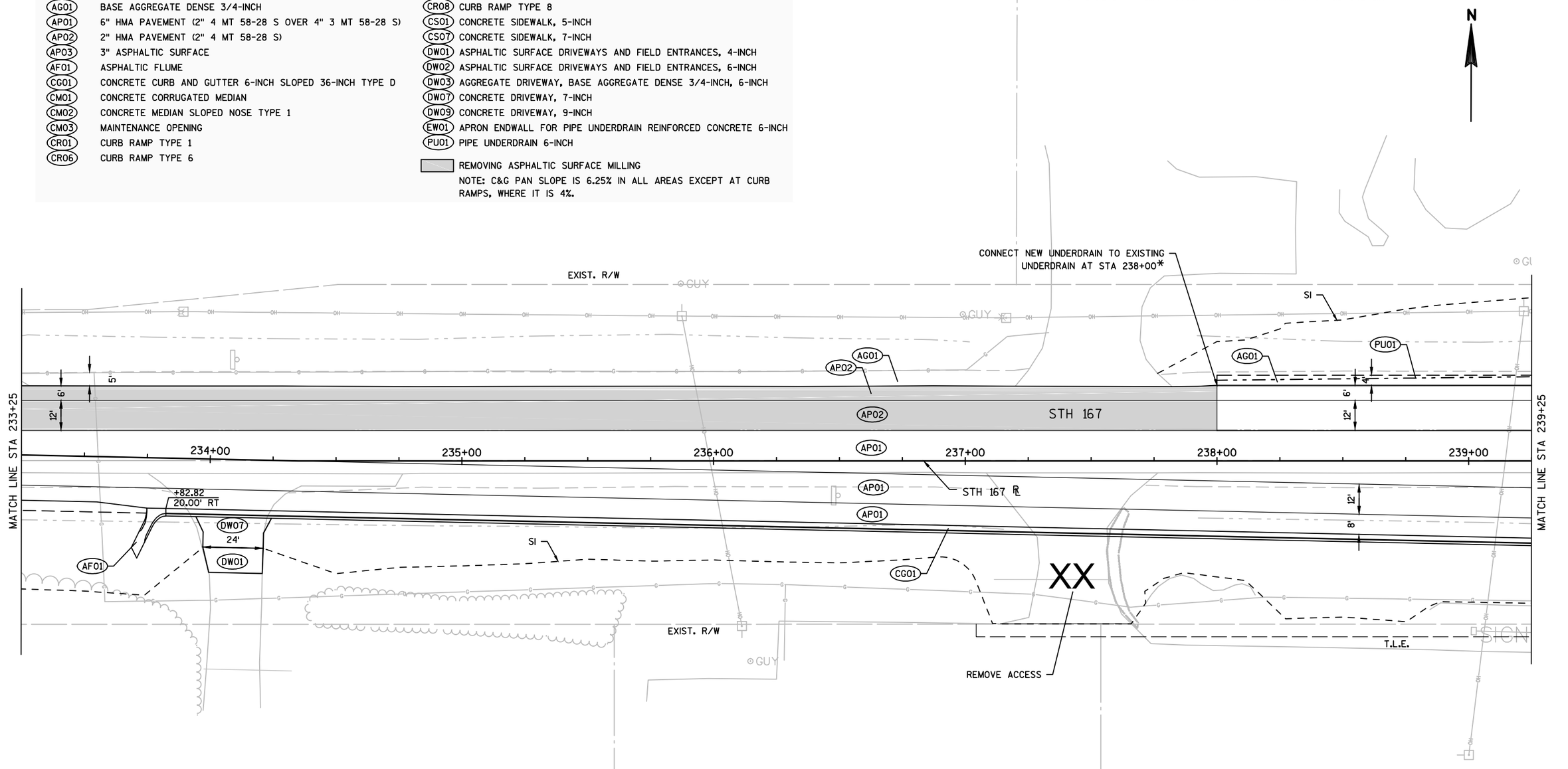
WISDOT/CADDS SHEET 42

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

*RUN UNDERDRAIN CONTINUOUS FROM STA 238+00 TO STRUCTURE 103



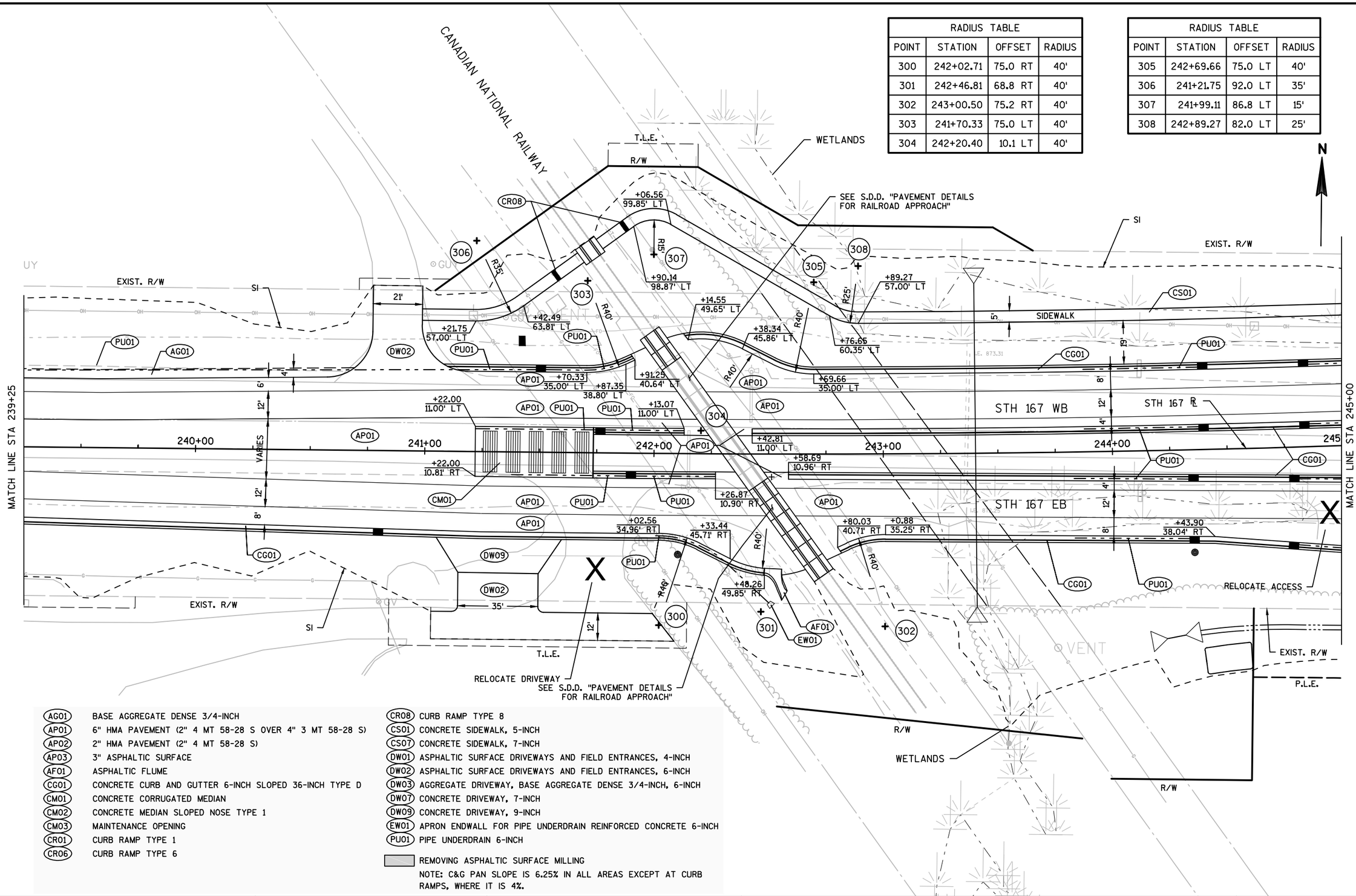
PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 30 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 02

PLOT DATE : 2/1/2018 10:23 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
300	242+02.71	75.0 RT	40'
301	242+46.81	68.8 RT	40'
302	243+00.50	75.2 RT	40'
303	241+70.33	75.0 LT	40'
304	242+20.40	10.1 LT	40'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
305	242+69.66	75.0 LT	40'
306	241+21.75	92.0 LT	35'
307	241+99.11	86.8 LT	15'
308	242+89.27	82.0 LT	25'



AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 31	E

2

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
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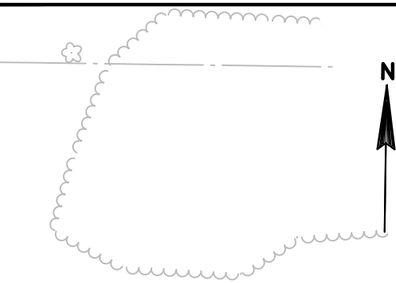
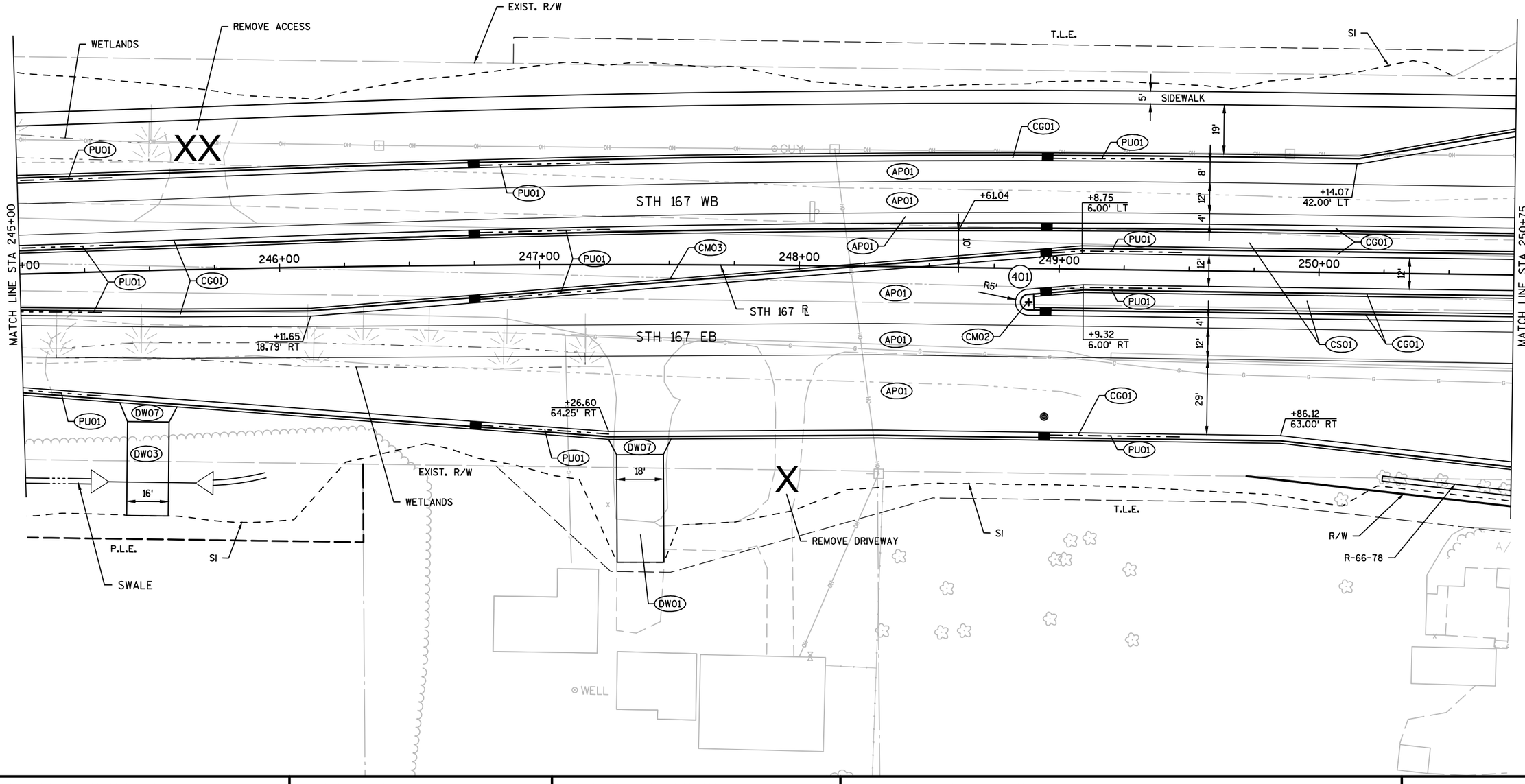
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
401	248+88.43	13.0 RT	5'





PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 32 E

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
505	251+35.18	44.5 LT	2.5'
506	251+65.37	44.5 LT	2.5'
507	252+18.06	44.5 LT	2.5'
508	252+72.74	46.5 LT	2.5'
509	251+16.86	46.5 RT	2.5'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
510	251+67.15	44.5 RT	2.5'
511	252+20.50	44.5 RT	2.5'
512	252+52.61	44.5 RT	2.5'
513	251+12.65	57.0 RT	75'
514	251+37.54	10.6 LT	3'

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
515	251+22.65	81.0 LT	75'
516	252+71.85	57.0 LT	75'
517	252+48.07	10.9 RT	3'
518	252+64.74	81.0 RT	75'
519	255+06.05	13.0 LT	5'

RADIUS TABLE					
POINT	STATION	OFFSET	STATION	OFFSET	RADIUS
501	250+72.29	129.0 LT	542+58.5	118.8 LT	75'
502	252+89.98	147.8 LT	542+72.9	102.3 RT	75'
503	253+17.66	129.0 RT	539+94.2	119.0 RT	75'
504	251+07.31	135.4 RT	539+94.6	88.0 LT	60'

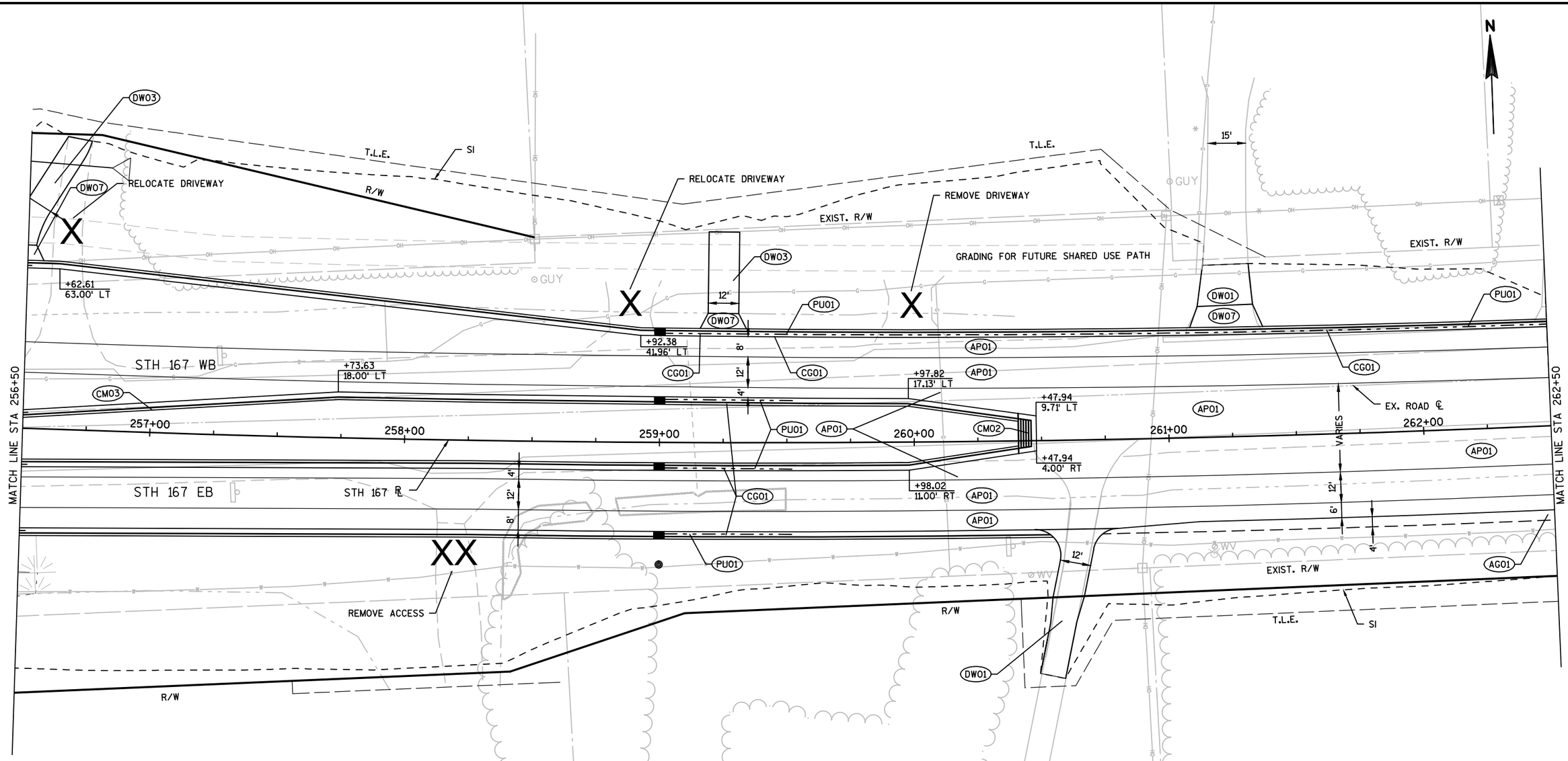
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 33 E

2



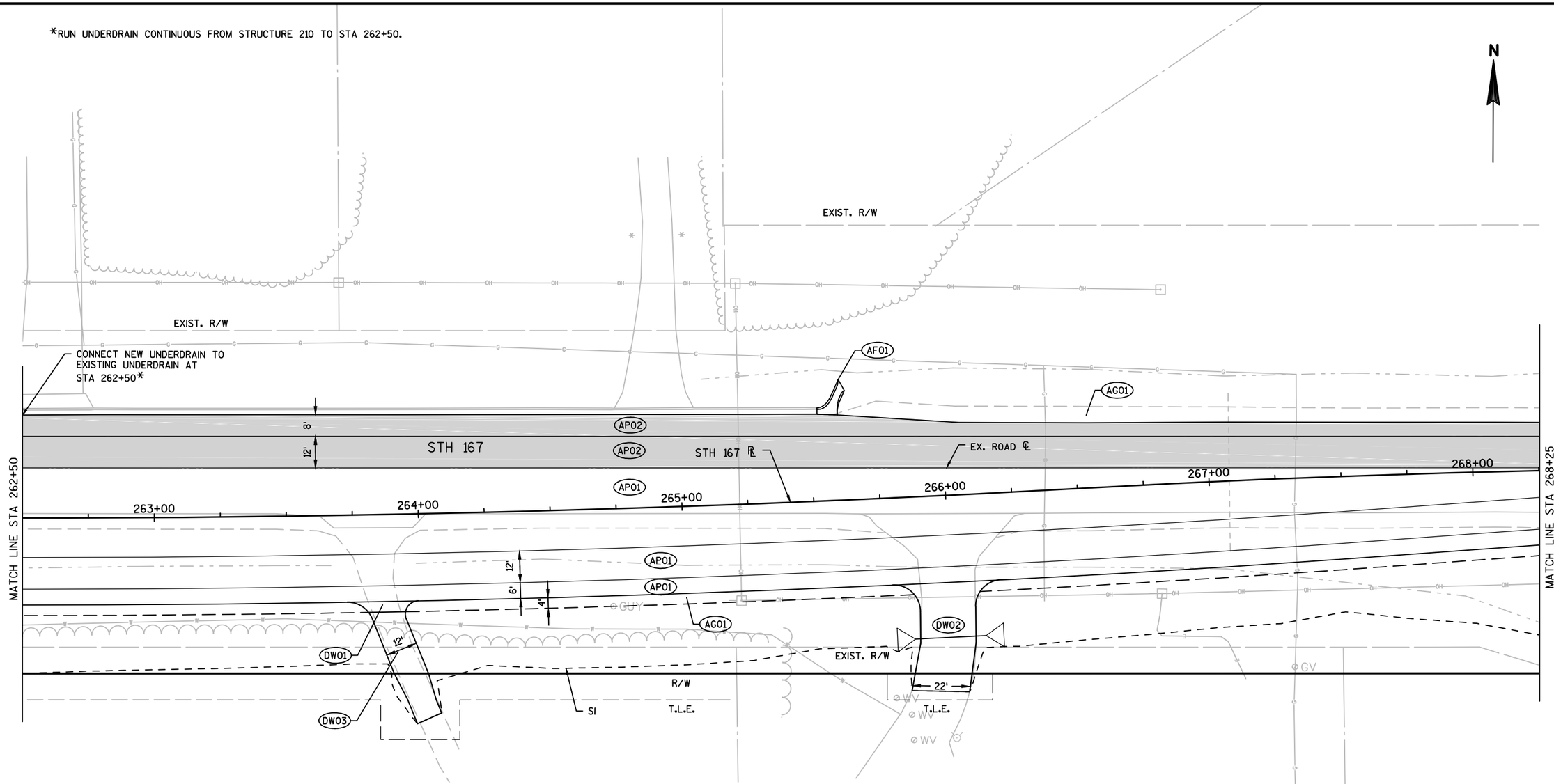
AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 34	E

*RUN UNDERDRAIN CONTINUOUS FROM STRUCTURE 210 TO STA 262+50.

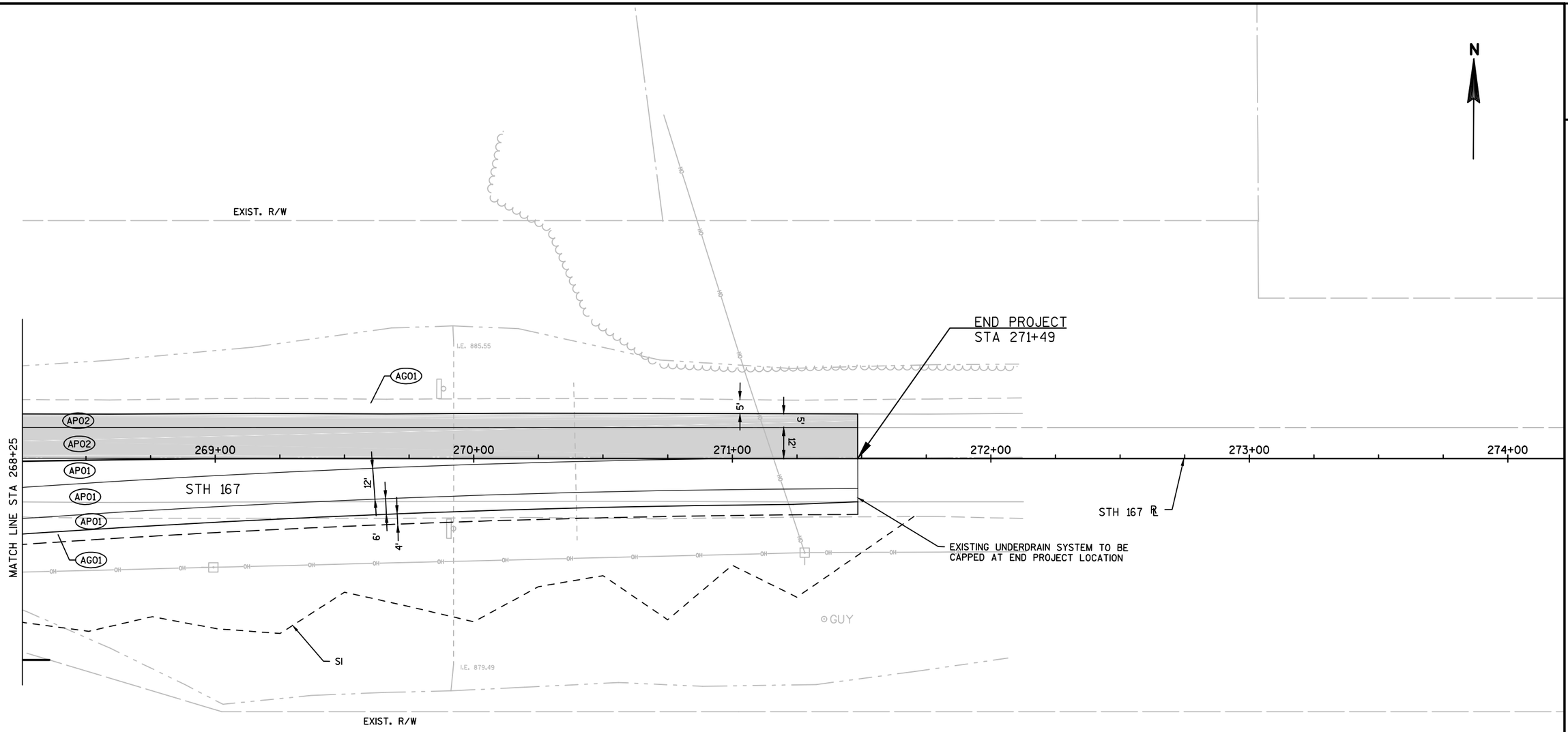


AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH
	REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 35	E

2

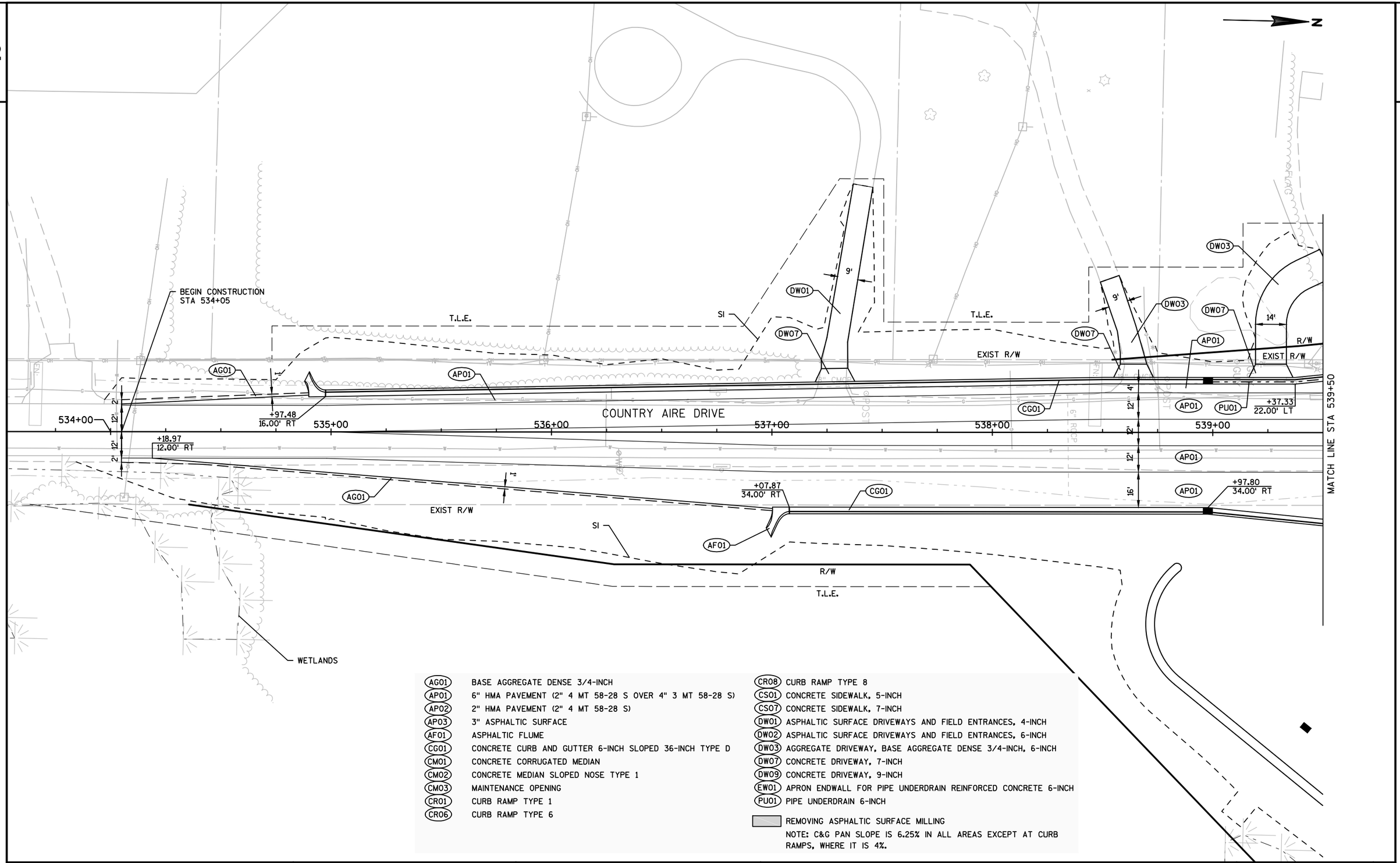


AG01	BASE AGGREGATE DENSE 3/4-INCH	CR08	CURB RAMP TYPE 8
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)	CS01	CONCRETE SIDEWALK, 5-INCH
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)	CS07	CONCRETE SIDEWALK, 7-INCH
AP03	3" ASPHALTIC SURFACE	DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
AF01	ASPHALTIC FLUME	DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
CM01	CONCRETE CORRUGATED MEDIAN	DW07	CONCRETE DRIVEWAY, 7-INCH
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1	DW09	CONCRETE DRIVEWAY, 9-INCH
CM03	MAINTENANCE OPENING	EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
CR01	CURB RAMP TYPE 1	PU01	PIPE UNDERDRAIN 6-INCH
CR06	CURB RAMP TYPE 6		REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: STH 167	SHEET 36	E

2



AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH
	REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	PLAN DETAILS: COUNTRY AIRE DR	SHEET 37	E

2

N

RADIUS TABLE			
POINT	STATION	OFFSET	RADIUS
601	540+33.26	28.5 RT	2.5'
602	540+54.28	26.5 LT	2.5'
603	542+19.19	28.5 LT	2.5'
604	542+04.21	26.5 RT	2.5'

STA 541+27.86 COUNTRY AIRE DR ℄
STA 251+92.61, STH 167 ℄

STH 167 EB

STH 167 WB

R-66-78

MATCH LINE STA 539+50

MATCH LINE STA 545+25

540+00 541+00 542+00 543+00 544+00 545+00

250+00 251+00 252+00 253+00

COUNTRY AIRE DRIVE

FUTURE ISLAND

FUTURE ISLAND

R/W

SI

T.L.E.

EXIST R/W

SHARED USE PATH

18" CMCP

+00.53
28.32' LT

+01.64
44.38' RT

+51.07
44.18' LT

+65.48
27.69' RT

+72.86
22.00' LT

+22.35
22.00' RT

R2.5'

601 602 603 604

CGO1 CMO2 AP01 PU01 EW01 DW03 DW07

AG01	BASE AGGREGATE DENSE 3/4-INCH	CR08	CURB RAMP TYPE 8
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)	CS01	CONCRETE SIDEWALK, 5-INCH
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)	CS07	CONCRETE SIDEWALK, 7-INCH
AP03	3" ASPHALTIC SURFACE	DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
AF01	ASPHALTIC FLUME	DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
CM01	CONCRETE CORRUGATED MEDIAN	DW07	CONCRETE DRIVEWAY, 7-INCH
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1	DW09	CONCRETE DRIVEWAY, 9-INCH
CM03	MAINTENANCE OPENING	EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
CR01	CURB RAMP TYPE 1	PU01	PIPE UNDERDRAIN 6-INCH
CR06	CURB RAMP TYPE 6		REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	PLAN DETAILS: COUNTRY AIRE DR	SHEET 38 E

2

AG01	BASE AGGREGATE DENSE 3/4-INCH
AP01	6" HMA PAVEMENT (2" 4 MT 58-28 S OVER 4" 3 MT 58-28 S)
AP02	2" HMA PAVEMENT (2" 4 MT 58-28 S)
AP03	3" ASPHALTIC SURFACE
AF01	ASPHALTIC FLUME
CG01	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D
CM01	CONCRETE CORRUGATED MEDIAN
CM02	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CM03	MAINTENANCE OPENING
CR01	CURB RAMP TYPE 1
CR06	CURB RAMP TYPE 6
CR08	CURB RAMP TYPE 8
CS01	CONCRETE SIDEWALK, 5-INCH
CS07	CONCRETE SIDEWALK, 7-INCH
DW01	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 4-INCH
DW02	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 6-INCH
DW03	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 3/4-INCH, 6-INCH
DW07	CONCRETE DRIVEWAY, 7-INCH
DW09	CONCRETE DRIVEWAY, 9-INCH
EW01	APRON ENDWALL FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH
PU01	PIPE UNDERDRAIN 6-INCH

REMOVING ASPHALTIC SURFACE MILLING

NOTE: C&G PAN SLOPE IS 6.25% IN ALL AREAS EXCEPT AT CURB RAMPS, WHERE IT IS 4%.

N

WETLANDS

SI

T.L.E.

XXXX

DW01

DW07

R/W

T.L.E.

EXIST. RW

CG01

24'

AG01

2%

4%

12'

+56.86
22.00' LT

AP01

+53.52
19.18' LT

+62.38
17.00' LT

MATCH LINE STA 545+25

546+00

547+00

548+00

549+00

550+00

551+00

COUNTRY AIRE DRIVE

+62.21
16.00' RT

5%

10'

SHARED USE PATH

AP03

12'

GRADING FOR FUTURE SHARED USE PATH EXTENSION

20'

DW07

CS07

T.L.E.

DW03

11'

DW07

CS07

DW01

DW03

T.L.E.

SI

END CONSTRUCTION
STA 548+15

CMCP

FLAG

GUY

POST

24" CMCP

POST

L.E. 885.17

L.E. 884.99

FND ROD

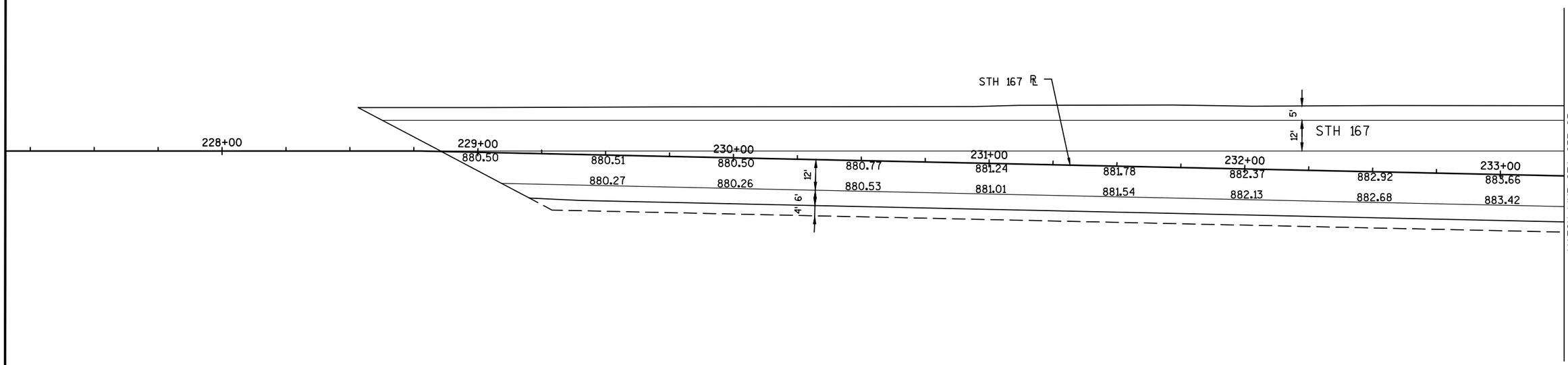
PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN DETAILS: COUNTRY AIRE DR	SHEET 39	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 03

PLOT DATE : 1/31/2018 1:05 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N



NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 40	E

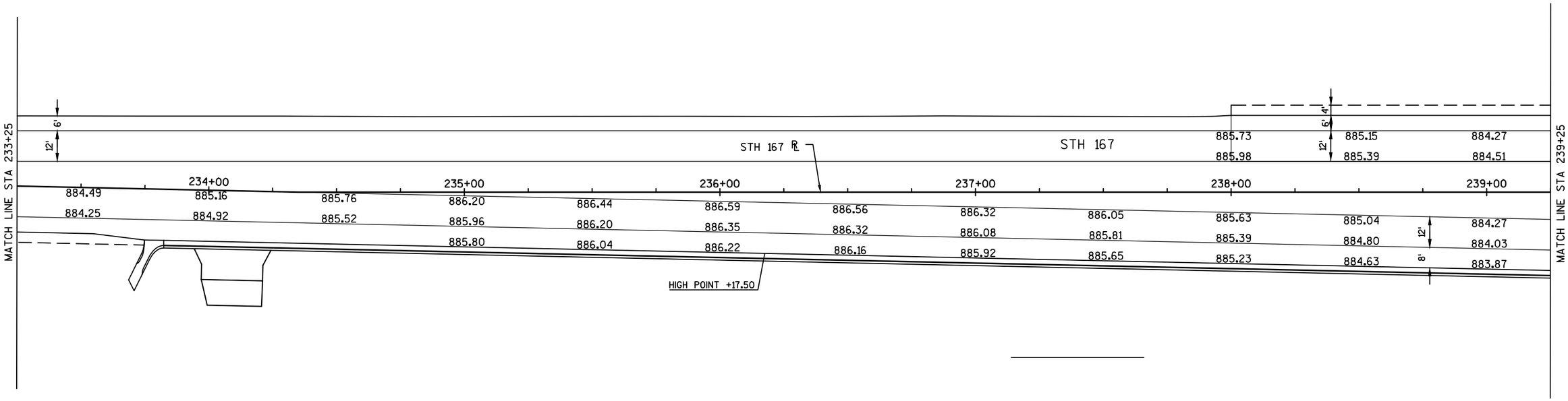
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021301-JD.DWG
LAYOUT NAME - 01

PLOT DATE : 2/1/2018 10:31 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N



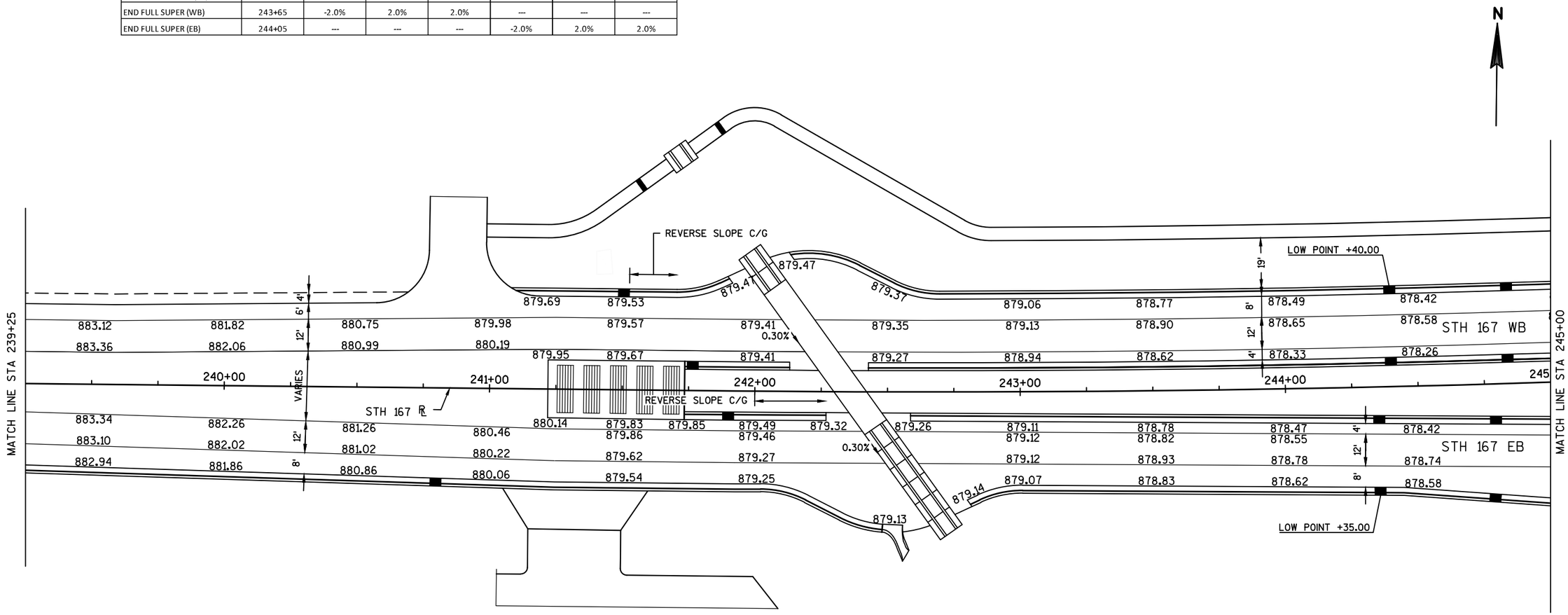
NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 41	E

STH 167							
		WESTBOUND			EASTBOUND		
SUPERELEVATION DATA	STATION	OUTSIDE SHLDR	LANE	INSIDE SHLDR	OUTSIDE SHLDR	LANE	INSIDE SHLDR
END NORMAL SHOULDER (WB)	240+87	-2.0%	-2.0%	-1.0%	-2.0%	-2.0%	-1.0%
END NORMAL CROWN (WB)	241+00	-1.7%	-1.7%	0.9%	-2.0%	-2.0%	-0.9%
BEGIN FULL SUPER (WB)	241+90	0.3%	0.3%	-0.3%	-0.3%	-2.0%	0.3%
BEGIN FULL SUPER (EB)	242+30	---	---	---	-0.3%	-0.3%	0.3%
END FULL SUPER (WB)	243+65	-2.0%	2.0%	2.0%	---	---	---
END FULL SUPER (EB)	244+05	---	---	---	-2.0%	2.0%	2.0%



NOTES:

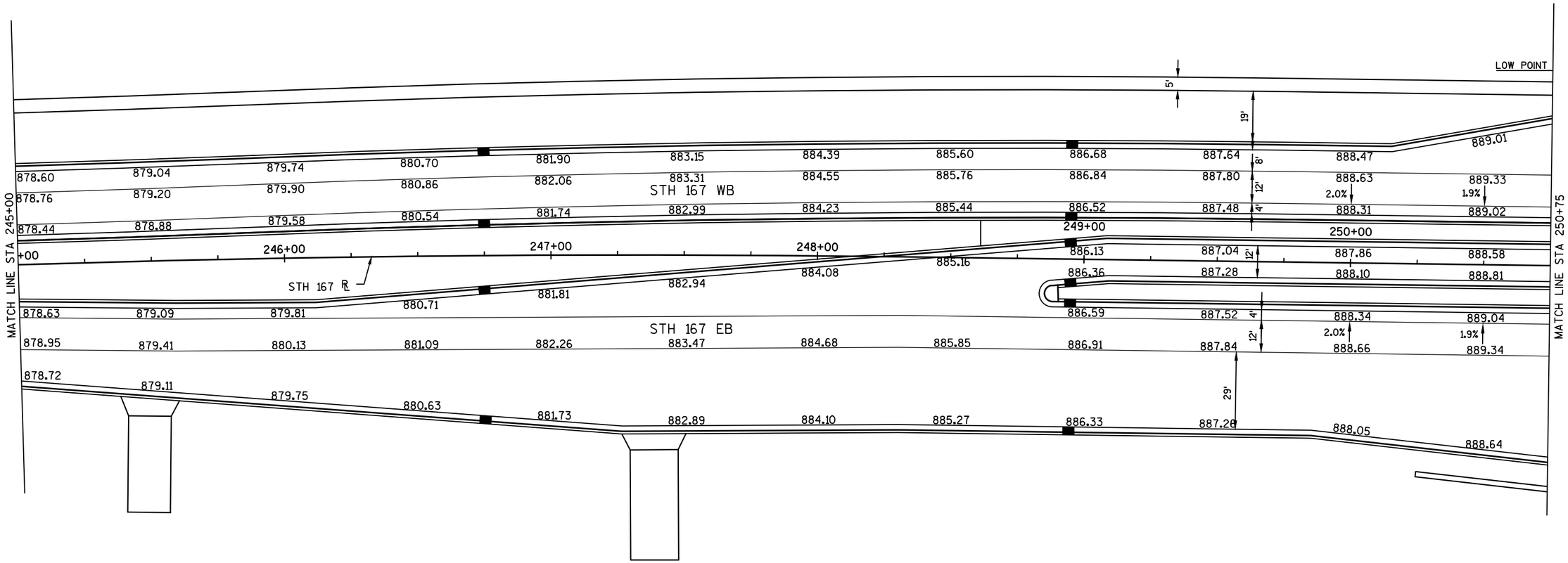
PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 42	E

2

N



NOTES:

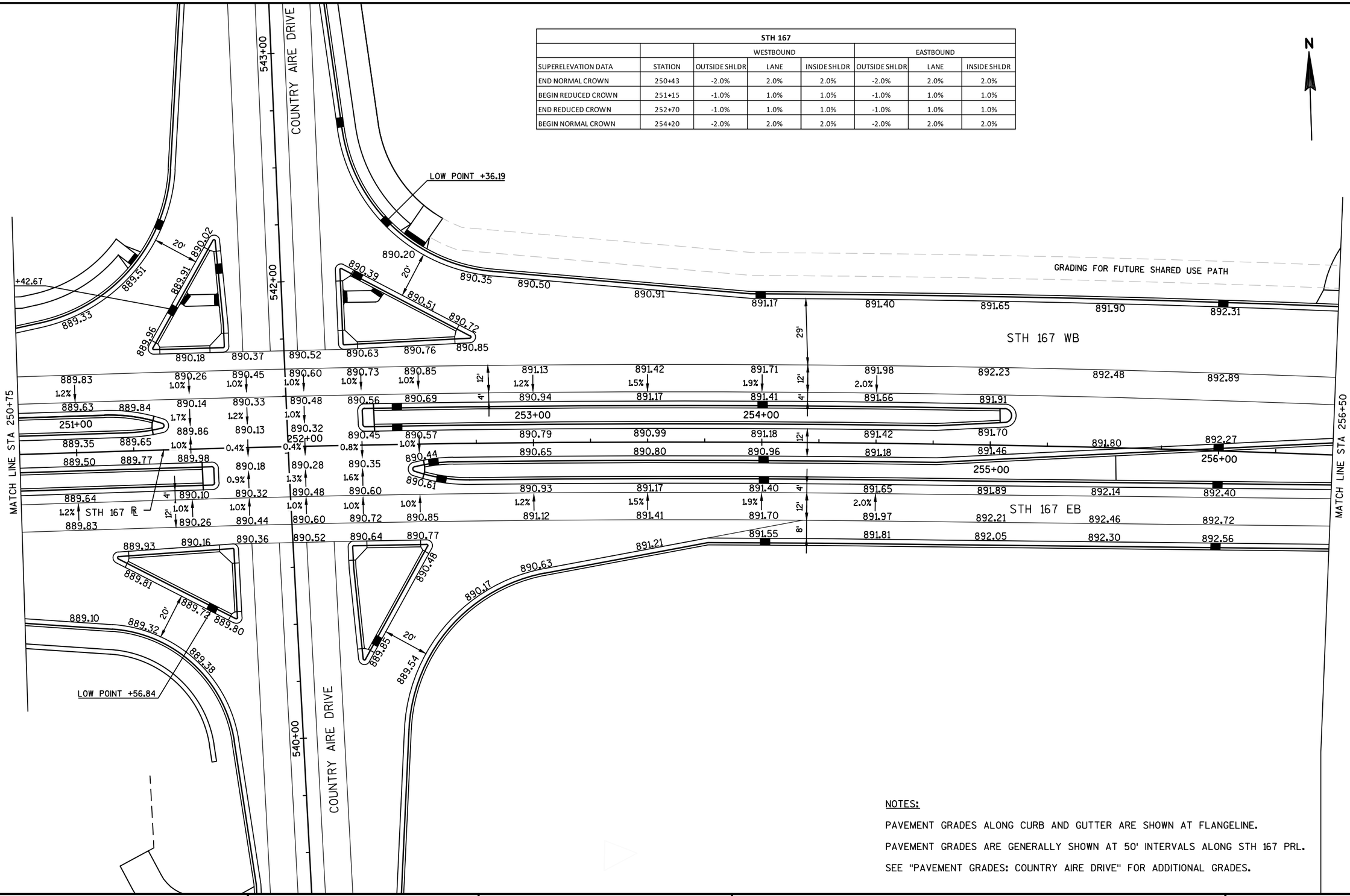
PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 43	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021301-JD.DWG
LAYOUT NAME - 04
PLOT DATE : 2/1/2018 10:31 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

STH 167							
		WESTBOUND			EASTBOUND		
SUPERELEVATION DATA	STATION	OUTSIDE SHLDR	LANE	INSIDE SHLDR	OUTSIDE SHLDR	LANE	INSIDE SHLDR
END NORMAL CROWN	250+43	-2.0%	2.0%	2.0%	-2.0%	2.0%	2.0%
BEGIN REDUCED CROWN	251+15	-1.0%	1.0%	1.0%	-1.0%	1.0%	1.0%
END REDUCED CROWN	252+70	-1.0%	1.0%	1.0%	-1.0%	1.0%	1.0%
BEGIN NORMAL CROWN	254+20	-2.0%	2.0%	2.0%	-2.0%	2.0%	2.0%



NOTES:

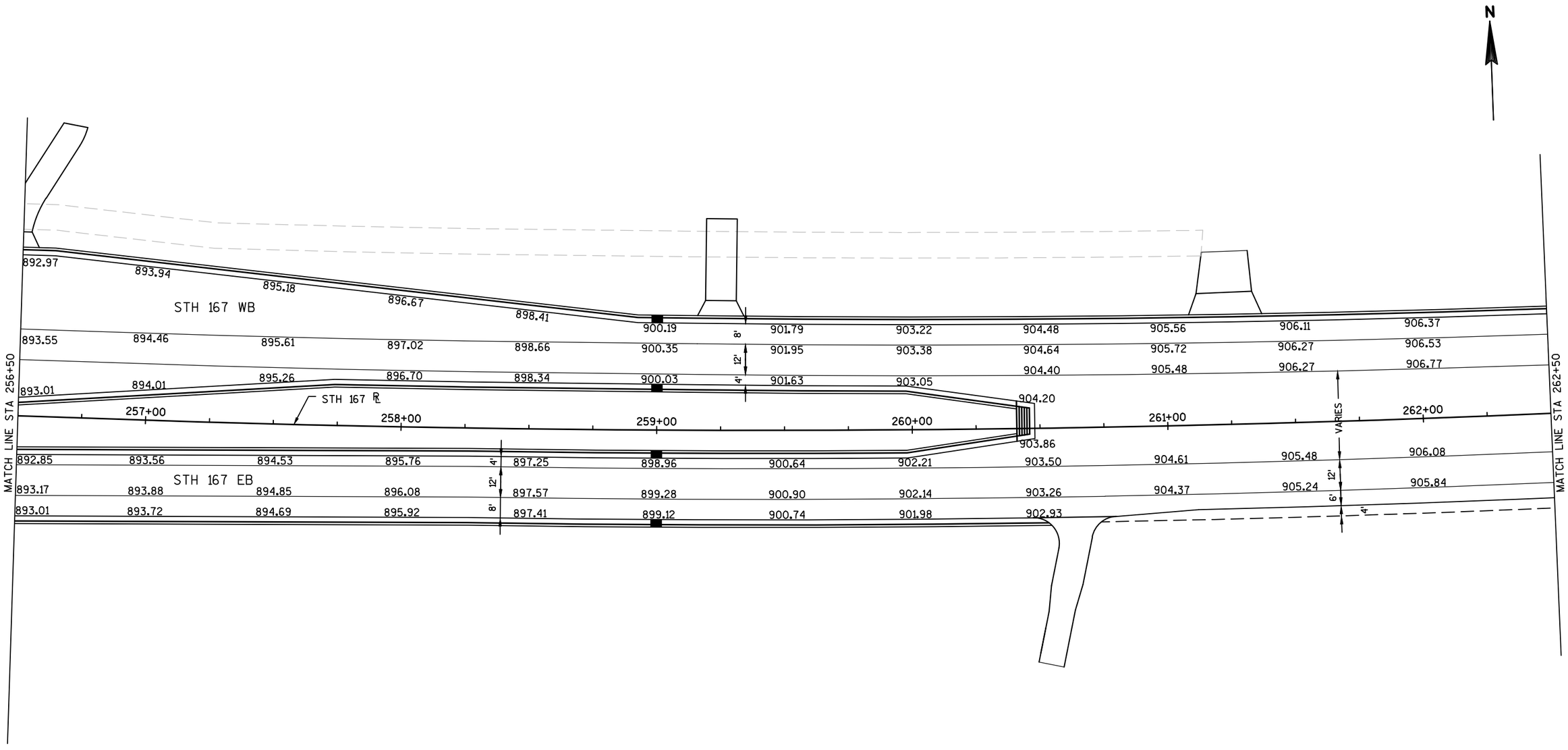
PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

SEE "PAVEMENT GRADES: COUNTRY AIRE DRIVE" FOR ADDITIONAL GRADES.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 44	E

2



STH 167							
		WESTBOUND			EASTBOUND		
SUPERELEVATION DATA	STATION	OUTSIDE SHLDR	LANE	INSIDE SHLDR	OUTSIDE SHLDR	LANE	INSIDE SHLDR
END NORMAL CROWN (EB)	259+40	---	---	---	-2.0%	2.0%	2.0%
BEGIN NORMAL CROWN (EB)	260+40	---	---	---	-2.0%	-2.0%	-2.5%
END NORMAL CROWN (WB)	261+00	-2.0%	2.0%	2.5%	---	---	---
BEGIN NORMAL CROWN (WB)	262+00	-4.0%	-2.0%	2.0%	---	---	---

NOTES:

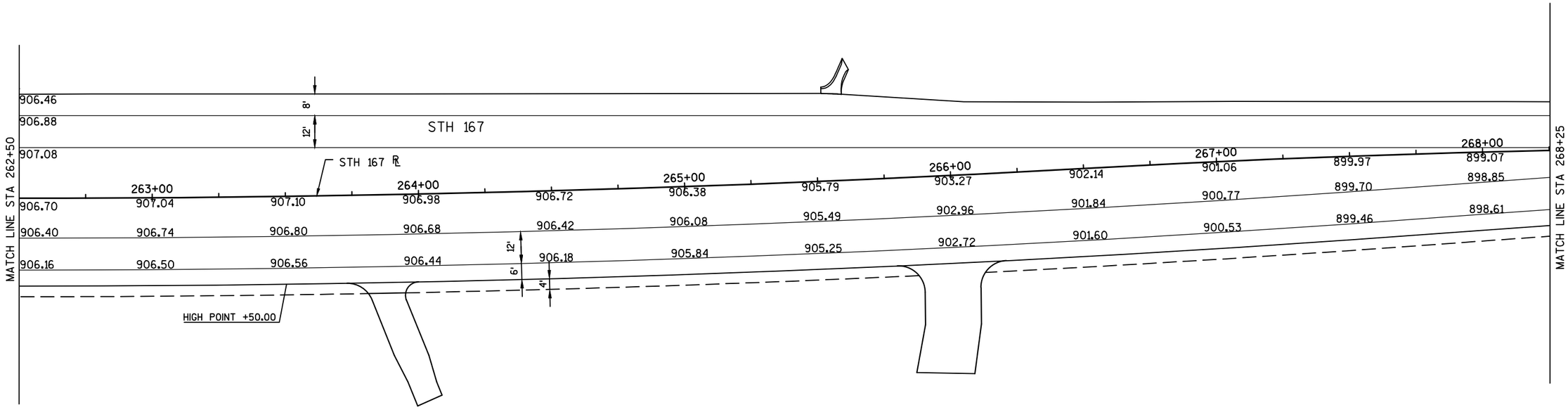
PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 45	E

2

N



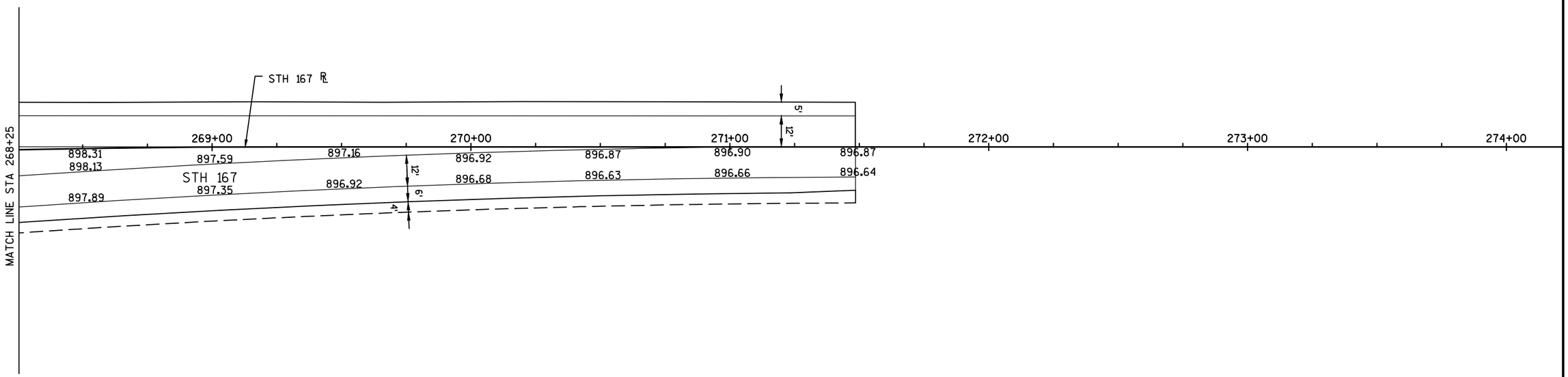
NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 46	E

2



NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG STH 167 PRL.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: STH 167	SHEET 47	E

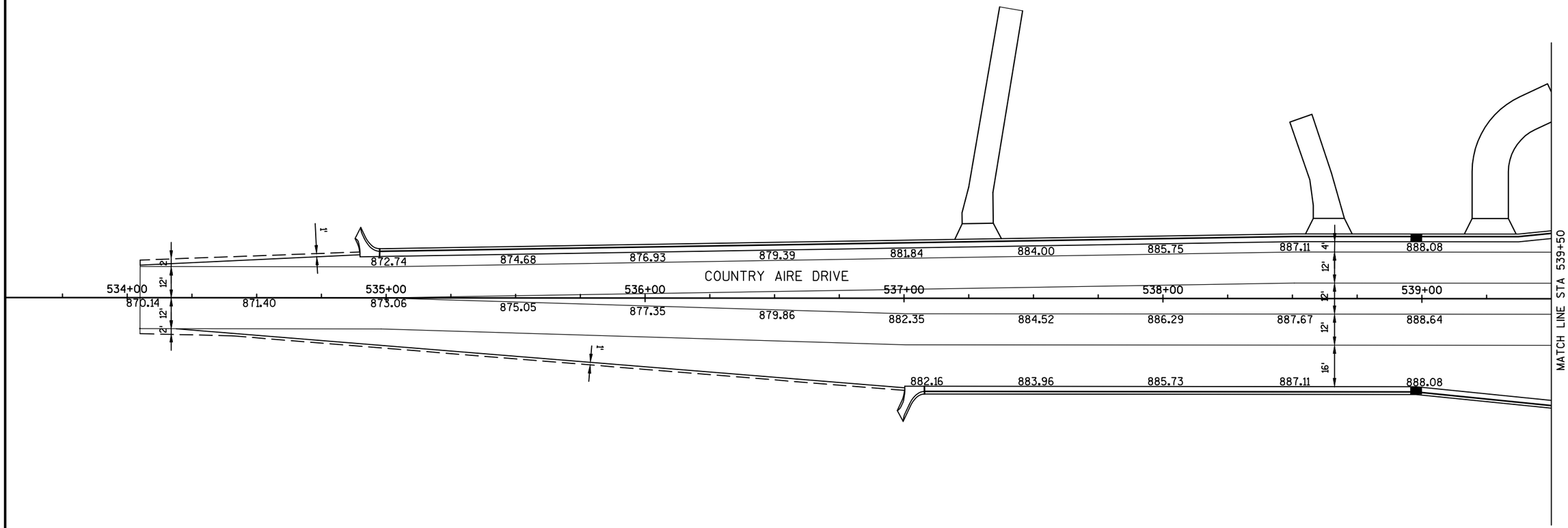
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021301-JD.DWG
LAYOUT NAME - 08
PLOT DATE : 2/1/2018 10:31 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG COUNTRY AIRE DRIVE ℄.

N



PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	PAVEMENT GRADES: COUNTRY AIRE DR	SHEET 48	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\021302-JD.DWG
LAYOUT NAME - 01

PLOT DATE : 2/1/2018 10:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

STH 167 EB

STH 167 WB

250+00

251+00

252+00

253+00

LOW POINT +57.85

LOW POINT +90.37

LOW POINT +23.45

COUNTRY AIRE DRIVE

MATCH LINE STA 539+50

MATCH LINE STA 545+25

888.65 889.05 889.96 890.34

889.24 889.74 890.18

888.58 888.97

890.06 890.10 890.58

890.32 890.14 890.09

890.28 890.61 891.35

890.84 891.59

890.29 890.56 891.08 891.83

890.58 890.38

890.49 890.73 891.51

890.30

889.83 890.20 891.02 892.16 893.58 894.95

892.87 894.17 895.48

892.55 893.85 895.16

2.0% 0.9% 12' 0.5%

0.4% 9'

0.5% 12' 0.5% 1.2% 1.9% 2.0%

1.7% 1.9% 2.0%

0.6% 1.9%

1.5%

4' 10'

540+00 541+00 542+00 543+00 544+00 545+00

NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG COUNTRY AIRE DRIVE ℄.

SEE "PAVEMENT GRADES: STH 167" FOR ADDITIONAL GRADES.

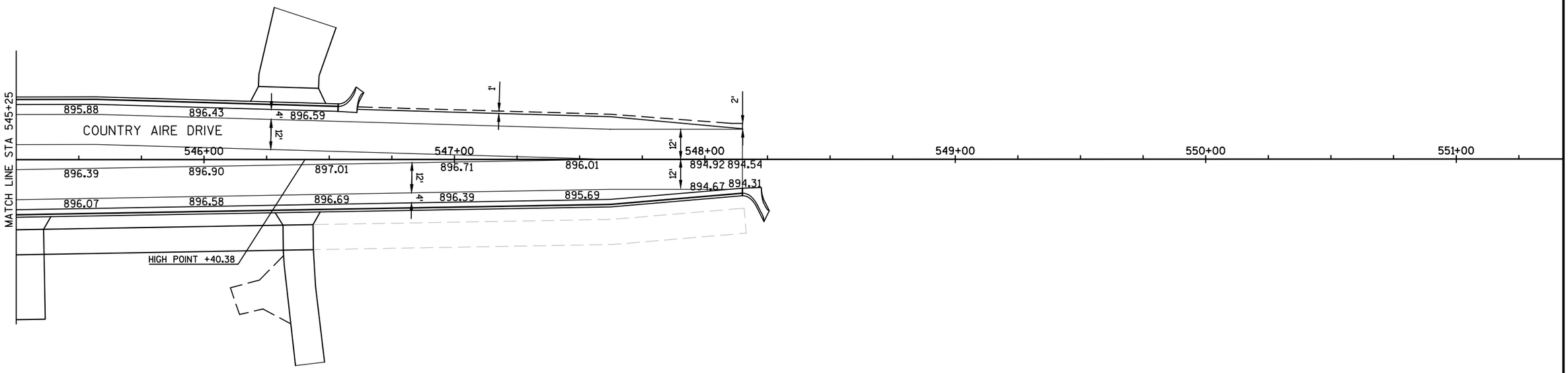
PROJECT NO: 1380-00-70	HWY: COUNTRY AIRE DRIVE	COUNTY: WASHINGTON	PAVEMENT GRADES: COUNTRY AIRE DR	SHEET 49	E

NOTES:

PAVEMENT GRADES ALONG CURB AND GUTTER ARE SHOWN AT FLANGELINE.

PAVEMENT GRADES ARE GENERALLY SHOWN AT 50' INTERVALS ALONG COUNTRY AIRE DRIVE ℄.

N



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT GRADES: COUNTRY AIRE DR	SHEET 50	E

2

LEGEND

EROSION MAT CLASS I TYPE B	INLET PROTECTION (TYPE DENOTED)
EROSION MAT CLASS I URBAN TYPE B	TEMPORARY DITCH CHECK
EROSION MAT CLASS II TYPE C	CULVERT PIPE CHECKS
SILT FENCE	RIP RAP OR STONE DITCH CHECK
HEAVY DUTY SILT FENCE	SLOPE INTERCEPT
	WETLAND BOUNDARY
	SURFACE WATER FLOW

N

MATCH LINE 235+00

EXISTING R/W

228 230 232 STH 167 234

STH 167 ℄

SI

7'X5'

EXISTING R/W

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 51	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

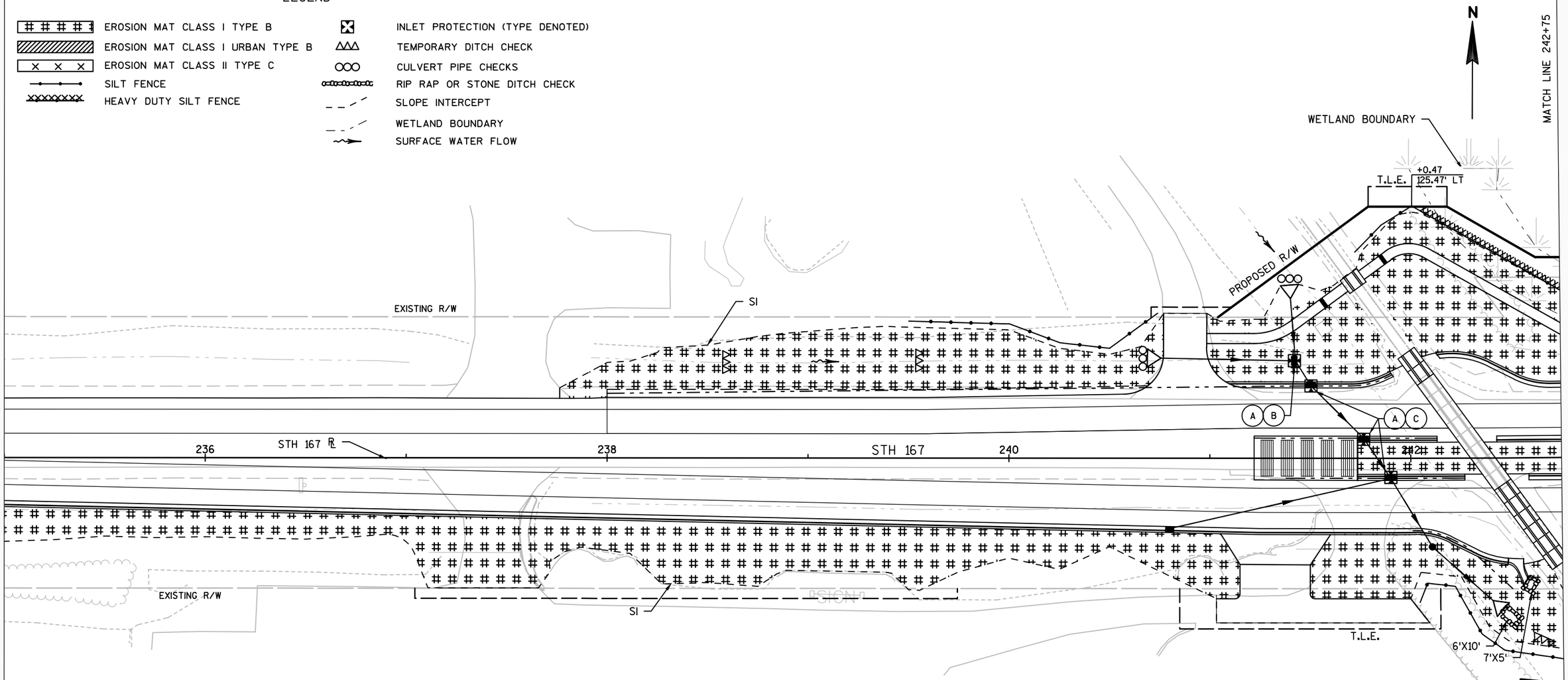
PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT CLASS I TYPE B	INLET PROTECTION (TYPE DENOTED)
EROSION MAT CLASS I URBAN TYPE B	TEMPORARY DITCH CHECK
EROSION MAT CLASS II TYPE C	CULVERT PIPE CHECKS
SILT FENCE	RIP RAP OR STONE DITCH CHECK
HEAVY DUTY SILT FENCE	SLOPE INTERCEPT
	WETLAND BOUNDARY
	SURFACE WATER FLOW



PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 52	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS I URBAN TYPE B
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

N

MATCH LINE 250+50

+90.05
89.46' LT

PROPOSED R/W

EXISTING R/W

SI

T.L.E.

+89.20
81.53' LT

+85.00
81.33' LT

+80.00
80.50' LT

STH 167 WB

244

246

248

250

STH 167 EB

STH 167

5'X10'

3'X10'

4'X10'

20'X10'

4'X10'

P.L.E.

SI

T.L.E.

SEPC

SEPV

WELL

+36.43
101.72' RT

+78.63
114.22' RT

+54.44
118.77' RT

PROPOSED R/W

WETLAND BOUNDARY

MATCH LINE 242+75

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 53	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS I URBAN TYPE B
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

N

MATCH LINE 258+25

EXISTING R/W

SI

PROPOSED R/W

T.L.E.

STH 167 WB

STH 167 EB

STH 167 ℄

252

254

256

258

540

5'X10'

25'X12'

3'X10'

4'X10'

+39.96
111.74' RT

+53.85
94.29' RT

+61.41
95.71' RT

+95.00
96.69' RT

+25.00
96.29' RT

+64.17
94.44' RT

+81.88
96.31' RT

+4.00
96.75' RT

+45.00
95.59' RT

+80.40
102.18' RT

+9.51
157.12' RT

+78.67
202.37' RT

WETLAND BOUNDARY

T.L.E.

MATCH LINE 250+50

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 54	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS I URBAN TYPE B
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- HEAVY DUTY SILT FENCE
- INLET PROTECTION (TYPE DENOTED)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- RIP RAP OR STONE DITCH CHECK
- SLOPE INTERCEPT
- WETLAND BOUNDARY
- SURFACE WATER FLOW

N

MATCH LINE 266+00

T.L.E.

SI

EXISTING R/W

7'X5'

STH 167 WB

A C

STH 167 EB

A C

STH 167 ℄

12

260

262

264

SI

T.L.E.

PROPOSED R/W

MATCH LINE 258+25

2

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 55	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 05

PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EROSION MAT CLASS I TYPE B
EROSION MAT CLASS I URBAN TYPE B
EROSION MAT CLASS II TYPE C
SILT FENCE
HEAVY DUTY SILT FENCE
INLET PROTECTION (TYPE DENOTED)
TEMPORARY DITCH CHECK
CULVERT PIPE CHECKS
RIP RAP OR STONE DITCH CHECK
SLOPE INTERCEPT
WETLAND BOUNDARY
SURFACE WATER FLOW

N

2

STH 167 ℄

I.E. 885.55

268

STH 167

270

272

SI

I.E. 879.49

PROPOSED R/W

EXISTING R/W

MATCH LINE 266+00

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - STH 167	SHEET 56	E

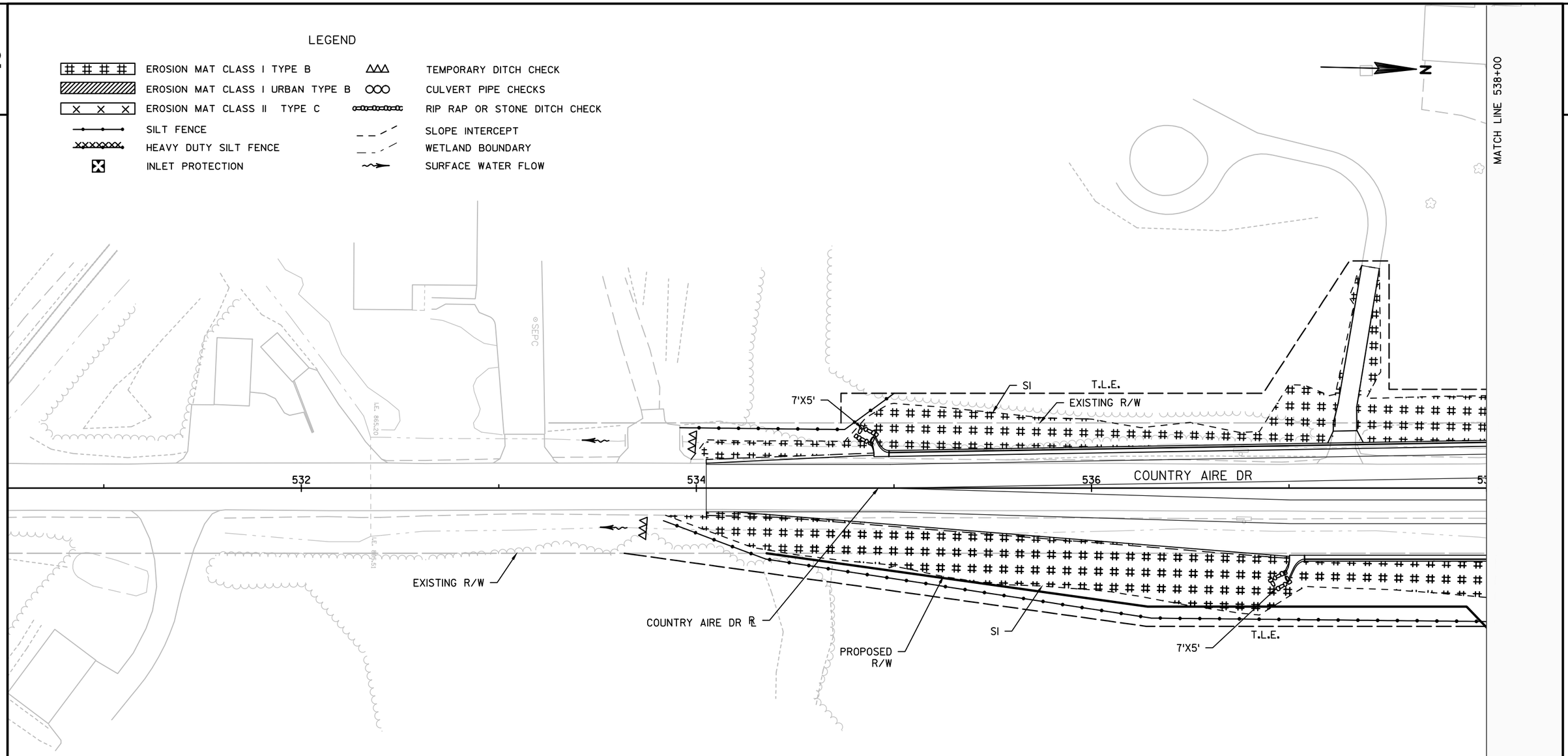
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 06

PLOT DATE : 3/8/2018 1:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

EROSION MAT CLASS I TYPE B	TEMPORARY DITCH CHECK
EROSION MAT CLASS I URBAN TYPE B	CULVERT PIPE CHECKS
EROSION MAT CLASS II TYPE C	RIP RAP OR STONE DITCH CHECK
SILT FENCE	SLOPE INTERCEPT
HEAVY DUTY SILT FENCE	WETLAND BOUNDARY
INLET PROTECTION	SURFACE WATER FLOW



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - COUNTRY AIRE DR	SHEET 57 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 3/8/2018 1:16 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

EROSION MAT CLASS I TYPE B		TEMPORARY DITCH CHECK	
EROSION MAT CLASS I URBAN TYPE B		CULVERT PIPE CHECKS	
EROSION MAT CLASS II TYPE C		RIP RAP OR STONE DITCH CHECK	
SILT FENCE		SLOPE INTERCEPT	
HEAVY DUTY SILT FENCE		WETLAND BOUNDARY	
INLET PROTECTION		SURFACE WATER FLOW	

N

PROPOSED R/W

T.L.E.

SI

7'X5'

COUNTRY AIRE DR

544

546

548

550

COUNTRY AIRE DR ℄

PROPOSED R/W

SI

T.L.E.

7'X5'

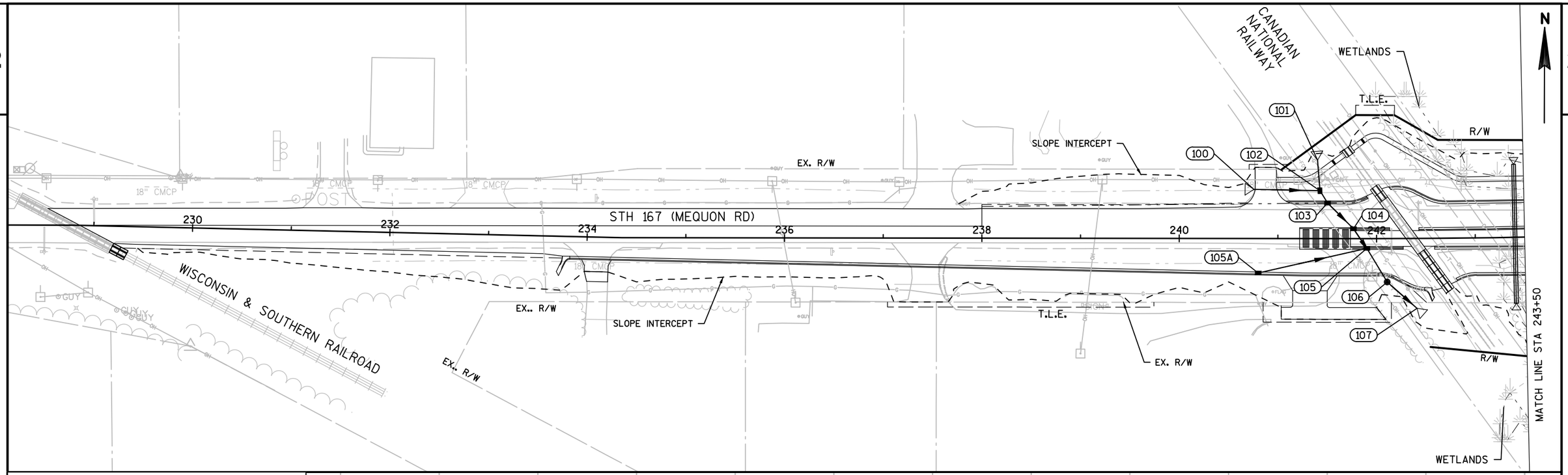
EXISTING R/W

MATCH LINE 543+50

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	EROSION CONTROL - COUNTRY AIRE DR	SHEET 58	E

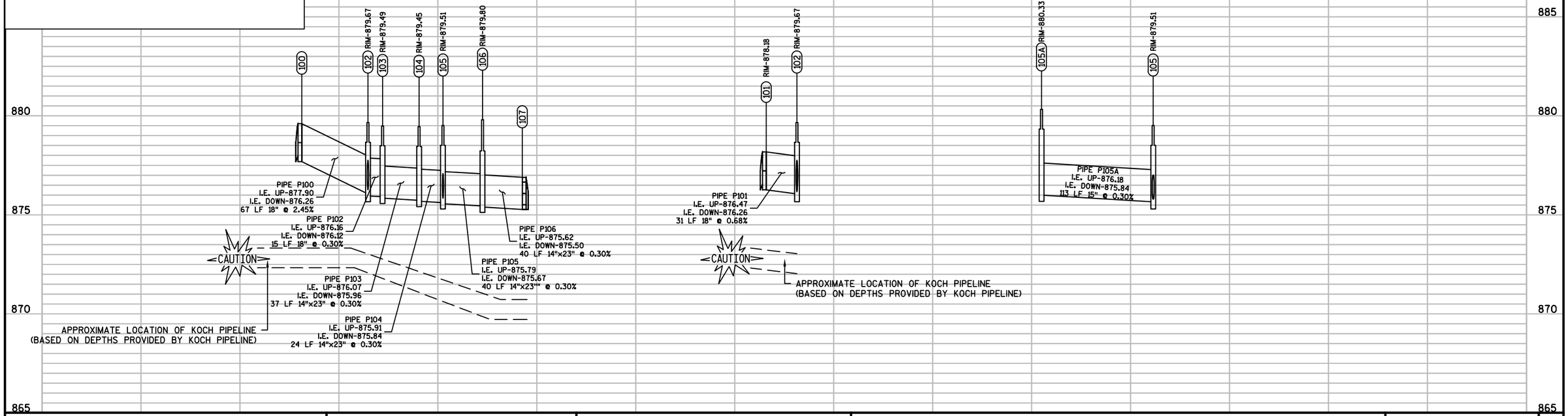
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 3/8/2018 1:16 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT



NOTES:

1. PIPES NOT NUMBERED ON THIS PLAN SHEET ARE CULVERT PIPES. INFORMATION CAN BE VIEWED IN CROSS SECTIONS AND QUANTITIES.



PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	STORM SEWER	SHEET 59	E

2

MATCH LINE STA 243+50

MATCH LINE STA 258+50

COUNTRY AIRE DR

STH 167 EB

STH 167 WB

N

SLOPE INTERCEPT

T.L.E.

EX. R/W

R/W

WETLANDS

WESTSHOREPIPELINE EASEMENT

DRAINAGE SWALE
I.E. UP = 875.50
I.E. DOWN = 874.18

R-66-78

WET DETENTION POND

NOTES:

1. PIPES NOT NUMBERED ON THIS PLAN SHEET ARE CULVERT PIPES. INFORMATION CAN BE VIEWED IN CROSS SECTIONS AND QUANTITIES.

PIPE P130
I.E. UP-874.51
I.E. DOWN-874.43
26 LF 18" @ 0.30%

PIPE P131
I.E. UP-874.38
I.E. DOWN-874.31
23 LF 18" @ 0.30%

PIPE P132
I.E. UP-874.26
I.E. DOWN-874.18
26 LF 18" @ 0.30%

PIPE P133
I.E. UP-874.13
I.E. DOWN-874.11
6 LF 18" @ 0.30%

PIPE P134
I.E. UP-874.06
I.E. DOWN-874.00
19 LF 18" @ 0.30%

PIPE P130A
I.E. UP-875.23
I.E. DOWN-875.01
44 LF 12" @ 0.50%

PIPE P131A
I.E. UP-875.10
I.E. DOWN-874.88
44 LF 12" @ 0.50%

PIPE P132A
I.E. UP-874.98
I.E. DOWN-874.76
44 LF 12" @ 0.50%

PIPE P133A
I.E. UP-874.85
I.E. DOWN-874.63
43 LF 12" @ 0.50%

PIPE P140
I.E. UP-876.98
I.E. DOWN-876.90
26 LF 15" @ 0.30%

PIPE P141
I.E. UP-876.80
I.E. DOWN-876.72
26 LF 15" @ 0.30%

PIPE P142
I.E. UP-876.62
I.E. DOWN-876.48
48 LF 15" @ 0.30%

PIPE P143
I.E. UP-875.73
I.E. DOWN-875.50
76 LF 24" @ 0.30%

PIPE P150
I.E. UP-881.38
I.E. DOWN-881.12
26 LF 15" @ 1.00%

PIPE P151
I.E. UP-881.02
I.E. DOWN-880.91
11 LF 15" @ 1.00%

PIPE P152
I.E. UP-880.81
I.E. DOWN-880.67
14 LF 15" @ 1.00%

PIPE P153
I.E. UP-880.57
I.E. DOWN-880.48
9 LF 15" @ 1.00%

PIPE P154
I.E. UP-880.38
I.E. DOWN-879.98
40 LF 15" @ 1.00%

PIPE P156
I.E. UP-880.12
I.E. DOWN-879.98
7 LF 15" @ 2.00%

PIPE P160
I.E. UP-886.50
I.E. DOWN-886.40
32 LF 12" @ 0.30%

PIPE P162
I.E. UP-886.15
I.E. DOWN-885.97
60 LF 15" @ 0.30%

PIPE P164
I.E. UP-885.72
I.E. DOWN-885.54
60 LF 18" @ 0.30%

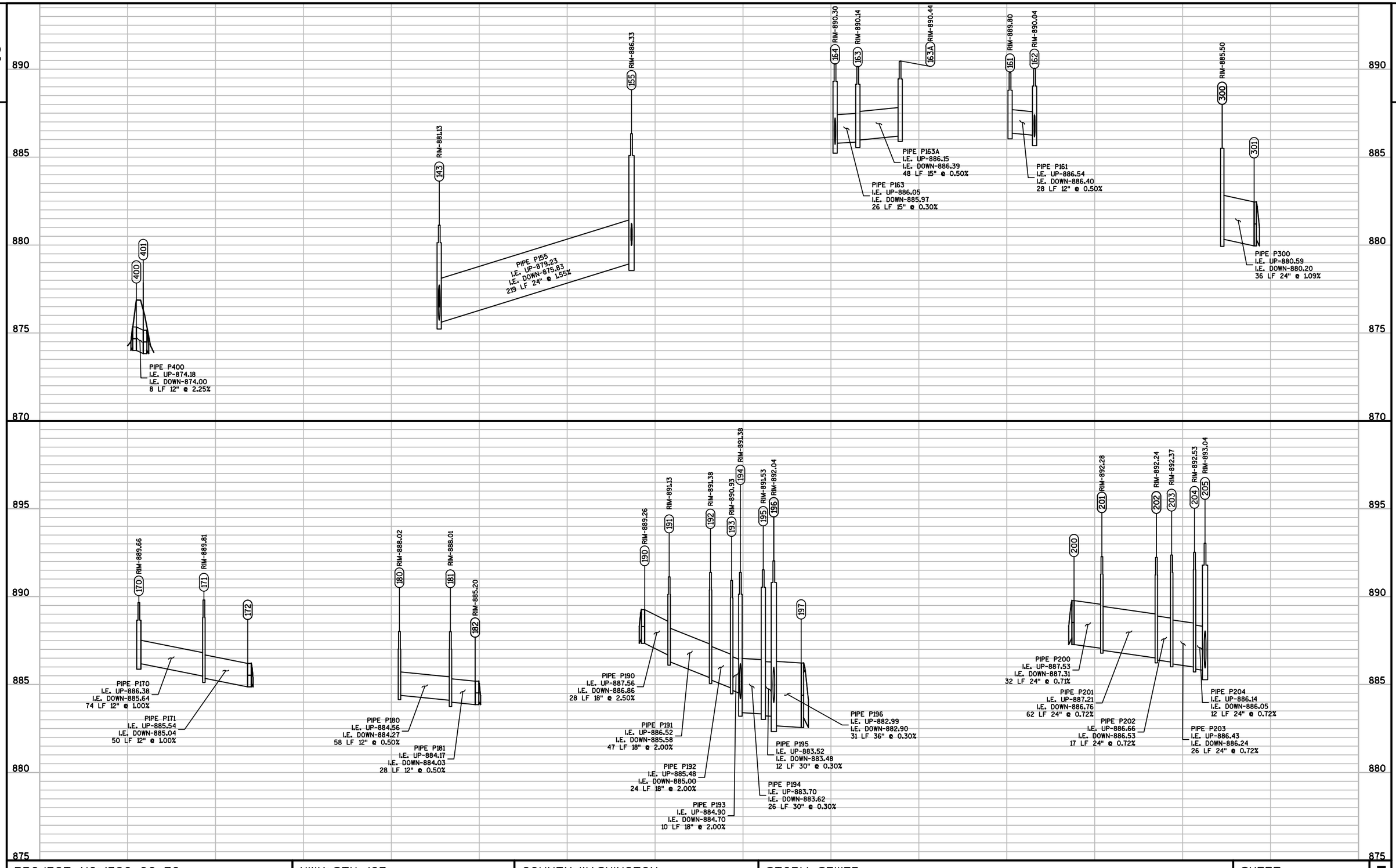
PIPE P165
I.E. UP-885.04
I.E. DOWN-885.01
10 LF 24" @ 0.30%

PIPE P166
I.E. UP-884.91
I.E. DOWN-884.85
21 LF 24" @ 0.30%

PIPE P167
I.E. UP-884.75
I.E. DOWN-884.72
9 LF 24" @ 0.30%

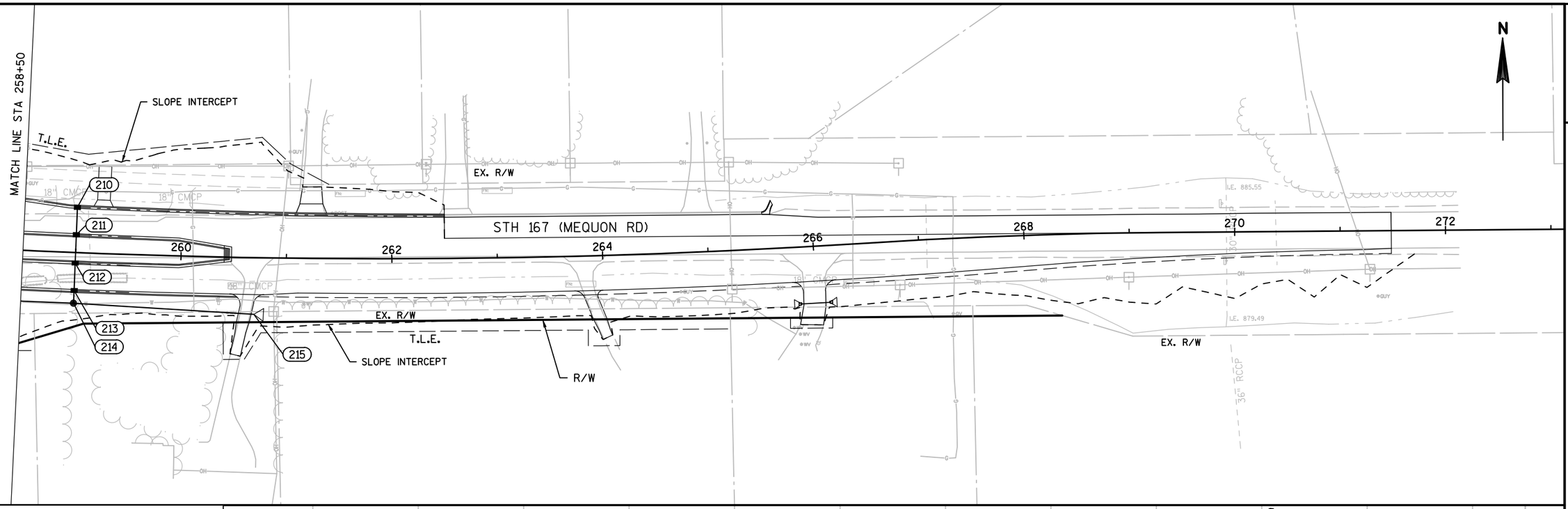
PIPE P168
I.E. UP-884.62
I.E. DOWN-884.20
141 LF 24" @ 0.30%

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	STORM SEWER	SHEET 60	E



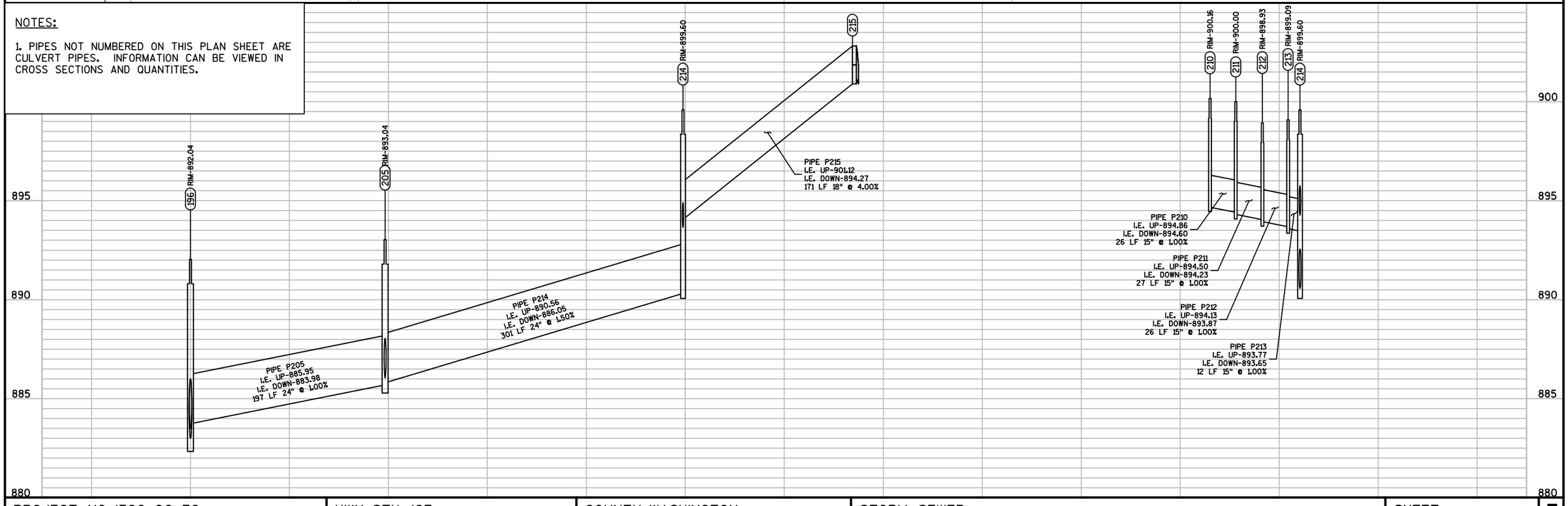
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	STORM SEWER	SHEET 61 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 03
PLOT DATE : 3/12/2018 10:04 AM PLOT BY : CORY IHDE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 41



NOTES:

1. PIPES NOT NUMBERED ON THIS PLAN SHEET ARE CULVERT PIPES. INFORMATION CAN BE VIEWED IN CROSS SECTIONS AND QUANTITIES.

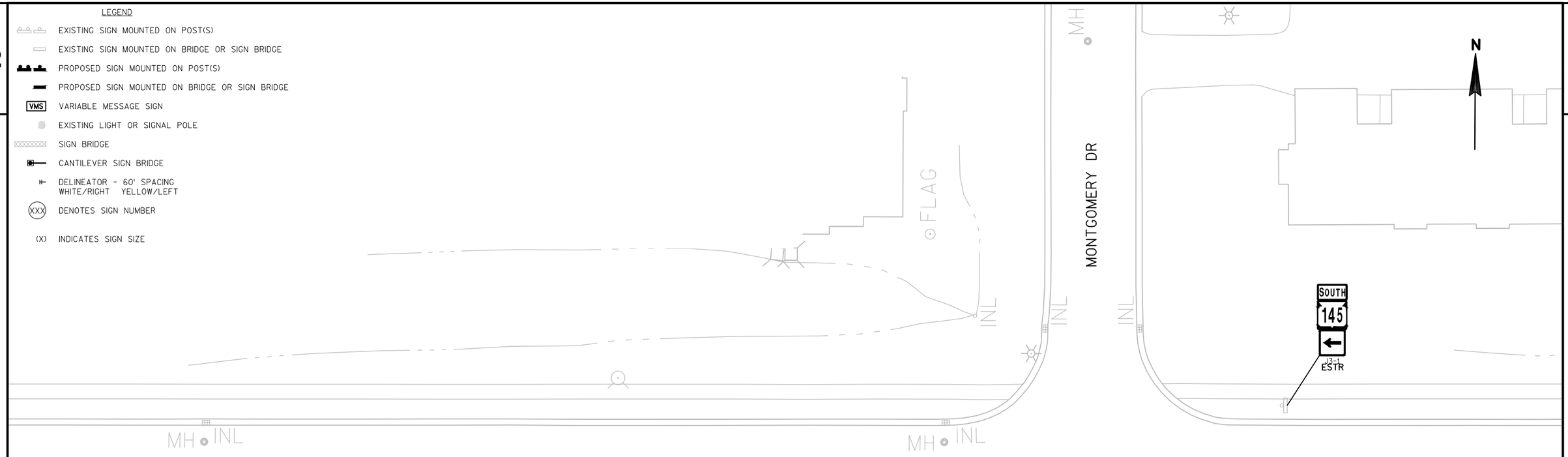


PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	STORM SEWER	SHEET 62	E

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop. Contact Dennis Newton, 414-266-1165 for distribution county location.

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 posts 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

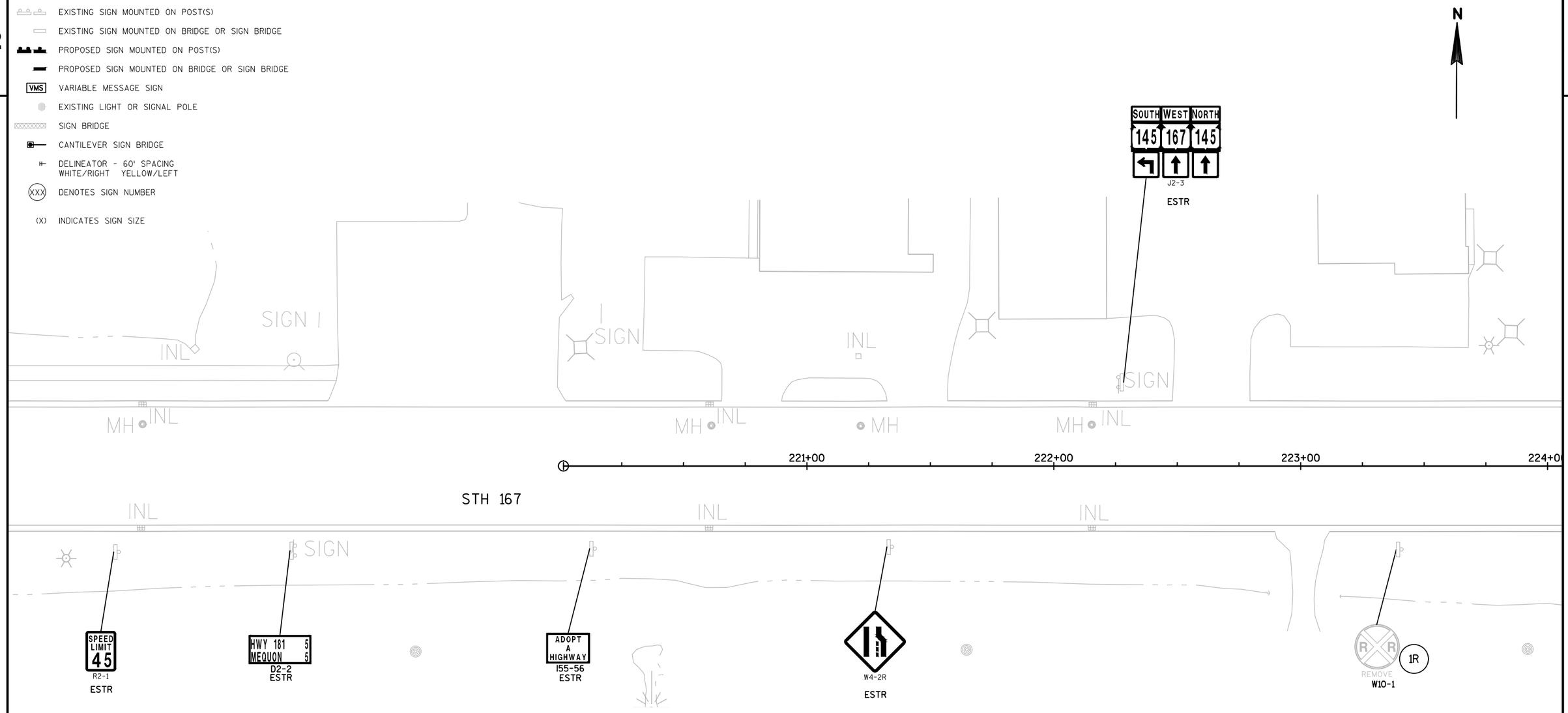
SHEET 1 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 63	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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 2 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 64	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023102_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

JCT 145
J1-1
ESTR

W5-52R
ESTR

SPEED LIMIT 45
REMOVE
R2-1
2R

GUY GUY

INL MH

18" CMCP

224+00 225+00 226+00 227+00 228+00 229+00

8" RCCP

STH 167

INL

SIGN

GUY GUY GUY GUY

RIDESHARE INFO CALL
1-800-455-POOL
D12-2A
ESTR

SHEET 3 OF 20

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 65	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023103_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

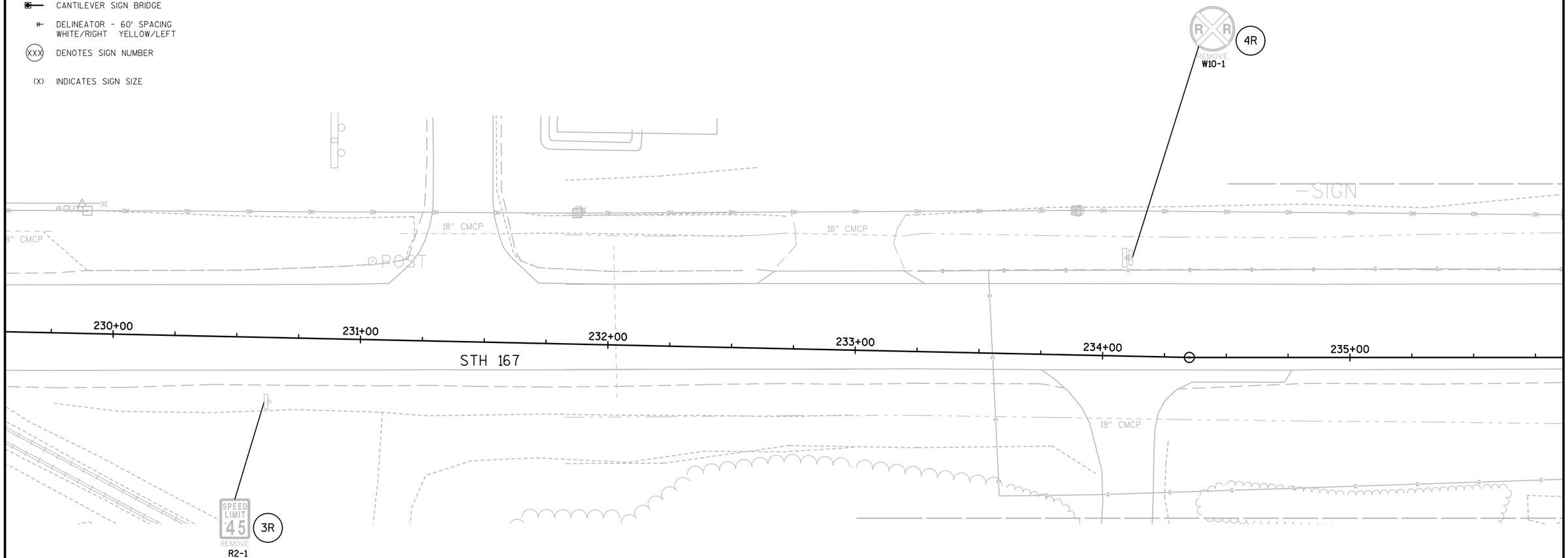
2

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 4 OF 20

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 66	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023104_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

FLAG
GUY
GUY
GUY
GUY
POST
18" CMCP
236+00
237+00
238+00
239+00
240+00
241+00
STH 167
18" CM
FLAG
GV
SIGN
R R
5R
REMOVE
W10-1

SHEET 5 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 67	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023105_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

SPEED LIMIT 45 REMOVE R2-1 6R

SPEED LIMIT 45 REMOVE R2-1 7R

242+00 243+00 244+00 245+00 246+00 247+00

STH 167

30" RCCP

I.E. 873.31

I.E. 872.25

18" CMCP

GUY

SEPC

SHEET 6 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 68	E

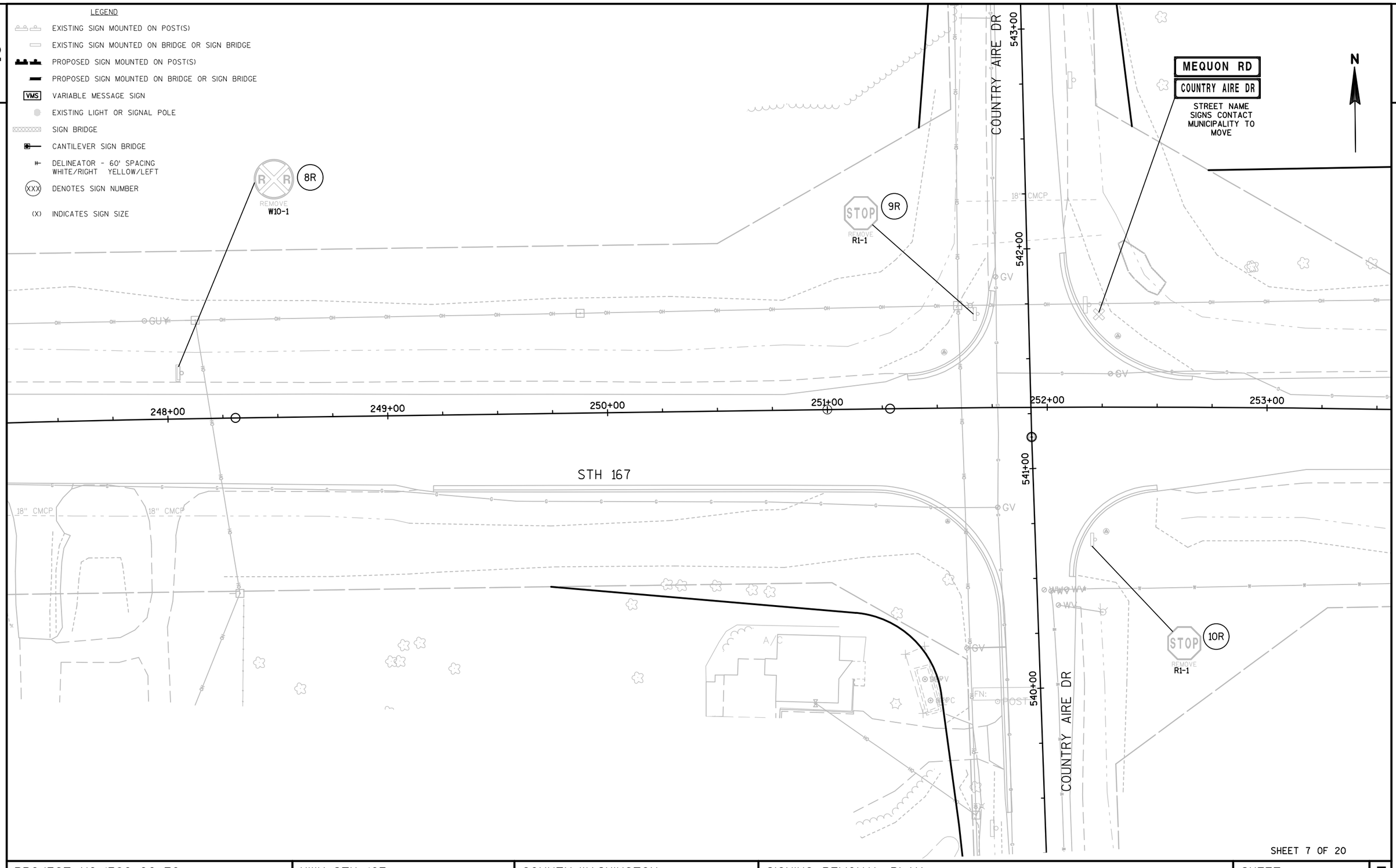
FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023106_PS

PLOT DATE : 11/30/2017 1:59 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 7 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 69	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023107_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

SPEED LIMIT 45 REMOVE R2-1

11R

18" CMCP

LE. 885.55

18" CMCP

FN:

GUY

18" CMCP

POST

254+00

255+00

256+00

257+00

258+00

259+00

30" RCP

STH 167

LE. 884.98

SPEED LIMIT 45 REMOVE R2-1

12R

SHEET 8 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 70	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023108_PS

PLOT DATE : 11/30/2017 1:59 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME :

PLOT SCALE : 1 IN:40 FT

2

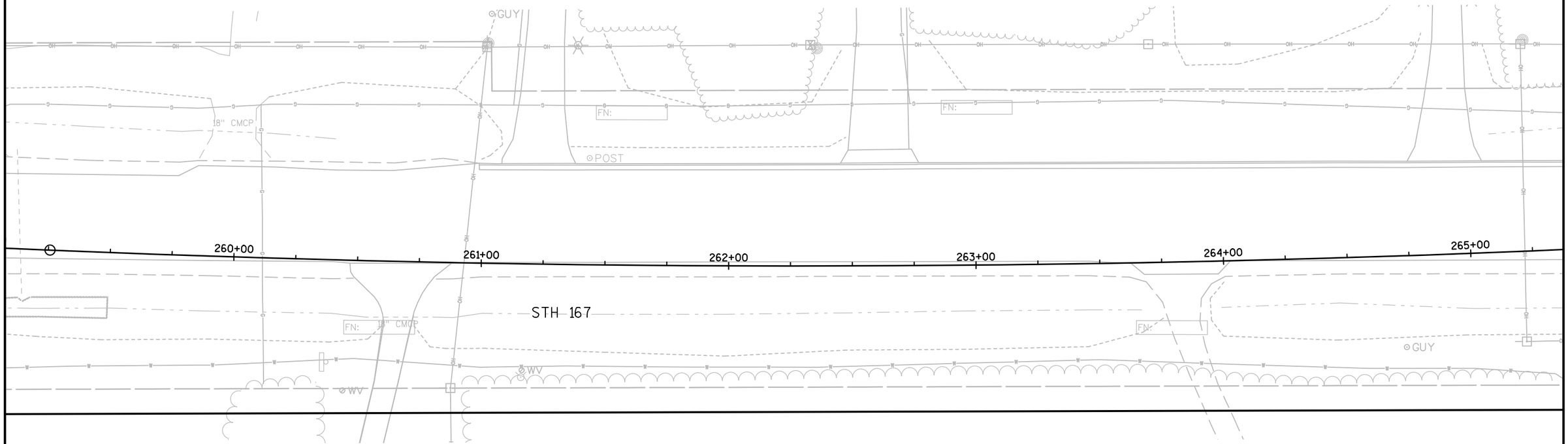
LEGEND

- 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NO SIGNS THIS SHEET

N

2



SHEET 9 OF 20

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 71	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023109_PS

PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

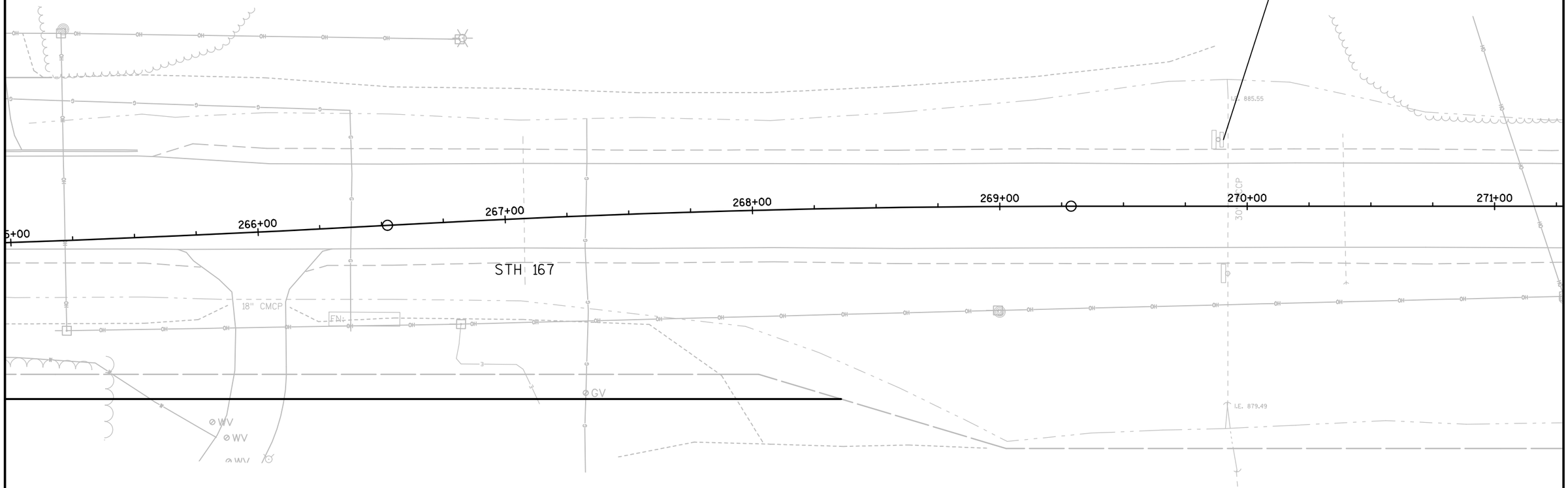
LEGEND

- 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 45 REMOVE R2-1

13R



SHEET 10 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 72	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023110_PS

PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

WEST
167
J4-1
ESTR

271+00 272+00 273+00 274+00 275+00 276+00 277+00

STH 167

SIGN SIGN SIGN

GUY

W3-3
MOVE SEE
PERMANENT
SIGNING PLAN

ONLY ONLY ONLY
R3-8-W
ESTR

FOREST DR
EISENHOWER DR
ESTR

SHEET 11 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 73	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023111_PS

PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

FOREST DR

STOP
R1-1F
ESTR

MEQUON RD
M1-94H
ESTR

STOP
R1-1F
ESTR

EISENHOWER DR
FOREST DR
ESTR

SIGN

MH

277+00

STH 167

STOP
R1-1F
ESTR

MEQUON RD
M1-94H
ESTR

MH

INL

MH

INL

EISENHOWER DR

STOP
R1-1F
ESTR

FOREST DR
EISENHOWER DR
M1-94H
ESTR

EAST
167
J4-1
ESTR

SPEED LIMIT
45
R2-1
ESTR

LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-50
ESTR

MH

2

SHEET 12 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 74	E

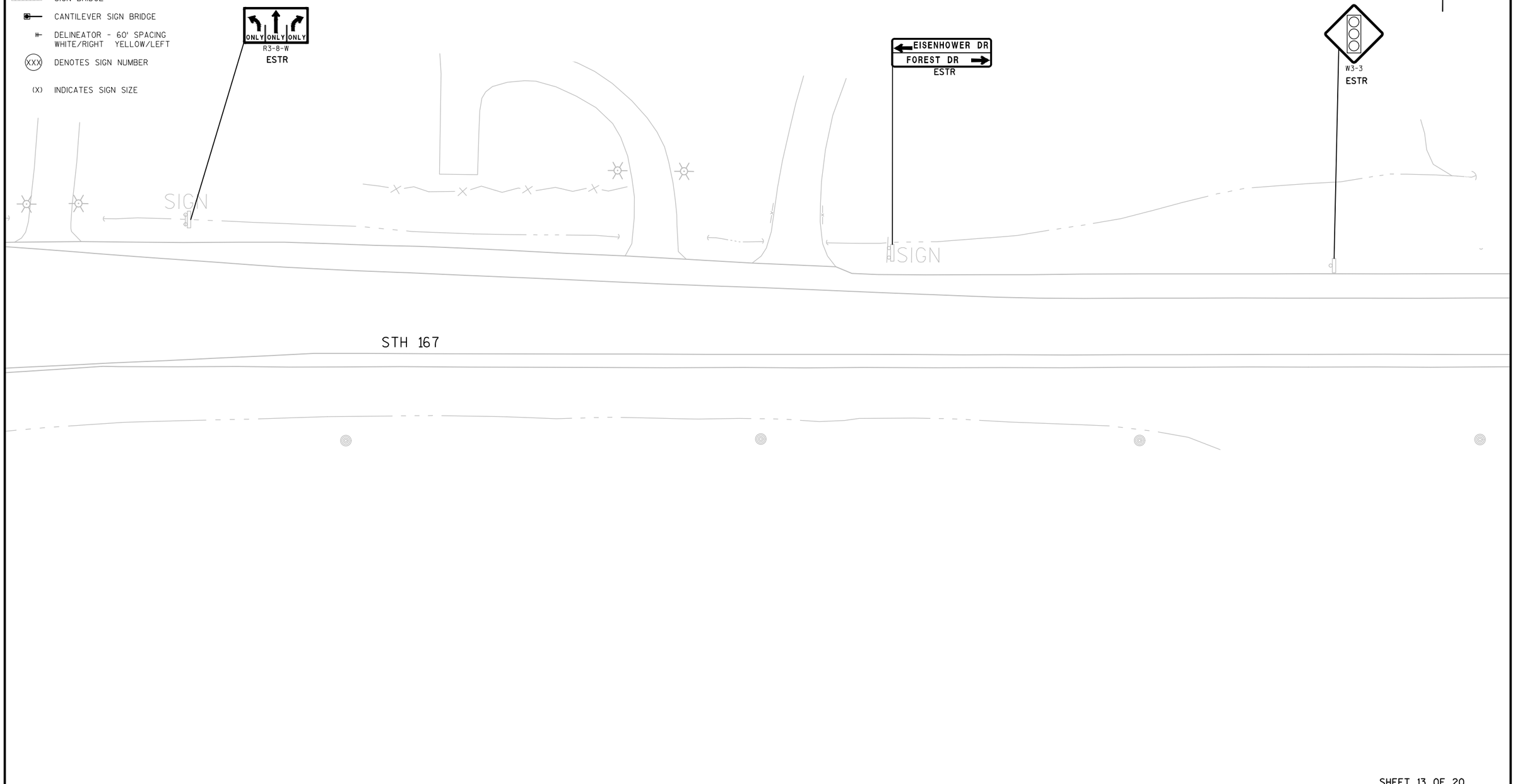
FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023112_PS

PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

SHEET 13 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 75	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023113_PS

PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

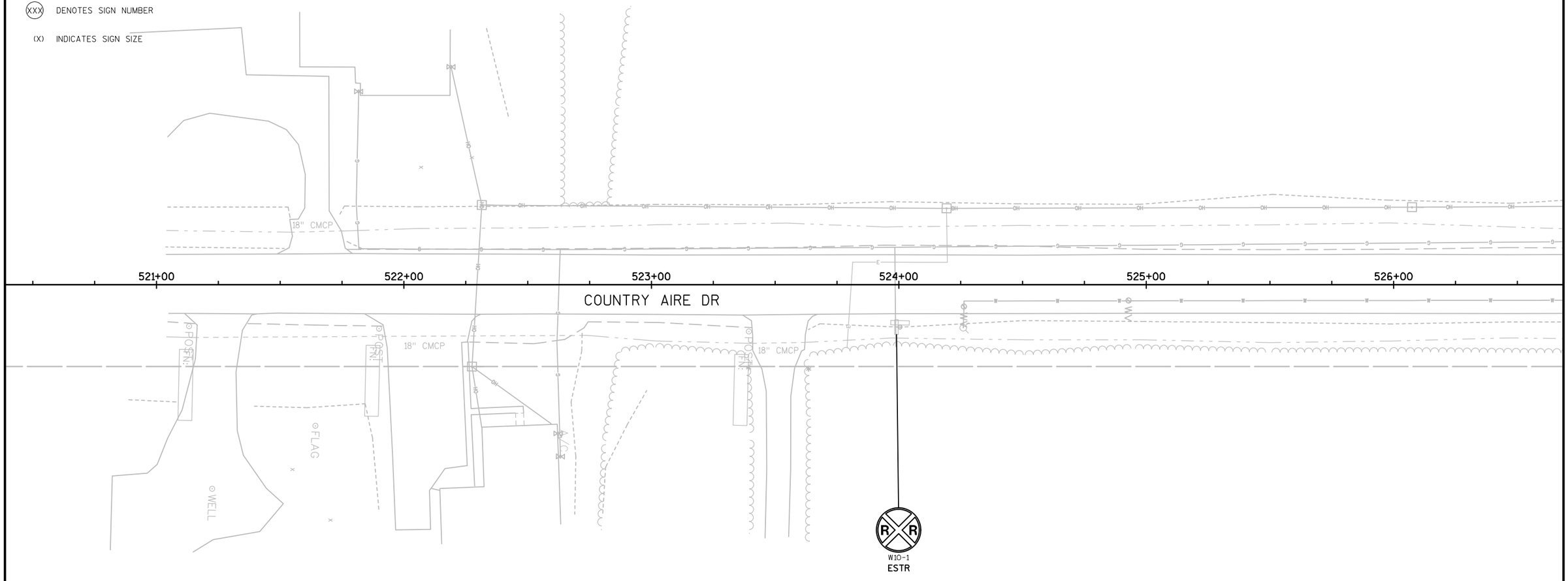
WISDOT/CADDS SHEET 42

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



2

SHEET 14 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 76	E

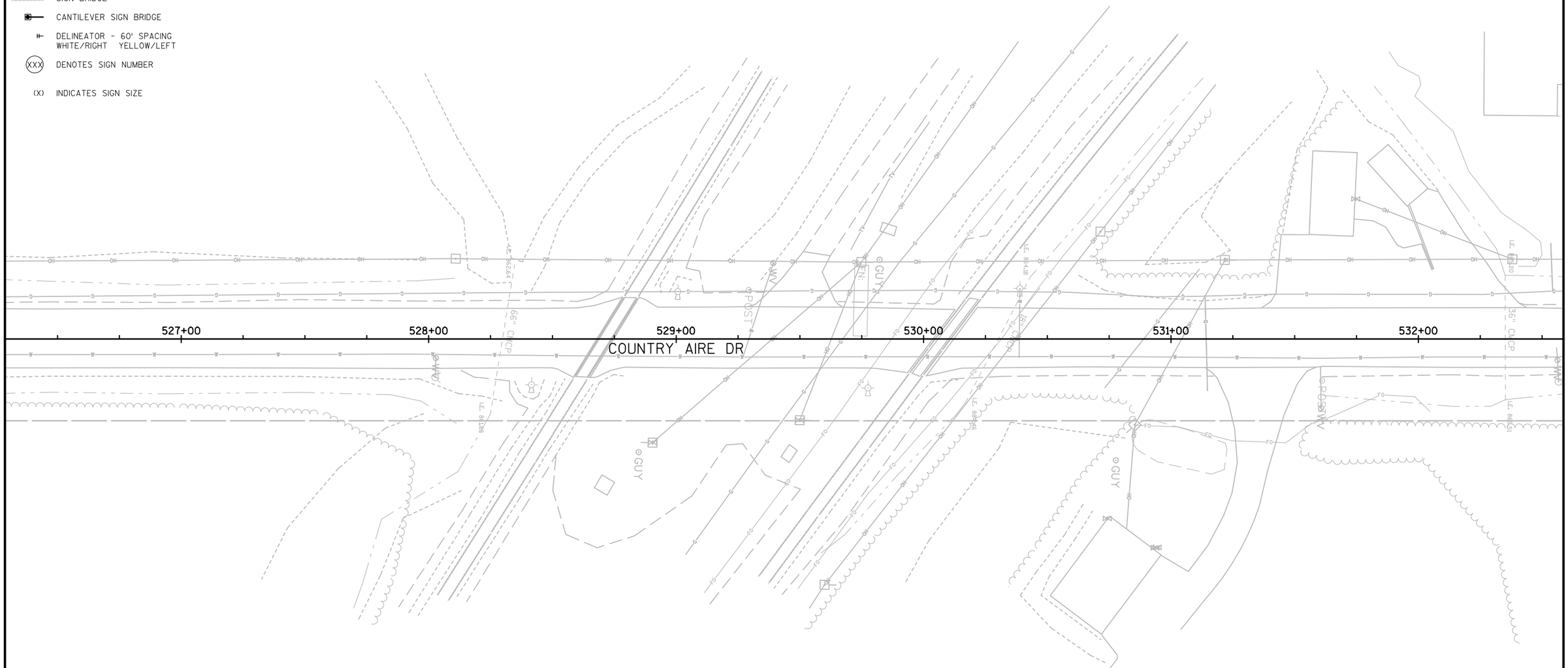
2

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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

NO SIGNS THIS SHEET

N



2

SHEET 15 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 77	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023115_PS

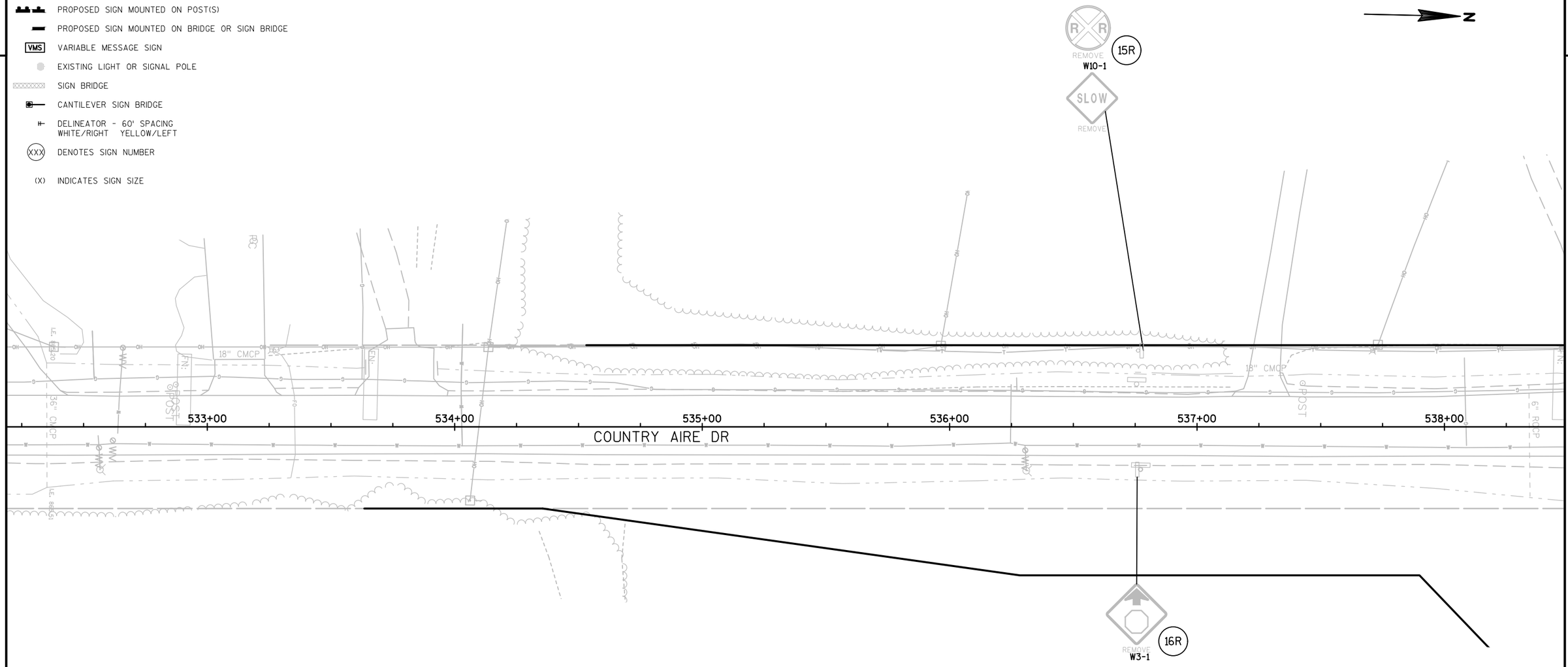
PLOT DATE : 11/30/2017 2:00 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 16 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 78	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023116_PS

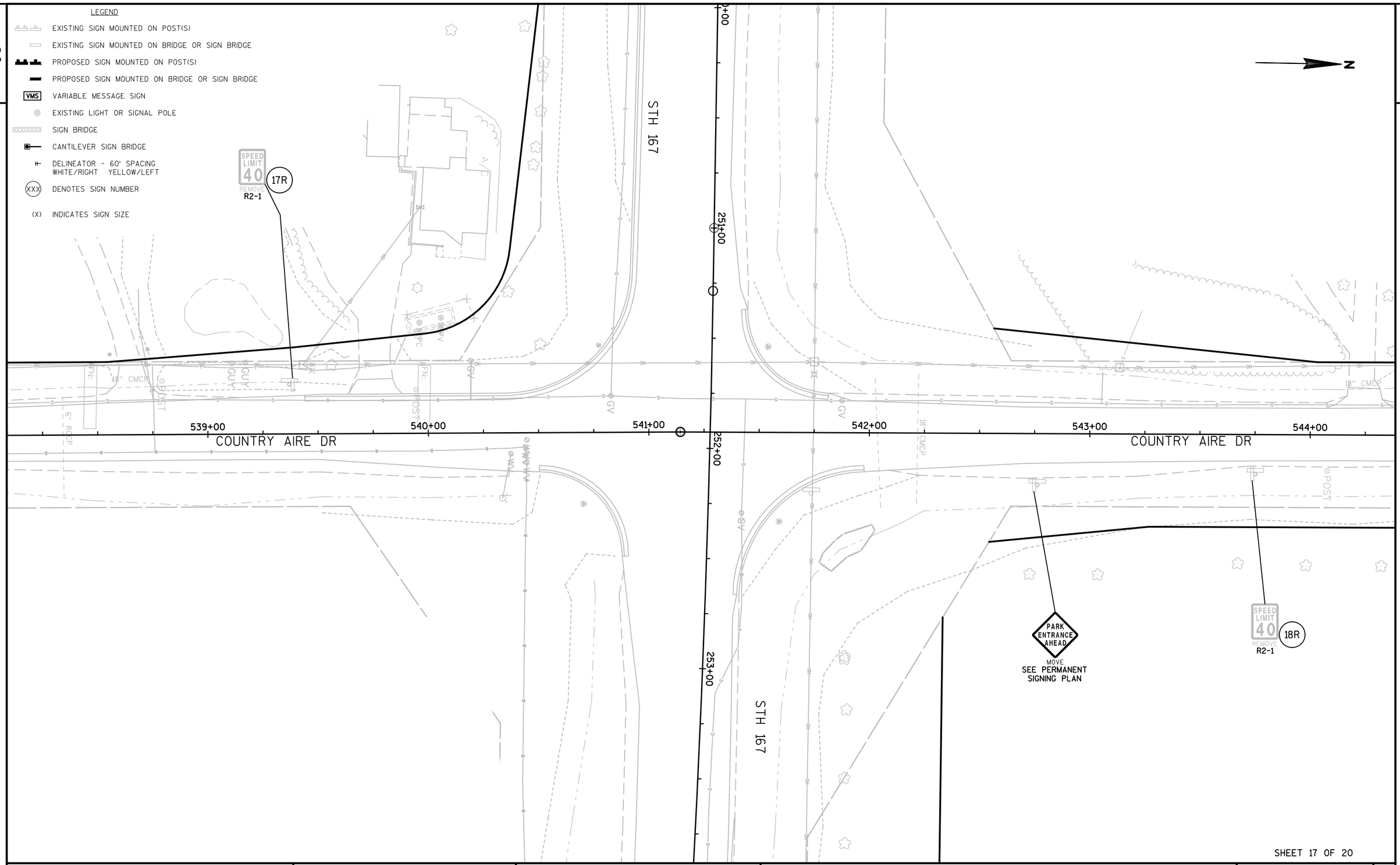
PLOT DATE : 3/5/2018 2:21 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



SHEET 17 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 79	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023117_PS

PLOT DATE : 11/30/2017 2:01 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

REMOVE
W3-1
20R

REMOVE
W2-1
21R

NO PARKING BETWEEN SIGNS

MOVE
SEE
PERMANENT
SIGNING
PLAN

18" CMCP

00 545+00 546+00 547+00 548+00 549+00 550+00

COUNTRY AIRE DR

POST

18" CMCP

FN

POST

GUY

POST

24" CMCP

PHEASANT LN

REMOVE
W2-2
19R

NO PARKING BETWEEN SIGNS

ESTR

PHEASANT LN

COUNTRY AIRE DR

STREET NAME
SIGNS

SHEET 18 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 80	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023118_PS

PLOT DATE : 11/30/2017 2:01 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NO PARKING BETWEEN SIGNS
ESTR

12" CMCP

550+00 551+00 552+00 553+00 554+00 555+00 556+00

COUNTRY AIRE DR

24" CMCP

POST

STOP
R1-1
ESTR

PHEASANT LN

GUY

POST

18" CMCP

PP

GUY

18" CMCP

PARK ENTRANCE
W54-51
NO PARKING BETWEEN SIGNS
ESTR

SHEET 19 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 81	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023119_PS

PLOT DATE : 11/30/2017 2:01 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

W2-2
ESTR

PARK ENTRANCE
W54-51
NO PARKING BETWEEN SIGNS
ESTR

18" CMCP

18" CMCP

556+00 557+00 558+00 559+00 560+00 561+00 562+00

COUNTRY AIRE DR

24" CP

STOP
R1-1
ESTR

NO PARKING BETWEEN SIGNS
ESTR

SHEET 20 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SIGNING REMOVAL PLAN	SHEET 82	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023101_PS.DWG
LAYOUT NAME - 023120_PS

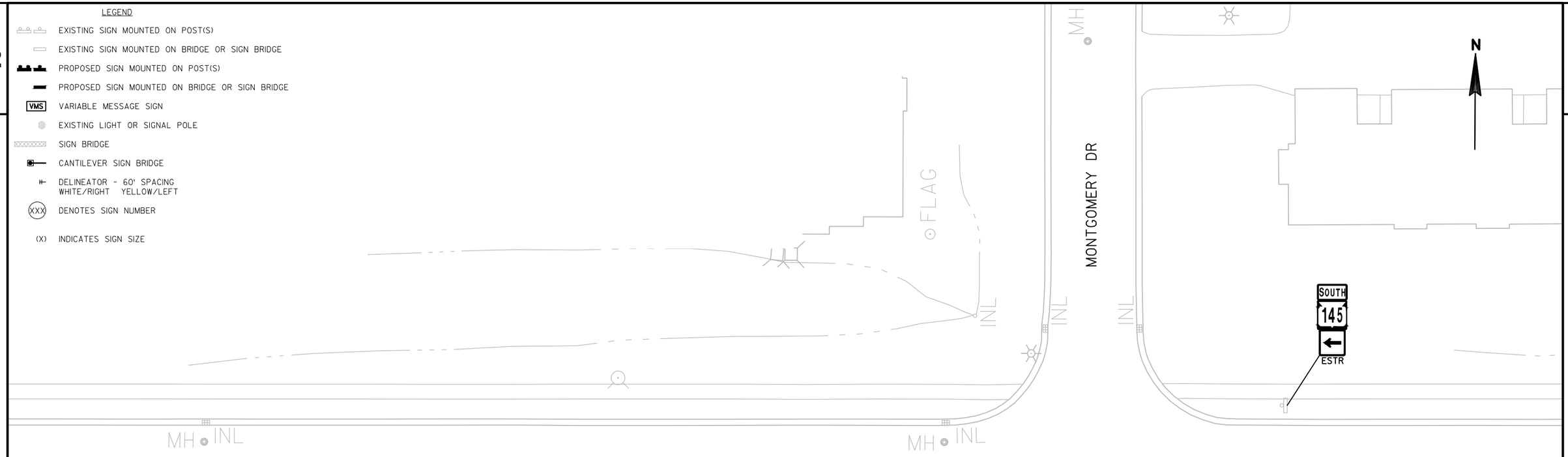
PLOT DATE : 11/30/2017 2:01 PM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

Signing notes

Type II aluminum signs removed under the contract shall be delivered to the County sign shop. Contact Dennis Newton, 414-266-1165 for distribution county location.

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 posts 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

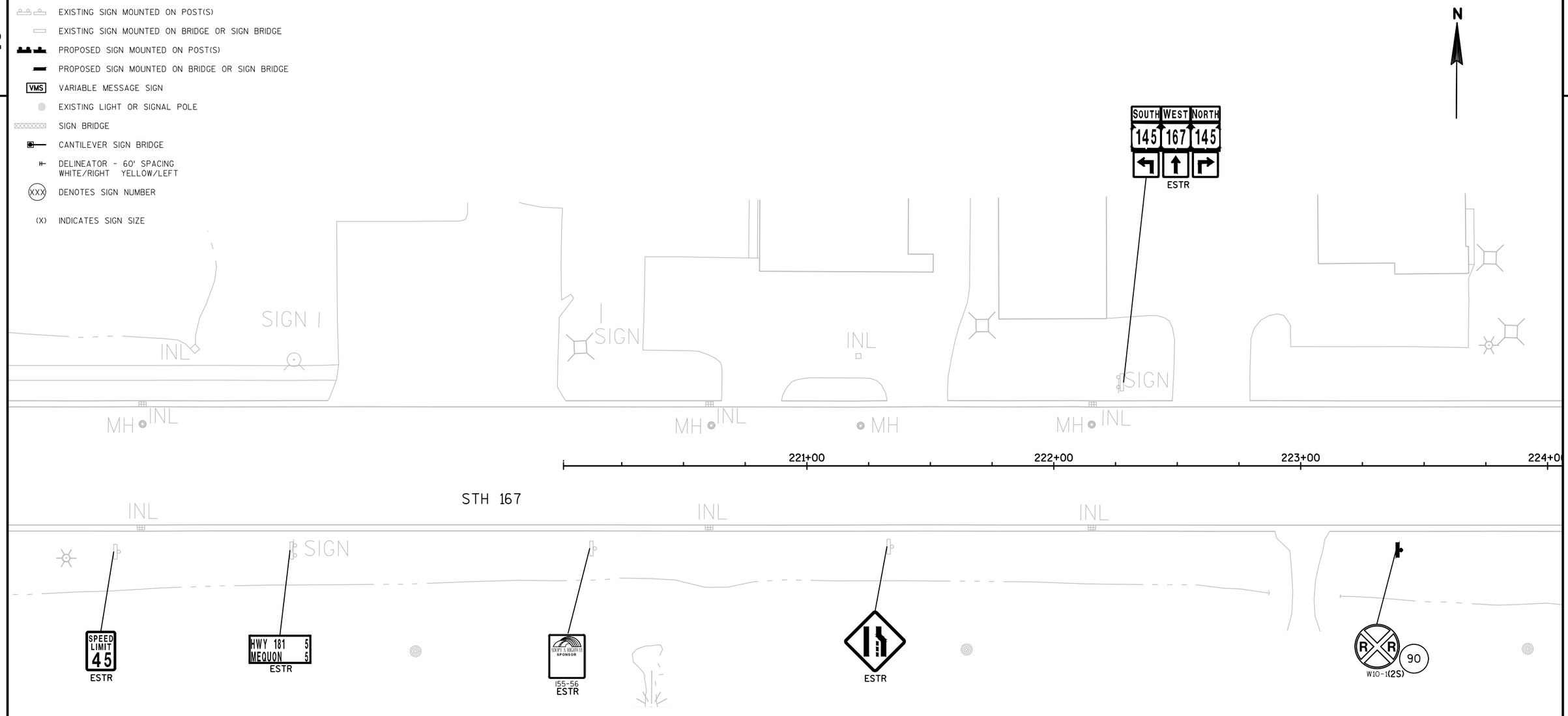
SHEET 1 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 83	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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 2 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 84	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023202_PS

PLOT DATE : 1/29/2018 7:28 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

SPEED LIMIT 45 — R2-1(2S) — 2

JCT 145 — ESTR

ESTR

18" CMCP

INL MH

224+00 225+00 8" RCCP 226+00 227+00 228+00 229+00

STH 167

INL

SIGN

RIDESHARE INFO CALL 1-800-455-POOL — ESTR

W6-1(2S) — 1

SHEET 3 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 85	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023203_PS

PLOT DATE : 1/29/2018 7:28 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

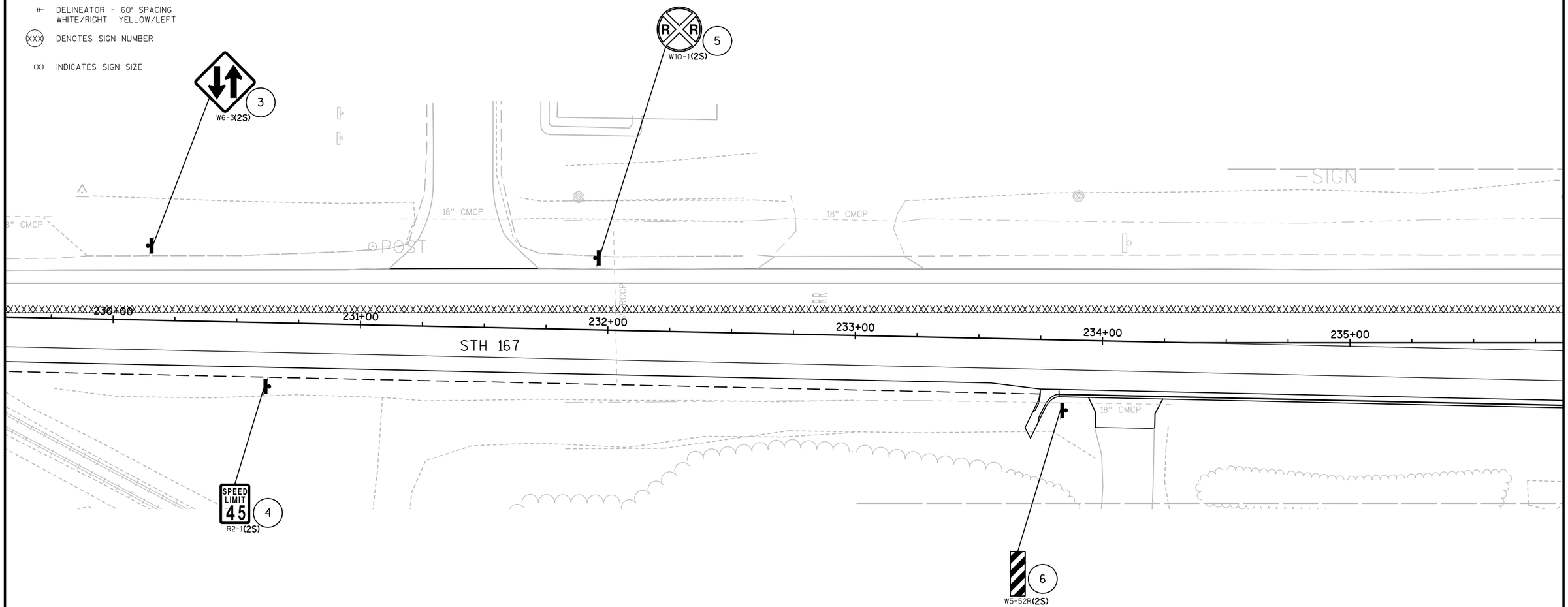
2

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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2



SHEET 4 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 86	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023204_PS

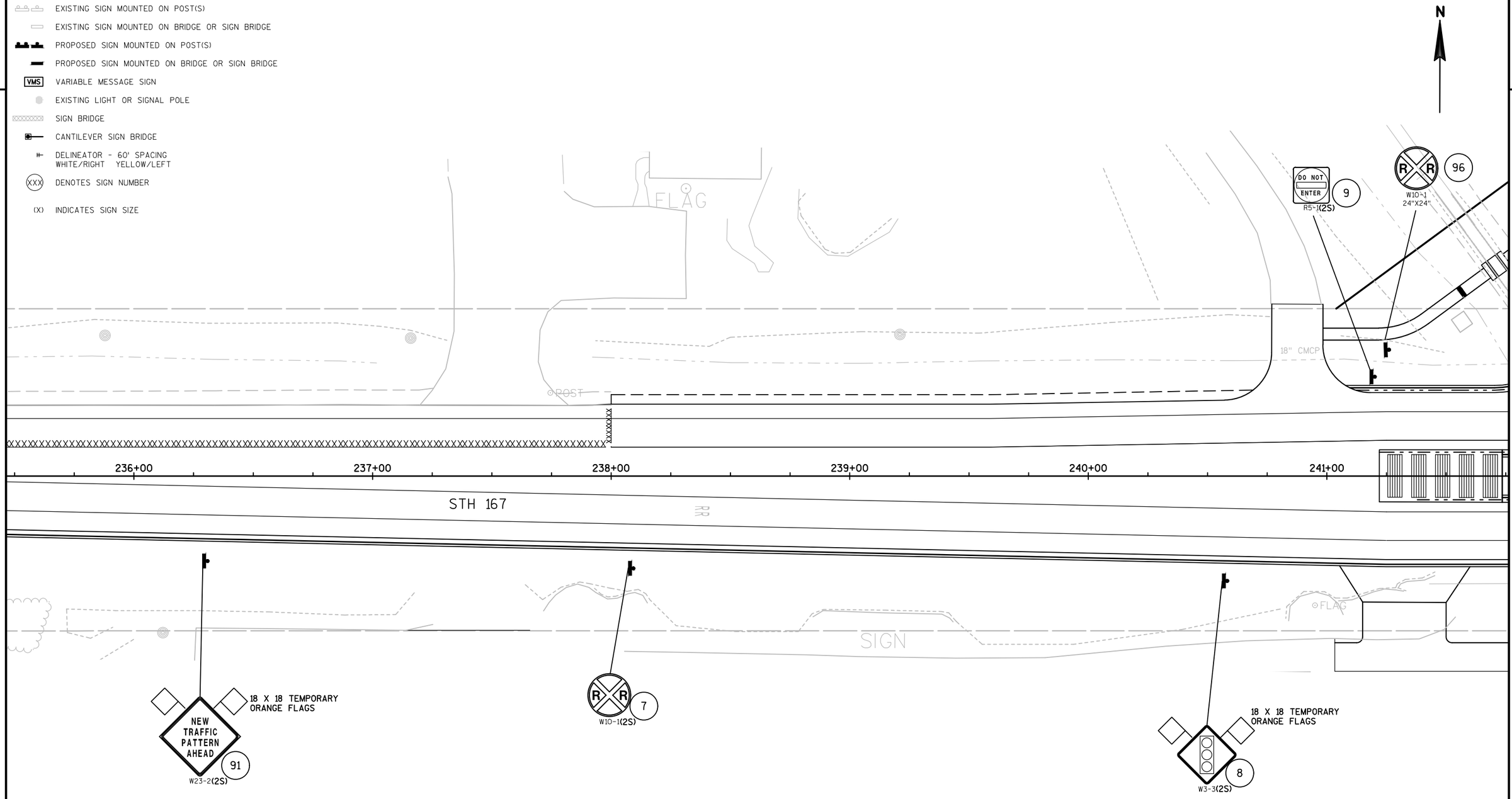
PLOT DATE : 1/29/2018 7:28 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 5 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 87	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023205_PS

PLOT DATE : 1/29/2018 7:28 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

10 R3-4(2S)

97 W10-1 24"X24"

13 WRONG WAY R5-1A(2M)

14 W6-2(2M)

15 W10-1(2M)

242+00 243+00 STH 167 244+00 245+00 246+00 247+00

11 R4-7(3)

12 W5-56(2S)

20 ONLY ONLY ONLY R3-8-W(2M)

19 BEGIN RIGHT TURN LANE YIELD TO BIKES R4-4(2M)

18 Country Aire Dr D1-61

17 BEGIN LEFT TURN LANE R3-20-L(2M)

16 ONE WAY R6-2-R(2S)

SEPC

SHEET 6 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 88	E

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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

2

N

COUNTRY AIRE DR

STH 167

248+00 249+00 250+00 251+00 252+00 253+00

543+00 542+00 541+00 540+00

21 SPEED LIMIT 45 R2-1(2M)

22 WEST 167 J4-1(2M)

23 BEGIN LEFT TURN LANE R3-20-LL(2M)

24 R4-7(2M)

25 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2M) ON SPAN WIRE

26 ONE WAY R6-2-L(2M)

27 STOP R1-1(2M)

28 DIVIDED HIGHWAY R6-3(2M)

29 STOP R1-1F(2M)

30 W12-1D(2M) 2' MOUNT HEIGHT

31 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2M) ON SPAN WIRE

32 DO NOT ENTER R5-1(2M)

33 STOP R1-1(2M)

34 STOP R1-1F(2M)

35

36 W12-1D(2M) 2' MOUNT HEIGHT

37 DO NOT ENTER R5-1(2M)

38 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2M) ON SPAN WIRE

39 167 Mequon Rd M1-94-S ON SPAN WIRE

40 167 Mequon Rd M1-94-S ON SPAN WIRE

41 Country Aire Dr ON SPAN WIRE

42 Country Aire Dr ON SPAN WIRE

43 R4-7(2M)

44 ONE WAY R6-2-L(2M)

45 DIVIDED HIGHWAY R6-3(2M)

46 STOP R1-1F(2M)

47 STOP R1-1(2M)

48 W12-1D(2M) 2' MOUNT HEIGHT

49 LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-50(2M) ON SPAN WIRE

50 DO NOT ENTER R5-1(2M)

51 STOP R1-1(2M)

52 DO NOT ENTER R5-1(2M)

53 STOP R1-1F(2M)

54 STOP R1-1F(2M)

55 W12-1D(2M) 2' MOUNT HEIGHT

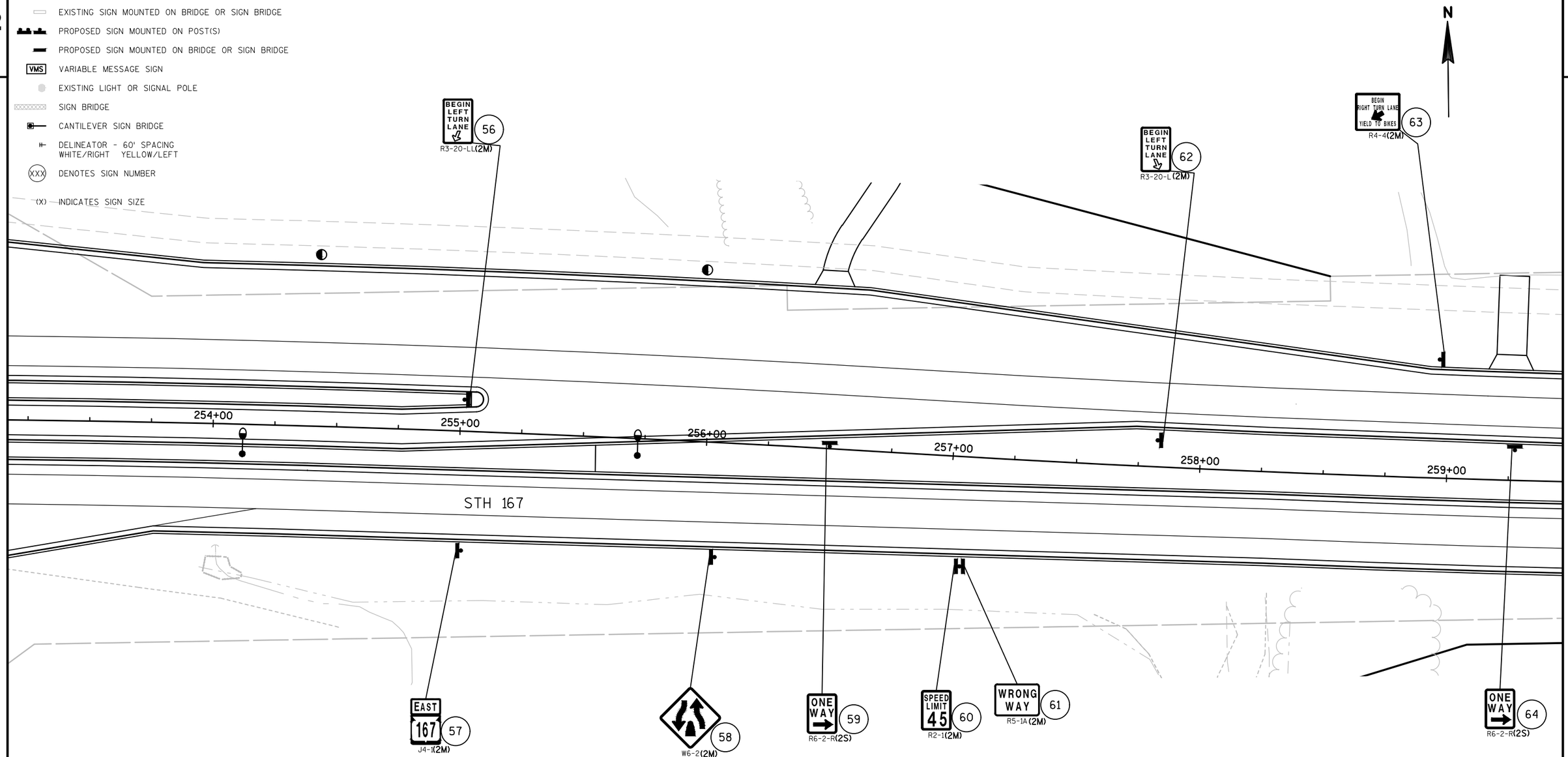
SHEET 7 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 89	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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SHEET 8 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 90	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023208_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

ONLY ONLY ONLY
65
R3-8-W(2M)

Country Aire Dr
66
D1-61

18 X 18 TEMPORARY ORANGE FLAGS
67
W3-3(2S)

18 X 18 TEMPORARY ORANGE FLAGS
NEW TRAFFIC PATTERN AHEAD
92
W23-2(2S)

18" CMCP

FN:

FN:

260+00

261+00

262+00

263+00

264+00

265+00

STH 167

68
R3-4(2M)

DO NOT ENTER
71
R5-1(2M)

69
R4-7(3)

70
W5-56(2S)

SHEET 9 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 91	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023209_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

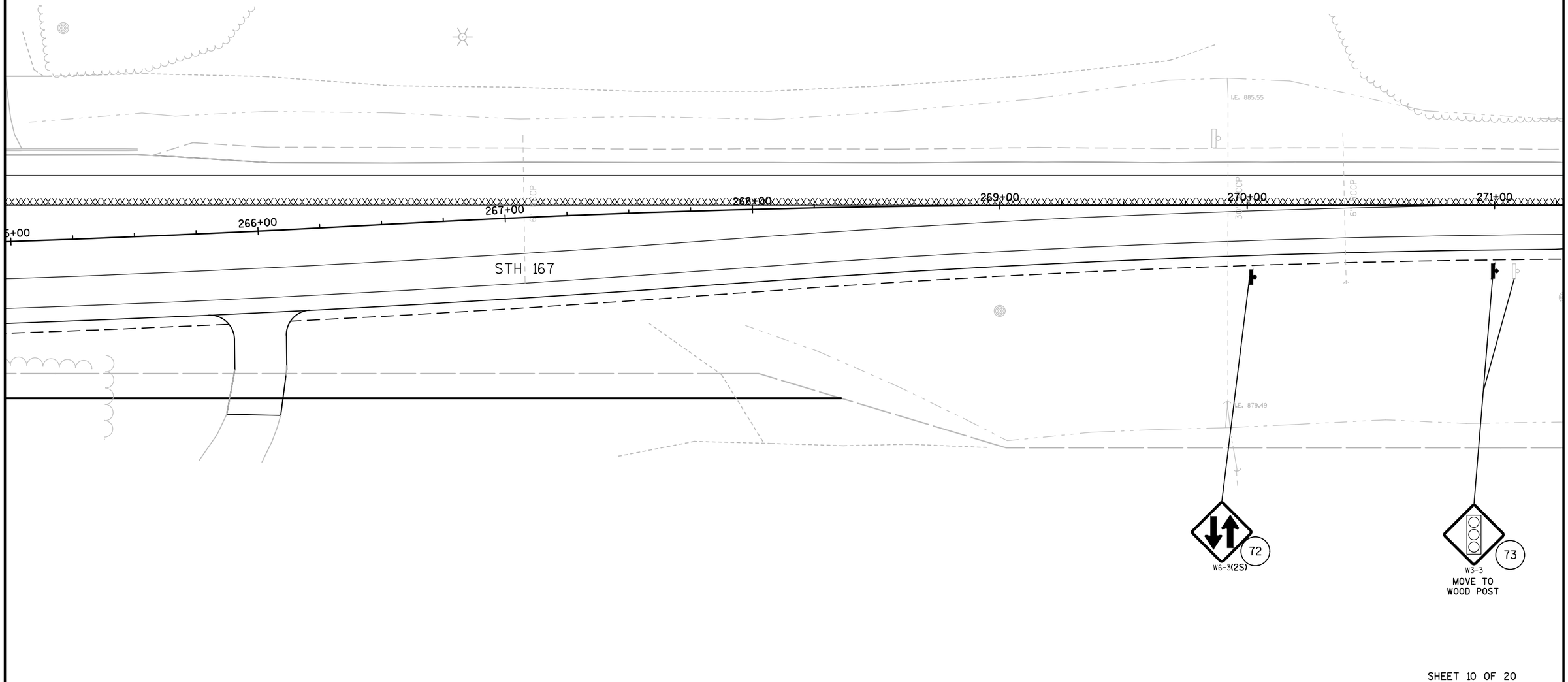
WISDOT/CADDS SHEET 42

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 10 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 92	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023210_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

2

SPEED LIMIT 45 74
R2-1(2S)

75
W6-1(2S)

WEST 167
J4-1
ESTR

271+00 272+00 273+00 274+00 275+00 276+00 277+00

STH 167

SIGN SIGN SIGN

ONLY ONLY ONLY
ESTR

FOREST DR
EISENHOWER DR
ESTR

SHEET 11 OF 20

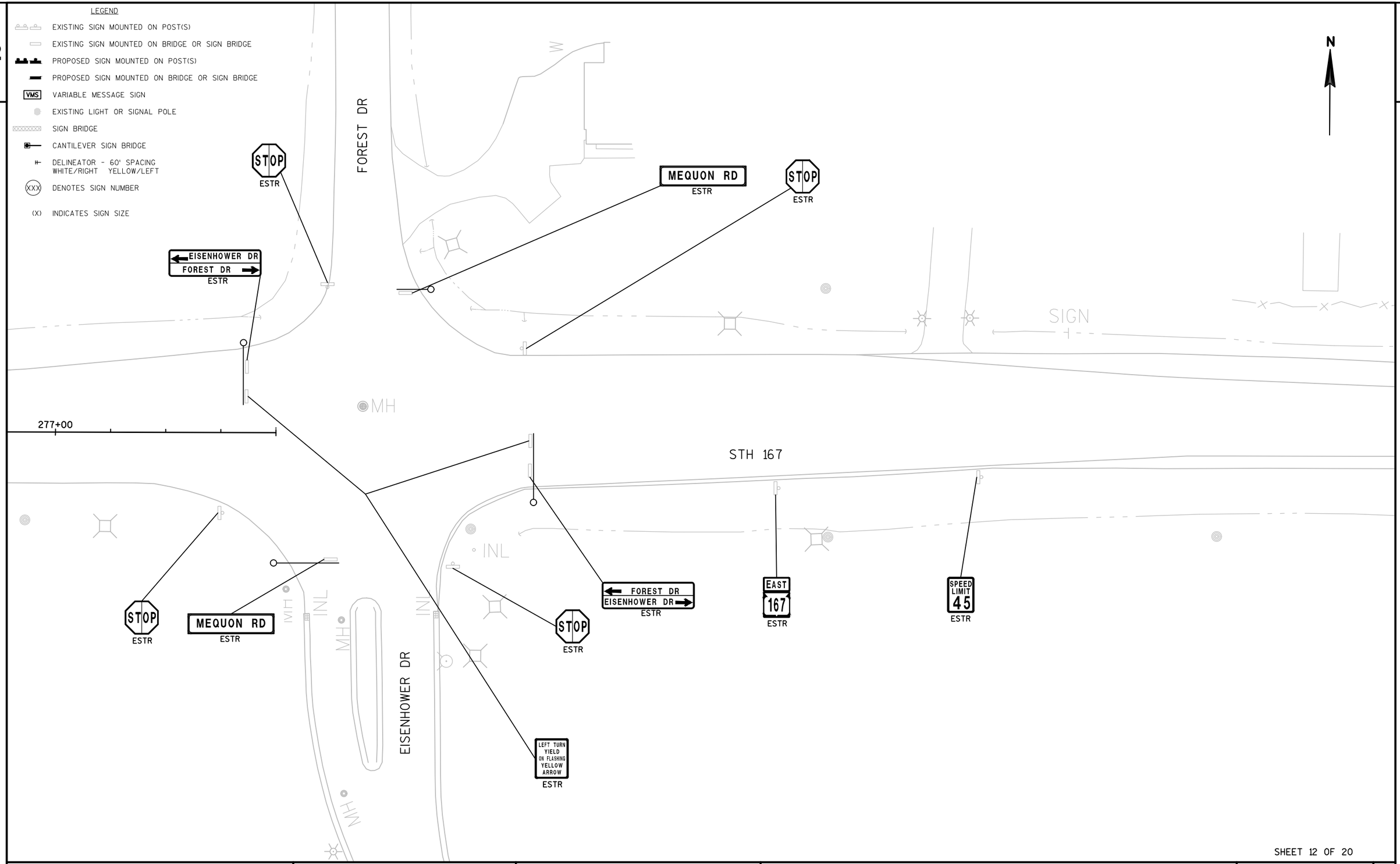
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 93	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023211_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

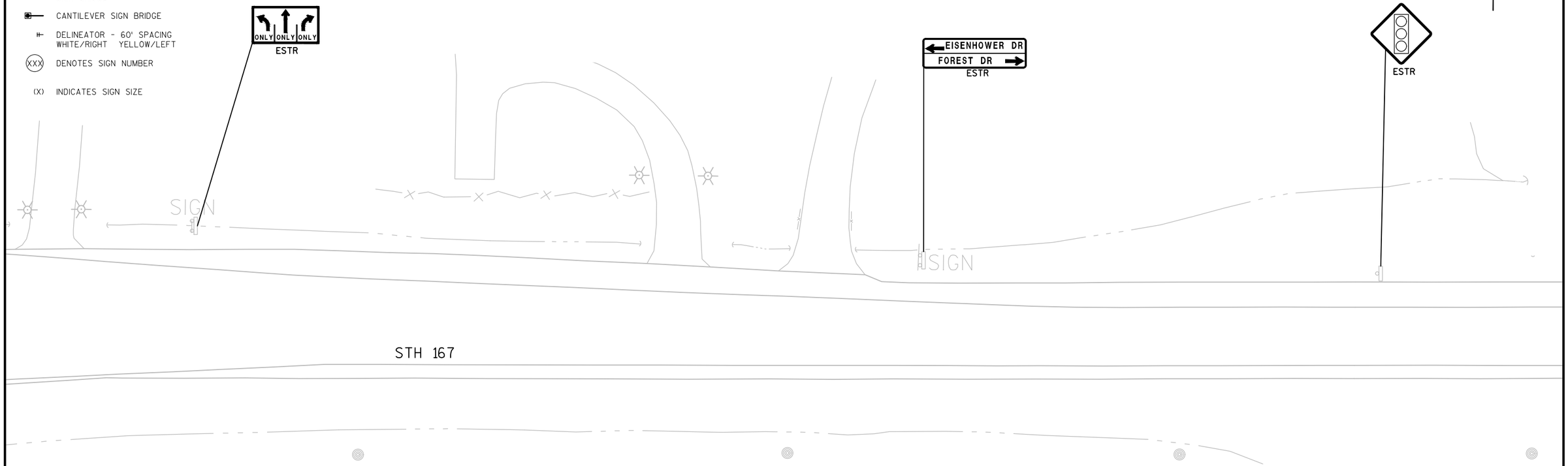
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- XXX — DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



2

SHEET 13 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 95	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023213_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L 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

DELINEATOR - 60' SPACING
WHITE/RIGHT YELLOW/LEFT

(XXX) DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

N

18" CMCP

521+00 522+00 523+00 524+00 525+00 526+00

COUNTRY AIRE DR

POST

POST

18" CMCP

18" CMCP

POST

FLAG

A/C

WELL

R R

ESTR

2

SHEET 14 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 96	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023214_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

527+00 528+00 529+00 530+00 531+00 532+00

COUNTRY AIRE DR

66" CMCP

18" CMCP

36" CMCP

POST

FN:

I.E. 862.64

I.E. 864.18

I.E. 865.20

I.E. 861.95

I.E. 864.95

I.E. 865.51

NEW TRAFFIC PATTERN AHEAD 93
W23-2(2S)

18 X 18 TEMPORARY ORANGE FLAGS

JCT 167 76
J1-1(2S)

2

SHEET 15 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 97	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023215_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

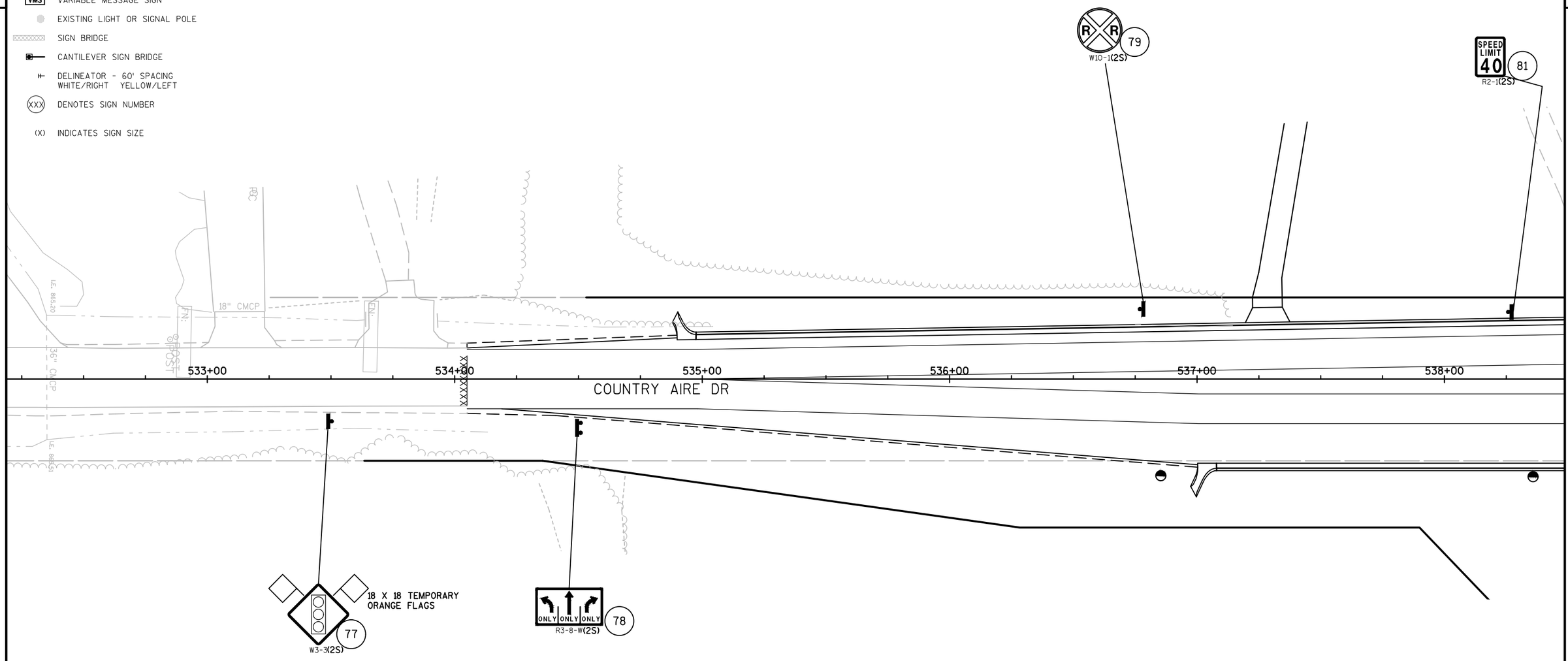
WISDOT/CADDS SHEET 42

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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N



SHEET 16 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 98	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023216_PS

PLOT DATE : 3/5/2018 2:21 PM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N

STH 167

250+00

251+00

252+00

253+00

539+00

540+00

541+00

542+00

543+00

544+00

COUNTRY AIRE DR

COUNTRY AIRE DR

EAST 167 | WEST 167
J3-2(2S) 83

WEST 167 | EAST 167
J3-2(2S) 82

SPEED LIMIT 40
R2-1(2S) 84

SHEET 17 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 99	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
- DELINEATOR - 60' SPACING
  WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

ONLY ONLY ONLY
R3-8-W(2S)
86

18 X 18 TEMPORARY ORANGE FLAGS
88
W3-3(2S)

JCT
167
89
J1-1(2S)

NO PARKING BETWEEN SIGNS
95
MOVE

00 545+00 546+00 547+00 548+00 549+00 550+00

COUNTRY AIRE DR

24" CMCP

PHEASANT LN

W2-2(2S)
85

PARK ENTRANCE AHEAD
87
MOVE
FROM STA 542+75

NO PARKING BETWEEN SIGNS
ESTR

PHEASANT LN
COUNTRY AIRE DR
ESTR

SHEET 18 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 100	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023218_PS

PLOT DATE : 1/29/2018 7:29 AM PLOT BY : MARTENS, KAREN L 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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

N

NEW TRAFFIC PATTERN AHEAD
94
W23-2(2S)
18 X 18 TEMPORARY ORANGE FLAGS

NO PARKING BETWEEN SIGNS
ESTR

12" CMCP

550+00 551+00 552+00 553+00 554+00 555+00 556+00

COUNTRY AIRE DR

24" CMCP

POST

STOP
ESTR

PHEASANT LN

POST

18" CMCP

POST

8" CMCP

PARK ENTRANCE AHEAD
NO PARKING BETWEEN SIGNS
ESTR

SHEET 19 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 101	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023219_PS

PLOT DATE : 1/29/2018 7:30 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

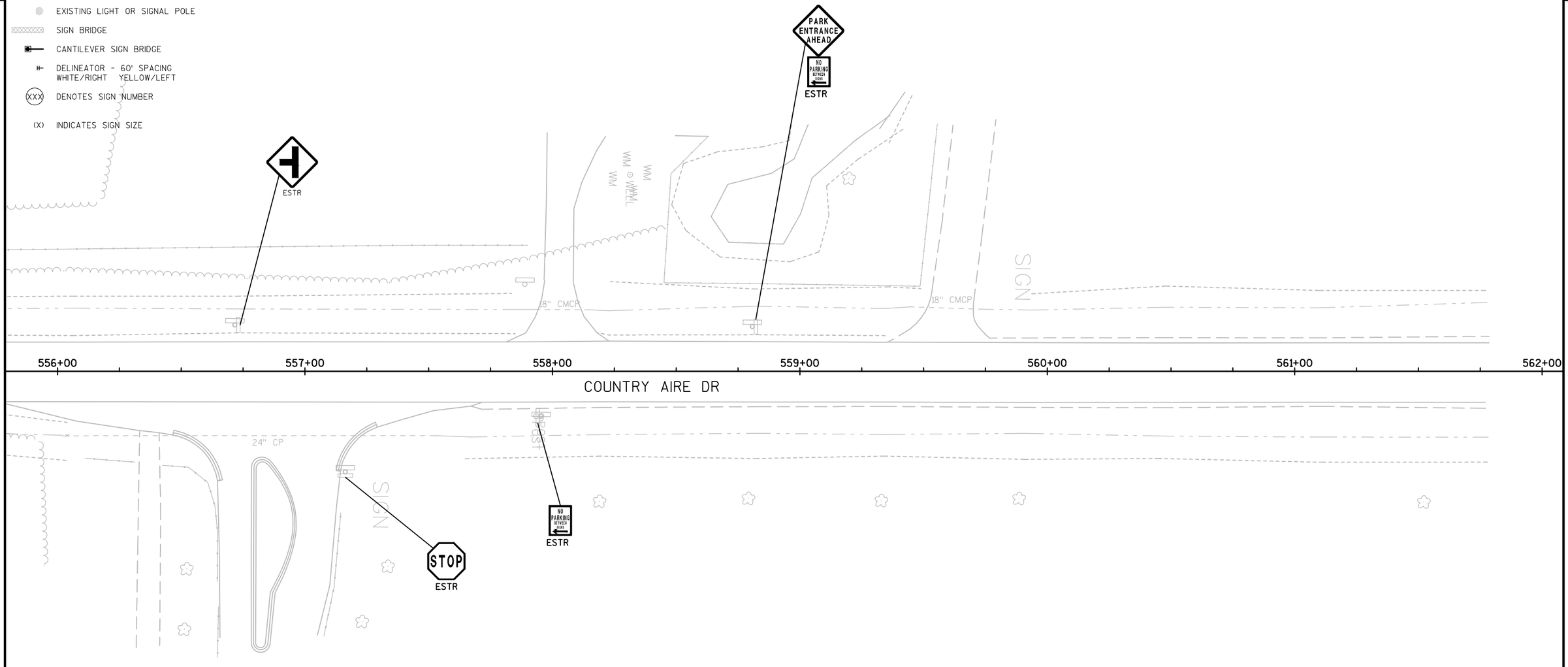
WISDOT/CADDS SHEET 42

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
- DELINEATOR - 60' SPACING WHITE/RIGHT YELLOW/LEFT
- (XXX) — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

N



2

SHEET 20 OF 20

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PERMANENT SIGNING	SHEET 102	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIGN\023201_PS.DWG
LAYOUT NAME - 023220_PS

PLOT DATE : 1/29/2018 7:30 AM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

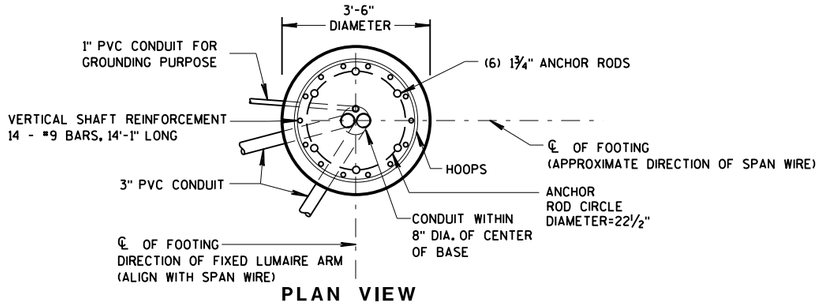
N

LEGEND

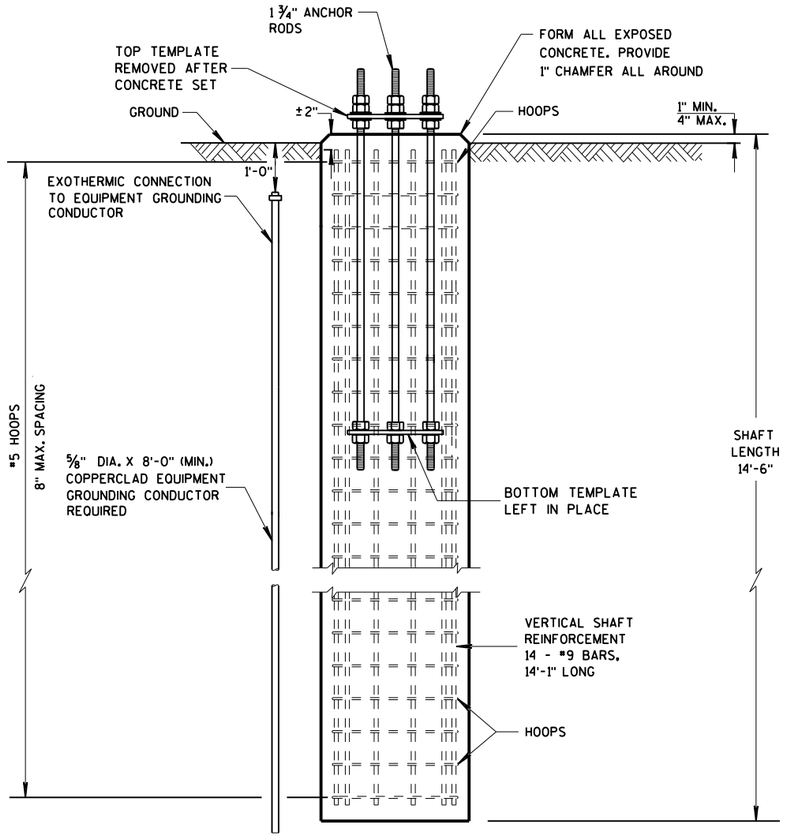
TRAFFIC SIGNAL
S66-XXXX

(1) INSTALL TRAFFIC SIGNAL

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL PROJECT OVERVIEW	SHEET 103	E

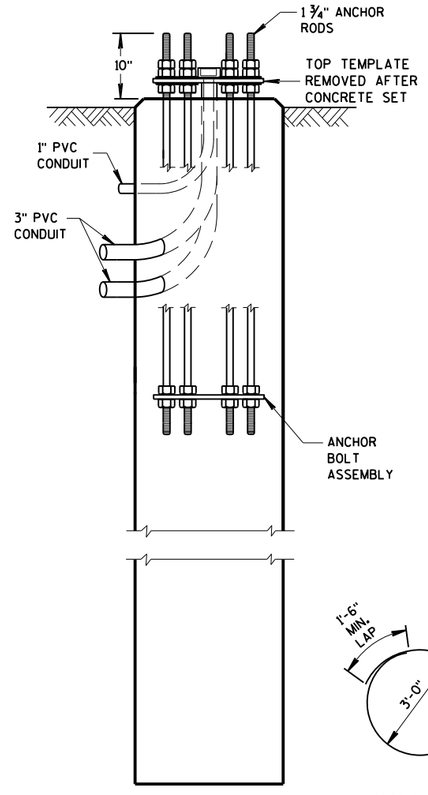


PLAN VIEW



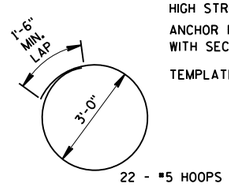
ELEVATION VIEW*

*CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

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



22 - #5 HOOPS
11'-0" LONG

HOOP DETAIL

GENERAL NOTES

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

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

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

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

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

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

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

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

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

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

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

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

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

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

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

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

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

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

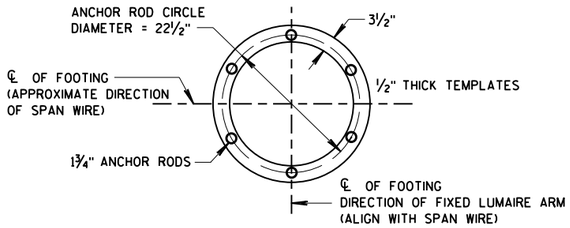
(FOR PERMANENT SPAN WIRE POLES)

CONCRETE = 5.2 C.Y.
H.S. REINFORCEMENT = 925 LBS.

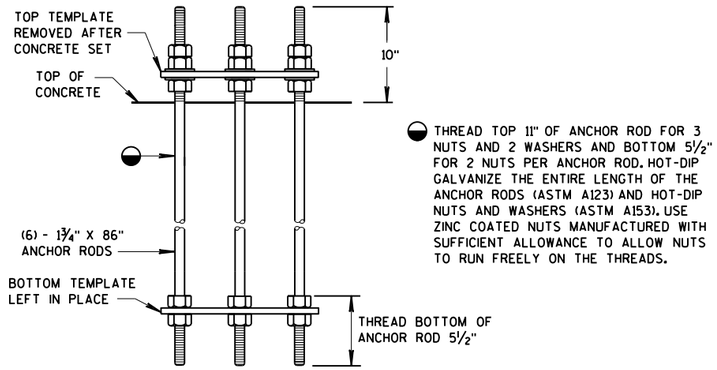
CONCRETE BASE STRAIN POLE

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL DETAILS	SHEET	E

2

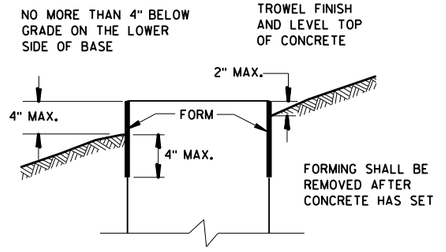


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

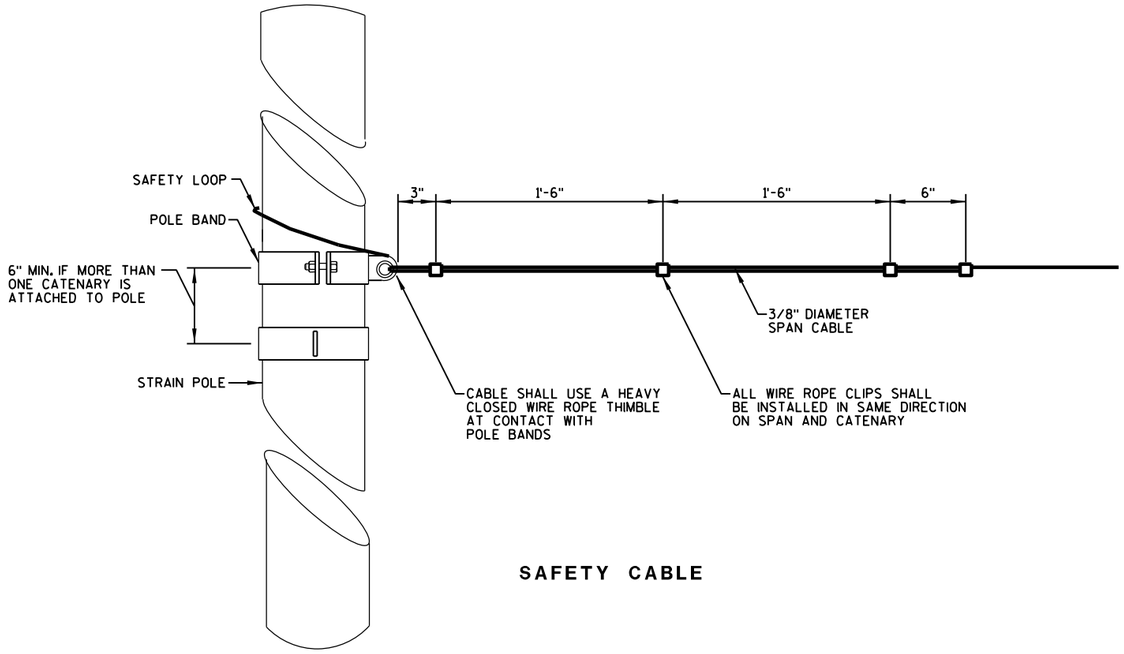
CONCRETE BASE ANCHOR ASSEMBLY



FORMING DETAIL

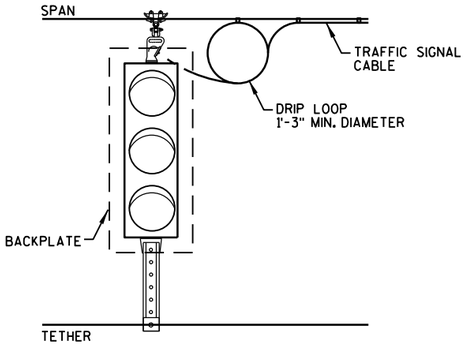
CONCRETE BASE STRAIN POLE

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL DETAILS	SHEET	E

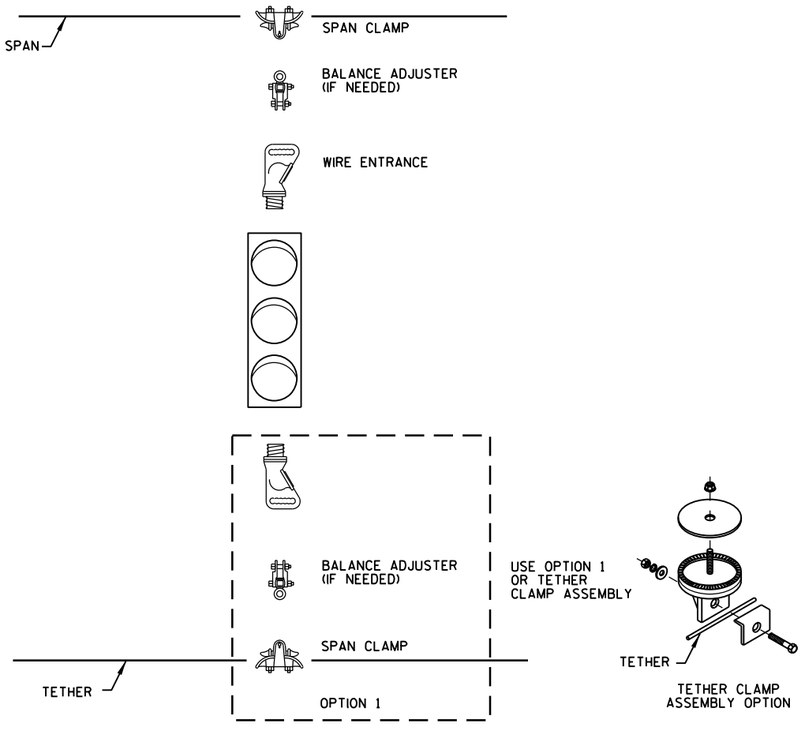


SAFETY CABLE

4 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN

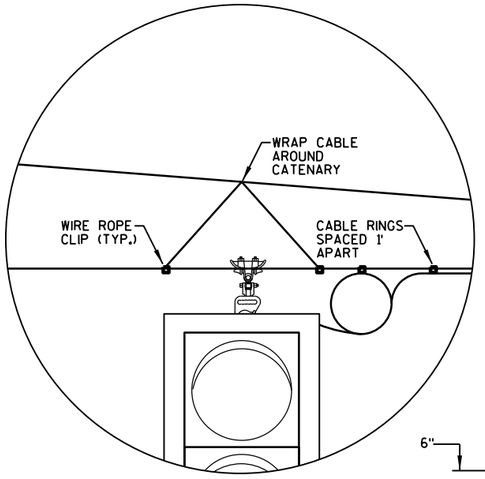


SPAN ATTACHMENT

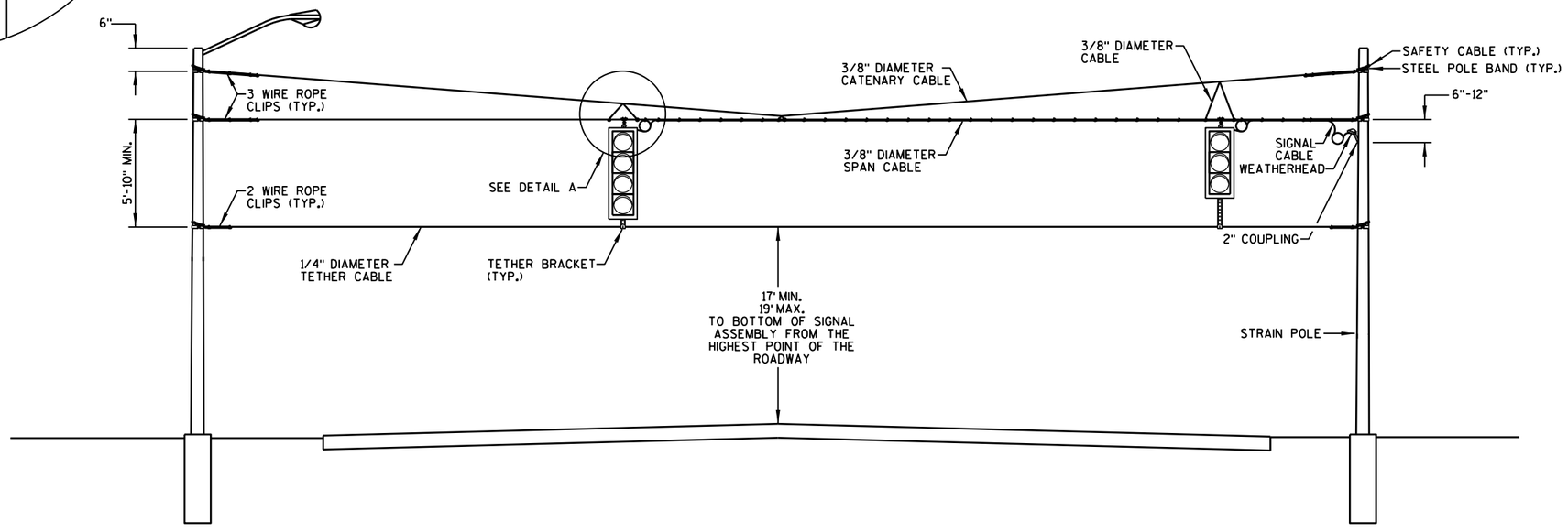


TYPICAL SPAN MOUNTING HARDWARE

2



DETAIL A

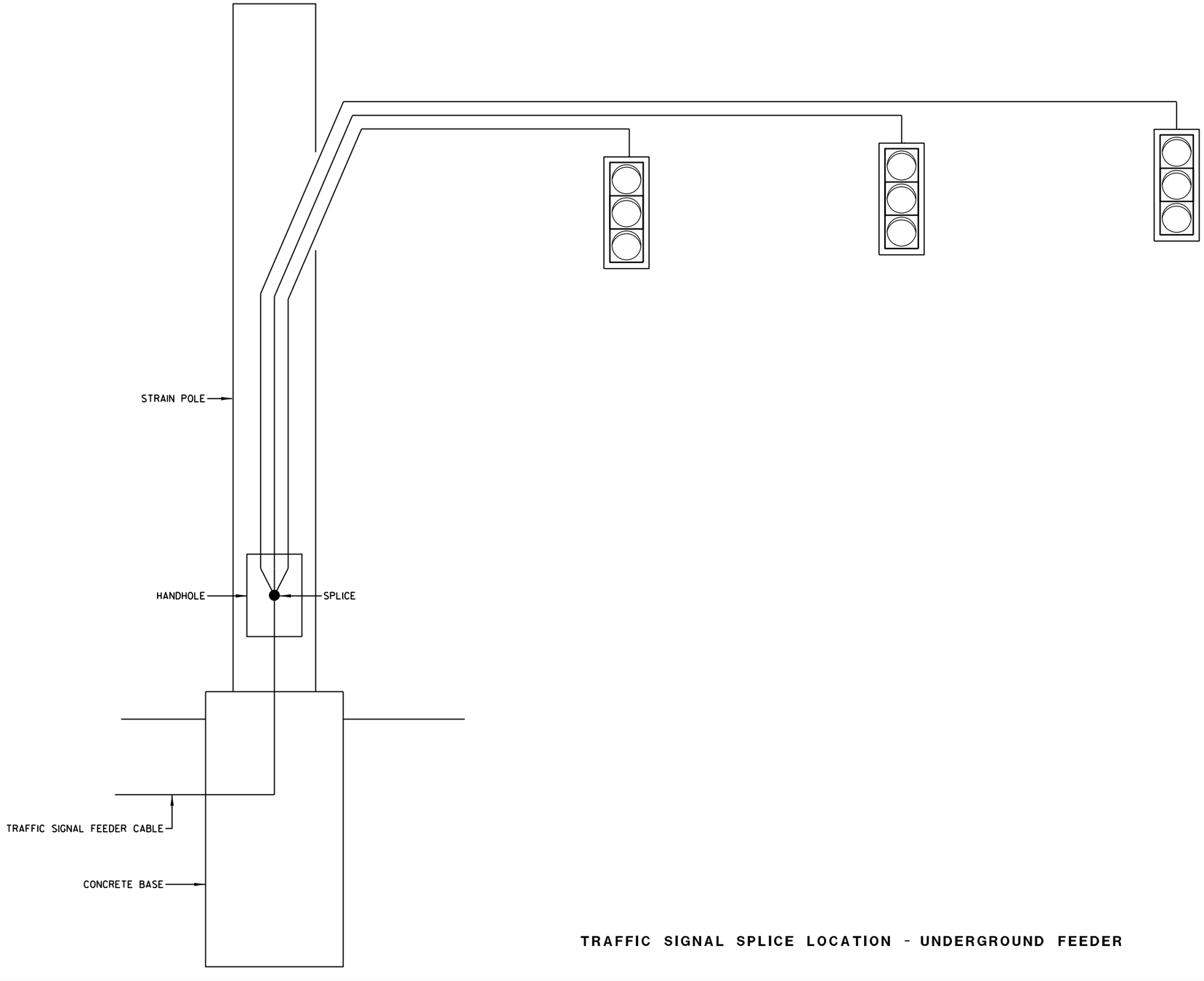


NOTES

1. THE TETHER BRACKET SHALL PROVIDE A 2" MINIMUM SPACE BETWEEN THE SIGNAL BACKPLATE AND TETHER AND SHALL BE SECURED BY A WIRE ROPE CLAMP OR TETHER PLATE.
2. THE CATENARY SHALL BE INSTALLED AT A MAXIMUM DISTANCE OF 2" ABOVE THE SPAN AT THE CONNECTION POINT.

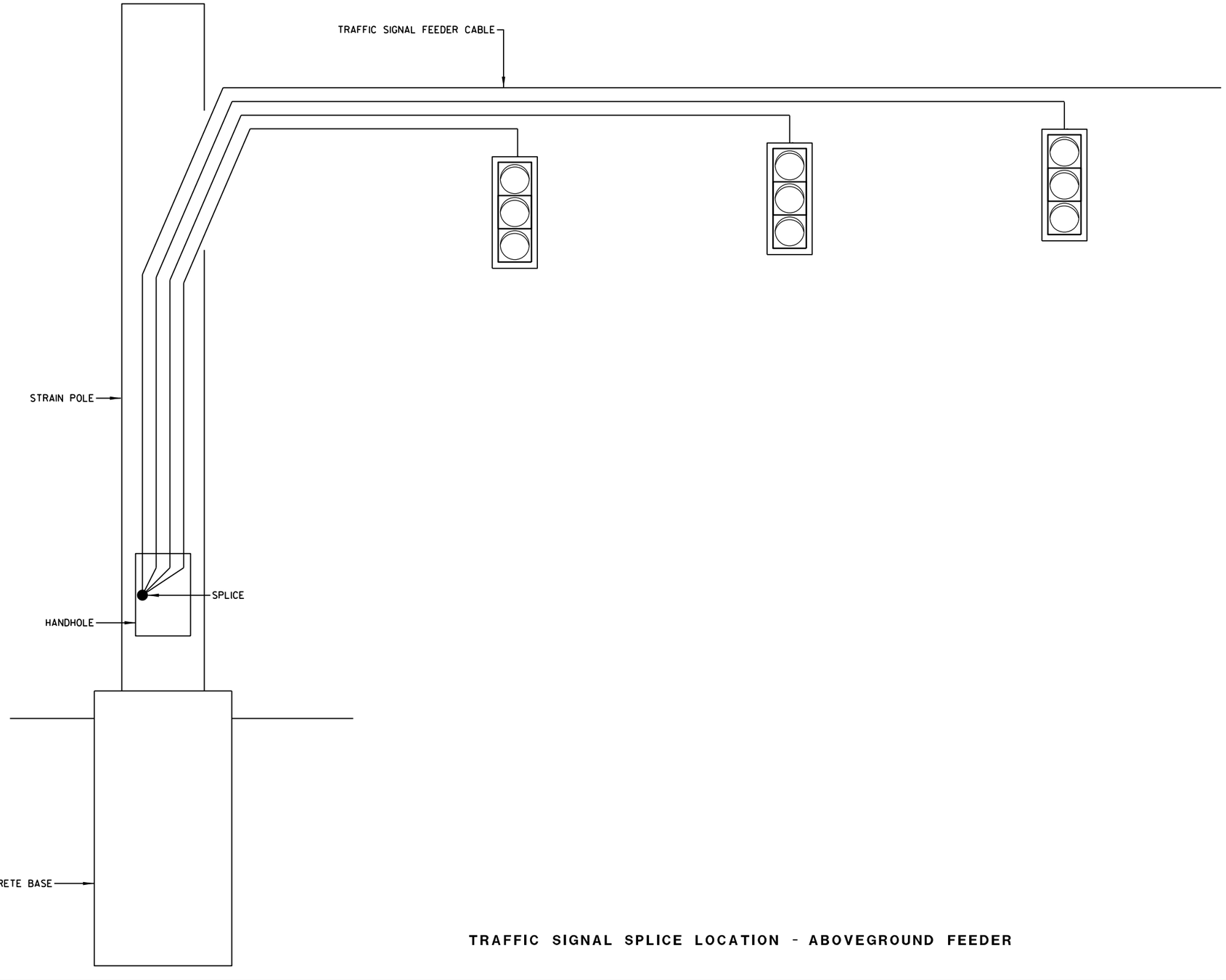
SPAN, CATENARY AND TETHER DETAIL

2



TRAFFIC SIGNAL SPLICE LOCATION - UNDERGROUND FEEDER

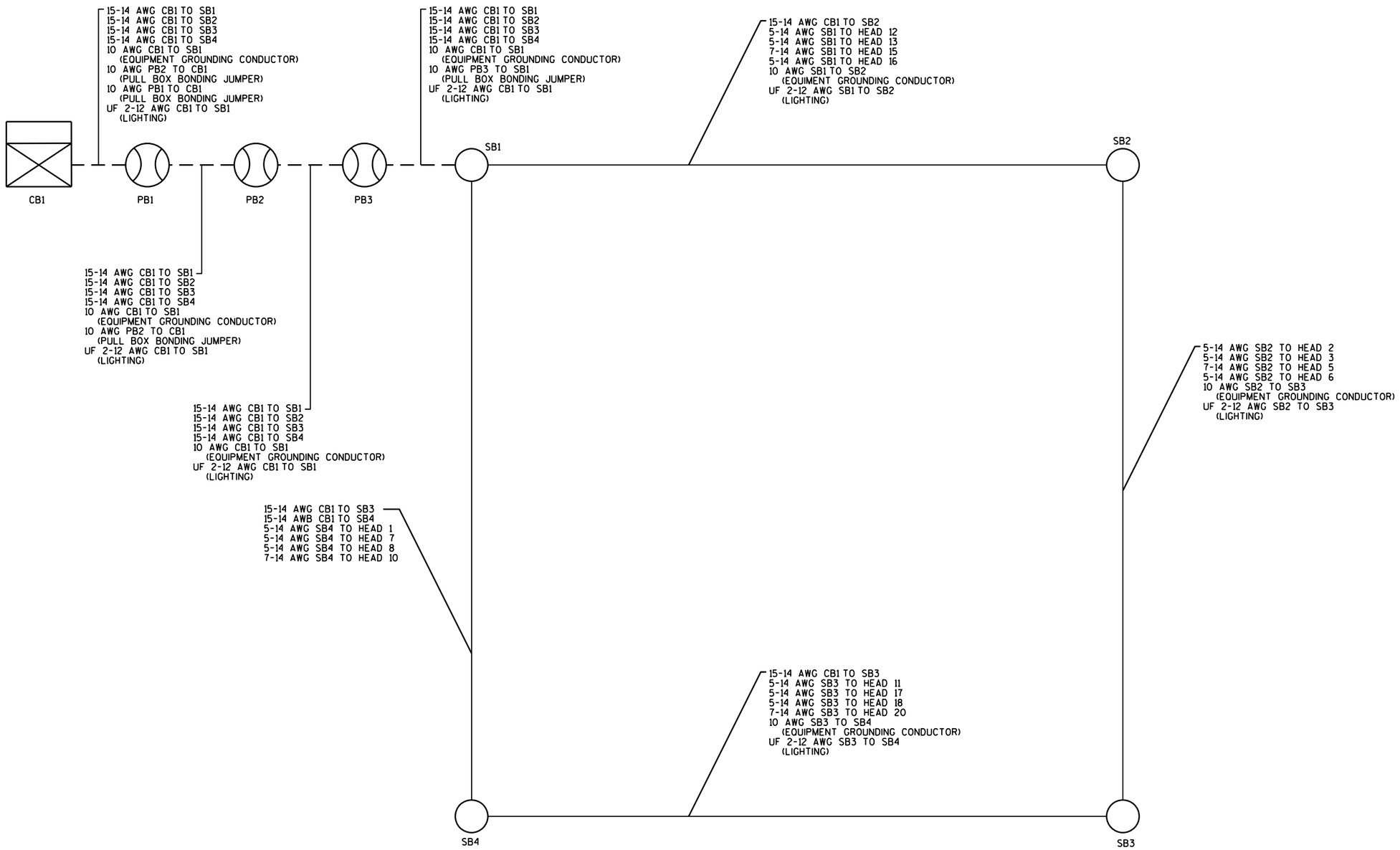
2



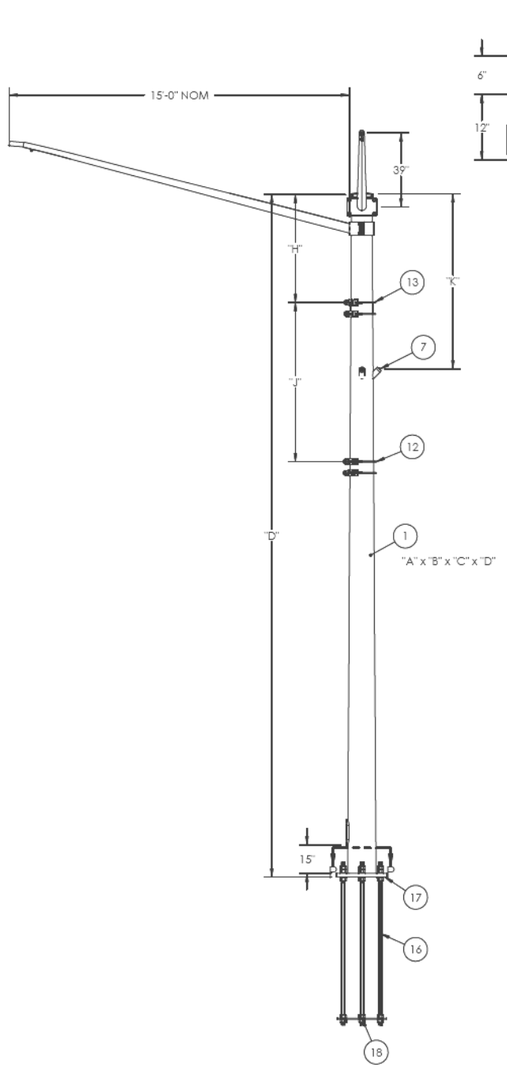
TRAFFIC SIGNAL SPLICE LOCATION - ABOVEGROUND FEEDER

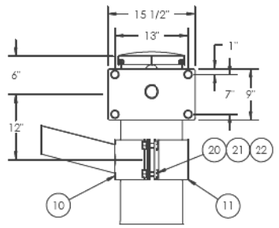
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL DETAILS	SHEET 109	E

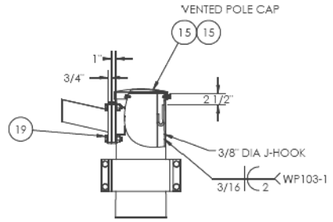
2

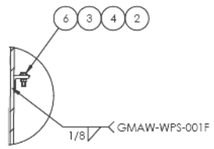


SPAN WIRE CABLING SCHEMATIC (TRAFFIC SIGNAL CABLE/WIRE)

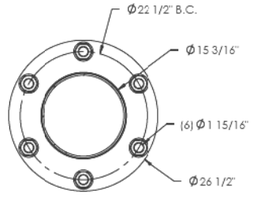




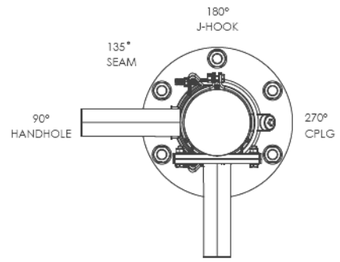




DETAIL R
SCALE 1 : 10



SECTION P-P
SCALE 1 : 20



REVISIONS			
REV.	DESCRIPTION	DATE	DRFT
A	REVISED TO MATCH CUSTOMER SPECS. REMOVED 36' POLE OPTION	2/9/2018	RK
B	J-HOOK WAS 6". ROTATED A BOLTS 30 DEG. HH COVER SCREW WAS 2"	2/14/2018	RK
C	ADDED 2ND PLUG FOR ITEM 7; CPLG WAS AT 90; UPDATED "H", "J" & "K" PER CUSTOMER	3/13/2018	RK

QTY	POLE				SPAN CLAMPS		(2) CPLG @ "K"
	"A"	"B"	"C"	"D"	"H"	"J"	
	5/16	15.0	10.8	30'-0"	5'-0"	7'-0"	10'-6"

ITEM NO.	DESCRIPTION	QTY PER	ASSY	FINISH
1	WLDMNT STRAIN RD "A"X"B"X"C"X"D"	1		X
2	NUTHX1-4-20SS	1	X	
3	WASHER FLAT 1/4 SS 5/8 OD ASME B18.22.1 SS	1	X	
4	WASHER LOCK 1/4 SS	1	X	
5	COVER HH WI 4 1/2x12	1	X	X
6	BOLT HX HD 1-4-20NC X 1" F593C SS	3	X	
7	PLUG-THD-PL-2 PVC	2	X	
8	WLDMT ARM LUM RD 11GAX150	1		X
9	PLUG THREADED 3/4 PVC	2		
10	WLDMT CLAMP ARM LUM RD 11GAX150	1		X
11	MASTARM BACK CLAMP HALF 3/8" A36	1		X
12	STRAIN POLE ATTACHMENT CLAMP ASSY	2		
13	STRAIN POLE ATTACHMENT CLAMP ASSY	2		
15	WLDMT CAP VENT 11.5"ID(10.75-11.25) 3 SET SCREW	1		X
15	SCRW SLF TAP 3-8 X 1-1-2 (TYPE B)	3		
16	AB 1 3/4X86" F1554 GR 55 W/5 GVNUT 2FL	6		
17	ANCHOR BOLT TEMPLATE 1/4" TK	1		
18	ANCHOR BOLT TEMPLATE 1/2" TK	1		
19	WIS DOT LUM ARM HDWR BAG	1		
20	BOLT HVYHXHD 3-4-10X 2-1-2 A325GV	4		
21	WASHER LOCK 3/4 GV	4		
22	NUT HVY HX 3-4-10NC A563GV(DH)	4		

MATERIAL SPECIFICATIONS

POST: ASTM A572 GR65
BASE PLATE: ASTM A36
MAST ARM: N/A
MOUNTING PLATE: N/A
HARDWARE FINISH: ASTM A153
ANCHOR BOLTS: ASTM F1554 GR 55

DESIGN CRITERIA

2013 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS ON HIGHWAY SIGNS, LUMINAIRES & TRAFFIC SIGNALS.
MAX DEFELCTION 0.16"/100LBS OF LOAD
WINDS: 90 MPH *VORTEX SHED:* N/A
FATIGUE CAT: N/A *GALLOPING:* N/A
NATURAL WIND GUST: N/A *TRUCK GUST:* N/A

WELD SPECIFICATION

THE POST AND MAST ARM TO BE ROUND TAPERED TUBE FABRICATION WITH ONE SUBMERGED ARC LONGITUDINAL SEAM WELD WITH 100% PENETRATION 6" FROM BASE PLATE AND 60% FOR REMAINDER. GAS METAL ARC WELDING PROCESS WITH 60% PENETRATION MAY BE USED FOR REMAINDER OF WELDED FABRICATION.

WELD TESTING: 100% OF ALL WELDS VISUAL TESTED (VT), 100% OF ALL COMPLETE JOINT PENETRATION (CJP) WELDS ULTRASONIC TESTED (UT) BASED ON THE THINNEST MATING MATERIAL: (PER AASHTO 2013 5.15.5-WELD INSP) THICKNESS.
< 6MM (0.25 IN) MT
≥ 6MM (0.25 IN UT
A RANDOM 30% OF ALL FILLET WELDS AND PARTIAL JOINT PENETRATION (PJP) LONGITUDINAL SEAM WELDS MAGNETIC PARTICLE TESTED (MT).

FINISH SPECIFICATION

GALV. OR PRIME COAT: HOT DIP GALV PER ASTM A123
FINISH COAT:
COLOR:
FEDERAL OR RAL SPEC.:
WEIGHT W/GALV.: 2276
WEIGHT W/GALV.&PAINT: 2294.76
SURFACE AREA: 47045.5
GAL. OF PAINT: 1.80944

MILLERBERND
622 6TH ST. SO.
WINSTED, MN 55395

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SALES ORDER NO.:	QTY:	STATE:	SHEET
80405	CHART	WI	1 OF 2

DESCRIPTION: SUB POLE STRAIN RD

EST. WEIGHT:	DRAWING NO:
2206.5	80405-1

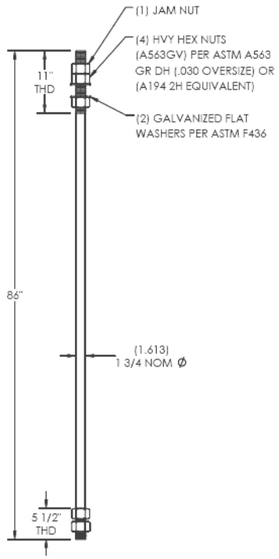
PROJECT NAME: WI DOT SPAN WIRE STANDARDS

PROJECT LOCATION: WISCONSIN

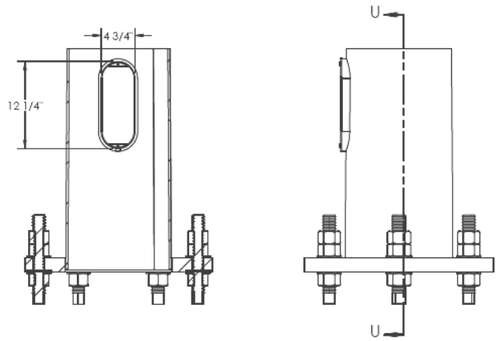
DWN BY: REBEKAH DATE: 1/31/2018
CHK BY: DATE:

STATE FURNISHED STRAIN POLE
N.T.S.

2

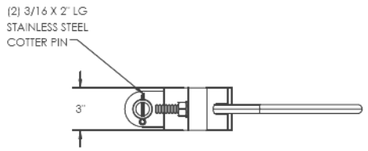


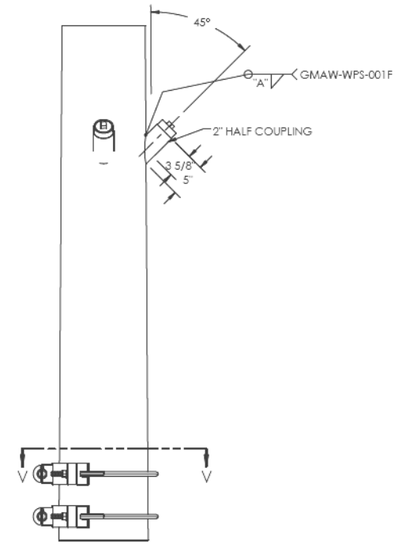
ANCHOR BOLT DETAIL



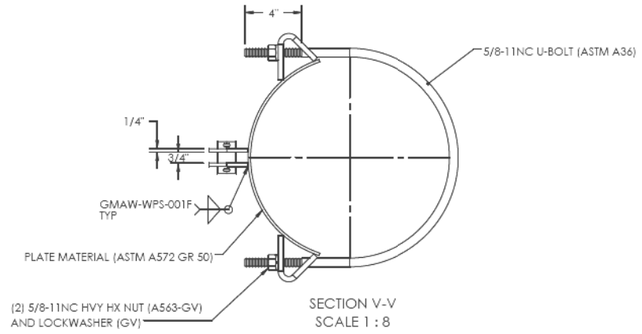
SECTION U-U
SCALE 1 : 16

HANDHOLE DETAIL





PIPE COUPLING/WEATHERHEAD DETAIL



SECTION V-V
SCALE 1 : 8

POLE BAND DETAIL

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WINSTED, MN 55395

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SALES ORDER NO.:	QTY:	STATE:	SHEET
80405	CHART	WI	2 OF 2

DESCRIPTION: SUB POLE STRAIN RD

EST. WEIGHT:	DRAWING NO:
2206.5	80405-1

PROJECT NAME: WI DOT SPAN WIRE STANDARDS

PROJECT LOCATION: WISCONSIN

DWN BY: REBEKAH	DATE: 1/31/2018
CHK BY:	DATE:

STATE FURNISHED STRAIN POLE
N.T.S.

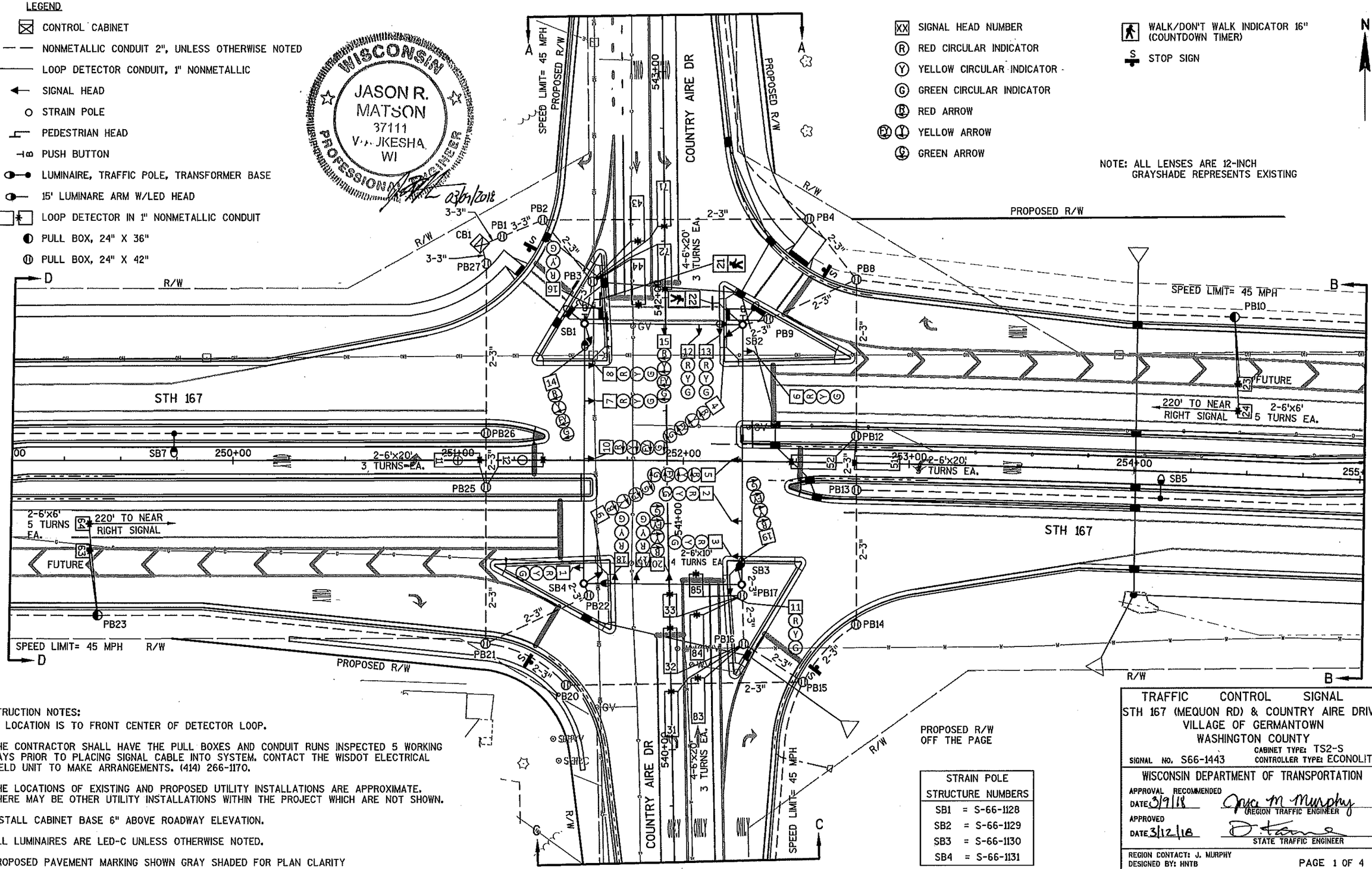
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD
- STRAIN POLE
- PEDESTRIAN HEAD
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- 15' LUMINARE ARM W/LED HEAD
- 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
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

WISCONSIN JASON R. MATSON 37111 WAUKESHA WI PROFESSIONAL ENGINEER
03/01/2018



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
6. PROPOSED PAVEMENT MARKING SHOWN GRAY SHADED FOR PLAN CLARITY

STRAIN POLE STRUCTURE NUMBERS	
SB1	= S-66-1128
SB2	= S-66-1129
SB3	= S-66-1130
SB4	= S-66-1131

TRAFFIC CONTROL SIGNAL
STH 167 (MEQUON RD) & COUNTRY AIRE DRIVE
VILLAGE OF GERMANTOWN
WASHINGTON COUNTY
CABINET TYPE: TS2-S
SIGNAL NO. S66-1443 CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 3/9/18 Jane M Murphy (REGION TRAFFIC ENGINEER)

APPROVED
DATE 3/12/18 D. Kanas STATE TRAFFIC ENGINEER

REGION CONTACT: J. MURPHY
DESIGNED BY: HNTB
REVISED BY:

PAGE 1 OF 4

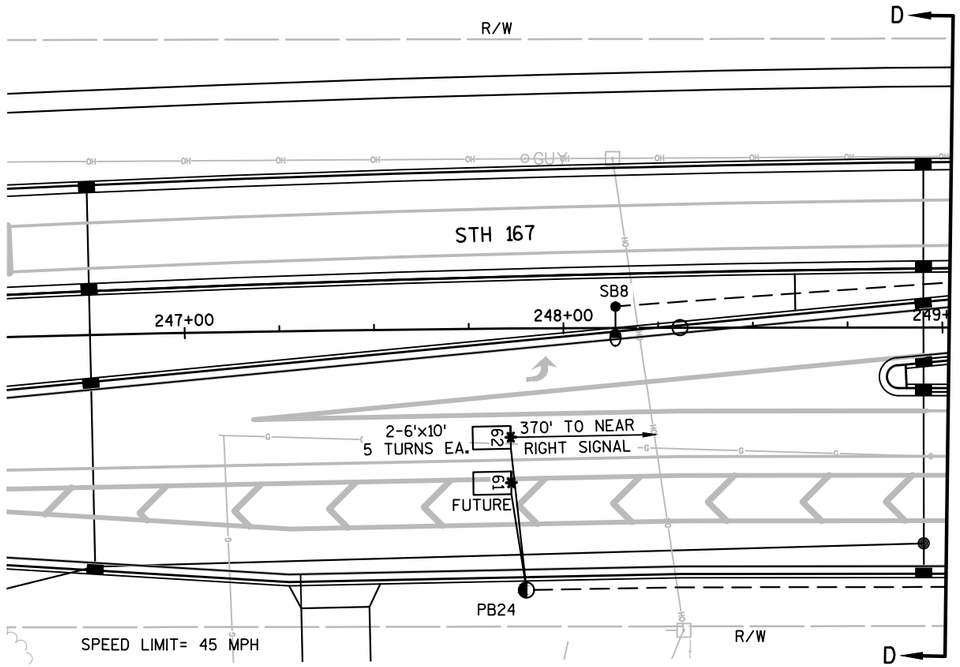
3-9-18 DMJ

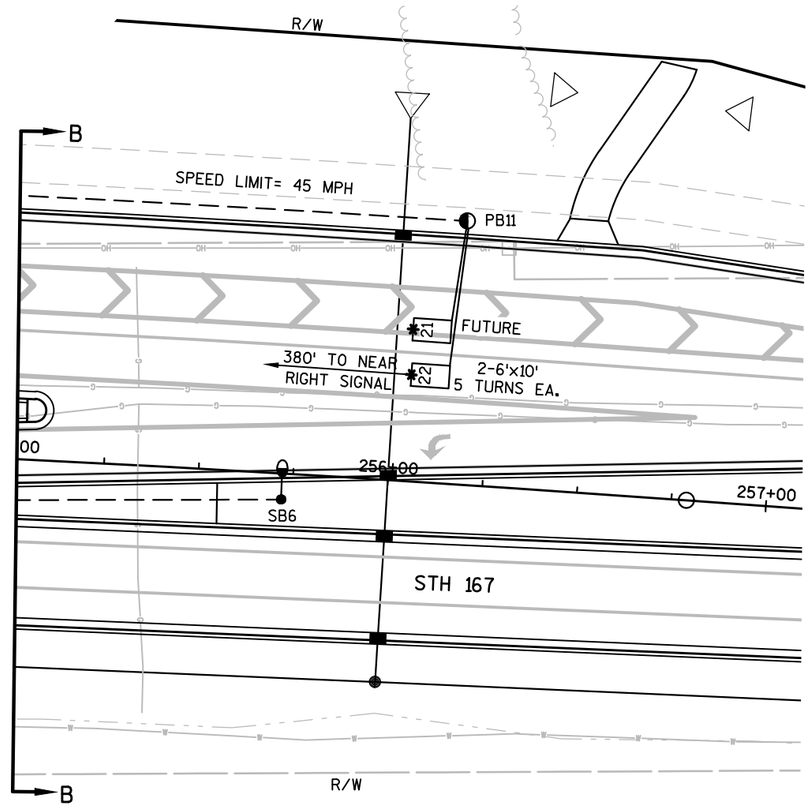
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL PLAN	SHEET 113 E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIG\S66-1443\S66-1443.DWG
LAYOUT NAME - S66-1443_PG1
PLOT DATE : 3/8/2018 2:29 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N





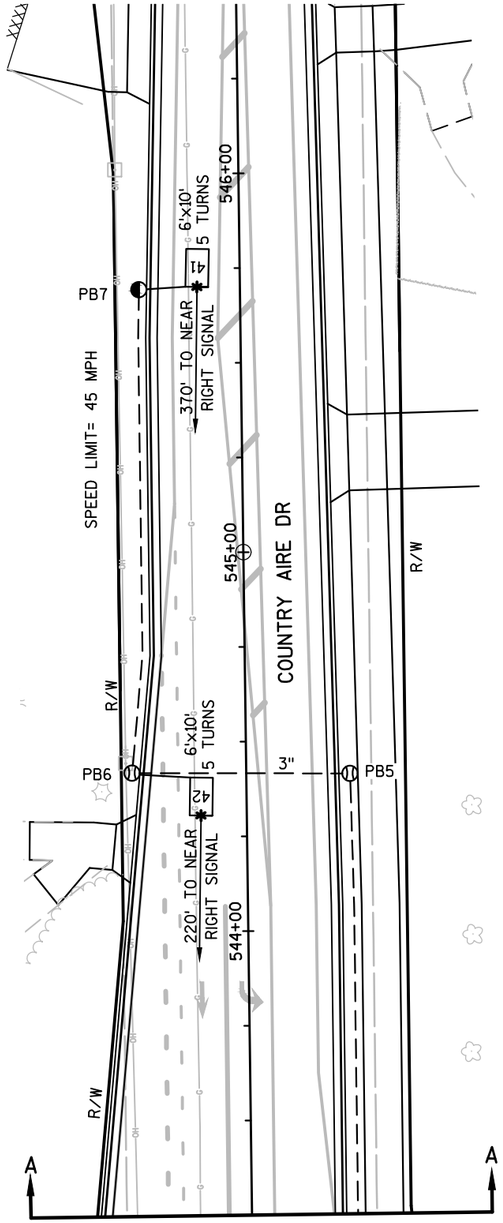
TRAFFIC CONTROL SIGNAL
STH 167 (MEQUON RD) & COUNTRY AIRE DRIVE
VILLAGE OF GERMANTOWN
WASHINGTON COUNTY

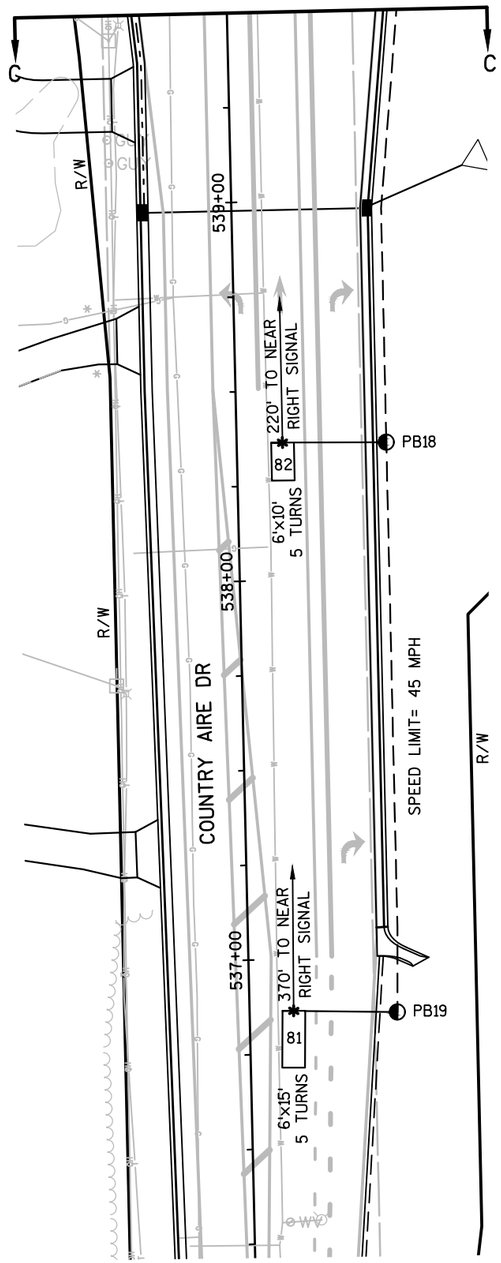
SIGNAL NO. S66-1443

REGION CONTACT: J. MURPHY
DESIGNED BY: HNTB
REVISED BY:

PAGE 2 OF 4

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL PLAN	SHEET 114 E





N

TRAFFIC CONTROL SIGNAL
STH 167 (MEQUON RD) & COUNTRY AIRE DRIVE
VILLAGE OF GERMANTOWN
WASHINGTON COUNTY

SIGNAL NO. S66-1443

REGION CONTACT: J. MURPHY
DESIGNED BY: HNTB
REVISED BY:

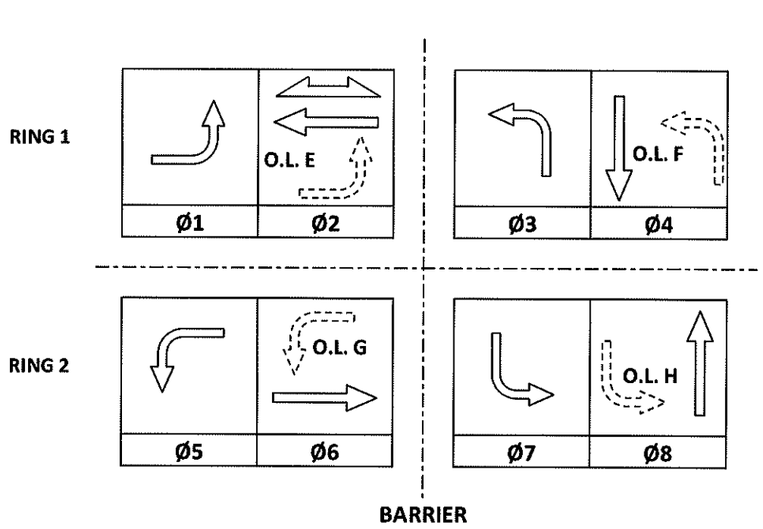
PAGE 3 OF 4

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\13800000\SIG\S66-1443\S66-1443.DWG
LAYOUT NAME - S66-1443_PG3

PLOT DATE : 3/8/2018 2:29 PM PLOT BY : DODGE, BRIAN M PLOT NAME : PLOT SCALE : 1 IN:40 FT

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



CONTROLLER LOGIC

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

TYPE OF 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	X
RAILROAD	
EMERGENCY VEHICLE	
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	23	31	33	42	44	52
CALLED PHASE	1	FUTURE	FUTURE	3	3	4	4	5
CALL OPTION	X			X	X			X
DELAY TIME					X			
EXTENTION OPTION	X			X	X	X	X	X
EXTEND TIME						X	X	
USE ADDED INITIAL								
CROSS SWITCH PHASE	2			4	4			6

19	17	23	21	27	25	31	29	DETECTOR INPUT
62	64	72	82	84				PLAN LOOP DETECTOR*(S)
6	6	7	8	8				CALLED PHASE
X	X	X		X				CALL OPTION
		X						DELAY TIME
X	X	X	X	X				EXTENTION OPTION
			X					EXTEND TIME
X	X							USE ADDED INITIAL
		8						CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	24	32	41	43	51	61
CALLED PHASE	1	2	2	3	4	4	5	FUTURE
CALL OPTION	X	X	X	X		X	X	
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X	X	X	X	
EXTEND TIME					X			
USE ADDED INITIAL		X	X					
CROSS SWITCH PHASE	2			4			6	

20	18	24	22	28	26	32	30	DETECTOR INPUT
63	71	81	83	85				PLAN LOOP DETECTOR*(S)
FUTURE	7	8	8	8				CALLED PHASE
	X		X	X				CALL OPTION
	X							DELAY TIME
	X	X	X	X				EXTENTION OPTION
		X						EXTEND TIME
								USE ADDED INITIAL
	8							CROSS SWITCH PHASE

STH 167 & COUNTRY AIRE DRIVE
VILLAGE OF GERMANTOWN
WASHINGTON COUNTY
SIGNAL NO: S66-1443 CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE
DATE: FEBRUARY 2018 PAGE NO. 4 OF 116

3/9/18 JMM 3-9-18 DTW

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SEQUENCE OF OPERATIONS	SHEET NO: E

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

STH 167 & COUNTRY AIRE DRIVE

2

PROJECT ID:	1380-00-70
INTERSECTION:	STH 167 & COUNTRY AIRE DRIVE

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

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1	15	12	RED	ORG	GRN								
		13	RED	ORG	GRN								
		14				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		15				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		16	RED/WHT	BLU/WHT	GRN/WHT								
		21								BLK	BLU		
		B										WHT/BLK	
SB2	15	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		4				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		6	RED/WHT	BLU/WHT	GRN/WHT								
		22								BLK	BLU		
		B										WHT/BLK	
SB3	15	11	RED	ORG	GRN								
		17	RED/BLK	ORG/BLK	GRN/BLK								
		18	RED/BLK	ORG/BLK	GRN/BLK								
		19				RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT				
		20				RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT				
SB4	15	1	RED	ORG	GRN								
		7	RED/BLK	ORG/BLK	GRN/BLK								
		8	RED/BLK	ORG/BLK	GRN/BLK								
		9				RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT				
		10				RED/WHT	BLU/WHT	GRN/WHT	BLK/WHT				

NOTES: USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

(CONTINUED ON NEXT SHEET)

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CABLE ROUTING	SHEET: 117 E

FILE NAME : \\milw00\ingrproj\66606\WO_06_Span_Wire\t1\cds\024020_sp_cr.ppt PLOT DATE : 1/31/2018 11:39:52 AM PLOT BY : HNTB PLOT NAME : 024020_sp_cr#› PLOT SCALE : 1:1

(CONTINUED)

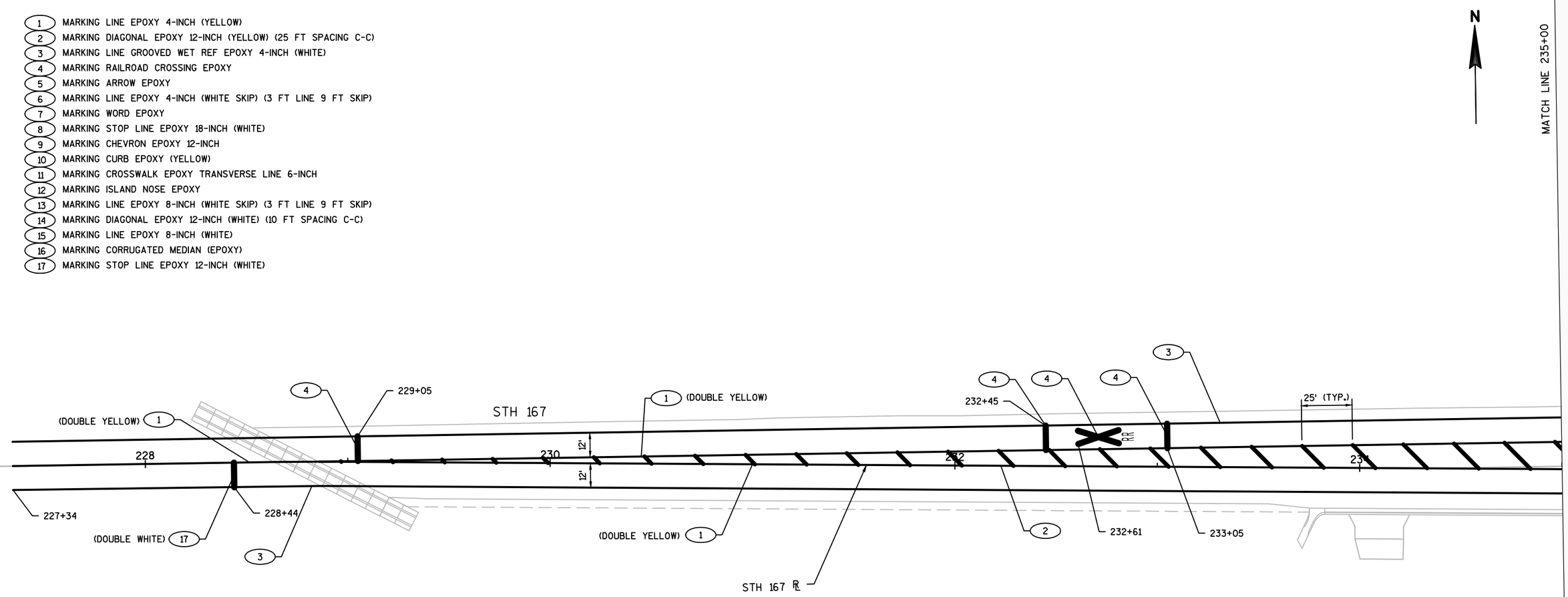
EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4

LIGHTING UF 10 AWG W/ GROUND	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
CB1	SB5
SB5	SB6
CB1	SB7
SB7	SB8

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	CB1
PB3	SB1
PB4	SB2
PB8	SB2
PB9	SB2
PB12	SB2
PB13	SB2
PB26	CB1
PB27	CB1

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4 MARKING RAILROAD CROSSING EPOXY
5 MARKING ARROW EPOXY
6 MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
7 MARKING WORD EPOXY
8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CHEVRON EPOXY 12-INCH
10 MARKING CURB EPOXY (YELLOW)
11 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
12 MARKING ISLAND NOSE EPOXY
13 MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
14 MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15 MARKING LINE EPOXY 8-INCH (WHITE)
16 MARKING CORRUGATED MEDIAN (EPOXY)
17 MARKING STOP LINE EPOXY 12-INCH (WHITE)



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 119	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 01
PLOT DATE : 2/1/2018 11:00 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4 MARKING RAILROAD CROSSING EPOXY
5 MARKING ARROW EPOXY
6 MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
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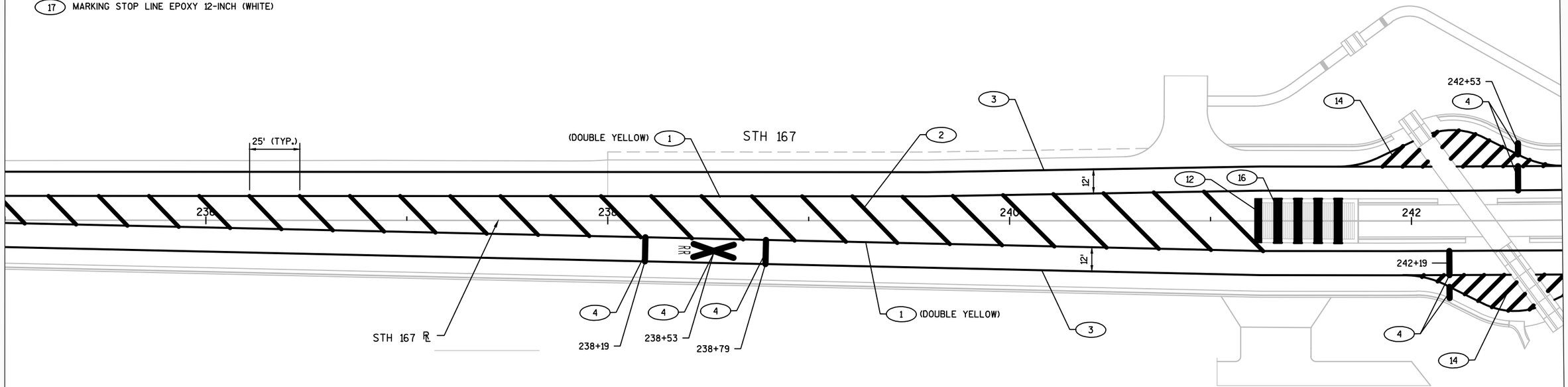
16 MARKING CORRUGATED MEDIAN (EPOXY)
17 MARKING STOP LINE EPOXY 12-INCH (WHITE)



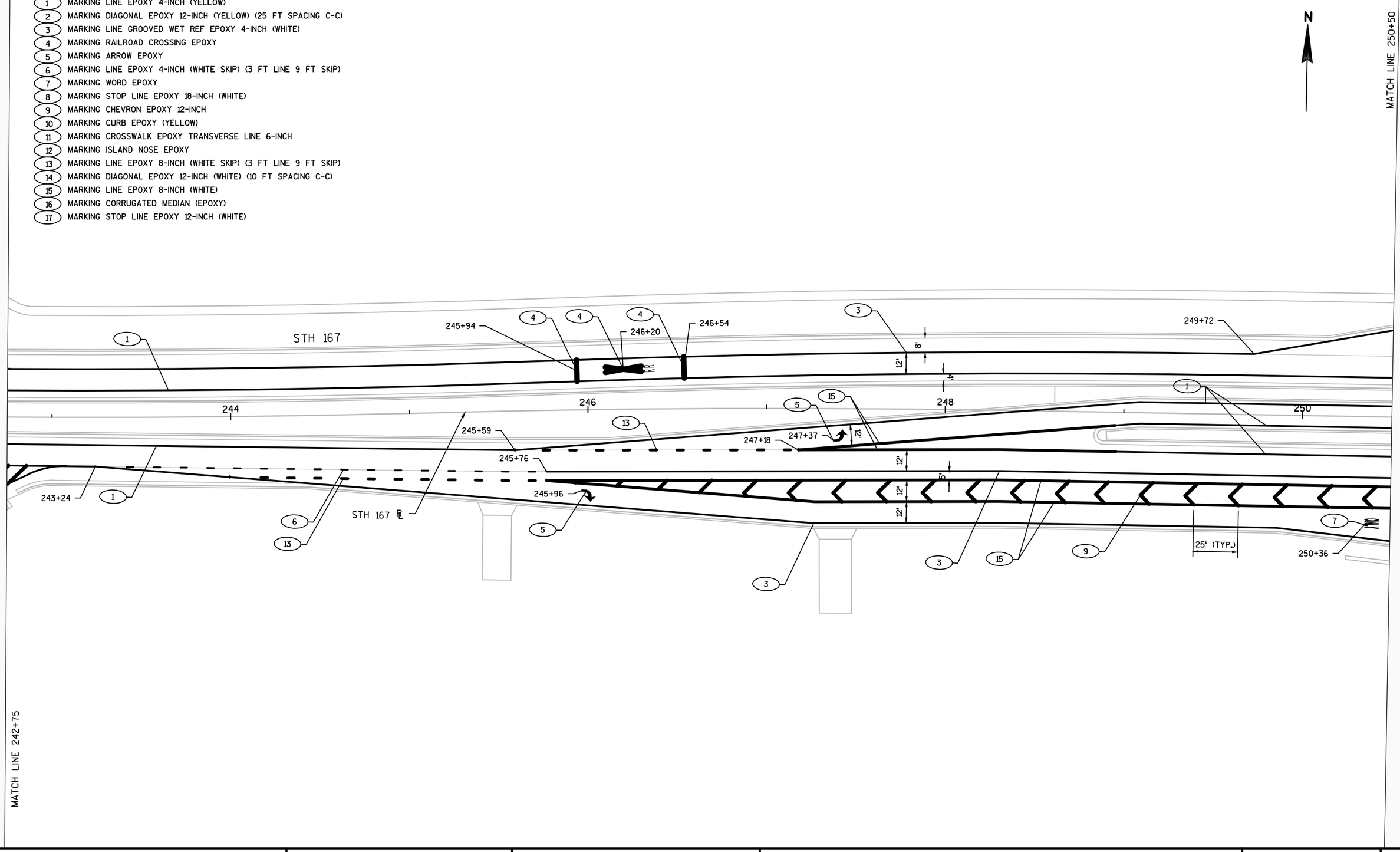
MATCH LINE 235+00

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 120	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 02
PLOT DATE : 2/1/2018 11:00 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4 MARKING RAILROAD CROSSING EPOXY
5 MARKING ARROW EPOXY
6 MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
7 MARKING WORD EPOXY
8 MARKING STOP LINE EPOXY 18-INCH (WHITE)
9 MARKING CHEVRON EPOXY 12-INCH
10 MARKING CURB EPOXY (YELLOW)
11 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
12 MARKING ISLAND NOSE EPOXY
13 MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
14 MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15 MARKING LINE EPOXY 8-INCH (WHITE)
16 MARKING CORRUGATED MEDIAN (EPOXY)
17 MARKING STOP LINE EPOXY 12-INCH (WHITE)



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 121	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 03
PLOT DATE : 2/1/2018 11:00 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

1 MARKING LINE EPOXY 4-INCH (YELLOW)
2 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4 MARKING RAILROAD CROSSING EPOXY
5 MARKING ARROW EPOXY
6 MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
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10 MARKING CURB EPOXY (YELLOW)
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12 MARKING ISLAND NOSE EPOXY
13 MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
14 MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15 MARKING LINE EPOXY 8-INCH (WHITE)
16 MARKING CORRUGATED MEDIAN (EPOXY)
17 MARKING STOP LINE EPOXY 12-INCH (WHITE)

N

MATCH LINE 258+25

2

251+79
251+58
ONLY
ONLY
25' (TYP.)
253+95
252+78
253+14
256+62
257+83
258+02
256+16
256+80
251+13
250+66
251+06
252+80
253+20
254+76
252
254
256
258
252+71
254+18
STH 167
STH 167 ℄
250+78
252+08
540
252+08
252+19
COUNTRY AIRE DR ℄
COUNTRY AIRE DR
251+81
MATCH LINE 250+50

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 122	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 04
PLOT DATE : 2/1/2018 11:00 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:50 FT

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4. MARKING RAILROAD CROSSING EPOXY
5. MARKING ARROW EPOXY
6. MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
7. MARKING WORD EPOXY
8. MARKING STOP LINE EPOXY 18-INCH (WHITE)
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10. MARKING CURB EPOXY (YELLOW)
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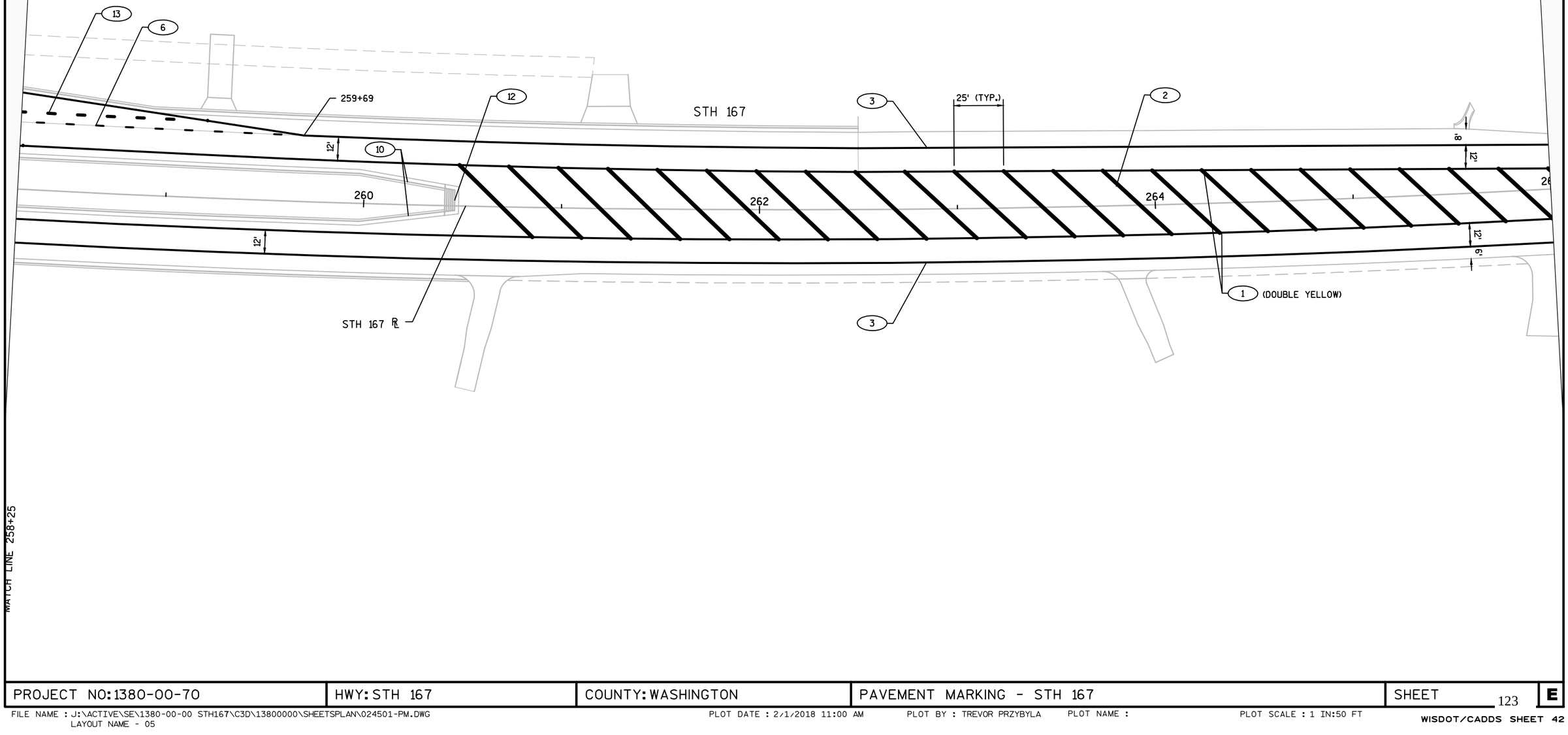
12. MARKING ISLAND NOSE EPOXY
13. MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
14. MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15. MARKING LINE EPOXY 8-INCH (WHITE)
16. MARKING CORRUGATED MEDIAN (EPOXY)
17. MARKING STOP LINE EPOXY 12-INCH (WHITE)



2

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4. MARKING RAILROAD CROSSING EPOXY
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12. MARKING ISLAND NOSE EPOXY
13. MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
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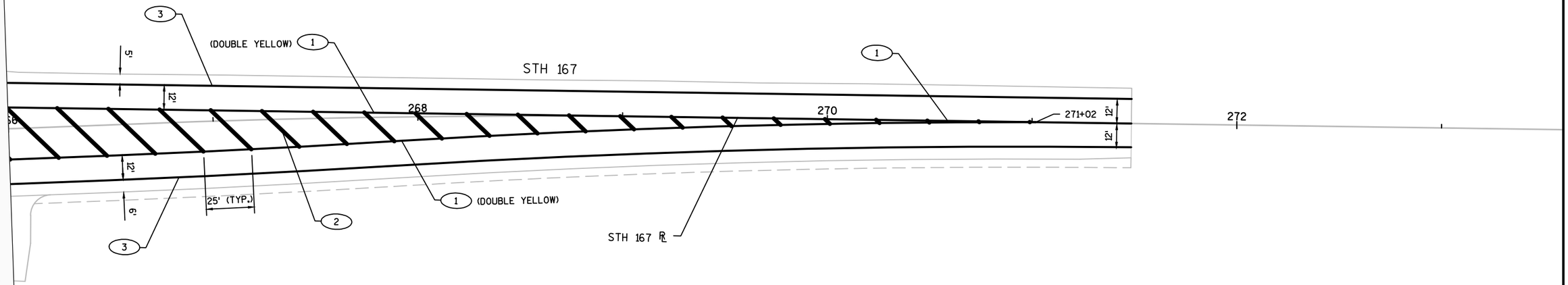
15. MARKING LINE EPOXY 8-INCH (WHITE)
16. MARKING CORRUGATED MEDIAN (EPOXY)
17. MARKING STOP LINE EPOXY 12-INCH (WHITE)

N



MATCH LINE 266+00

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - STH 167	SHEET 124	E

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4. MARKING RAILROAD CROSSING EPOXY
5. MARKING ARROW EPOXY
6. MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
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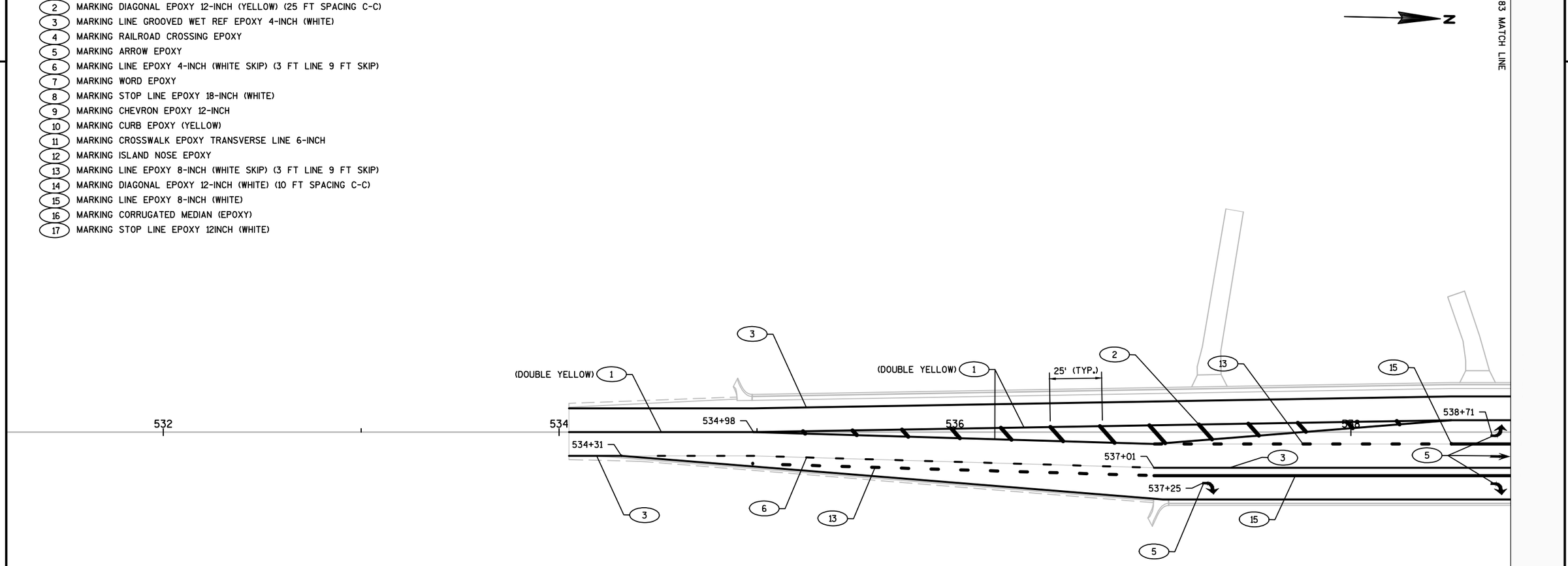
8. MARKING STOP LINE EPOXY 18-INCH (WHITE)
9. MARKING CHEVRON EPOXY 12-INCH
10. MARKING CURB EPOXY (YELLOW)
11. MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
12. MARKING ISLAND NOSE EPOXY
13. MARKING LINE EPOXY 8-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
14. MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15. MARKING LINE EPOXY 8-INCH (WHITE)
16. MARKING CORRUGATED MEDIAN (EPOXY)
17. MARKING STOP LINE EPOXY 12INCH (WHITE)



PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - COUNTRY AIRE DR	SHEET 125	E

2

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING DIAGONAL EPOXY 12-INCH (YELLOW) (25 FT SPACING C-C)
3. MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
4. MARKING RAILROAD CROSSING EPOXY
5. MARKING ARROW EPOXY
6. MARKING LINE EPOXY 4-INCH (WHITE SKIP) (3 FT LINE 9 FT SKIP)
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8. MARKING STOP LINE EPOXY 18-INCH (WHITE)
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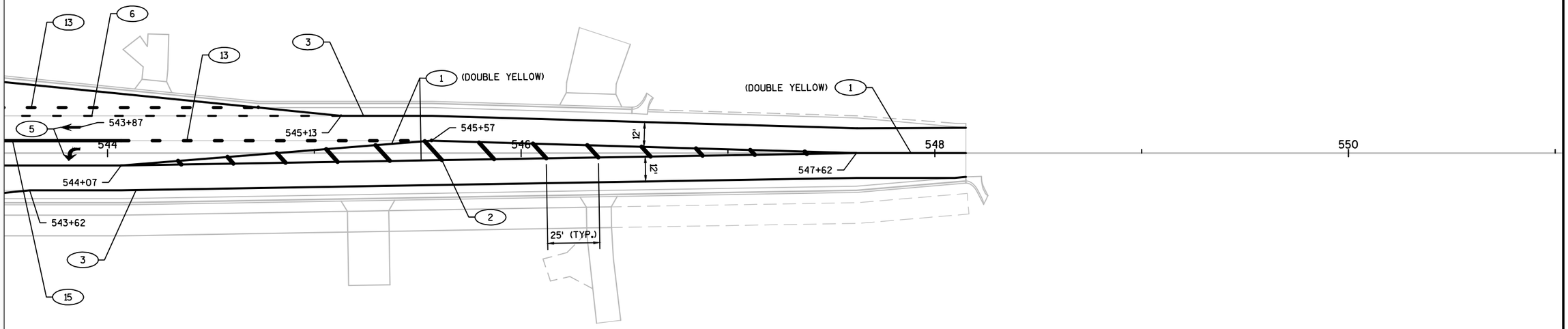
14. MARKING DIAGONAL EPOXY 12-INCH (WHITE) (10 FT SPACING C-C)
15. MARKING LINE EPOXY 8-INCH (WHITE)
16. MARKING CORRUGATED MEDIAN (EPOXY)
17. MARKING STOP LINE EPOXY 12INCH (WHITE)



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PAVEMENT MARKING - COUNTRY AIRE DR	SHEET 126	E

LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK ZONE
- MARKING LINE REMOVAL
- (TY01) TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)
- (TY02) TEMPORARY MARKING LINE, REMOVABLE TAPE 8-INCH (WHITE)
- (TY03) TEMPORARY MARKING ARROW REMOVABLE TAPE
- (TY04) TEMPORARY MARKING WORD REMOVABLE TAPE
- (FMXX) FIXED MESSAGE SIGN

NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS.
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.
7. NEWLY CONSTRUCTED SIDEWALKS OR SHARED USE PATHS SHALL NOT BE OPENED UNTIL ALL ROAD CONSTRUCTION IS COMPLETE. TYPE II OR III BARRICADES WITH SIDEWALK CLOSED SIGNS SHALL BE ERECTED ON THESE FACILITIES UNTIL THE ROADWAY IS OPEN TO TRAFFIC.

N

EAST
M3-2
24"X12"
167
M1-6
24"X24"

ROAD CLOSED AHEAD
W20-3-A

END ROAD WORK
G20-2A
48"X24"

WO1-6
48" X 24"
TYPE III BARRICADE

STH 167

300'

500'

350'

245' TAPER

TY01

FM-100

ROAD CLOSED AHEAD
W20-3-A

LEFT LANE CLOSED AHEAD
W20-55-A

W04-2L

HWY 167 EAST CLOSED AHEAD FOLLOW DETOUR

BEGINS XXX XX

*BEGINS XXX XX PLACARD MUST BE PLACED 14 CALENDAR DAYS PRIOR TO THE SCHEDULED DATE FOR CLOSING STH 167.

PILGRIM RD

EAST
M3-2
24"X12"
167
M1-6
24"X24"

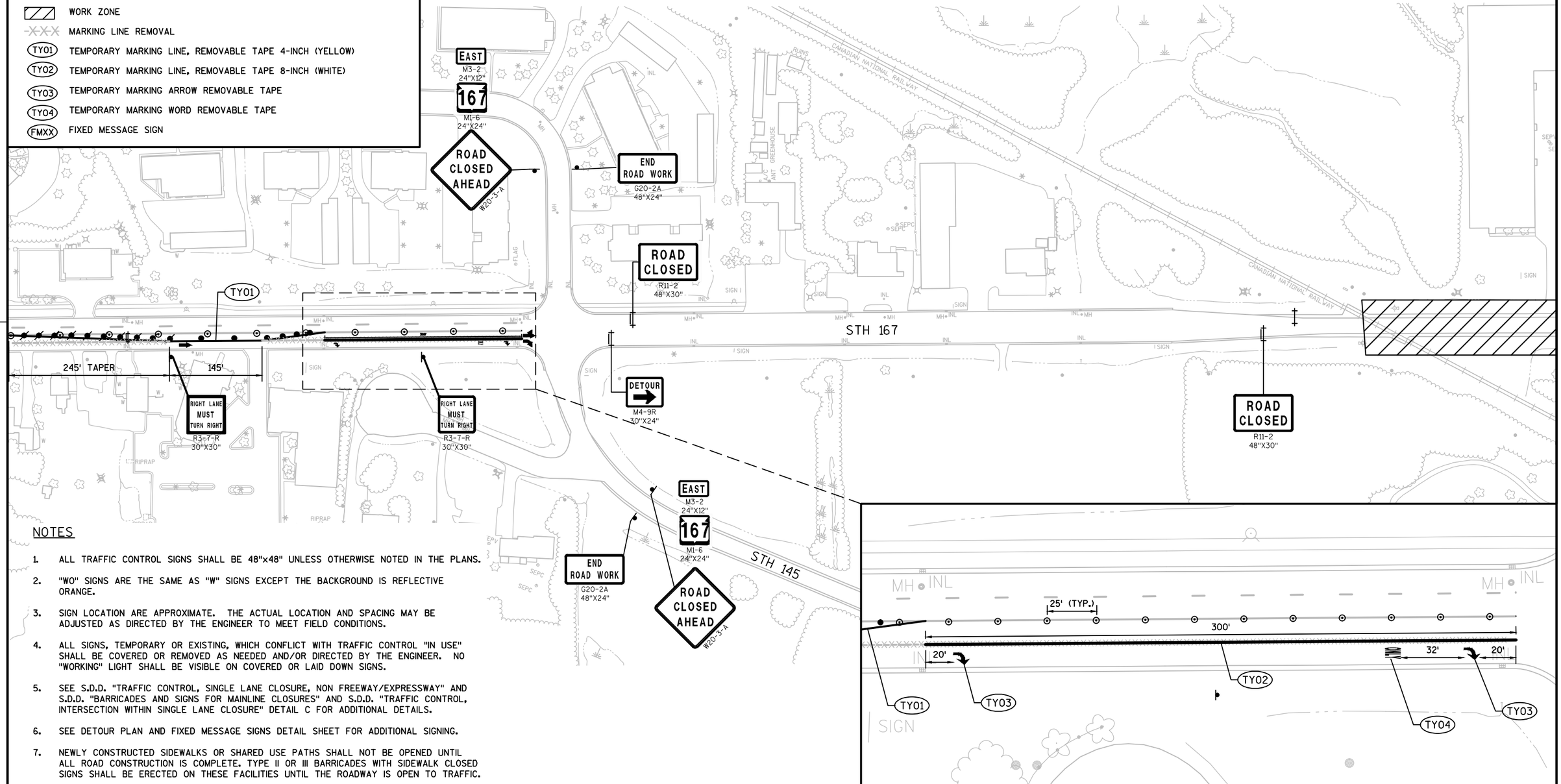
END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3-A

PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC CONTROL: STH 167/PILGRIM RD INTERSECTION	SHEET 127	E

LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK ZONE
- MARKING LINE REMOVAL
- (TY01) TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)
- (TY02) TEMPORARY MARKING LINE, REMOVABLE TAPE 8-INCH (WHITE)
- (TY03) TEMPORARY MARKING ARROW REMOVABLE TAPE
- (TY04) TEMPORARY MARKING WORD REMOVABLE TAPE
- (FMXX) FIXED MESSAGE SIGN



NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS.
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.
7. NEWLY CONSTRUCTED SIDEWALKS OR SHARED USE PATHS SHALL NOT BE OPENED UNTIL ALL ROAD CONSTRUCTION IS COMPLETE. TYPE II OR III BARRICADES WITH SIDEWALK CLOSED SIGNS SHALL BE ERECTED ON THESE FACILITIES UNTIL THE ROADWAY IS OPEN TO TRAFFIC.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC CONTROL: STH 167/STH 145 INTERSECTION	SHEET 128 E

2

N

WEST
M3-4
24"X12"
167
M1-6
24"X24"

ROAD CLOSED AHEAD
W20-3-A

FOREST DR

END ROAD WORK
G20-2A
48"X24"

500'

ROAD CLOSED 500 FT
W20-3-D

ROAD CLOSED 1000 FT
W20-3-C

500'

1000'

ROAD CLOSED AHEAD
W20-3-A

STH 167

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

END ROAD WORK
G20-2A
48"X24"

EISENHOWER DR

500'

WEST
M3-4
24"X12"
167
M1-6
24"X24"

END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3-A

NOTES

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LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK ZONE
- MARKING LINE REMOVAL
- TY01 TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)
- TY02 TEMPORARY MARKING LINE, REMOVABLE TAPE 8-INCH (WHITE)
- TY03 TEMPORARY MARKING ARROW REMOVABLE TAPE
- TY04 TEMPORARY MARKING WORD REMOVABLE TAPE
- FMXX FIXED MESSAGE SIGN

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC CONTROL: STH 167/EISENHOWER DR INTERSECTION	SHEET 129	E

2

LEGEND

- TRAFFIC FLOW ARROW
- TYPE III BARRICADE WITH WARNING LIGHTS, TYPE A
- TYPE III BARRICADE WITH ATTACHED SIGN WITH WARNING LIGHTS, TYPE A
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK ZONE
- MARKING LINE REMOVAL
- (TY01) TEMPORARY MARKING LINE, REMOVABLE TAPE 4-INCH (YELLOW)
- (TY02) TEMPORARY MARKING LINE, REMOVABLE TAPE 8-INCH (WHITE)
- (TY03) TEMPORARY MARKING ARROW REMOVABLE TAPE
- (TY04) TEMPORARY MARKING WORD REMOVABLE TAPE
- (FMXX) FIXED MESSAGE SIGN

NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
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5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS.
6. SEE DETOUR PLAN AND FIXED MESSAGE SIGNS DETAIL SHEET FOR ADDITIONAL SIGNING.
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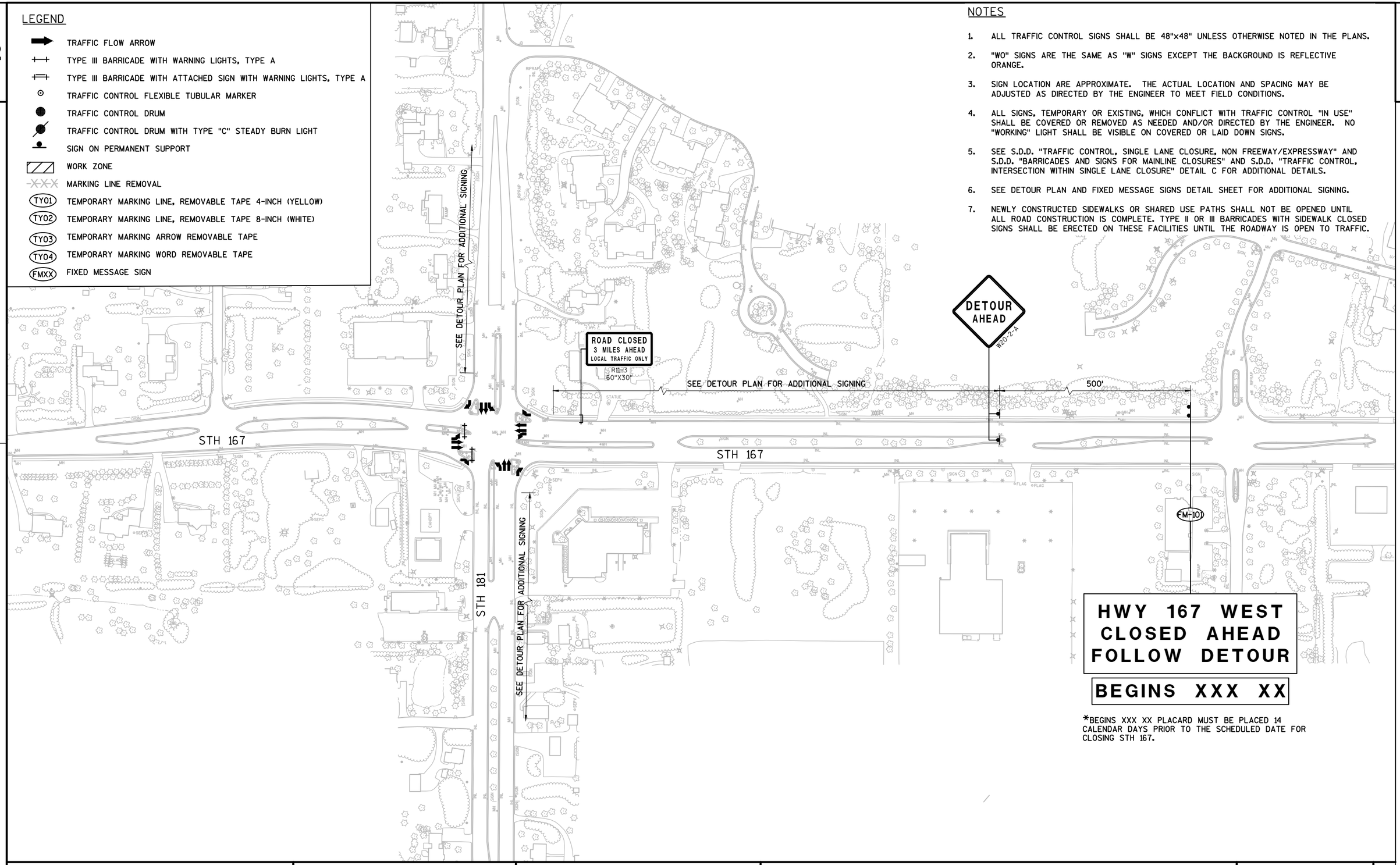

*BEGINS XXX XX PLACARD MUST BE PLACED 14 CALENDAR DAYS PRIOR TO THE SCHEDULED DATE FOR CLOSING STH 167.

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC CONTROL: STH 167/STH 181 INTERSECTION	SHEET 130	E

NOTES

1. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"x48" UNLESS OTHERWISE NOTED IN THE PLANS.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
3. SIGN LOCATION ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
4. ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR DIRECTED BY THE ENGINEER. NO "WORKING" LIGHT SHALL BE VISIBLE ON COVERED OR LAID DOWN SIGNS.
5. SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY" AND S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND S.D.D. "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE" DETAIL C FOR ADDITIONAL DETAILS.
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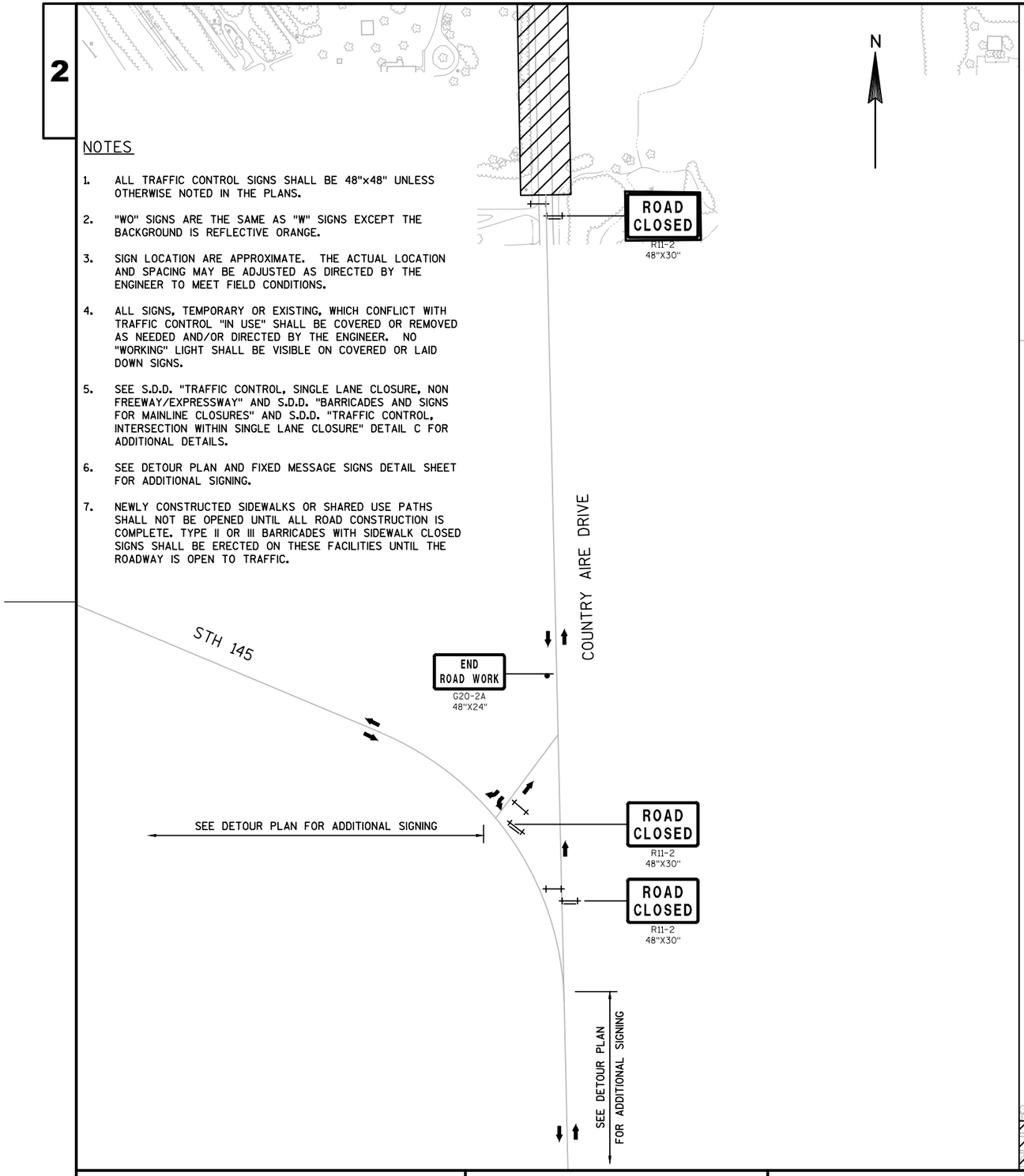
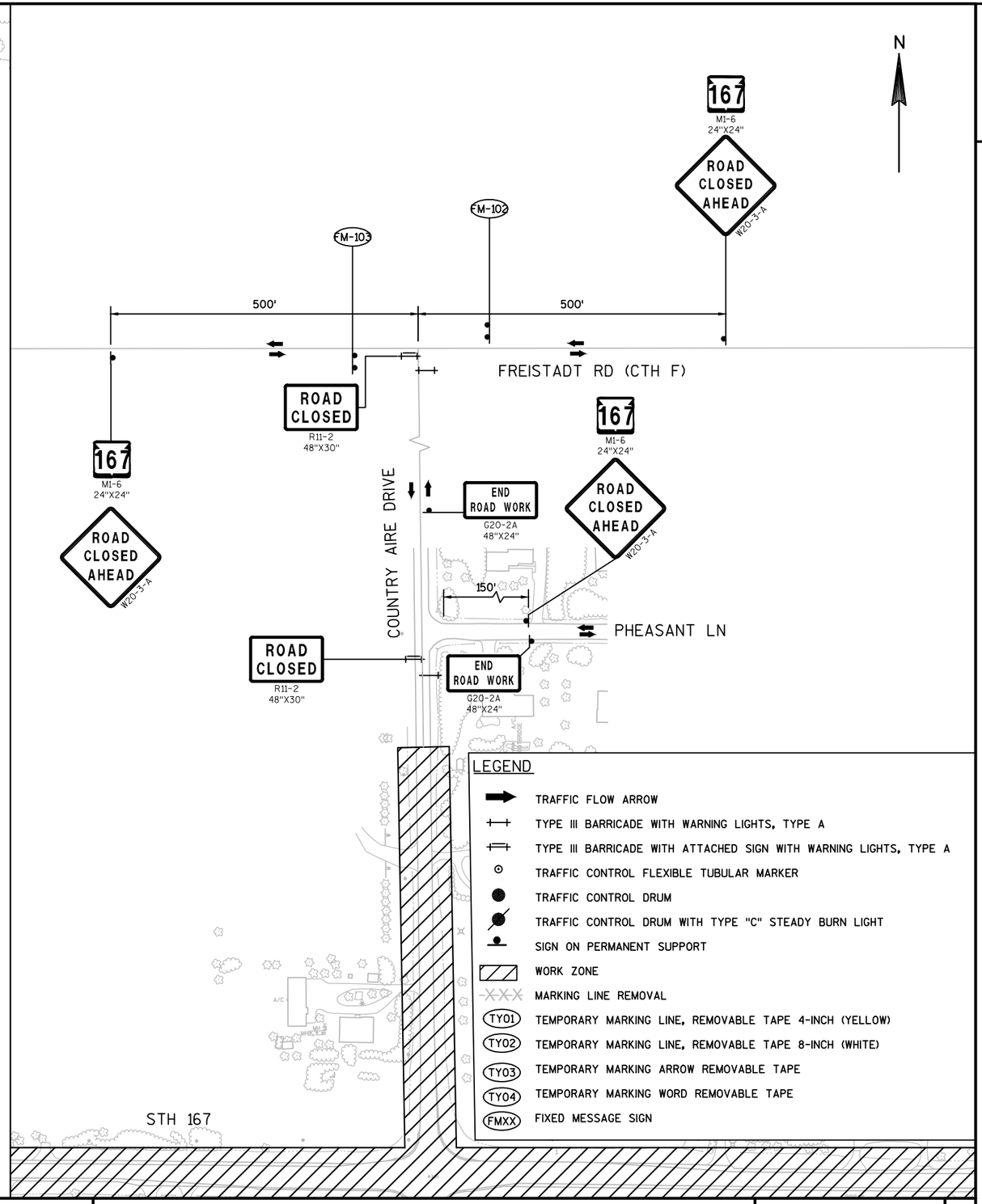




PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	TRAFFIC CONTROL: COUNTRY AIRE DR	SHEET 131 E

2

LEGEND

- TRAFFIC FLOW ARROW
- PROPOSED SIGN MOUNTED ON POST
- PROPOSED SIGN MOUNTED ON EXISTING POST
- PROPOSED SIGN MOUNTED ON POSTS
- PROPOSED SIGN MOUNTED ON EXISTING POSTS
- COV. — COVER CONFLICTING STH 167 SIGN
- WORK ZONE CLOSED TO TRAFFIC
- COVER EXISTING SIGN
- (XX) SIGN NUMBER
- STH 167 DETOUR ROUTE

NOTES

1. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. EXACT NUMBER, LOCATION AND SPACING OF SIGNS AND DEVICES MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR UNDER THE ITEM "TRAFFIC CONTROL COVERING SIGNS TYPE II."
4. TEMPORARY ACCESS FOR EMERGENCY VEHICLES AND LOCAL ACCESS SHALL BE PROVIDED THROUGHOUT THE PROJECT DURING CONSTRUCTION.

*SIGNS ON BOTH SIDES OF ROADWAY (DIVIDED HIGHWAY)

SIGN PLATE LEGEND

1 — ROAD CLOSED AHEAD W20-3-A

2 — DETOUR AHEAD W20-2-A

3 — END DETOUR M4-8A 24"X18"

4 — DETOUR M4-8 24"X12"

5 — DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / 167 M1-6 24"X24"

6 — DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / 167 M1-6 24"X24"

7 — DETOUR NEXT 10 MILES G20-51 60"X24"

A — M06-1 21"X21"

B — M06-1 21"X21"

C — M06-1 21"X21"

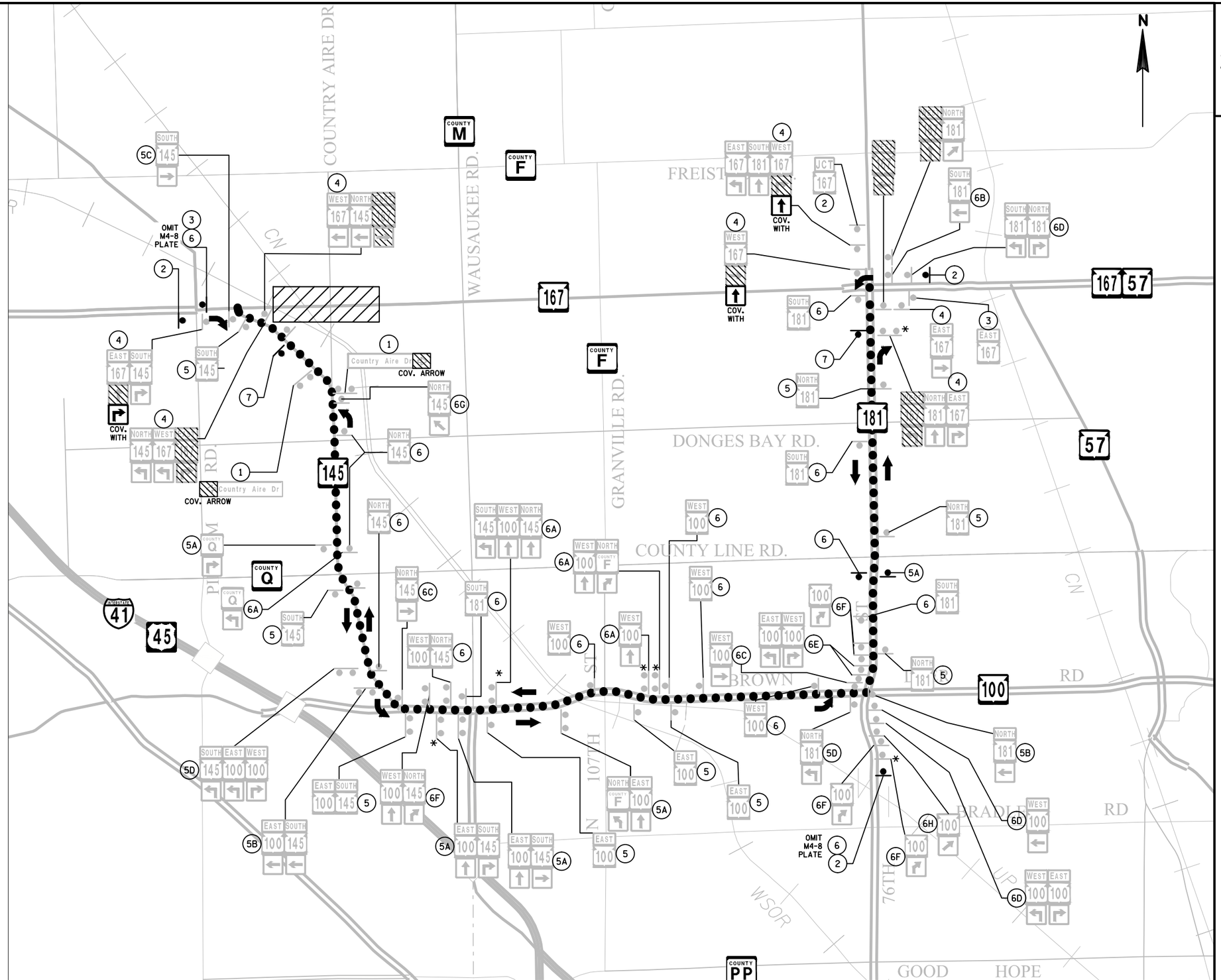
D — M05-1L 21"X21"

E — M05-1R 21"X21"

F — M05-2R 21"X21"

G — M06-2 21"X21"

H — M06-2 21"X21"



PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	DETOUR PLAN	SHEET 132 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 1/22/2018 3:24 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN : 3/4 MI

WISDOT/CADDS SHEET 42

2

STH 167 - CURVE DATA

CURVE PRL1
PI STA = 243+52.19
Y = 110438.280
X = 387884.896
DELTA = 2°30'14"
D = 0°47'06"
T = 159.53'
L = 319.00'
R = 7299.56'
PC STA = 241+92.67
PT STA = 245+11.67

CURVE PRL2
PI STA = 246+71.24
Y = 110452.700
X = 388203.671
DELTA = 2°30'16"
D = 0°47'06"
T = 159.58'
L = 319.10'
R = 7300.05'
PC STA = 245+11.67
PT STA = 248+30.77

CURVE PRL3
PI STA = 254+03.90
Y = 110453.792
X = 388936.381
DELTA = 4°19'12"
D = 0°47'06"
T = 275.34'
L = 550.42'
R = 7300.06'
PC STA = 251+28.56
PT STA = 256+78.98

CURVE PRL4
PI STA = 258+02.33
Y = 110424.352
X = 389333.982
DELTA = 1°56'10"
D = 0°47'05"
T = 123.35'
L = 246.67'
R = 7300.35'
PC STA = 256+78.98
PT STA = 259+25.66

CURVE PRL5
PI STA = 262+89.34
Y = 110404.818
X = 389820.620
DELTA = 5°46'45"
D = 0°47'43"
T = 363.68'
L = 726.75'
R = 7205.00'
PC STA = 259+25.66
PT STA = 266+52.40

CURVE PRL6
PI STA = 267+90.67
Y = 110435.292
X = 390321.645
DELTA = 3°12'24"
D = 1°09'35"
T = 138.27'
L = 276.47'
R = 4940.00'
PC STA = 266+52.40
PT STA = 269+28.87

BEGIN PROJECT 1380-00-70
STA 228+86

STA 567+53.06
COUNTRY AIRE DR ℄

CP 1007
Y = 113078.18
X = 388690.62

STA 251+92.61, STH 167
STA 541+27.86, COUNTRY AIRE DRIVE
Y = 110453.20
X = 388725.09

CP 1006

END PROJECT
STA 271+49

BP: 220+01.41
PI: 225+97.41
PI: 228+77.54
PI: 234+35.14
PI: 243+52.19
BP: 1+00.00
PI: 246+71.24
PI: 254+03.90
PI: 267+90.67
EP: 278+00.00

N89° 33' 48"E
596.00'

STH 167

S88° 50' 25"E
557.60'

S89° 54' 48"E
2595.00'
SECTION LINE

CP 1008

STH 167 (MEQUON RD)

S89° 54' 48"W
2595.00'

N89° 54' 55"E
280.13'

Y = 110,435.77
X = 386,130.27

PC
PRC
PT
PRL1
PRL2
PRL3
PRL4
PRL5
PRL6

S63° 28' 49"W
20.51'
S89° 57' 41"W
92.49'
S2
S1
℄ SWALE

N89° 54' 52"E
297.79'
S76° 07' 25"W
33.36'

N89° 43' 32"E
2645.42'
SECTION LINE

CP 1009

PI: 541+14.35
Y = 110439.69
X = 388725.27

Y = 110,439.69
X = 388,725.27

PI: 258+02.33
PI: 262+89.34

℄ STH 167 PRL

Y = 110,452.36
X = 391,370.66

NO° 45' 08"W
SECTION LINE
2638.71'

SECTION LINE
COUNTRY AIRE DR
N1° 17' 58"W
2650.10'

℄ COUNTRY AIRE DR

CP 1005

Y = 107,790.27
X = 388,785.37

514+64.24
COUNTRY AIRE DR ℄

560
555
550
545
540
535
530
525

N

SWALE - CURVE DATA

CURVE S1
PI STA = 1+45.50
Y = 110366.668
X = 388114.801
DELTA = 13°50'16"
D = 57°17'45"
T = 12.13'
L = 24.15'
R = 100.00'
PC STA = 1+33.36
PT STA = 1+57.51

CURVE S2
PI STA = 3+08.82
Y = 110366.558
X = 387951.356
DELTA = 26°28'51"
D = 22°55'06"
T = 58.82'
L = 115.54'
R = 250.00'
PC STA = 2+50.00
PT STA = 3+65.55

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	ALIGNMENT DETAIL	SHEET 133	E

STH 167 WB-PGL - CURVE DATA

CURVE WB1
PI STA = 243+51.89
Y = 110453.280
X = 387884.545
DELTA = 2°30'14"
D = 0°47'12"
T = 159.20'
L = 318.35'
R = 7284.56'
PC STA = 241+92.69
Y = 110453.041
X = 387725.347
PT STA = 245+11.04
Y = 110460.473
X = 388043.581
BK = N89°54'50.3"E
AH = N87°24'36.2"E

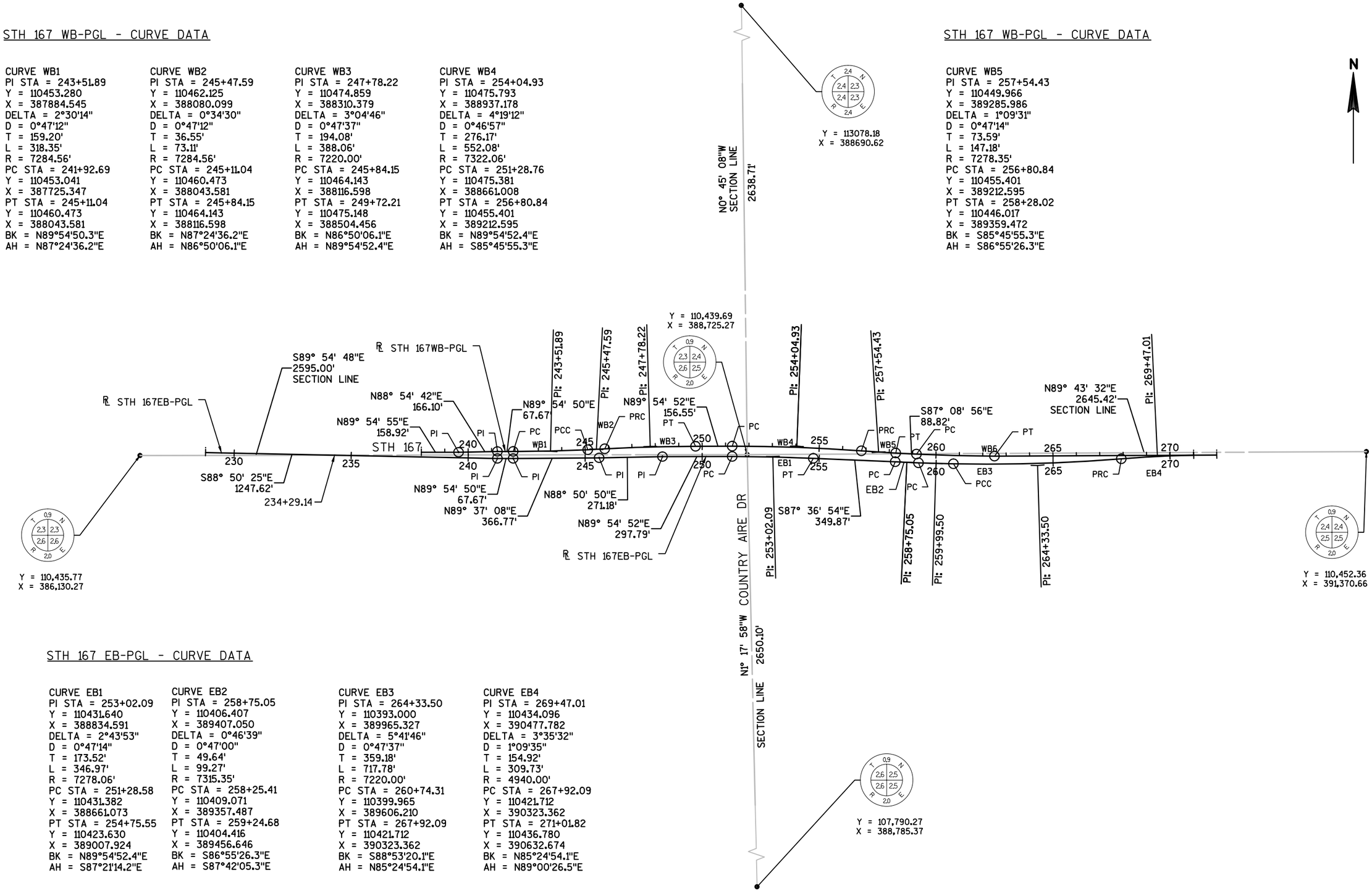
CURVE WB2
PI STA = 245+47.59
Y = 110462.125
X = 388080.099
DELTA = 0°34'30"
D = 0°47'12"
T = 36.55'
L = 73.11'
R = 7284.56'
PC STA = 245+11.04
Y = 110460.473
X = 388043.581
PT STA = 245+84.15
Y = 110464.143
X = 388116.598
BK = N87°24'36.2"E
AH = N86°50'06.1"E

CURVE WB3
PI STA = 247+78.22
Y = 110474.859
X = 388310.379
DELTA = 3°04'46"
D = 0°47'37"
T = 194.08'
L = 388.06'
R = 7220.00'
PC STA = 245+84.15
Y = 110464.143
X = 388116.598
PT STA = 249+72.21
Y = 110475.148
X = 388504.456
BK = N86°50'06.1"E
AH = N89°54'52.4"E

CURVE WB4
PI STA = 254+04.93
Y = 110475.793
X = 388937.178
DELTA = 4°19'12"
D = 0°46'57"
T = 276.17'
L = 552.08'
R = 7322.06'
PC STA = 251+28.76
Y = 110475.381
X = 388661.008
PT STA = 256+80.84
Y = 110455.401
X = 389212.595
BK = N89°54'52.4"E
AH = S85°45'55.3"E

STH 167 WB-PGL - CURVE DATA

CURVE WB5
PI STA = 257+54.43
Y = 110449.966
X = 389285.986
DELTA = 1°09'31"
D = 0°47'14"
T = 73.59'
L = 147.18'
R = 7278.35'
PC STA = 256+80.84
Y = 110455.401
X = 389212.595
PT STA = 258+28.02
Y = 110446.017
X = 389359.472
BK = S85°45'55.3"E
AH = S86°55'26.3"E



STH 167 EB-PGL - CURVE DATA

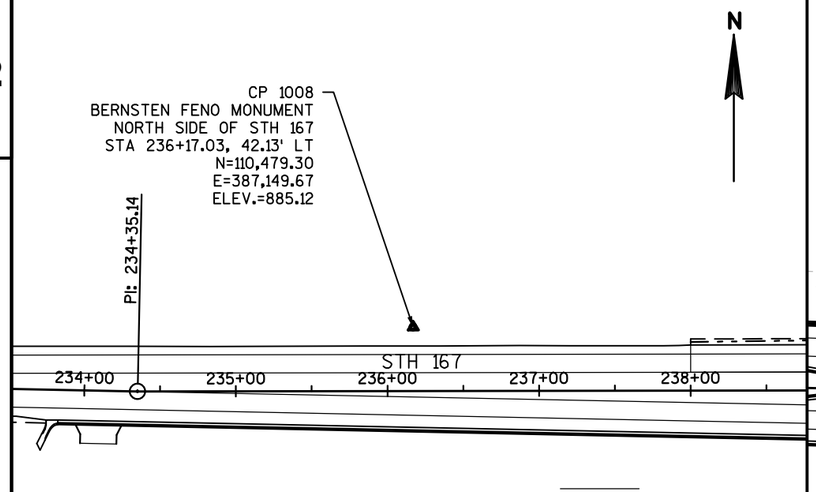
CURVE EB1
PI STA = 253+02.09
Y = 110431.640
X = 388834.591
DELTA = 2°43'53"
D = 0°47'14"
T = 173.52'
L = 346.97'
R = 7278.06'
PC STA = 251+28.58
Y = 110431.382
X = 388661.073
PT STA = 254+75.55
Y = 110423.630
X = 389007.924
BK = N89°54'52.4"E
AH = S87°21'14.2"E

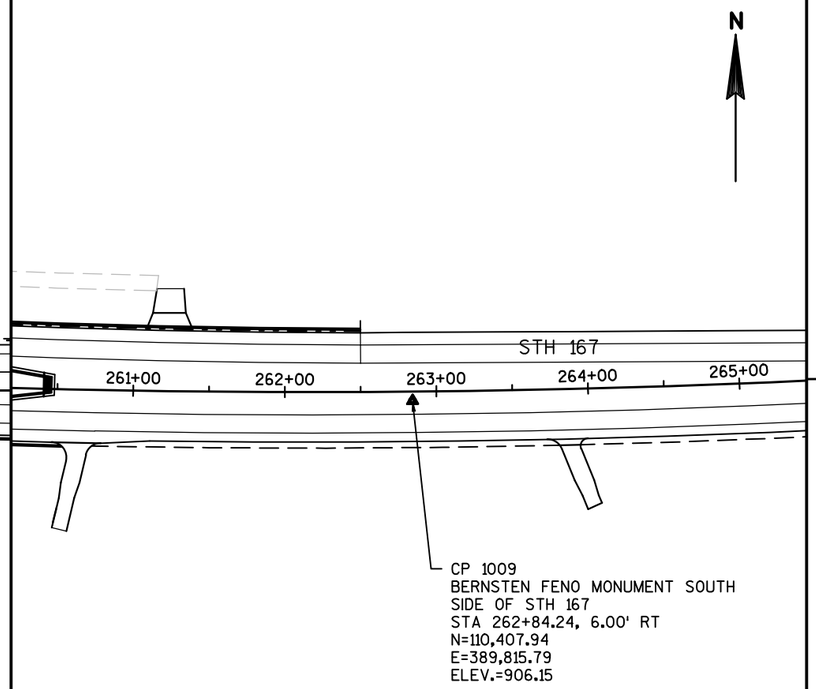
CURVE EB2
PI STA = 258+75.05
Y = 110406.407
X = 389407.050
DELTA = 0°46'39"
D = 0°47'00"
T = 49.64'
L = 99.27'
R = 7315.35'
PC STA = 258+25.41
Y = 110409.071
X = 389357.487
PT STA = 259+24.68
Y = 110404.416
X = 389456.646
BK = S86°55'26.3"E
AH = S87°42'05.3"E

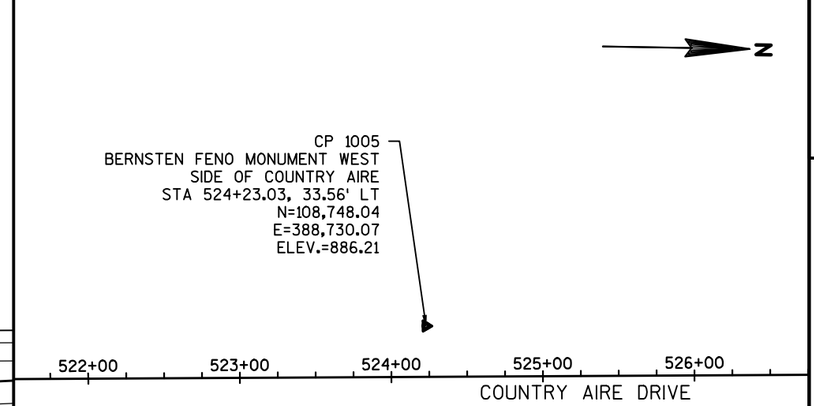
CURVE EB3
PI STA = 264+33.50
Y = 110393.000
X = 389965.327
DELTA = 5°41'46"
D = 0°47'37"
T = 359.18'
L = 717.78'
R = 7220.00'
PC STA = 260+74.31
Y = 110399.965
X = 389606.210
PT STA = 267+92.09
Y = 110421.712
X = 390323.362
BK = S88°53'20.1"E
AH = N85°24'54.1"E

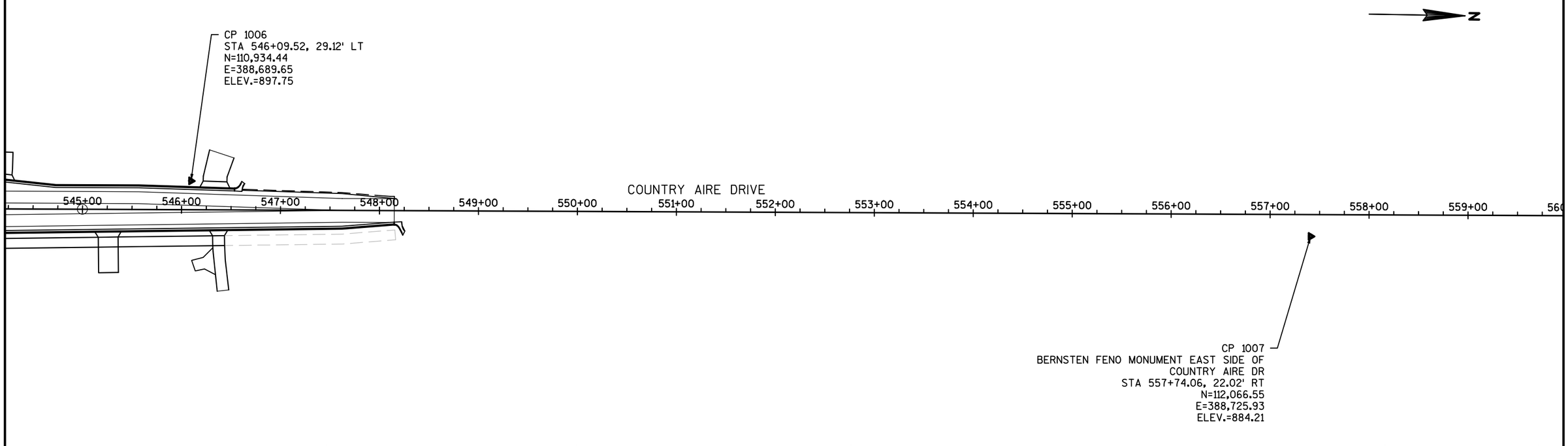
CURVE EB4
PI STA = 269+47.01
Y = 110434.096
X = 390477.782
DELTA = 3°35'32"
D = 1°09'35"
T = 154.92'
L = 309.73'
R = 4940.00'
PC STA = 267+92.09
Y = 110421.712
X = 390323.362
PT STA = 271+01.82
Y = 110436.780
X = 390632.674
BK = N85°24'54.1"E
AH = N89°00'26.5"E

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	ALIGNMENT DETAIL	SHEET 134	E









PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	SURVEY CONTROL	SHEET 135	E

1380-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	26.000	26.000
0004	201.0120	Clearing	ID	70.000	70.000
0006	201.0205	Grubbing	STA	26.000	26.000
0008	201.0220	Grubbing	ID	70.000	70.000
0010	203.0100	Removing Small Pipe Culverts	EACH	21.000	21.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	460.000	460.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	3,655.000	3,655.000
0016	204.0150	Removing Curb & Gutter	LF	755.000	755.000
0018	204.0205	Removing Utility Poles	EACH	2.000	2.000
0020	205.0100	Excavation Common	CY	32,003.000	32,003.000
0022	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	16.000	16.000
0024	213.0100	Finishing Roadway (project) 01. 1380-00-70	EACH	1.000	1.000
0026	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,300.000	1,300.000
0028	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	31,000.000	31,000.000
0030	305.0410	Aggregate Detours	TON	50.000	50.000
0032	310.0110	Base Aggregate Open-Graded	TON	276.000	276.000
0034	312.0110	Select Crushed Material	TON	24,000.000	24,000.000
0036	371.1000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	TON	31,000.000	31,000.000
0038	416.0170	Concrete Driveway 7-Inch	SY	146.000	146.000
0040	416.0190	Concrete Driveway 9-Inch	SY	75.000	75.000
0042	440.4410	Incentive IRI Ride	DOL	3,230.000	3,230.000
0044	455.0605	Tack Coat	GAL	2,250.000	2,250.000
0046	460.2000	Incentive Density HMA Pavement	DOL	7,320.000	7,320.000
0048	460.6223	HMA Pavement 3 MT 58-28 S	TON	7,250.000	7,250.000
0050	460.6224	HMA Pavement 4 MT 58-28 S	TON	4,150.000	4,150.000
0052	465.0105	Asphaltic Surface	TON	100.000	100.000
0054	465.0115	Asphaltic Surface Detours	TON	50.000	50.000
0056	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	300.000	300.000
0058	465.0315	Asphaltic Flumes	SY	49.000	49.000
0060	516.0500	Rubberized Membrane Waterproofing	SY	2.000	2.000
0062	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000
0064	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0066	521.1228	Apron Endwalls for Pipe Arch Steel 28x20-Inch	EACH	2.000	2.000
0068	521.1721	Apron Endwalls for Pipe Arch Sloped Side Drains Steel 21x15-Inch 6 to 1	EACH	2.000	2.000
0070	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	39.000	39.000
0072	521.3721	Pipe Arch Corrugated Steel 21x15-Inch	LF	27.000	27.000
0074	521.3728	Pipe Arch Corrugated Steel 28x20-Inch	LF	34.000	34.000
0076	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	4.000	4.000

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Line	Item	Item Description	Unit	Total	Qty
0078	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	5.000	5.000
0080	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	3.000	3.000
0082	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000
0084	522.2424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	141.000	141.000
0086	522.2614	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	1.000	1.000
0088	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	2.000	2.000
0090	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	12,589.000	12,589.000
0092	602.0410	Concrete Sidewalk 5-Inch	SF	14,915.000	14,915.000
0094	602.0420	Concrete Sidewalk 7-Inch	SF	320.000	320.000
0096	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	90.000	90.000
0098	606.0200	Riprap Medium	CY	92.000	92.000
0100	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	218.000	218.000
0102	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	295.000	295.000
0104	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	472.000	472.000
0106	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,160.000	1,160.000
0108	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	38.000	38.000
0110	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	31.000	31.000
0112	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	235.000	235.000
0114	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	247.000	247.000
0116	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	81.000	81.000
0118	608.2414	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	141.000	141.000
0120	611.0530	Manhole Covers Type J	EACH	6.000	6.000
0122	611.0606	Inlet Covers Type B	EACH	1.000	1.000
0124	611.0627	Inlet Covers Type HM	EACH	40.000	40.000
0126	611.0636	Inlet Covers Type HM-S	EACH	9.000	9.000
0128	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000
0130	611.2005	Manholes 5-FT Diameter	EACH	6.000	6.000

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Line	Item	Item Description	Unit	Total	Qty
0132	611.2044	Manholes 4x4-FT	EACH	1.000	1.000
0134	611.3004	Inlets 4-FT Diameter	EACH	14.000	14.000
0136	611.3230	Inlets 2x3-FT	EACH	32.000	32.000
0138	611.9800.S	Pipe Grates 01. 18-INCH	EACH	2.000	2.000
0140	611.9800.S	Pipe Grates 02. 24-INCH	EACH	1.000	1.000
0142	612.0104	Pipe Underdrain 4-Inch	LF	200.000	200.000
0144	612.0106	Pipe Underdrain 6-Inch	LF	2,600.000	2,600.000
0146	612.0204	Pipe Underdrain Unperforated 4-Inch	LF	100.000	100.000
0148	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	100.000	100.000
0150	612.0208	Pipe Underdrain Unperforated 8-Inch	LF	100.000	100.000
0152	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	161.000	161.000
0154	612.0700	Drain Tile Exploration	LF	500.000	500.000
0156	612.0804	Apron Endwalls for Underdrain Reinforced Concrete 4-Inch	EACH	8.000	8.000
0158	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	2.000	2.000
0160	616.0700.S	Fence Safety	LF	560.000	560.000
0162	619.1000	Mobilization	EACH	1.000	1.000
0164	620.0100	Concrete Corrugated Median	SF	1,135.000	1,135.000
0166	620.0300	Concrete Median Sloped Nose	SF	916.000	916.000
0168	623.0200	Dust Control Surface Treatment	SY	50,765.000	50,765.000
0170	624.0100	Water	MGAL	660.000	660.000
0172	625.0500	Salvaged Topsoil	SY	36,620.000	36,620.000
0174	627.0200	Mulching	SY	9,165.000	9,165.000
0176	628.1504	Silt Fence	LF	5,590.000	5,590.000
0178	628.1520	Silt Fence Maintenance	LF	5,590.000	5,590.000
0180	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0182	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0184	628.2004	Erosion Mat Class I Type B	SY	34,115.000	34,115.000
0186	628.2008	Erosion Mat Urban Class I Type B	SY	2,050.000	2,050.000
0188	628.2027	Erosion Mat Class II Type C	SY	2,000.000	2,000.000
0190	628.7005	Inlet Protection Type A	EACH	65.000	65.000
0192	628.7010	Inlet Protection Type B	EACH	3.000	3.000
0194	628.7015	Inlet Protection Type C	EACH	60.000	60.000
0196	628.7504	Temporary Ditch Checks	LF	265.000	265.000
0198	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0200	628.7560	Tracking Pads	EACH	4.000	4.000
0202	628.7570	Rock Bags	EACH	200.000	200.000
0204	629.0210	Fertilizer Type B	CWT	24.000	24.000
0206	630.0130	Seeding Mixture No. 30	LB	660.000	660.000

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Line	Item	Item Description	Unit	Total	Qty
0208	630.0200	Seeding Temporary	LB	990.000	990.000
0210	633.5200	Markers Culvert End	EACH	2.000	2.000
0212	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	85.000	85.000
0214	637.2210	Signs Type II Reflective H	SF	481.340	481.340
0216	637.2215	Signs Type II Reflective H Folding	SF	44.760	44.760
0218	637.2230	Signs Type II Reflective F	SF	197.380	197.380
0220	638.2102	Moving Signs Type II	EACH	3.000	3.000
0222	638.2602	Removing Signs Type II	EACH	20.000	20.000
0224	638.3000	Removing Small Sign Supports	EACH	20.000	20.000
0226	640.1303.S	Pond Liner Clay	CY	975.000	975.000
0228	642.5201	Field Office Type C	EACH	1.000	1.000
0230	643.0300	Traffic Control Drums	DAY	2,900.000	2,900.000
0232	643.0420	Traffic Control Barricades Type III	DAY	4,150.000	4,150.000
0234	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	21.000	21.000
0236	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	21.000	21.000
0238	643.0705	Traffic Control Warning Lights Type A	DAY	7,600.000	7,600.000
0240	643.0715	Traffic Control Warning Lights Type C	DAY	1,800.000	1,800.000
0242	643.0900	Traffic Control Signs	DAY	46,100.000	46,100.000
0244	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	12.000
0246	643.1000	Traffic Control Signs Fixed Message	SF	69.000	69.000
0248	643.5000	Traffic Control	EACH	1.000	1.000
0250	645.0112	Geotextile Type DF Schedule B	SY	1,200.000	1,200.000
0252	645.0120	Geotextile Type HR	SY	170.000	170.000
0254	646.1020	Marking Line Epoxy 4-Inch	LF	17,120.000	17,120.000
0256	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	11,445.000	11,445.000
0258	646.3020	Marking Line Epoxy 8-Inch	LF	4,333.000	4,333.000
0260	646.5020	Marking Arrow Epoxy	EACH	20.000	20.000
0262	646.5120	Marking Word Epoxy	EACH	9.000	9.000
0264	646.5320	Marking Railroad Crossings Epoxy	EACH	3.000	3.000
0266	646.6020	Marking Stop Line Epoxy 12-Inch	LF	24.000	24.000
0268	646.6120	Marking Stop Line Epoxy 18-Inch	LF	218.000	218.000
0270	646.6464.S	Cold Weather Marking Epoxy 4-Inch	LF	3,400.000	3,400.000
0272	646.6468.S	Cold Weather Marking Epoxy 8-Inch	LF	900.000	900.000
0274	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,628.000	2,628.000
0276	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	182.000	182.000
0278	646.8020	Marking Corrugated Median Epoxy	SF	350.000	350.000
0280	646.8120	Marking Curb Epoxy	LF	85.000	85.000
0282	646.8220	Marking Island Nose Epoxy	EACH	3.000	3.000
0284	646.9000	Marking Removal Line 4-Inch	LF	160.000	160.000
0286	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	485.000	485.000

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Line	Item	Item Description	Unit	Total	Qty
0288	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	300.000	300.000
0290	649.0550	Temporary Marking Arrow Removable Tape	EACH	2.000	2.000
0292	649.0650	Temporary Marking Word Removable Tape	EACH	1.000	1.000
0294	650.4000	Construction Staking Storm Sewer	EACH	71.000	71.000
0296	650.4500	Construction Staking Subgrade	LF	8,038.000	8,038.000
0298	650.5000	Construction Staking Base	LF	8,038.000	8,038.000
0300	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	12,589.000	12,589.000
0302	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0304	650.6500	Construction Staking Structure Layout (structure) 01. R-66-78	LS	1.000	1.000
0306	650.9000	Construction Staking Curb Ramps	EACH	8.000	8.000
0308	650.9910	Construction Staking Supplemental Control (project) 01. 1380-00-70	LS	1.000	1.000
0310	650.9920	Construction Staking Slope Stakes	LF	8,038.000	8,038.000
0312	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,954.000	1,954.000
0314	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,931.000	1,931.000
0316	652.0800	Conduit Loop Detector	LF	2,364.000	2,364.000
0318	653.0135	Pull Boxes Steel 24x36-Inch	EACH	7.000	7.000
0320	653.0140	Pull Boxes Steel 24x42-Inch	EACH	20.000	20.000
0322	654.0105	Concrete Bases Type 5	EACH	4.000	4.000
0324	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0326	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,155.000	1,155.000
0328	655.0240	Cable Traffic Signal 7-14 AWG	LF	434.000	434.000
0330	655.0270	Cable Traffic Signal 15-14 AWG	LF	1,182.000	1,182.000
0332	655.0305	Cable Type UF 2-12 AWG Grounded	LF	1,703.000	1,703.000
0334	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,540.000	1,540.000
0336	655.0610	Electrical Wire Lighting 12 AWG	LF	1,332.000	1,332.000
0338	655.0700	Loop Detector Lead In Cable	LF	9,233.000	9,233.000
0340	655.0800	Loop Detector Wire	LF	9,600.000	9,600.000
0342	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 167 & COUNTRY AIRE DR	LS	1.000	1.000
0344	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000
0346	657.0322	Poles Type 5-Aluminum	EACH	4.000	4.000
0348	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	4.000	4.000
0350	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000
0352	658.0174	Traffic Signal Face 4S 12-Inch	EACH	8.000	8.000
0354	658.0416	Pedestrian Signal Face 16-Inch	EACH	2.000	2.000
0356	658.0500	Pedestrian Push Buttons	EACH	2.000	2.000
0358	658.5069	Signal Mounting Hardware (location) 01. STH 167 & COUNTRY AIRE DR	LS	1.000	1.000
0360	659.1125	Luminaires Utility LED C	EACH	10.000	10.000

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Line	Item	Item Description	Unit	Total	Qty
0362	690.0150	Sawing Asphalt	LF	2,473.000	2,473.000
0364	690.0250	Sawing Concrete	LF	50.000	50.000
0366	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,500.000	1,500.000
0368	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,500.000	1,500.000
0370	SPV.0060	Special 01. SECTION CORNER MONUMENTS	EACH	1.000	1.000
0372	SPV.0060	Special 02. Clay Anti-Seepage Collar	EACH	1.000	1.000
0374	SPV.0060	Special 03. POND OUTLET CONTROL STRUCTURE	EACH	1.000	1.000
0376	SPV.0060	Special 04. CONCRETE BASES STRAIN POLE	EACH	4.000	4.000
0378	SPV.0060	Special 05. INSTALL STRAIN POLE	EACH	4.000	4.000
0380	SPV.0060	Special 06. INSTALL STRAIN POLE LUMINAIRE ARMS	EACH	6.000	6.000
0382	SPV.0090	Special 01. TIMBER FENCE	LF	161.000	161.000
0384	SPV.0090	Special 02. HEAVY DUTY SILT FENCE	LF	590.000	590.000
0386	SPV.0090	Special 03. MARKING CHEVRON EPOXY 12-INCH	LF	647.000	647.000
0388	SPV.0105	Special 01. TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET	LS	1.000	1.000
0390	SPV.0105	Special 02. TRANSPORT TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS	LS	1.000	1.000
0392	SPV.0105	Special 03. Construction Staking Detention Pond & Drainage Swale	LS	1.000	1.000
0394	SPV.0105	Special 04. OVERHEAD TRAFFIC SIGNAL CABLES	LS	1.000	1.000
0396	SPV.0165	Special 01. WALL MODULAR BLOCK GRAVITY R-66-78	SF	1,067.000	1,067.000
0398	SPV.0165	Special 02. CONSTRUCTION STAKING SIDEWALK	SF	5,267.000	5,267.000

3

CLEARING AND GRUBBING

ROADWAY	STATION	TO	STATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID
STH 167	232+00		234+00	2	--	2	--
STH 167	242+00		247+00	5	--	5	--
STH 167	250+00		252+00	2	--	2	--
STH 167	253+00		259+00	6	--	6	--
STH 167	261+00		266+00	5	--	5	--
COUNTRY AIRE DR	534+00		537+00	3	--	3	--
COUNTRY AIRE DR	543+00		545+00	2	--	2	--
COUNTRY AIRE DR	547+00		548+00	1	--	1	--
STH 167	BEGIN PROJECT		END PROJECT	--	20	--	20
COUNTRY AIRE DR	BEGIN PROJECT		END PROJECT	--	50	--	50
TOTAL				**26**	**70**	**26**	**70**

REMOVING CURB & GUTTER

ROADWAY	LOCATION	204.0150 REMOVING CURB & GUTTER LF
STH 167	NORTHEAST QUADRANT OF INTERSECTION	93
STH 167	SOUTHEAST QUADRANT OF INTERSECTION	65
STH 167	SOUTHWEST QUADRANT OF INTERSECTION	383
STH 167	NORTHWEST QUADRANT OF INTERSECTION	63
STH 167	STA 260+99 TO STA 262+50	151
TOTAL		**755**

REMOVING SMALL PIPE CULVERTS

ROADWAY	STATION	OFFSET		SIZE INCH	LENGTH FEET	TYPE	203.0100 REMOVING SMALL PIPE CULVERTS EACH
STH 167	233+86	25'	RT	18	42	CMCP	1
STH 167	240+73	48'	LT	18	34	CMCP	1
STH 167	241+52	23'	RT	18	42	CMCP	1
STH 167	243+36	--	--	30	68	RCCP	1
STH 167	244+87	33'	RT	18	24	CMCP	1
STH 167	245+55	42'	LT	18	28	CMCP	1
STH 167	247+21	42'	RT	18	34	CMCP	1
STH 167	247+79	44'	RT	18	34	CMCP	1
STH 167	254+00	--	--	30	76	RCCP	1
STH 167	254+93	41'	LT	18	28	CMCP	1
STH 167	256+37	44'	LT	18	62	CMCP	1
STH 167	258+73	51'	LT	18	26	CMCP	1
STH 167	259+84	51'	LT	18	29	CMCP	1
STH 167	260+54	23'	RT	18	28	CMCP	1
STH 167	265+82	26'	RT	18	34	CMCP	1
COUNTRY AIRE DR	537+17	20'	LT	18	22	CMCP	1
COUNTRY AIRE DR	538+54	21'	LT	18	24	CMCP	1
COUNTRY AIRE DR	542+03	--	--	18	59	CMCP	1
COUNTRY AIRE DR	542+22	--	--	18	59	CMCP	1
COUNTRY AIRE DR	544+14	21'	LT	18	23	CMCP	1
COUNTRY AIRE DR	545+14	26'	RT	18	22	CMCP	1
TOTAL							**21**

ASPHALT REMOVAL

ROADWAY	LOCATION	STA	TO	STA	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
STH 167	WEST OF W&S TRACK	--	--	--	460	--
STH 167 WB	--	228+86	-	238+00	--	1,820
STH 167 WB	--	262+50	-	271+49	--	1,835
TOTAL					**460**	**3,655**

REMOVING UTILITY POLES

ROADWAY	STATION	OFFSET	204.0205 REMOVING UTILITY POLES EACH
STH 167	241+98	90' LT	1
STH 167	242+95	45' RT	1
TOTAL			**2**

FINISHING ROADWAY

LOCATION	213.0100 FINISHING ROADWAY (1380-00-70) EACH
PROJECT	1
TOTAL	**1**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

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EARTHWORK SUMMARY

Division	From/To Station	Location	205.0100 Excavation Common (1)		Salvaged/ Unusable Pavement Material (4)	Available Material (5)	Reduced EBS in Fill (6)	Select Crushed Material = EBS Backfil (3)(7) CY	Unexpanded Fill	Expanded Fill (8)	Mass Ordinate +/- (9)	Waste
			Cut (2)	EBS Excavation (3)			Factor 0.80	Factor 1.00		Factor 1.30		
Division 1	229+30 -- 271+49	STH 167	20,929	2,616	2,350	18,579	0	2,616	13,360	17,368	1,211	1,211
	534+05 -- 548+15	Country Aire Drive	5,797	725	300	5,497	0	725	1,023	1,330	4,167	4,167
	---	Pond	1,936	0	0	1,936	0	0	1,146	1,490	446	446
Grand Total			28,662	3,341	2,650	26,012	0	3,341	15,529	20,187	5,825	5,825
Total Common Exc			32,003					6,000 (TON)				

Notes:

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

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

(3) EBS Excavation to be backfilled with Select Crushed Material, Item number 312.0110.

(4) Salvaged/Unusable Pavement Material

(5) Available Material = Cut - Salvaged/Unusuable Pavement Material

(6) Reduced EBS in Fill - It is assumed that all EBS excavation will be wasted because this is a waste project.

(7) Expanded EBS Backfill - It is assumed that EBS excavation will be backfilled with Select Crushed Material. EBS backfill is not included as part of the mass ordinate. Assumed unit weight of Select Crushed Material = 1.8 Tons/CY.

(8) Expanded Fill Factor = 1.3

(9) 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.

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AGGREGATE ITEMS

ROADWAY	STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	371.1000.S QMP BASE AGGREGATE DENSE 1 1/4 INCH COMPACTION TON	623.0200 DUST CONTROL SURFACE TREATMENT SY	624.0100 WATER MGAL	COMMENTS
STH 167	228+86	-	238+00	30	--	--	--	510	5	
STH 167	228+86	-	241+00	225	3,900	--	3,900	5,715	85	
STH 167	241+00	-	260+75	--	15,500	18,000	15,500	22,630	310	INCLUDES SELECT CRUSHED MATERIAL FOR ENTIRE INTERSECTION
STH 167	260+75	-	271+49	300	3,800	--	3,800	5,605	85	
STH 167	262+50	-	271+49	30	--	--	--	500	5	
COUNTRY AIRE DR	534+05	-	540+00	25	2,500	--	2,500	3,720	55	
COUNTRY AIRE DR	542+72		548+15	25	2,300	--	2,300	3,140	50	
DRIVEWAYS	PROJECT			140	--	--	--	415	5	
UNDISTRIBUTED	PROJECT			525	3,000	6,000	3,000	8,530	65	ADDITIONAL UNDSTRIBUTED SELECT CRUSHED INCLD. FOR EBS
TOTAL				**1,300**	**31,000**	**24,000**	**31,000**	**50,765**	**660**	

CONCRETE DRIVEWAY ITEMS

LOCATION	416.0170 CONCRETE DRIVEWAY 7-INCH SY	416.0190 CONCRETE DRIVEWAY 9-INCH SY
PROJECT	146	75
TOTAL	**146**	**75**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

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ASPHALT ITEMS

ROADWAY	STA	TO	STA	LOCATION	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	455.0605 TACK COAT GAL	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	460.2000 INCENTIVE DENSITY HMA PAVEMENT DOL	COMMENTS
STH 167	227+70	-	229+21	---	--	75	--	--	35	--	50	
STH 167	228+86	-	238+00	LT	--	225	--	--	130	10	150	MILL AND RESURFACE SECTION
STH 167	228+86	-	271+49	---	5,800	2,900	--	220	1,700	--	5,570	RECONSTRUCTION AREAS
STH 167	262+50	-	271+49	LT	--	225	--	--	130	6	150	MILL AND RESURFACE SECTION
COUNTRY AIRE DR	534+05	-	540+85	---	800	400	--	30	230	--	770	
COUNTRY AIRE DR	542+23	-	546+44	RT	--	--	100	--	--	--	--	SHARED-USE PATH
COUNTRY AIRE DR	541+70	-	548+15	---	650	325	--	50	25	--	630	
TOTAL					**7,250**	**4,150**	**100**	**300**	**2,250**	**16**	**7,320**	

INCENTIVE IRI RIDE

LOCATION	STATION	TO	STATION	440.4410 INCENTIVE IRI RIDE DOL
STH 167	228+86		271+49	3,230
TOTAL				**3,230**

ASPHALTIC FLUMES

ROADWAY	STA	LOCATION	465.0315 ASPHALTIC FLUMES SY
STH 167	233+75	RT	10
STH 167	242+48	RT	7
STH 167	265+53	LT	7
COUNTRY AIRE DR	534+88	LT	5
COUNTRY AIRE DR	536+97	RT	7
COUNTRY AIRE DR	546+53	LT	6
COUNTRY AIRE DR	548+15	RT	7
TOTAL			**49**

CONCRETE COLLARS

LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH
UNDISTRIBUTED	4
TOTAL	**4**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

CULVERT PIPE ITEMS

ROADWAY	PIPE NUMBER	INLET END STR	INLET END STATION	INLET END OFFSET	INLET END ELEV	DISCHARGE END STR	DISCHARGE END STATION	DISCHARGE END OFFSET	DISCHARGE END ELEV	SLOPE	521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	521.3721 CULVERT PIPE CORRUGATED STEEL 21x15-INCH LF	521.3728 CULVERT PIPE CORRUGATED STEEL 28X20-INCH LF	522.2424 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL HE-IV 24x38-INCH LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
STH 167	CP120	120	243+40	74.1' LT	874.15	121	243+40	66.9' RT	873.73	0.30%	--	--	--	141	1
STH 167	CP500	500	256+82	103.3' LT	889.43	501	256+43	105.3' LT	888.55	2.25%	39	--	--	--	--
STH 167	CP502	502	265+86	53.8' RT	900.23	503	266+13	53.8' RT	899.22	3.75%	--	27	--	--	--
STH 167	CP504	504	245+66	82.1' RT	875.33	505	245+32	80.8' RT	875.16	0.50%	--	--	34	--	--
									TOTAL		**39**	**27**	**34**	**141**	**1**

NOTES
1) STATIONS, OFFSETS, AND ELEVATIONS SHOWN ARE TO THE END OF THE PIPE, NOT THE APRON END OF ENDWALLS
2) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
3) LENGTH OF APRON ENDWALLS ARE NOT INCLUDED IN CULVERT PIPE LENGTHS.

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

CULVERT & STORM SEWER ENDWALL SUMMARY

ROADWAY	STRUCTURE NUMBER	STATION	OFFSET FT		521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH EACH	521.1228 APRON ENDWALLS FOR PIPE ARCH STEEL 28X20-INCH EACH	521.1721 APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 21x15-INCH 6:1 EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.2614 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14x23-INCH EACH	522.2624 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24x38-INCH EACH	611.9800.S.01 PIPE GRATES 18-INCH EACH	611.9800.S.02 PIPE GRATES 24-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH
STH 167	100	240+76	49.8'	LT	--	--	--	--	1	--	--	--	--	--	--	--	1
STH 167	101	241+40	79.4'	LT	--	--	--	--	1	--	--	--	--	--	--	--	1
STH 167	107	242+41	70.9'	RT	--	--	--	--	--	--	--	1	--	--	--	--	1
STH 167	120	243+40	74.1	LT	--	--	--	--	--	--	--	--	1	--	--	1	--
STH 167	121	243+40	66.9'	RT	--	--	--	--	--	--	--	--	1	--	--	1	--
STH 167	135	244+22	58.6'	RT	--	--	--	--	1		--	--	--	--	--	--	1
STH 167	144	246+00	77.4'	RT	--	--	--	--	--	1	--	--	--	--	--	--	1
COUNTRY AIRE DR	172	540+11	74.9'	RT	--	--	--	1	--	--	--	--	--	--	--	--	1
COUNTRY AIRE DR	182	539+08	61.0'	RT	--	--	--	1	--	--	--	--	--	--	--	--	1
STH 167	190	253+99	91.9'	LT	--	--	--	--	1	--	--	--	--	1	--	--	1
STH 167	197	253+89	83.2'	RT	--	--	--	--	--	--	1	--	--	--	--	--	1
STH 167	200	256+00	95.6'	LT	--	--	--	--	--	1	--	--	--	--	1	--	1
STH 167	215	260+70	53.6'	RT	--	--	--	--	1	--	--	--	--	1	--	--	1
STH 167	301	253+65	201.3'	RT	--	--	--	--	--	1	--	--	--	--	--	--	1
STH 167	400	244+30	80.8'	RT	--	--	--	1	--	--	--	--	--	--	--	--	1
STH 167	401	244+22	82.1'	RT	--	--	--	1	--	--	--	--	--	--	--	--	1
STH 167	500	256+82	103.3'	LT	1	--	--	--	--	--	--	--	--	--	--	--	--
STH 167	501	256+43	105.3'	LT	1	--	--	--	--	--	--	--	--	--	--	--	--
STH 167	502	265+86	53.8'	RT	--	--	1	--	--	--	--	--	--	--	--	--	--
STH 167	503	266+13	53.8'	RT	--	--	1	--	--	--	--	--	--	--	--	--	--
STH 167	504	245+32	80.8'	RT	--	1	--	--	--	--	--	--	--	--	--	--	--
STH 167	505	245+66	82.1'	RT	--	1	--	--	--	--	--	--	--	--	--	--	--
			TOTAL		**2**	**2**	**2**	**4**	**5**	**3**	**1**	**1**	**2**	**2**	**1**	**2**	**14**

NOTES
1) STATIONS, OFFSETS, AND ELEVATIONS SHOWN ARE TO THE END OF THE PIPE, NOT THE APRON END OF ENDWALLS
2) JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL CONCRETE APRON ENDWALLS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.
*ADDITIONAL QUANTITIES LISTED ELSEWHERE

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

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STORM SEWER PIPE ITEMS

ROADWAY	PIPE NUMBER	STATION	FROM STR	TO STR	INLET ELEV	DISCH ELEV	ACTUAL LENGTH FT	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 CLASS III 15-INCH LF	608.0318 CLASS III 18-INCH LF	608.0324 CLASS III 24-INCH LF	608.0330 CLASS III 30-INCH LF	608.0336 CLASS III 36-INCH LF	608.0412 CLASS IV 12-INCH LF	608.0415 CLASS IV 15-INCH LF	608.0418 CLASS IV 18-INCH LF	608.2414 HORIZONTAL ELLIPTICAL HE-IV 14x23-INCH LF
STH 167	P100	240+76	100	102	877.90	876.26	66.89	2.45%	--	--	67	--	--	--	--	--	--	--
STH 167	P101	241+40	101	102	876.47	876.26	31.01	0.68%	--	--	31	--	--	--	--	--	--	--
STH 167	P102	241+42	102	103	876.16	876.12	14.74	0.30%	--	--	15	--	--	--	--	--	--	--
STH 167	P103	241+50	103	104	876.07	875.96	36.91	0.30%	--	--	--	--	--	--	--	--	--	37
STH 167	P104	241+77	104	105	875.91	875.84	24.13	0.30%	--	--	--	--	--	--	--	--	--	24
STH 167	P105	241+90	105	106	875.79	875.67	39.92	0.30%	--	--	--	--	--	--	--	--	--	40
STH 167	P105A	240+80	105A	105	876.18	875.84	112.84	0.30%	--	--	--	--	--	--	--	113	--	--
STH 167	P106	242+11	106	107	875.62	875.50	40.29	0.30%	--	--	--	--	--	--	--	--	--	40
STH 167	P130	244+40	130	131	874.51	874.43	25.99	0.30%	--	--	--	--	--	--	--	--	26	--
STH 167	P130A	244+84	130A	130	875.23	875.01	43.99	0.50%	--	--	--	--	--	--	44	--	--	--
STH 167	P131	244+40	131	132	874.38	874.31	23.35	0.30%	--	--	--	--	--	--	--	--	23	--
STH 167	P131A	244+84	131A	131	875.10	874.88	44.00	0.50%	--	--	--	--	--	--	44	--	--	--
STH 167	P132	244+35	132	133	874.26	874.18	25.99	0.30%	--	--	--	--	--	--	--	--	26	--
STH 167	P132A	244+79	132A	132	874.98	874.76	44.00	0.50%	--	--	--	--	--	--	44	--	--	--
STH 167	P133	244+35	133	134	874.13	874.11	6.00	0.30%	--	--	--	--	--	--	--	--	6	--
STH 167	P133A	244+78	133A	133	874.85	874.63	43.42	0.50%	--	--	--	--	--	--	43	--	--	--
STH 167	P134	244+35	134	135	874.06	874.00	19.10	0.30%	--	--	19	--	--	--	--	--	--	--
STH 167	P140	246+75	140	141	876.98	876.90	26.01	0.30%	--	26	--	--	--	--	--	--	--	--
STH 167	P141	246+75	141	142	876.80	876.72	25.98	0.30%	--	26	--	--	--	--	--	--	--	--
STH 167	P142	246+75	142	143	876.62	876.48	47.71	0.30%	--	48	--	--	--	--	--	--	--	--
STH 167	P143	246+76	143	144	875.73	875.50	76.73	0.30%	--	--	--	77	--	--	--	--	--	--
STH 167	P150	248+95	150	151	881.38	881.12	26.00	1.00%	--	26	--	--	--	--	--	--	--	--
STH 167	P151	248+95	151	152	881.02	880.91	10.89	1.00%	--	10	--	--	--	--	--	--	--	--
STH 167	P152	248+95	152	153	880.81	880.67	14.06	1.00%	--	14	--	--	--	--	--	--	--	--
STH 167	P153	248+95	153	154	880.57	880.48	8.64	1.00%	--	8	--	--	--	--	--	--	--	--
STH 167	P154	248+95	154	155	880.38	879.98	40.00	1.00%	--	40	--	--	--	--	--	--	--	--
STH 167	P155	248+95	155	143	879.23	875.83	218.80	1.60%	--	--	--	219	--	--	--	--	--	--
STH 167	P156	248+95	156	155	880.12	879.98	7.00	2.00%	--	7	--	--	--	--	--	--	--	--
COUNTRY AIRE DR	P160	542+27	160	162	886.50	886.40	32.43	0.30%	--	--	--	--	--	--	32	--	--	--
COUNTRY AIRE DR	P161	541+90	161	162	886.54	886.40	27.89	0.50%	--	--	--	--	--	--	28	--	--	--
COUNTRY AIRE DR	P162	542+07	162	164	886.15	885.97	60.35	0.30%	--	--	--	--	--	--	--	60	--	--
COUNTRY AIRE DR	P163	542+24	163	164	886.05	885.97	25.80	0.30%	--	--	--	--	--	--	--	26	--	--
COUNTRY AIRE DR	P163A	542+69	163A	163	886.39	886.15	48.19	0.50%	--	--	--	--	--	--	--	48	--	--
COUNTRY AIRE DR	P164	542+02	164	165	885.72	885.54	59.68	0.30%	--	--	60	--	--	--	--	--	--	--
STH 167	P165	252+41	165	166	885.04	885.01	10.00	0.30%	--	--	--	10	--	--	--	--	--	--
STH 167	P166	252+41	166	167	884.91	884.85	21.29	0.30%	--	--	--	21	--	--	--	--	--	--
STH 167	P167	252+56	167	168	884.75	884.72	9.12	0.30%	--	--	--	9	--	--	--	--	--	--
						SUBTOTAL			--	205	192	336	--	--	235	247	81	141

STORM SEWER PIPE GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES.
2) PIPE LENGTHS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

(CONTINUED ON NEXT PAGE)

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

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STORM SEWER PIPE ITEMS

ROADWAY	PIPE NUMBER	STATION	FROM STR	TO STR	INLET ELEV	DISCH ELEV	ACTUAL LENGTH FT	SLOPE	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 CLASS III 15-INCH LF	608.0318 CLASS III 18-INCH LF	608.0324 CLASS III 24-INCH LF	608.0330 CLASS III 30-INCH LF	608.0336 CLASS III 36-INCH LF	608.0412 CLASS IV 12-INCH LF	608.0415 CLASS IV 15-INCH LF	608.0418 CLASS IV 18-INCH LF	608.2414 HORIZONTAL ELLIPTICAL HE-IV 14x23-INCH LF
STH 167	P168	252+59	168	194	884.62	884.20	141.26	0.30%	--	--	--	141	--	--	--	--	--	--
COUNTRY AIRE DR	P170	540+59	170	171	886.38	885.64	74.03	1.00%	74	--	--	--	--	--	--	--	--	--
COUNTRY AIRE DR	P171	540+41	171	172	885.54	885.04	49.82	1.00%	50	--	--	--	--	--	--	--	--	--
COUNTRY AIRE DR	P180	538+98	180	181	884.56	884.27	58.00	0.50%	58	--	--	--	--	--	--	--	--	--
COUNTRY AIRE DR	P181	538+98	181	182	884.17	884.03	28.12	0.50%	28	--	--	--	--	--	--	--	--	--
STH 167	P190	253+99	190	191	887.56	886.86	27.88	2.50%	--	--	28	--	--	--	--	--	--	--
STH 167	P191	253+99	191	192	886.52	885.58	47.02	2.00%	--	--	47	--	--	--	--	--	--	--
STH 167	P192	254+00	192	193	885.48	885.00	24.01	2.00%	--	--	24	--	--	--	--	--	--	--
STH 167	P193	254+01	193	194	884.90	884.70	10.00	2.00%	--	--	10	--	--	--	--	--	--	--
STH 167	P194	254+01	194	195	883.70	883.62	26.01	0.30%	--	--	--	--	26	--	--	--	--	--
STH 167	P195	254+02	195	196	883.52	883.48	12.00	0.30%	--	--	--	--	12	--	--	--	--	--
STH 167	P196	254+02	196	197	882.99	882.90	31.13	0.30%	--	--	--	--	--	31	--	--	--	--
STH 167	P200	256+00	200	201	887.53	887.31	31.57	0.71%	--	--	--	32	--	--	--	--	--	--
STH 167	P201	256+00	201	202	887.21	886.76	61.99	0.72%	--	--	--	62	--	--	--	--	--	--
STH 167	P202	256+00	202	203	886.66	886.53	17.41	0.72%	--	--	--	17	--	--	--	--	--	--
STH 167	P203	256+00	203	204	886.43	886.24	26.01	0.72%	--	--	--	26	--	--	--	--	--	--
STH 167	P204	256+00	204	205	886.14	886.05	12.00	0.72%	--	--	--	12	--	--	--	--	--	--
STH 167	P205	256+00	205	196	885.95	883.98	196.65	1.00%	--	--	--	197	--	--	--	--	--	--
STH 167	P210	259+00	210	211	894.86	894.60	26.00	1.00%	--	26	--	--	--	--	--	--	--	--
STH 167	P211	259+00	211	212	894.50	894.23	26.92	1.00%	--	26	--	--	--	--	--	--	--	--
STH 167	P212	259+00	212	213	894.13	893.87	26.00	1.00%	--	26	--	--	--	--	--	--	--	--
STH 167	P213	259+00	213	214	893.77	893.65	12.00	1.00%	--	12	--	--	--	--	--	--	--	--
STH 167	P214	259+00	214	205	890.56	886.05	301.01	1.50%	--	--	--	301	--	--	--	--	--	--
STH 167	P215	259+00	215	214	901.12	894.27	171.41	4.00%	--	--	171	--	--	--	--	--	--	--
STH 167	P300	253+35	300	301	880.59	880.20	36.20	1.09%	--	--	--	36	--	--	--	--	--	--
STH 167	P400	243+68	400	401	874.18	874.00	7.99	2.25%	8	--	--	--	--	--	--	--	--	--
SUBTOTAL									218	90	280	824	38	31	0	0	0	0
						TOTAL			**218**	**295**	**472**	**1,160**	**38**	**31**	**235**	**247**	**81**	**141**

STORM SEWER PIPE GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES.
2) PIPE LENGTHS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

(CONTINUED FROM PREVIOUS PAGE)

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

STORM SEWER STRUCTURE ITEMS

ROADWAY	STRUCTURE NO.	STA	OFFSET FT		RIM OR FLANGE ELEV	LOWEST INVERT ELEV	STR DEPTH FT	611.0530 MANHOLE COVERS TYPE J EACH	611.0606 INLET COVERS TYPE B EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2044 MANHOLES 4x4-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.02 CLAY ANTI-SEEPAGE COLLAR EACH	SPV.0060.03 POND OUTLET CONTROL STRUCTURE EACH	COMMENT
STH 167	102	241+42	48.5'	LT	879.67	876.16	2.74	--	1	--	--	--	--	--	1	--	1	--	--	USE 2" ADJUSTMENT RING
STH 167	103	241+50	36.5'	LT	879.49	876.07	2.65	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	104	241+77	9.5'	LT	879.45	875.91	2.77	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	105	241+90	9.5'	RT	879.51	875.79	2.95	--	--	1	--	--	1	--	--	--	1	--	--	
STH 167	105A	240+80	35.5'	RT	880.33	876.18	3.36	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	106	242+11	44.1'	RT	879.80	875.62	2.67	1	--	--	--	1	--	--	--	--	1	--	--	USE 2-6" ADJ. RINGS FOR FUTURE
STH 167	130	244+40	36.5'	LT	878.38	874.51	3.08	--	--	--	1	--	--	--	--	1	1	--	--	
STH 167	130A	244+84	36.5'	LT	878.49	875.23	2.76	--	--	1	--	--	--	--	--	1	1	--	--	USE 2" ADJUSTMENT RING
STH 167	131	244+40	9.5'	LT	878.22	874.38	3.05	--	--	--	1	--	--	--	--	1	1	--	--	
STH 167	131A	244+84	9.5'	LT	878.33	875.10	2.40	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	132	244+35	12.3'	RT	878.38	874.26	3.33	--	--	--	1	--	--	--	--	1	1	--	--	
STH 167	132A	244+79	13.6'	RT	878.49	874.98	2.68	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	133	244+35	39.3'	RT	878.54	874.13	3.66	--	--	--	1	--	--	--	--	1	1	--	--	
STH 167	133A	244+78	42.9'	RT	878.60	874.85	2.92	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	134	244+35	44.8'	RT	879.15	874.06	4.34	1	--	--	--	1	--	--	--	--	1	--	--	
STH 167	140	246+75	39.0'	LT	881.25	876.90	3.54	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	141	246+75	12.0'	LT	881.09	876.80	3.48	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	142	246+75	12.9'	RT	881.21	876.62	3.78	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	143	246+75	61.6'	RT	881.13	875.73	4.65	--	--	1	--	--	1	--	--	--	1	--	--	
STH 167	150	248+95	43.1'	LT	886.55	881.38	4.36	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	151	248+95	16.1'	LT	886.39	881.02	4.56	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	152	248+95	6.2'	LT	886.00	880.81	4.38	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	153	248+95	8.9'	RT	886.24	880.57	4.86	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	154	248+95	16.5'	RT	886.46	880.38	5.27	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	155	248+95	57.0'	RT	886.33	879.23	6.35	1	--	--	--	--	1	--	--	--	1	--	--	
STH 167	156	248+95	64.5'	RT	886.20	880.12	5.27	--	--	1	--	--	--	--	--	1	1	--	--	
COUNTRY AIRE DR	160	542+27	52.2'	LT	889.65	886.50	2.32	--	--	1	--	--	--	--	--	1	1	--	--	
COUNTRY AIRE DR	161	541+90	47.9'	LT	889.80	886.54	2.43	--	--	--	1	--	--	--	1	--	1	--	--	
COUNTRY AIRE DR	162	542+07	26.8'	LT	890.04	886.15	3.08	--	--	--	1	--	--	--	1	--	1	--	--	
COUNTRY AIRE DR	163	542+24	47.1'	RT	890.14	886.05	3.28	--	--	--	1	--	--	--	1	--	1	--	--	
COUNTRY AIRE DR	163A	542+69	28.9'	RT	890.44	886.39	3.24	--	--	1	--	--	--	--	1	--	1	--	--	
COUNTRY AIRE DR	164	542+02	33.5'	RT	890.30	885.72	3.79	--	--	--	1	--	--	--	1	--	1	--	--	
STH 167	165	252+41	16.5'	LT	890.61	885.04	4.82	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	166	252+41	7.5'	LT	890.50	884.91	4.84	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	167	252+56	8.0'	RT	890.44	884.75	4.94	--	--	1	--	--	--	--	1	--	1	--	--	
STH 167	168	252+59	15.5'	RT	890.66	884.62	5.29	--	--	1	--	--	--	--	1	--	1	--	--	
COUNTRY AIRE DR	170	540+59	36.7'	LT	889.66	886.38	2.45	--	--	--	1	--	--	--	1	--	1	--	--	
						SUBTOTAL		3	1	24	9	2	3	0	14	18	37	0	0	

STORM SEWER STRUCTURE GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES.
2) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND FIELD INLETS.
3) STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSTMENT RING.
   - CASTING HEIGHT EQUALS 0.7396 FT FOR TYPE J COVERS; 0.8333 FT FOR TYPE B COVERS; 0.5 FT FOR TYPE H COVERS; 0 FT FOR TYPE MS COVERS.
   - ADJUSTMENT RING HEIGHT EQUALS 0.5 FT, UNLESS OTHERWISE NOTED.

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

(CONTINUED ON NEXT PAGE)

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

3

STORM SEWER STRUCTURE ITEMS

ROADWAY	STRUCTURE NO.	STA	OFFSET FT		RIM OR FLANGE ELEV	LOWEST INVERT ELEV	STR DEPTH FT	611.0530 MANHOLE COVERS TYPE J EACH	611.0606 INLET COVERS TYPE B EACH	611.0627 INLET COVERS TYPE HM EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.2044 MANHOLES 4x4-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	650.4000* CONSTRUCTION STAKING STORM SEWER EACH	SPV.0060.02 CLAY ANTI-SEEPAGE COLLAR EACH	SPV.0060.03 POND OUTLET CONTROL STRUCTURE EACH	COMMENT
COUNTRY AIRE DR	171	540+41	34.4'	RT	889.81	885.54	3.44	--	--	1	--	--	--	--	--	1	1	--	--	
COUNTRY AIRE DR	180	538+98	23.5'	LT	888.02	884.56	2.63	--	--	1	--	--	--	--	--	1	1	--	--	
COUNTRY AIRE DR	181	538+98	35.5'	RT	888.01	884.17	3.01	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	191	253+99	64.5'	LT	891.13	886.52	3.82	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	192	254+00	16.5'	LT	891.38	885.48	5.11	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	193	254+01	7.5'	RT	890.93	884.90	5.24	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	194	254+01	16.5'	RT	891.38	883.70	6.97	--	--	1	--	--	--	1	--	--	1	--	--	
STH 167	195	254+02	43.5'	RT	891.53	883.52	7.30	--	--	1	--	--	1	--	--	--	1	--	--	
STH 167	196	254+02	55.0'	RT	892.04	882.99	7.60	1	--	--	--	--	1	--	--	--	1	--	--	USE 2-6" ADJ. RINGS FOR FUTURE
STH 167	201	256+00	64.5'	LT	892.28	887.21	4.32	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	202	256+00	1.5'	LT	892.24	886.66	4.83	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	203	256+00	14.9'	RT	892.37	886.43	5.19	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	204	256+00	41.9'	RT	892.53	886.14	5.14	--	--	1	--	--	--	--	--	1	1	--	--	USE 2-6" ADJ. RINGS FOR FUTURE
STH 167	205	256+00	53.4'	RT	893.04	885.95	6.10	1	--	--	--	--	1	--	--	--	1	--	--	
STH 167	210	259+00	43.4'	LT	900.16	894.86	4.31	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	211	259+00	16.4'	LT	900.00	894.50	4.69	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	212	259+00	9.5'	RT	898.93	894.13	3.99	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	213	259+00	36.5'	RT	899.09	893.77	4.51	--	--	1	--	--	--	--	--	1	1	--	--	
STH 167	214	259+00	48.0'	RT	899.60	890.56	7.55	1	--	--	--	1	--	--	--	--	1	--	--	USE 2-6" ADJ. RINGS FOR FUTURE
STH 167	300	253+35	179.9'	RT	885.49	880.59	--	--	--	--	--	--	--	--	--	--	1	1	1	SEE CONST. DETAIL FOR STR DEPTH
SUBTOTAL								3	0	16	0	1	3	1	0	14	20	1	1	
						TOTAL		**6**	**1**	**40**	**9**	**3**	**6**	**1**	**14**	**32**	**57**	**1**	**1**	

STORM SEWER STRUCTURE GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES.
2) RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE FOR INLET GRATES OR THE CENTER OF THE COVER FOR MANHOLES AND FIELD INLETS.
3) STRUCTURE DEPTH = RIM ELEVATION MINUS LOWEST INVERT PLUS PIPE THICKNESS MINUS CASTING HEIGHT MINUS ADJUSTMENT RING.
   - CASTING HEIGHT EQUALS 0.7396 FT FOR TYPE J COVERS; 0.8333 FT FOR TYPE B COVERS; 0.5 FT FOR TYPE H COVERS; 0 FT FOR TYPE MS COVERS.
   - ADJUSTMENT RING HEIGHT EQUALS 0.5 FT, UNLESS OTHERWISE NOTED.

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE

(CONTINUED FROM PREVIOUS PAGE)

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	MISCELLANEOUS QUANTITIES	SHEET 150	E

FILE NAME : PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

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CURB AND GUTTER ITEMS

ROADWAY	STATION	TO STATION	LOCATION	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
STH 167	233+82	242+49	STH 167 EB W OF RR	870
STH 167	241+08	241+92	STH 167 WB W OF RR	82
STH 167	241+73	242+27	MEDIAN ISLAND W SIDE OF INTERSECTION: W OF RR	94
STH 167/COUNTRY AIRE DR	242+12	251+65	NW QUAD OF INTERSECTION	1,376
STH 167	242+42	251+41	MEDIAN ISLAND W SIDE OF INTERSECTION: E OF RR	2,671
STH 167/COUNTRY AIRE DR	242+80	251+96	SW QUAD OF INTERSECTION	1,415
STH 167	248+83	251+62	EB LEFT TURN ISLAND	560
STH 167	251+14	251+70	SW PORKCHOP ISLAND	141
STH 167	251+33	251+68	NW PORKCHOP ISLAND	134
STH 167/COUNTRY AIRE DR	251+90	262+50	NE QUAD OF INTERSECTION	1,617
STH 167	252+15	252+76	NE PORKCHOP ISLAND	155
STH 167	252+18	252+55	SE PORKCHOP ISLAND	141
STH 167	252+23	255+11	WB LEFT TURN ISLAND	579
STH 167/COUNTRY AIRE DR	252+41	260+55	SE QUAD OF INTERSECTION	1,143
STH 167	252+45	260+41	MEDIAN ISLAND E SIDE OF INTERSECTION	1,611
TOTAL				**12,589**

CONCRETE SIDEWALK ITEMS

ROADWAY	LOCATION	STATION	TO STATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0420 CONCRETE SIDEWALK 7-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
STH 167	NW QUAD OF INTERSECTION	240+98	251+31	5,260	--	30
STH 167	MEDIAN ISLANDS W SIDE OF INTERSECTION	248+61	251+55	3,255	--	--
STH 167	SW PORKCHOP ISLAND	251+21	251+67	665	--	--
STH 167	NW PORKCHOP ISLAND	251+37	251+65	630	--	20
STH 167	NE PORKCHOP ISLAND	252+18	252+67	795	--	20
STH 167	SE PORKCHOP ISLAND	252+21	252+51	710	--	--
STH 167	MEDIAN ISLANDS E SIDE OF INTERSECTION	252+30	255+04	3,600	--	--
STH 167	NE QUAD OF INTERSECTION	252+45	252+54	--	--	20
COUNTRY AIRE DR	DRIVEWAY	545+20	545+36	--	200	--
COUNTRY AIRE DR	DRIVEWAY	546+31	546+44	--	120	--
TOTAL				**14,915**	**320**	**90**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

PIPE UNDERDRAIN ITEMS

ROADWAY	STATION	TO	STATION	310.0110 BASE AGGREGATE OPEN-GRADED TON	612.0104 PIPE UNDERDRAIN 4-INCH LF	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0804 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 4-INCH EACH	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	645.0112 GEOTEXTILE TYPE DF SCHEDULE B SY
STH 167	238+00		241+50	24	--	350	--	--	156
STH 167	241+12		241+48	4	--	36	--	--	16
STH 167	241+22		241+74	4	--	52	--	--	24
STH 167	241+38		241+88	4	--	50	--	--	23
STH 167	241+52		241+90	4	--	39	--	--	18
STH 167	241+79		242+13	4	--	34	--	--	16
STH 167	241+92		242+27	4	--	35	--	--	16
STH 167	242+01		242+50	4	--	57	--	1	26
STH 167	243+88		244+38	4	--	50	--	--	23
STH 167	243+88		244+38	4	--	50	--	--	23
STH 167	243+83		244+33	4	--	50	--	--	23
STH 167	243+83		244+33	4	--	50	--	--	23
STH 167	244+86		245+36	4	--	50	--	--	23
STH 167	244+86		245+36	4	--	50	--	--	23
STH 167	244+81		245+31	4	--	50	--	--	23
STH 167	244+80		245+30	4	--	50	--	--	23
STH 167	246+77		247+27	4	--	50	--	--	23
STH 167	246+77		247+27	4	--	50	--	--	23
STH 167	246+77		247+27	4	--	50	--	--	23
STH 167	246+77		247+27	4	--	50	--	--	23
STH 167	248+97		249+47	4	--	50	--	--	23
STH 167	248+97		249+47	4	--	50	--	--	23
STH 167	248+97		249+47	4	--	50	--	--	23
STH 167	248+97		249+47	4	--	50	--	--	23
STH 167	252+12		252+38	4	--	56	--	--	25
STH 167	252+43		252+93	4	--	50	--	--	23
STH 167	252+38		252+54	2	--	16	--	--	8
STH 167	256+02		256+52	4	--	50	--	--	23
STH 167	256+02		256+52	4	--	50	--	--	23
STH 167	256+02		256+52	4	--	50	--	--	23
STH 167	256+02		256+52	4	--	50	--	--	23
STH 167	252+58		253+08	4	--	50	--	--	23
STH 167	259+00		259+50	4	--	50	--	--	23
STH 167	259+00		259+50	4	--	50	--	--	23
STH 167	259+00		259+50	4	--	50	--	--	23
STH 167	259+00		262+50	24	--	350	--	--	156
COUNTRY AIRE DR	539+00		540+43	10	--	151	--	--	68
COUNTRY AIRE DR	539+90		540+42	6	--	73	--	1	33
COUNTRY AIRE DR	542+00		542+22	4	--	50	--	--	23
COUNTRY AIRE DR	542+25		542+51	2	--	29	--	--	13
COUNTRY AIRE DR	541+71		542+05	4	--	34	--	--	16
COUNTRY AIRE DR	542+09		542+19	2	--	10	--	--	5
UNDISTRIBUTED				90	200	278	8	--	138
TOTAL				**276**	**200**	**2,600**	**8**	**2**	**1,200**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

UNDISTRIBUTED PIPE UNDERDRAIN ITEMS

ROADWAY	STATION	TO	STATION	612.0204 PIPE UNDERDRAIN UNPERFORATED 4-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0208 PIPE UNDERDRAIN UNPERFORATED 8-INCH LF	612.0700 DRAIN TILE EXPLORATION LF
UNDISTRIBUTED				100	100	100	500
TOTAL				**100**	**100**	**100**	**500**

SAFETY FENCE

ROADWAY	LOCATION	616.0700.S FENCE SAFETY LF
STH 167	SW QUAD OF INTERSECTION APPROXIMATELY 2' BEYOND CUT NEEDED TO CONSTRUCT RETAINING WALL R-66-78	210
STH 167	EAST SIDE OF CANADIAN NATIONAL RAILWAY CROSSING	250
COUNTRY AIRE DR	APPROX STA 539+00 LT. LOCATE AT LIMITS OF DRIVEWAY RELOCATION	100
TOTAL		**560**

CONCRETE MEDIAN ITEMS

ROADWAY	STA	LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
STH 167	241+22	ON C/L	1,135	--
STH 167	248+83	RT	--	60
STH 167	251+33	LT	--	43
STH 167	251+55	RT	--	57
STH 167	252+30	LT	--	57
STH 167	252+52	RT	--	43
STH 167	255+04	LT	--	60
STH 167	260+40	ON C/L	--	104
STH 167	--	NE PORKCHOP ISLAND	--	150
STH 167	--	SE PORKCHOP ISLAND	--	114
STH 167	--	SW PORKCHOP ISLAND	--	114
STH 167	--	NW PORKCHOP ISLAND	--	114
TOTAL			**1,135**	**916**

3

CONSTRUCTION STAKING

ROADWAY	STATION	TO	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6500* CONSTRUCTION STAKING STRUCTURE LAYOUT (R-66-78) LS	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL PROJECT 1380-00-70 LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	SPV.0105.03 CONSTRUCTION STAKING DETENTION POND AND DRAINAGE SWALE LS	SPV.0165.02 CONSTRUCTION STAKING SIDEWALK SF
STH 167 EB	228+86	TO	271+49	4,263	4,263	12,589	--	--	--	4,263	--	--
STH 167 WB	238+00	TO	262+50	2,450	2,450	--	--	--	--	2,450	--	5,267
COUNTRY AIRE DR	534+05	TO	540+85	680	680	--	--	--	--	680	--	--
COUNTRY AIRE DR	541+70	TO	548+15	645	645	--	--	--	--	645	--	--
TOTAL				**8,038**	**8,038**	**12,589**	**1**	**8**	**1**	**8,038**	**1**	**5,267**

*CATEGORY 0300

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

EROSION CONTROL ITEMS

ROADWAY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS I TYPE B SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY	SPV.0090.02 HEAVY DUTY SILT FENCE LF
STH 167	4,115	4,115	20,270	1,630	1,590	150	8	--	--	52	2	48	61	110	470
COUNTRY AIRE DR	355	355	7,022	--	--	60	--	--	--	--	--	--	10	25	--
UNDISTRIBUTED	1,120	1,120	6,823	420	410	55	2	4	200	13	1	12	21	35	120
TOTAL	**5,590**	**5,590**	**34,115**	**2,050**	**2,000**	**265**	**10**	**4**	**200**	**65**	**3**	**60**	**92**	**170**	**590**

RESTORATION ITEMS

ROADWAY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB
STH 167	23,490	5,875	15	425	635
COUNTRY AIRE DR	7,025	1,760	5	125	190
UNDISTRIBUTED	6,105	1,530	4	110	165
TOTAL	**36,620**	**9,165**	**24**	**660**	**990**

EROSION CONTROL MOBILIZATION

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT	8	4
TOTAL	**8**	**4**

POND LINER CLAY

LOCATION	640.1303.S POND LINER CLAY CY
STH 167 SE QUAD POND	975
TOTAL	**975**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

TRAFFIC CONTROL ITEMS

ROADWAY	DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS EACH**	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	646.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH**	646.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH**	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0900* TRAFFIC CONTROL SIGNS EACH**	643.0900* TRAFFIC CONTROL SIGNS DAY
STH 167/PILGRIM RD/STH 145 INTERSECTION	150	16	2,400	6	900	11	11	8	1,200	10	1,500	20	3,000
STH 167/EISENHOWER DR INTERSECTION	150	--	--	4	600	--	--	8	1,200	--	--	14	2,100
STH 167/STH 181 INTERSECTION	150	--	--	3	450	--	--	6	900	--	--	4	600
COUNTRY AIRE DR	150	--	--	10	1,500	--	--	20	3,000	--	--	12	1,800
UNDISTRIBUTED		480		690		10	10	1,260		300		1,500	
TOTAL		**2,900**		**4,150**		**21**	**21**	**7,600**		**1,800**		**9,000**	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
** INFORMATION ONLY

TEMPORARY MARKING ITEMS

ROADWAY	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	649.0150 TERMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW) LF	649.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE) LF	649.0550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	649.0650 TEMPORARY MARKING WORD REMOVABLE TAPE EACH
STH 167/PILGRIM RD/STH 145 INTERSECTION	AT LANE CLOSURE	160	485	300	2	1
TOTAL		**160**	**485**	**300**	**2**	**1**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

MAINTAINING DETOURS

LOCATION	305.0410 AGGREGATE DETOURS TON	465.0115 ASPHALTIC SURFACE DETOURS TON
PROJECT	50	50
TOTAL	**50**	**50**

TRAFFIC CONTROL DETOUR ITEMS

ROADWAY	DURATION DAYS	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	CYCLES	SIGNS	643.0900* TRAFFIC CONTROL SIGNS EACH**	DAY
STH 167 DETOUR	150	10	1	10	206	30,900
UNDISTRIBUTED		2	--	--		6,180
TOTAL		**12**				**37,100**

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
** INFORMATION ONLY

TRAFFIC CONTROL

LOCATION	643.5000 TRAFFIC CONTROL EACH
PROJECT	1
TOTAL	**1**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

PAVEMENT MARKING ITEMS

			646.1020			646.1040	646.3020		646.5020	646.5120	646.5320	646.6020	646.6120	646.7120	
			MARKING LINE												
				EPOXY 4-INCH		GROOVED WET REF EPOXY 4-INCH		EPOXY 8-INCH						MARKING DIAGONAL EPOXY 12-INCH	
				3 FT LINE 9 FT SKIP	12.5 FT LINE 37.5 FT SKIP			3 FT LINE 9 FT SKIP	MARKING ARROW EPOXY	MARKING WORD EPOXY	MARKING RAILROAD CROSSINGS EPOXY	MARKING STOP LINE EPOXY 12-INCH	MARKING STOP LINE EPOXY 18-INCH	10 FT SPACING C-C	25 FT SPACING C-C
ROADWAY	STATION	TO STATION	YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	EACH	EACH	EACH	LF	LF	WHITE	YELLOW
			LF	LF	LF	LF	LF	LF						LF	LF
STH 167	228+00	232+00	1,483	--	--	929	--	--	--	--	1	24	--	--	65
STH 167	232+00	236+00	1,600	--	--	800	--	--	--	--	--	--	--	--	261
STH 167	236+00	240+00	1,600	--	--	800	--	--	--	--	1	--	--	--	392
STH 167	240+00	244+00	1,260	19	--	1,056	--	--	--	--	--	--	--	218	159
STH 167	244+00	248+00	801	44	--	1,023	610	84	2	--	1	--	--	--	--
STH 167	248+00	252+00	636	--	--	1,458	884	--	2	2	--	--	58	--	--
STH 167	252+00	256+00	676	--	--	1,517	927	--	2	2	--	--	58	--	--
STH 167	256+00	260+00	800	29	--	1,054	565	66	2	--	--	--	--	--	--
STH 167	260+00	264+00	1,465	--	--	800	--	--	--	--	--	--	--	--	699
STH 167	264+00	268+00	1,600	--	--	800	--	--	--	--	--	--	--	--	583
STH 167	268+00	272+00	1,254	--	--	697	--	--	--	--	--	--	--	--	75
COUNTRY AIRE DR	534+00	541+00	1,798	67	--	270	672	88	7	3	--	--	51	--	88
COUNTRY AIRE DR	541+00	548+50	1,729	60	--	241	349	88	5	2	--	--	51	--	88
UNDISTRIBUTED			--	--	200	--	--	--	--	--	--	--	--	--	--
SUBTOTAL			16,700	220	200	11,445	4,007	326	20	9	3	24	218	218	2,410
TOTAL				**17,120**		**11,445**	**4,333**		**20**	**9**	**3**	**24**	**218**	**2,628**	

			646.7420	646.8020	646.8120	646.8220	646.6464.S	646.6468.S	SPV.0090.03
			MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH	MARKING CORRUGATED MEDIAN EPOXY	MARKING CURB EPOXY YELLOW	MARKING ISLAND NOSE EPOXY	COLD WEATHER MARKING EPOXY 4-INCH	COLD WEATHER MARKING EPOXY 8-INCH	MARKING CHEVRON EPOXY 12-INCH
ROADWAY	STATION	TO STATION	LF	SF	LF	EACH	LF	LF	LF
STH 167	228+00	232+00	--	--	--	--	--	--	--
STH 167	232+00	236+00	--	--	--	--	--	--	--
STH 167	236+00	240+00	--	--	--	--	--	--	--
STH 167	240+00	244+00	--	350	--	1	--	--	--
STH 167	244+00	248+00	--	--	--	--	--	--	100
STH 167	248+00	252+00	--	--	43	1	--	--	225
STH 167	252+00	256+00	--	--	42	1	--	--	232
STH 167	256+00	260+00	--	--	--	--	--	--	90
STH 167	260+00	264+00	--	--	--	--	--	--	--
STH 167	264+00	268+00	--	--	--	--	--	--	--
STH 167	268+00	272+00	--	--	--	--	--	--	--
COUNTRY AIRE DR	534+00	541+00	--	--	--	--	--	--	--
COUNTRY AIRE DR	541+00	548+50	182	--	--	--	--	--	--
UNDISTRIBUTED			--	--	--	--	3,400	900	--
SUBTOTAL			182	350	85	3	3,400	900	647
TOTAL			**182**	**350**	**85**	**3**	**3,400**	**900**	**647**

3

TEMPORARY TRAFFIC CONTROL SIGNS

ROADWAY	SIGN NO.	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF
STH 167 EB	FM-100	25.5
STH 167 WB	FM-101	25.5
FRIESTADT RD	FM-102	9.0
FRIESTADT RD	FM-103	9.0
TOTAL		**69.0**

MOBILIZATION

LOCATION	619.1000 MOBILIZATION EACH
PROJECT	1
TOTAL	**1**

FIELD OFFICE

642.5201

LOCATION	FIELD OFFICE TYPE C EACH
PROJECT	1
TOTAL	**1**

SAW CUTTING ITEMS

ROADWAY	STATION		STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
STH 167	228+85	-	238+00	933	--	
STH 167		234+00		24	--	DRIVEWAY
STH 167		237+14		53	--	DRIVEWAY
STH 167		240+77		22	--	DRIVEWAY
STH 167		241+03		120	--	DRIVEWAY
STH 167		260+48		10	--	DRIVEWAY
STH 167		261+15		18	--	DRIVEWAY
STH 167	262+50	-	271+49	922	--	
STH 167		265+84		22	3	DRIVEWAY
STH 167		271+49		34	--	MATCHPOINT
COUNTRY AIRE DR		534+05		24	--	MATCHPOINT
COUNTRY AIRE DR		537+37		9	--	DRIVEWAY
COUNTRY AIRE DR		546+28		26	--	DRIVEWAY
COUNTRY AIRE DR		546+37		12	--	DRIVEWAY
COUNTRY AIRE DR		548+15		24	--	MATCHPOINT
UNDISTRIBUTED		---		220	47	
TOTAL				**2,473**	**50**	

SECTION CORNER MONUMENTS

LOCATION	STA	SPV.0060.01 SECTION CORNER MONUMENTS EACH
COUNTRY AIRE DR	541+14.35	1
TOTAL		**1**

ALL ITEMS ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

TYPE II SIGN REMOVAL **1380-00-70 STH 167**

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	REMARKS / SIGN LOCATION
1R	W10-1	--	1	1	--
2R	R2-1	45 MPH	1	1	--
3R	R2-1	45 MPH	1	1	--
4R	W10-1	--	1	1	--
5R	W10-1	--	1	1	--
6R	R2-1	45 MPH	1	1	--
7R	R2-1	45 MPH	1	1	--
8R	W10-1	--	1	1	--
9R	R1-1	--	1	1	--
10R	R1-1	--	1	1	--
11R	R2-1	45 MPH	1	1	--
12R	R2-1	45 MPH	1	1	--
13R	R2-1	45 MPH	1	1	--
14R	NOT USED				
15R	W10-1	--	1	1	--
16R	W3-1	--	1	1	--
17R	R2-1	40 MPH	1	1	--
18R	R2-1	40 MPH	1	1	--
19R	W2-2	--	1	1	--
20R	W3-1	--	1	1	--
21R	W2-1	--	1	1	--
TOTALS			20	20	

3

SHEET 1 OF 1

3

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]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	W6-1(2S)	--	36	x	36	--	9.000	--	1	--	--	--
2	R2-1(2S)	45 MPH	24	x	30	5.000	--	--	1	--	--	--
3	W6-3(2S)	--	36	x	36	--	9.000	--	1	--	--	--
4	R2-1(2S)	45 MPH	24	x	30	5.000	--	--	1	--	--	--
5	W10-1(2S)	--	36	x	36	--	7.070	--	1	--	--	--
6	W5-52R(2S)	--	12	x	36	--	3.000	--	1	--	--	4 FT MOUNT HEIGHT
7	W10-1(2S)	--	36	x	36	--	7.070	--	1	--	--	--
8	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
9	R5-1(2M)	--	36	x	36	9.000	--	--	1	--	--	--
10	R3-4(2S)	--	24	x	24	4.000	--	--	1	--	--	--
11	R4-7(3)	--	36	x	48	12.000	--	--	1	--	--	--
12	W5-56(2S)	--	18	x	18	--	2.250	--	--	--	11	--
13	R5-1A(2M)	--	42	x	30	8.750	--	--	1	--	--	--
14	W6-2(2M)	--	36	x	36	--	9.000	--	1	--	--	--
15	W10-1(2S)	--	36	x	36	--	7.070	--	1	--	--	--
16	R6-2R(2S)	--	24	x	30	5.000	--	--	1	--	--	--
17	R3-20L(2M)	--	24	x	36	6.000	--	--	1	--	--	--
18	D1-61	<-- COUNTRY AIRE DR -->	90	x	24	15.000	--	--	2	--	--	--
19	R4-4(2M)	--	36	x	30	7.500	--	--	1	--	--	--
20	R3-8W(2M)	--	54	x	30	11.250	--	--	2	--	--	--
21	R2-1(2M)	45 MPH	30	x	36	7.500	--	--	1	--	--	--
22	J4-1(2M)	--	24	x	36	6.000	--	--	1	--	--	--
	M3-4	--	24	x	12			--				
	M1-6	STH 167	24	x	24			--				
23	R3-20LL(2M)	--	24	x	36	6.000	--	--	1	--	--	--
24	R4-7(2M)	--	24	x	30	5.000	--	--	1	--	--	--
25	R10-50(2M)	--	30	x	36	7.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
26	R6-2L(2M)	--	30	x	36	7.500	--	--	1	--	--	--
27	R1-1(2M)	--	36	x	36	7.460	--	--	1	--	--	--
28	R6-3(2M)	--	30	x	24	5.000	--	--	1	--	--	--
29	R1-1F(2M)	--	36	x	36	--	--	7.460	--	--	28	--
30	W12-1D(2M)	--	24	x	24	--	4.000	--	1	--	--	2 FT MOUNT HEIGHT
31	R10-50(2M)	--	30	x	36	7.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
32	R5-1(2M)	--	36	x	36	9.000	--	--	1	--	--	--

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]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	634.0618 WOOD POSTS 4"X6"x18' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
33	R1-1(2M)	--	36	x	36	7.460	--	--	1	--	--	--
34	R1-1F(2M)	--	36	x	36	--	--	7.460	1	--	--	--
35	R1-1F(2M)	--	36	x	36	--	--	7.460	1	--	--	--
36	W12-1D(2M)	--	24	x	24	--	4.000	--	1	--	--	2 FT MOUNT HEIGHT
37	R5-1(2M)	--	36	x	36	9.000	--	--	--	--	35	BACK OF SIGN #35
38	R10-50(2M)	--	30	x	36	7.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
39	M1-94S	[67] MEQUON RD	96	x	18	12.000	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
40	M1-94S	[67] MEQUON RD	96	x	18	12.000	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
41	M1-94S	COUNTRY AIRE DR	108	x	18	13.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
42	M1-94S	COUNTRY AIRE DR	108	x	18	13.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
43	R4-7(2M)	--	24	x	30	5.000	--	--	1	--	--	--
44	R6-2L(2M)	--	30	x	36	7.500	--	--	1	--	--	--
45	R6-3(2M)	--	30	x	24	5.000	--	--	1	--	--	--
46	R1-1F(2M)	--	36	x	36	--	--	7.460	--	--	45	--
47	R1-1(2M)	--	36	x	36	7.460	--	--	1	--	--	--
48	W12-1D(2M)	--	24	x	24	--	4.000	--	1	--	--	2 FT MOUNT HEIGHT
49	R10-50(2M)	--	30	x	36	7.500	--	--	--	--	--	ON SPAN WIRE - BRACKET INCIDENTAL
50	R5-1(2M)	--	36	x	36	9.000	--	--	1	--	--	--
51	R1-1(2M)	--	36	x	36	7.460	--	--	1	--	--	--
52	R5-1(2M)	--	36	x	36	9.000	--	--	--	--	53	BACK OF SIGN #53
53	R1-1F(2M)	--	36	x	36	--	--	7.460	1	--	--	--
54	R1-1F(2M)	--	36	x	36	--	--	7.460	1	--	--	--
55	W12-1D(2M)	--	24	x	24	--	4.000	--	1	--	--	2 FT MOUNT HEIGHT
56	R3-20LL(2M)	--	24	x	36	6.000	--	--	1	--	--	--
57	J4-1(2M)	--	24	x	36	6.000	--	--	1	--	--	--
	M3-2	--	24	x	12							
	M1-6	STH 167	24	x	24							
58	W6-2(2M)	--	36	x	36	--	9.000	--	1	--	--	--
59	R6-2R(2S)	--	24	x	30	5.000	--	--	1	--	--	--
60	R2-1(2M)	45 MPH	30	x	36	7.500	--	--	1	--	--	--
61	R5-1A(2M)	--	42	x	30	8.750	--	--	--	--	60	BACK OF SIGN #60
62	R3-20L(2M)	--	24	x	36	6.000	--	--	1	--	--	--

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]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
63	R4-4(2M)	--	36	x	30	7.500	--	--	1	--	--	--
64	R6-2R(2S)	--	24	x	30	5.000	--	--	1	--	--	--
65	R3-8W(2M)	--	54	x	30	11.250	--	--	2	--	--	--
66	D1-61	<-- COUNTRY AIRE DR -->	90	x	24	15.000	--	--	2	--	--	--
67	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
68	R3-4(2S)	--	24	x	24	4.000	--	--	--	--	69	BACK OF SIGN #69
69	R4-7(3)	--	36	x	48	12.000	--	--	1	--	--	--
70	W5-56(2S)	--	18	x	18	--	2.250	--	--	--	69	--
71	R5-1(2M)	--	36	x	36	9.000	--	--	1	--	--	--
72	W6-3(2S)	--	36	x	36	--	9.000	--	1	--	--	--
73	W3-3	--	--	x	--	--	--	--	1	1	--	MOVE TO NEW WOOD POST
74	R2-1(2S)	45 MPH	24	x	30	5.000	--	--	1	--	--	--
75	W6-1(2S)	--	36	x	36	--	9.000	--	1	--	--	--
76	J1-1(2S)	--	24	x	39	6.500	--	--	1	--	--	--
	M2-1	--	24	x	15							
	M1-6	STH 167	24	x	24							
77	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
78	R3-8W(2M)	--	54	x	30	11.250	--	--	2	--	--	--
79	W10-1(2S)	--	36	x	36	--	7.070	--	1	--	--	--
80	NOT USED	--	--	x	--	--	--	--	--	--	--	--
81	R2-1(2S)	40 MPH	24	x	30	5.000	--	--	1	--	--	--
82	J3-2(2S)	--	48	x	57	19.000	--	--	1	--	--	--
	M3-4	--	24	x	12							
	M1-6	STH 167	24	x	24							
	M6-1	--	21	x	21							
	M3-2	--	24	x	12							
	M1-6	STH 167	24	x	24							
	M6-1	--	21	x	21							

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]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	634.0618 WOOD POSTS 4"X 6"x18' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
83	J3-2(2S)	--	48	x	57	19.000	--	--	1	--	--	--
	M3-2	--	24	x	12							
	M1-6	STH 167	24	x	24							
	M6-1	--	21	x	21							
	M3-4	--	24	x	12							
	M1-6	STH 167	24	x	24							
	M6-1	--	21	x	21							
84	R2-1(2S)	40 MPH	24	x	30	5.000	--	--	1	--	--	--
85	W2-2(2S)	--	30	x	30	--	6.250	--	1	--	--	--
86	R3-8W(2M)	--	54	x	30	11.250	--	--	2	--	--	--
87	--	PARK ENTRANCE AHEAD	--	x	--	--	--	--	1	1	--	MOVE FROM STA 542+75
88	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL
89	J1-1(2S)	--	24	x	39	6.500	--	--	1	--	--	--
	M2-1	--	21	x	15							
	M1-6	STH 167	24	x	24							
90	W10-1(2S)	--	36	x	36	--	7.070	--	1	--	--	SHEET 2 OF 20
91	W23-2(2S)	--	36	x	36	--	9.000	--	--	--	--	TEMPORARY FLAGS INCIDENTAL- SHT 5
92	W23-2(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL - SHT 9
93	W23-2(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL- SHT 15
94	W23-2(2S)	--	36	x	36	--	9.000	--	1	--	--	TEMPORARY FLAGS INCIDENTAL - SHT 19
95	--	NO PARKING BETWEEN SIGNS	--	x	--	--	--	--	1	1	--	MOVE TO NEW WOOD POST -SHT 18
96	W10-1	--	24	x	24	--	3.140	--	1	--	--	SHEET 5 OF 20
97	W10-1	--	24	x	24	--	3.140	--	1	--	--	SHEET 6 OF 20
--	--	--	--	x	--	--	--	--	--	--	--	--
TOTALS						481.340	197.380	44.760	85	3		

3

3

SUMMARY OF STATE FURNISHED MATERIALS - FOR INFORMATION ONLY

QUANTITY	UNIT	DESCRIPTION
1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET
4	EACH	STRAIN POLE AND STRAIN POLE HARDWARE
6	EACH	LUMINAIRE ARMS STEEL 15-FT

3

3

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CB1	PB1	--	30
PB1	PB2	--	57
PB2	PB3	--	70
PB2	PB4	--	236
PB4	PB5	220	--
PB5	PB6	--	58
PB6	PB7	127	--
PB4	PB8	--	68
PB8	PB9	--	86
PB8	PB10	169	--
PB10	PB11	176	--
PB8	PB12	--	138
PB12	PB13	--	48
PB13	PB14	--	118
PB14	PB15	--	70
PB15	PB16	--	62
PB16	PB17	--	42
PB15	PB18	195	--
PB18	PB19	150	--
PB15	PB20	--	210
PB20	PB21	--	82
PB21	PB22	--	102
PB21	PB23	173	--
PB23	PB24	150	--
PB21	PB25	--	138
PB25	PB26	--	48
PB26	PB27	--	150
PB27	CB1	--	24
PB3	SB1	--	48
PB9	SB2	--	24
PB13	SB5	135	--
SB5	SB6	160	--
PB17	SB3	--	10
PB22	SB4	--	12
PB26	SB7	139	--
SB7	SB8	160	--
	TOTALS	1954	1931

LOOP DETECTOR SCHEDULE

LOOP NUMBER	HOMERUN PB	STATION	LOCATION	SIZE (FT)X(FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
11	PB25	251+09.7	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	124	220
12	PB25	251+37.8	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	74	124	232
21 (FUTURE)	PB11	256+04.2	40.0' LT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	543	440
22	PB11	256+04.5	28.0' LT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	543	560
23 (FUTURE)	PB10	254+44.6	40.0' LT	6X6	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	367	400
24	PB10	254+45.1	28.0' LT	6X6	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	367	550
31	PB16	540+25.7	0.0' RT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	124	370	382
32	PB16	540+53.7	0.0' RT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	116	370	358
33	PB17	540+68.8	0.0' RT	6X10	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	391	386
41	PB7	545+70.2	11.3' LT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	56	569	290
42	PB6	544+30.7	12.0' LT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	473	320
43	PB3	542+25.2	12.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	100	81	310
44	PB3	541+97.2	12.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	81	280
51	PB12	252+75.8	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	70	267	220
52	PB12	252+47.8	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	76	267	238
61 (FUTURE)	PB24	247+85.9	40.7' RT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	516	430
62	PB24	247+85.8	28.7' RT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	516	580
63 (FUTURE)	PB23	249+36.2	40.0' RT	6X6	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	366	390
64	PB23	249+36.1	28.0' RT	6X6	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	366	510
71	PB3	542+31.6	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	134	81	412
72	PB3	542+03.6	0.0' LT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	118	81	364
81	PB19	536+86.3	11.7' RT	6X15	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	684	460
82	PB18	538+36.3	12.0' RT	6X10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	534	410
83	PB16	540+31.4	12.0' RT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	98	370	304
84	PB16	540+59.4	12.0' RT	6X20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	90	391	280
85	PB17	540+77.4	12.0' RT	6X10	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)	66	391	274
							TOTALS	2364	9233	9600

** LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

STH 167 & COUNTRY AIRE DRIVE

ALL ITEMS ARE CATEGORY 0200 UNLESS OTHERWISE NOTED

PULL BOXES STEEL

PULL BOX NO.	STATION	LOCATION	653.0135 PULL BOXES STEEL 24X36-INCH EACH	653.0140 PULL BOXES STEEL 24X42-INCH EACH
PB1	542+28.0	72.0' LT	--	1
PB2	542+35.1	53.9' LT	--	1
PB3	542+07.5	32.0' LT	--	1
PB4	542+34.0	64.5' RT	--	1
PB5	544+41.3	27.4' RT	--	1
PB6	544+42.1	30.1' LT	--	1
PB7	545+69.5	26.6' LT	1	--
PB8	542+06.9	85.0' RT	--	1
PB9	252+36.7	63.1' LT	--	1
PB10	254+41.9	69.6' LT	1	--
PB11	256+16.5	69.6' LT	1	--
PB12	252+76.4	12.0' LT	--	1
PB13	252+76.9	12.0' RT	--	1
PB14	252+78.2	71.5' RT	--	1
PB15	540+28.6	58.6' RT	--	1
PB16	540+46.0	32.7' RT	--	1
PB17	252+27.1	59.3' RT	--	1
PB18	538+35.7	39.5' RT	1	--
PB19	536+85.5	39.0' RT	1	--
PB20	540+29.6	46.3' LT	--	1
PB21	251+12.4	81.2' RT	--	1
PB22	251+58.6	59.8' RT	--	1
PB23	249+39.8	68.4' RT	1	--
PB24	247+89.8	69.1' RT	1	--
PB25	251+12.4	12.0' RT	--	1
PB26	251+12.4	12.0' LT	--	1
PB27	542+16.2	79.2' LT	--	1
		TOTALS	7	20

*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0105 CONCRETE BASES TYPE 5 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	SPV.0060.04 CONCRETE BASE STRAIN POLE EACH
CB1	542+24.4	81.3' LT	--	1	--
SB1	251+56.0	60.5' LT	--	--	1
SB2	252+25.5	60.5' LT	--	--	1
SB3	252+26.8	54.5' RT	--	--	1
SB4	251+56.3	54.5' RT	--	--	1
SB5	254+12.0	12.0' RT	1	--	--
SB6	255+72.2	6.9' RT	1	--	--
SB7	249+73.8	12.0' LT	1	--	--
SB8	248+13.8	5.7' LT	1	--	--
		TOTALS	4	1	4

*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

STH 167 & COUNTRY AIRE DRIVE

ALL ITEMS ARE CATEGORY 0200 UNLESS OTHERWISE NOTED

3

UNDERGROUND TRAFFIC SIGNAL CABLE NO

FROM	TO	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG LF
CB1	SB1	157
CB1	SB2	285
CB1	SB3	410
CB1	SB4	330
	TOTALS	1182

ABOVE GROUND TRAFFIC SIGNAL CABLE NO. 14

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG LF
SB1	HEAD 12	92	--
SB1	HEAD 13	101	--
SB1	HEAD 14	--	22
SB1	HEAD 15	--	76
SB1	HEAD 16	50	--
SB1	HEAD 21	18	--
SB2	HEAD 2	128	--
SB2	HEAD 3	156	--
SB2	HEAD 4	--	22
SB2	HEAD 5	--	101
SB2	HEAD 6	53	--
SB2	HEAD 22	18	--
SB3	HEAD 11	46	--
SB3	HEAD 17	88	--
SB3	HEAD 18	97	--
SB3	HEAD 19	--	22
SB3	HEAD 20	--	73
SB4	HEAD 1	48	--
SB4	HEAD 7	122	--
SB4	HEAD 8	138	--
SB4	HEAD 9	--	22
SB4	HEAD 10	--	96
	TOTAL	1155	434

LIGHTING CABLE AND WIRE

FROM	TO	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
CB1	SB1	157	--
SB1	LUMIN (2)	--	288
SB1	SB2	128	--
SB2	LUMIN (2)	--	288
SB2	SB3	173	--
SB3	LUMIN (1)	--	144
SB3	SB4	128	--
SB4	LUMIN (1)	--	144
CB1	SB5	516	--
SB5	LUMIN (1)	--	117
SB5	SB6	168	--
SB6	LUMIN (1)	--	117
CB1	SB7	265	--
SB7	LUMIN (1)		117
SB7	SB8	168	--
SB8	LUMIN (1)	--	117
	TOTALS	1703	1332

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CB1	SB1	157
SB1	SB2	128
SB2	SB3	173
SB3	SB4	128
PB1	CB1	33
PB2	CB1	68
PB3	SB1	44
PB4	SB2	141
PB8	SB2	91
PB9	SB2	32
PB12	SB2	176
PB13	SB2	216
PB26	CB1	122
PB27	CB1	31
	TOTAL	1540

3

3

ELECTRICAL SERVICE METER BREAKER PEDESTAL
STH 167 & COUNTRY AIRE DRIVE

BASE NO.	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
CB1	1
TOTAL	1

***FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

CAST BASES, POLES, PUSH BUTTONS, LUMINAIRES

SIGNAL BASE NO.	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.05 INSTALL STRAIN POLE EACH	SPV.0060.06 INSTALL STRAIN POLE LUMINAIRE ARMS EACH
SB1	--	--	--	1	2	1	2
SB2	--	--	--	1	2	1	2
SB3	--	--	--	--	1	1	1
SB4	--	--	--	--	1	1	1
SB5	1	1	1	--	1	--	--
SB6	1	1	1	--	1	--	--
SB7	1	1	1	--	1	--	--
SB8	1	1	1	--	1	--	--
TOTALS	4	4	4	2	10	4	6

3

TRAFFIC SIGNAL AND PEDESTRIAN FACES

SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
1	--	1	--	--
2	--	1	--	--
3	--	1	--	--
4	SB2	--	1	--
5	--	--	1	--
6	--	1	--	--
7	--	1	--	--
8	--	1	--	--
9	SB4	--	1	--
10	--	--	1	--
11	--	1	--	--
12	--	1	--	--
13	--	1	--	--
14	SB1	--	1	--
15	--	--	1	--
16	--	1	--	--
17	--	1	--	--
18	--	1	--	--
19	SB3	--	1	--
20	--	--	1	--
21	SB1	--	--	1
22	SB2	--	--	1
	TOTALS	12	8	2

SIGNAL MOUNTING HARDWARE
STH 167 & COUNTRY AIRE DRIVE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE LS
STH 167 & COUNTRY AIRE DRIVE	1
TOTAL	1

3

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET
STH 167 & COUNTRY AIRE DRIVE

LOCATION	SPV.0105.01 TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET LS
CB1	1
TOTAL	1

TRANSPORTING TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS
STH 167 & COUNTRY AIRE DRIVE

LOCATION	SPV.0105.02 TRANSPORTING TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS LS
STH 167 & COUNTRY AIRE DRIVE	1
TOTAL	1

3

OVERHEAD TRAFFIC SIGNAL CABLES

LOCATION	SPV.0105.04 OVERHEAD TRAFFIC SIGNAL CABLES LS
STH 167 & COUNTRY AIRE DRIVE	1
TOTAL	1

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.01

THAT PART OF PARCEL 2 OF CSM 3157 IN AND INCLUDING PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 23, ALSO, PART OF PARCEL 2 OF CSM 2747 IN AND INCLUDING PART OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4, ALSO PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 26, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE WASHINGTON COUNTY REGISTER OF DEEDS.

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	EXISTING	TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
1	SPI REAL ESTATE LLC.	TLE				0.006	
2	SPI REAL ESTATE LLC	TLE				0.085	
3	DEAN R. & PAMELA J. ESSMAN TRUST	FEE,TLE	0.002		0.002	0.004	
4	WISCONSIN CENTRAL LTD.	HE,TLE	0.261		0.261	0.005	
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					
51	WEST SHORE PIPELINE CO.	ROR					
53	KOCH PIPELINES INC.	ROR					
55	WINDSTREAM NTI INC.	ROR					
56	SPRINT COMMUNICATIONS	ROR					

DOCUMENT#: **1423934**
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SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to **WiDotSeRegionWaukesha**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.01
AMENDMENT NO:___

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	EASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		

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
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
PARALLEL OFFSETS

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
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)
R/W BOUNDARY POINT (RWB20)
BUILDING TO BE REMOVED

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

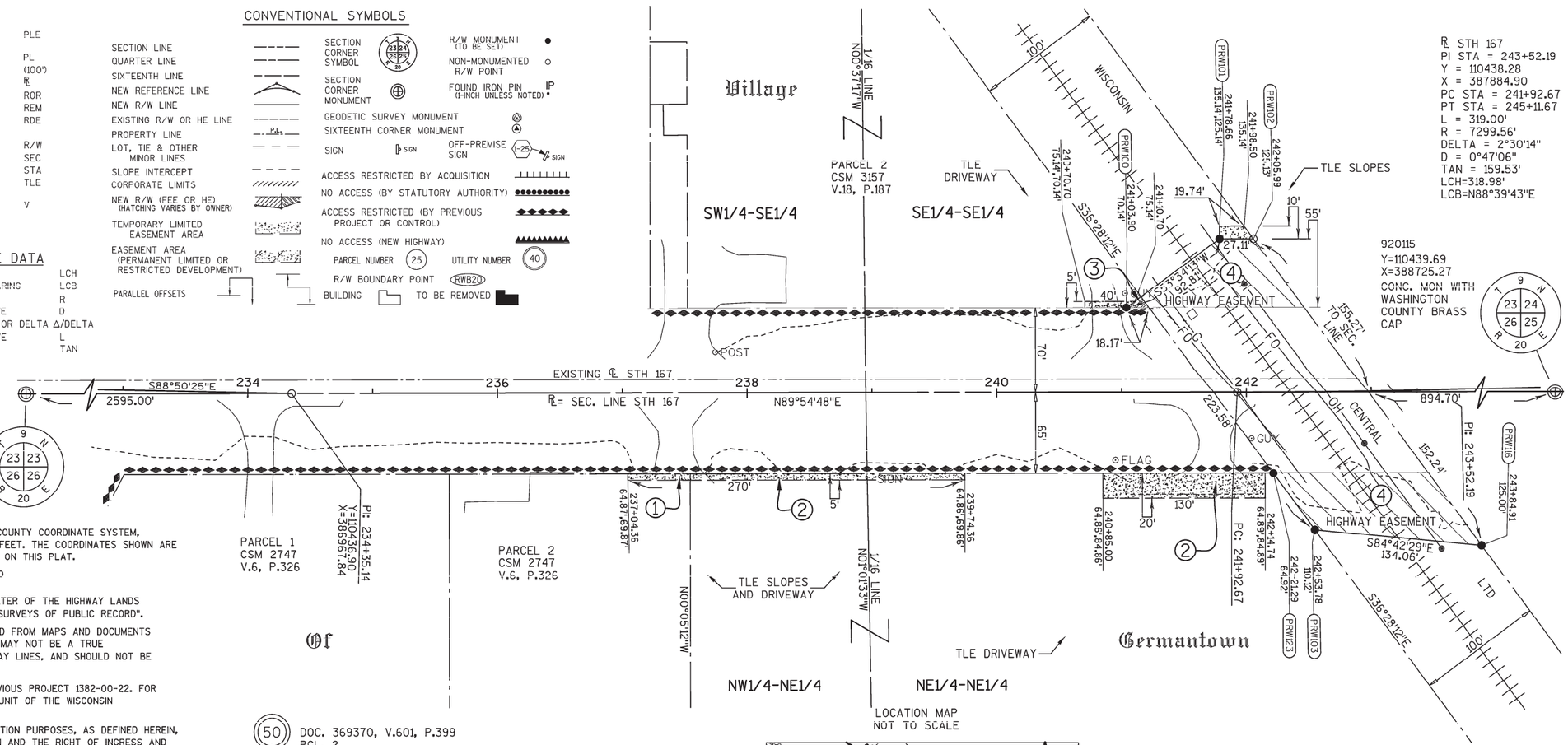
CONVENTIONAL UTILITY SYMBOLS

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

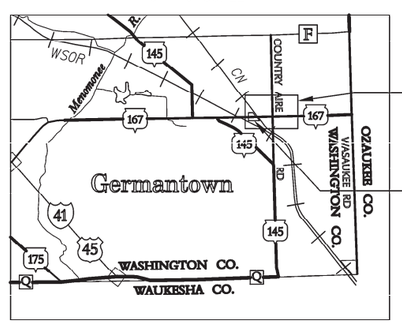
CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

920114
Y=110435.77
X=386130.27
CONC. MON WITH WASHINGTON COUNTY BRASS CAP



LOCATION MAP
NOT TO SCALE



GN
SCALE, FEET 0 50 100

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WASHINGTON COUNTY ZONE, NAD83 (2007) ADJUSTMENT IN US SURVEY FEET. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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".

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

EXISTING ACCESS CONTROL ALONG STH 167 IS ESTABLISHED FROM PREVIOUS PROJECT 1382-00-22. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNINC UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RICHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RICHT 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 NECESSARY OR DESIRABLE. ALL TLES 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 NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

(50) DOC. 369370, V.601, P.399 PCL. 2
CONVEYANCE OF RIGHTS DOC. 555554, V.1060, P.172 PCL. 2

(51) DOC. 369370, V.350, P.518 PCL. 3

(53) DOC. 535815, V.1006, P.451 PCL. 4

(55) DOC. 544889, V.1031, P.172 PCL. 4
DOC. 589891, V.1158, P.67 PCL. 4

(56) DOC. 573831, V.1109, P.620 PCL. 4

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
STH 167	PROJECT 1382-00-22	VARIES	1989

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

SIGNATURE: Walter C. Zendek DATE:1/24/17
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION

SIGNATURE: Robert L. Duffeck DATE:1/24/17
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040401_RP.DWG PLOT DATE : 1/31/2017 12:06 PM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********

CONST. I.D. 1380-00-70 1380-00-20 4.01

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.02 AMENDMENT 1

AMENDS TRANSPORTATION PROJECT PLAT 1380-00-20 - 4.02, RECORDED AS DOCUMENT 1423935 BY ADDING PARCEL 107.

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 23 AND THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 26, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOCUMENT#: **1445841**
Date:**01-30-2018** Time:**03:41 PM** Pages: **1**
Fee:**$25.00** County:**WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
***The above recording information verifies this document has been electronically recorded and returned to
WIDotSeRegionWaukesha***

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.02
AMENDMENT NO: 1

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
5	DEVELOPERS GROUP LLC	FEE,TLE	0.057	0.034	0.091	0.132	
6	RICHARD K. & MAREN J. STAHLE	FEE,TLE	0.010	0.117	0.127	0.110	
7	JEFFEREY R. LONG REVOCABLE TRUST	FEE,TLE	0.153		0.153	0.008	
8	WOLFGANG MROZEK & KAREN M. STREICHER	TLE				0.093	
9	DANIEL J. & ANGELE M. KRINN	FEE,TLE	0.050	0.106	0.156	0.238	
107	JEFFEREY R. LONG REVOCABLE TRUST	PLE					0.118
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					
51	WEST SHORE PIPELINE CO.	ROR					

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE WASHINGTON COUNTY REGISTER OF DEEDS.

(50) NO RECORDED EASEMENT PCL. 8

(51) DOC. 256546, V.349, P.641 PCL. 7

CONVENTIONAL UTILITY SYMBOLS

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

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	EASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		

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; NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER); TEMPORARY LIMITED EASEMENT AREA; EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT); PARALLEL OFFSETS

SECTION CORNER SYMBOL; SECTION CORNER MONUMENT; GEODETIC SURVEY MONUMENT; SIXTEENTH CORNER MONUMENT; SIGN; ACCESS RESTRICTED BY ACQUISITION; NO ACCESS (BY STATUTORY AUTHORITY); ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL); NO ACCESS (NEW HIGHWAY); PARCEL NUMBER (25); R/W BOUNDARY POINT (RWB20); BUILDING; TO BE REMOVED

R/W MONUMENT (TO BE SET); NON-MONUMENTED R/W POINT; FOUND IRON PIN (1-INCH UNLESS NOTED) IP; OFF-PREMISE SIGN (I-25); UTILITY NUMBER (40)

℄ STH 167
PI STA = 243+52.19
Y = 110438.28
X = 387884.90
PC STA = 241+92.67
PT STA = 245+11.67
L = 319.00'
R = 7299.56'
DELTA = 2°30'14"
D = 0°47'06"
TAN = 159.53'
LCH=318.98'
LCB=N88°39'43"E

℄ STH 167
PI STA = 246+71.24
Y = 110452.70
X = 388203.67
PC STA = 245+11.67
PT STA = 248+30.77
L = 319.10'
R = 7300.05'
DELTA = 2°30'16"
D = 0°47'06"
TAN = 159.58'
LCH=319.07'
LCB=N88°39'44"E

POINT	STATION	OFFSET
PRW102	242+05.99	125.13'
PRW201	242+18.34	125.09'
PRW211	251+11.59	92.63'
TLE215	241+98.50	135.14
TLE216	242+18.37	135.09'
TLE231	250+99.61	101.48'

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
STH 167	PROJECT 1382-00-22	VARIES	1989
COUNTRY AIRE DRIVE	WIS. STATUTE 82.31(2)	66'	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WASHINGTON COUNTY ZONE, NAD83 (2007) ADJUSTMENT IN US SURVEY FEET. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

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EXISTING ACCESS CONTROL ALONG STH 167 IS ESTABLISHED FROM PREVIOUS PROJECT 1382-00-22. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES 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 NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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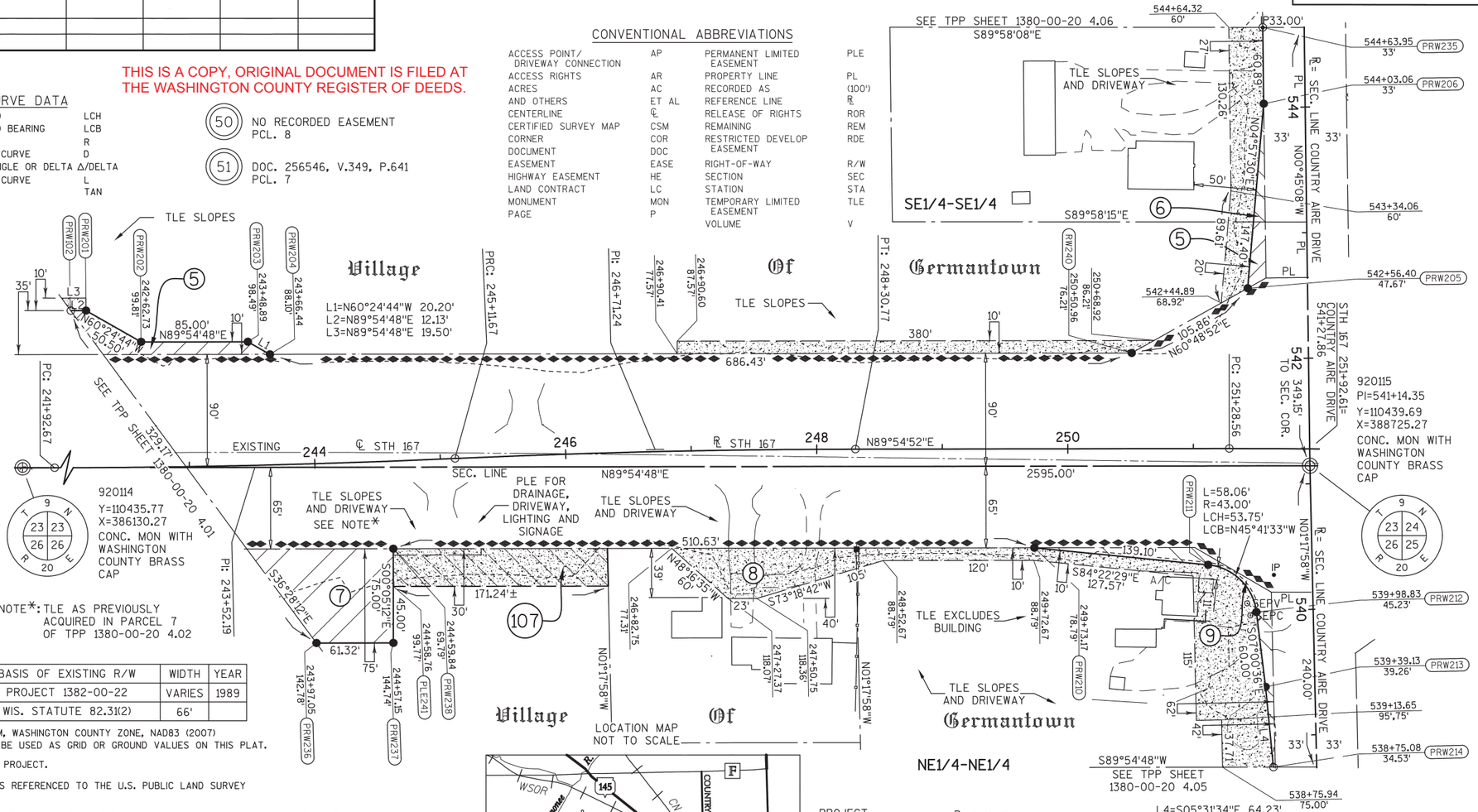
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.



STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

SIGNATURE: Walter C. Zendek DATE:1/25/18
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION.

SIGNATURE: Robert L Duffeck DATE:1/25/18
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040402A1_RP.DWG PLOT DATE : 1/29/2018 7:42 AM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********
CONST. I.D. 1380-00-70 1380-00-20 4.02A1

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.03

THAT PART OF CSM 127 IN AND INCLUDING PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 24, ALSO, PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

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RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
10	KENNETH F., MARGARET A. & CHRISTOPHER U. MILLER	FEE,TLE	0.477	0.219	0.696	0.161	
11	ALLAN S. SPRASKY	FEE,TLE	0.201		0.201	0.060	
12	JOACHIM H. & DOROTHEA M. RAKOW	FEE,TLE	1.075	0.200	1.275	0.022	
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
STH 167	PROJECT 1382-00-22	VARIES	1989
COUNTRY AIRE DRIVE	WIS. STATUTE 82.31(2)	66'	

℄ STH 167
PI STA = 254+03.90
Y = 110453.79
X = 388936.38
PC STA = 251+28.56
PT STA = 256+78.98
L = 550.42'
R = 7300.06'
DELTA = 4°19'12"
D = 0°47'06"
TAN = 275.34'
LCH=550.29'
LCB=S87°55'31"E

℄ STH 167
PI STA = 258+02.33
Y = 110424.35
X = 389333.98
PC STA = 256+78.98
PT STA = 259+25.66
L = 246.67'
R = 7300.35'
DELTA = 1°56'10"
D = 0°47'05"
TAN = 123.35'
LCH=246.66'
LCB=S86°44'00"E

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

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
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
PARALLEL OFFSETS

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
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ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER
UTILITY NUMBER
R/W BOUNDARY POINT
BUILDING TO BE REMOVED

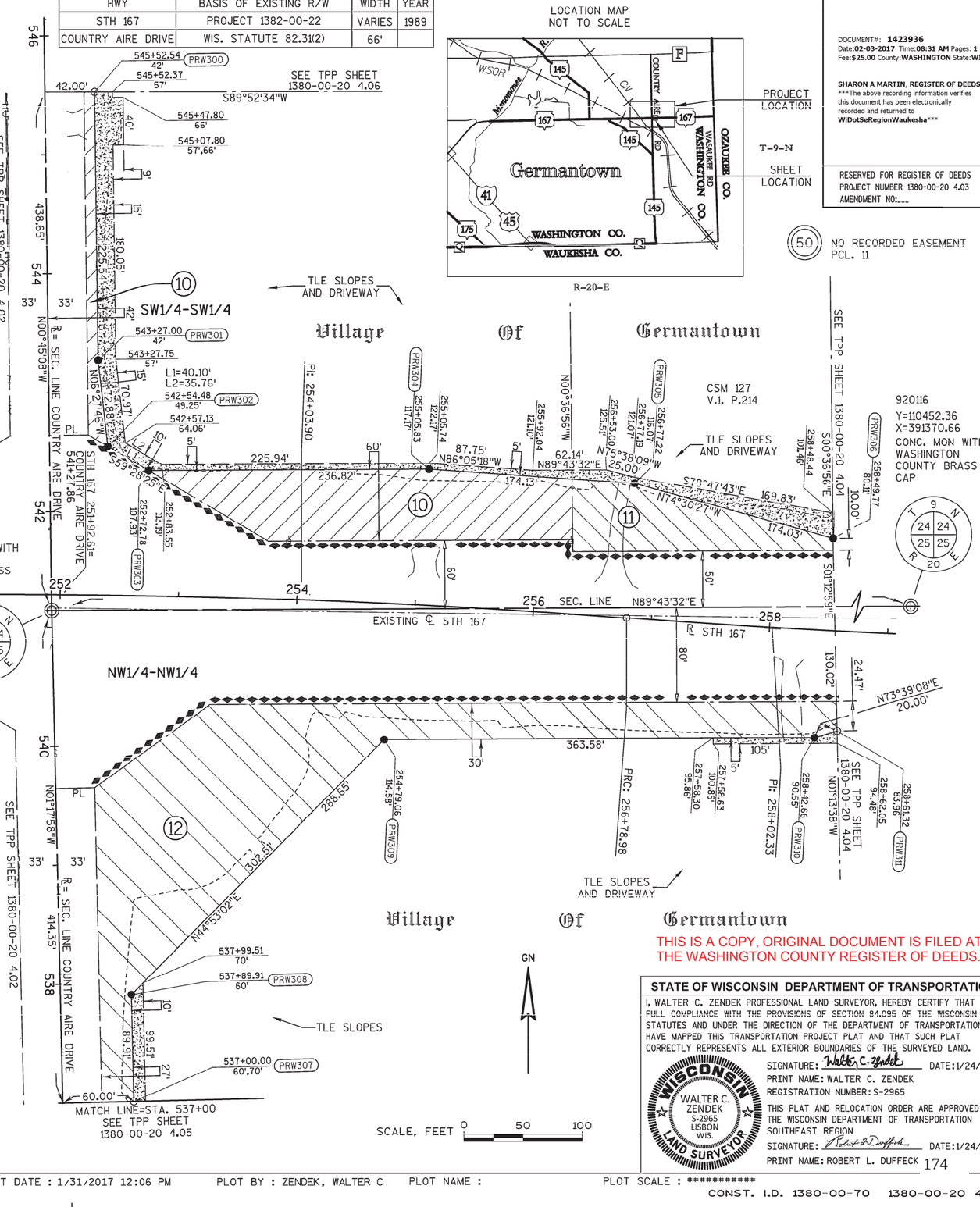
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

CONVENTIONAL UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	EASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		



DOCUMENT#: **1423936**
Date:**02-03-2017** Time:**08:31 AM** Pages: **1**
Fee:**$25.00** County:**WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.03
AMENDMENT NO:___

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE WASHINGTON COUNTY REGISTER OF DEEDS.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

SIGNATURE: Walter C. Zendek DATE:1/24/17
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION

SIGNATURE: Robert L Duffeck DATE:1/24/17
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040403_RP.DWG PLOT DATE : 1/31/2017 12:06 PM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********

CONST. I.D. 1380-00-70 1380-00-20 4.03

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WAHINGTON COUNTY ZONE, NAD83 (2007) ADJUSTMENT IN US SURVEY FEET. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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".

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

EXISTING ACCESS CONTROL ALONG STH 167 ESTABLISHED FROM PREVIOUS PROJECT 1382-00-22 AND CSM 5472. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION. CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES 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 NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.04

THAT PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 24, THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, AND PART OF LOT 24 CSM 6318 AND PART OF LOT 1 OF CSM 6554 IN AND INCLUDING PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE. THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOCUMENT#: **1423937**
Date:**02-03-2017** Time:**08:31 AM** Pages: **1**
Fee:**$25.00** County:**WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to **WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.04
AMENDMENT NO:___

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

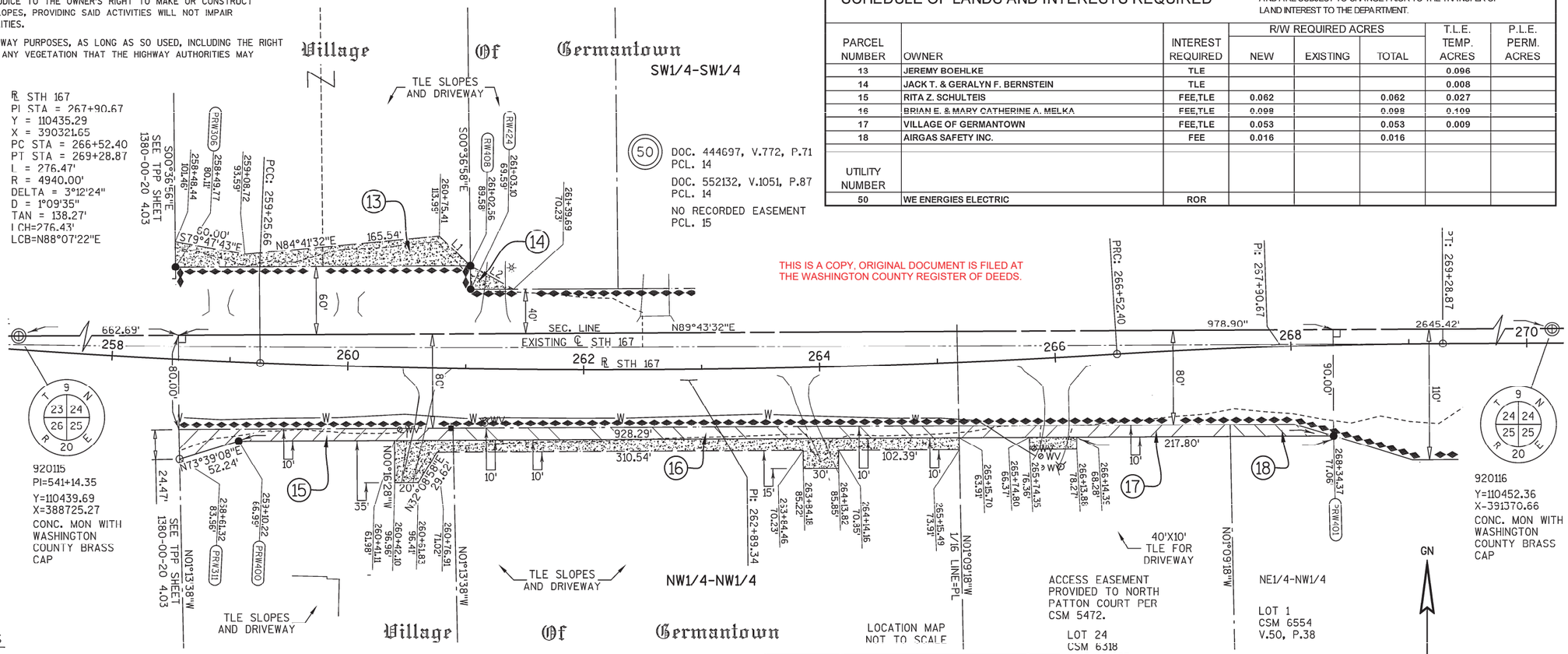
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
13	JEREMY BOEHLKE	TLE				0.096	
14	JACK T. & GERALYN F. BERNSTEIN	TLE				0.008	
15	RITA Z. SCHULTEIS	FEE,TLE	0.062		0.062	0.027	
~~16~~	~~BRIAN E. & MARY CATHERINE A. MELKA~~	~~FEE,TLE~~	~~0.098~~		~~0.098~~	~~0.109~~	
17	VILLAGE OF GERMANTOWN	FEE,TLE	0.053		0.053	0.009	
18	AIRGAS SAFETY INC.	FEE	0.016		0.016		
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					

℄ STH 167
PI STA = 258+02.33
Y = 110424.35
X = 389333.98
PC STA = 256+78.98
PT STA = 259+25.66
L = 246.67'
R = 7300.35'
DELTA = 1°56'10"
D = 0°47'05"
TAN = 123.35'
LCH=246.66'
LCB=S86°44'00"E

℄ STH 167
PI STA = 262+89.34
Y = 110404.82
X = 389820.62
PC STA = 259+25.66
PT STA = 266+52.40
L = 726.75'
R = 7205.00'
DELTA = 5°46'45"
D = 0°47'43"
TAN = 363.68'
LCH=726.44'
LCB=N89°24'33"E

℄ STH 167
PI STA = 267+90.67
Y = 110435.29
X = 390321.65
PC STA = 266+52.40
PT STA = 269+28.87
L = 276.47'
R = 4940.00'
DELTA = 3°12'24"
D = 1°09'35"
TAN = 138.27'
LCH=276.43'
LCB=N88°07'22"E

LINE	BEARING	DISTANCE
L1	S46°38'38"E	36.23'
L2	S61°28'03"E	41.51'



(50) DOC. 444697, V.772, P.71 PCL. 14
DOC. 552132, V.1051, P.87 PCL. 14
NO RECORDED EASEMENT PCL. 15

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920115
PI=541+14.35
Y=110439.69
X=388725.27
CONC. MON WITH WASHINGTON COUNTY BRASS CAP

920116
Y=110452.36
X-391370.66
CONC. MON WITH WASHINGTON COUNTY BRASS CAP

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

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
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
PARALLEL OFFSETS
SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
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
R/W BOUNDARY POINT RWB20
BUILDING TO BE REMOVED
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

CONVENTIONAL UTILITY SYMBOLS

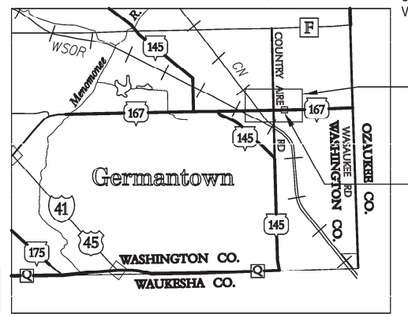
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

NON COMPENSABLE COMPENSABLE
POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
ELECTRIC TOWER

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	EASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
STH 167	PROJECT 1382-00-22	VARIES	1989



R-20-E

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Walter C. Zendek DATE:1/24/17
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION

SIGNATURE: Robert L. Duffeck DATE:1/24/17
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040404_RP.DWG PLOT DATE : 1/31/2017 12:06 PM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********

CONST. I.D. 1380-00-70 1380-00-20 4.04

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.05

THAT PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 26, AND THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 25, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST, IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

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NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WASHINGTON COUNTY ZONE, NAD83 (2007) ADJUSTMENT IN US SURVEY FEET. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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".

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

EXISTING ACCESS CONTROL ALONG STH 167 IS ESTABLISHED FROM PREVIOUS PROJECT 1382-00-22. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

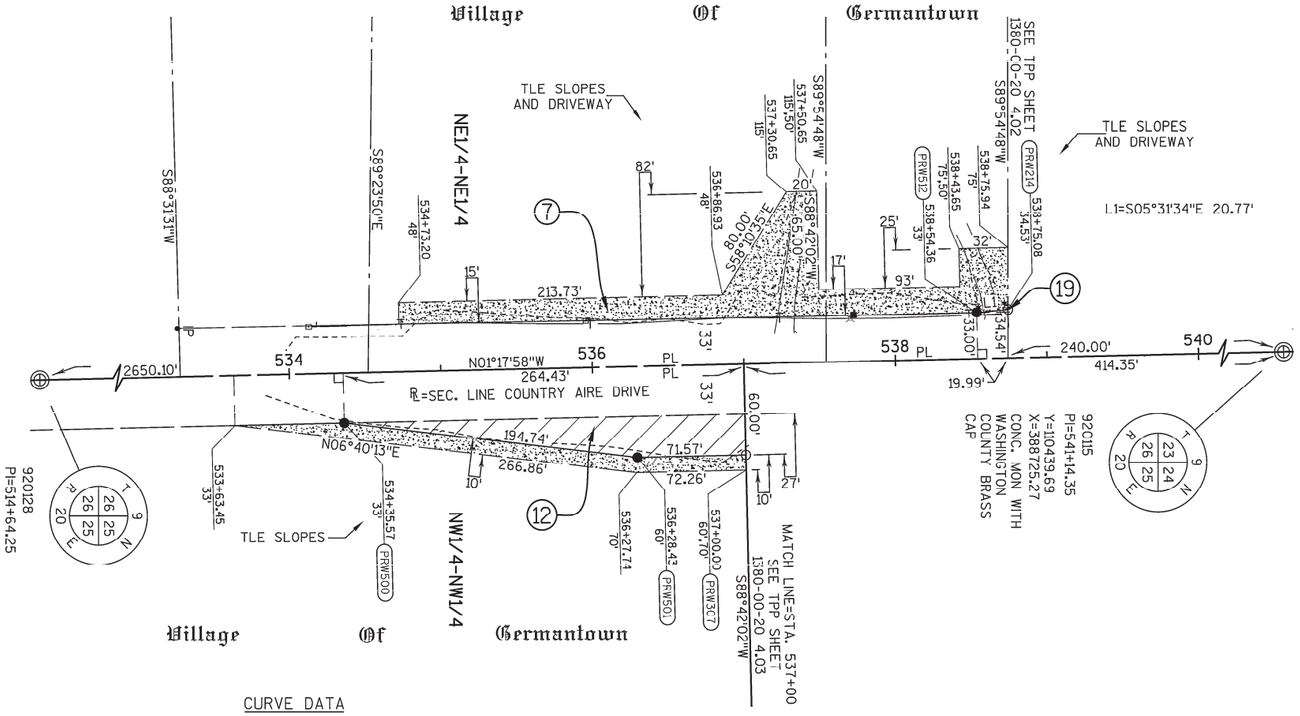
PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
7	JEFFEREY R. LONG REVOCABLE TRUST	FEE,TLE	0.000	0.220	0.220	0.162	
12	JOACHIM H. & DOROTHEA M. RAKOW	FEE,TLE	0.104	0.255	0.359	0.069	
19	LEONARD J. & JANET L. LEWINSKI	FEE,TLE	15.836 *	3960.000 *	3975.836 *	0.065	
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					
51	WEST SHORE PIPELINE CO.	ROR					

*=SQUARE FEET

DOCUMENT#: **1423938**
Date:**02-03-2017** Time:**08:32 AM** Pages: **1**
Fee:**$25.00** County:**WASHINGTON** State:**WI**

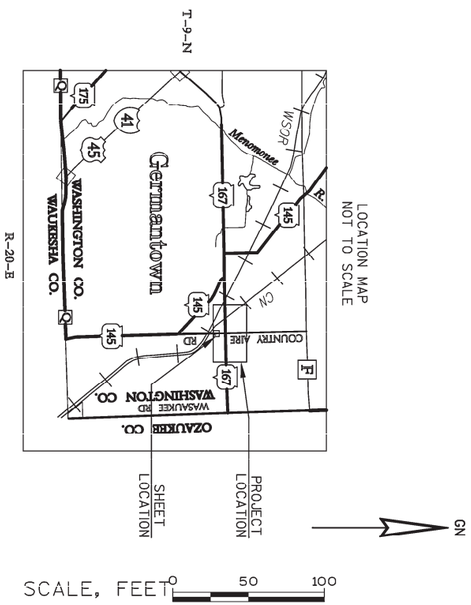
SHARON A MARTIN, REGISTER OF DEEDS
***The above recording information verifies this document has been electronically recorded and returned to
WiDotSeRegionWaukesha***

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.05
AMENDMENT NO:___



(50) NO RECORDED EASEMENT PCL. 7&19

(51) DOC. 256546, V.349, P.641 PCL. 7



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
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
PARALLEL OFFSETS
SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
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)
R/W BOUNDARY POINT (RWB20)
BUILDING TO BE REMOVED
R/W MONUMENT TO BE SET
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	CASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		

CONVENTIONAL UTILITY SYMBOLS

WATER —W—
GAS —G—
TELEPHONE —T—
OVERHEAD —OH—
TRANSMISSION LINES
ELECTRIC —E—
CABLE TELEVISION —TV—
FIBER OPTIC —FO—
SANITARY SEWER —SAN—
STORM SEWER —SS—

NON COMPENSABLE	COMPENSABLE
POWER POLE	
TELEPHONE POLE	
TELEPHONE PEDESTAL	
ELECTRIC TOWER	

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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

SIGNATURE: Walter C. Zendek DATE:1/24/17
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION

SIGNATURE: Robert L Duffeck DATE:1/24/17
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040405_RP.DWG PLOT DATE : 1/31/2017 12:07 PM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********

CONST. I.D. 1380-00-70 1380-00-20 4.05

SCHEDULE OF LANDS AND INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE DEPARTMENT.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	R/W REQUIRED ACRES NEW	R/W REQUIRED ACRES EXISTING	R/W REQUIRED ACRES TOTAL	T.L.E. TEMP. ACRES	P.L.E. PERM. ACRES
5	DEVELOPERS GROUP LLC	FEE,TLE	0.019	0.255	0.274	0.140	
20	KENNETH F. & MARGARET A. MILLER	FEE,TLE	0.039	0.167	0.206	0.139	
21	CASPER J. & DELORES K. POLLICH	FEE,TLE	0.001	0.152	0.153	0.019	
UTILITY NUMBER							
50	WE ENERGIES ELECTRIC	ROR					

TRANSPORTATION PROJECT PLAT NO: 1380-00-20 - 4.06

THAT PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 23, AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 24, ALL IN TOWNSHIP 9 NORTH, RANGE 20 EAST IN THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

RELOCATION ORDER STH 167 WASHINGTON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

DOCUMENT#: **1423939**
Date:**02-03-2017** Time:**08:32 AM** Pages: **1**
Fee:**$25.00** County:**WASHINGTON** State:**WI**

SHARON A MARTIN, REGISTER OF DEEDS
The above recording information verifies this document has been electronically recorded and returned to **WiDotSeRegionWaukesha

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1380-00-20 4.06
AMENDMENT NO:___

HWY	BASIS OF EXISTING R/W	WIDTH	YEAR
STH 167	PROJECT 1382-00-22	VARIES	1989
COUNTRY AIRE DRIVE	WIS. STATUTE 82.31(2)	66'	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, WASHINGTON COUNTY ZONE, NAD83 (2007) ADJUSTMENT IN US SURVEY FEET. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 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".

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

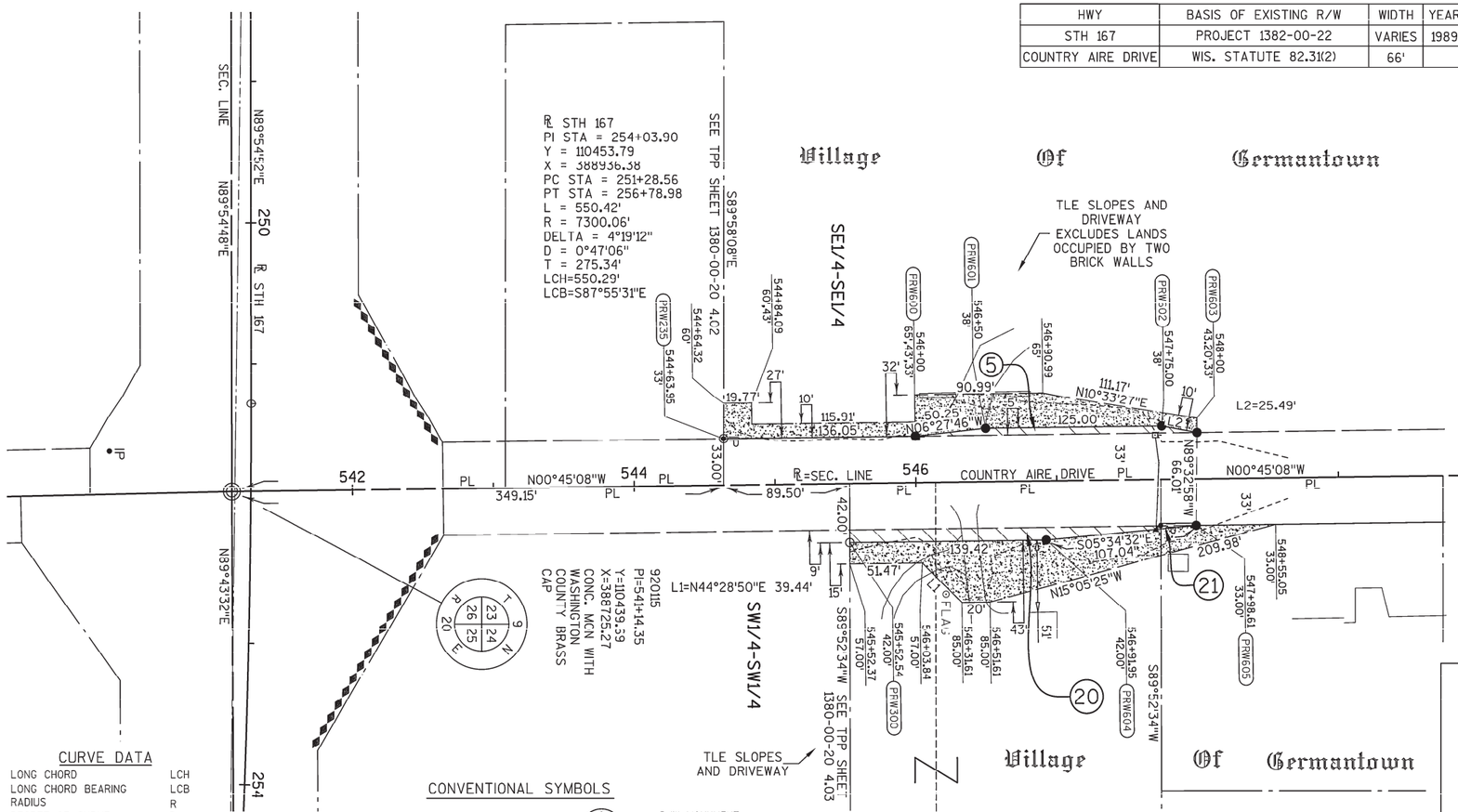
EXISTING ACCESS CONTROL ALONG STH 167 IS ESTABLISHED FROM PREVIOUS PROJECT 1382-00-22. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WAUKESHA.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION 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 NECESSARY OR DESIRABLE. ALL TLES 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 NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

THIS IS A COPY, ORIGINAL DOCUMENT IS FILED AT THE WASHINGTON COUNTY REGISTER OF DEEDS.



(50) DOC. 262800
V.364, P.127
PCL. 21

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL UTILITY SYMBOLS

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

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
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
PARALLEL OFFSETS

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
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)
R/W BOUNDARY POINT RWB20
BUILDING TO BE REMOVED

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	PERMANENT LIMITED EASEMENT	PLE
ACCESS RIGHTS	AR	PROPERTY LINE	PL
ACRES	AC	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	℄
CENTERLINE	℄	RELEASE OF RIGHTS	ROR
CERTIFIED SURVEY MAP	CSM	REMAINING	REM
CORNER	COR	RESTRICTED DEVELOP EASEMENT	RDE
DOCUMENT	DOC	RIGHT-OF-WAY	R/W
EASEMENT	EASE	SECTION	SEC
HIGHWAY EASEMENT	HE	STATION	STA
LAND CONTRACT	LC	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	VOLUME	V
PAGE	P		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, WALTER C. ZENDEK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN WALTER C. ZENDEK S-2965 LISBON WIS. LAND SURVEYOR

SIGNATURE: Walter C. Zendek DATE:1/24/17
PRINT NAME: WALTER C. ZENDEK
REGISTRATION NUMBER: S-2965

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHEAST REGION

SIGNATURE: Robert L Duffeck DATE:1/24/17
PRINT NAME: ROBERT L. DUFFECK

FILE NAME : N:\PDS\C3D\13800000\RW\040406_RP.DWG PLOT DATE : 1/31/2017 12:07 PM PLOT BY : ZENDEK, WALTER C PLOT NAME : PLOT SCALE : **********

CONST. I.D. 1380-00-70 1380-00-20 4.06

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1008	236+17.03	42.13' LT BERN N SIDE OF STH 167	885.12

ROBERT T AIKEN
HELEN M AIKEN

CROSSING IMPROVEMENTS TO BE COMPLETED BY WISCONSIN & SOUTHERN RAILROAD. SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

STATE OF WISCONSIN

RAFRAD LLC

REMOVING ASPHALTIC SURFACE MILLING

ROBERT T AIKEN
HELEN M AIKEN

WE ENERGIES (OH ELECTRIC)
TIME WARNER CABLE (OH)
AT&T

EX. R/W

1008

DEAN R ESSMANN TRUST
PAMELA J ESSMANN TRUST

STH 167 WB PGL

SI

SIN

226 228 230 230EB 232 232EB 234 234EB STH 167 (MEQUON RD) 236 236EB 238 238EB 240WB 240 240EB

MATCHLINE STA 241+00

BEGIN PROJECT 1380-00-70
STA 228+86

EX. R/W

WISCONSIN & SOUTHERN RAILROAD

STATE OF WISCONSIN

EX. R/W

SI

STH 167 ℄

XX

REMOVE ACCESS

STH 167 EB PGL

FREDERICK E GIERACHWEYER
3 LTD PRTNRSHIP

SPI REAL ESTATE

WE ENERGIES (GAS)

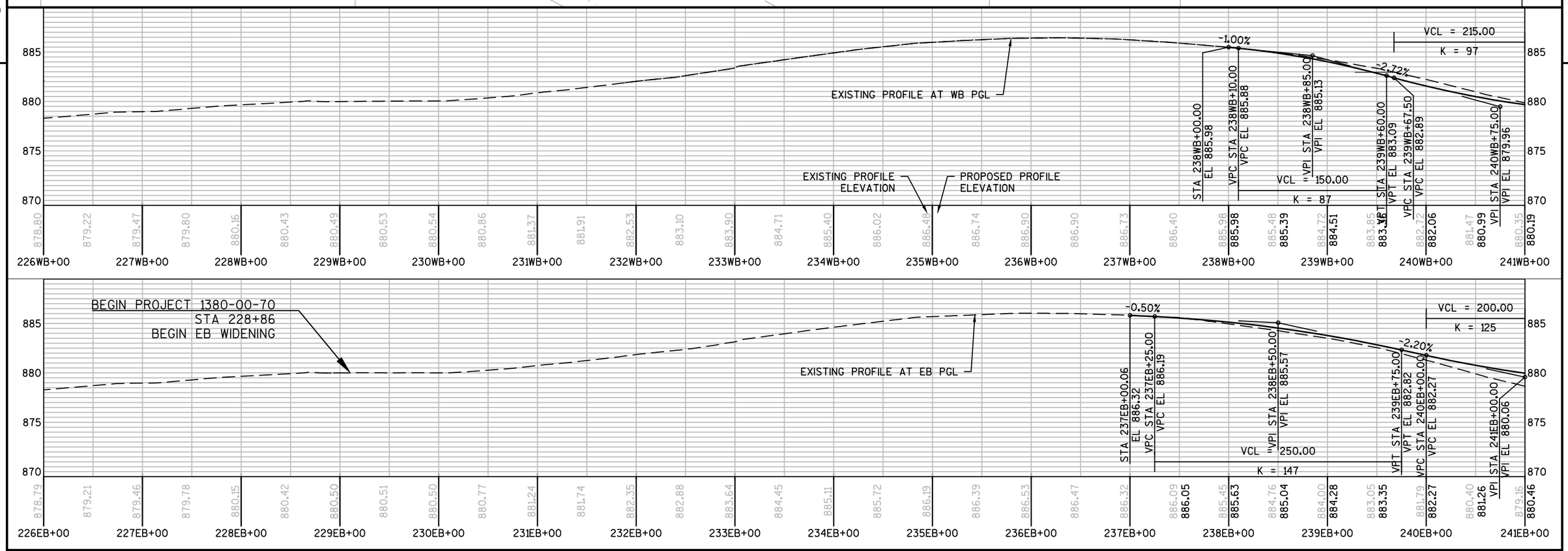
SPI REAL ESTATE

SPI REAL ESTATE

N

5

5

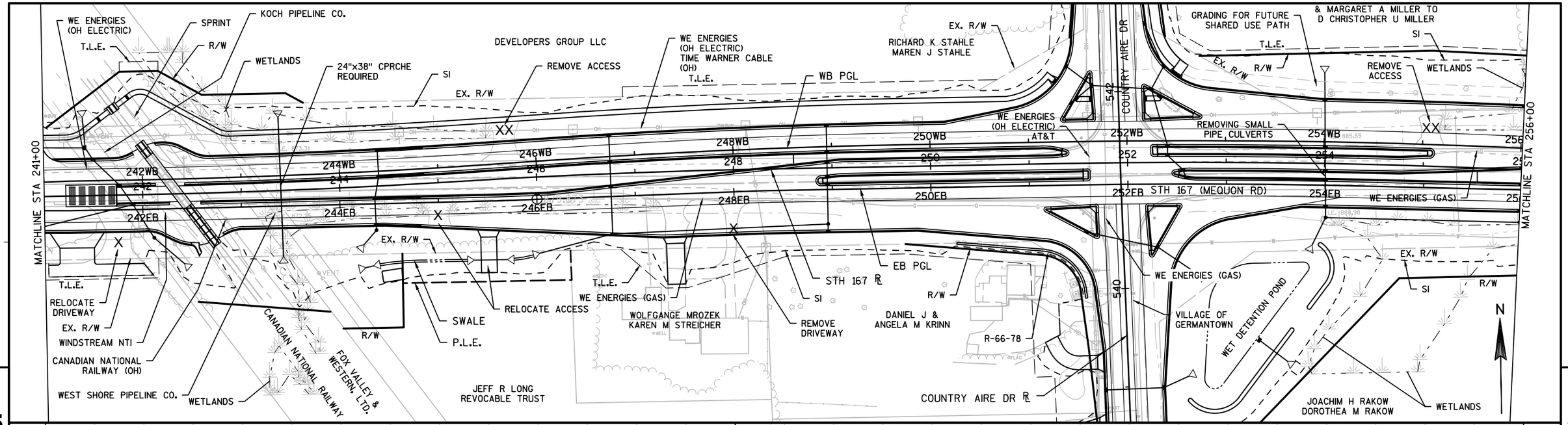


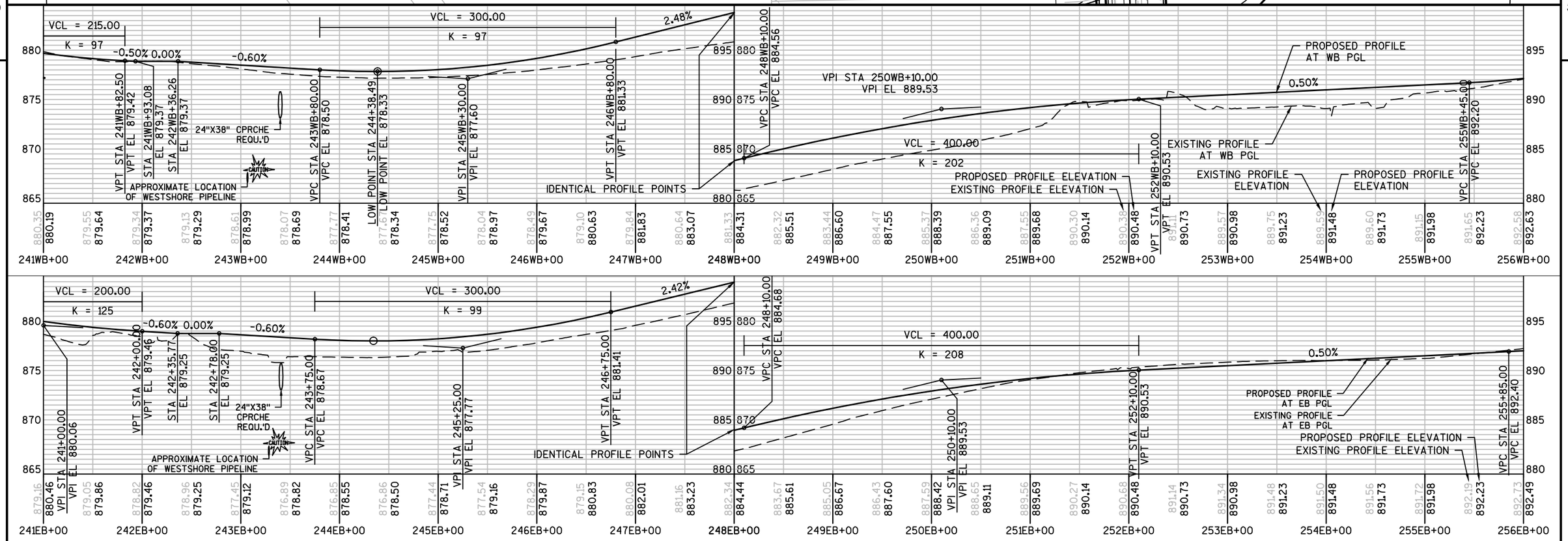
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN AND PROFILE: STH 167	SHEET 178	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 01

PLOT DATE : 3/13/2018 8:42 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 44



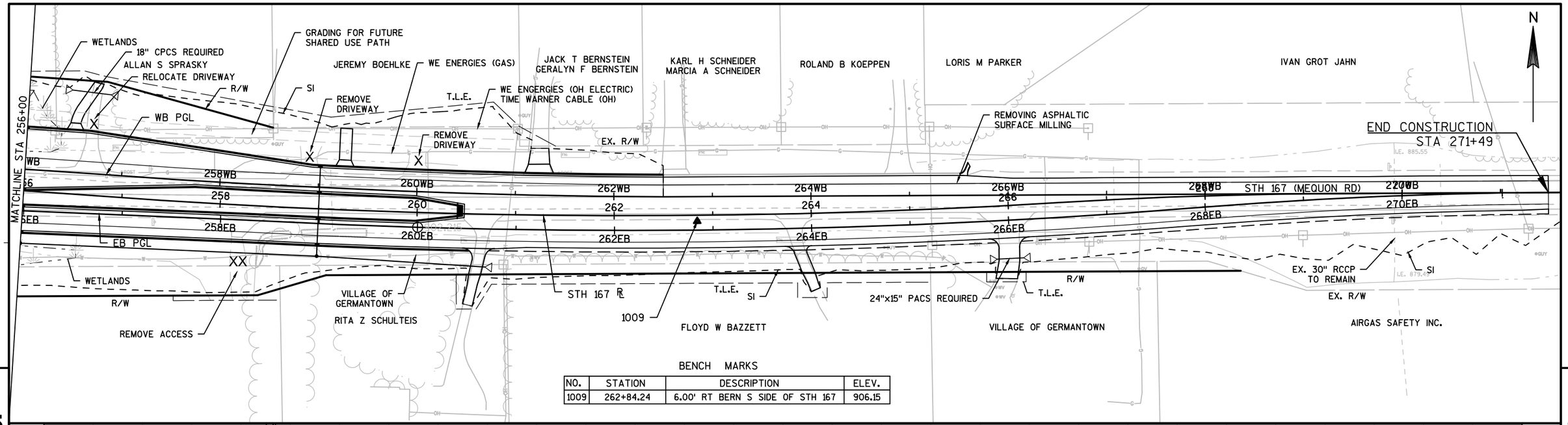


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN AND PROFILE: STH 167	SHEET 179	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 02

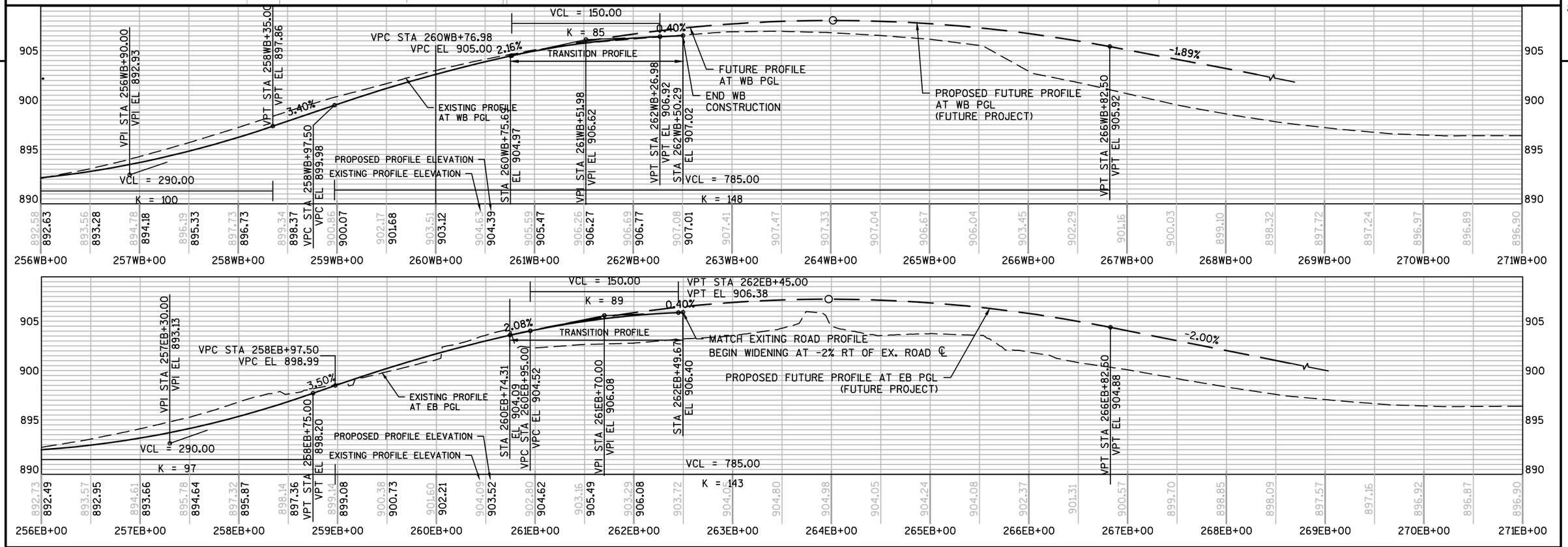
PLOT DATE : 2/1/2018 9:37 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 44

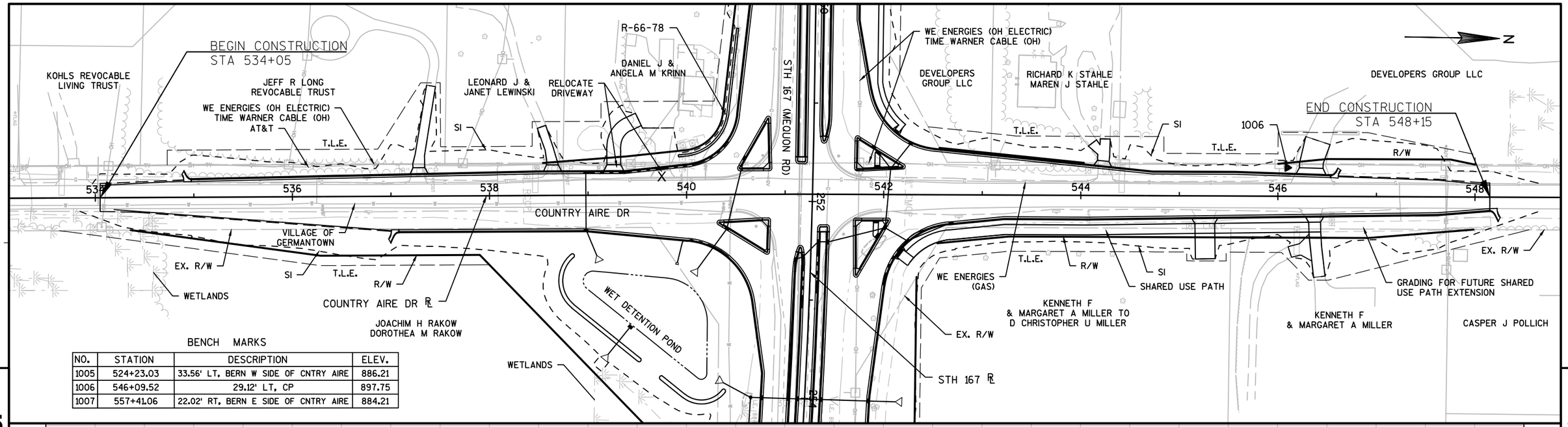


BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1009	262+84.24	6.00' RT BERN S SIDE OF STH 167	906.15

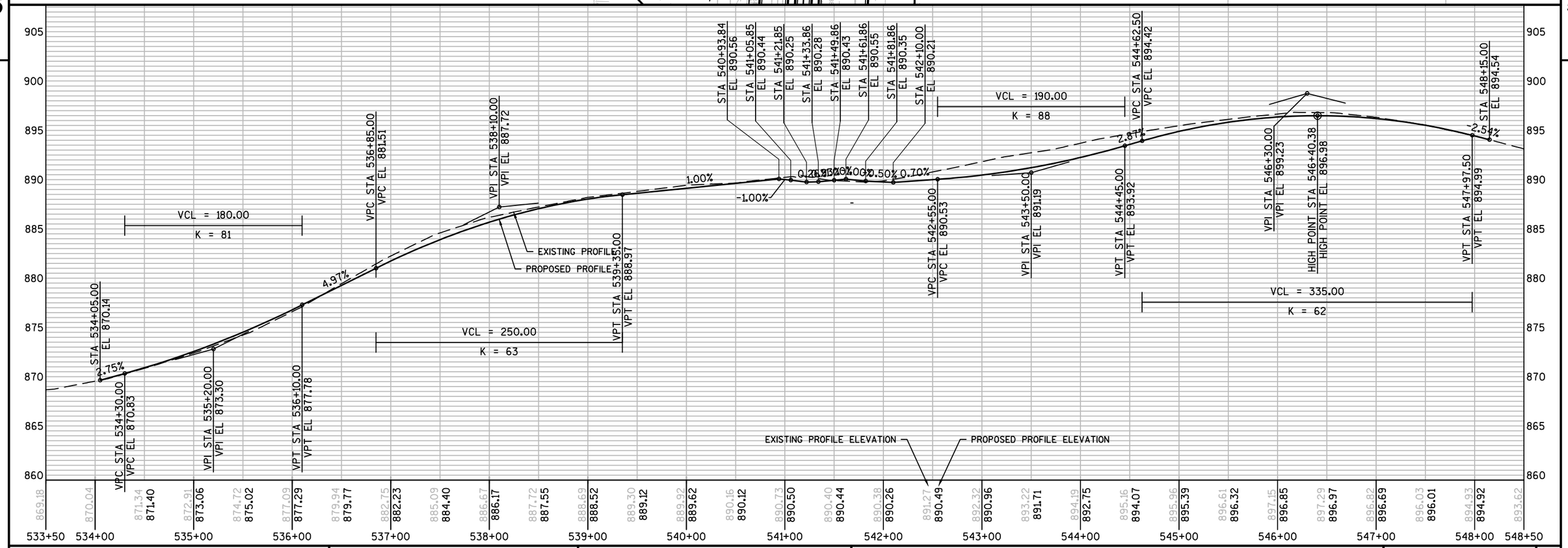


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN AND PROFILE: STH 167	SHEET 180	E



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1005	524+23.03	33.56' LT, BERN W SIDE OF CNTRY AIRE	886.21
1006	546+09.52	29.12' LT, CP	897.75
1007	557+41.06	22.02' RT, BERN E SIDE OF CNTRY AIRE	884.21

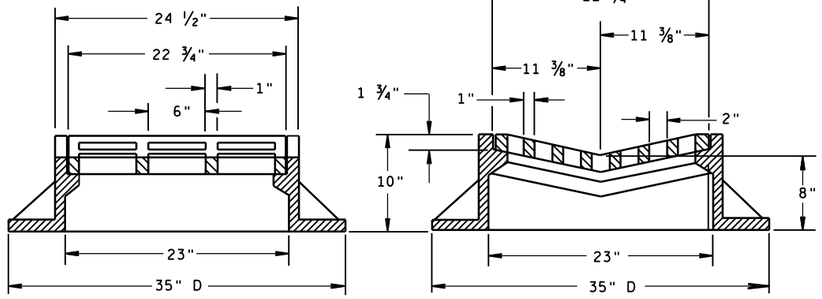


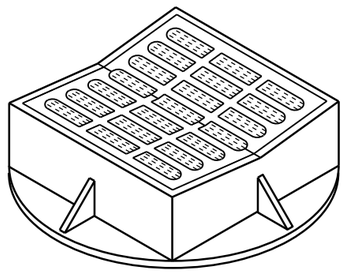
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	PLAN AND PROFILE: COUNTRY AIRE DRIVE	SHEET 181 E

Standard Detail Drawing List

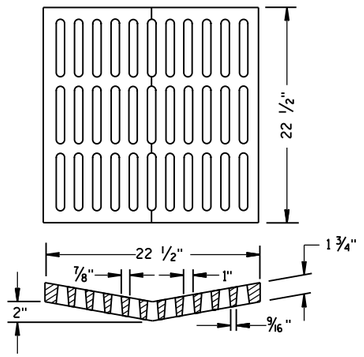
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08B10-02	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D18-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09F15-04A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-04	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-04	MEDIAN ISLAND MARKING
15C27-02A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-02B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-05	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

6



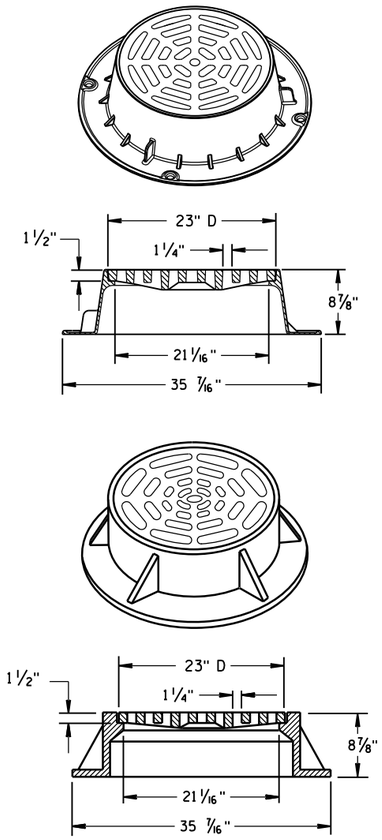


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

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



TYPE "C"

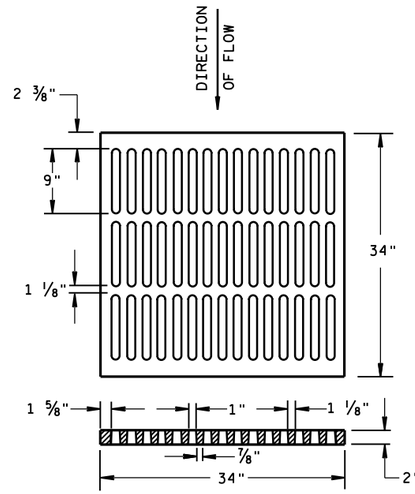
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

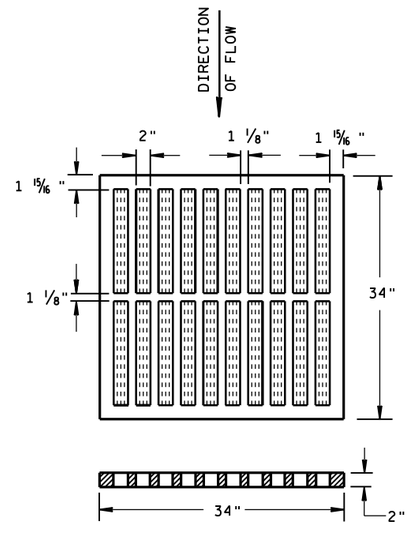
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



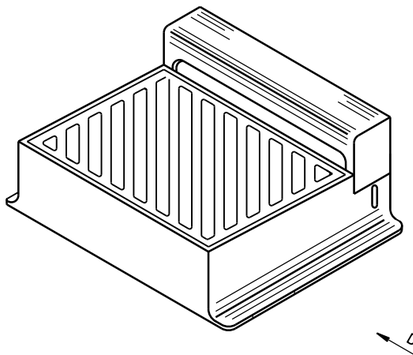
ALTERNATIVE TYPE "MS"

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



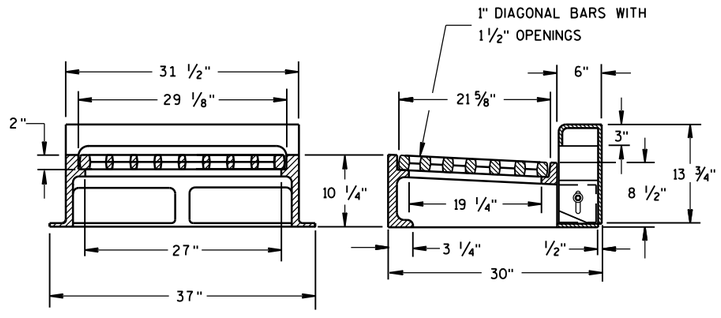
TYPE "MS"

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



DIRECTION OF FLOW

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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

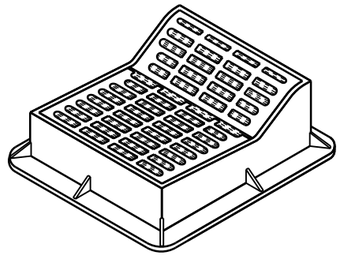
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

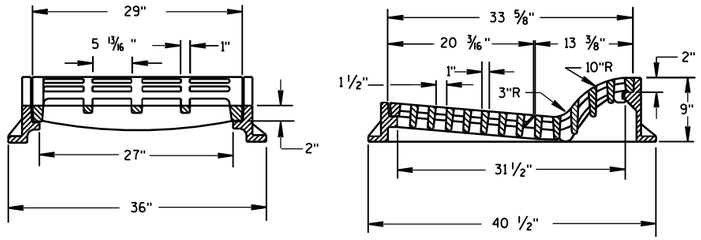
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

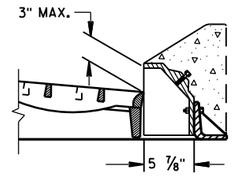
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

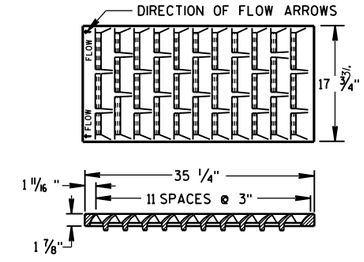
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

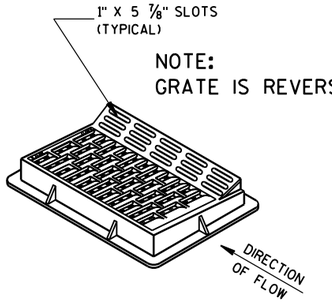
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

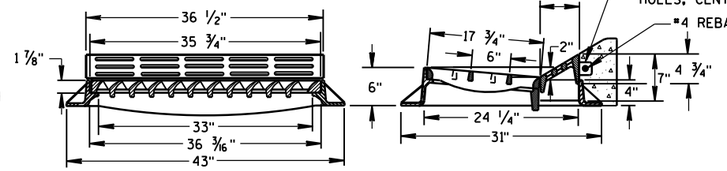
GENERAL NOTES

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.



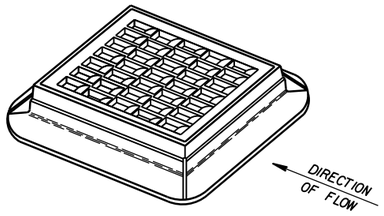


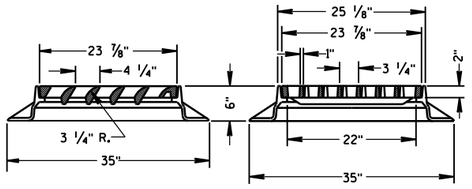


TYPE "HM"

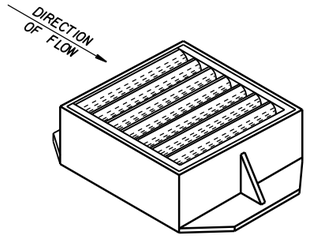
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

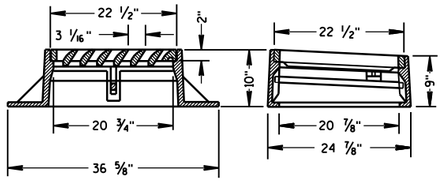
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



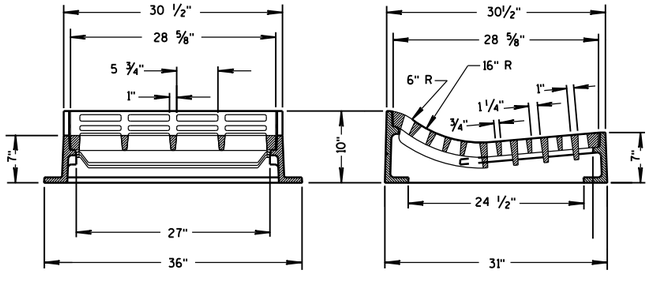


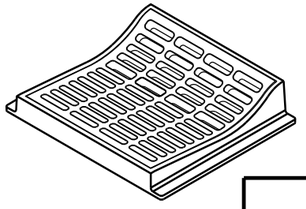
TYPE "S"





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

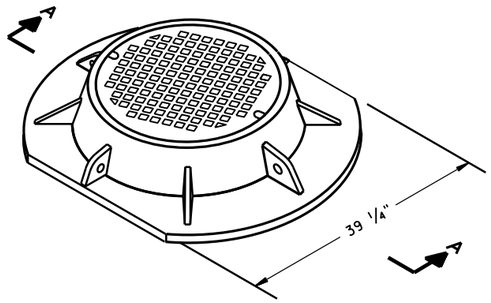
APPROVED
11/27/2013
DATE

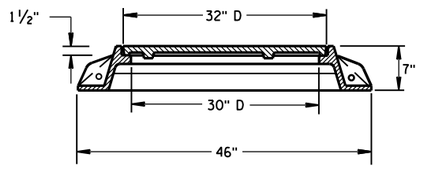
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

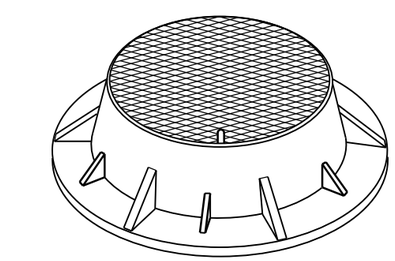
6

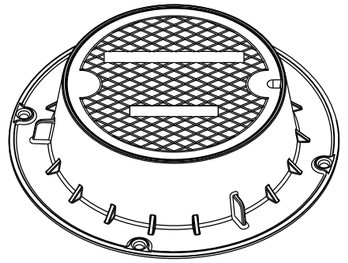
S.D.D. 8 A 5-19c

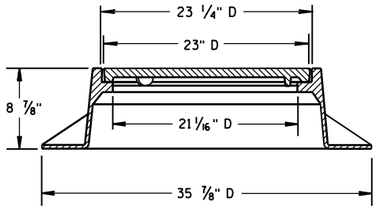


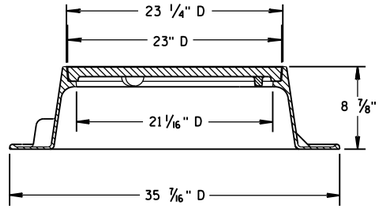


SECTION A-A
TYPE "K"









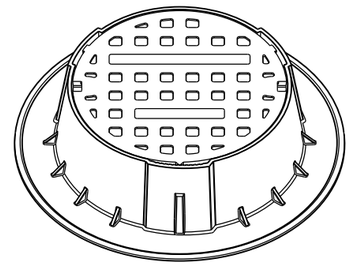
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

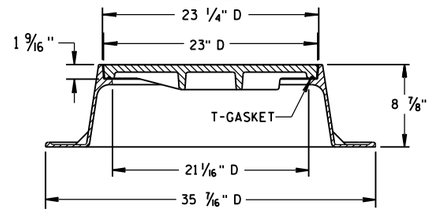
GENERAL NOTES

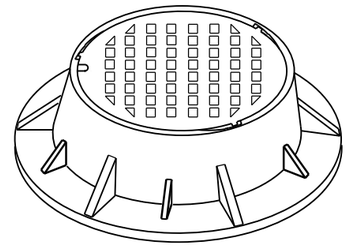
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

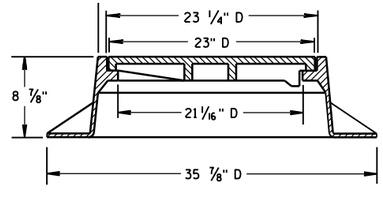
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

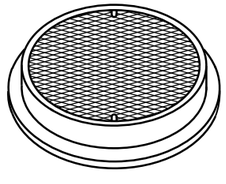


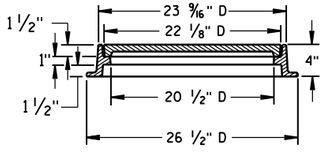




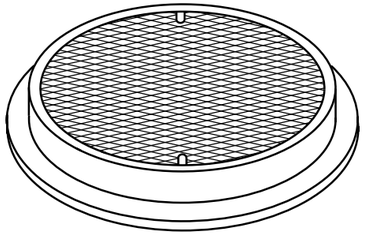


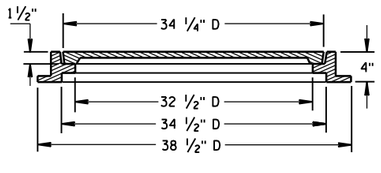
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



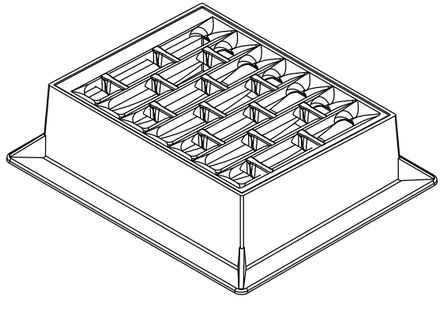


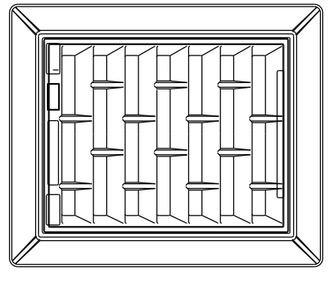
TYPE "L"

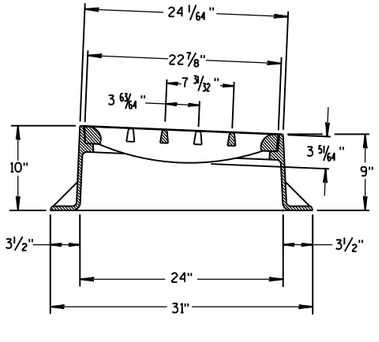


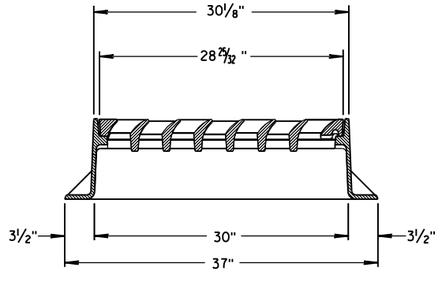


TYPE "M"









INLET COVER TYPE "BW"

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

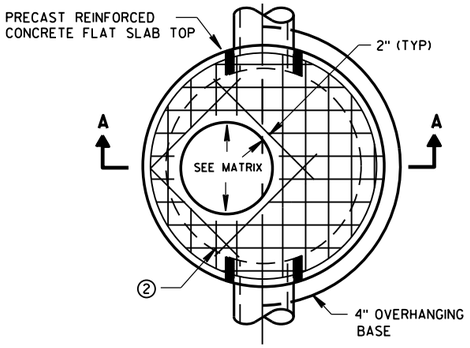
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

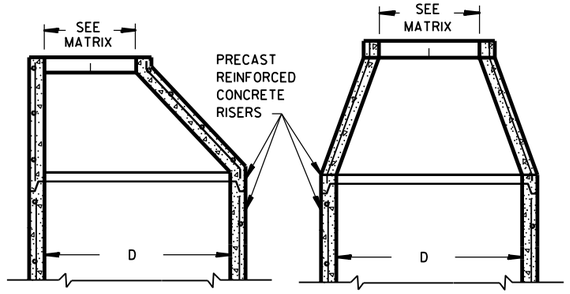
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

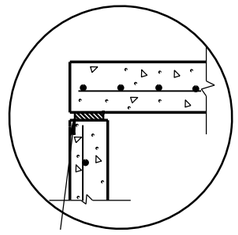


PLAN VIEW CIRCULAR OPENING

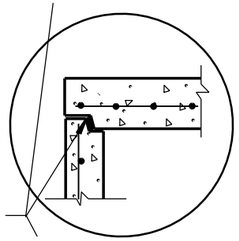


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

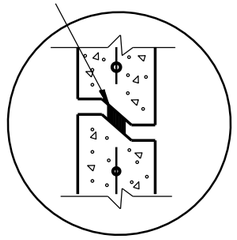


TOP WITH PLAIN END JOINT



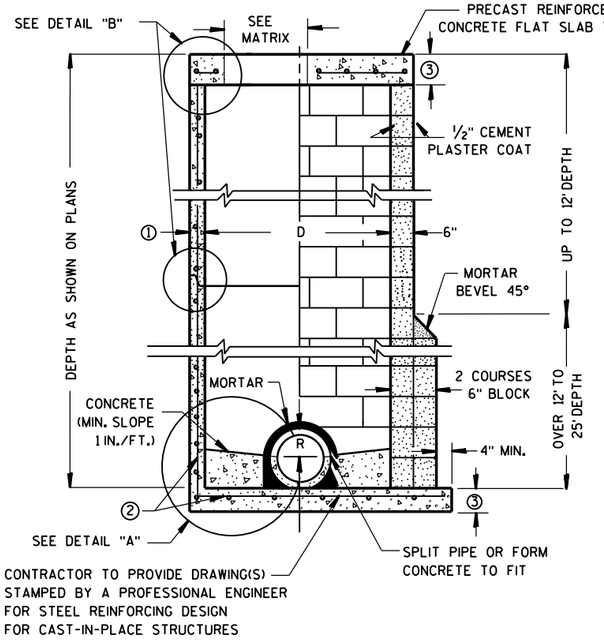
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



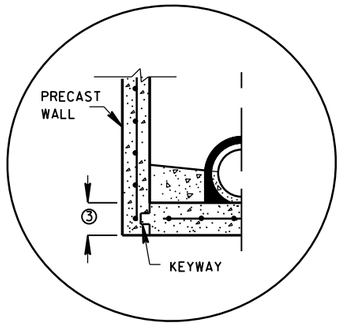
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

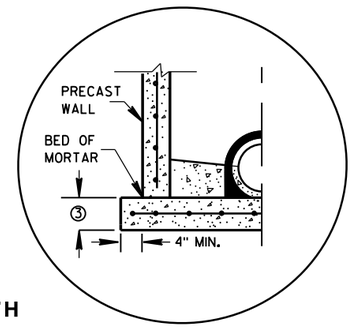


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

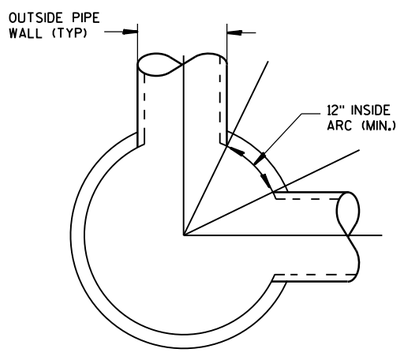


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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 MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED 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" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES 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".

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

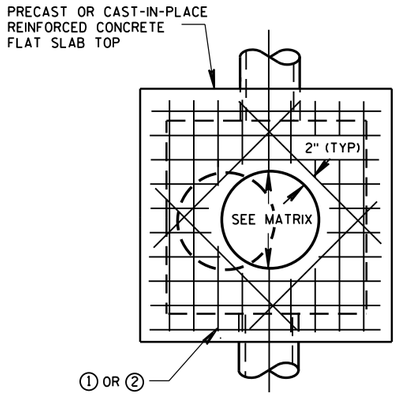
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

6

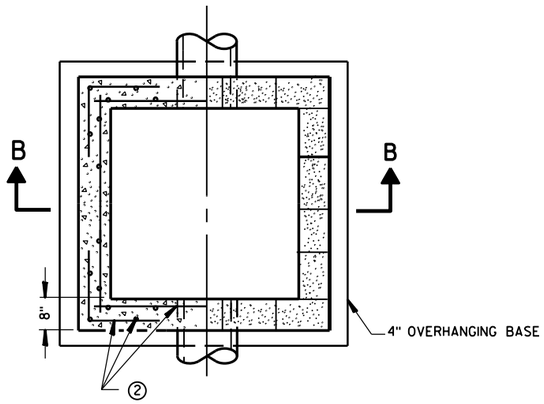
S.D.D. 8 B 9-2

6

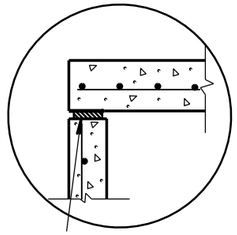
S.D.D. 8 B 9-2



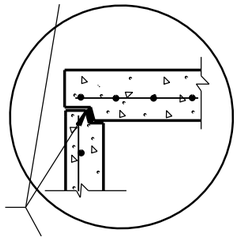
PLAN VIEW
CIRCULAR OPENING



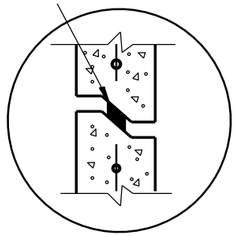
SECTION A-A
PLAN VIEW



TOP WITH PLAIN END JOINT

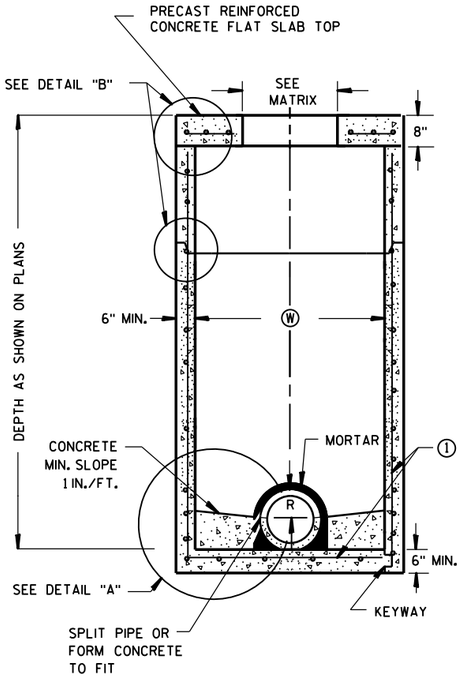


TOP WITH TONGUE AND GROOVE JOINT

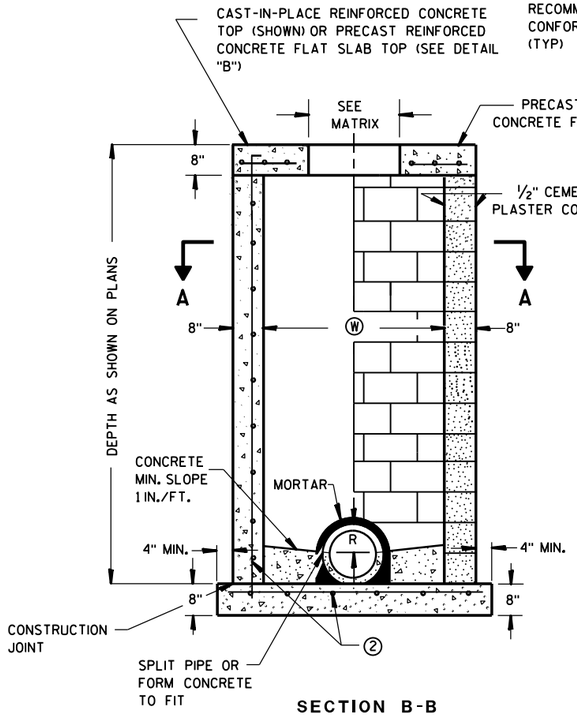


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

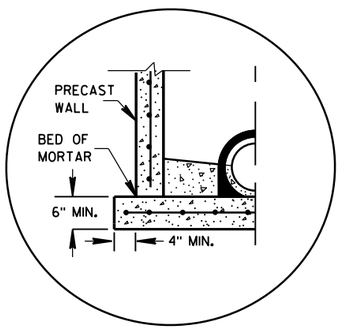


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

SECTION B-B

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



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

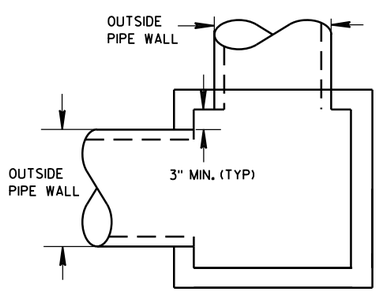
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

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

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

STATE OF WISCONSIN
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Sept., 2016
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
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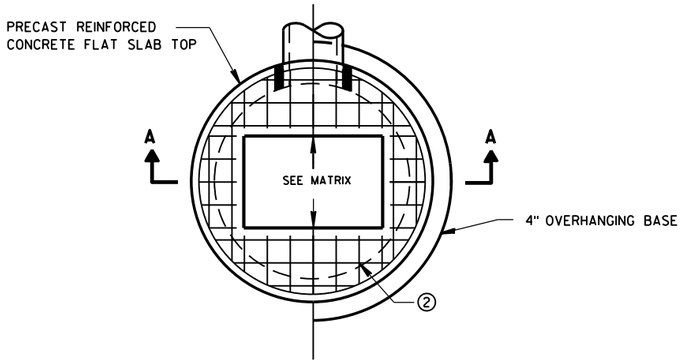
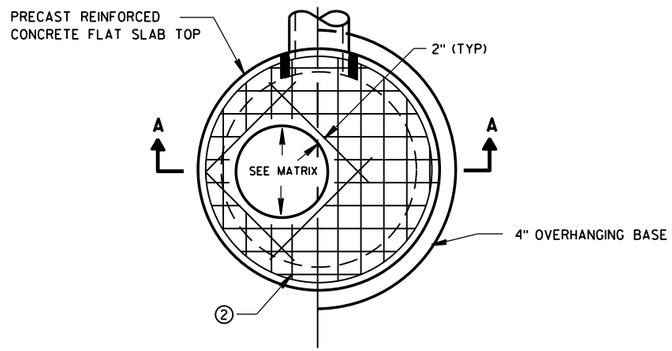
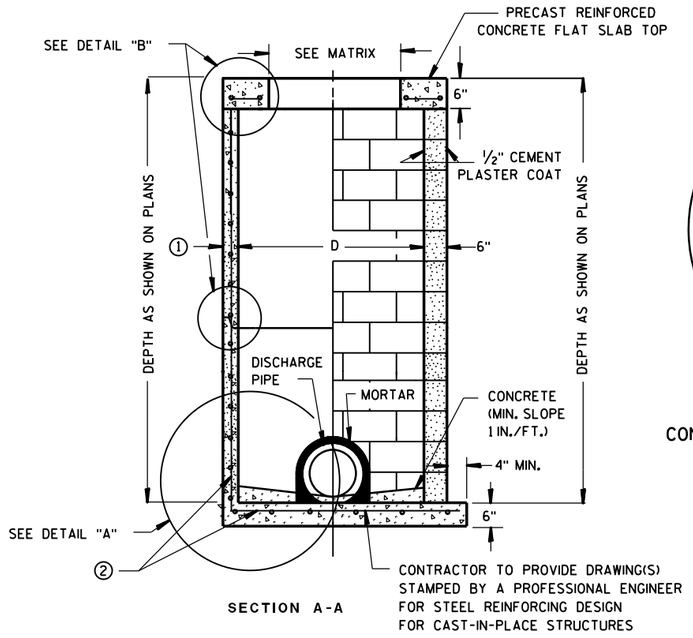


PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

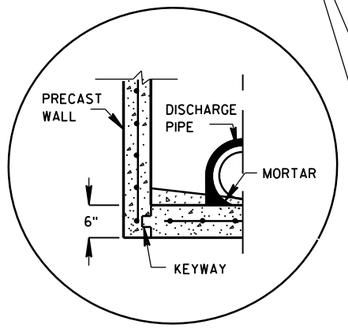


SECTION A-A

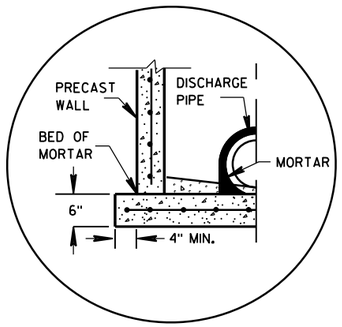
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

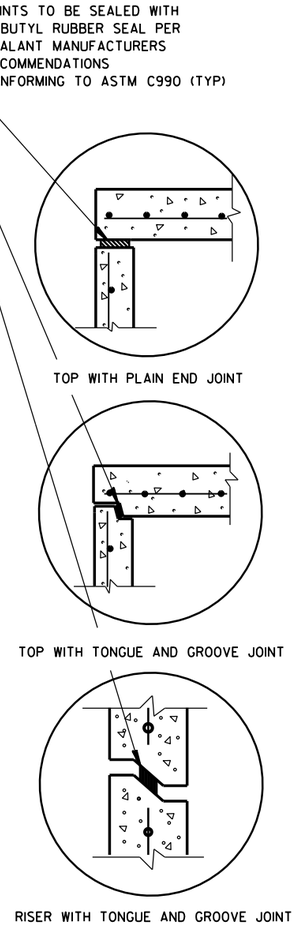


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

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

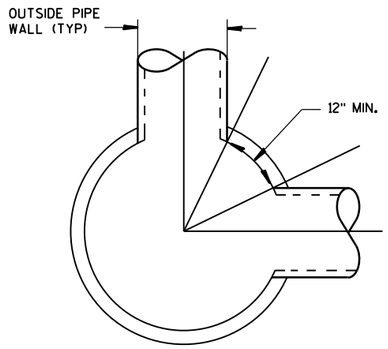
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

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

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

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

INLETS 3-FT AND 4-FT DIAMETER

INLETS 3-FT
AND 4-FT DIAMETER

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S.D.D. 8 C 6-2

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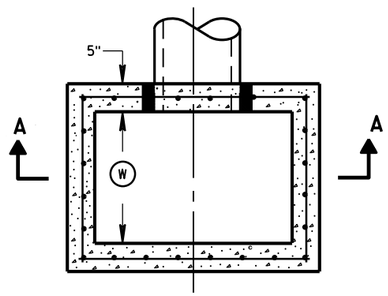
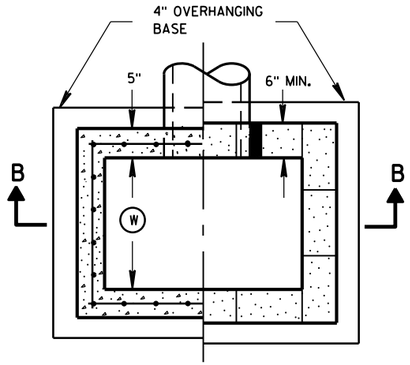
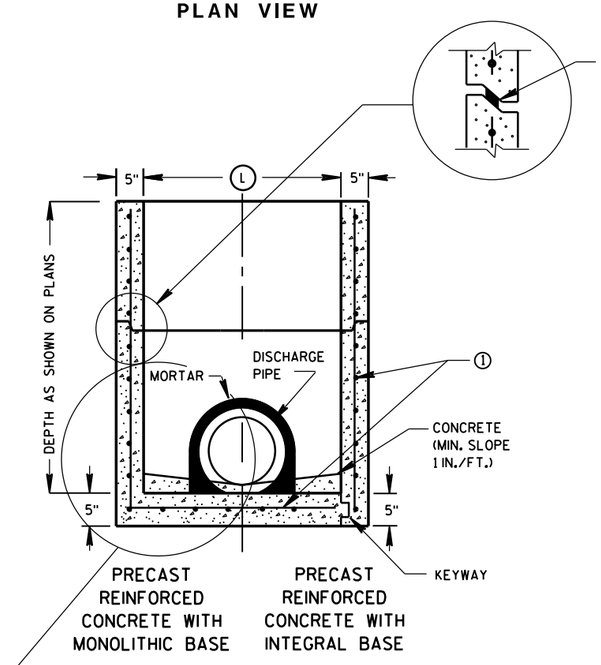


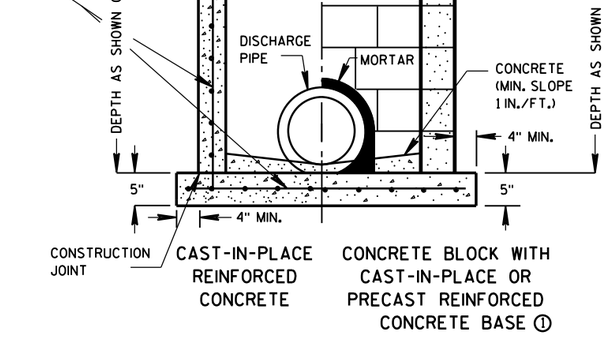
PLAN VIEW



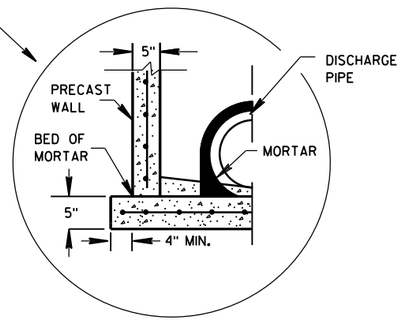
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

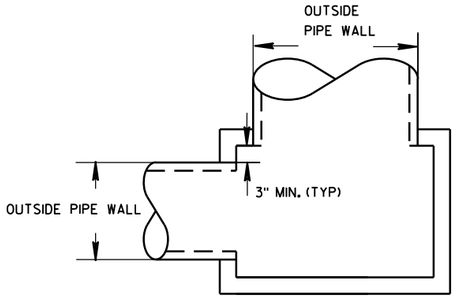
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



DETAIL "A"

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

STATE OF WISCONSIN
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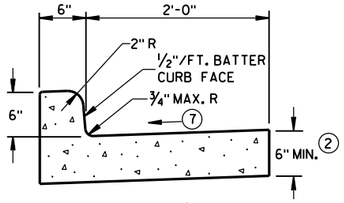
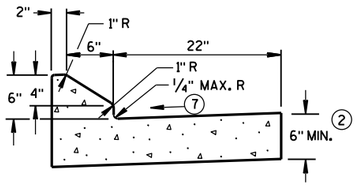
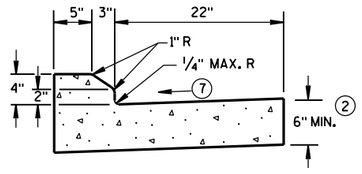


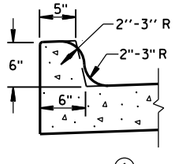
TYPES A (1) & D



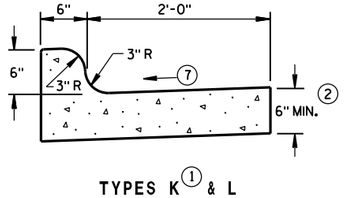
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

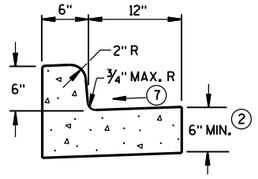


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



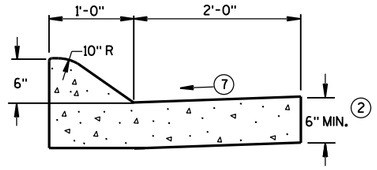
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

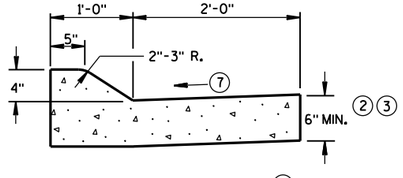


TYPES A (1) & D

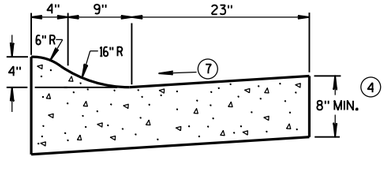
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

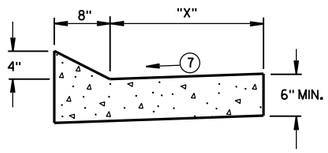


4" SLOPED CURB TYPES A (1) & D



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

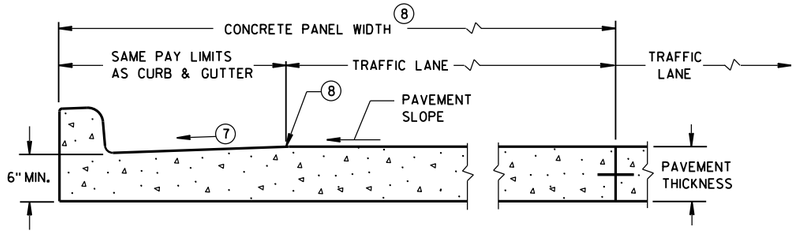
CONCRETE CURB & GUTTER 36"



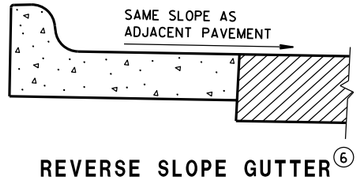
TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

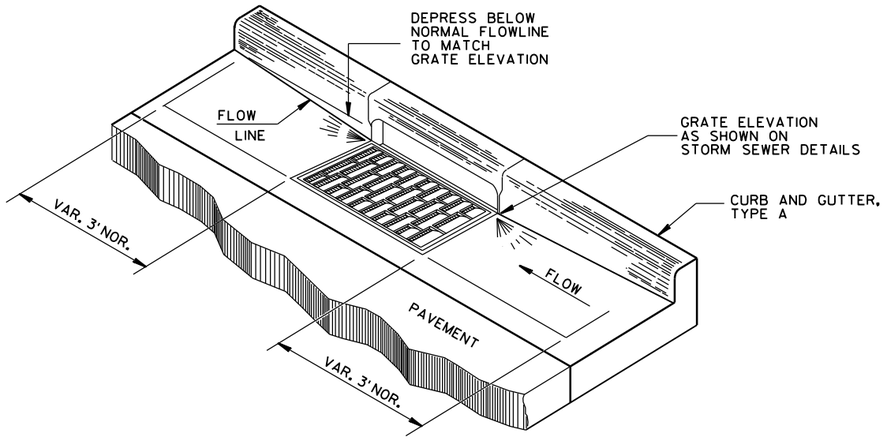
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

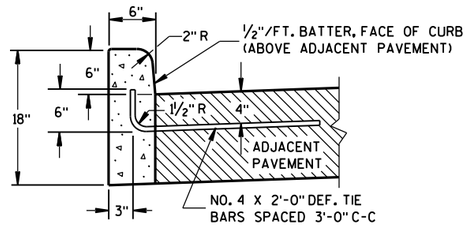
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

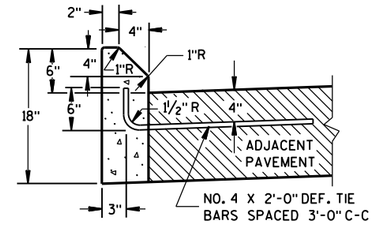
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

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

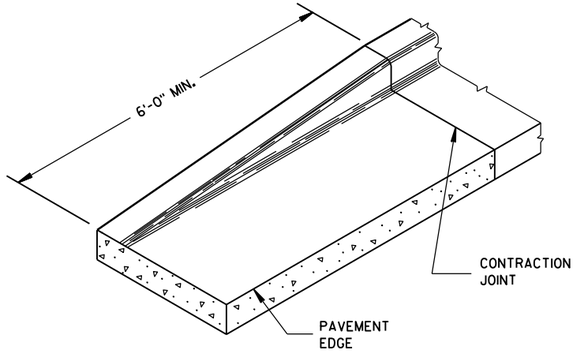


TYPES A(1) & D

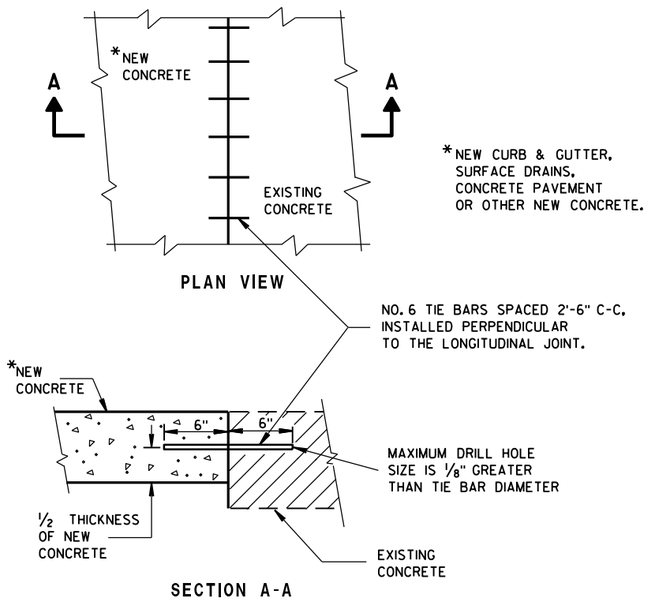


TYPES G(1) & J

CONCRETE CURB



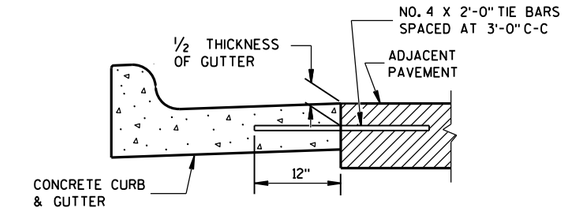
END SECTION CURB & GUTTER



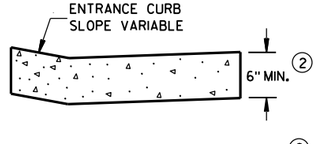
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA
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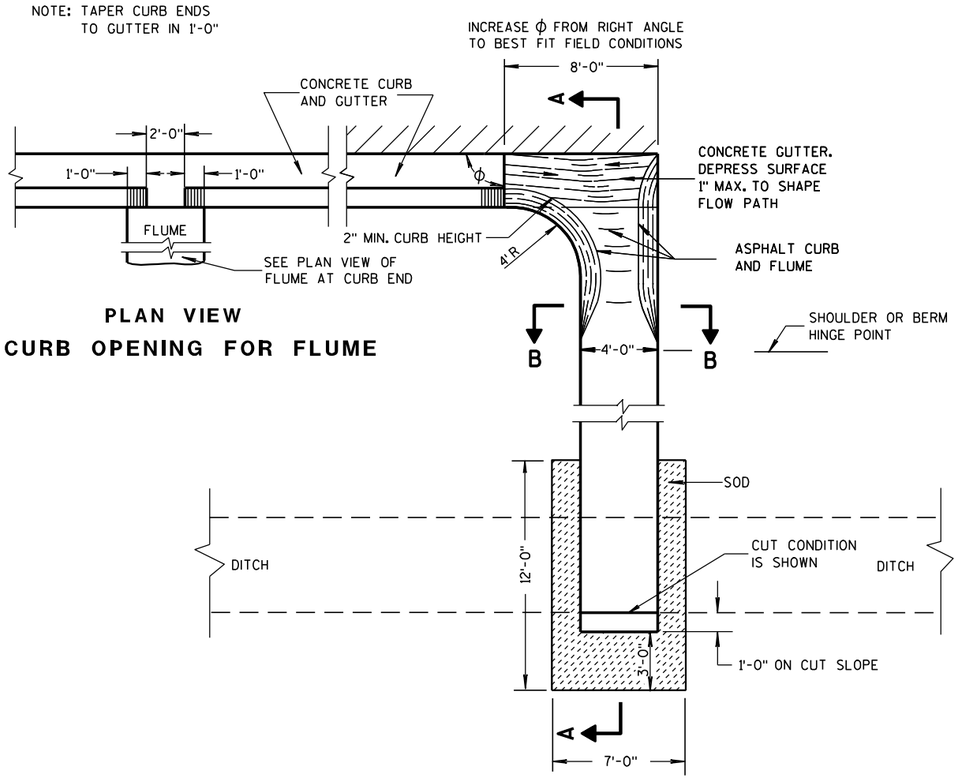
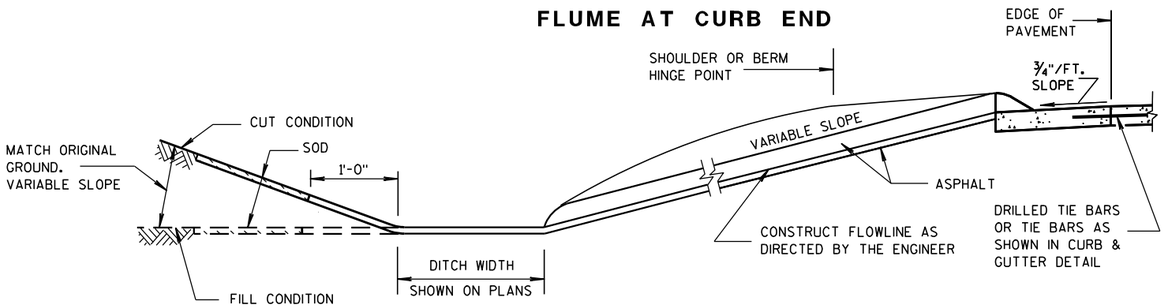
ASPHALTIC FLUME

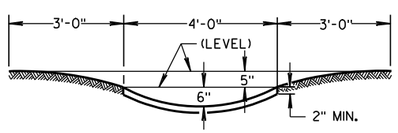


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

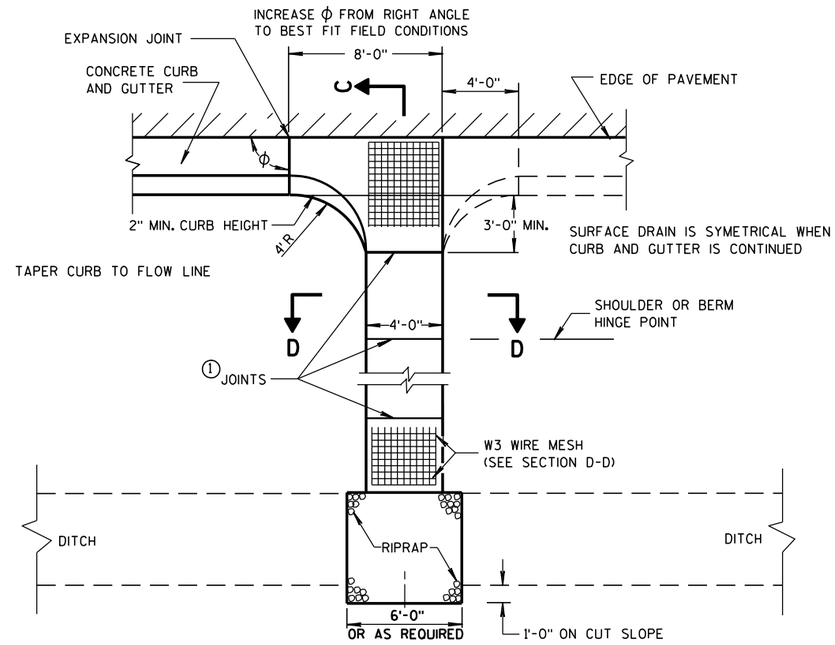
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

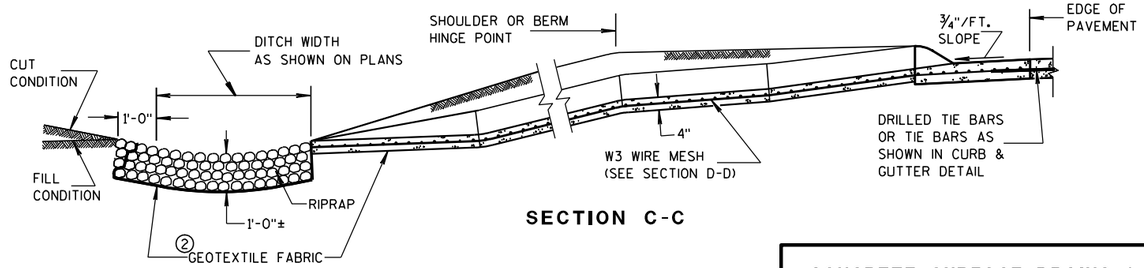
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

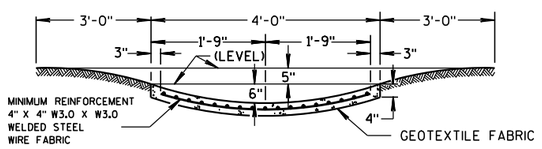
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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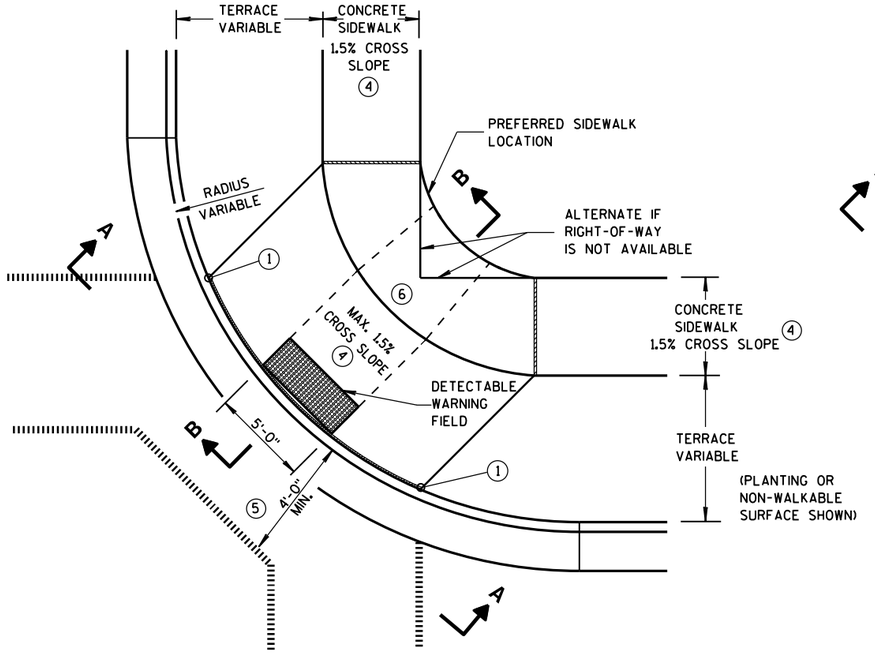
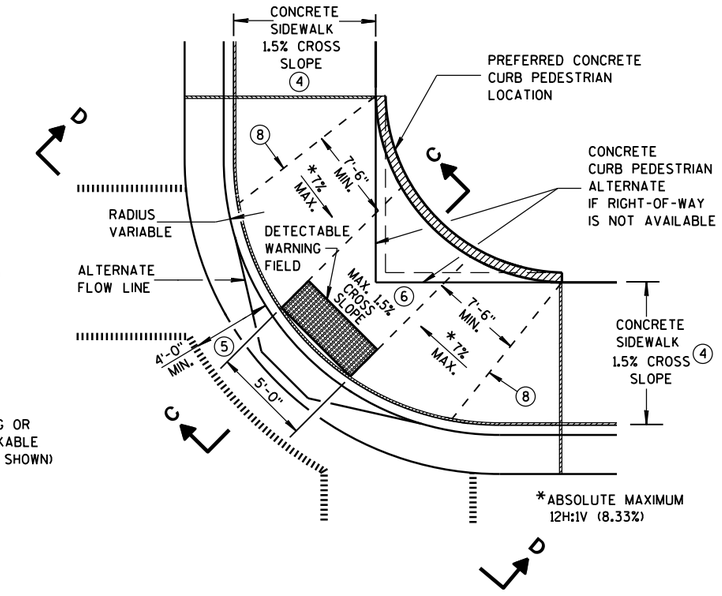


PLAN VIEW

TYPE 1 RAMP

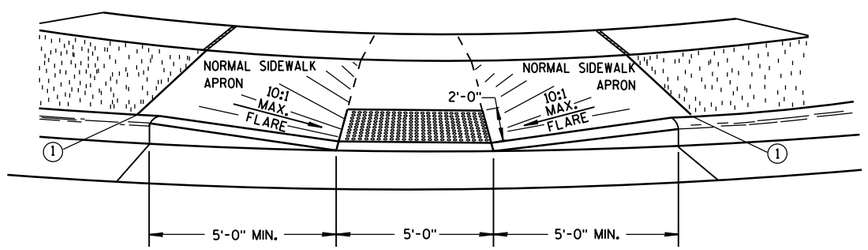
(CENTER OF CORNER RADIUS)



PLAN VIEW

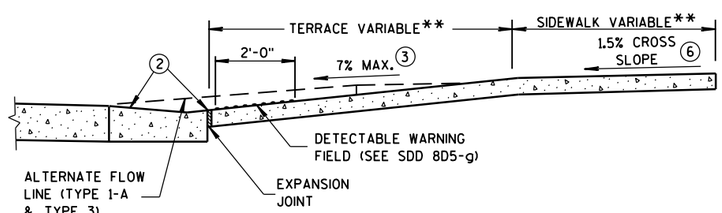
TYPE 1-A RAMP

(NO TERRACE)

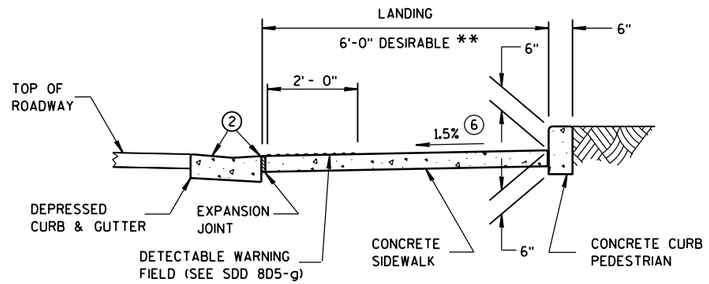


VIEW A-A

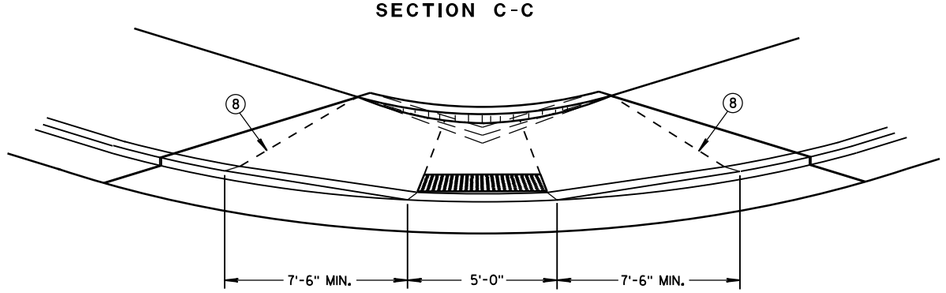
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

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

DETECTABLE WARNING FIELD 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 LINEAL 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 1/4-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) ABSOLUTE MAXIMUM 12H:1V (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 LANDING SIZE IS 5 FEET X 5 FEET.

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

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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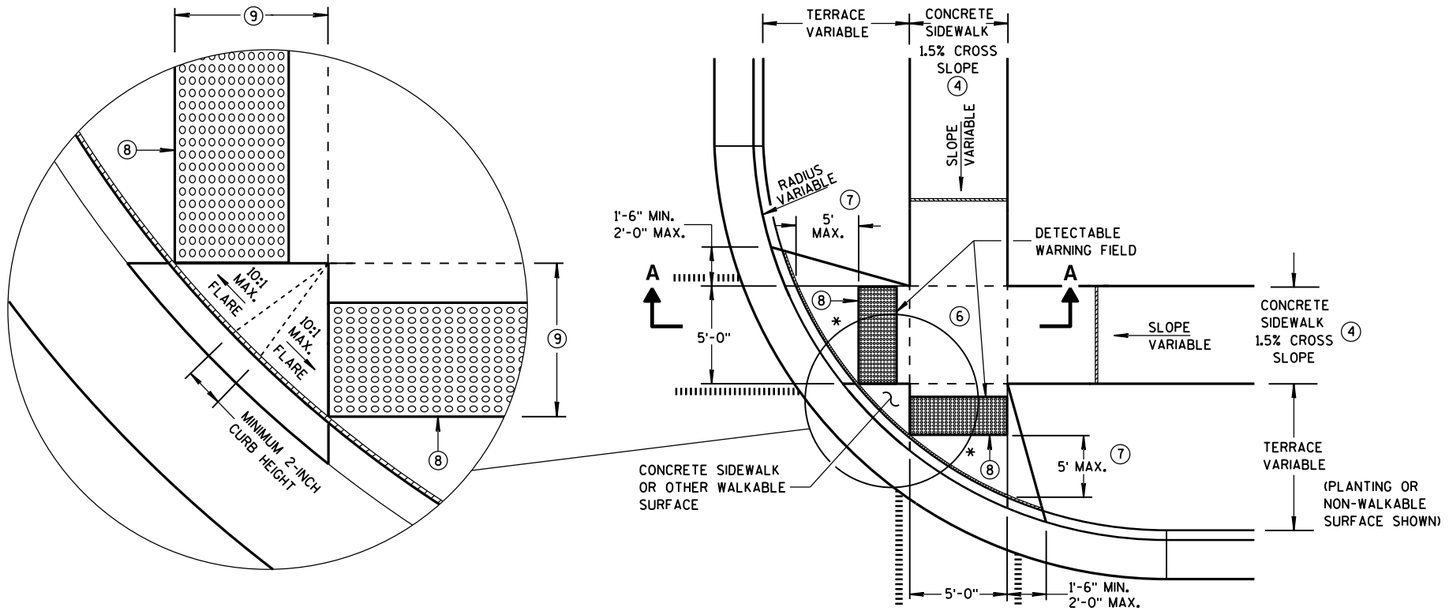
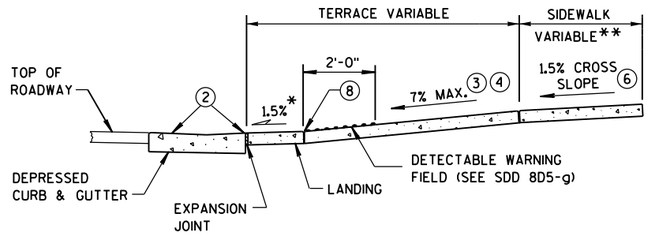


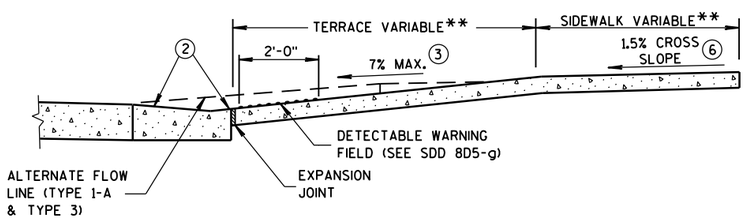
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

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

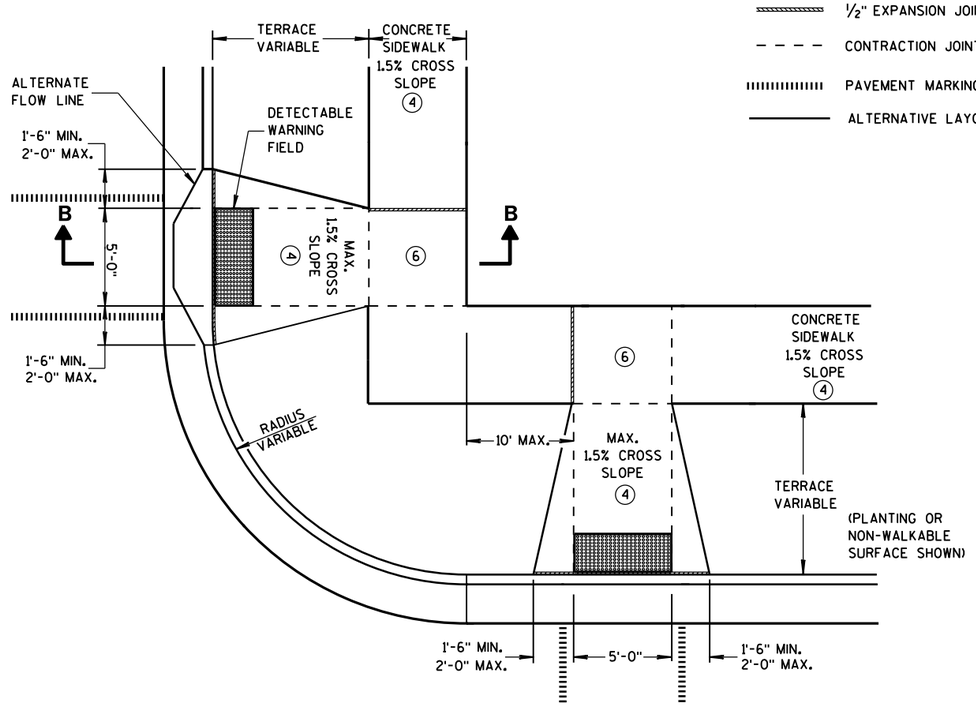


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

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

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 1/4-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) ABSOLUTE MAXIMUM 12H:1V (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 X 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.

(9) WHEN THIS 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.

LEGEND

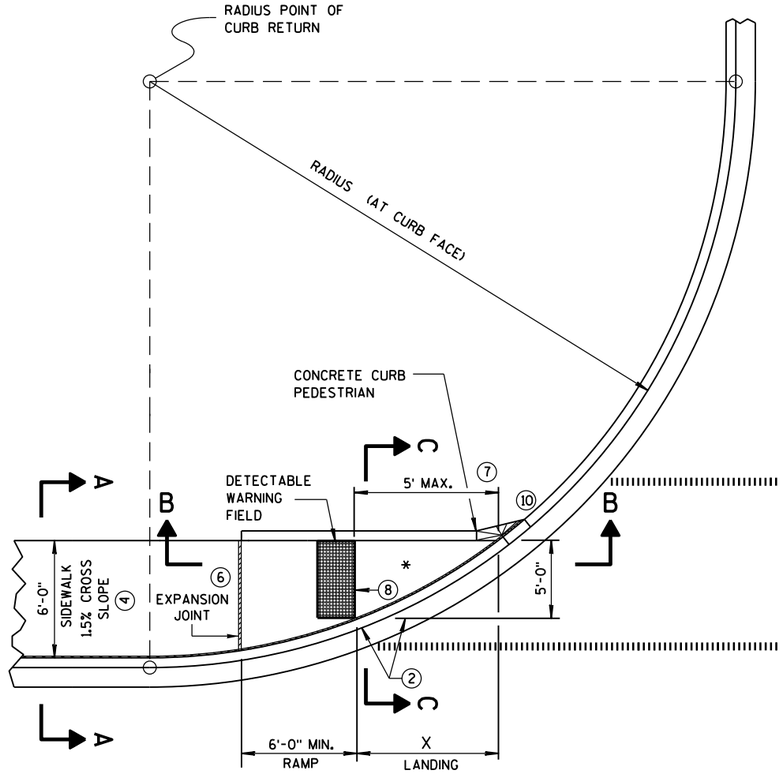
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

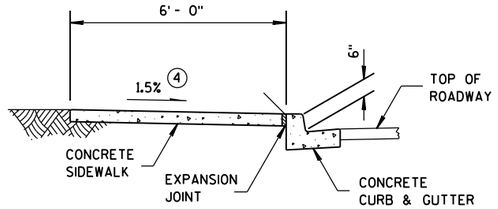
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

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.

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) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

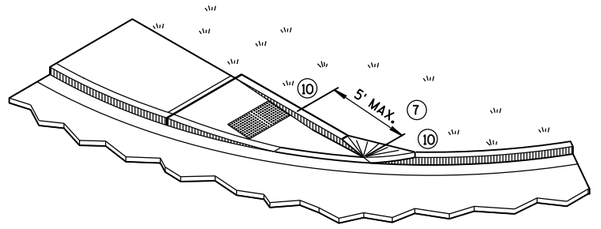
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

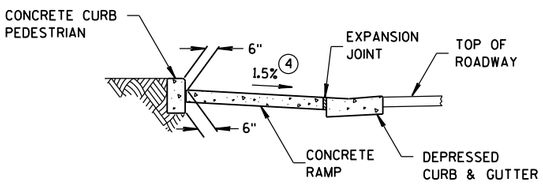
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

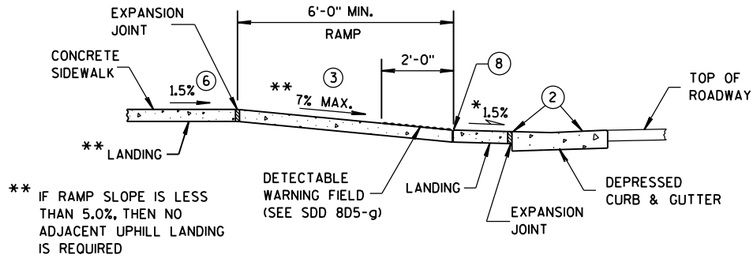
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



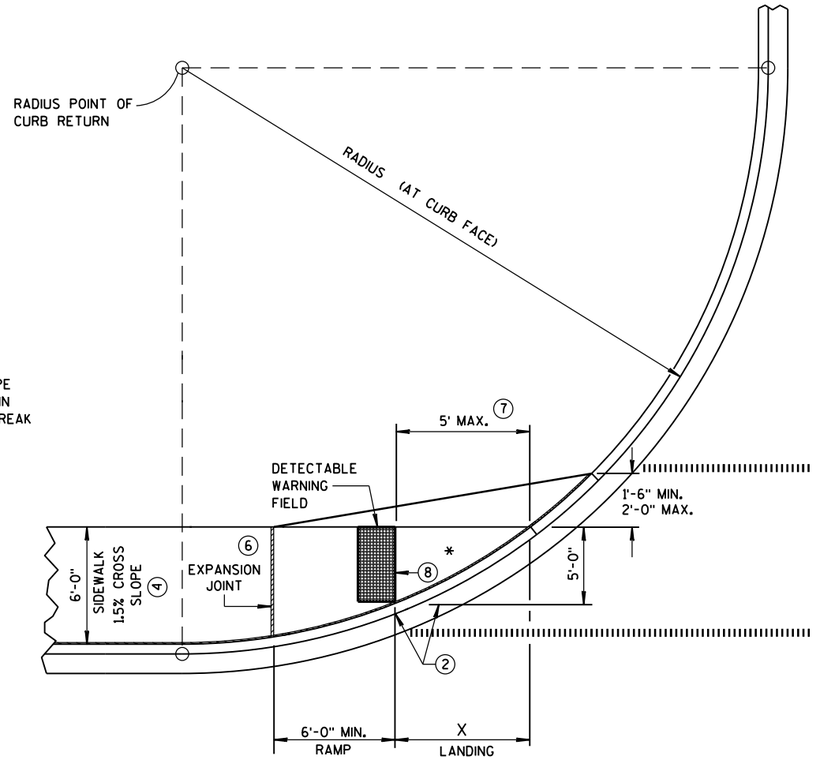
SECTION C-C FOR TYPE 4A



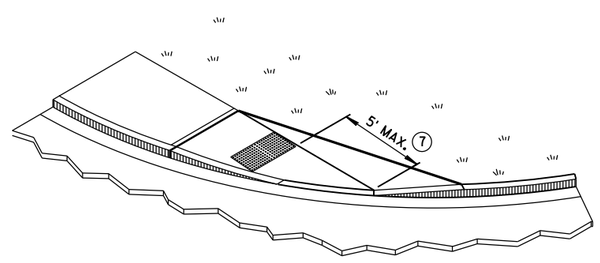
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B-B FOR TYPE 4A

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



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

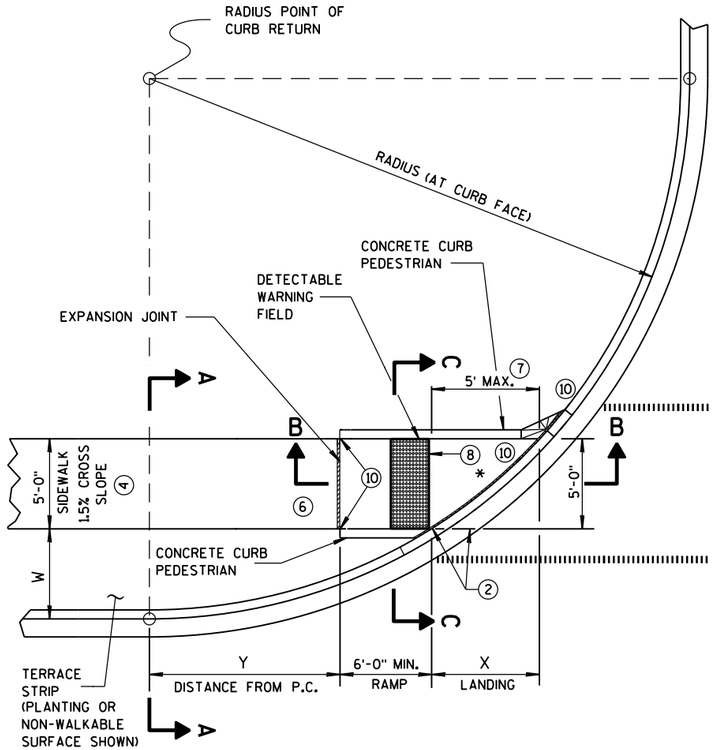
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

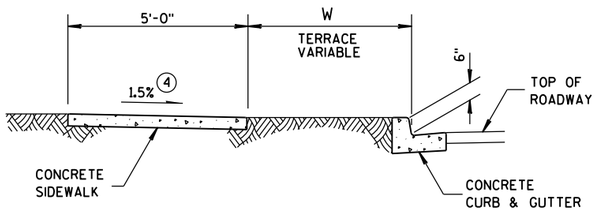
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

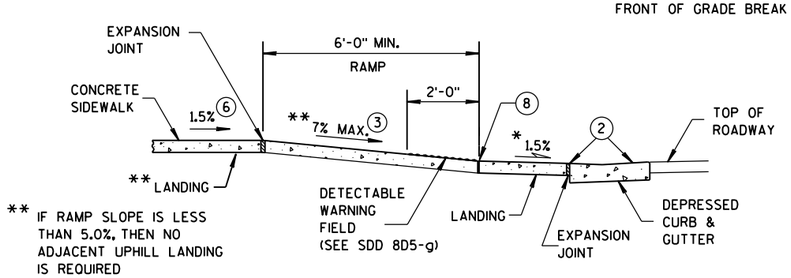
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



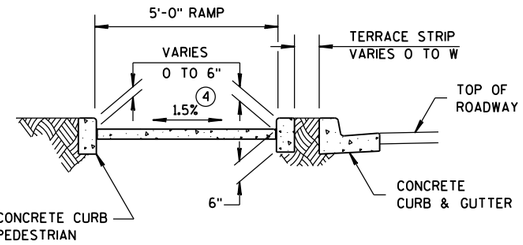
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

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

SECTION B-B FOR 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'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	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

GENERAL NOTES

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

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) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

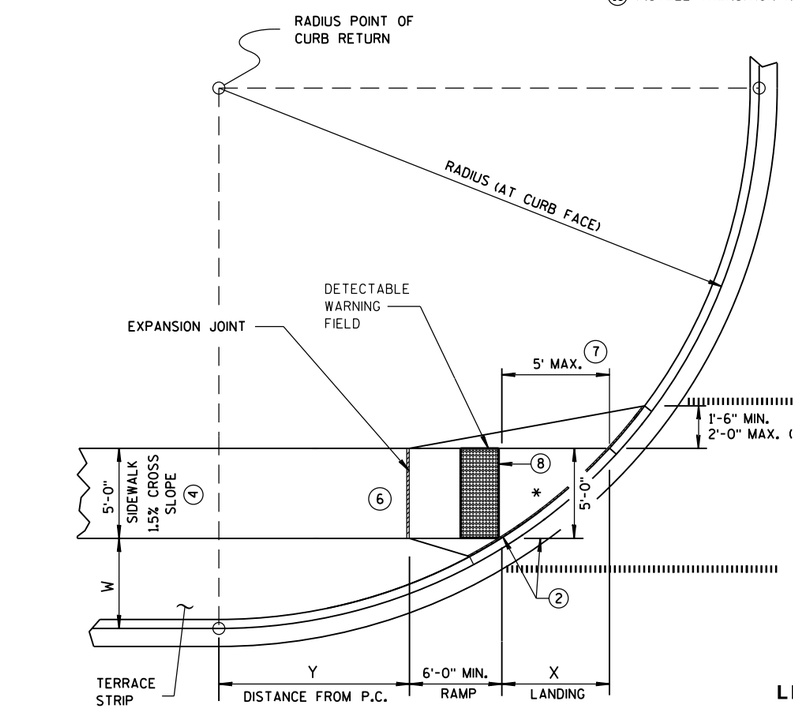
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

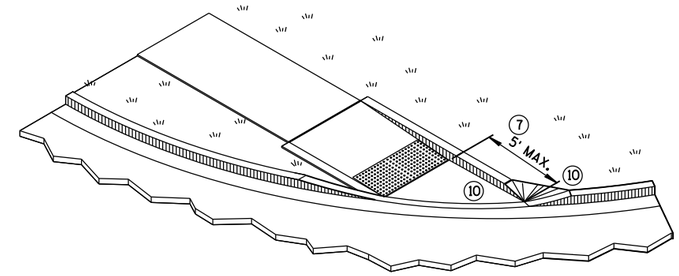
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

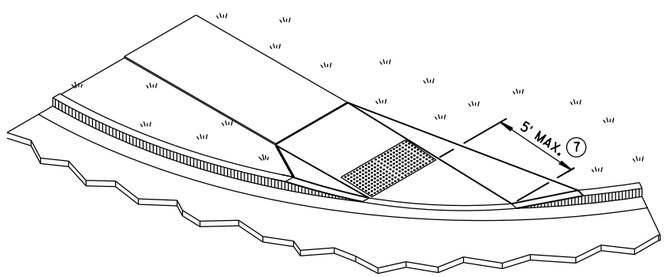
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

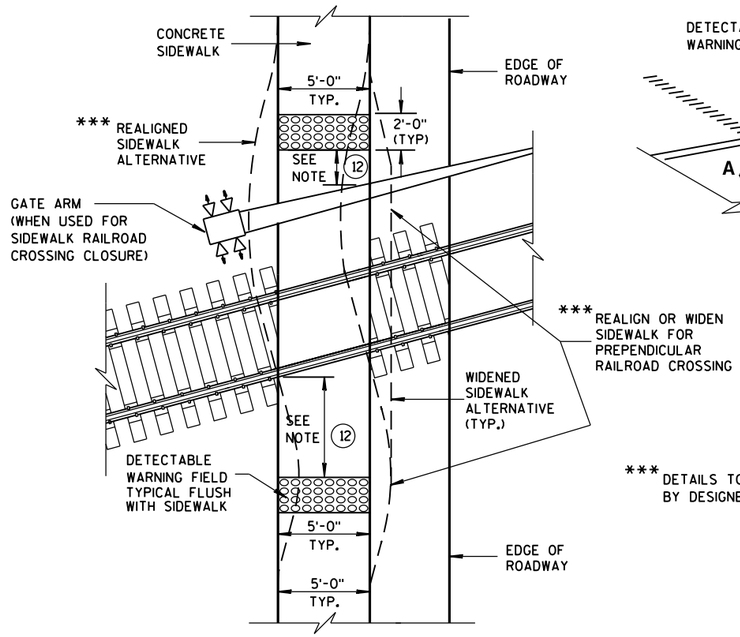
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

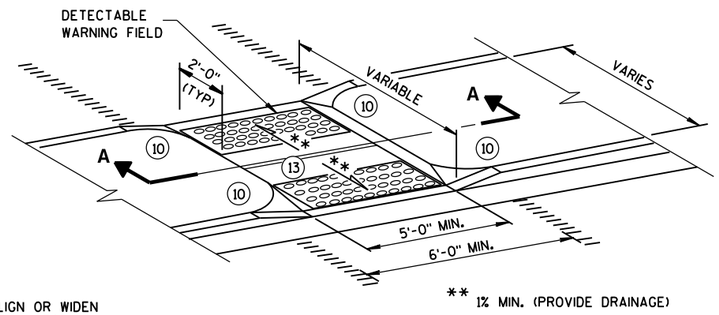
6

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



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

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

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 1/4-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) ABSOLUTE MAXIMUM 12H:1V (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.

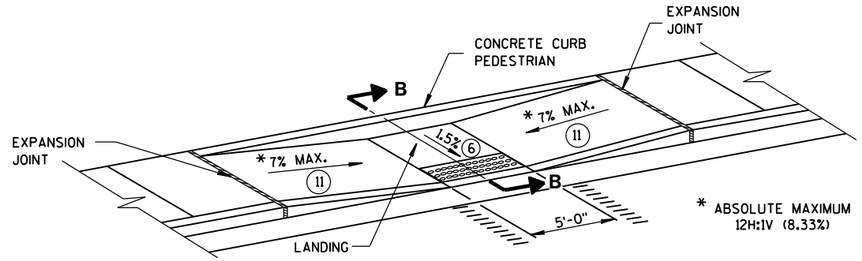
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

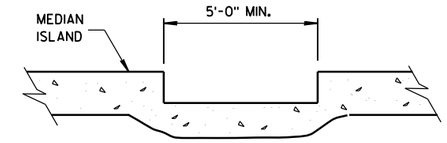
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

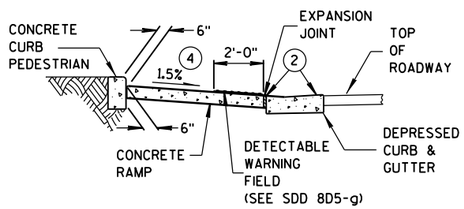
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

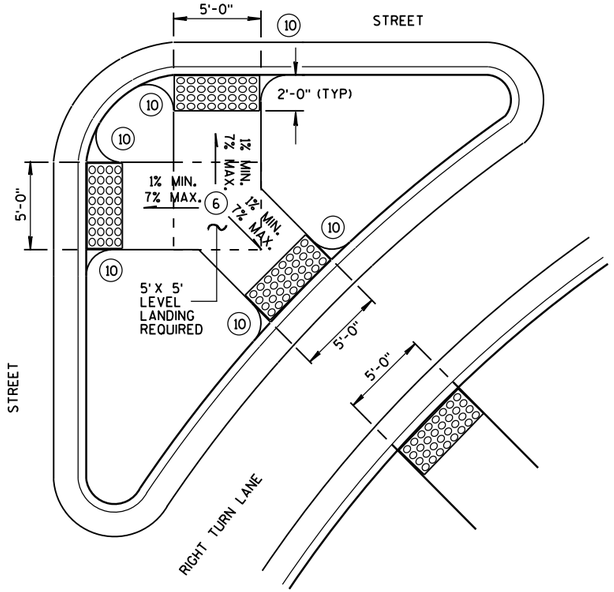


SECTION A-A

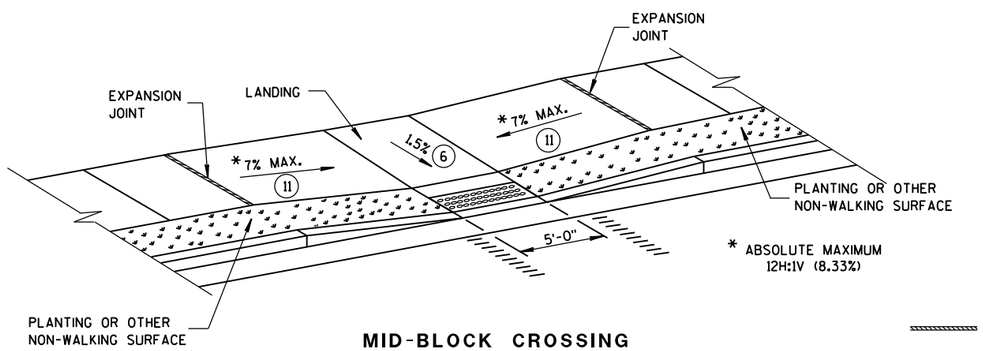


SECTION B-B

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



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

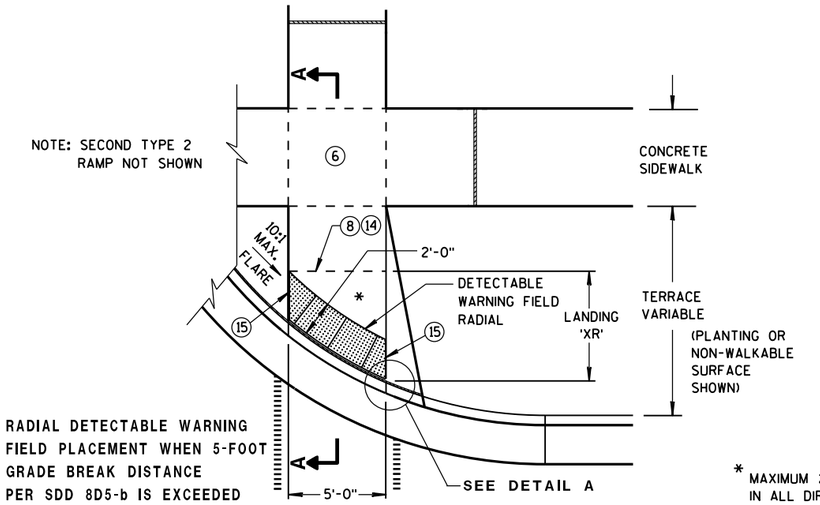
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

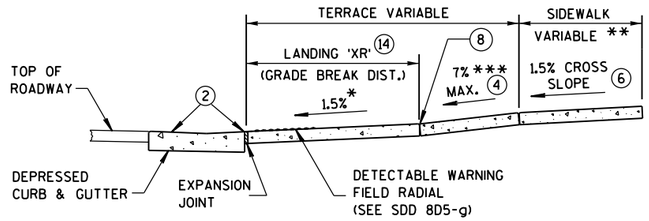
6

S.D.D. 8 D 5-19e



TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

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



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

LEGEND

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

GENERAL NOTES

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

DETECTABLE WARNING FIELDS (DWFs) 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 FIELD 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.

(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) ABSOLUTE MAXIMUM 12H:1V (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 X 5 FEET.

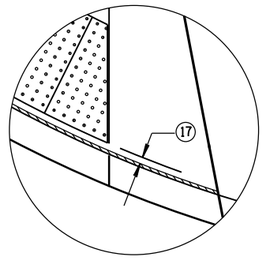
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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

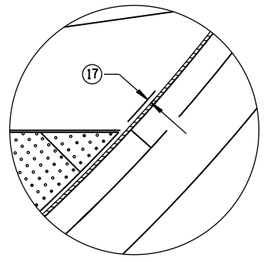
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(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.

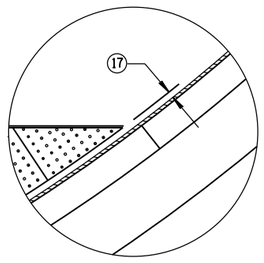
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



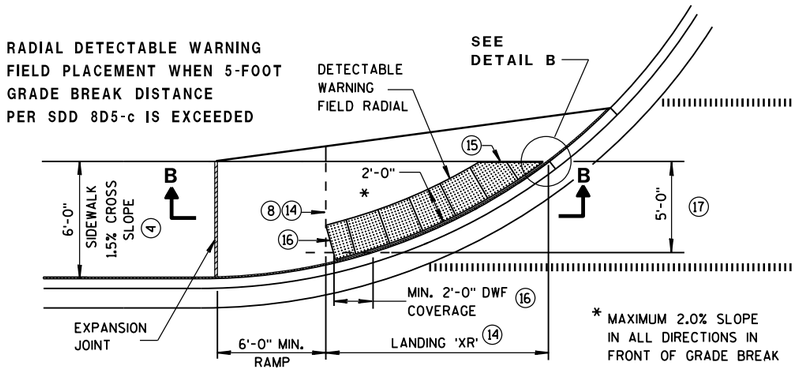
DETAIL A



DETAIL C

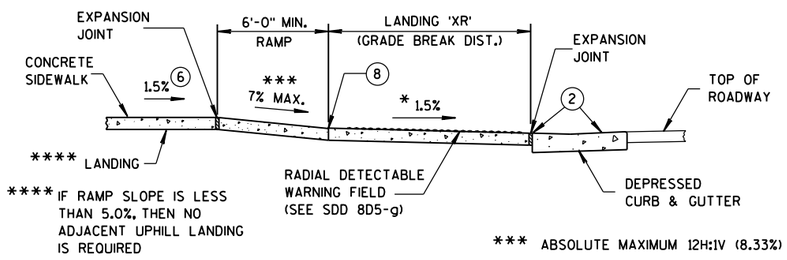


DETAIL B



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

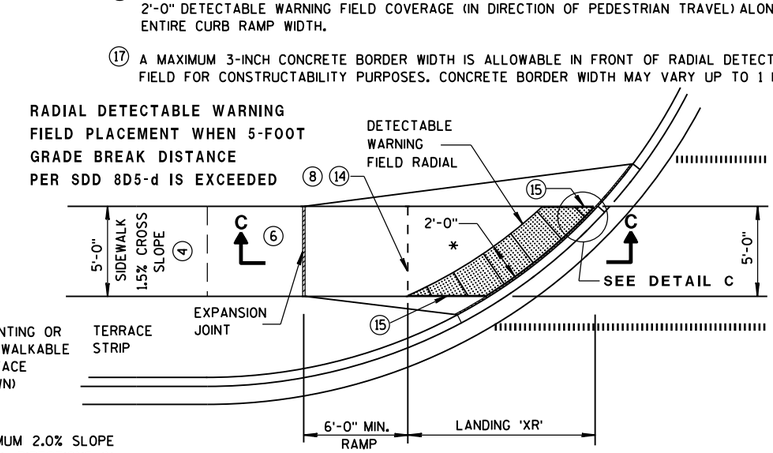
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

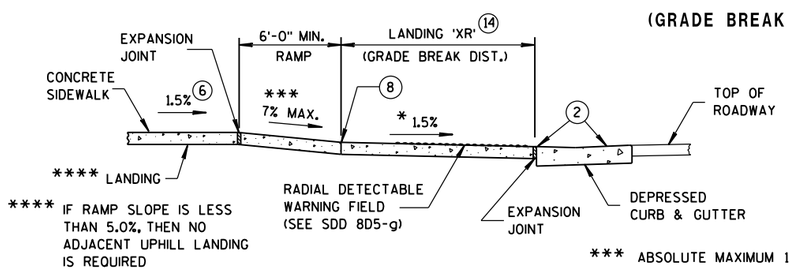
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION B-B FOR TYPE 4A1



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

CURB RAMP TYPE 4B1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION C-C FOR TYPE 4B1

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 198

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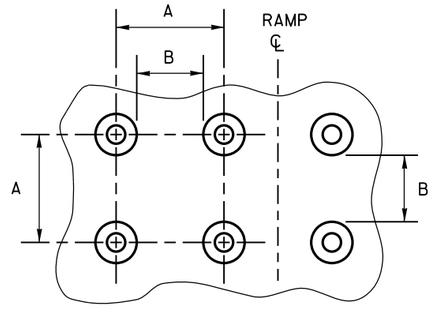
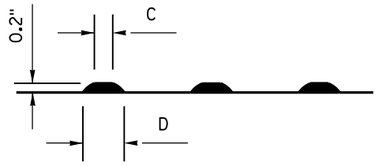
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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



PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING PATTERN DETAIL

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, 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 FIELD ARE PROHIBITED.

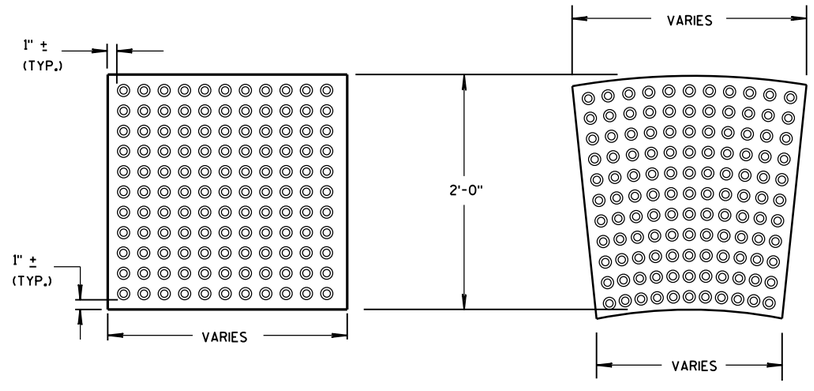
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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 WEDGES IN COMBINATION WITH SQUARE PANELS 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 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

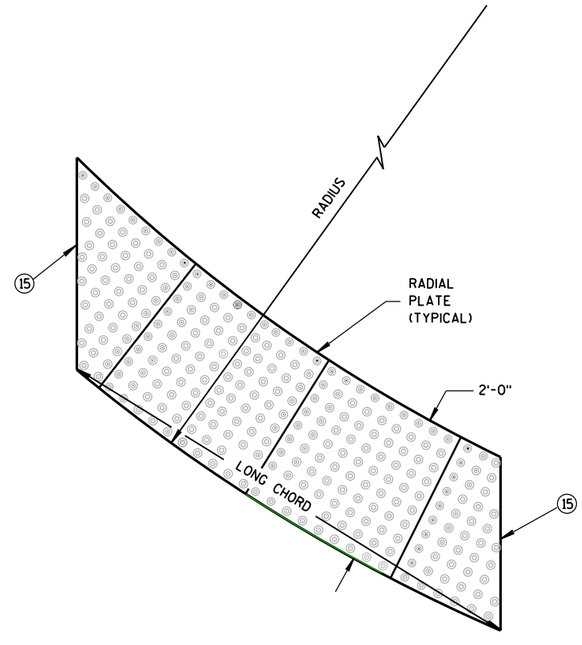


RECTANGULAR PLATES

RADIAL PLATES

DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW



RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
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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 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:

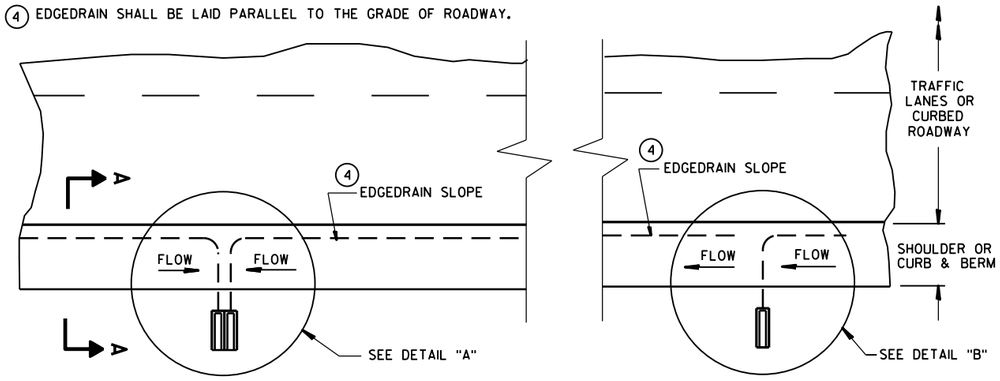
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

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.

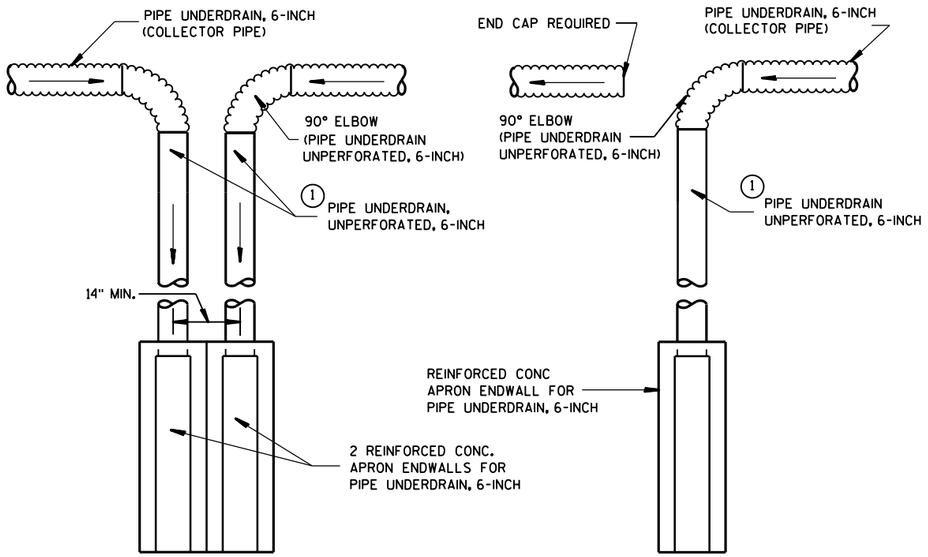
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

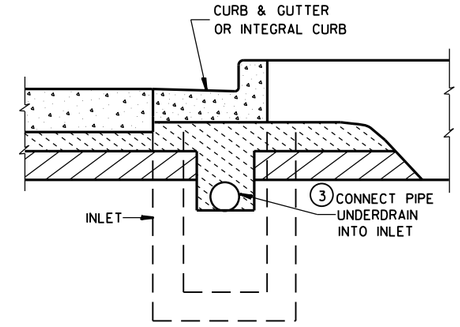
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

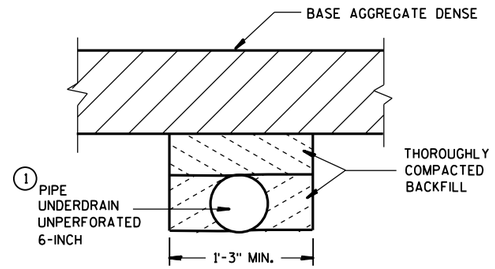
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



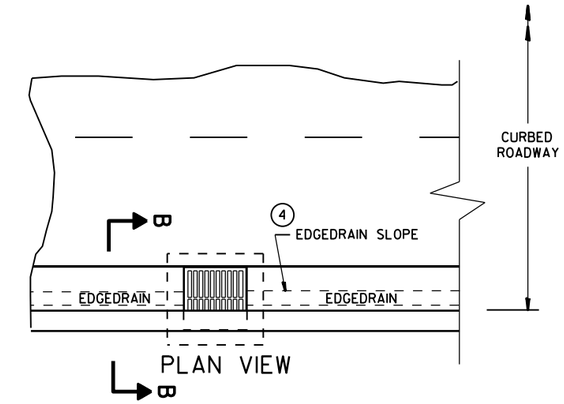
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

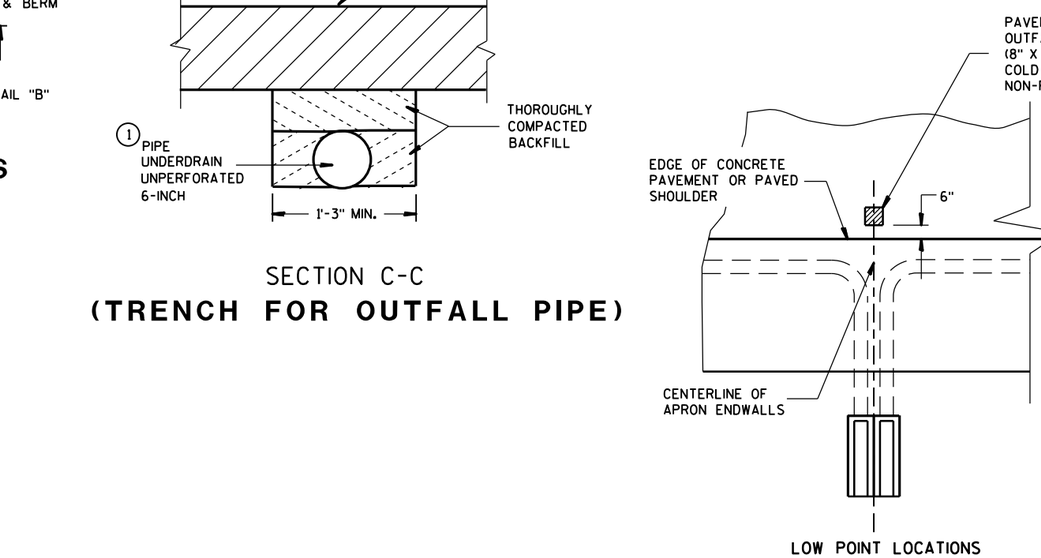
(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

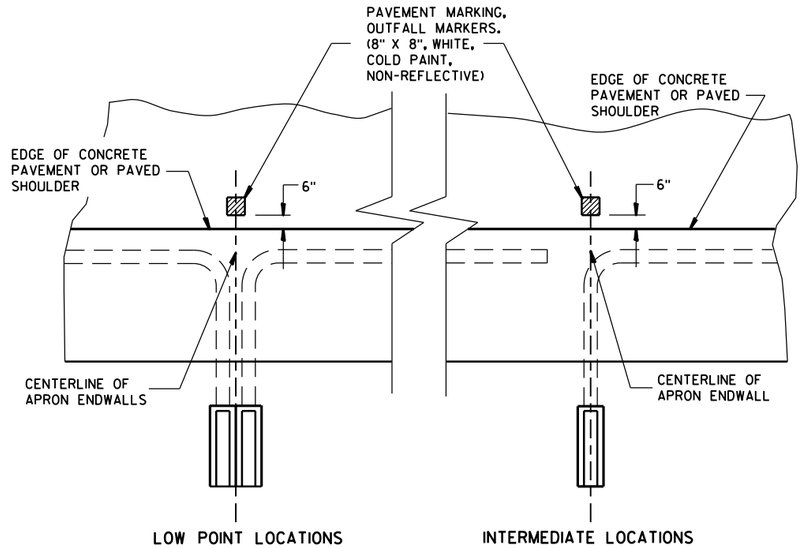
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



SECTION A-A

RURAL CROSS SECTION



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS

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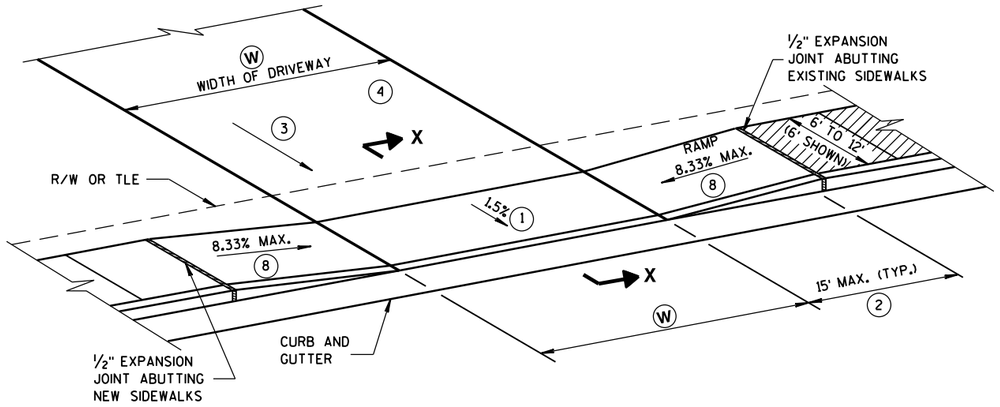
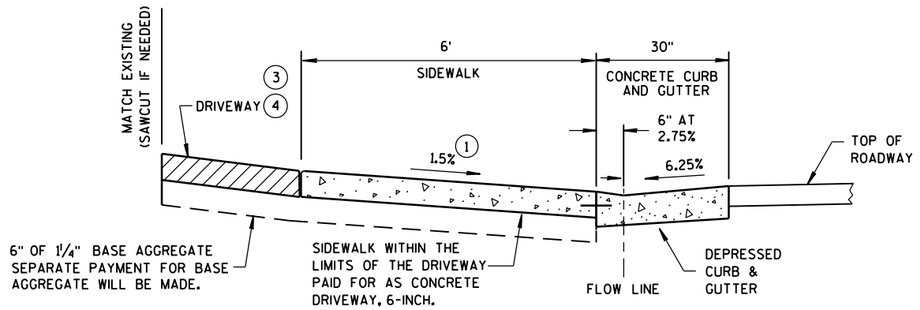
EDGEDRAIN OUTLET AND OUTFALL MARKERS

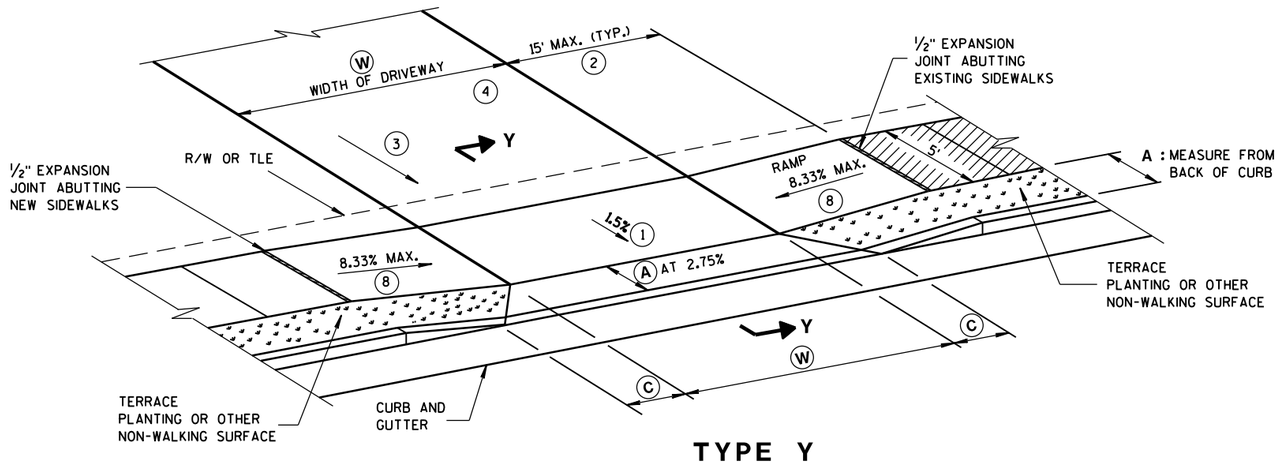
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X

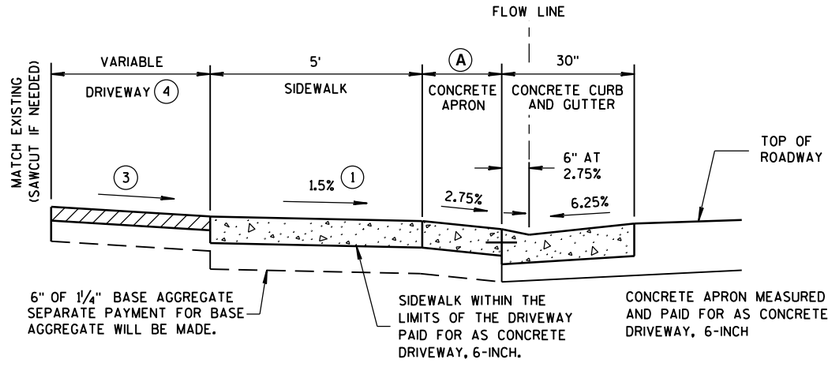


TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

W: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)

GENERAL NOTES

1. CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
2. THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
3. DRIVEWAY SLOPES: DESIRABLE MAXIMUM
   - 10.5% UP AWAY FROM SIDEWALK (SAG)
   - 8.5% DOWN AWAY FROM SIDEWALK (CREST)
   - ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
4. DRIVEWAY TYPES
   - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
   - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
   - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
5. PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
6. (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
7. OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
8. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

TABLE Y

A FEET	C FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

NOT TO SCALE

DRIVEWAY AND SIDEWALK RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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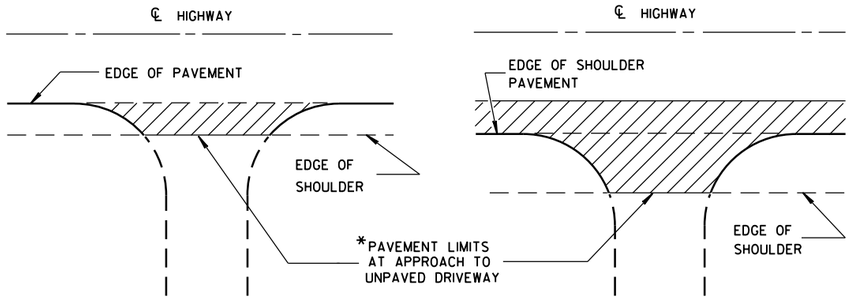


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

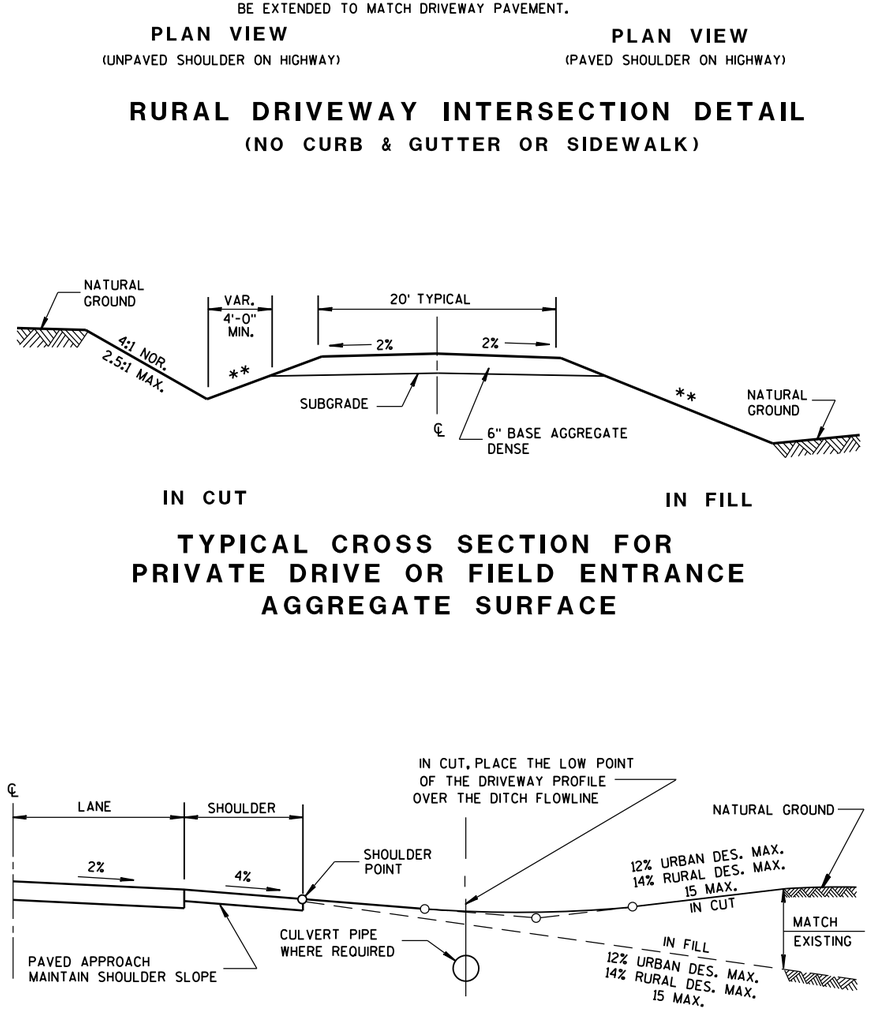
RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)

IN CUT **IN FILL**

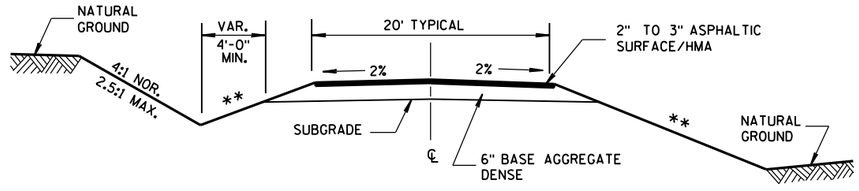
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

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

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



TYPICAL DRIVEWAY PROFILES



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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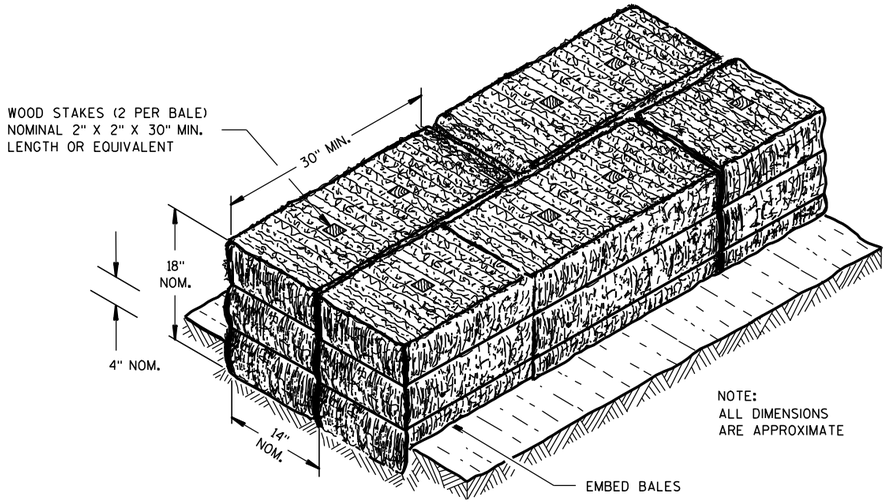
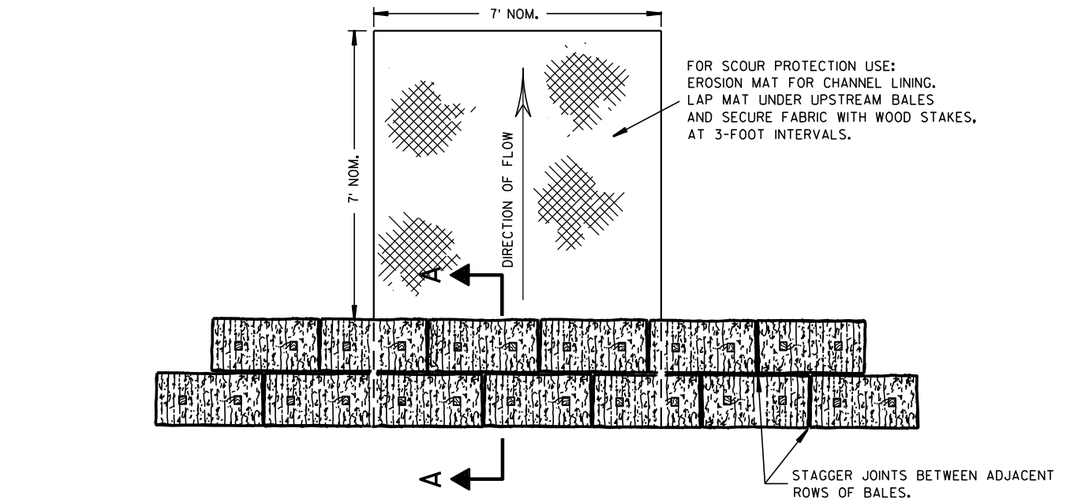
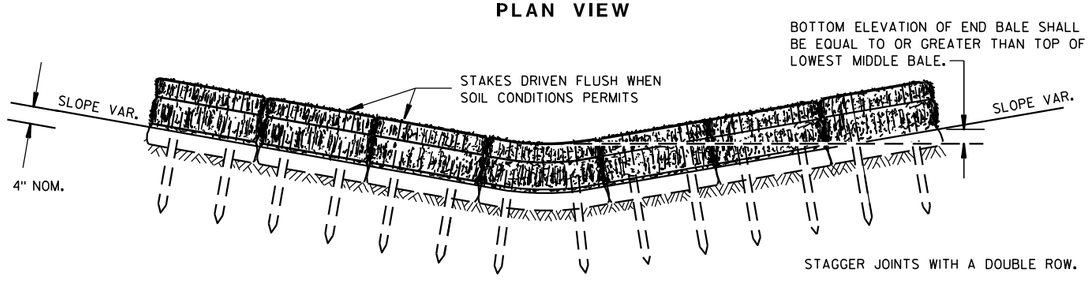


SECTION A-A



PLAN VIEW



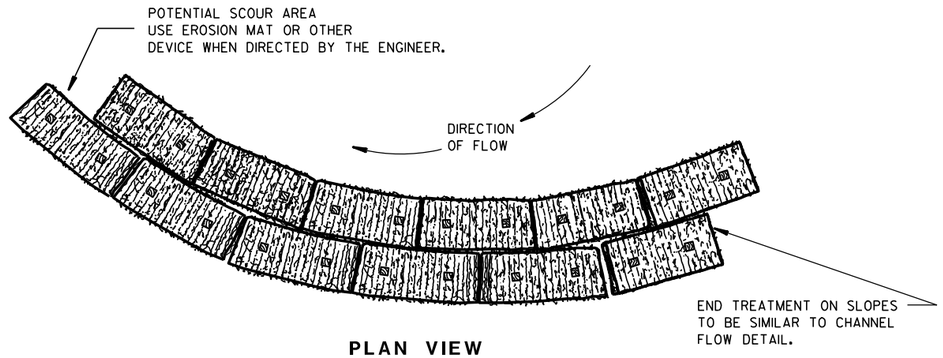
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

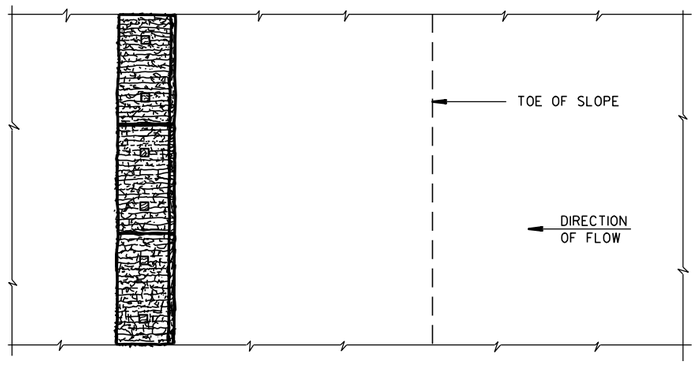
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

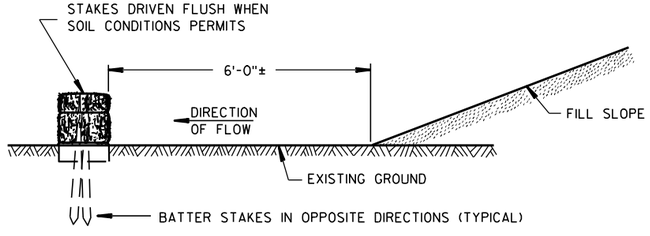


PLAN VIEW

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

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S.D.D. 8 E 8-3

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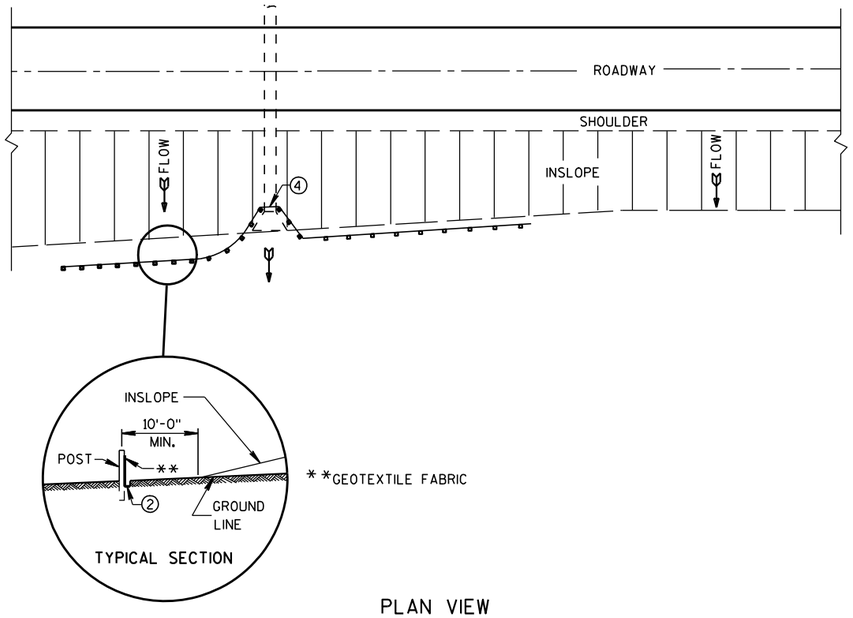
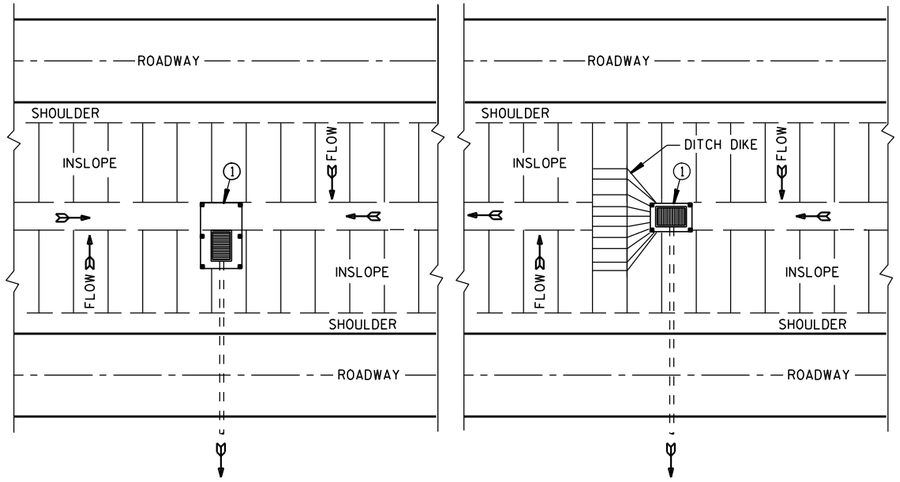
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



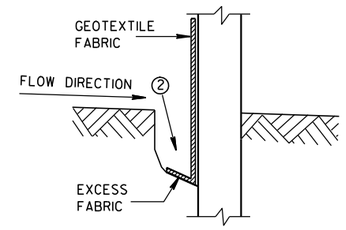
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

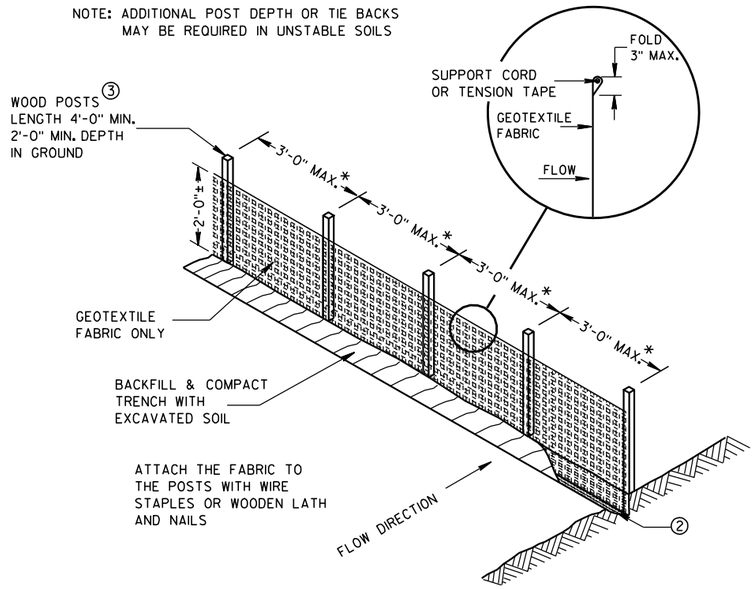
GENERAL NOTES

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

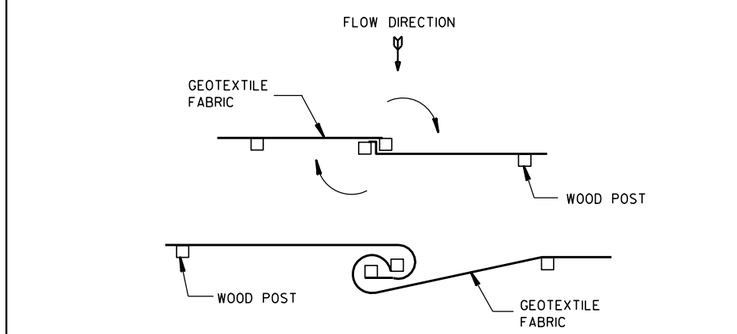
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



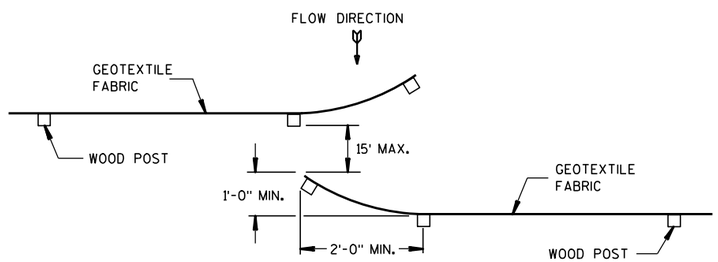
TRENCH DETAIL



SILT FENCE

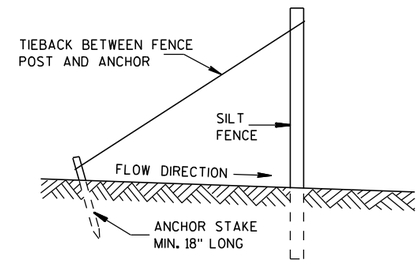


TWIST METHOD



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

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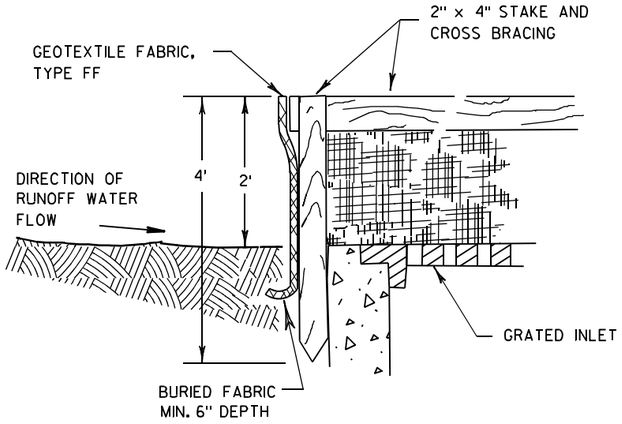
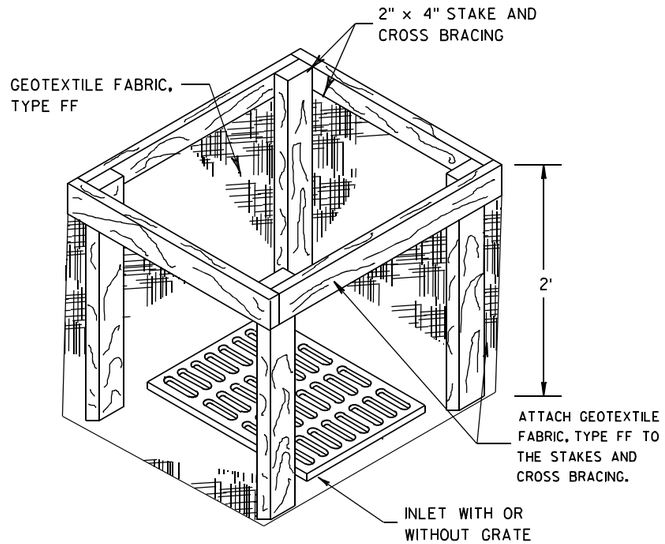
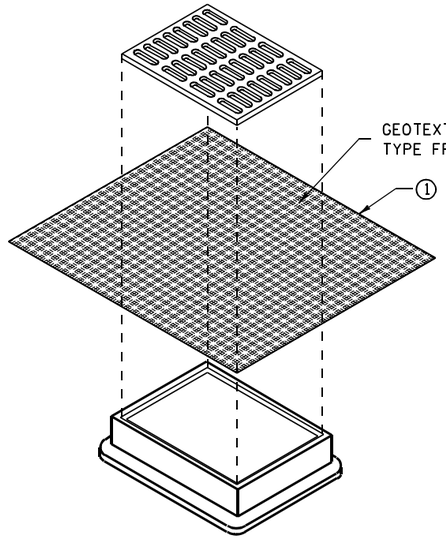
S.D.D. 8 E 9-6



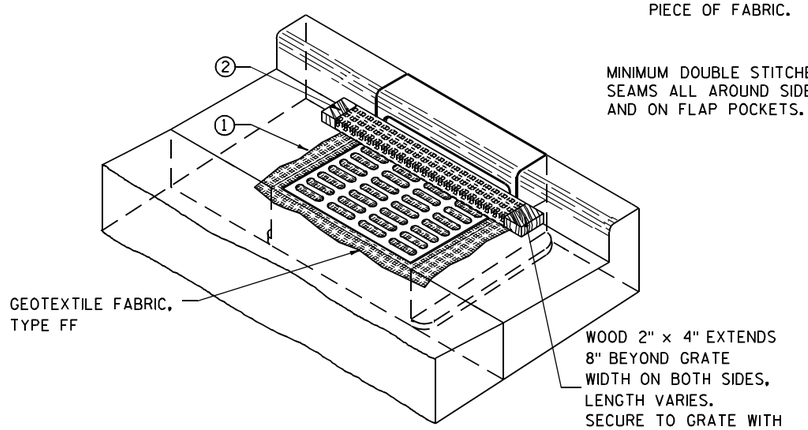


INLET PROTECTION, TYPE A

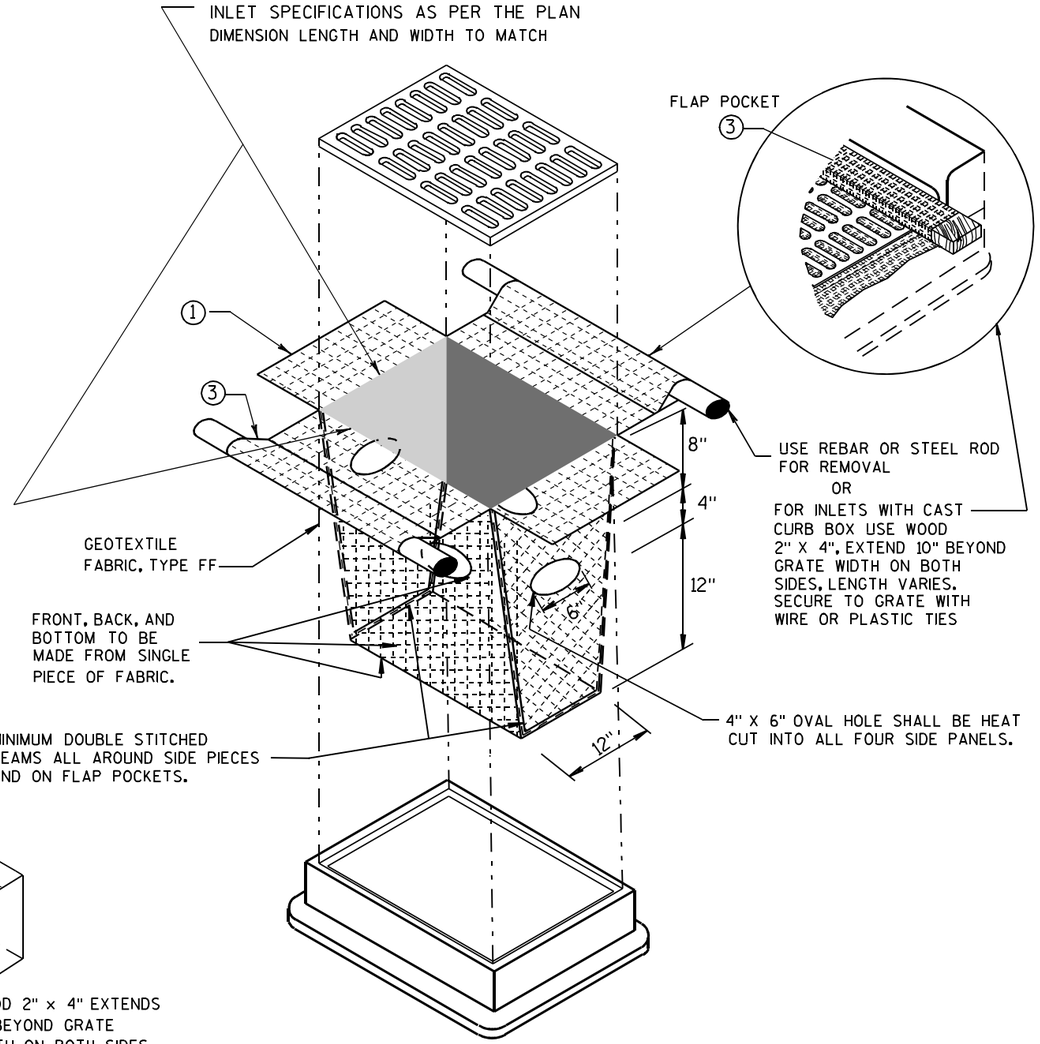


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

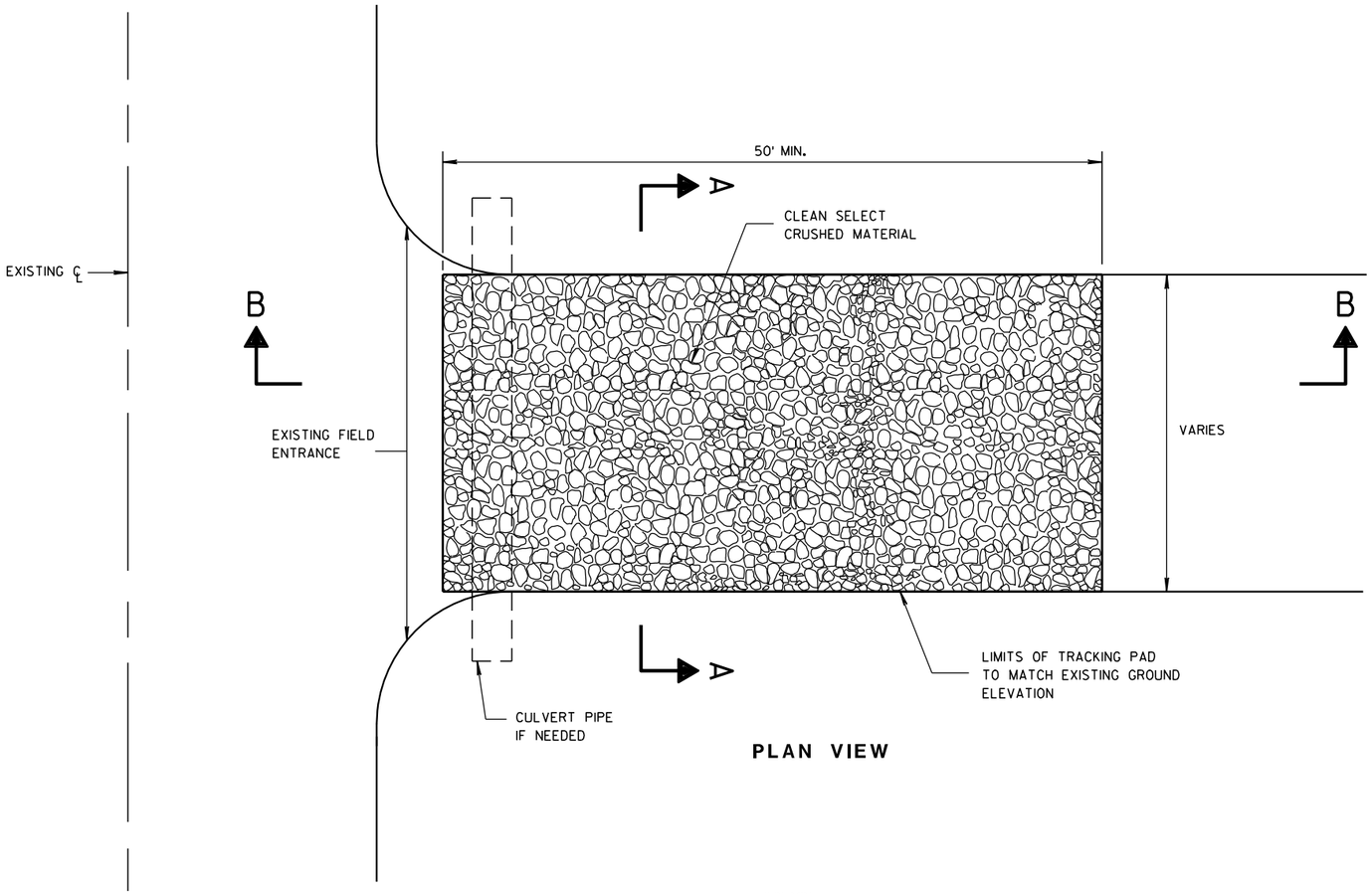
APPROVED

10/16/02
DATE

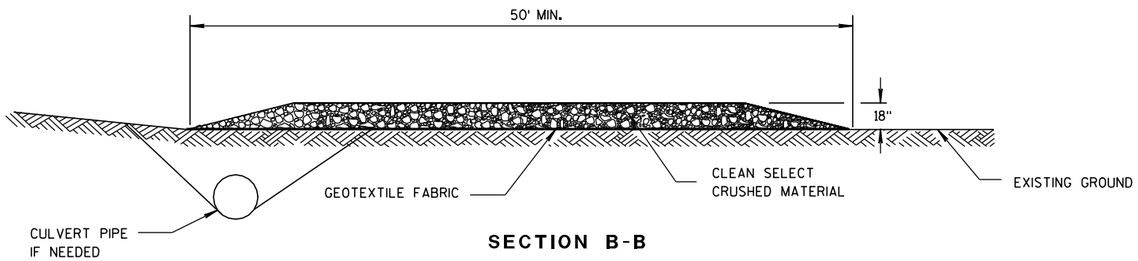
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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



PLAN VIEW



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.

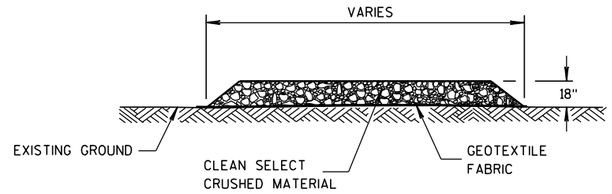
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

TRACKING PAD

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 DATE FHWA	/S/ Jerry H. Zoda ROADWAY STANDARDS ENGINEER

6

S.D.D. 8 E 14-1

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S.D.D. 8 E 14-1

METAL APRON ENDWALLS

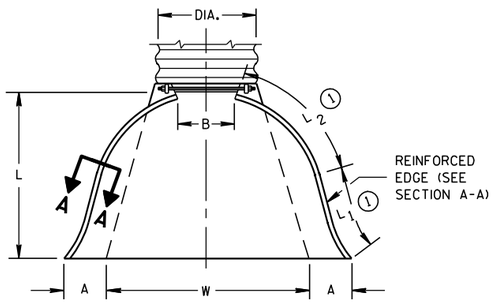
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 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

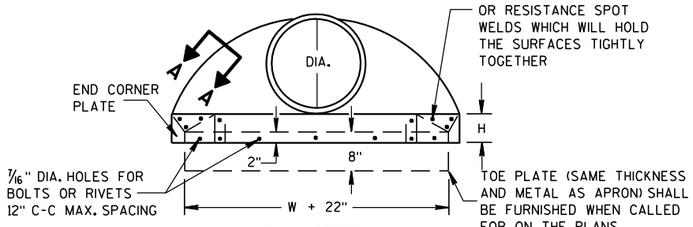
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
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 ** 36	* 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



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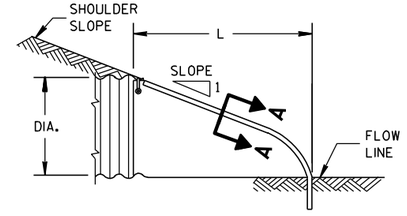
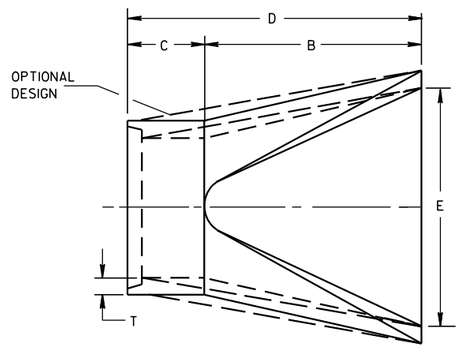
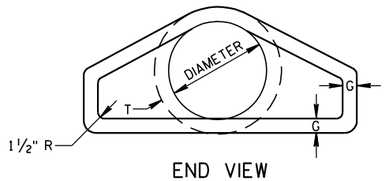


SIDE ELEVATION

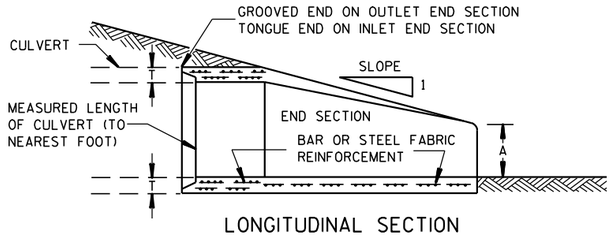
METAL ENDWALLS



PLAN

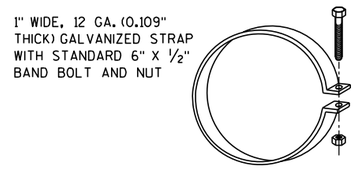


END VIEW



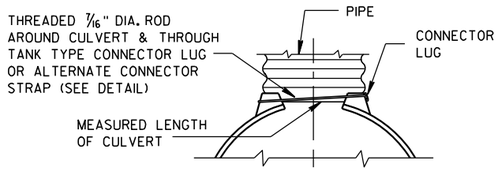
LONGITUDINAL SECTION

CONCRETE ENDWALLS

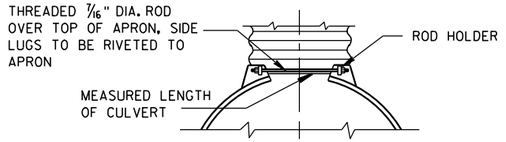


ALTERNATE FOR TYPE 1 CONNECTION

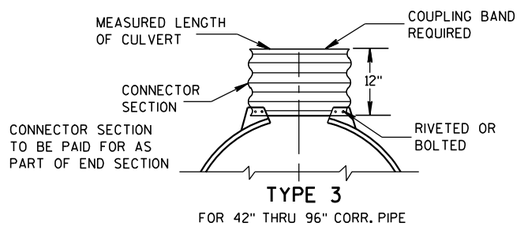
END SECTION CONNECTOR STRAP



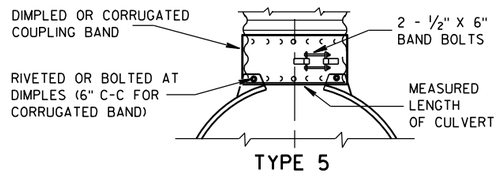
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

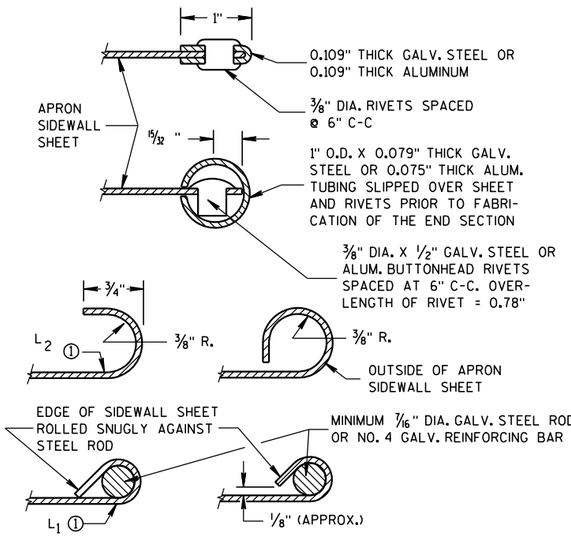
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

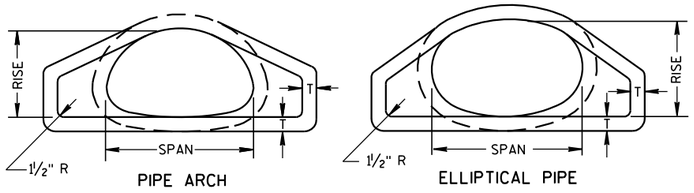
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

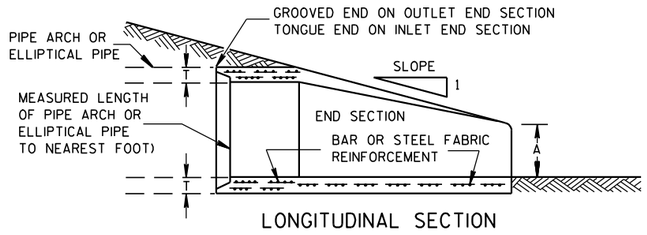
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

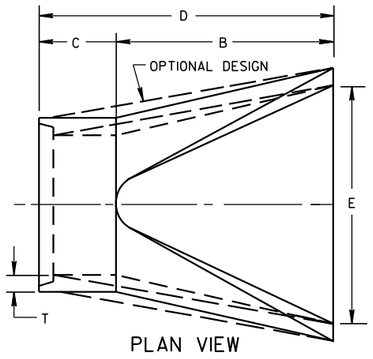
6
S.D.D. 8 F 1-11



END VIEW

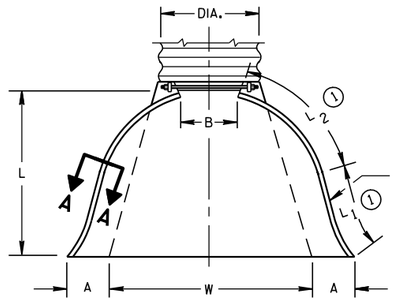


LONGITUDINAL SECTION

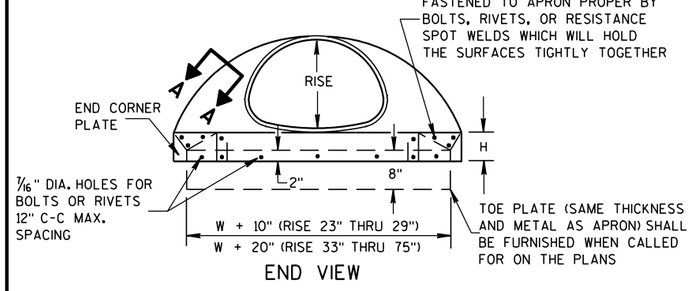


PLAN VIEW

CONCRETE ENDWALLS

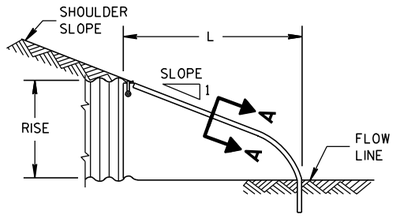


PLAN VIEW



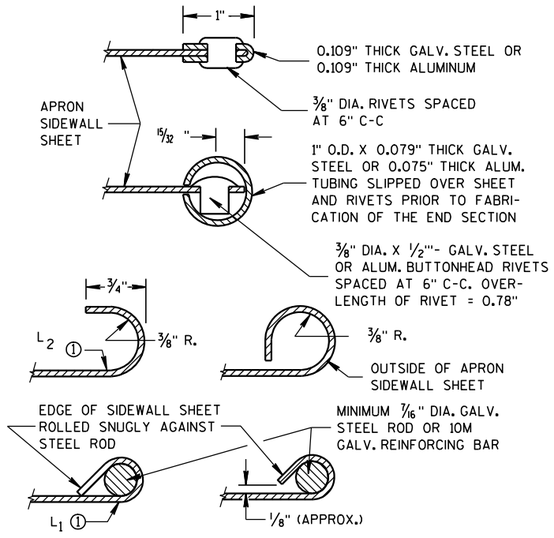
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	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

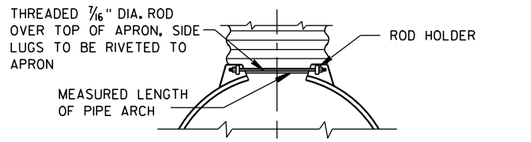
REINFORCED CONCRETE PIPE ARCH

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

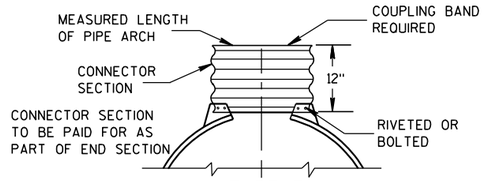
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



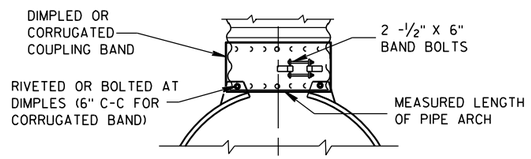
TYPE 2

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

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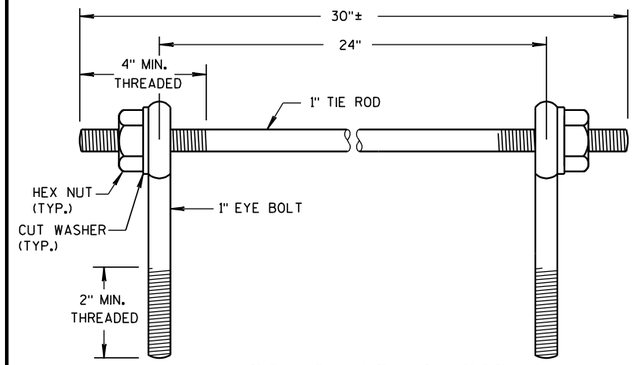
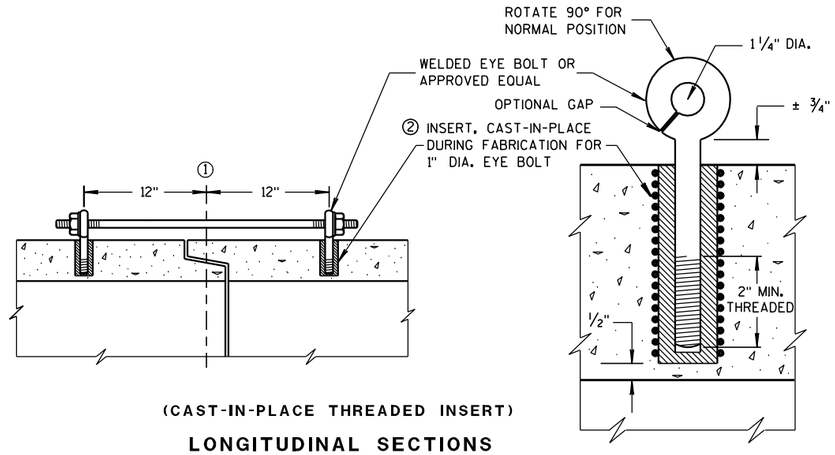
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

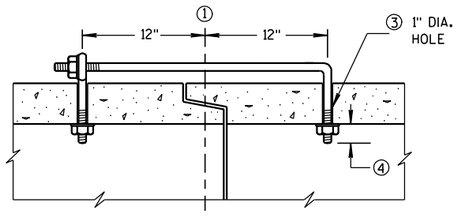
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

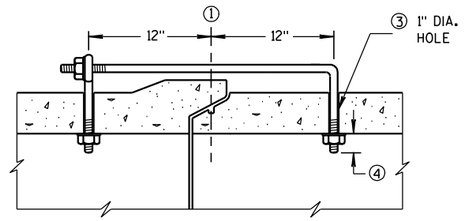
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

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



(TONGUE & GROOVE PIPE)

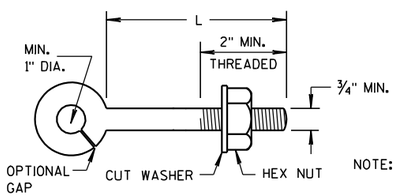


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

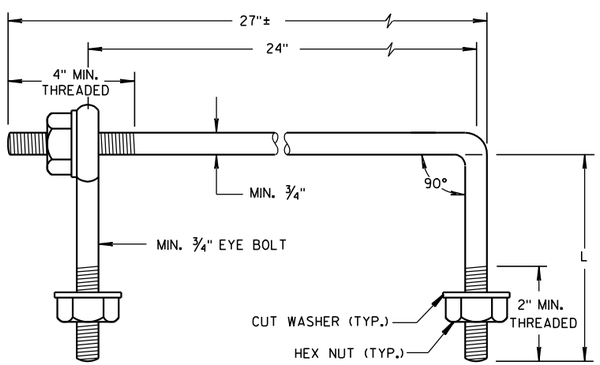
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

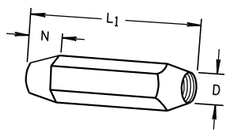
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



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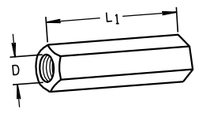
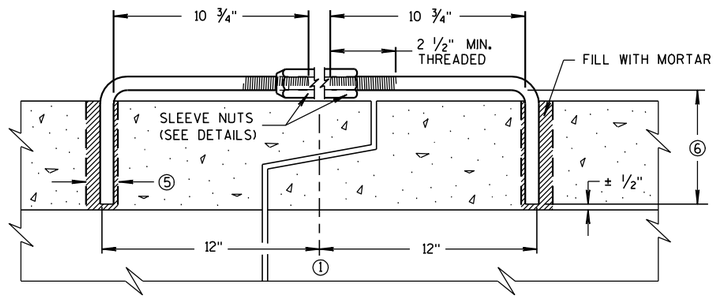


PLAIN

RIGHT AND LEFT THREADS

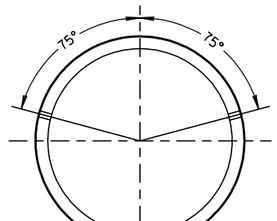
SLEEVE NUTS



LONGITUDINAL SECTION

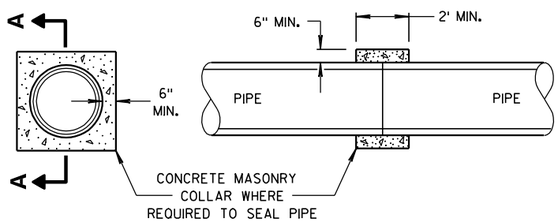
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

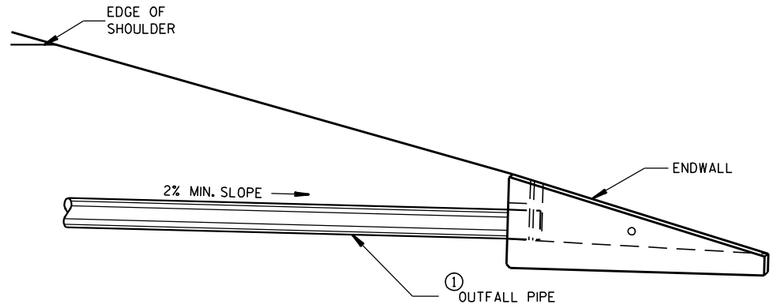
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
209
FHWA

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION 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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

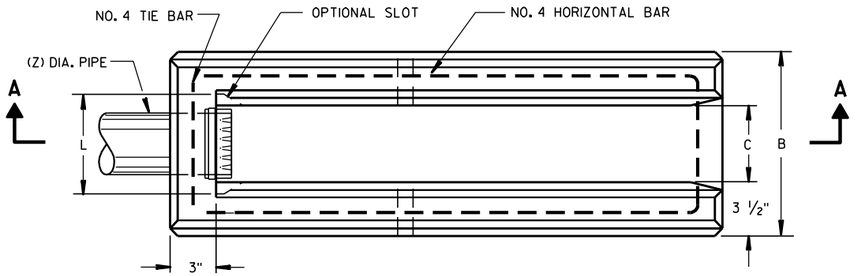
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

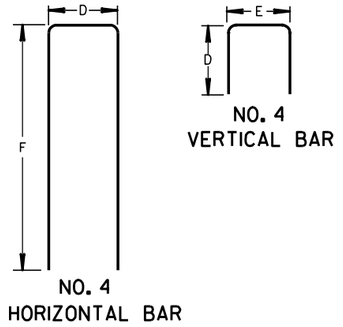
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

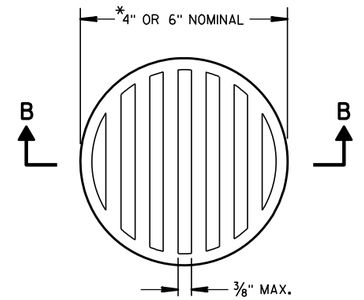
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

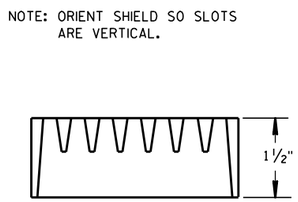


PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

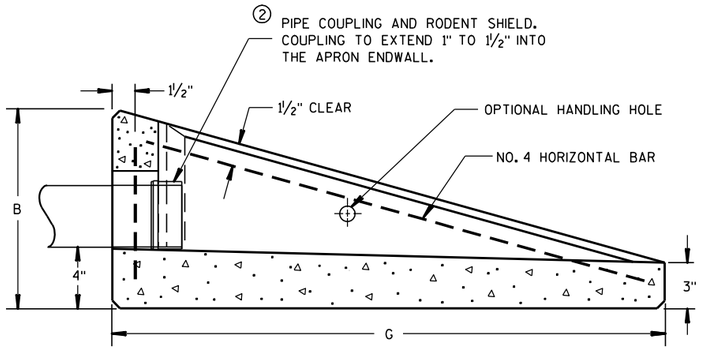




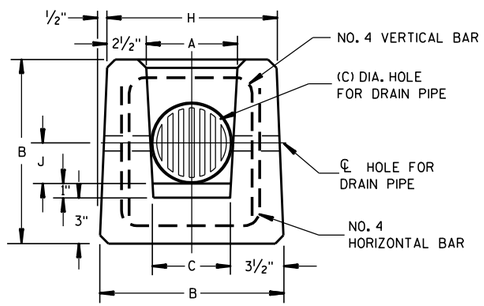
SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.



SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN

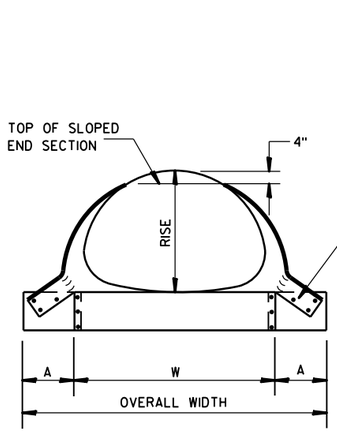
REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

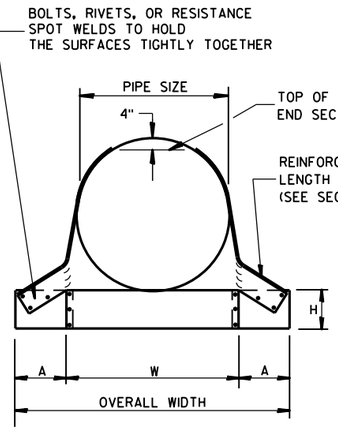
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

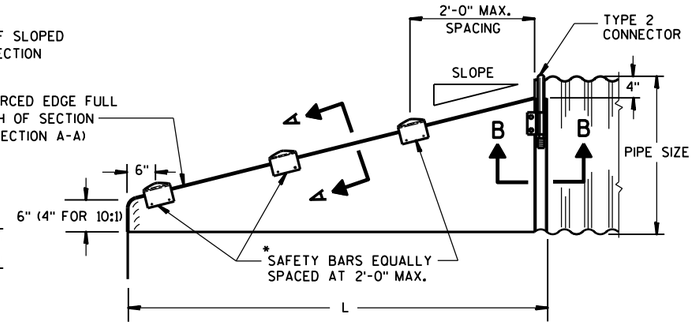
S.D.D. 8 F 6-4



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

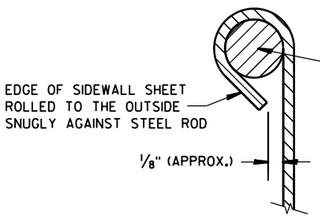
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

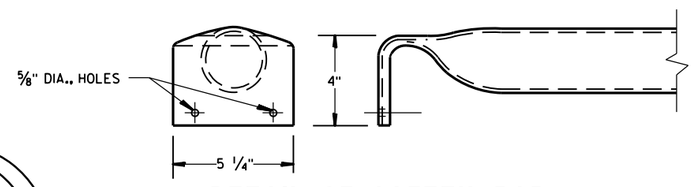
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

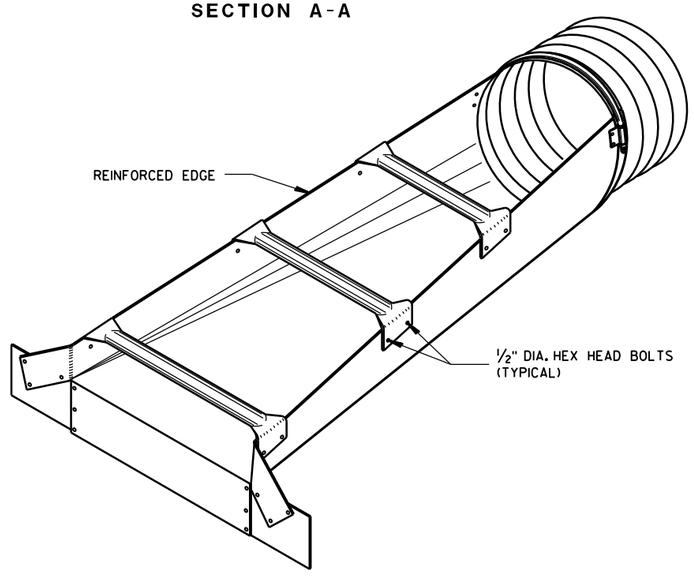


DETAIL OF SAFETY BAR

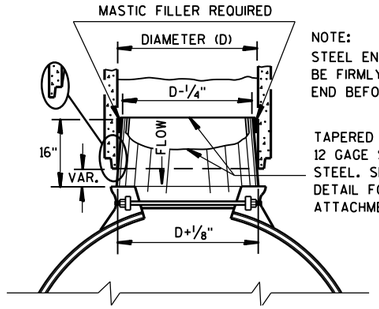
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

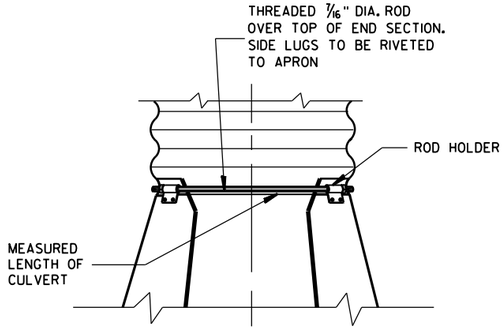
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



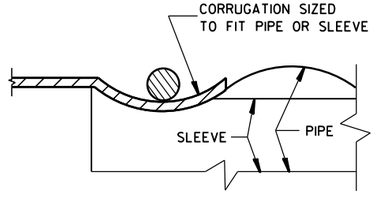
ISOMETRIC VIEW



STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5

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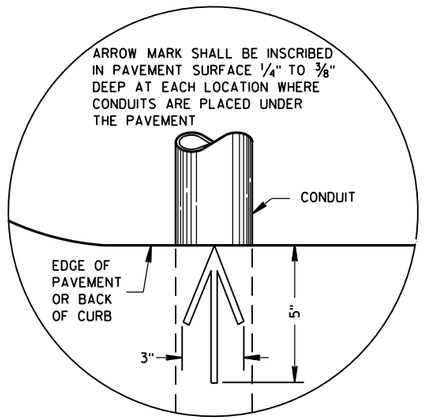
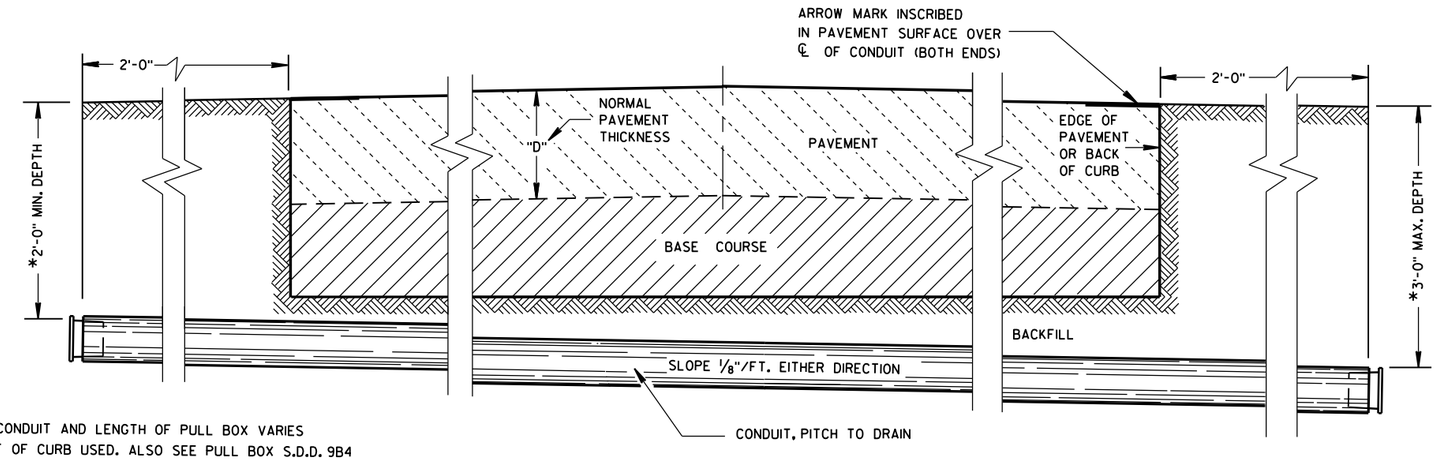
S.D.D. 8 F 7-5



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.

6

S.D.D. 9 B 2-10

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

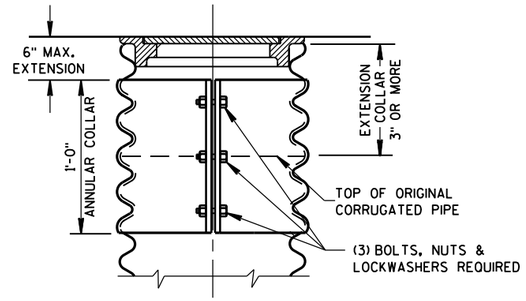
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

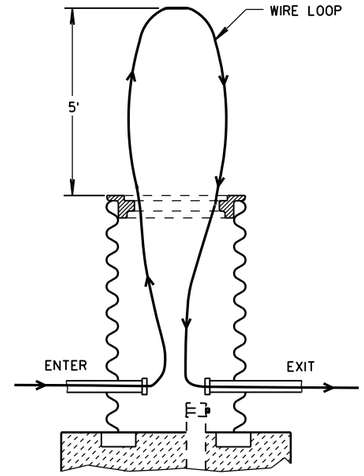
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
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.

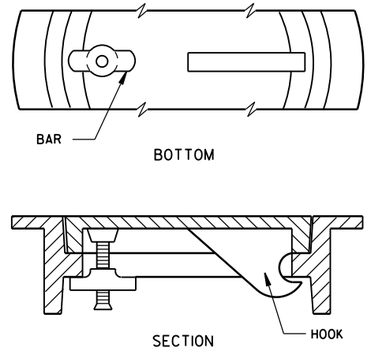
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

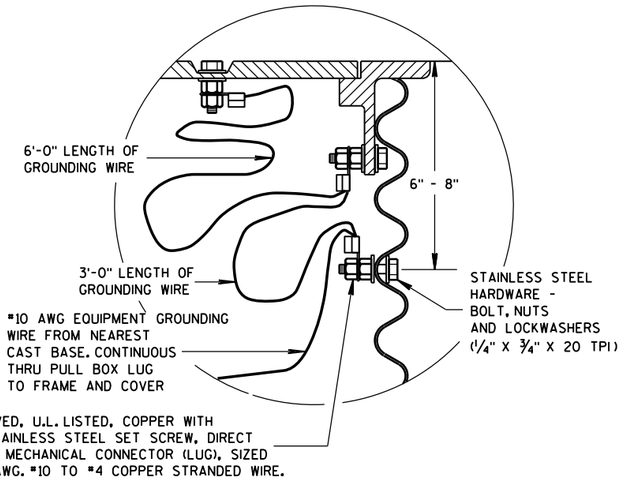


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

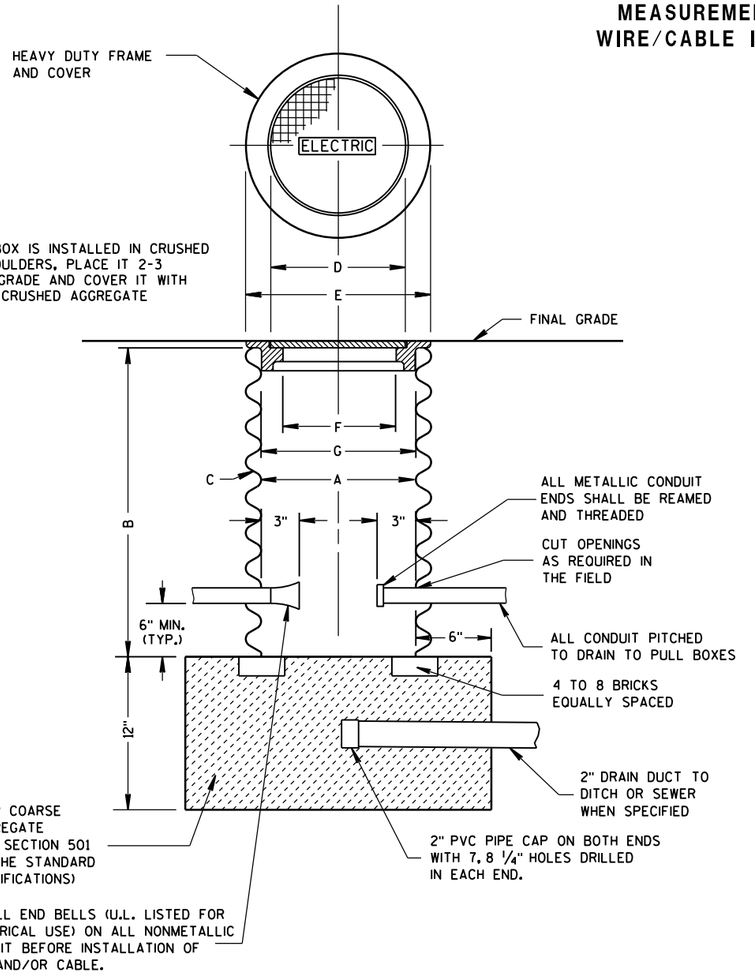


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

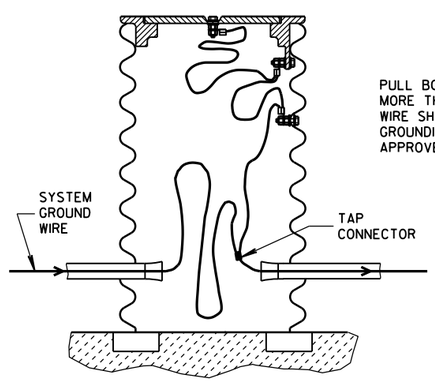
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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.



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

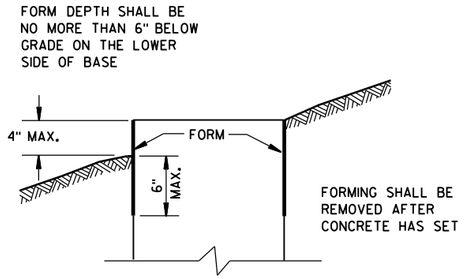
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 9 B 4-11



FORMING DETAIL

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

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

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

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

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

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

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

GENERAL NOTES (CONTINUED)

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

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

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

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

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

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

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

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

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

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

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

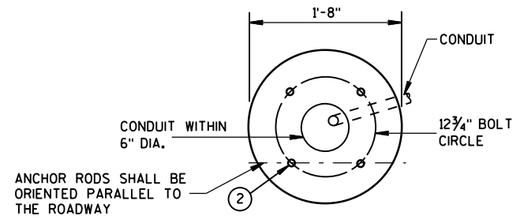
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

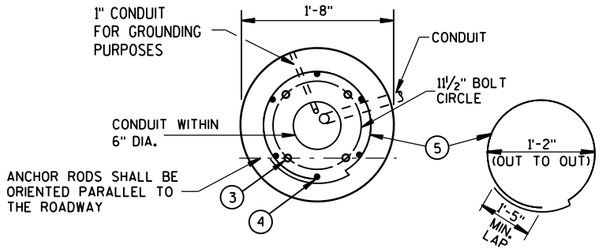
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

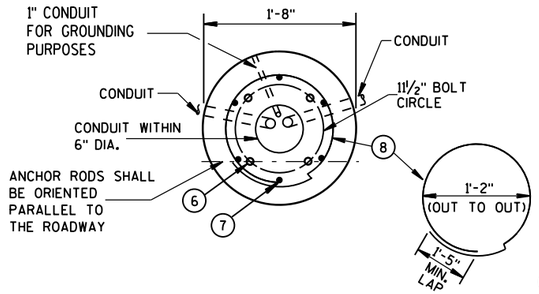
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

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

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





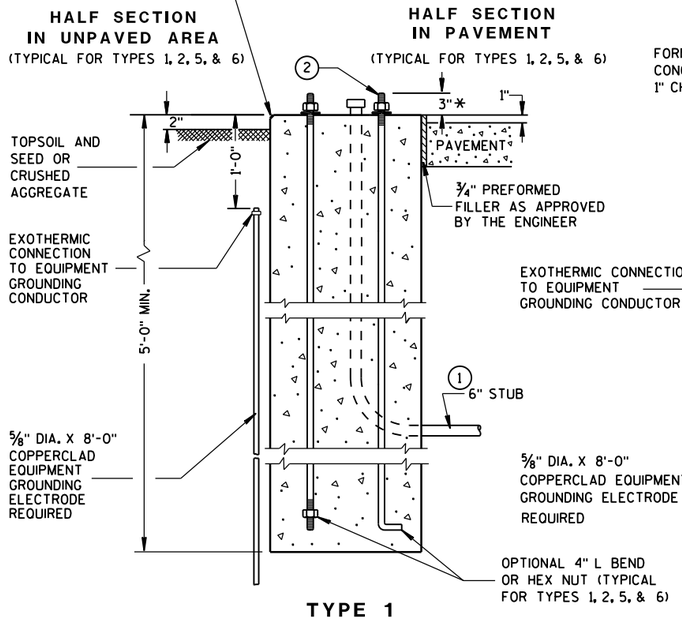


HALF SECTION IN UNPAVED AREA

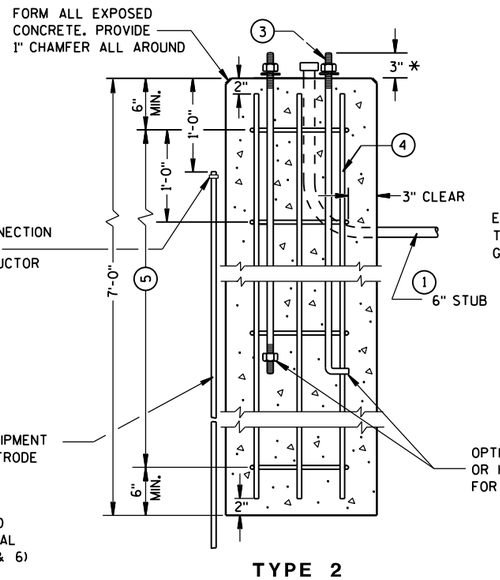
(TYPICAL FOR TYPES 1, 2, 5, & 6)

HALF SECTION IN PAVEMENT

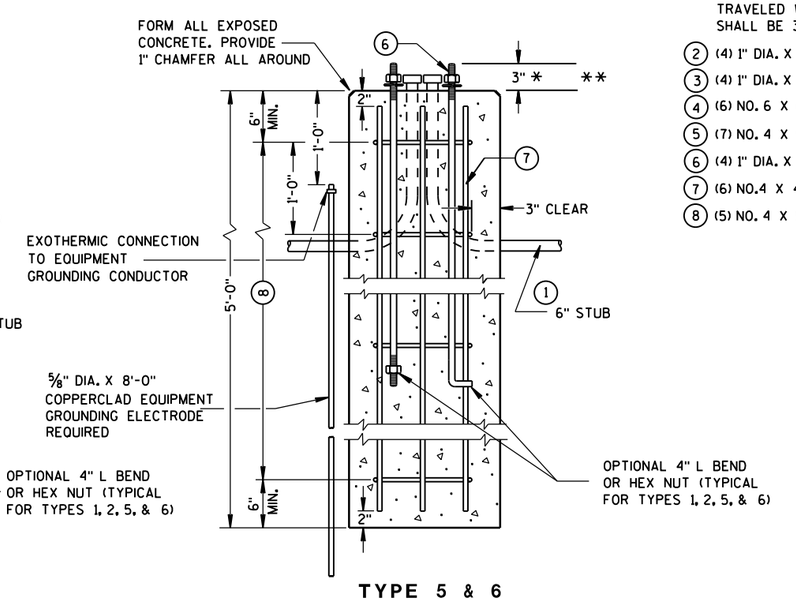
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

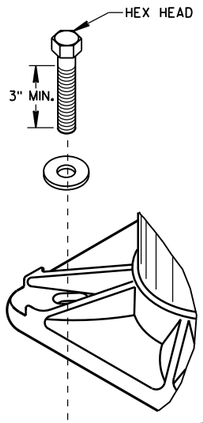
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

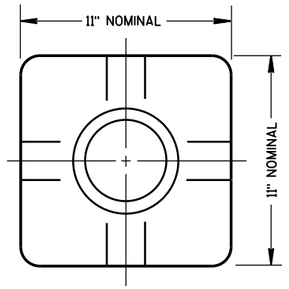
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

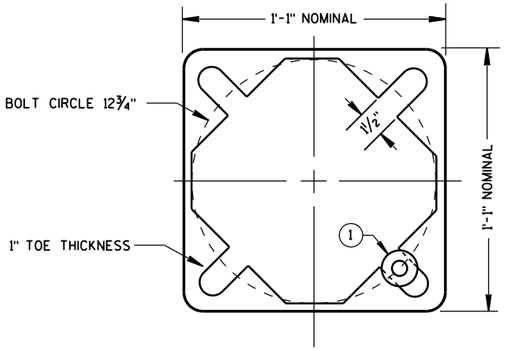
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

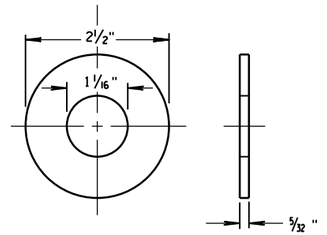




TOP VIEW
(PEDESTAL BASE)

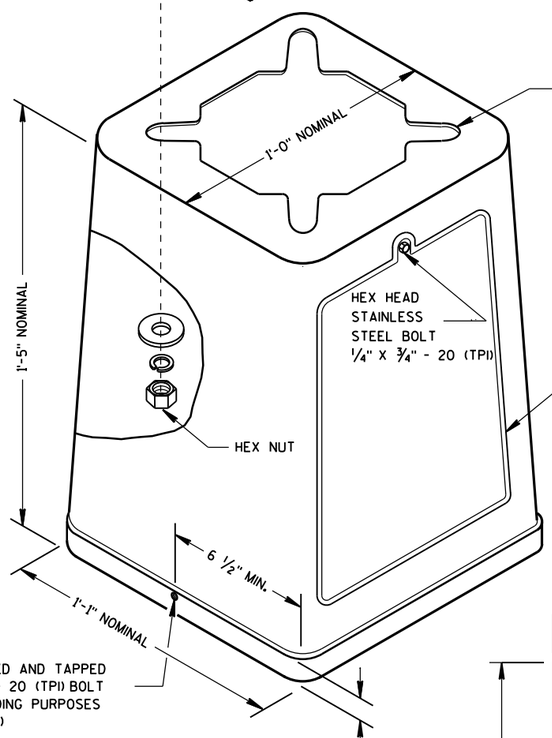


BOTTOM VIEW
(PEDESTAL BASE)

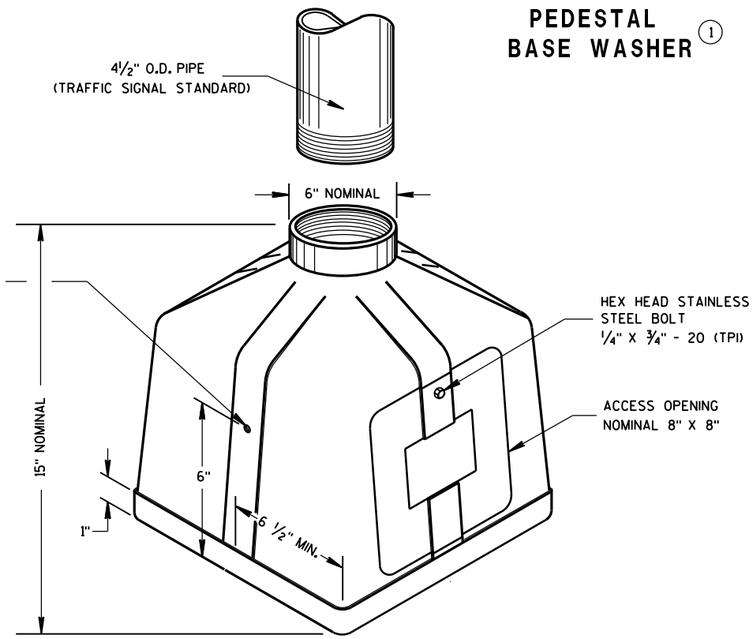


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

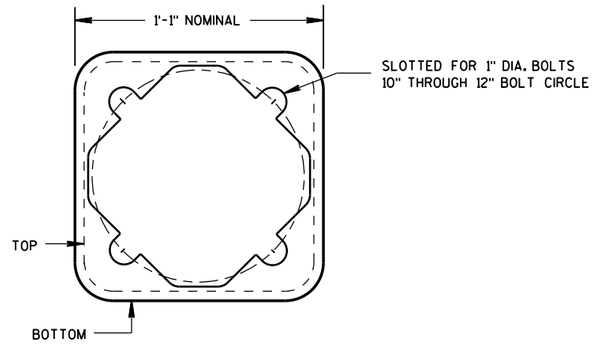


ISOMETRIC VIEW

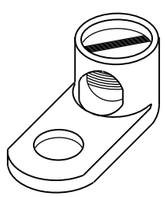


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

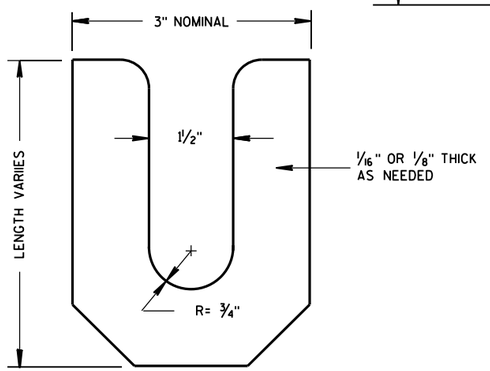


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

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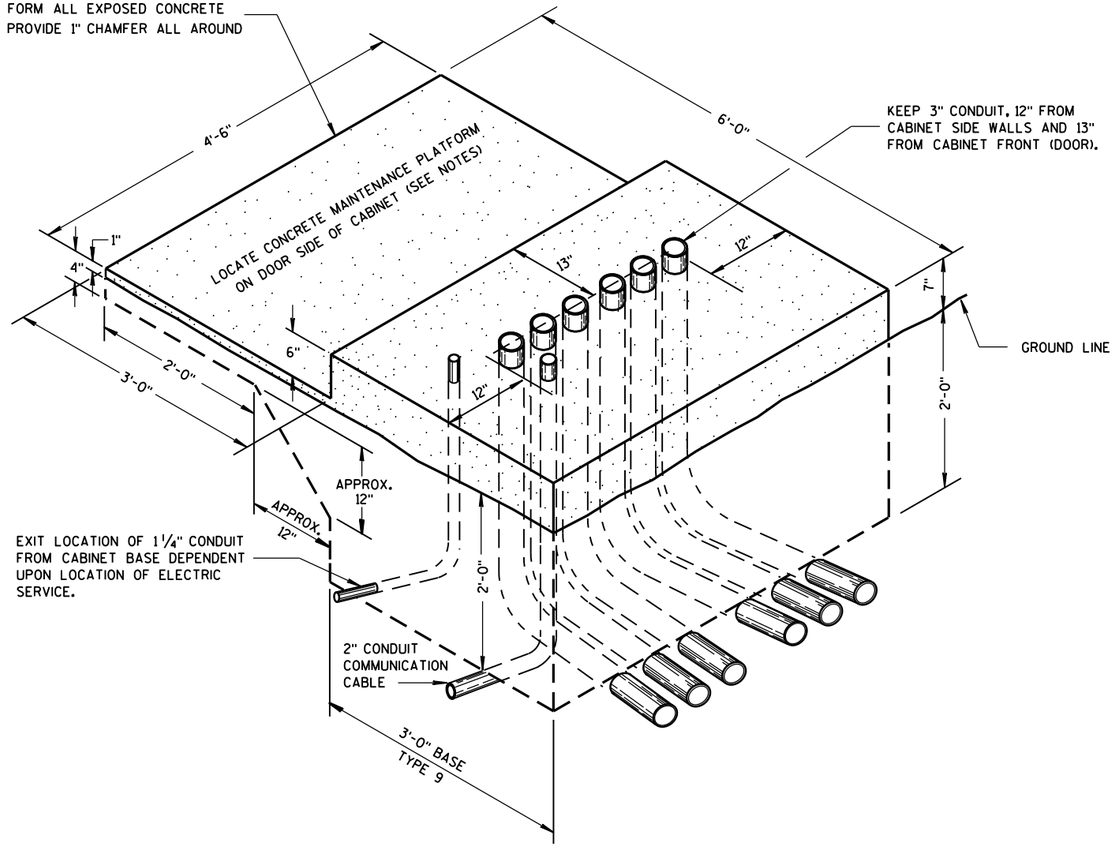
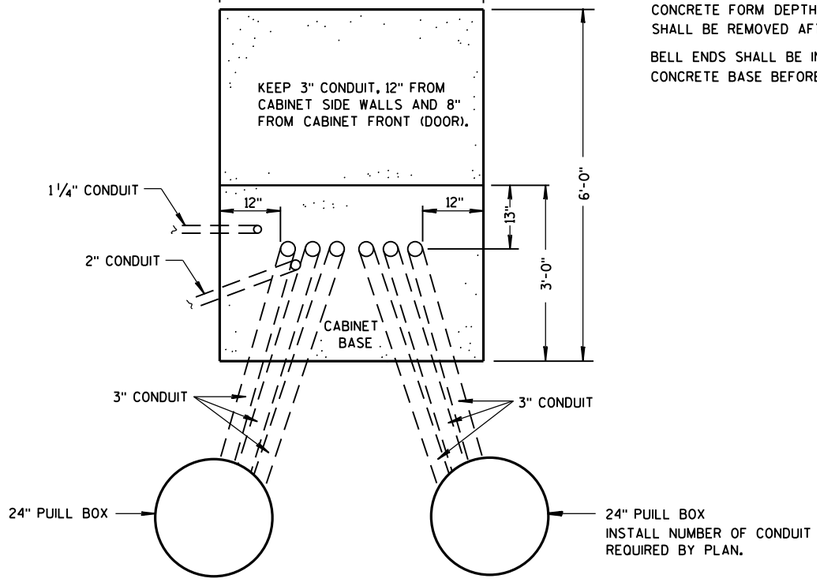


ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

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

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

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

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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

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

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

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

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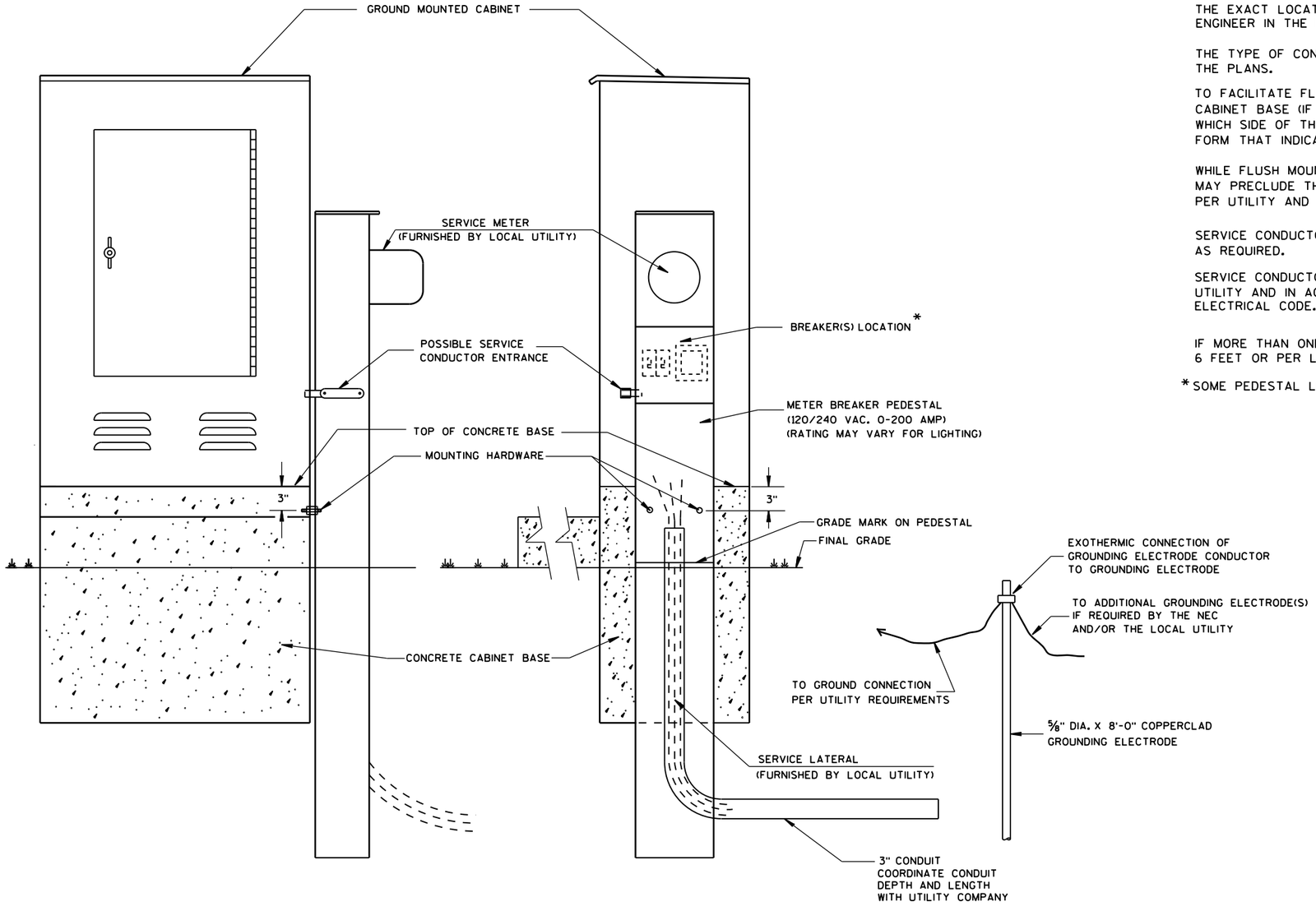

TYPICAL CABINET SERVICE INSTALLATION

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)

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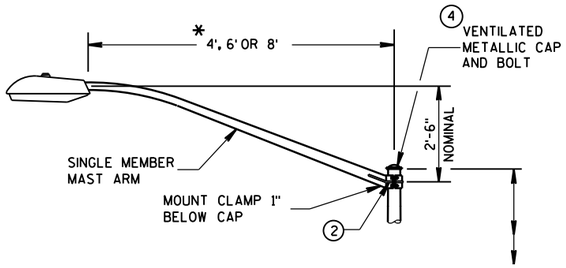
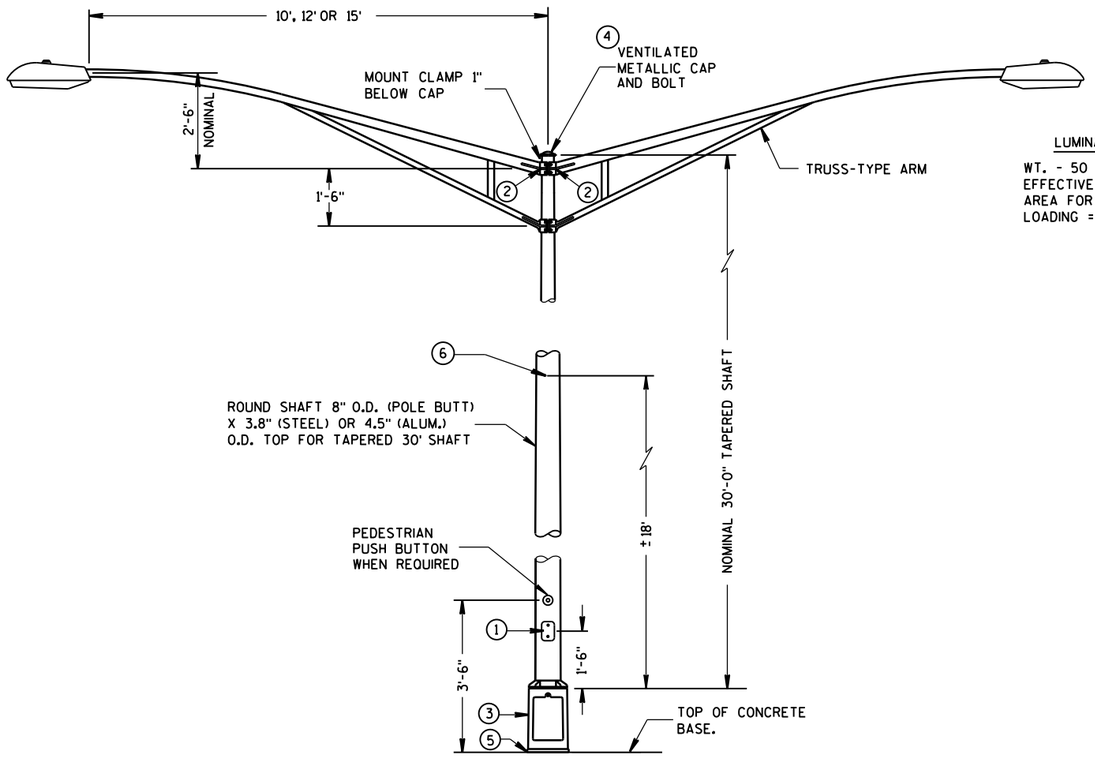
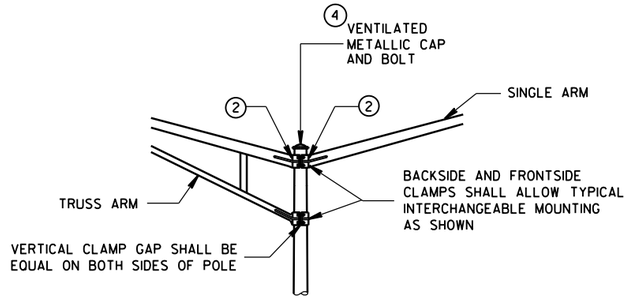
*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

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

GENERAL NOTES

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

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.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

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

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" 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 THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

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POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

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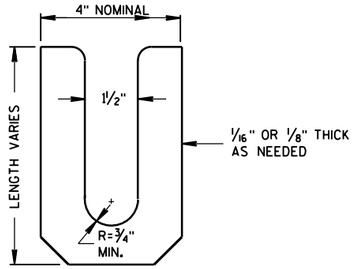
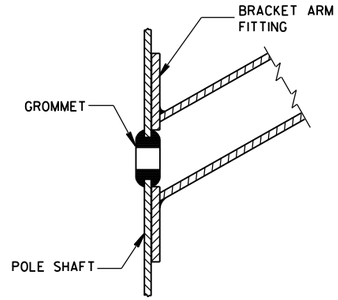
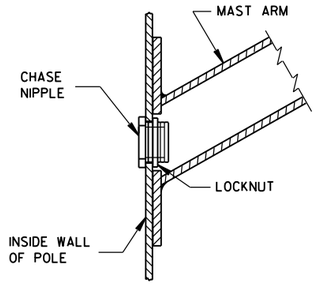


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

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

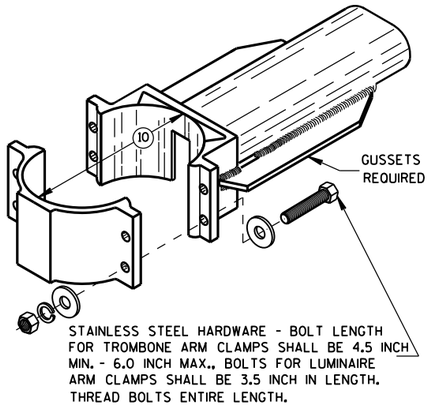
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

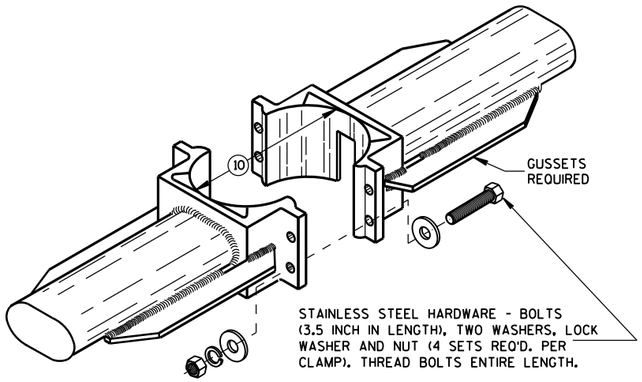
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

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

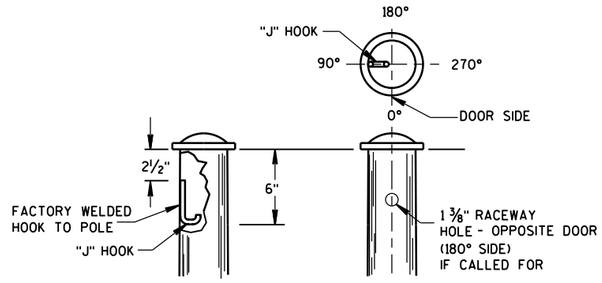
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



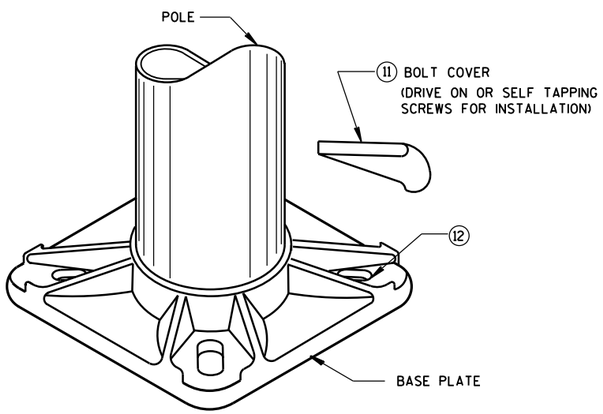
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



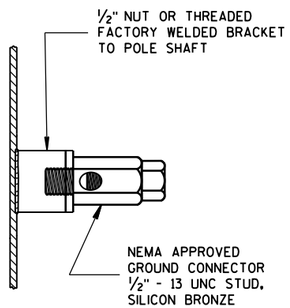
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

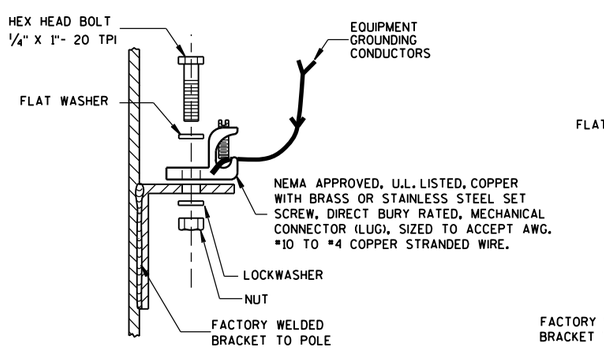


TYPICAL "J" HOOK LOCATION



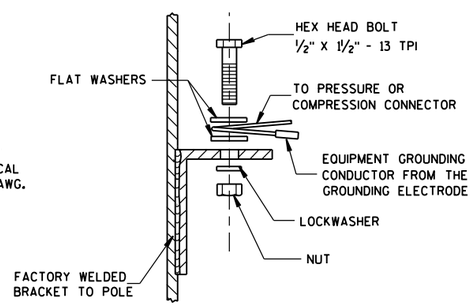
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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Feb. 2015 — DATE
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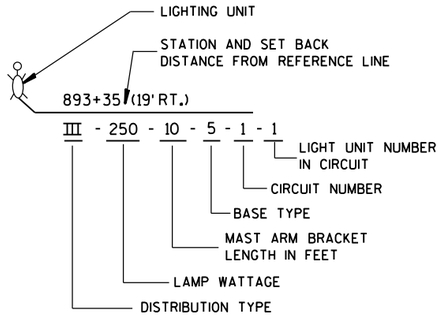
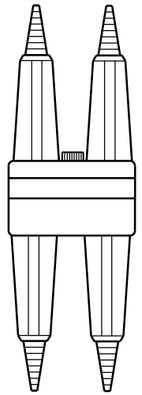
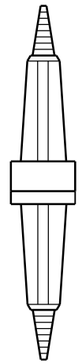


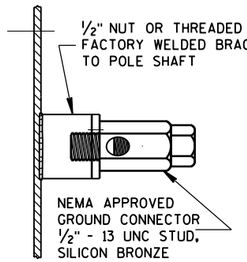
LIGHTING UNIT CODE
(TYPICAL)

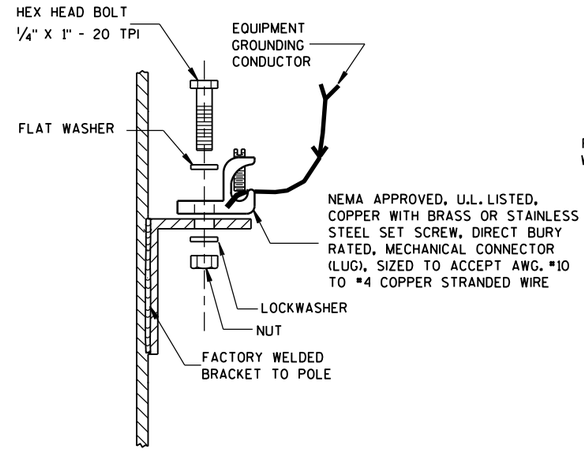


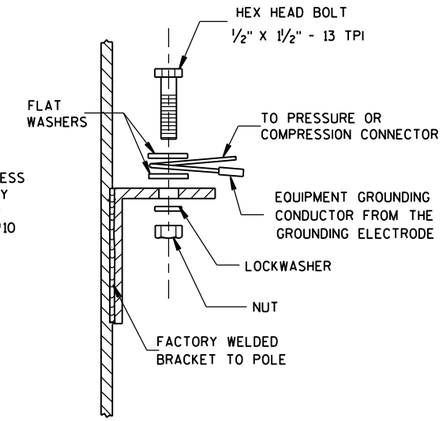
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



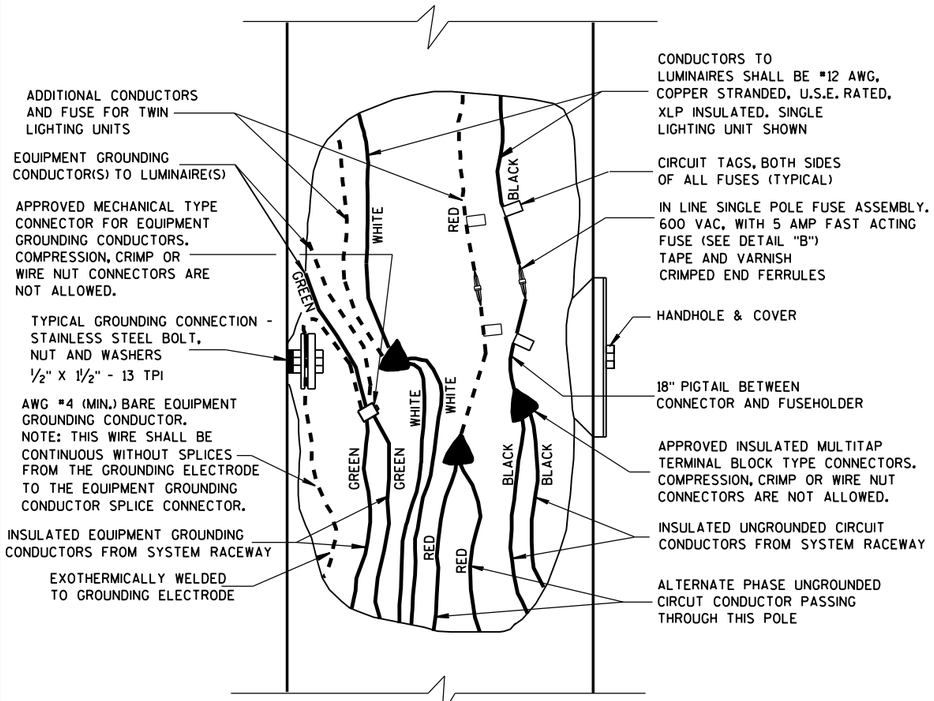
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



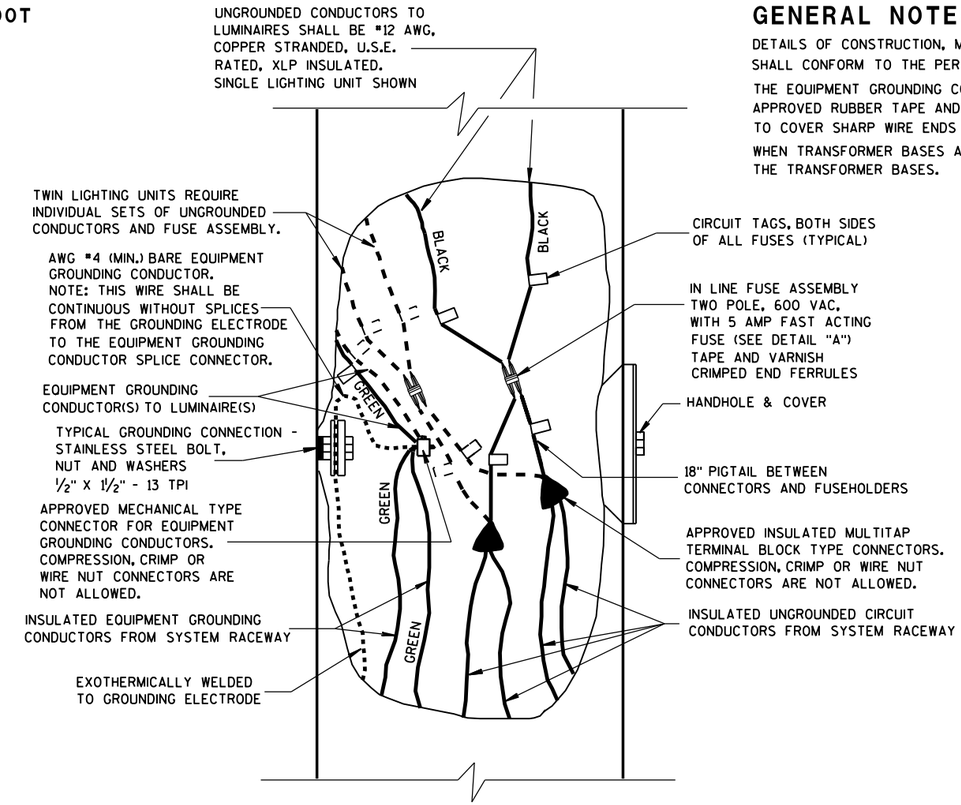




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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



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

GENERAL NOTES

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

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

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

NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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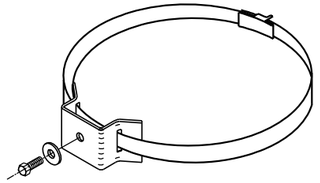
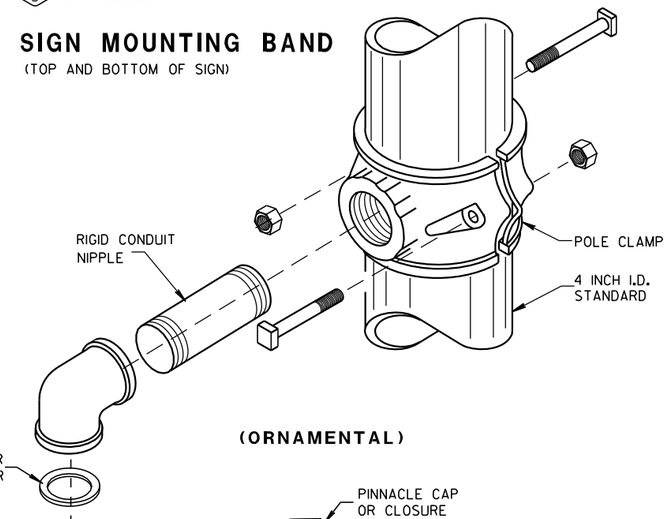
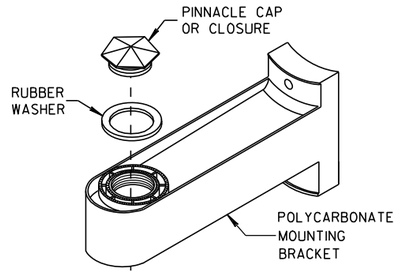


TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



(ORNAMENTAL)



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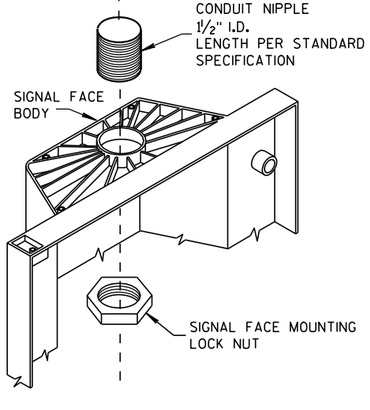
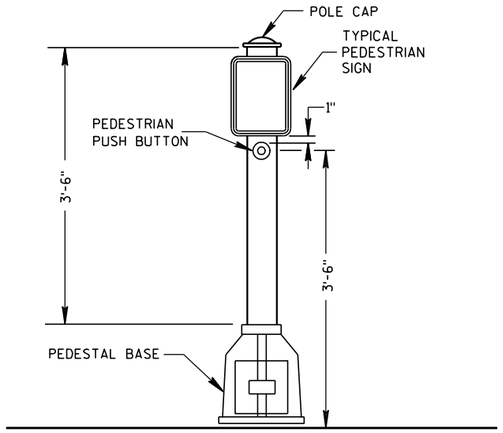
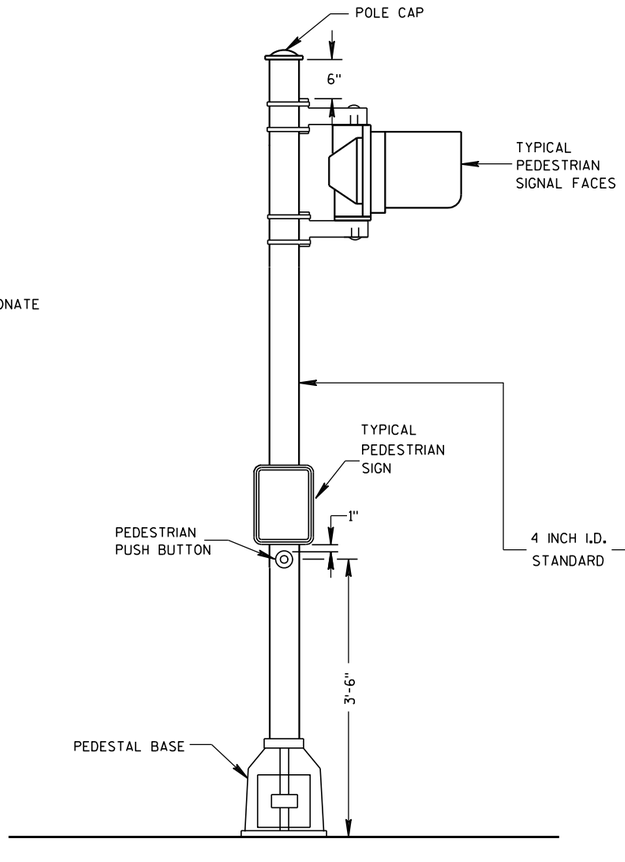


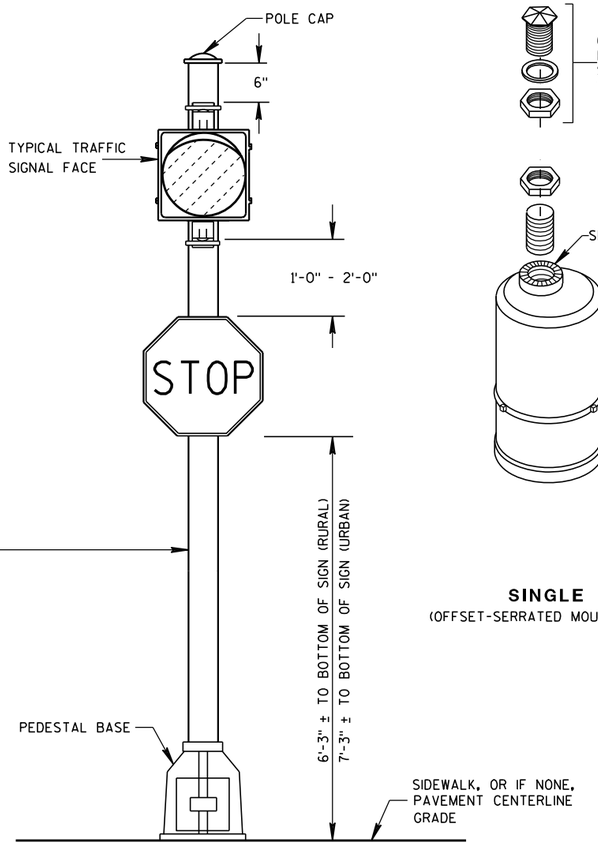
SIGNAL FACE MOUNTING DETAILS



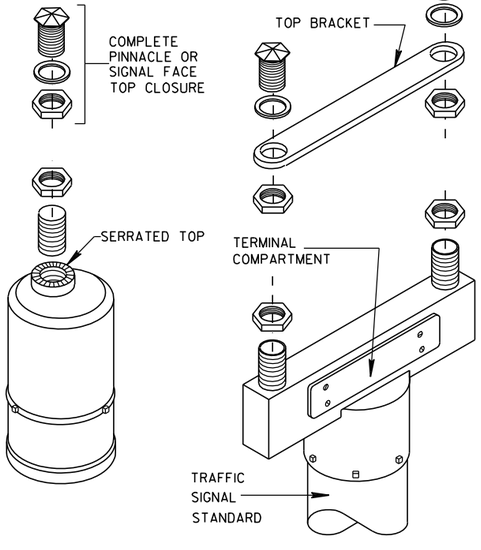
PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

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

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/11/10
DATE

/S/ John Corbin
STATE ELECTRICAL ENGI

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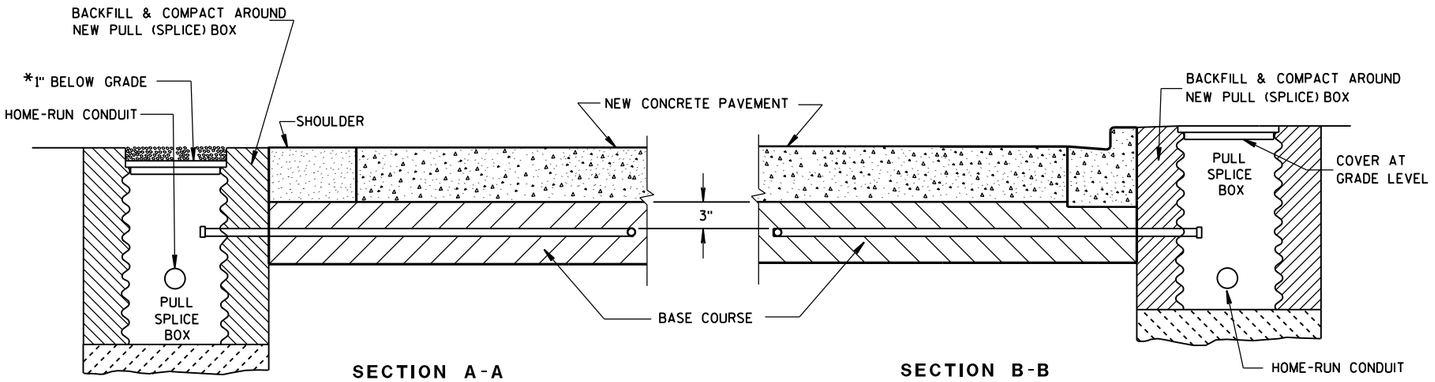


SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

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

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

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

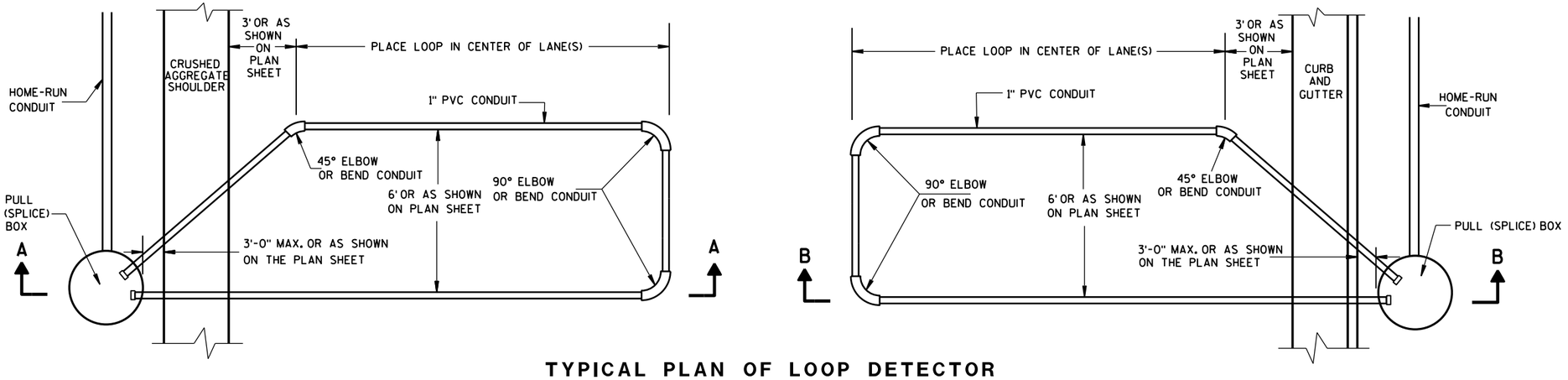
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

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

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 F 15-4a

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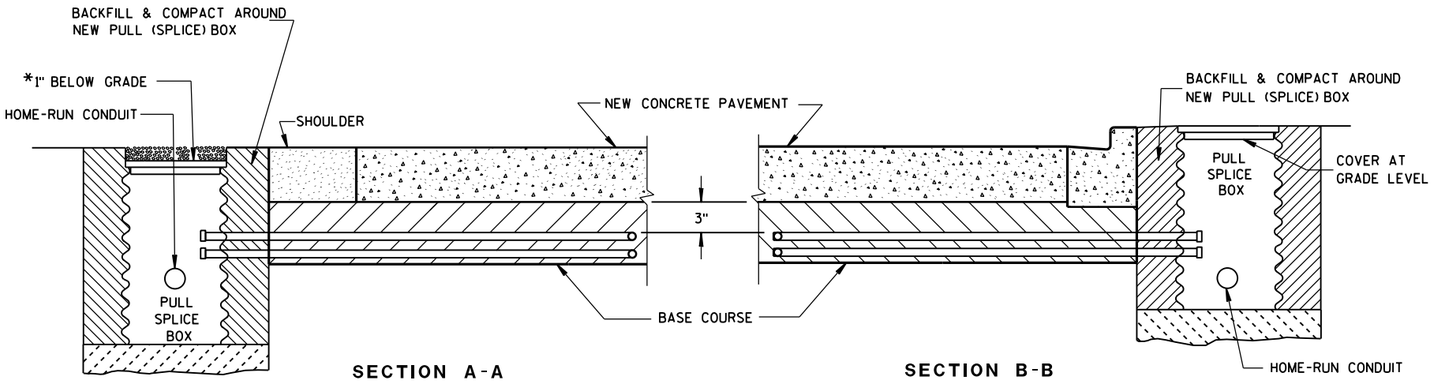
S.D.D. 9 F 15-4a



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

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

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

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

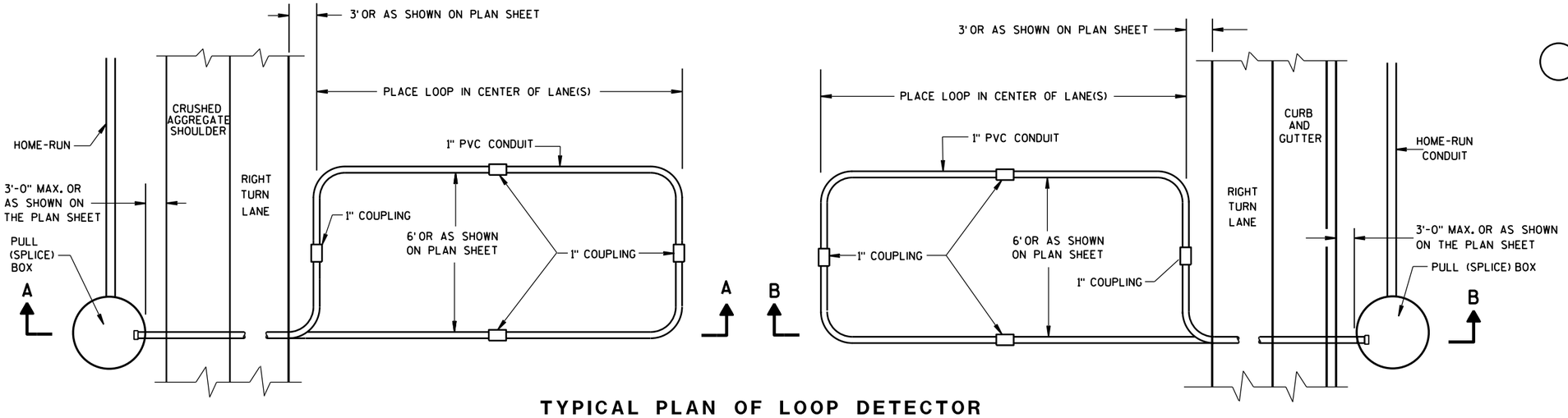
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

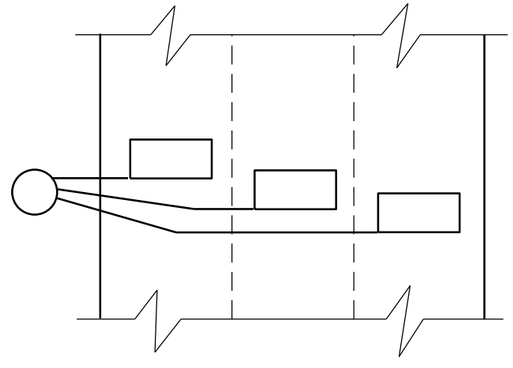
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA

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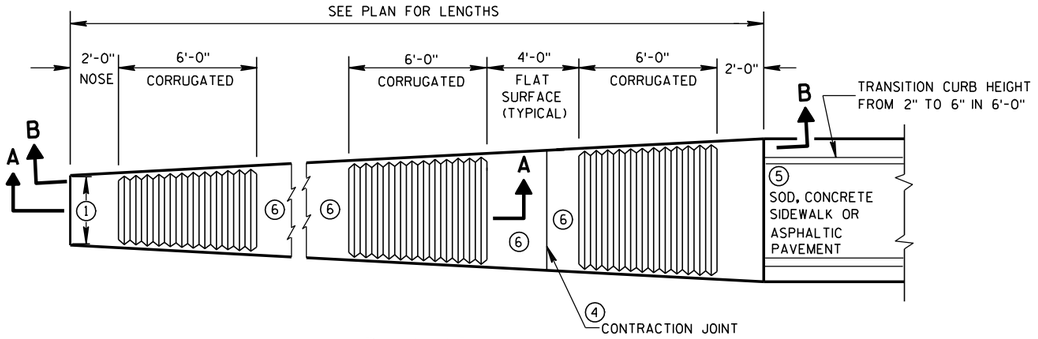
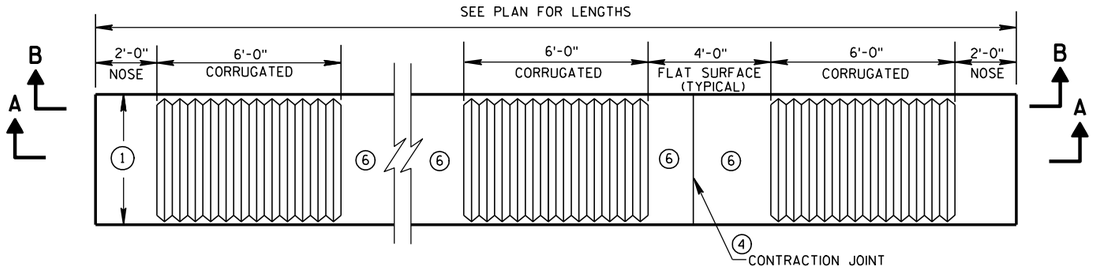


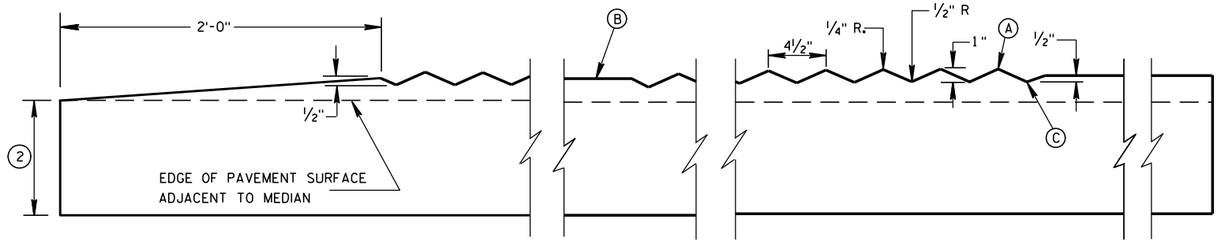
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

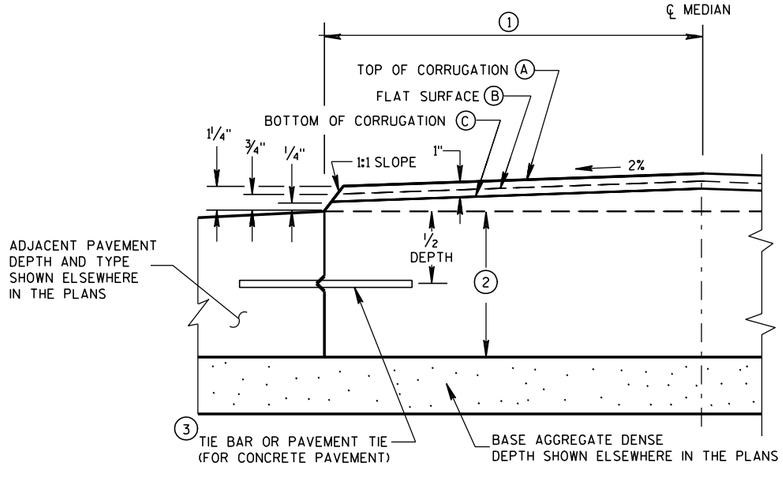
(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.
ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

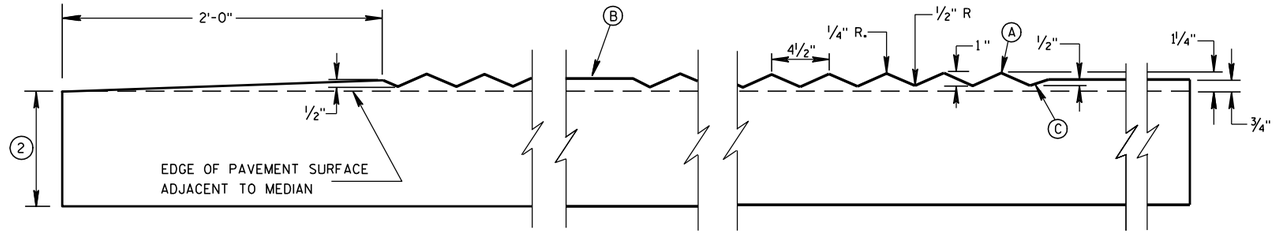
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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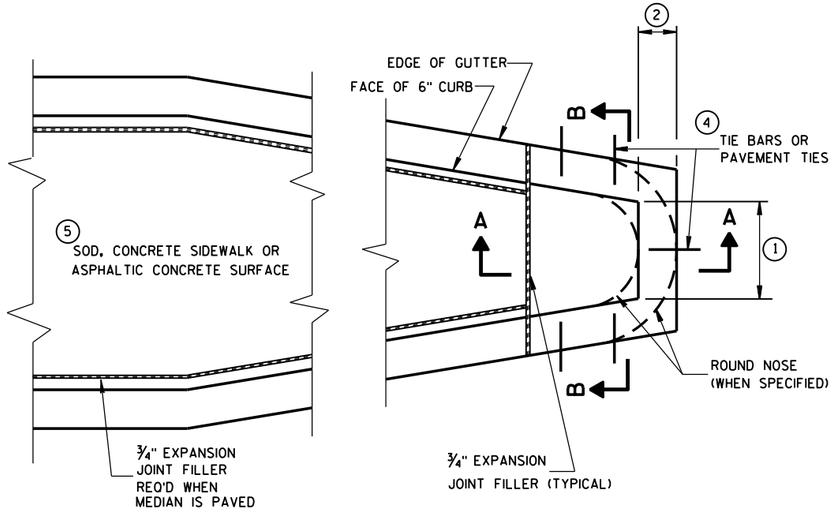
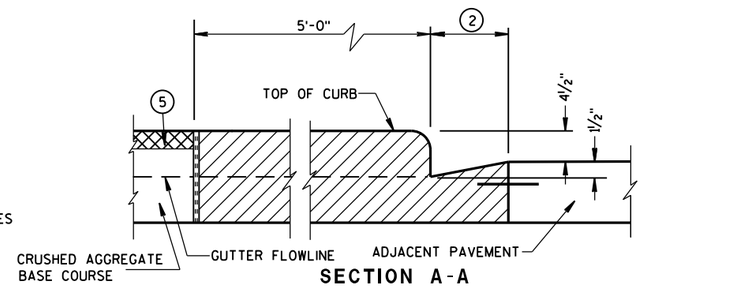
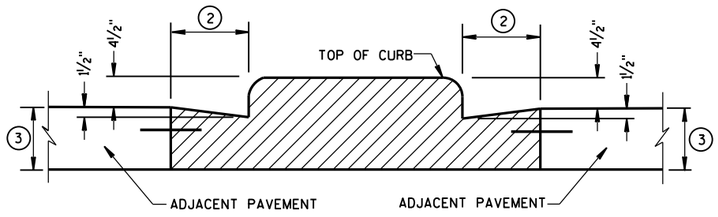






CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

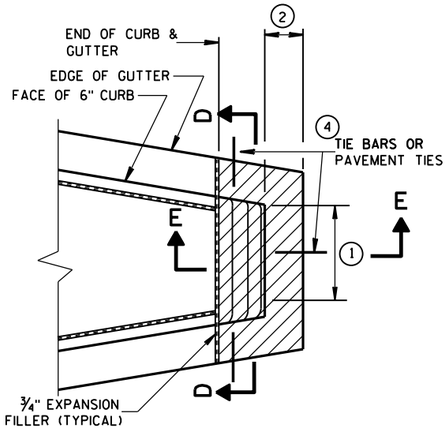
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

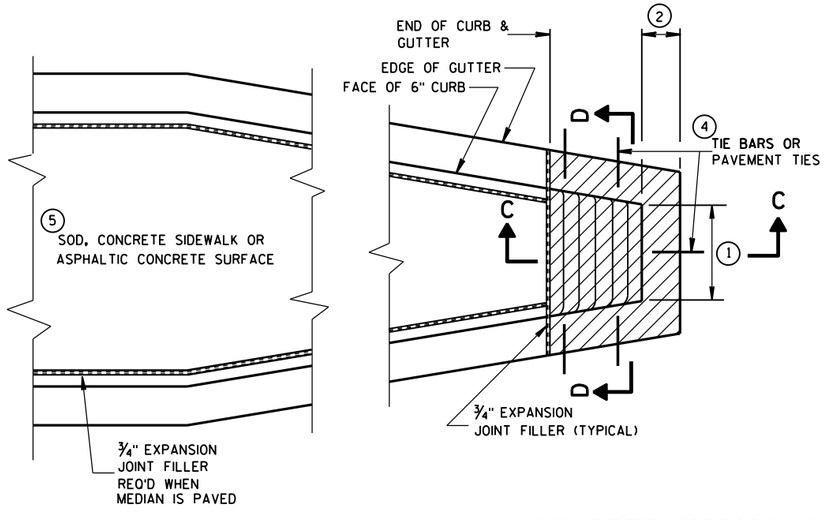
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

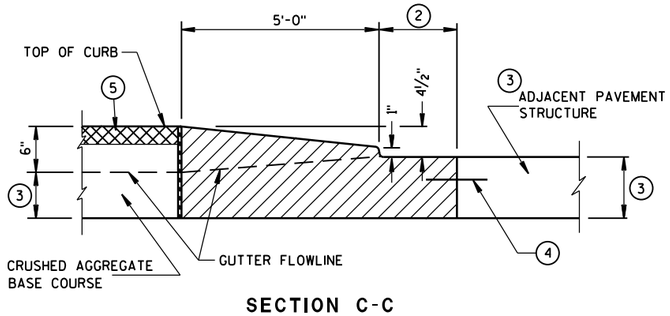
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

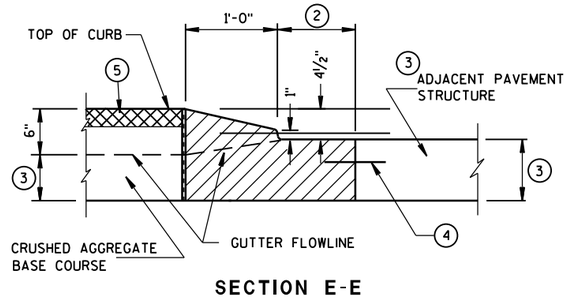
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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



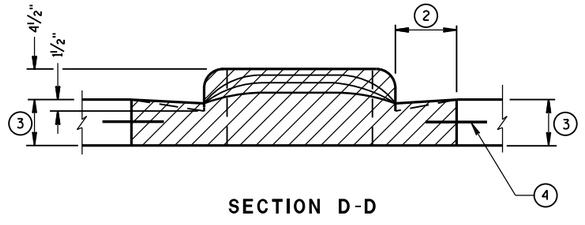






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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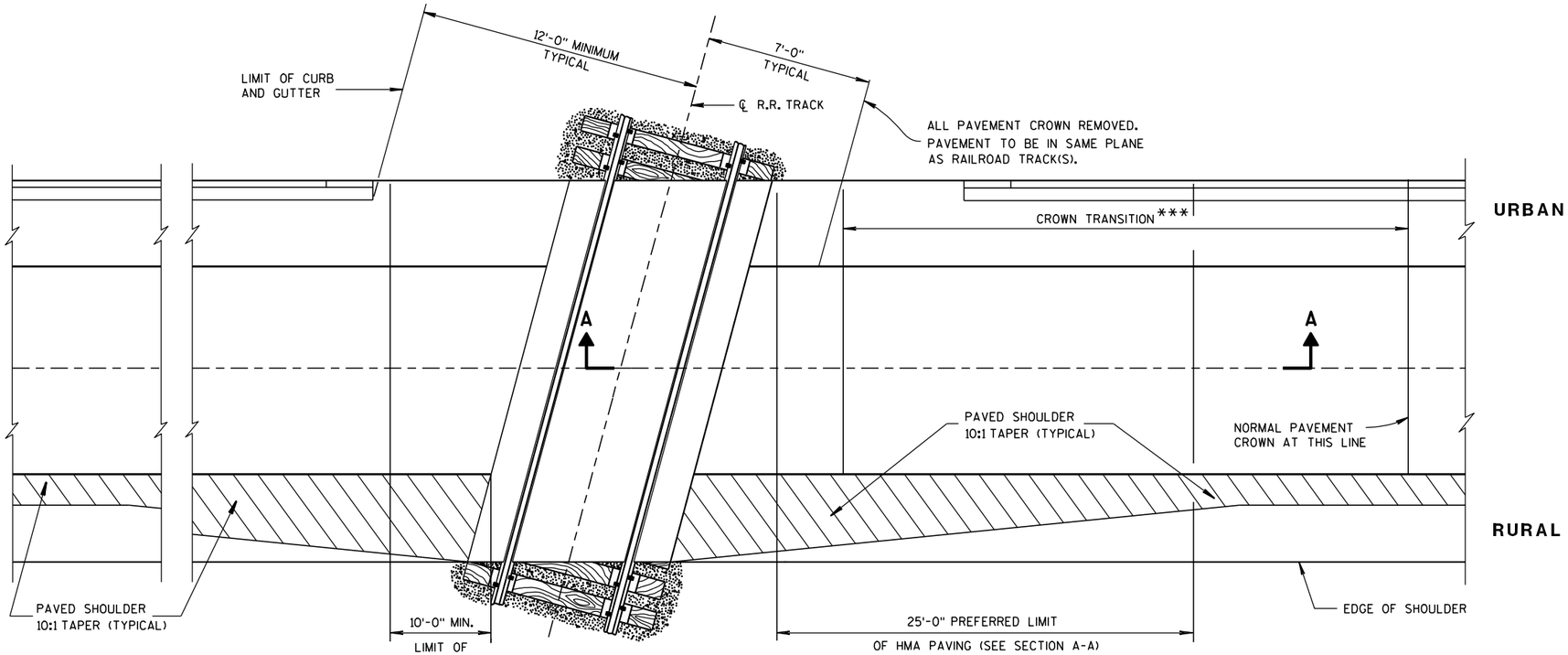
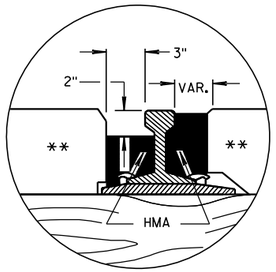
S.D.D. 11 B 2-2





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

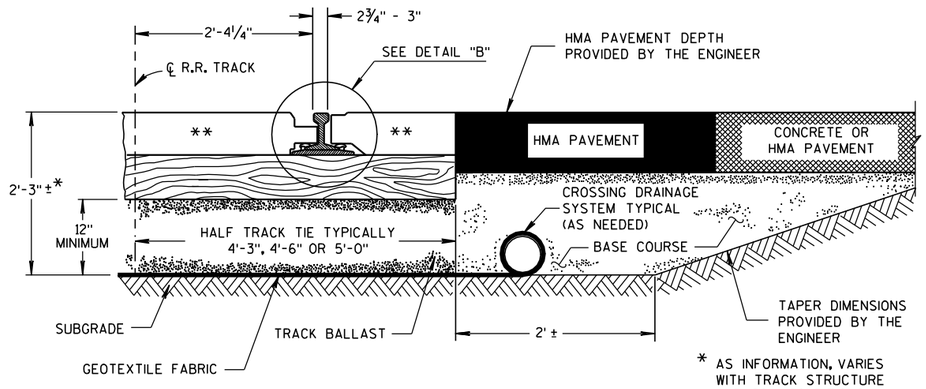
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGEWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

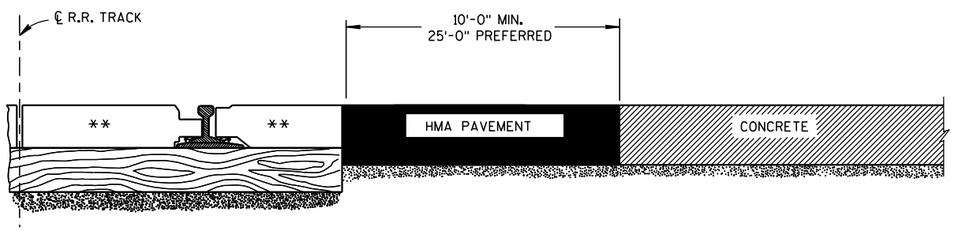
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.



TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH

SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI CTION
FHWA

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S.D.D. 13 B 1-10

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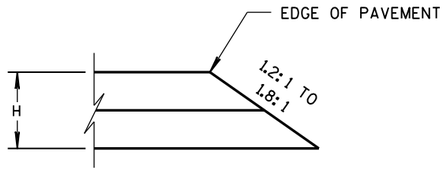
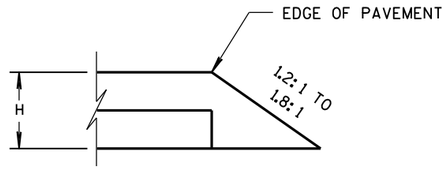
S.D.D. 13 B 1-10



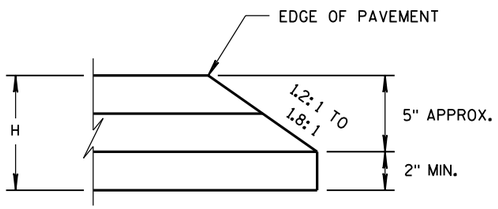
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



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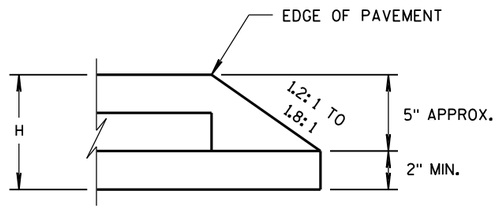
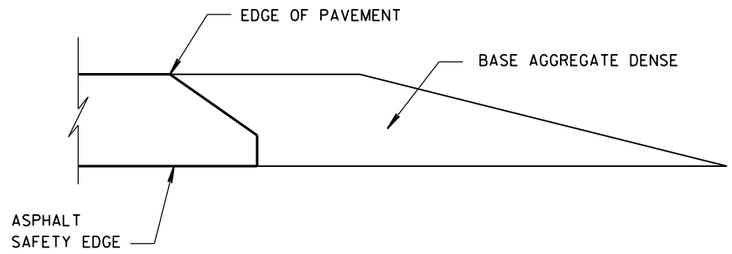
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

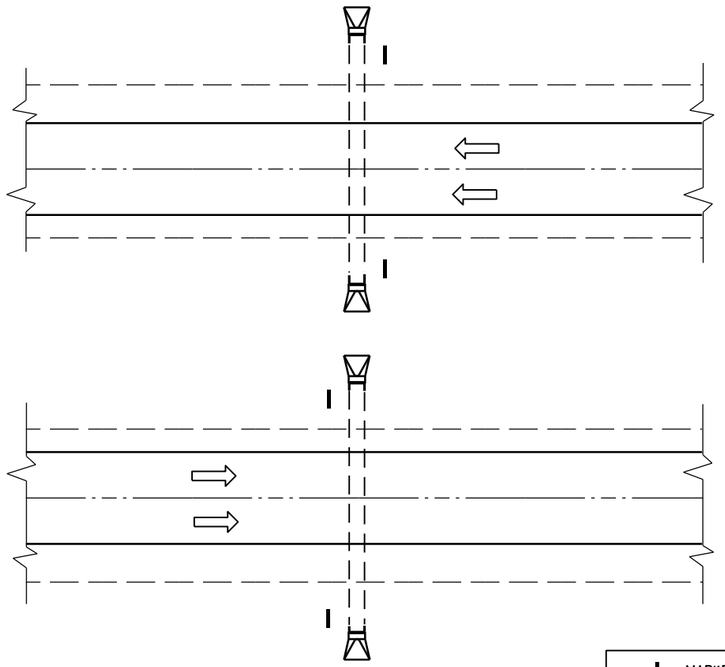
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

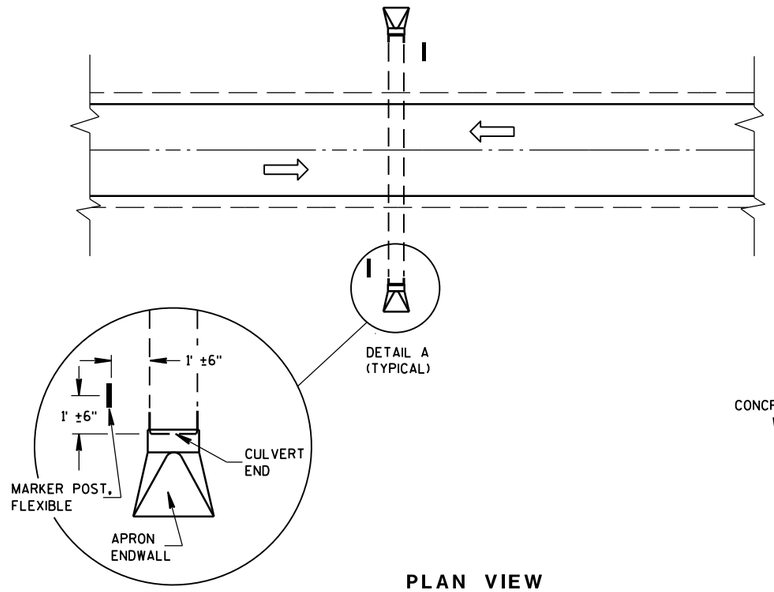
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

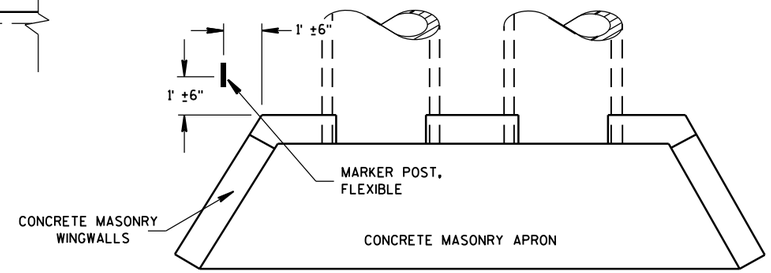
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

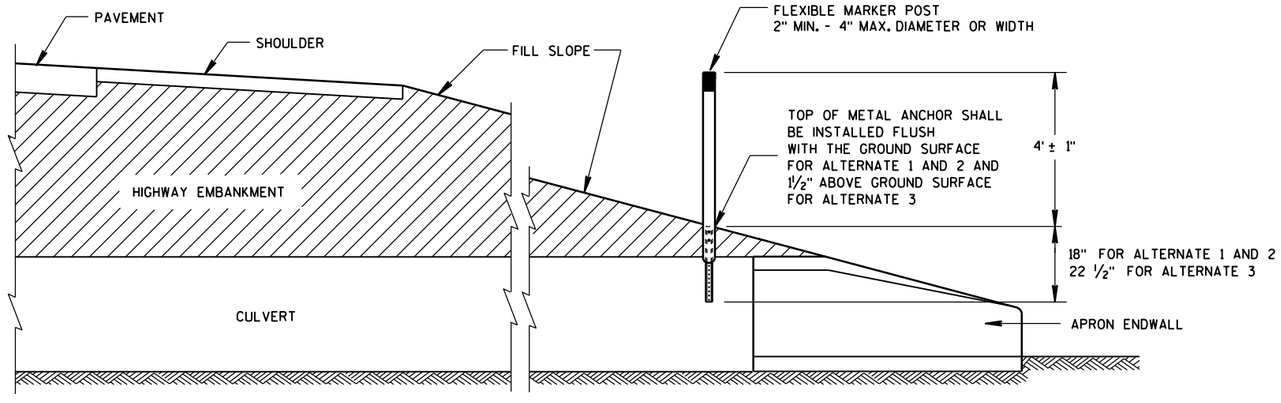
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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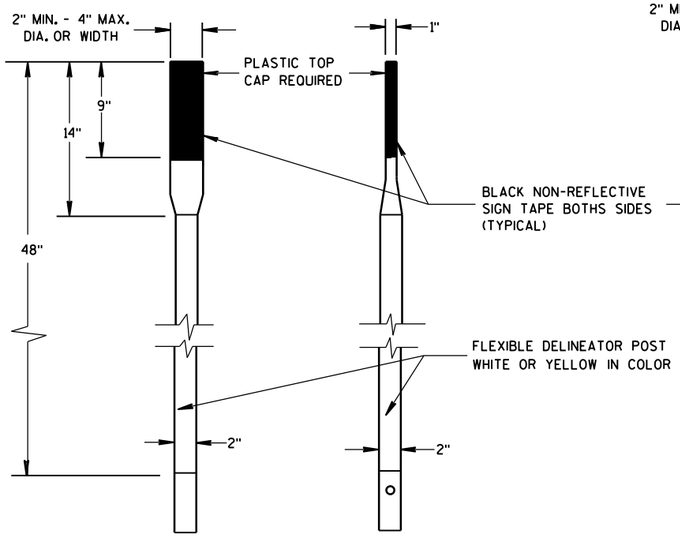
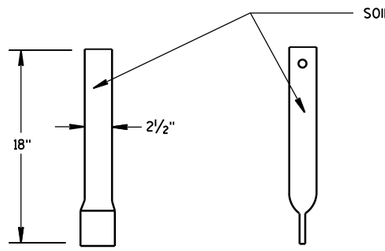
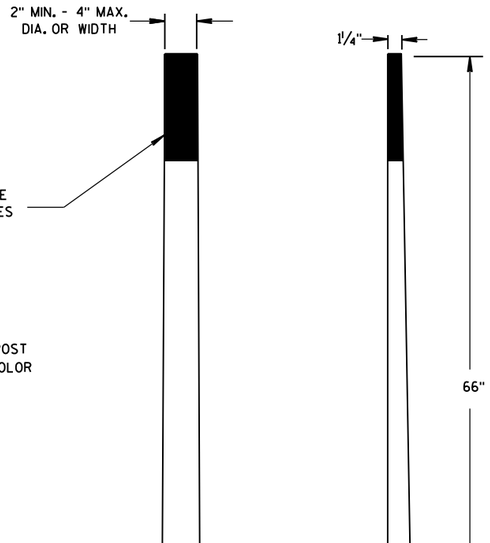
S.D.D. 15 A 3-2a





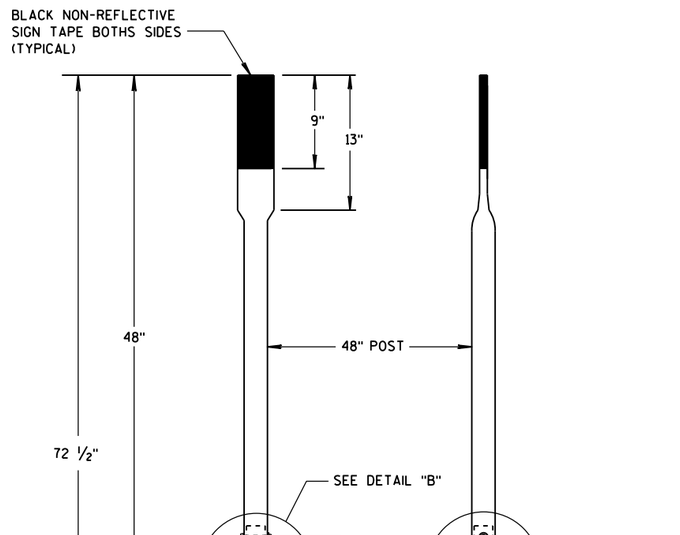
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

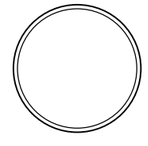
ALTERNATE 2



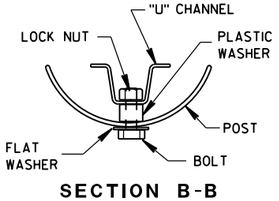
FRONT VIEW SIDE VIEW

ALTERNATE 3

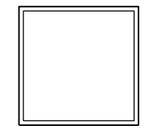
FLEXIBLE MARKER POSTS



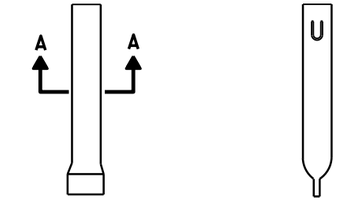
SECTION A-A



SECTION B-B

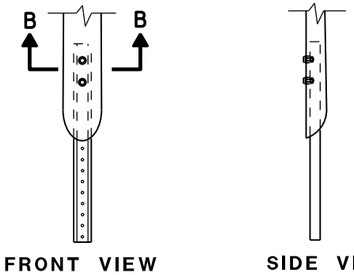


SECTION C-C



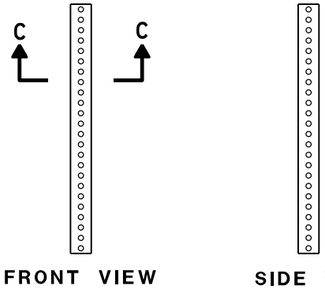
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

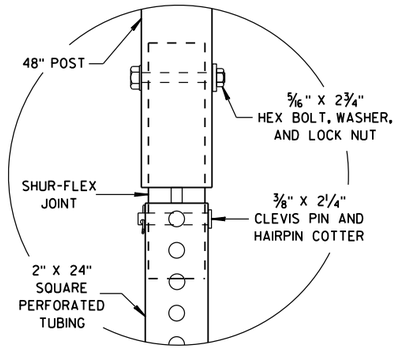
ALTERNATE 2



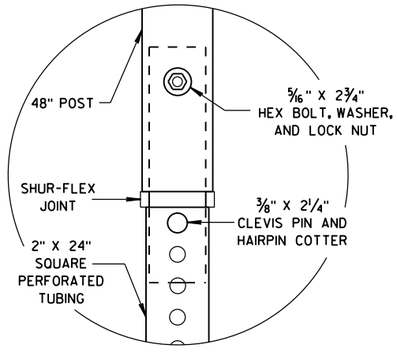
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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

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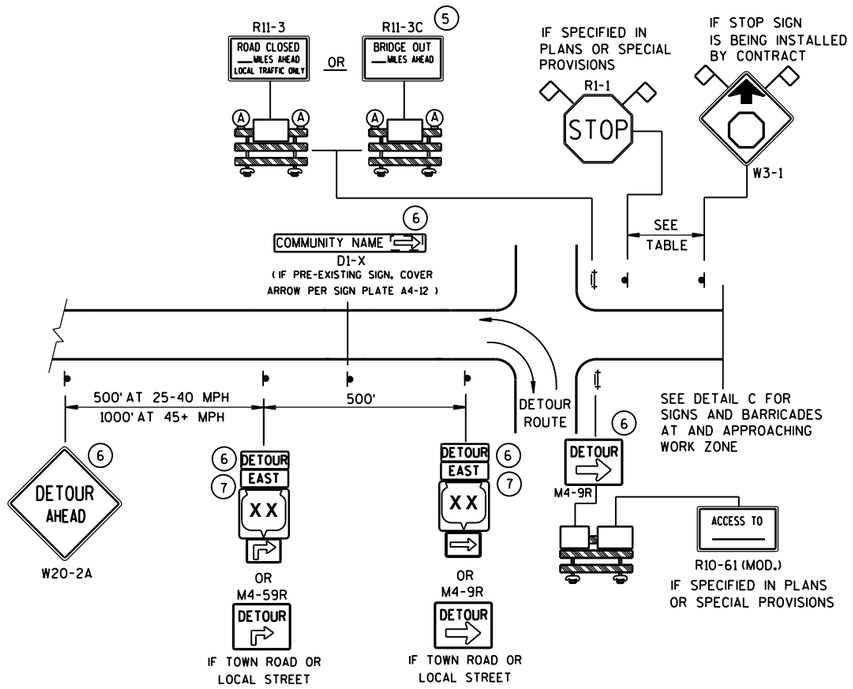
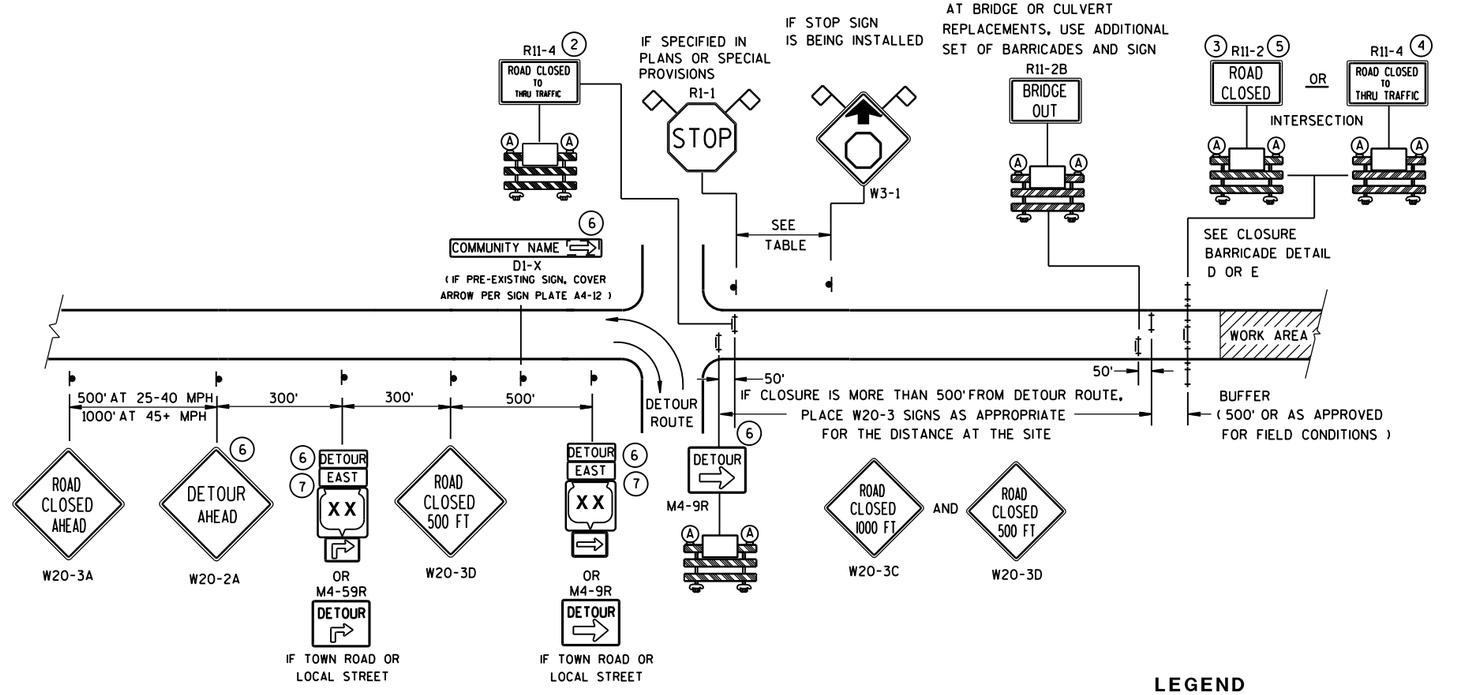
S.D.D. 15 A 3-2b



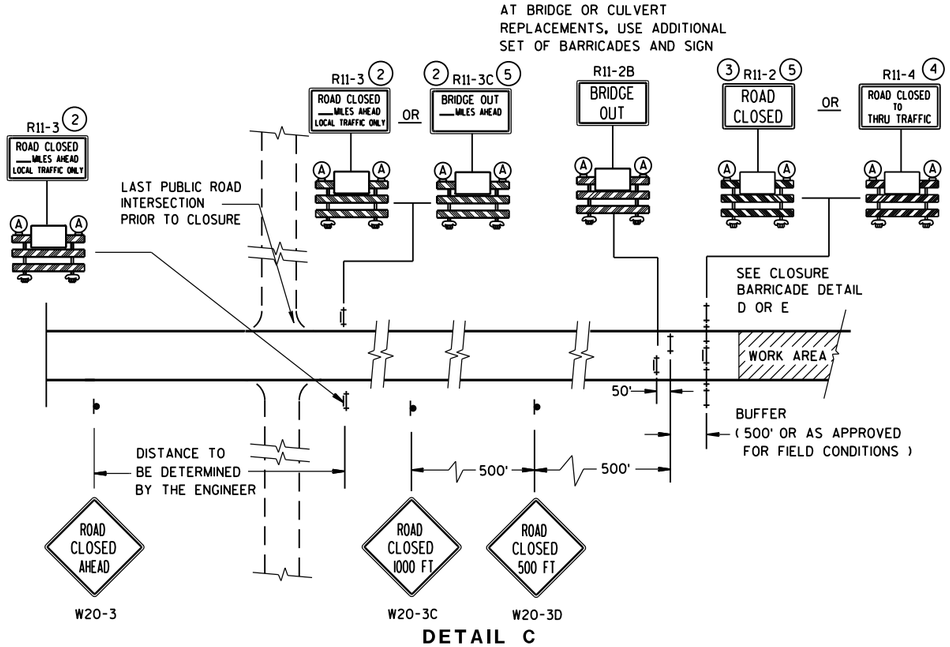
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES (1) THROUGH (7)

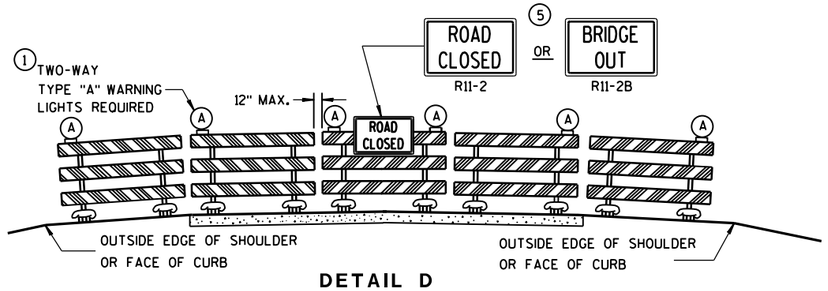
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

S.D.D. 15 C 2-6a

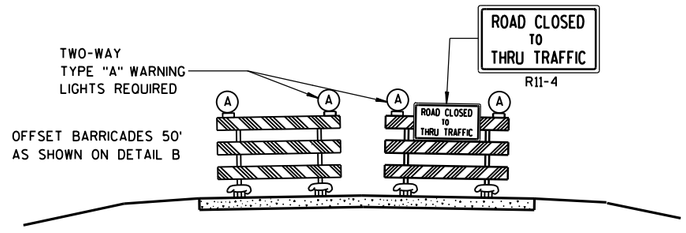
S.D.D. 15 C 2-6a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO SAFETY ENGI — FIC

FHWA

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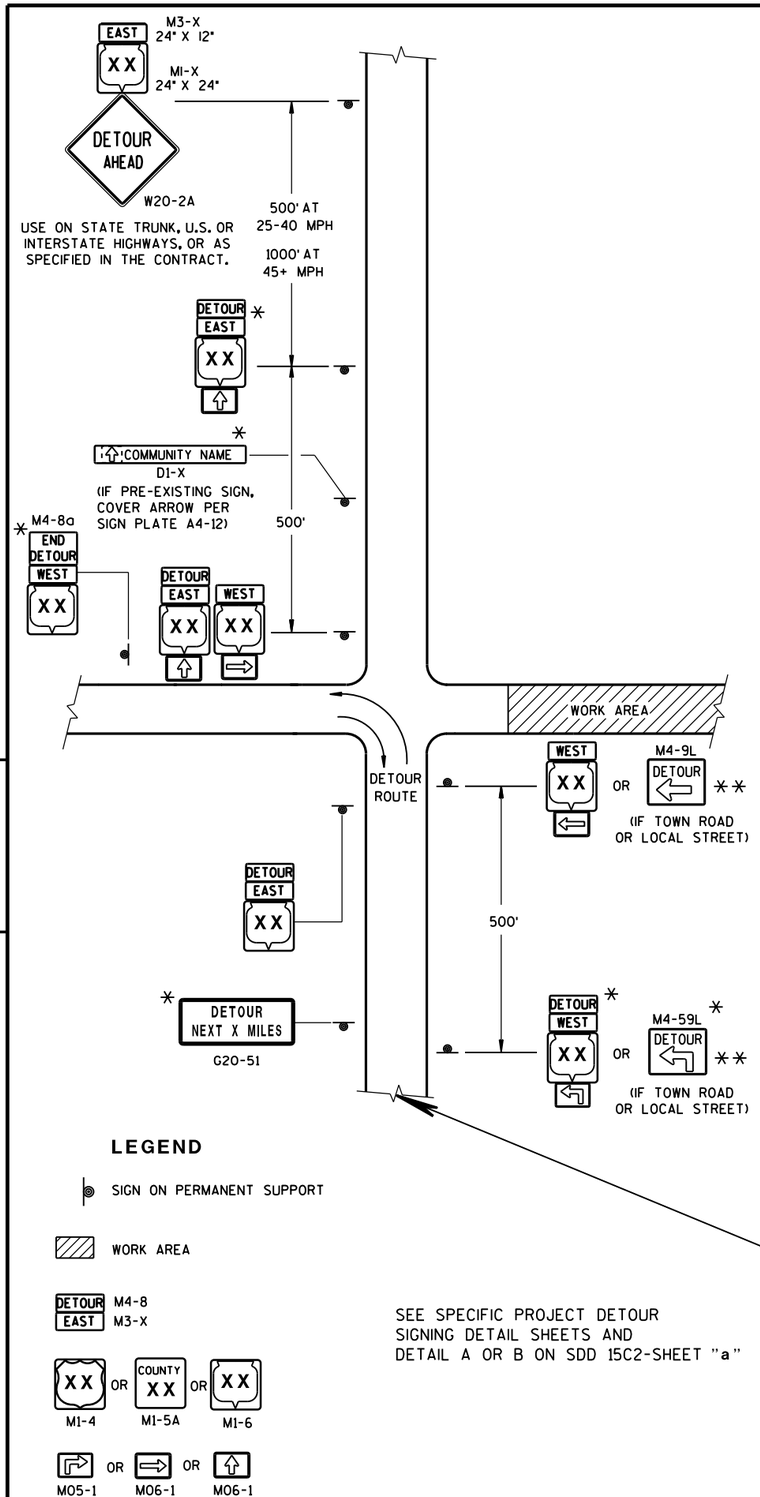
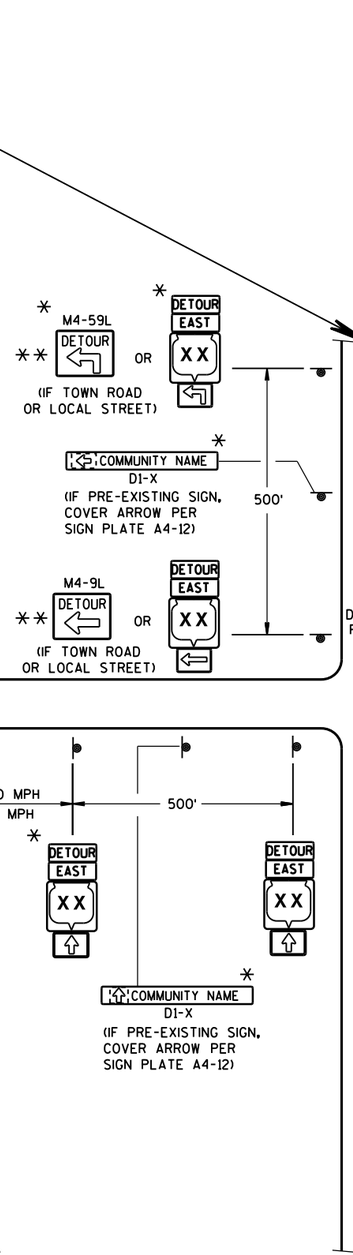
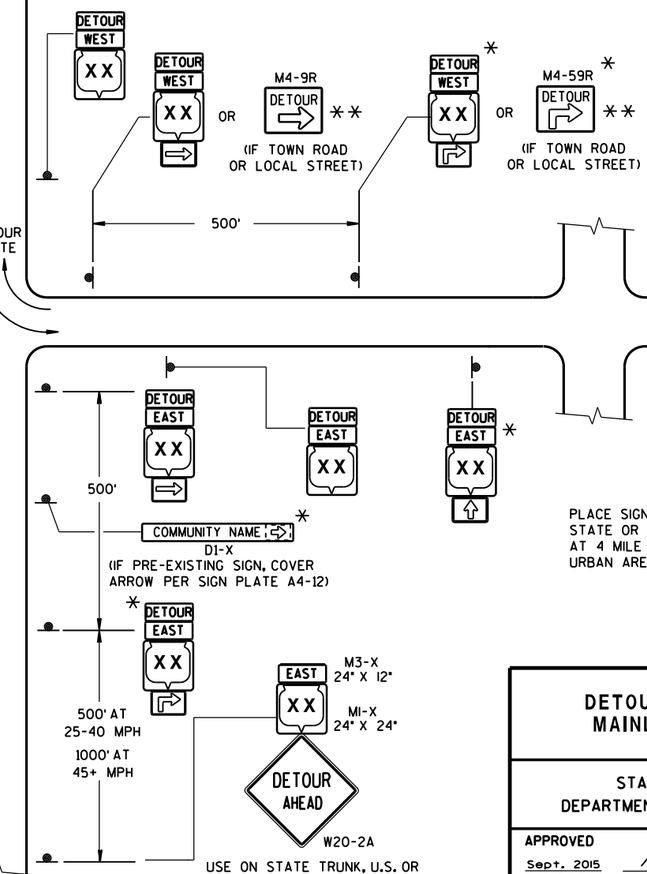
S.D.D. 15 C 2-6b

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



MATCH POINT





GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- MO5-1 AND MO6-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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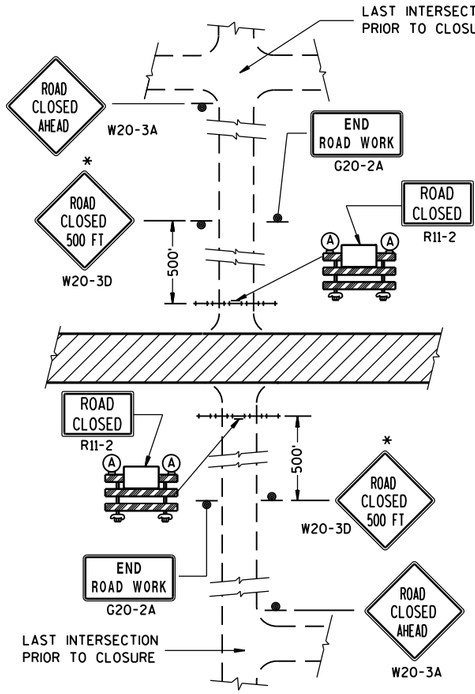
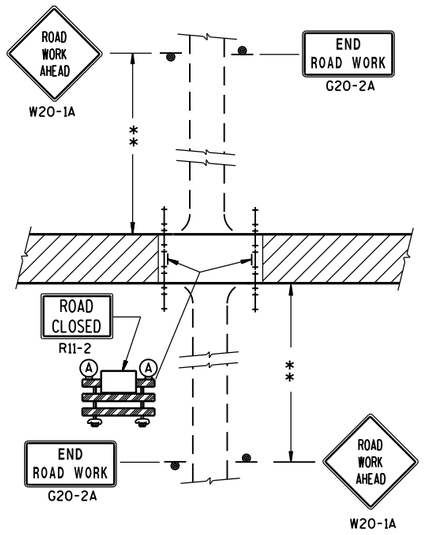
S.D.D. 15 C 2-6c



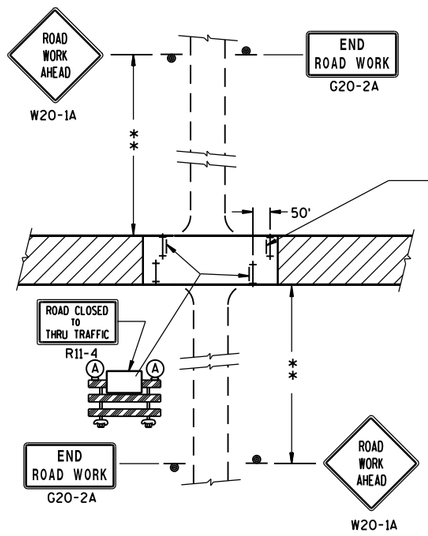
DETAIL 1

(NO ACCESS TO PROJECT)



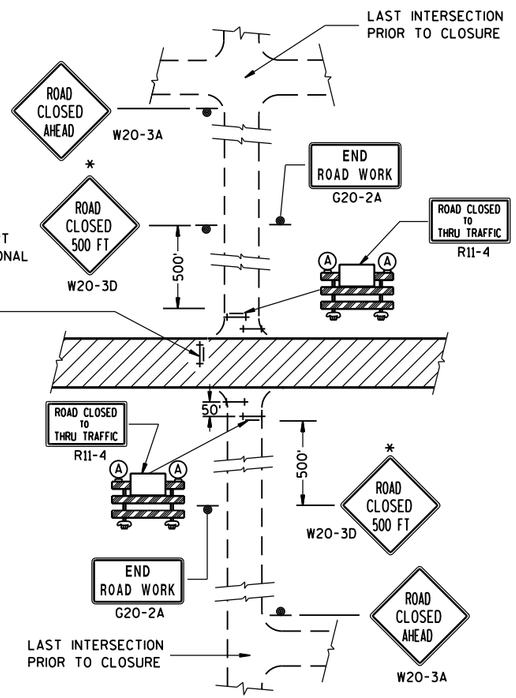
DETAIL 2

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



DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENG
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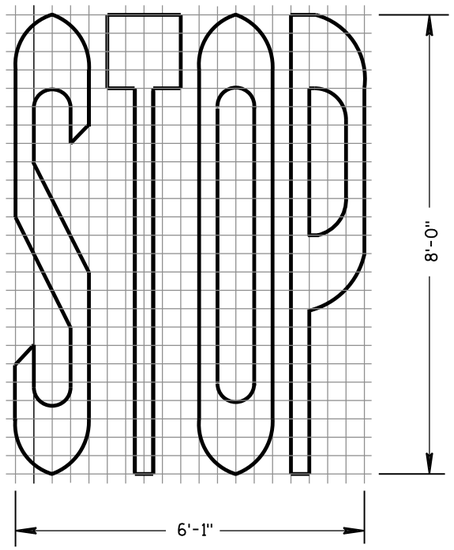
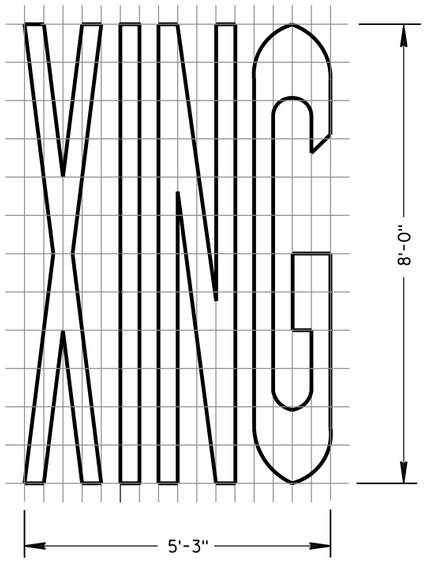
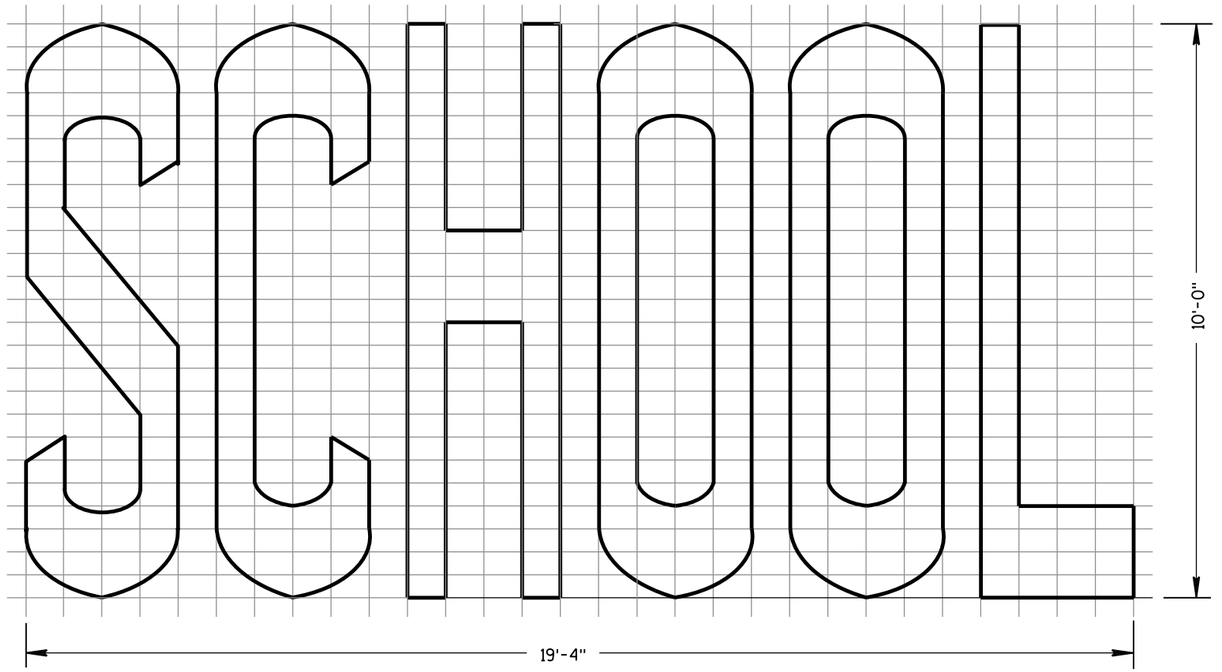
S.D.D. 15 C 3-4

GENERAL NOTES

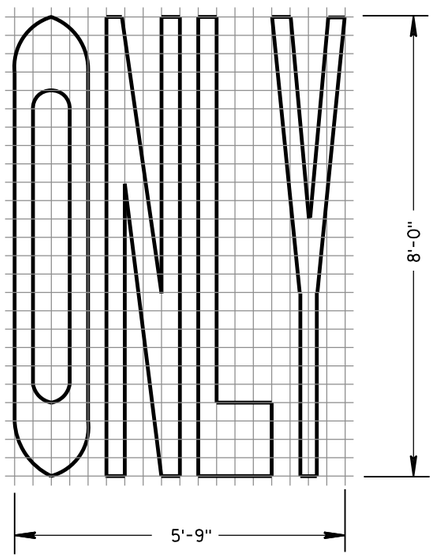
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

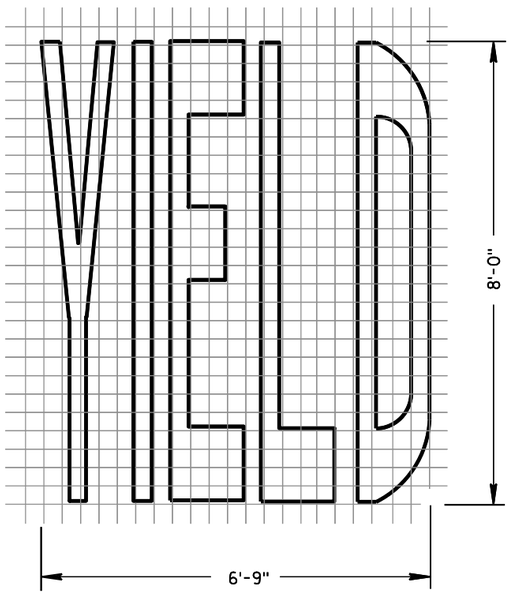


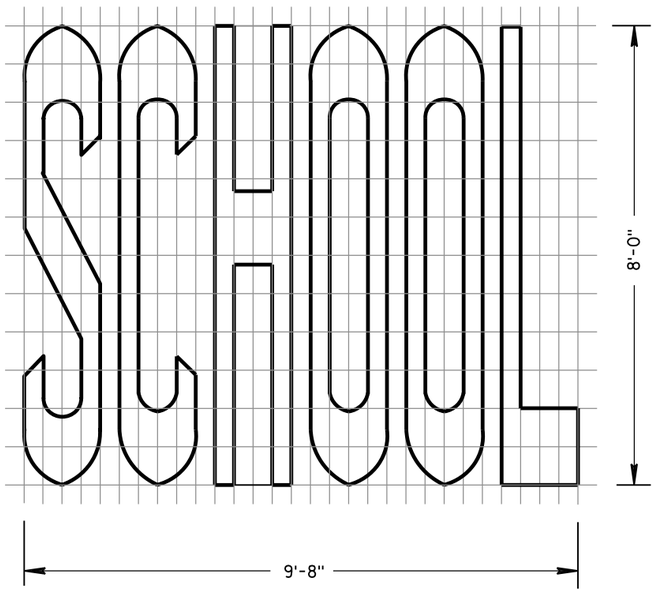




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
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S.D.D. 15 C 7-14b

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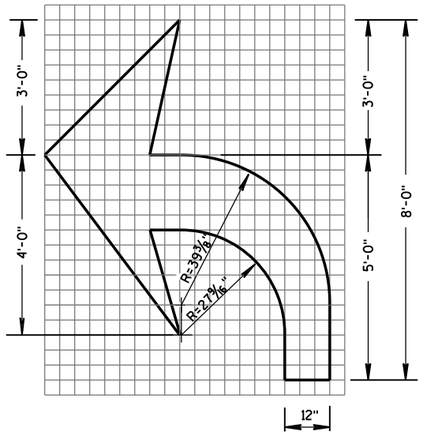
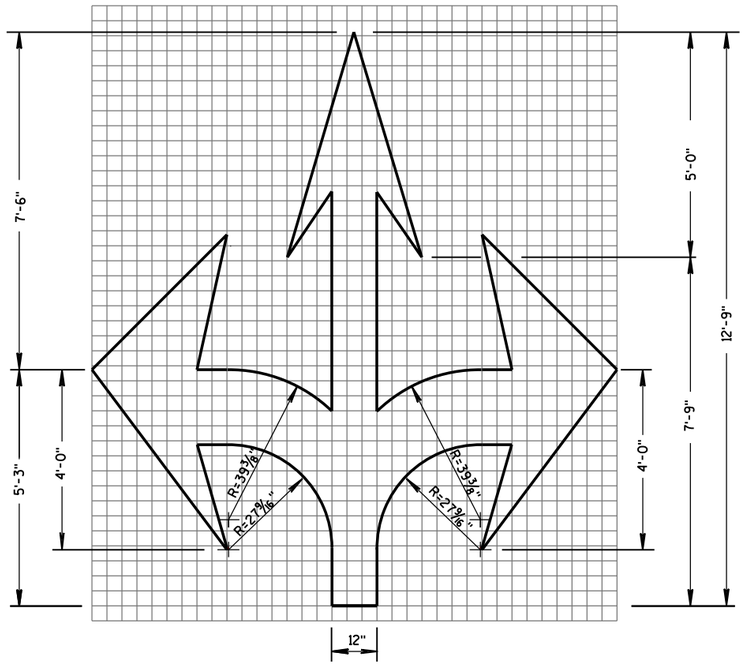
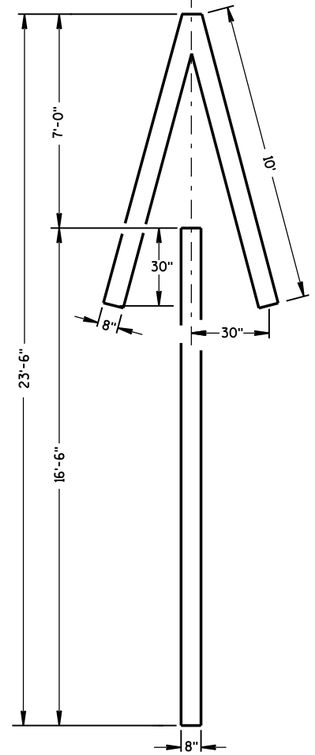
S.D.D. 15 C 7-14b



TYPE 2



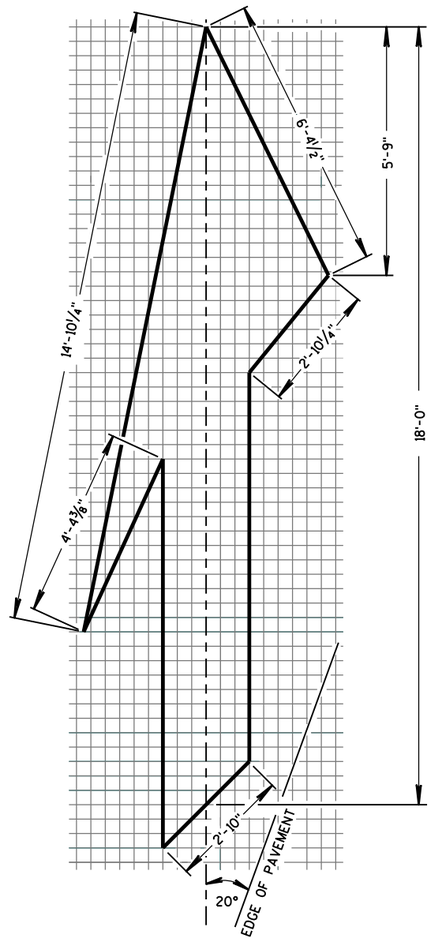
TYPE 6



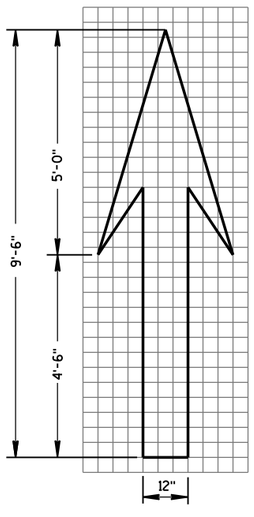
TYPE 4

GENERAL NOTES

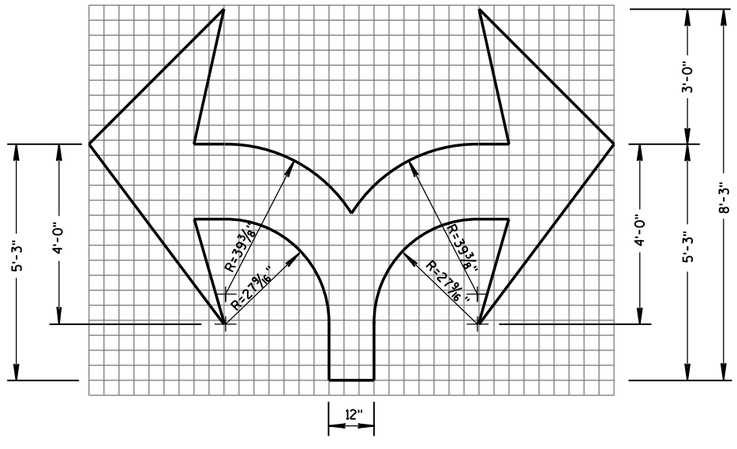
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



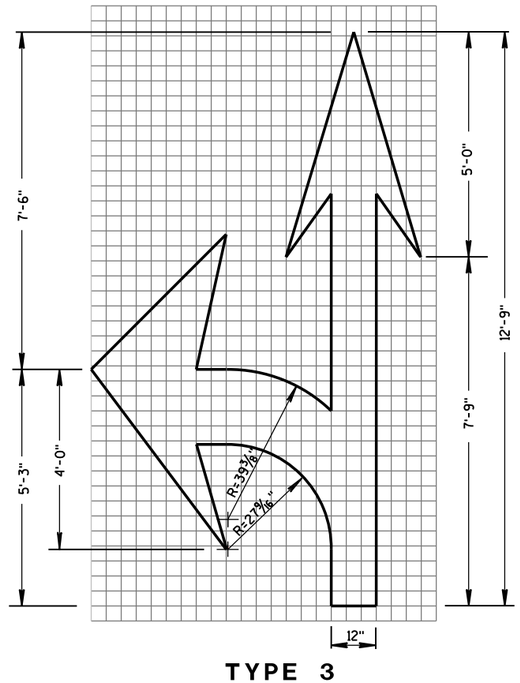
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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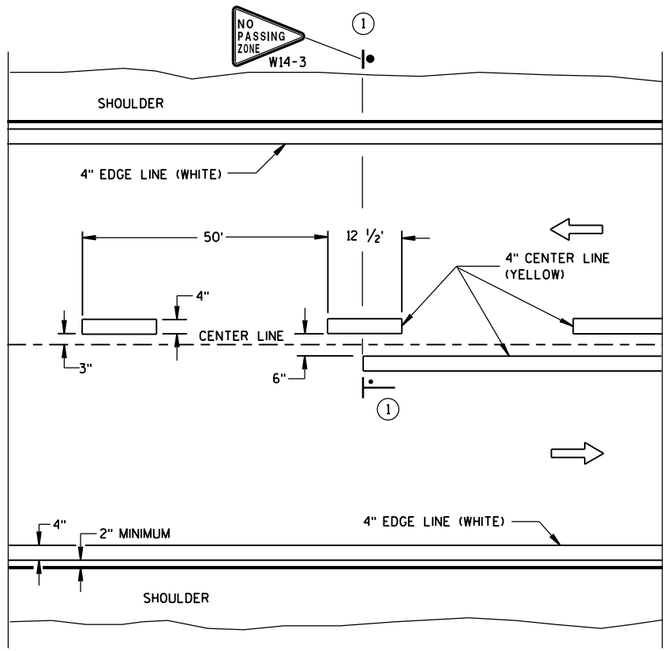
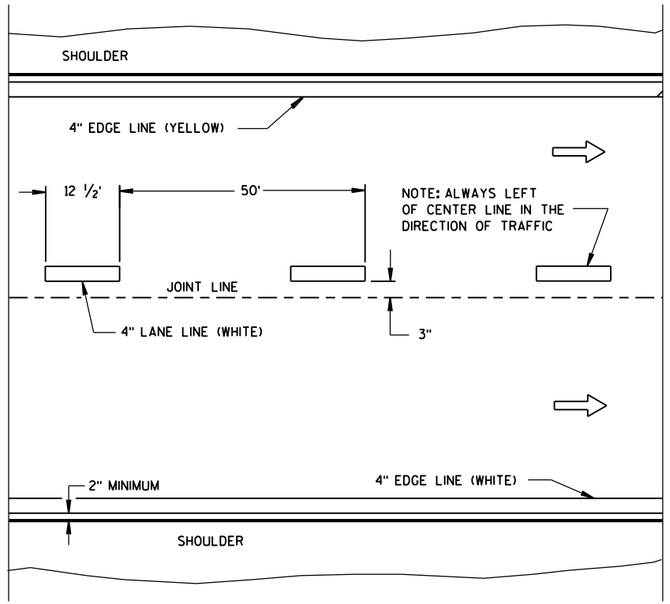
S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

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

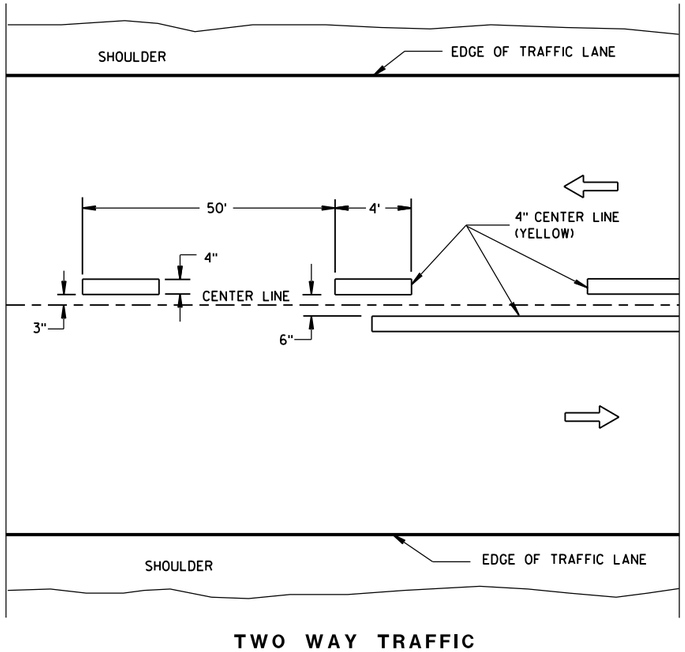
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

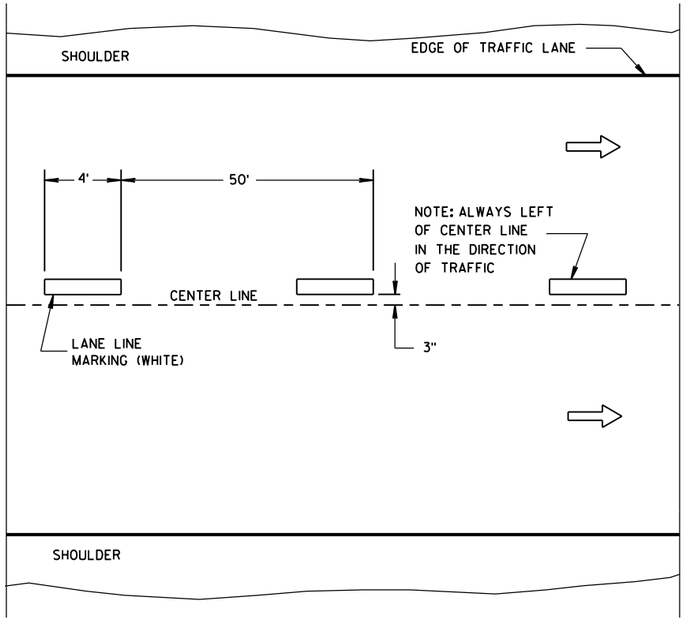
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2017 — DATE
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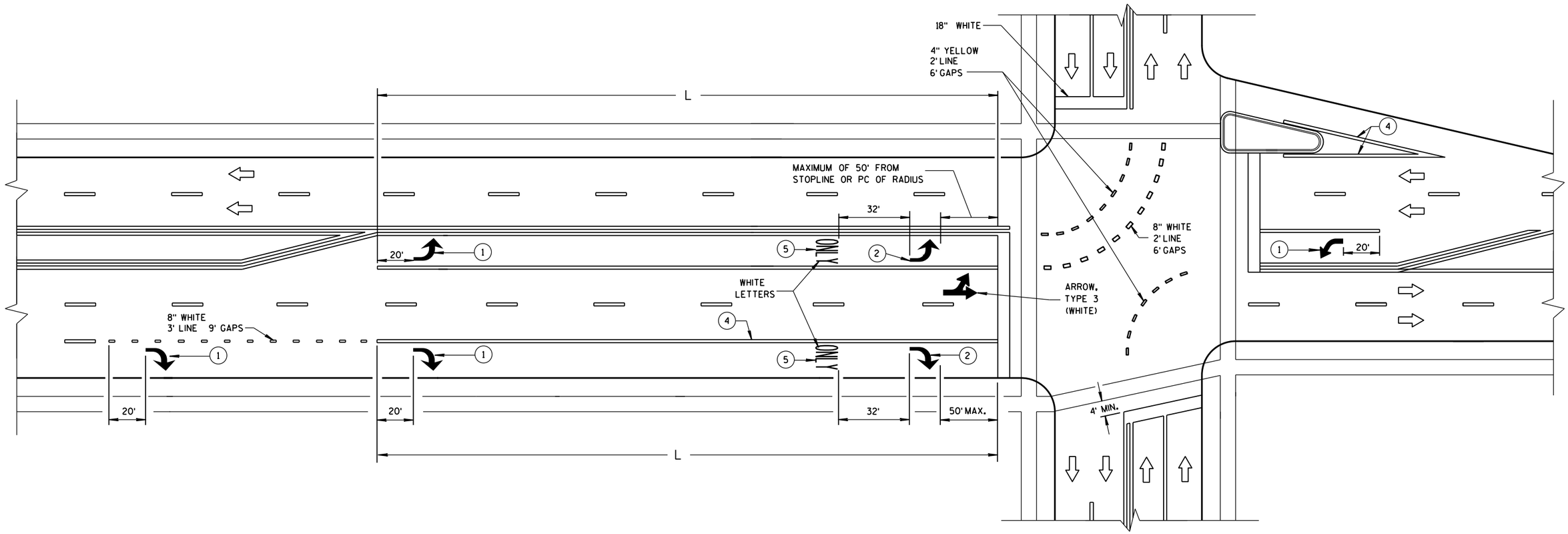
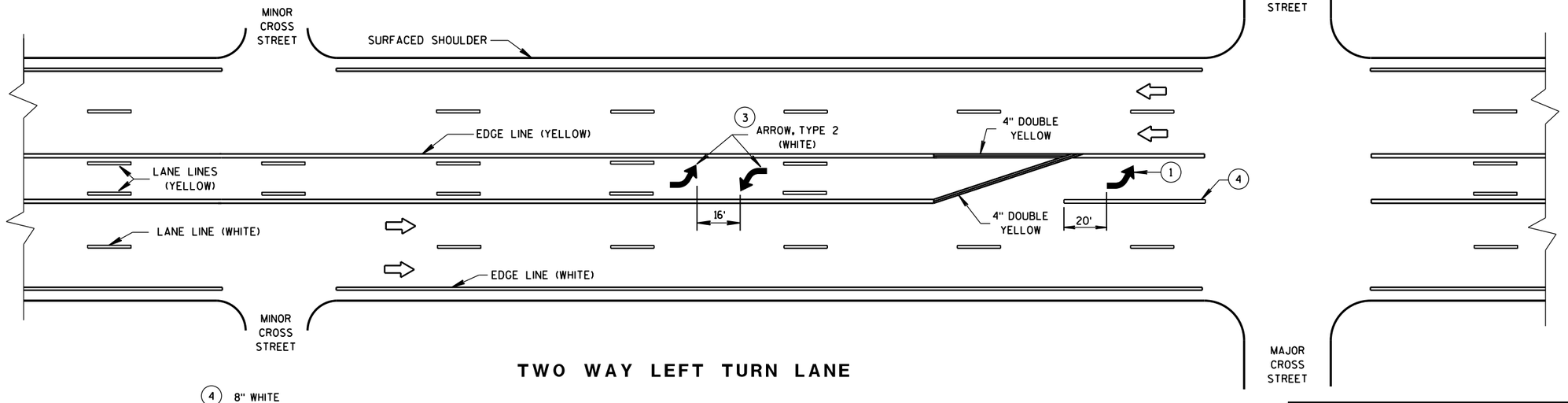
S.D.D. 15 C 8-18a





TWO WAY LEFT TURN LANE

GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

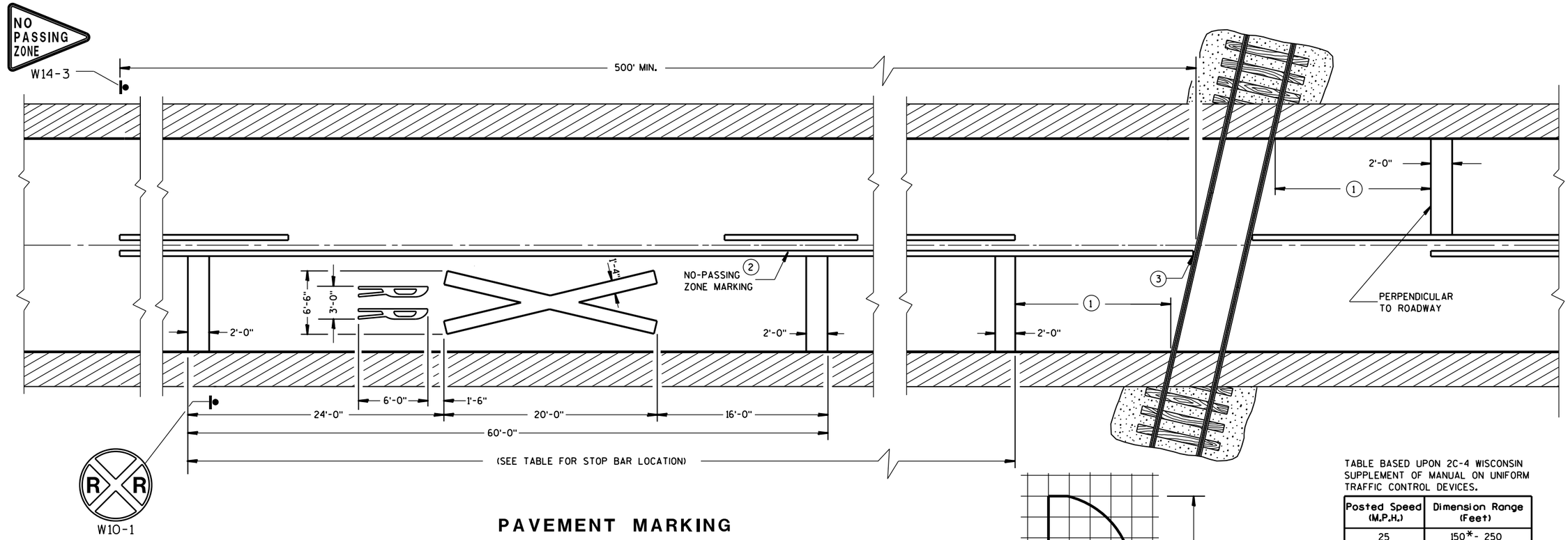
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 8-18b



PAVEMENT MARKING

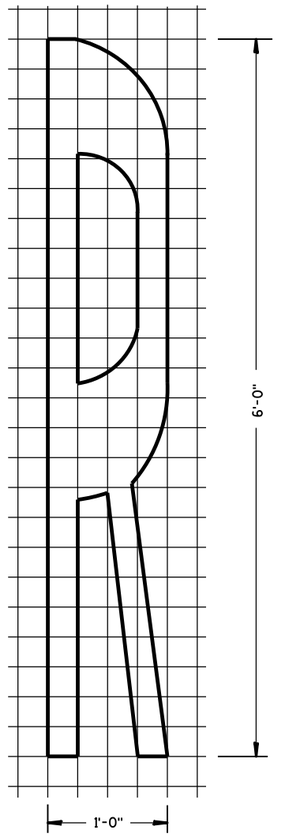


TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017 — DATE

/S/ Matthew R. Rauch — STATE SIGNING AND MAI[illegible]GINEER

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S.D.D. 15 C 9-11a

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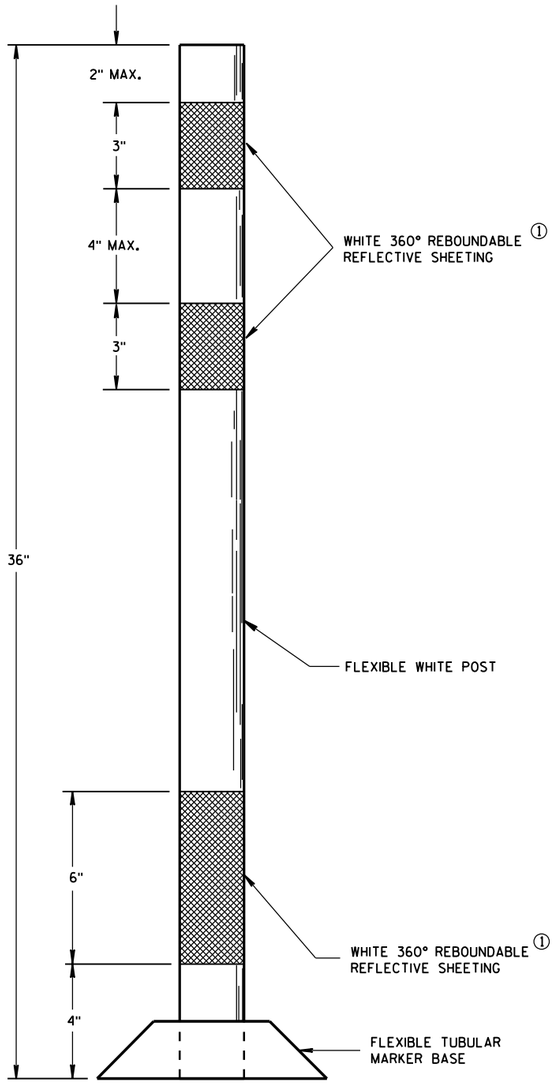
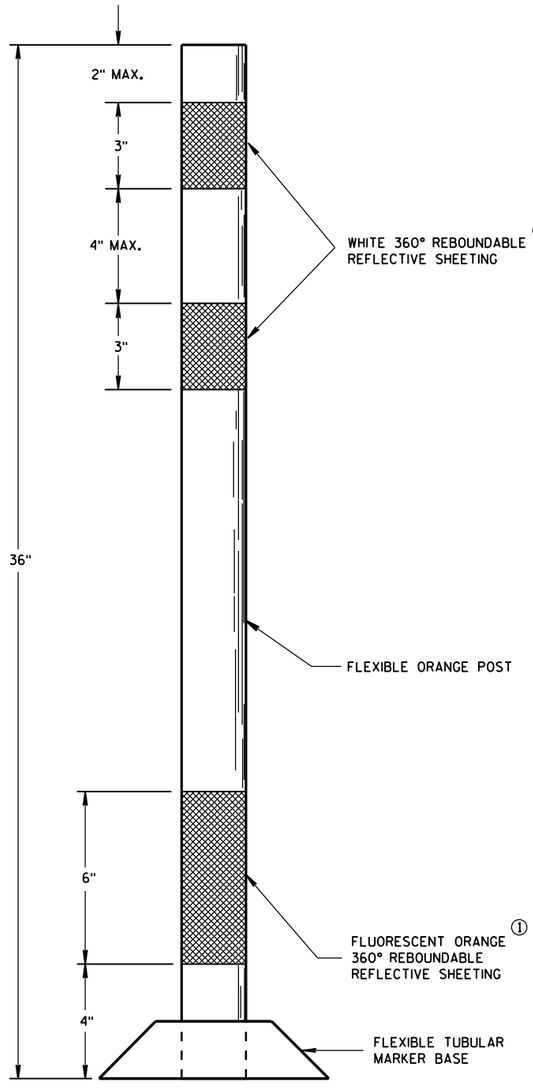
S.D.D. 15 C 9-11a



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGR
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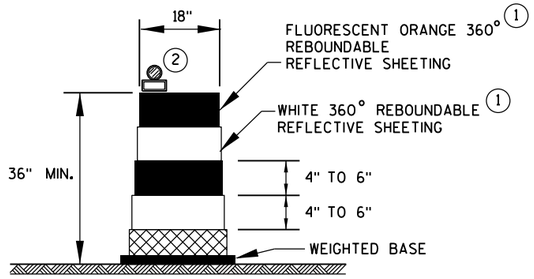
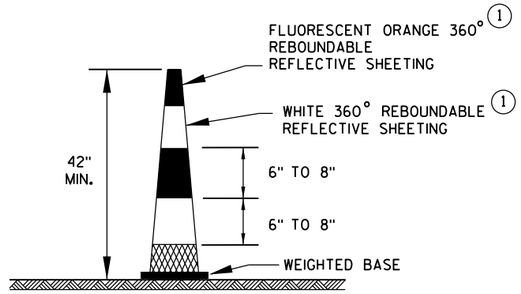
S.D.D. 15 C 11-7a



DRUM

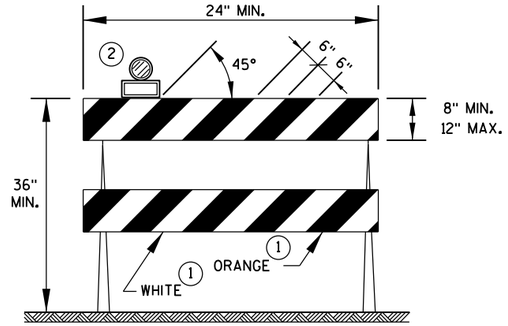


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

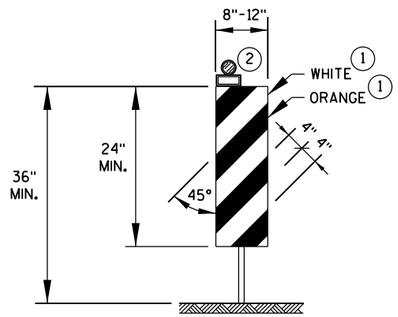
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



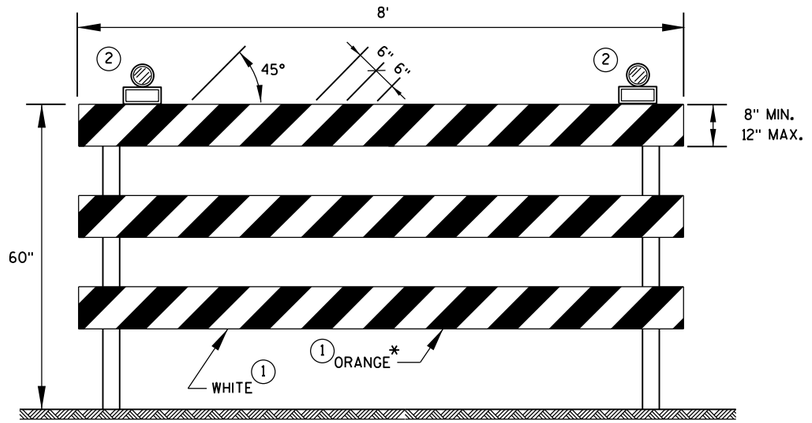
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENG
FHWA	

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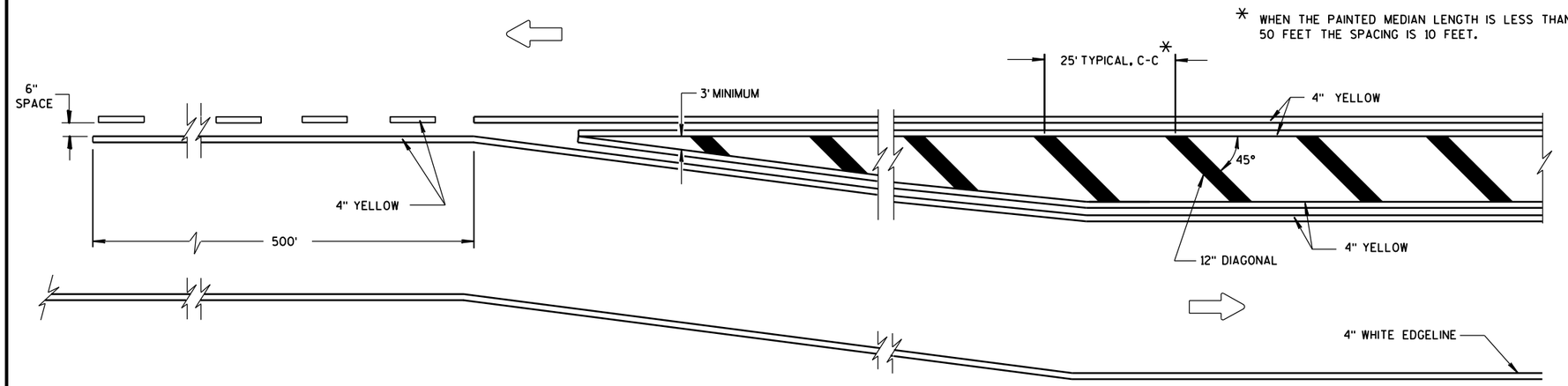
S.D.D. 15 C 11-7b

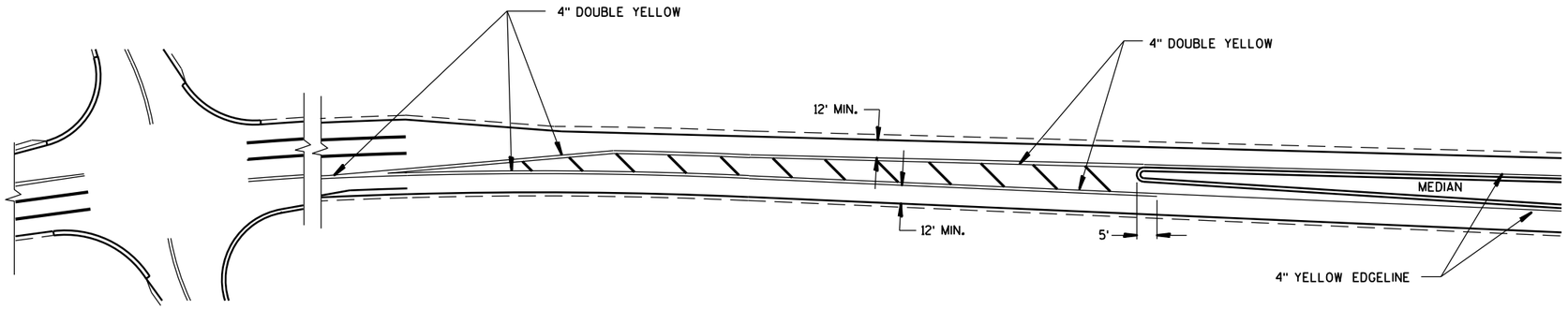


MEDIAN ISLAND DETAIL

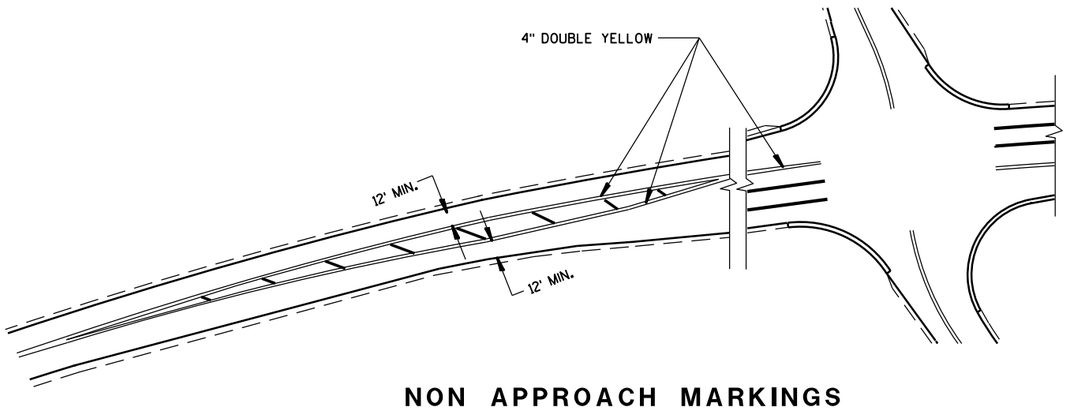
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew Rauch STATE SIGNING AND MARK ... EER
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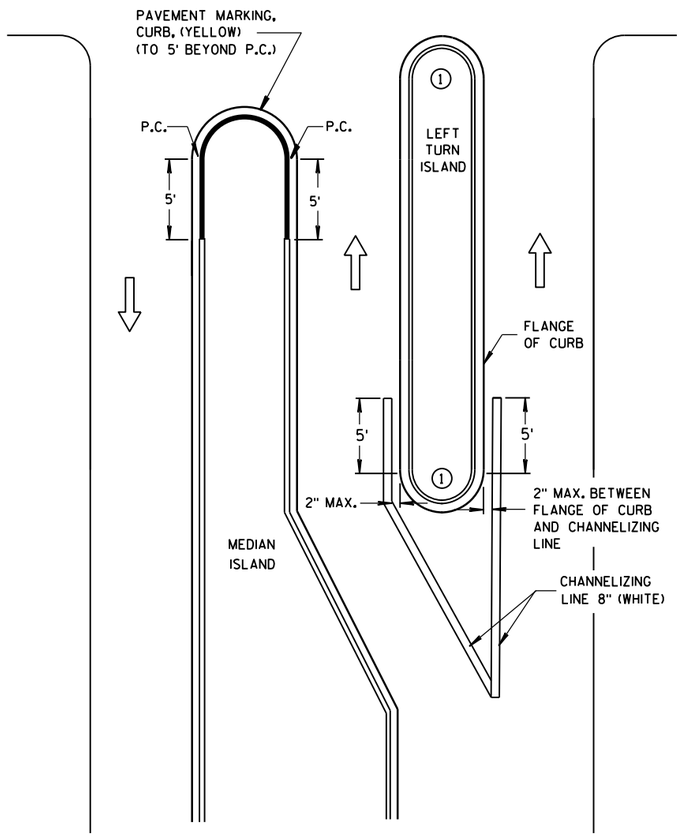
S.D.D. 15 C 18-4

GENERAL NOTE

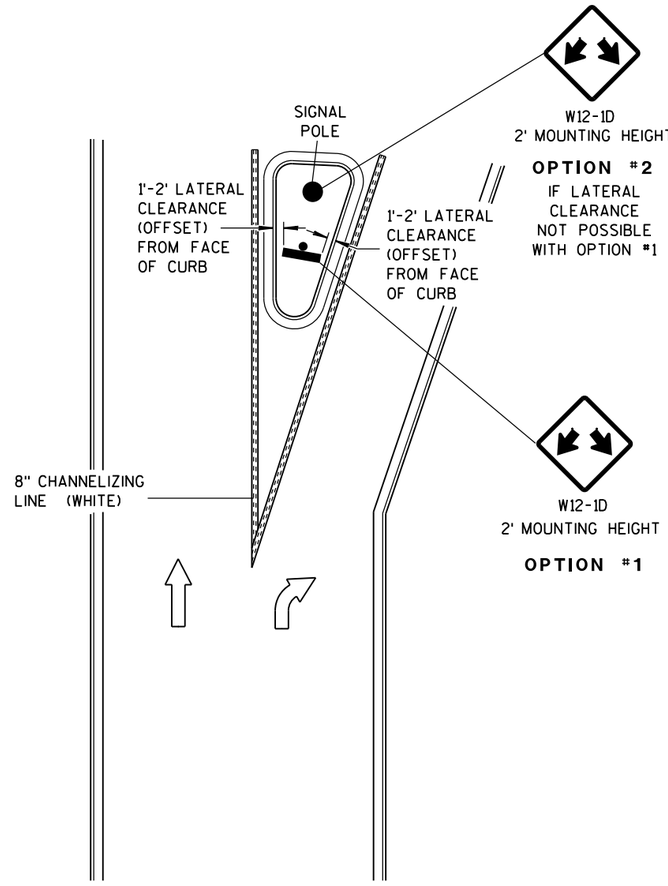
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

DIRECTION OF TRAVEL



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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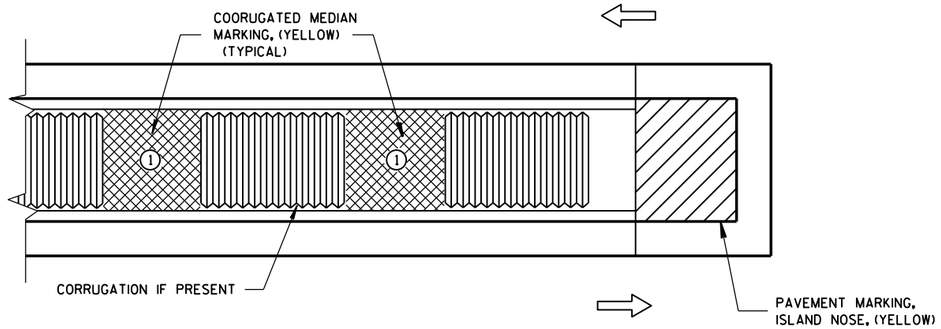
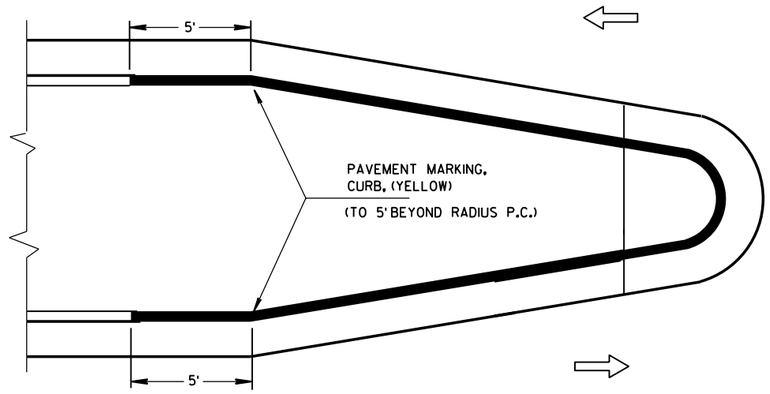
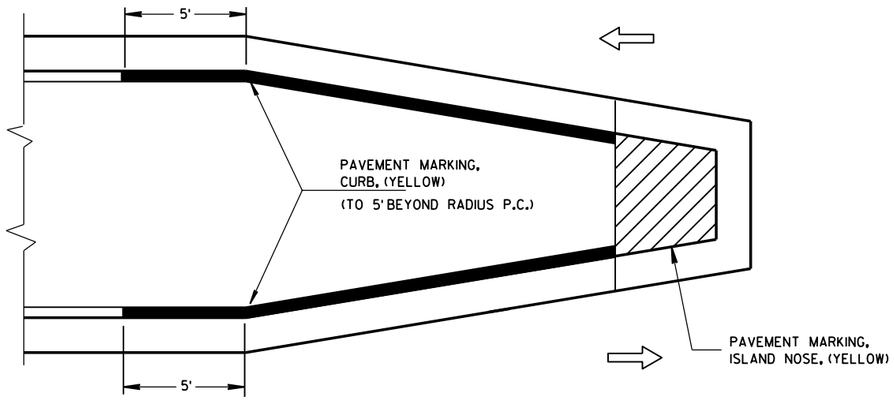
S.D.D. 15 C 27-2a



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

(1) 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 AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARK 243 EER
FHWA

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S.D.D. 15 C 27-2b

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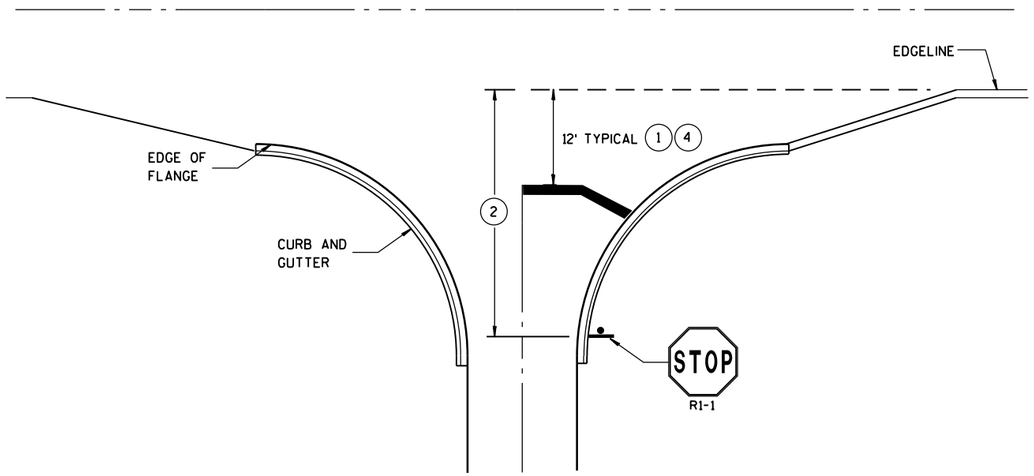
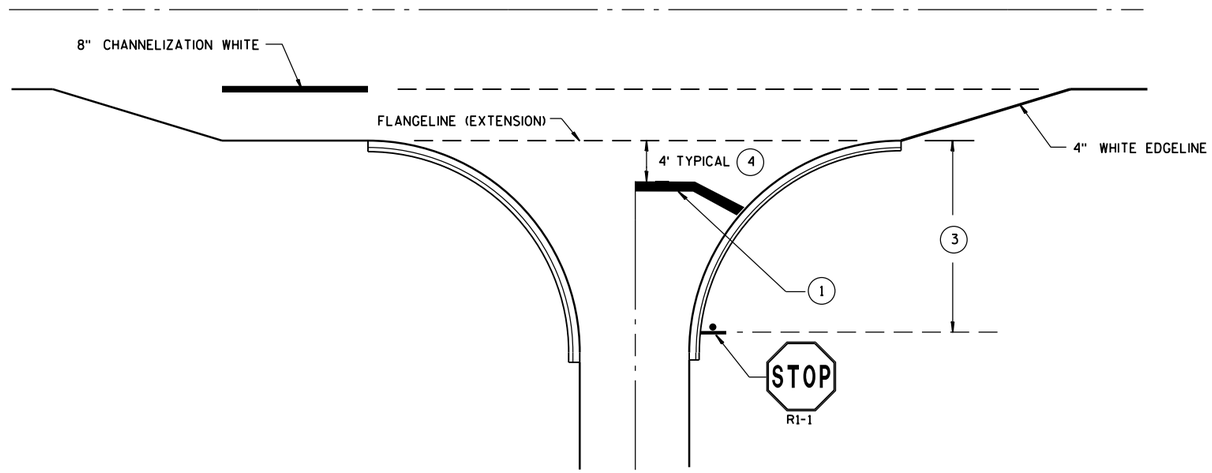
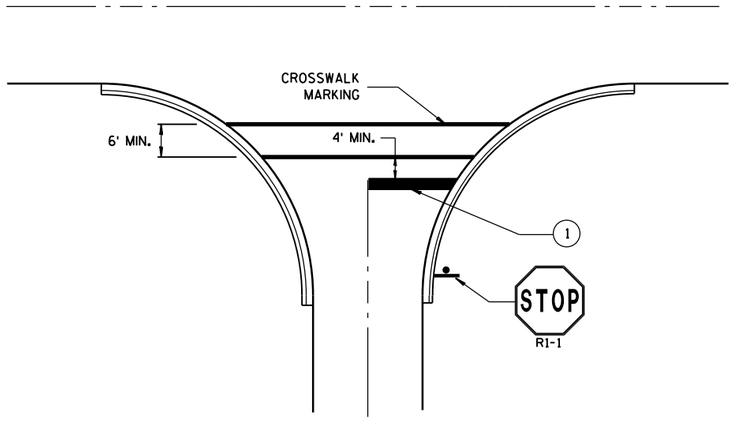
S.D.D. 15 C 27-2b



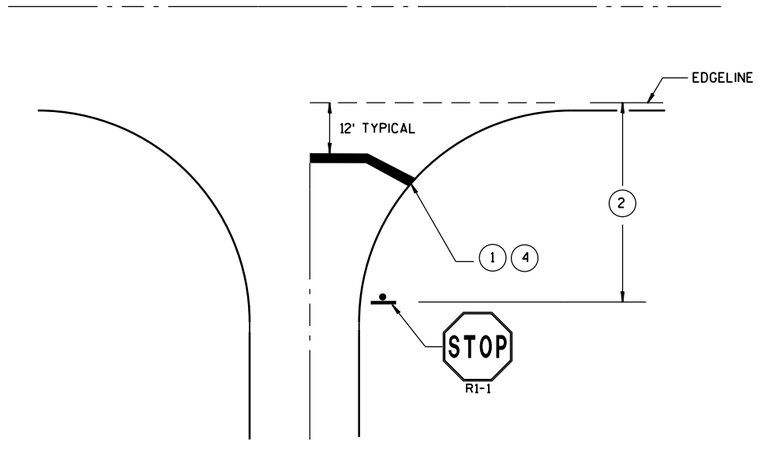
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

(1) 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.

(2) IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE THAN NO STOP LINE IS REQUIRED.

(3) IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.

(4) MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept., 2017
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 244 NEER

FHWA

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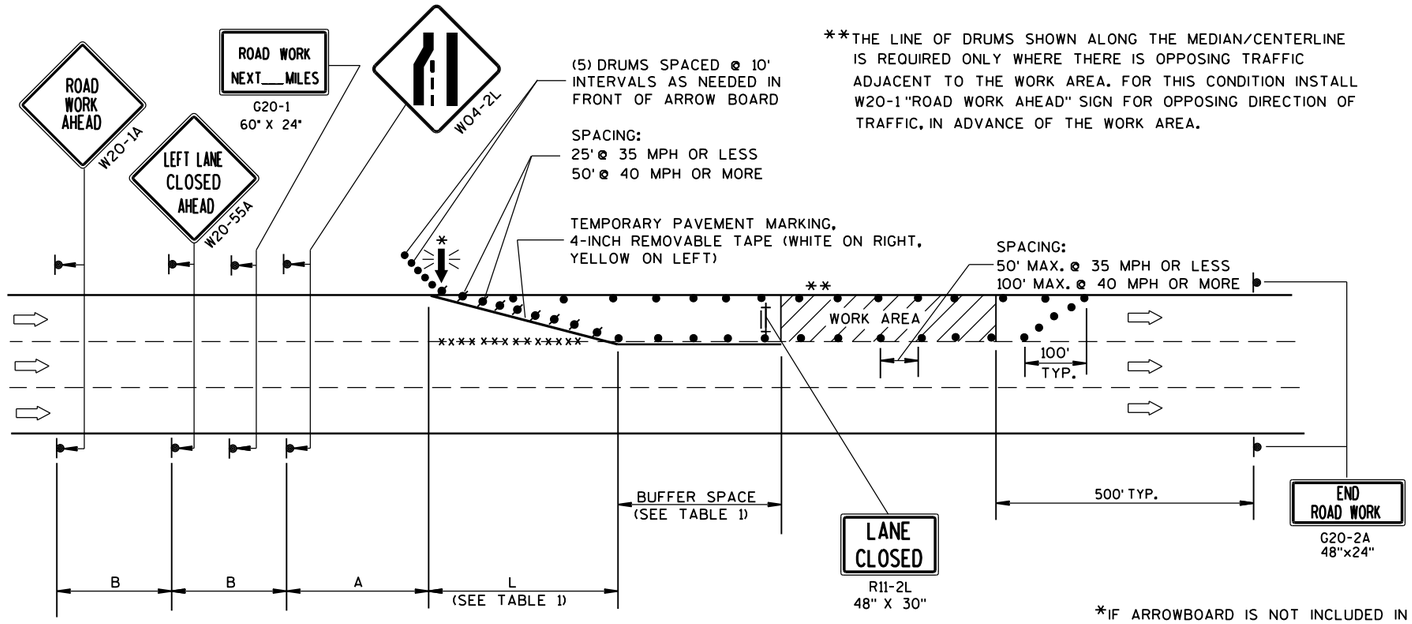

**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

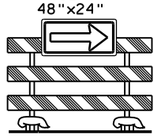

TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA

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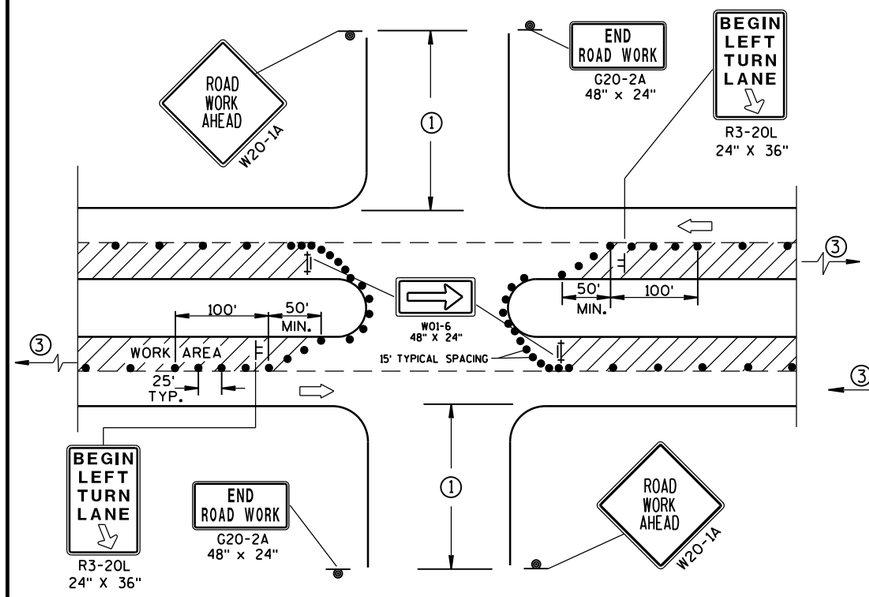
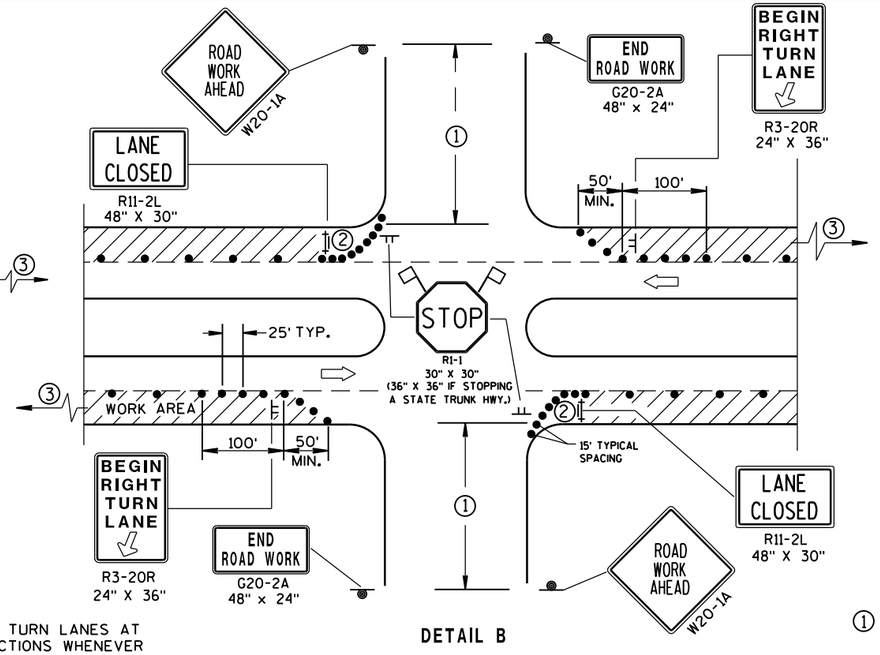


DETAIL A

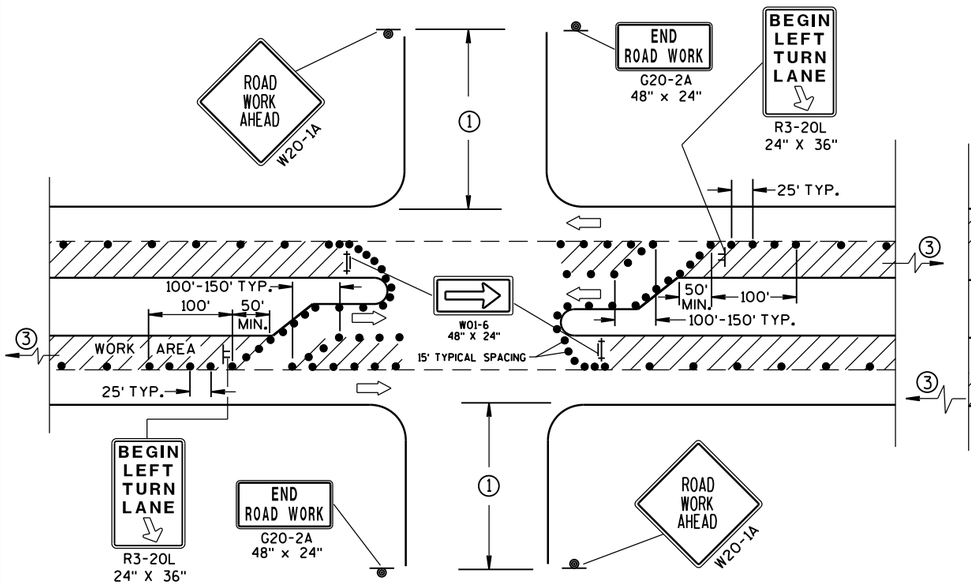
FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING



DETAIL B

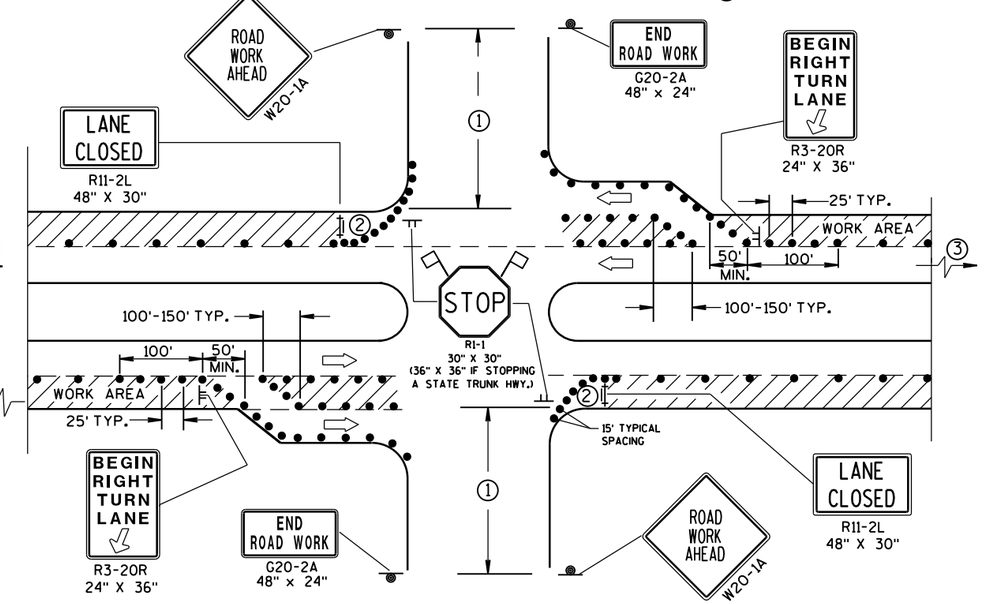
FOR RIGHT LANE CLOSURE AT INTERSECTION

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



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENG
FHWA

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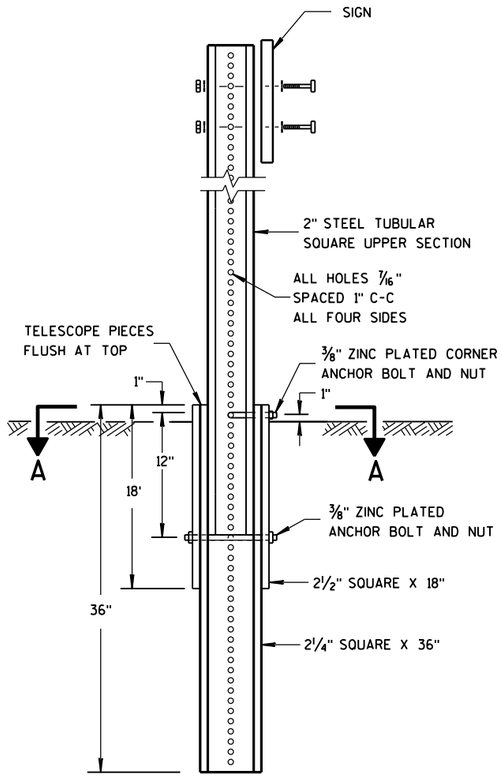
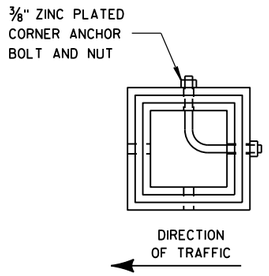
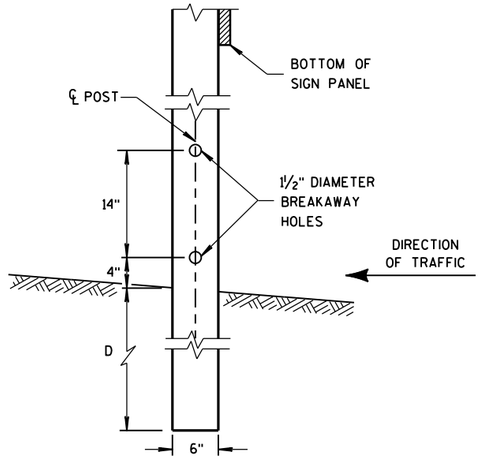


DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



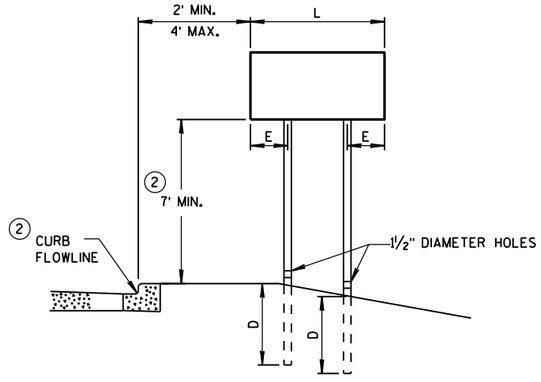
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

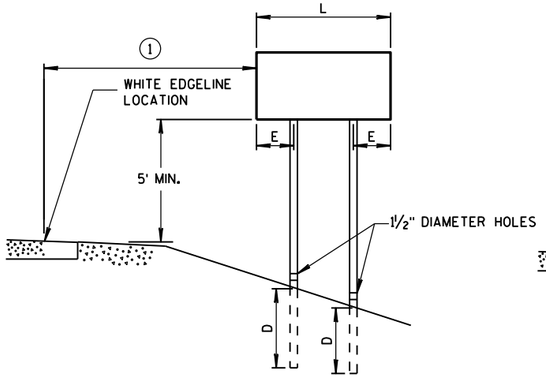
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

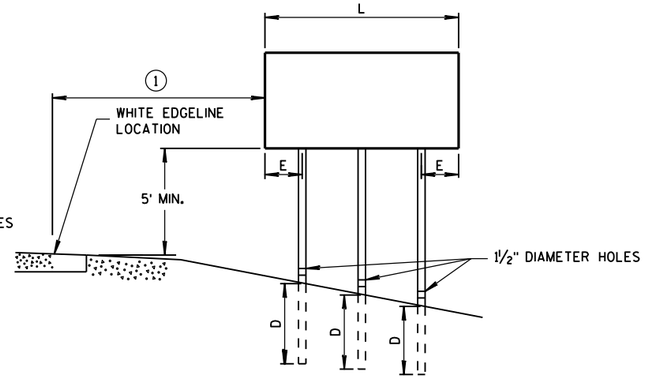
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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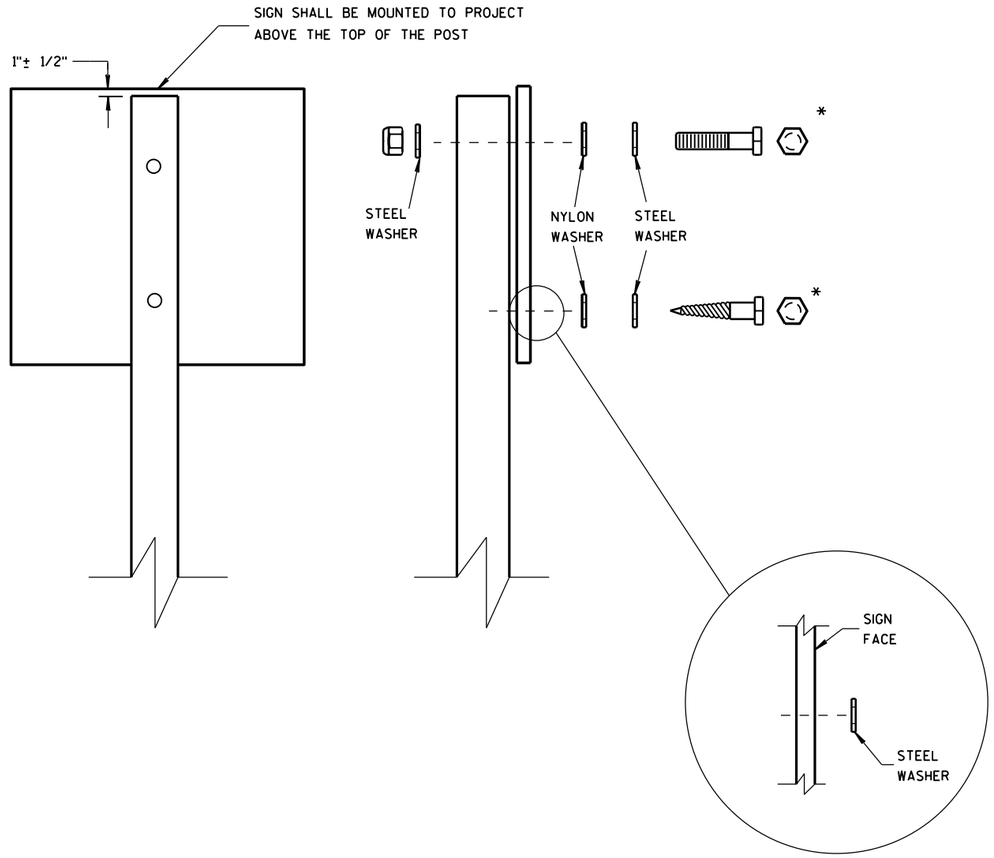
S.D.D. 15 D 38-2a



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

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

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

LAG SCREWS - 3/8" X 3"

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

SQUARE STEEL POSTS (2" x 2")

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

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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

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

ATTACHMENT OF SIGNS TO POSTS

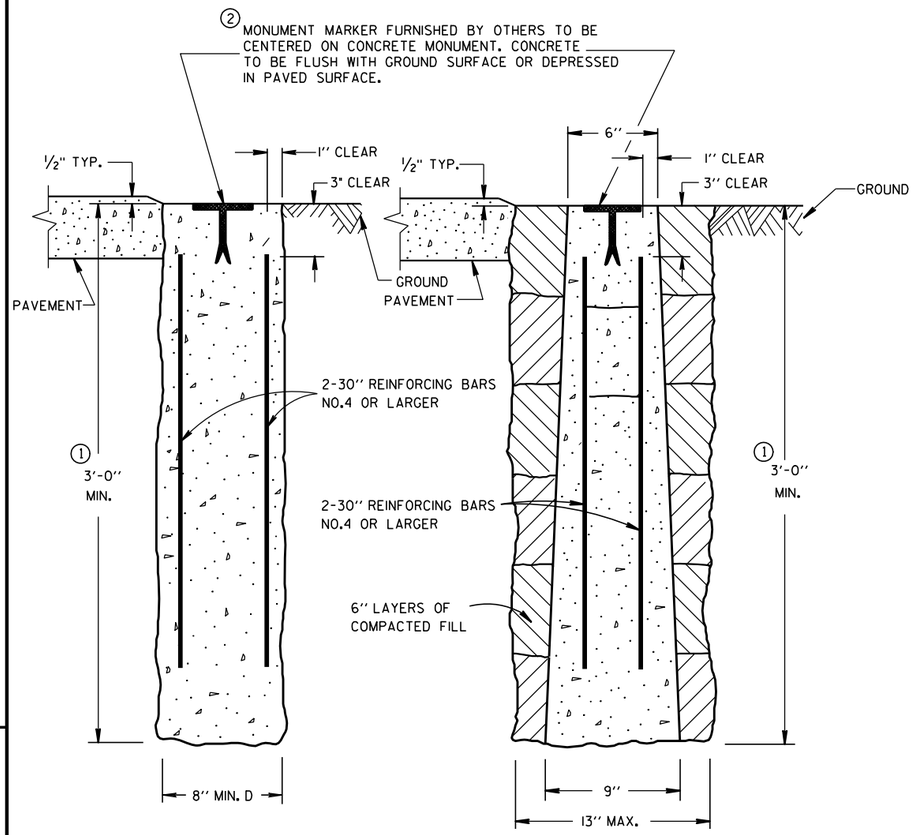
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

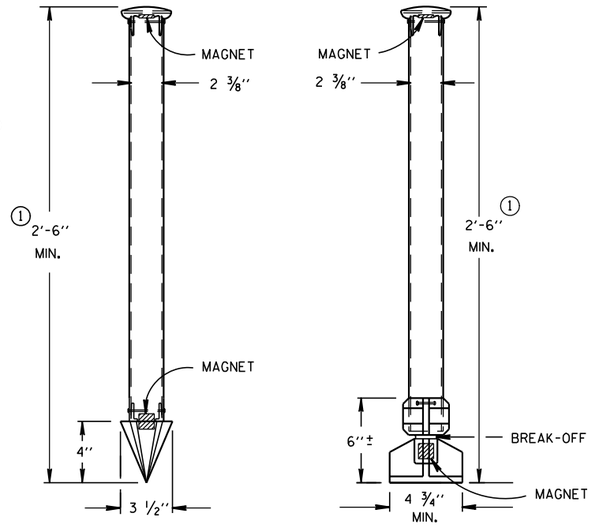
FHWA



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

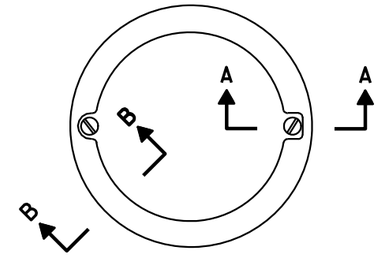
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

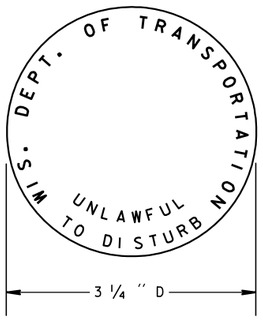
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

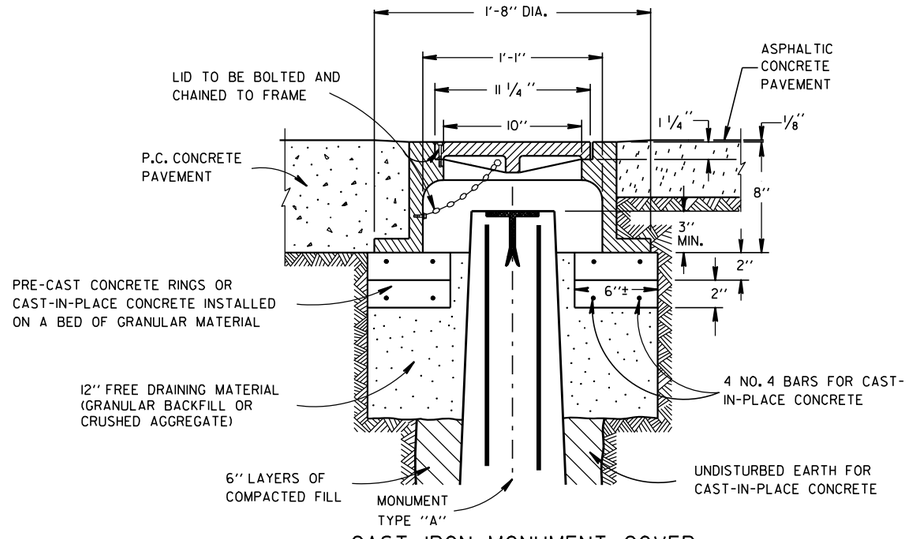
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

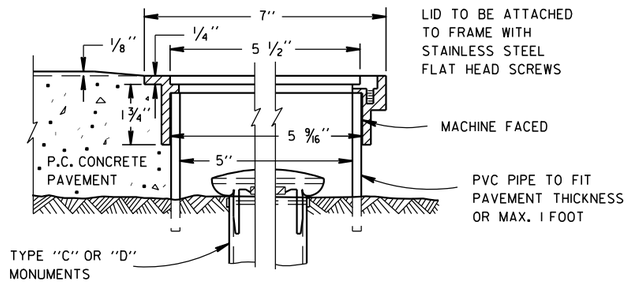


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP NEER

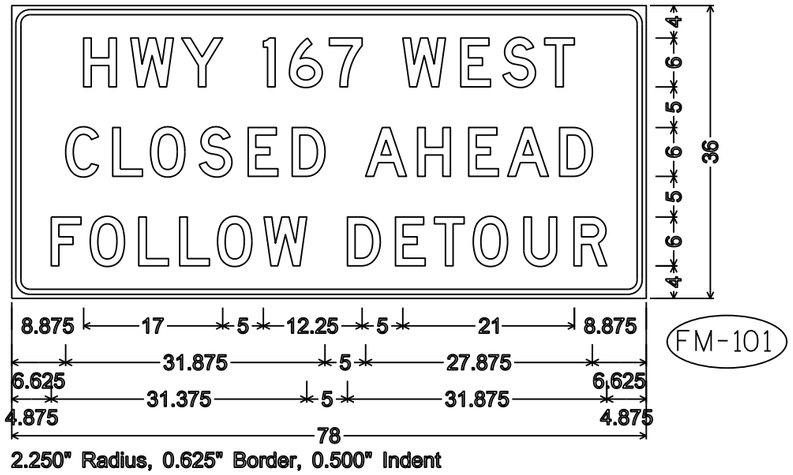
FHWA

6

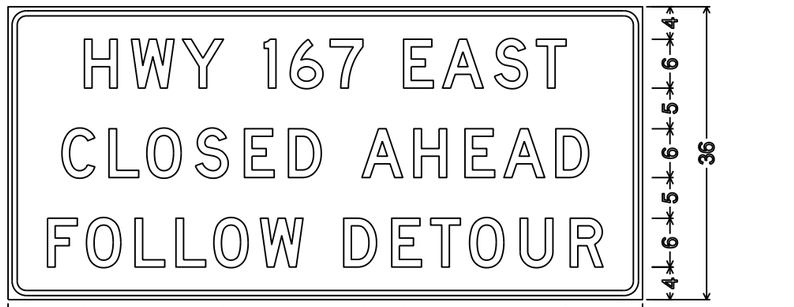
S.D.D. 16 A 1-6

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D except as noted

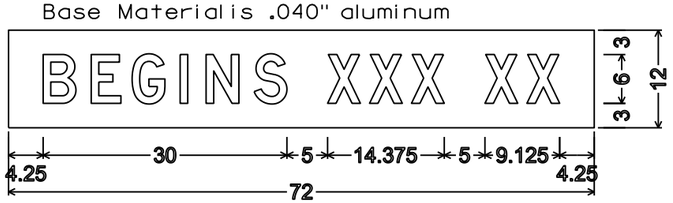


2.250" Radius, 0.625" Border, 0.500" Indent

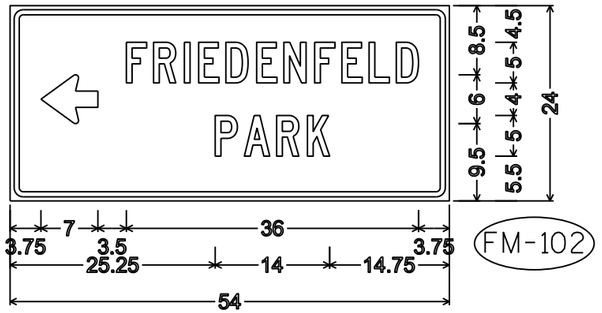


2.250" Radius, 0.625" Border, 0.500" Indent

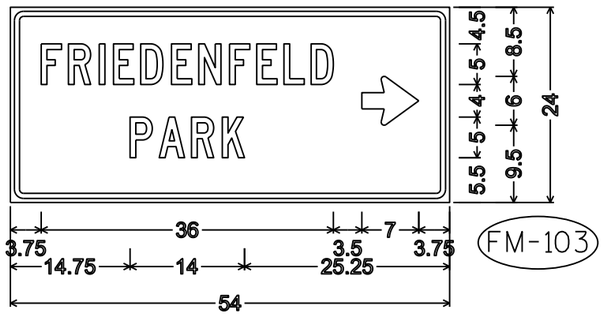
Base Materialis .040" aluminum



No border



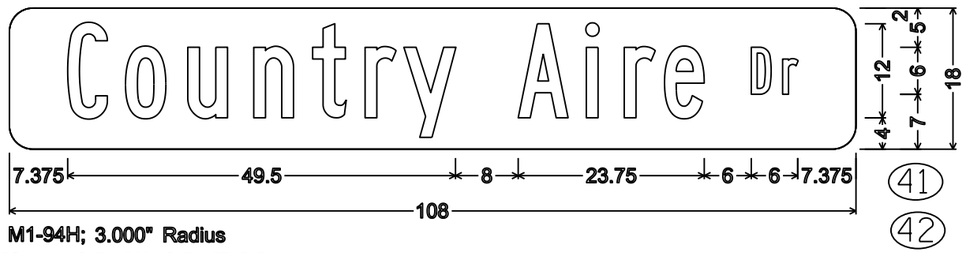
1.625" Radius, 0.625" Border, 0.500" Indent,
"FRIEDENFELD" C; "PARK" C



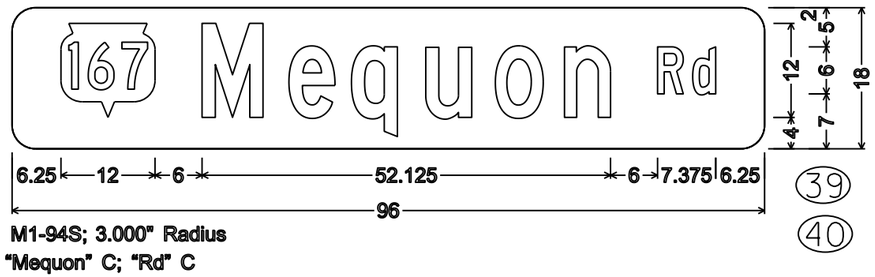
1.625" Radius, 0.625" Border, 0.500" Indent,
"FRIEDENFELD" C; "PARK" C

NOTES

1. Signs are Type II- Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted
4. M1-94H and M1-94S base material is .125" aluminum



M1-94H; 3.000" Radius
"Country" B; "Aire" B; "Dr" B



M1-94S; 3.000" Radius
"Mequon" C; "Rd" C

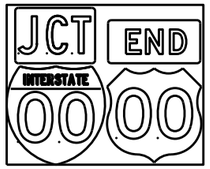
D1-61; 2.250" Radius, 0.750" Border

7

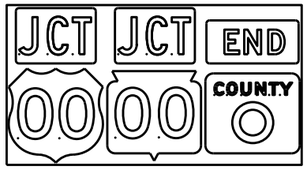
7

TYPICAL ASSEMBLIES

J1-1

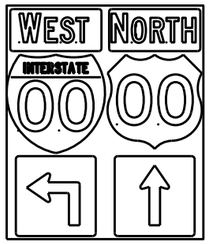


J1-2

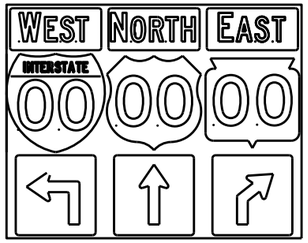


J1-3

J2-1



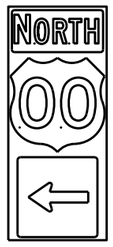
J2-2



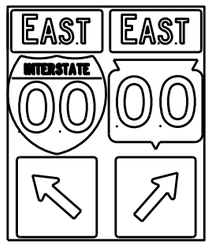
J2-3

JV

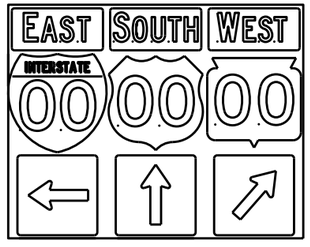
(Typical Vertical J-Assembly
See Note 10 and 11)



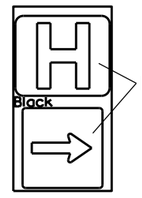
J3-1



J3-2



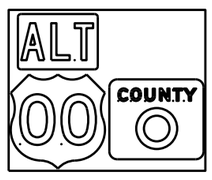
J3-3



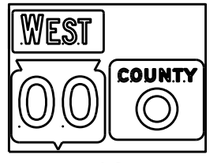
Blue Background

JH-1

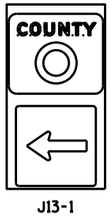
J4-1



J4-2



J4-2



J13-1

J12-1

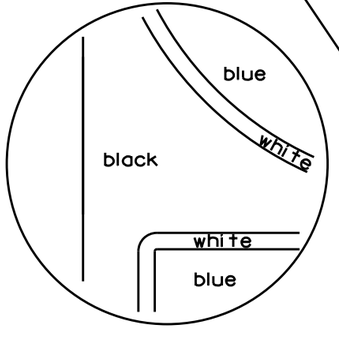
J32-1

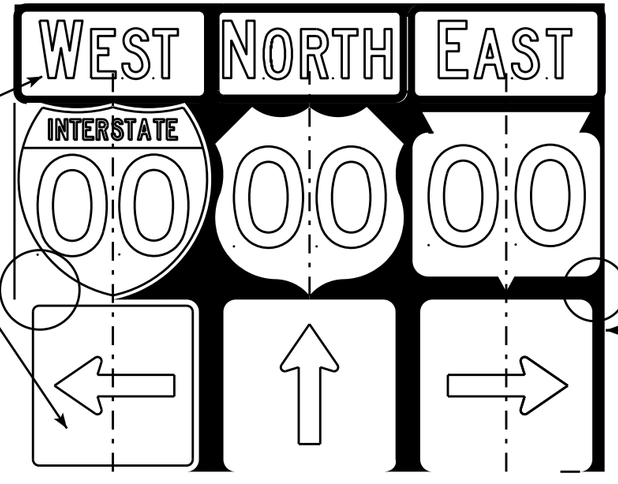
J33-1

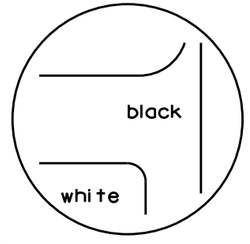
J23-1

J22-1

blue background
with interstate







black background

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

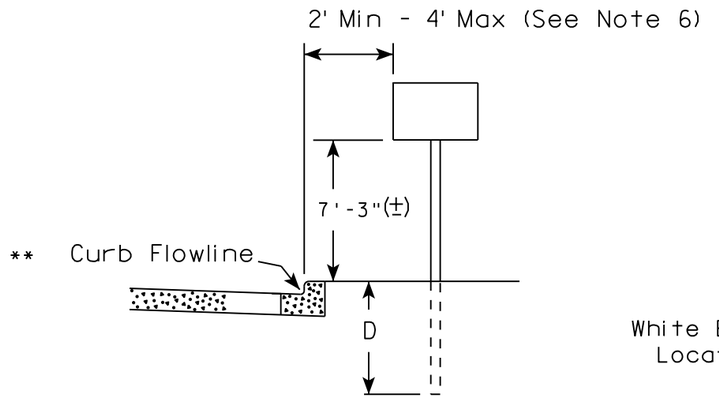
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL... A2-1S.8

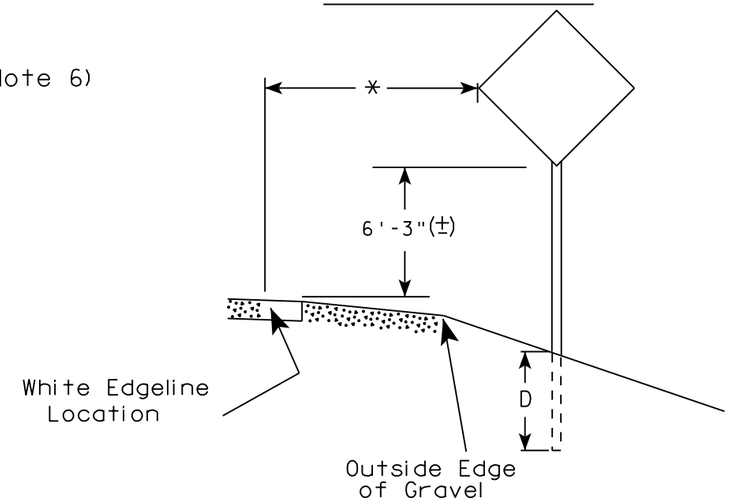
PROJECT NO: | SHEET NO: E

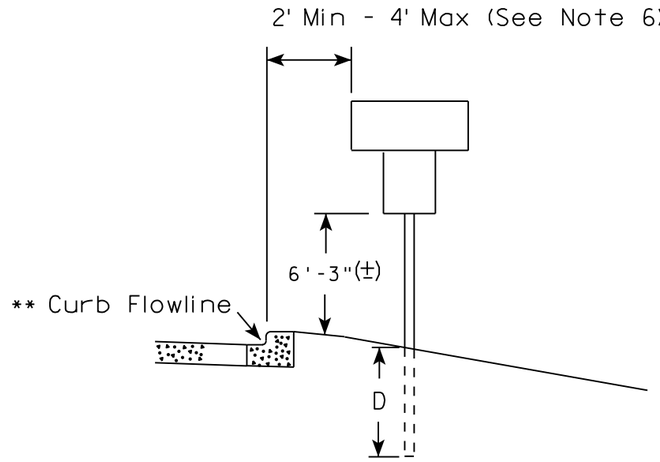
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

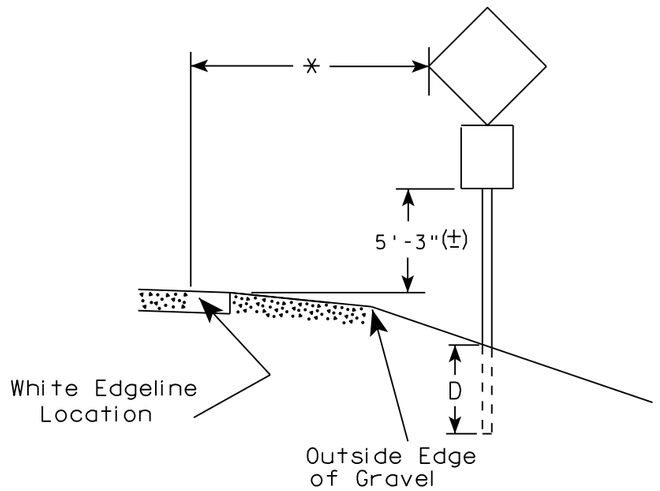
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

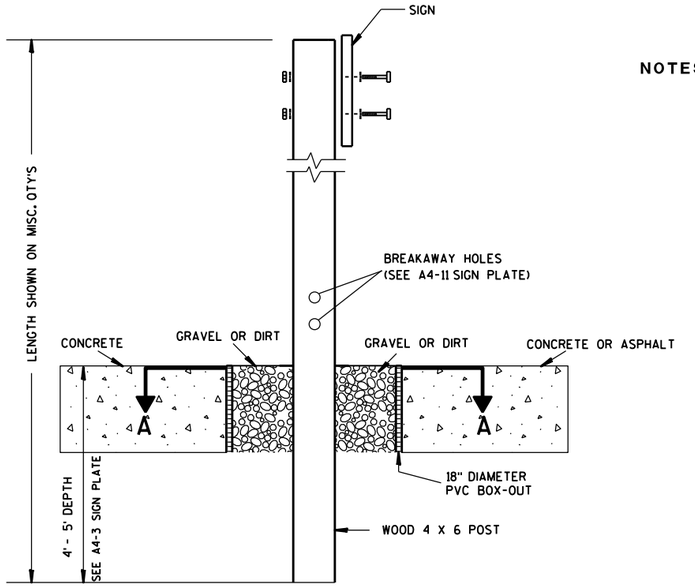
APPROVED Matthew R Rauch for State Traffic Engineer

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

7

7

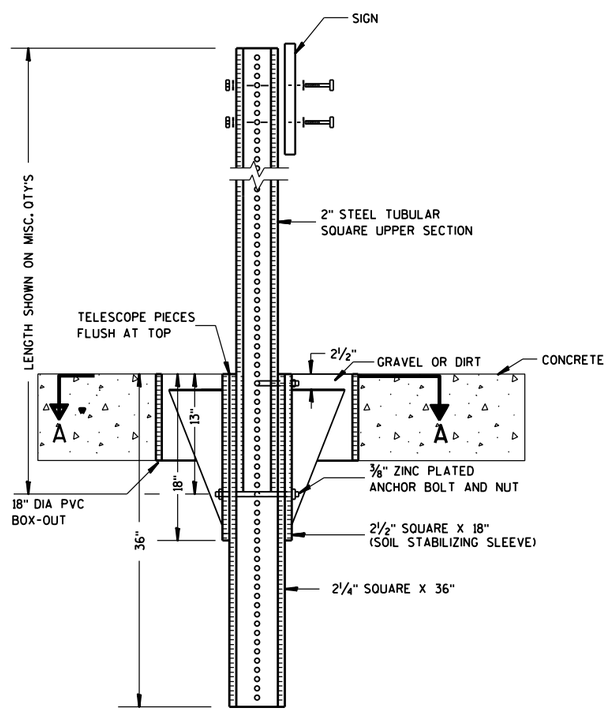
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 253	E



ELEVATION VIEW

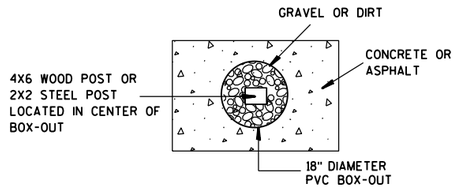
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

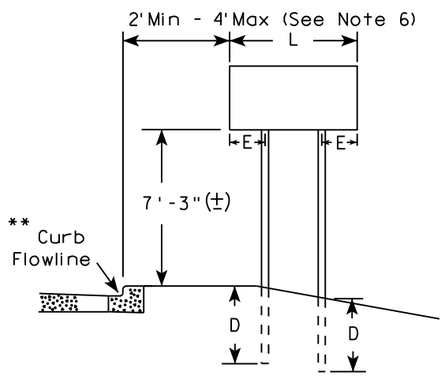
APPROVED Matthew R Rauch
for State Traffic Engineer

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

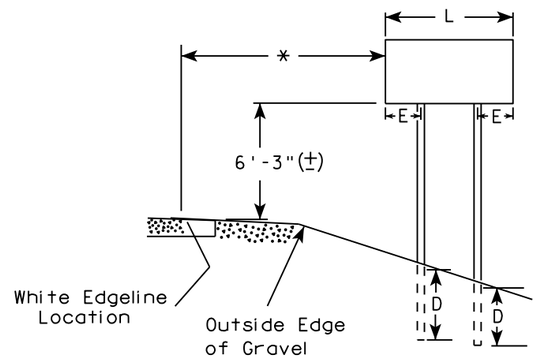
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

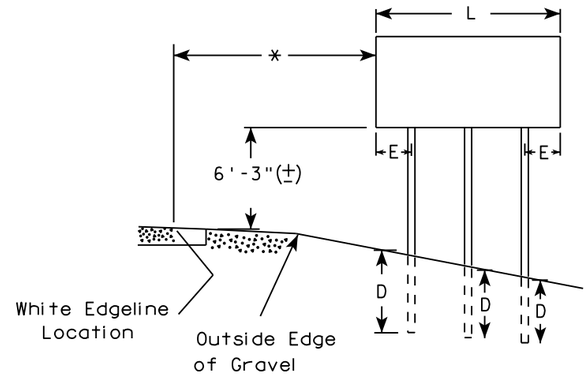
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

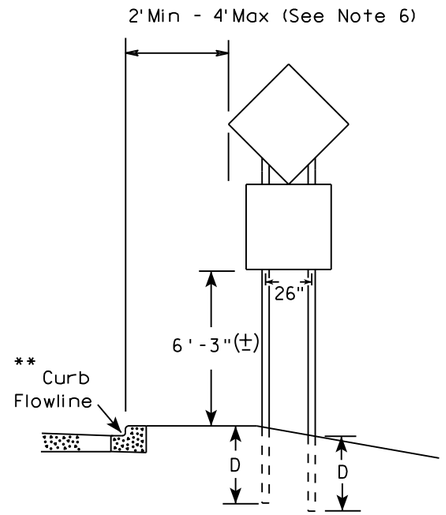
URBAN AREA



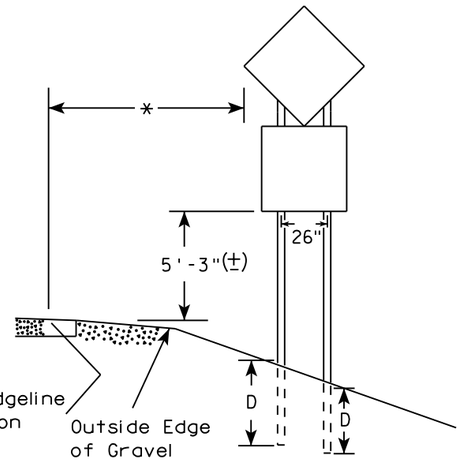
RURAL AREA (See Note 3)







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'

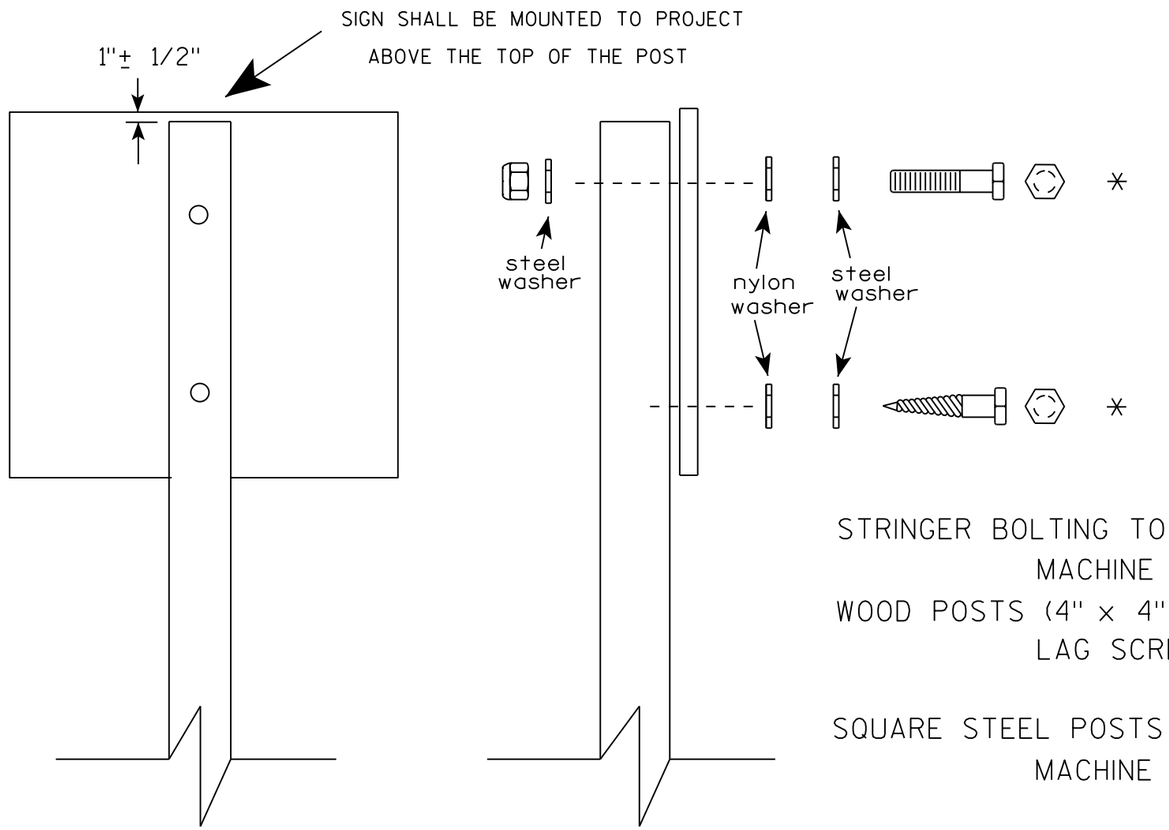
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 255	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

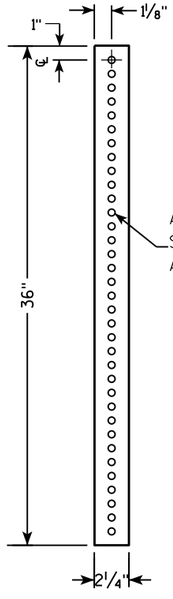
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

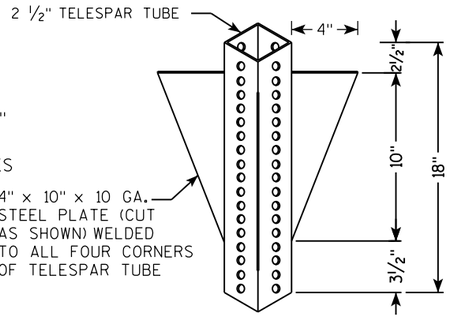
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

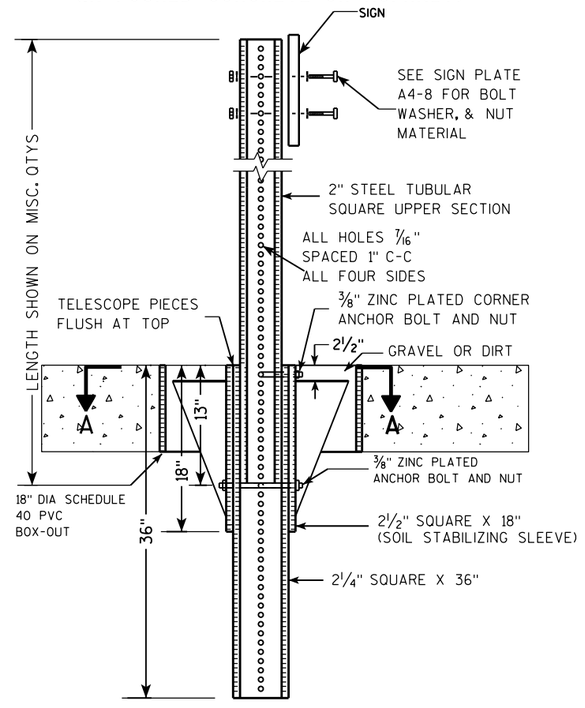
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



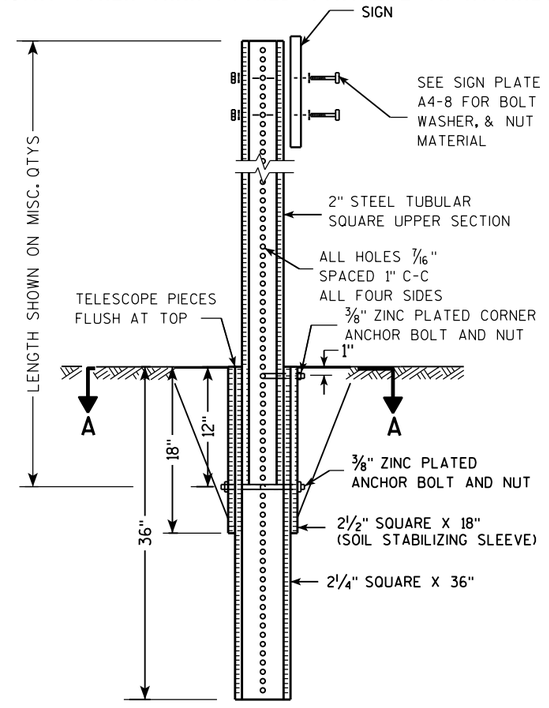
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

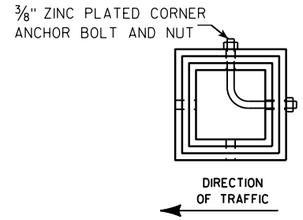


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

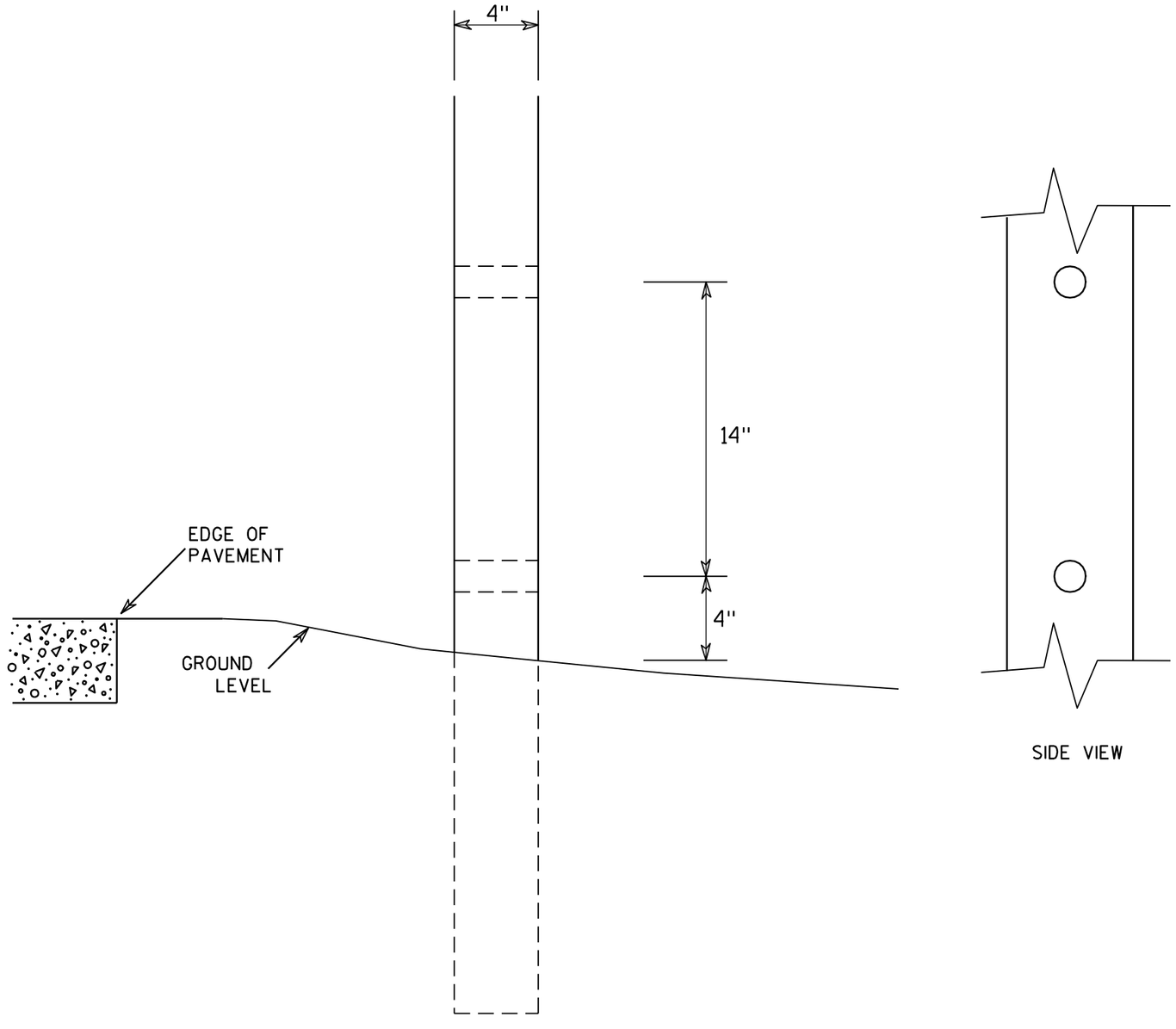
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 257 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

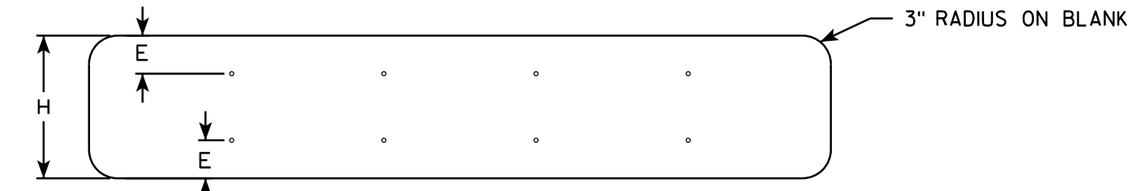
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

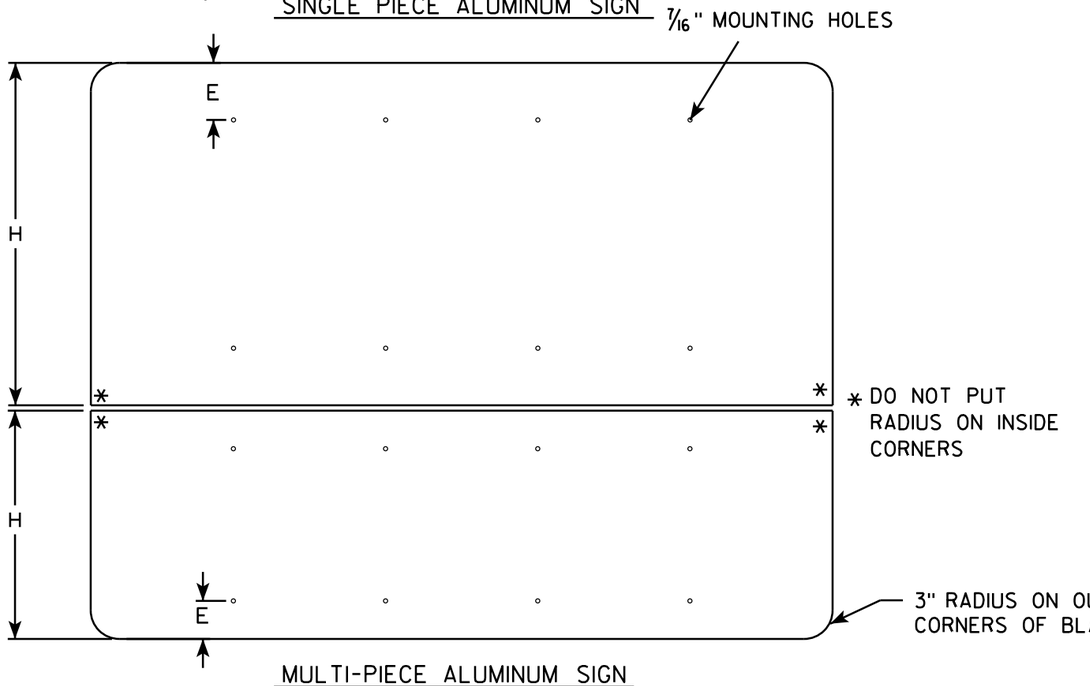
APPROVED Chester J Spang
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 258	E



SINGLE PIECE ALUMINUM SIGN

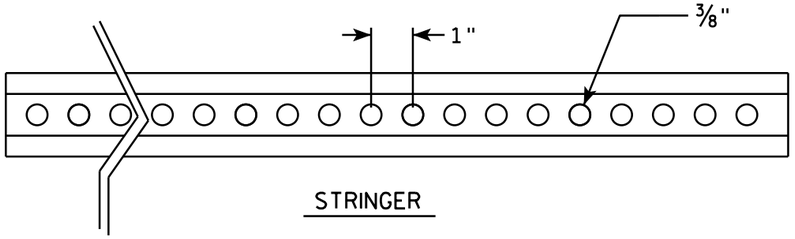


MULTI-PIECE ALUMINUM SIGN

GENERAL NOTES

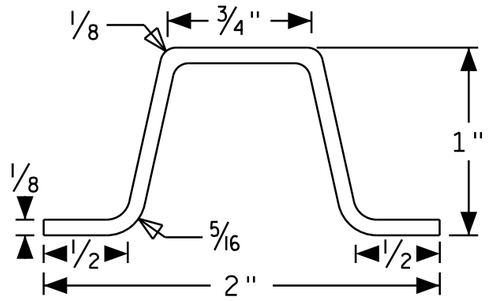
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

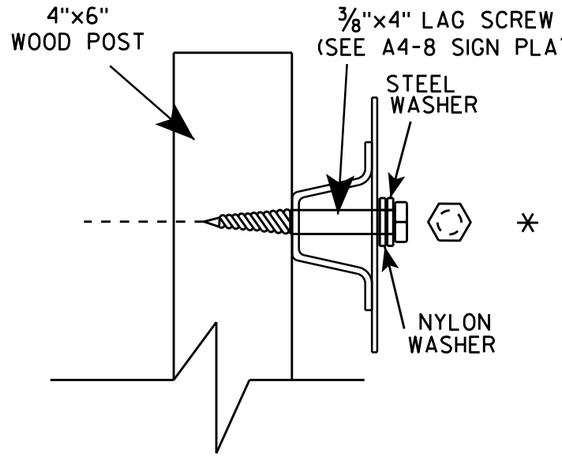


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

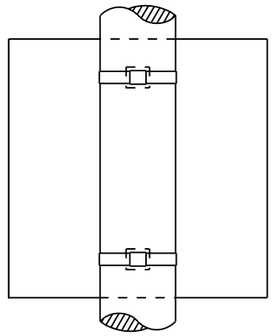
DATE 4/26/16 PLATE NO A4-18.1

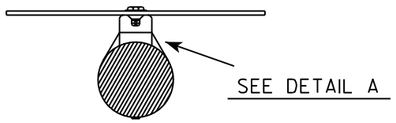
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

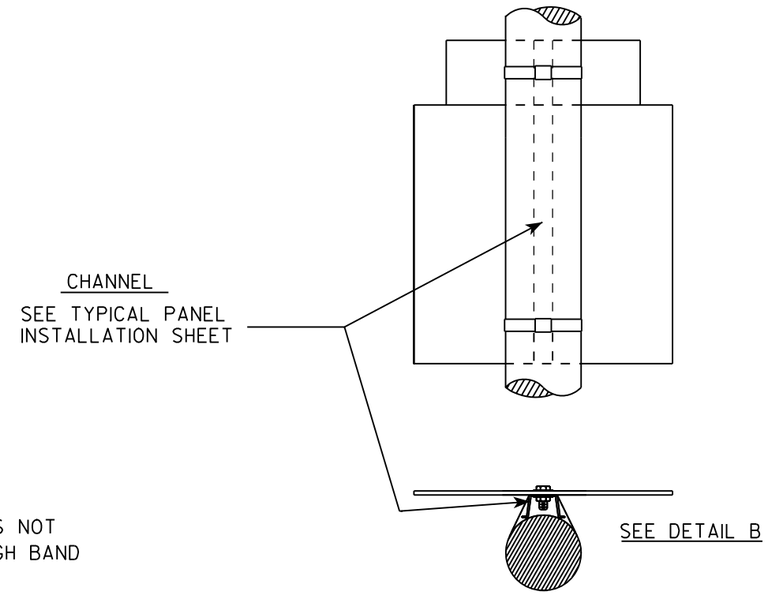
BANDING

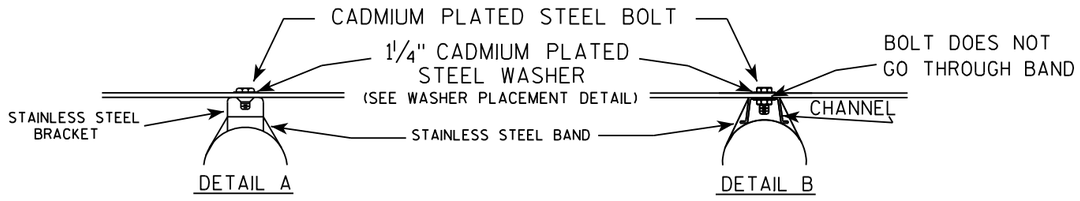
SINGLE SIGN



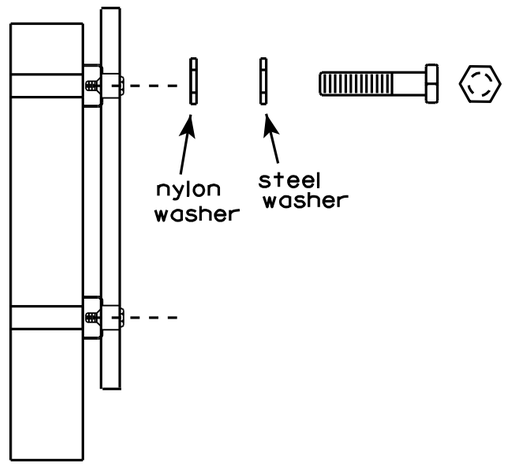


"J" ASSEMBLY





WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

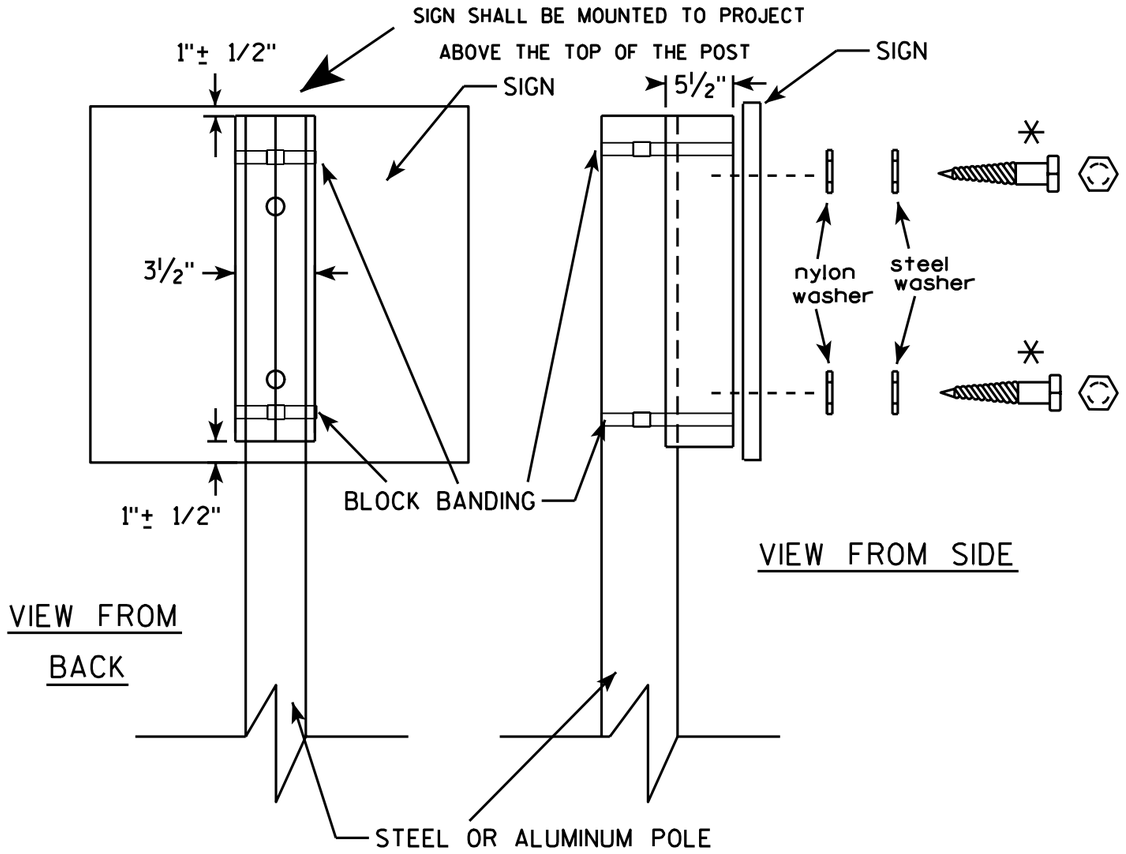
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

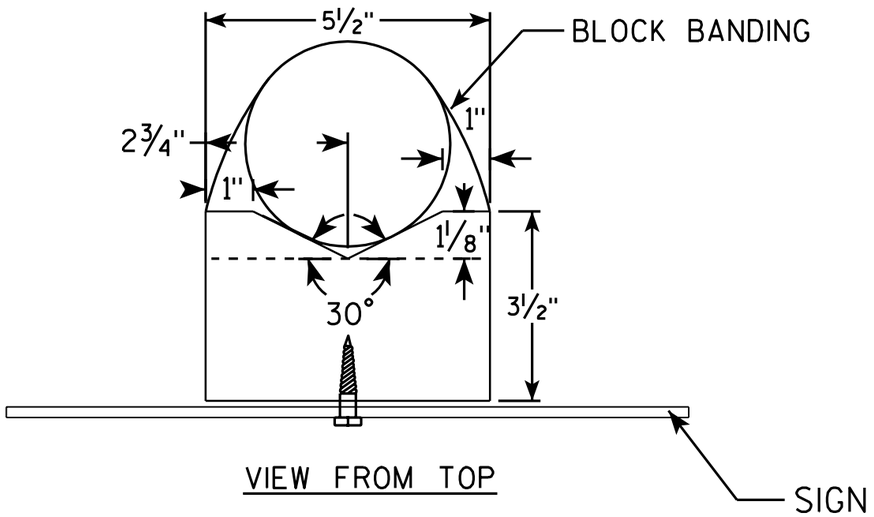
DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 260	E



VIEW FROM SIDE

VIEW FROM BACK



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

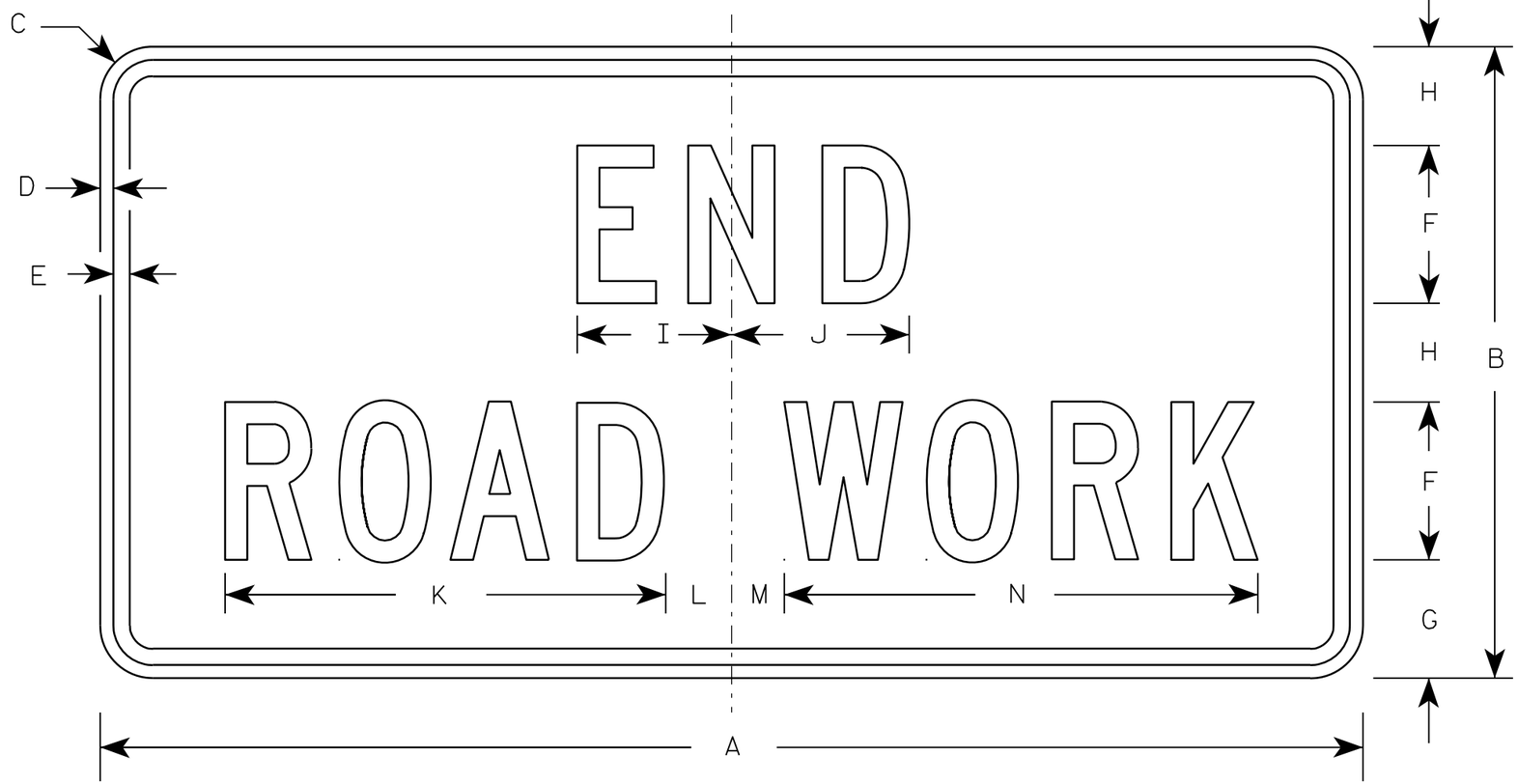
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 261 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

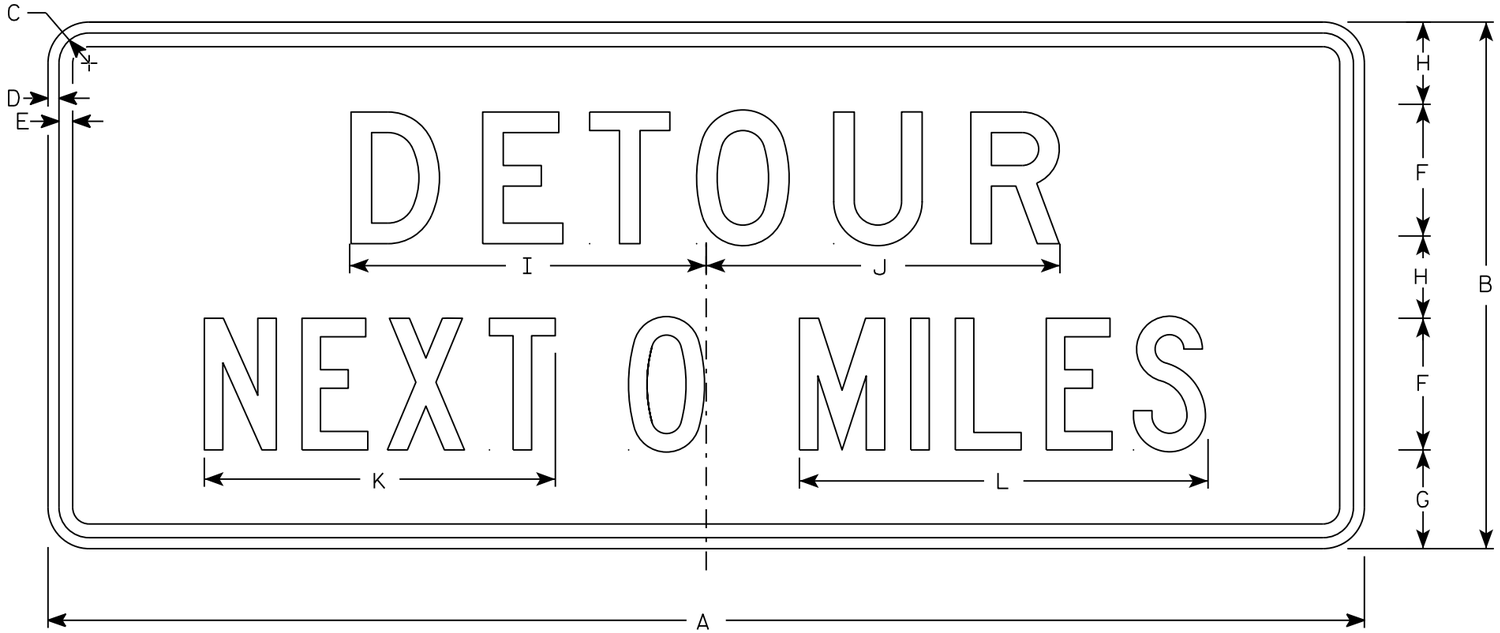
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 262	E



G20-51

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - Line 1 is D and Line 2 is 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. Round distance to nearest whole Mile and 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																											
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
3																											
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10
5																											

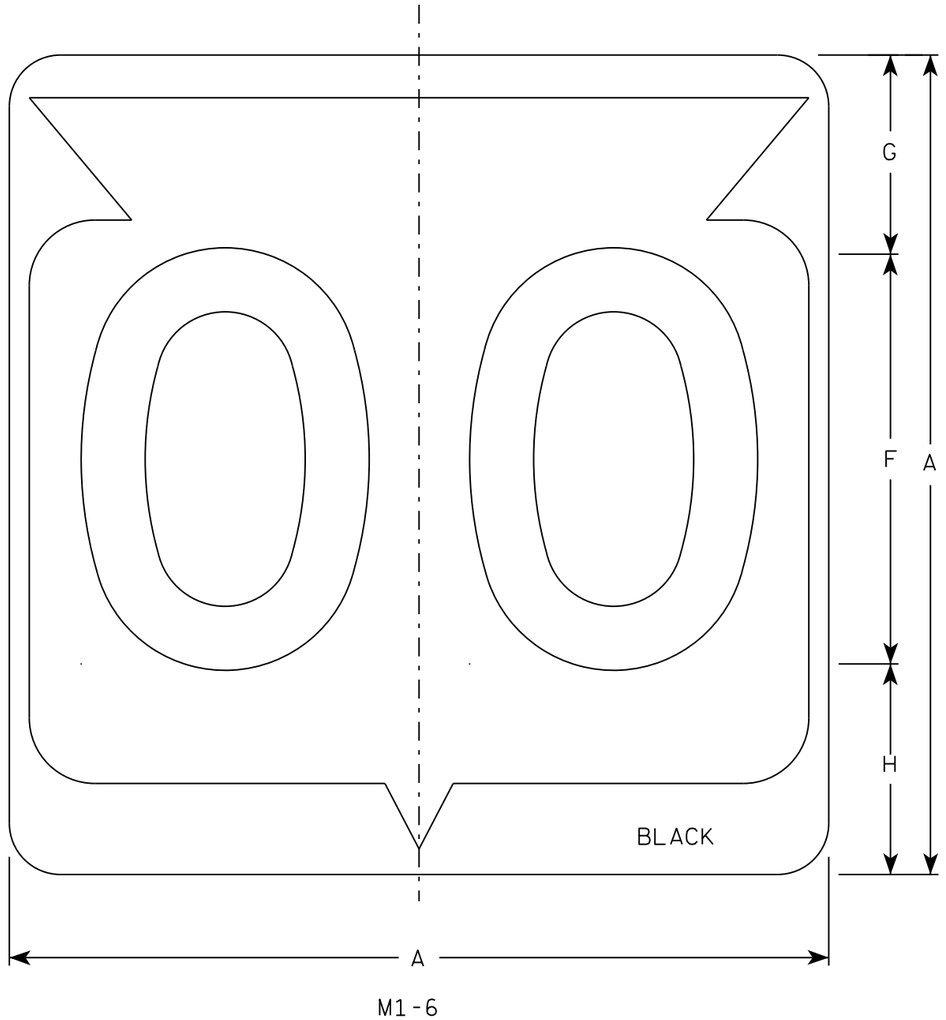
STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-51.2

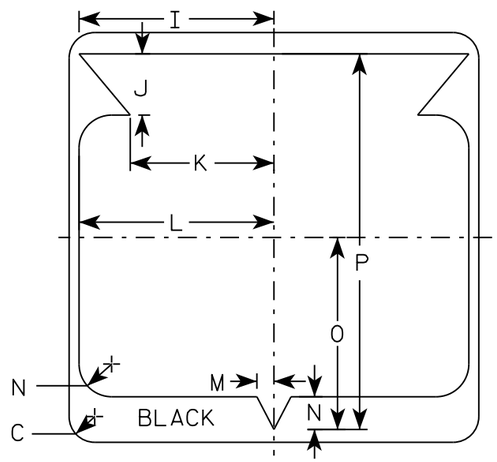
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 263 | E



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

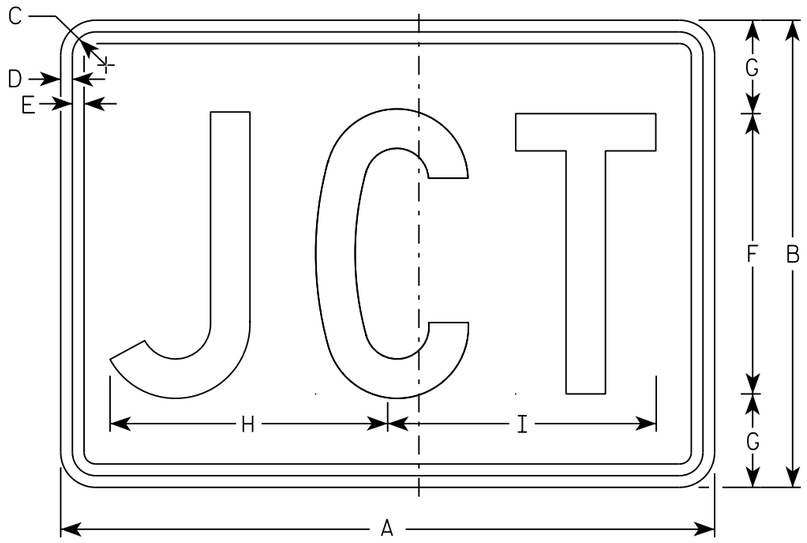
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

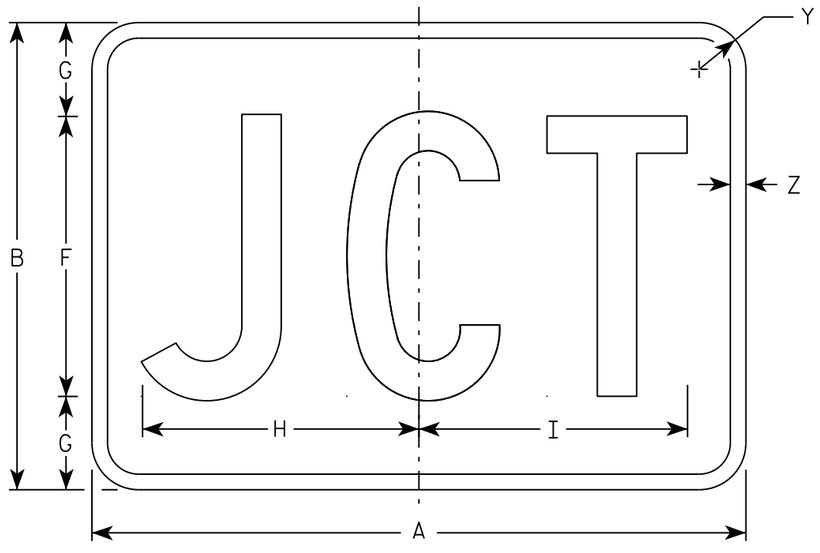
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 264	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

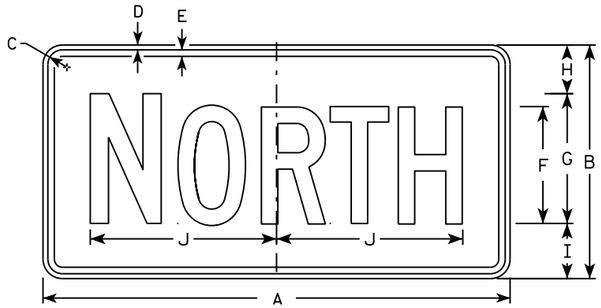
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

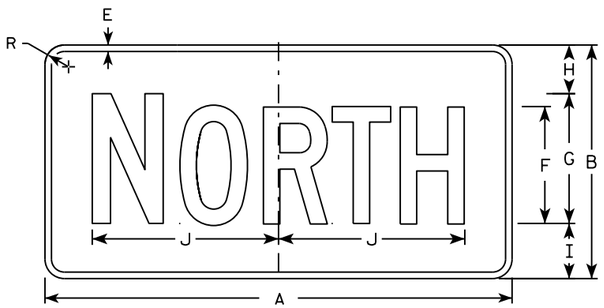
DATE 10/15/15 PLATE 265 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



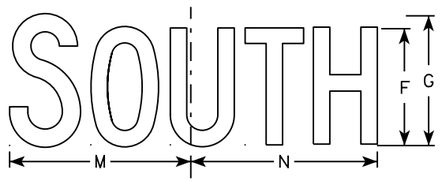
M3-1
MM3-1
MP3-1



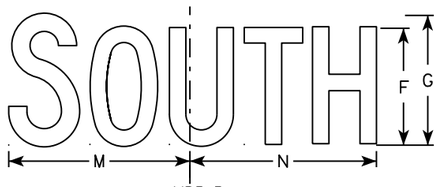
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

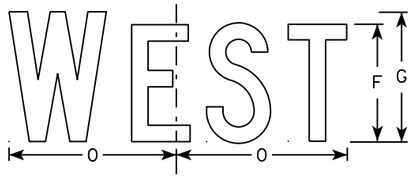
MB3-2
MK3-2
MN3-2



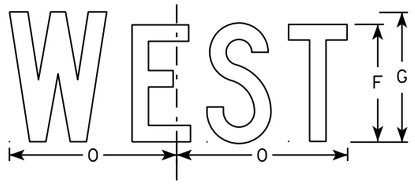
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

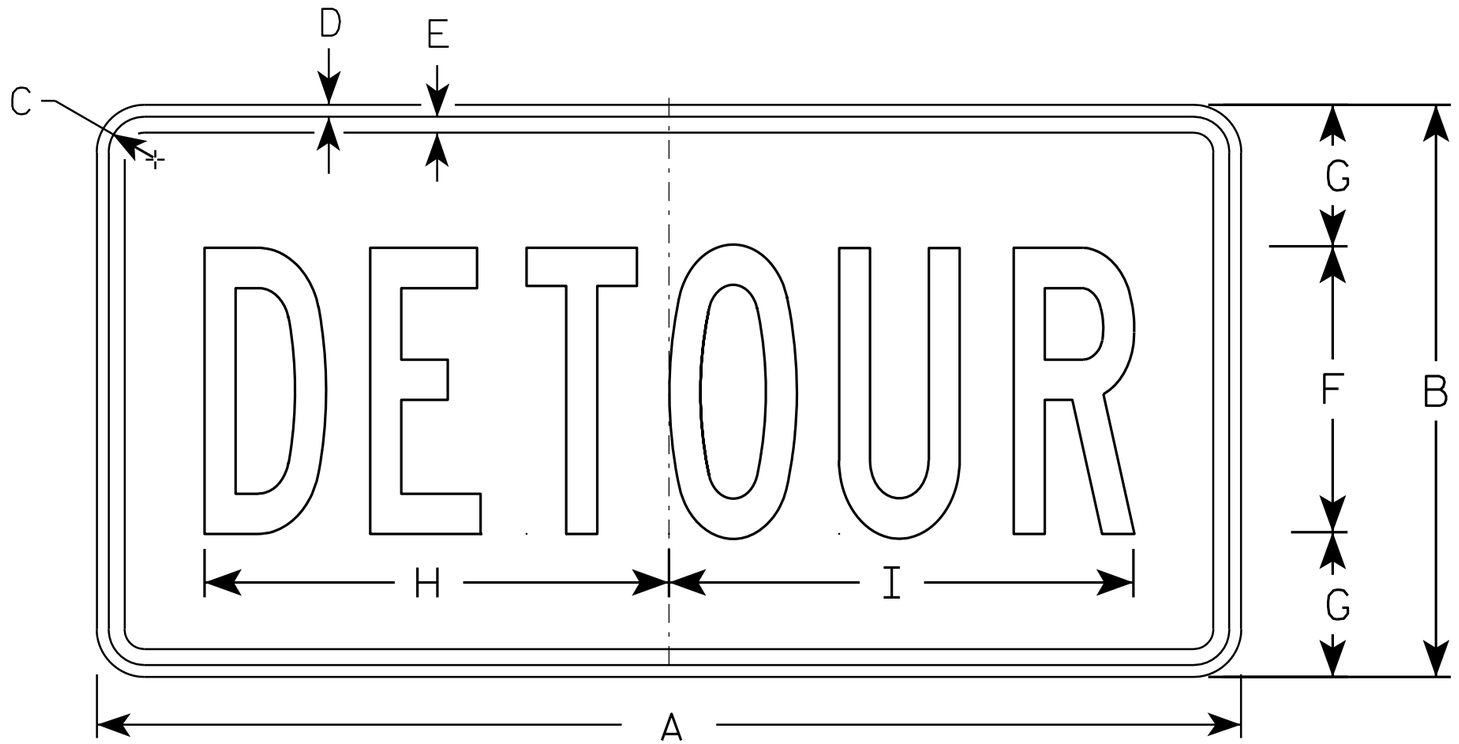
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

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



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

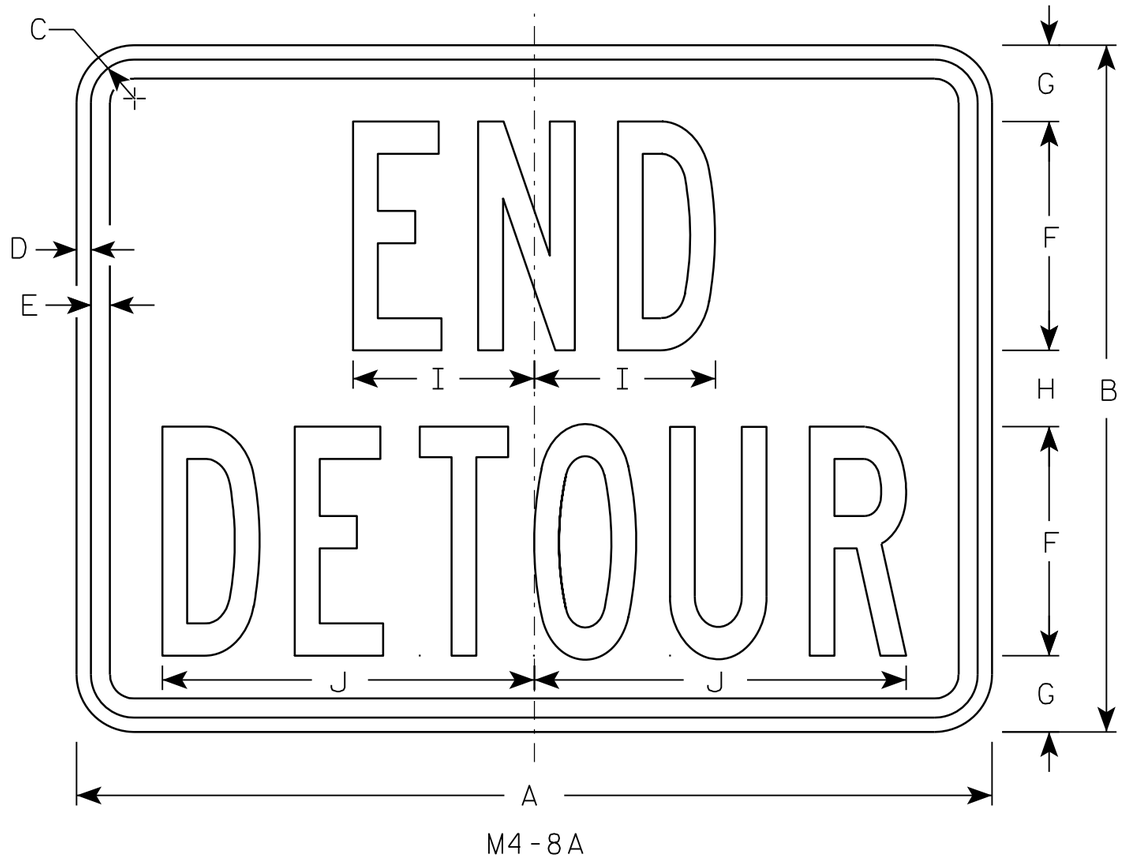
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 267	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																											

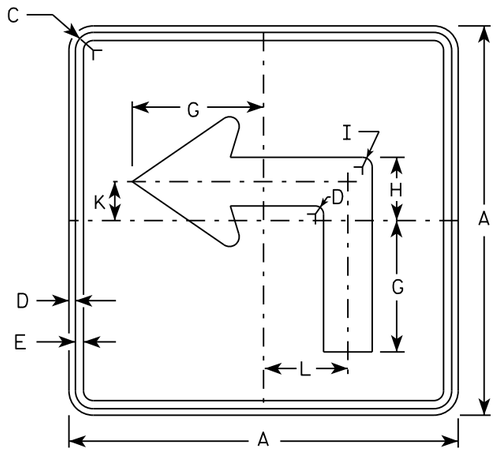
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

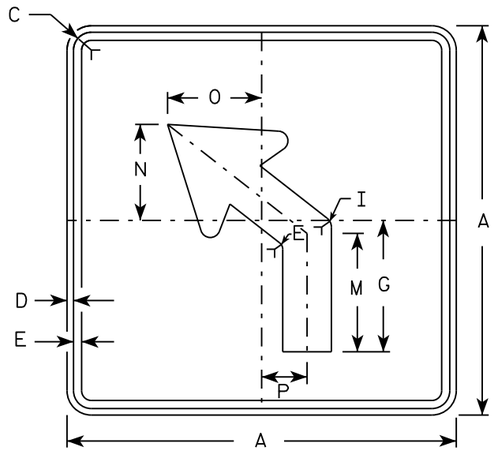
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

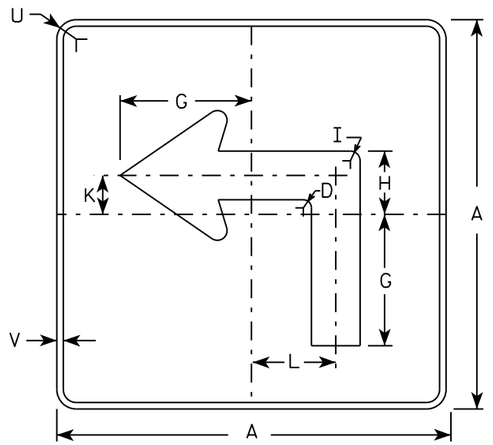
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 268	E



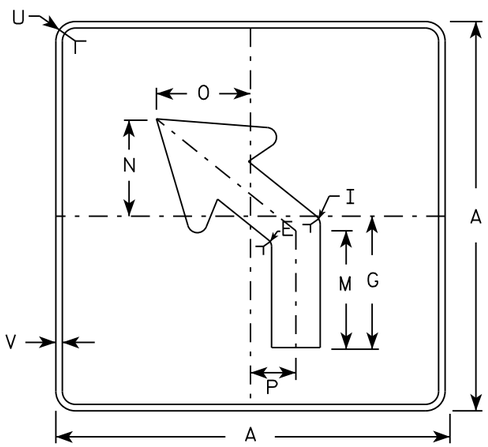
M5-1L
MM5-1L
MO5-1L
MP5-1L



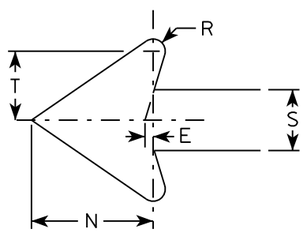
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

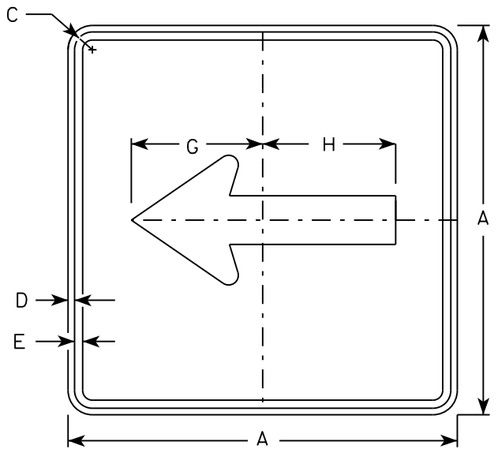
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

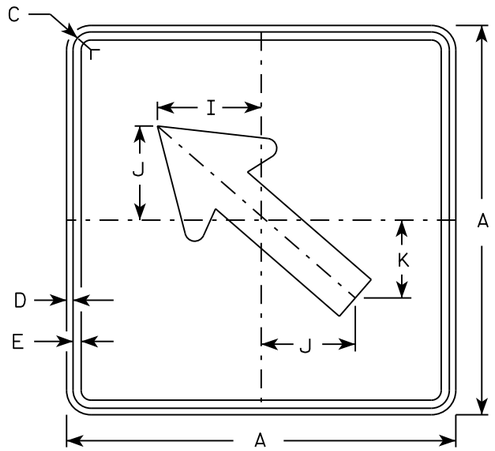
DATE 10/15/15 PLATE NO. M5-1.13

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



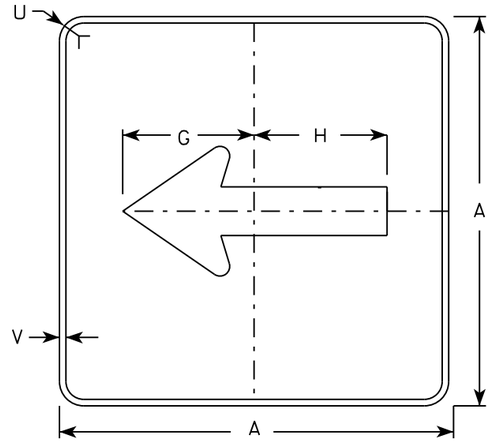
M6-1
MM6-1
MO6-1
MP6-1



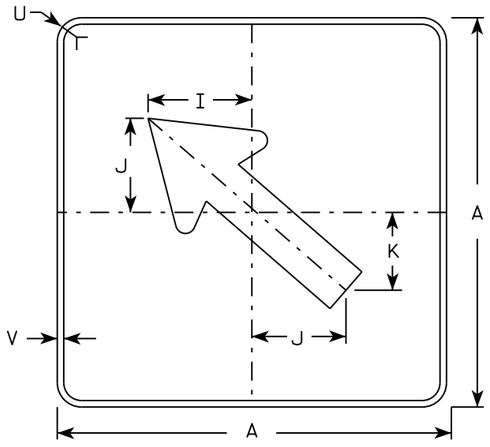
M6-2
MM6-2
MO6-2
MP6-2

NOTES

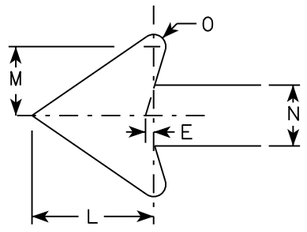
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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

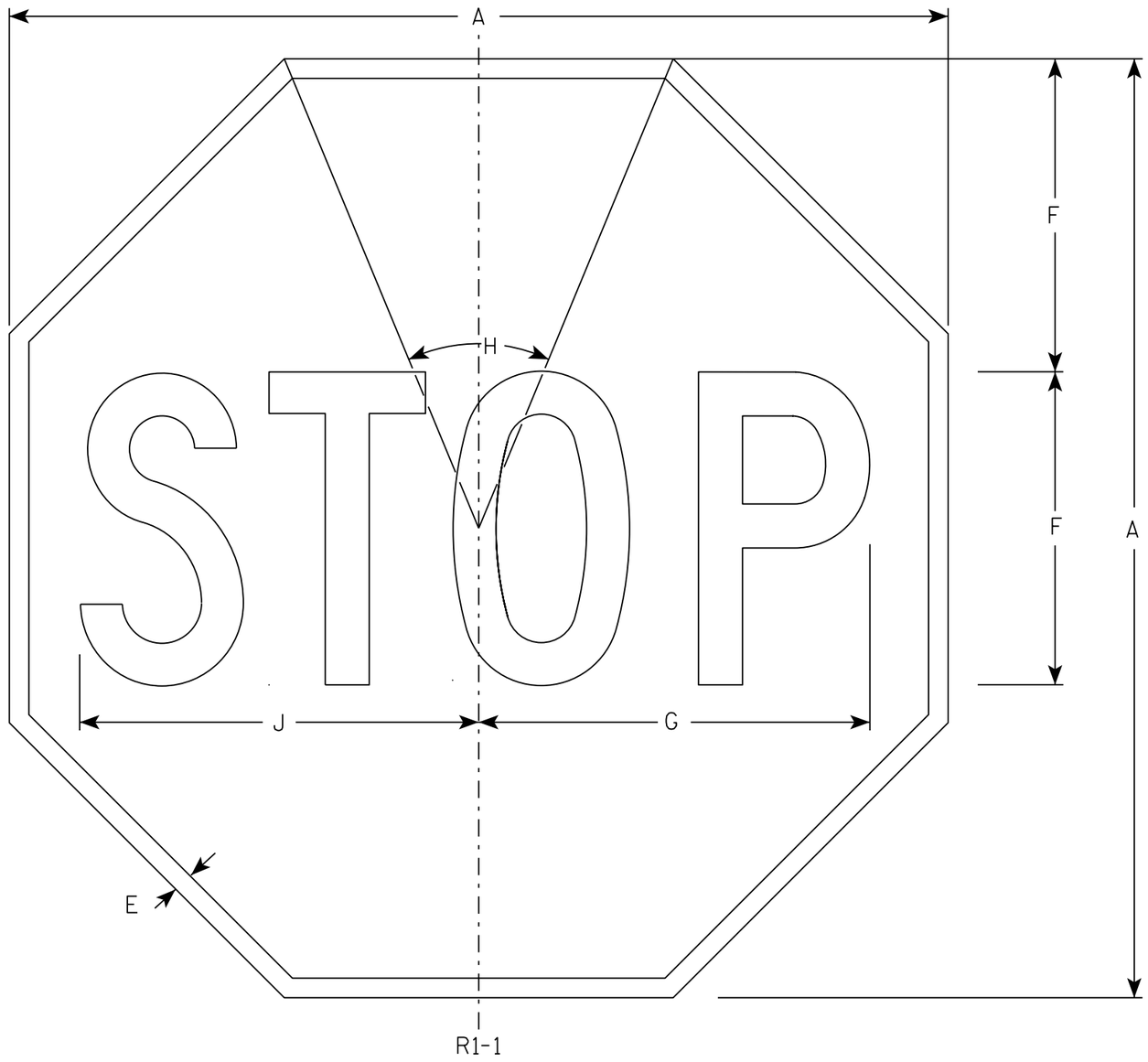
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 270 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

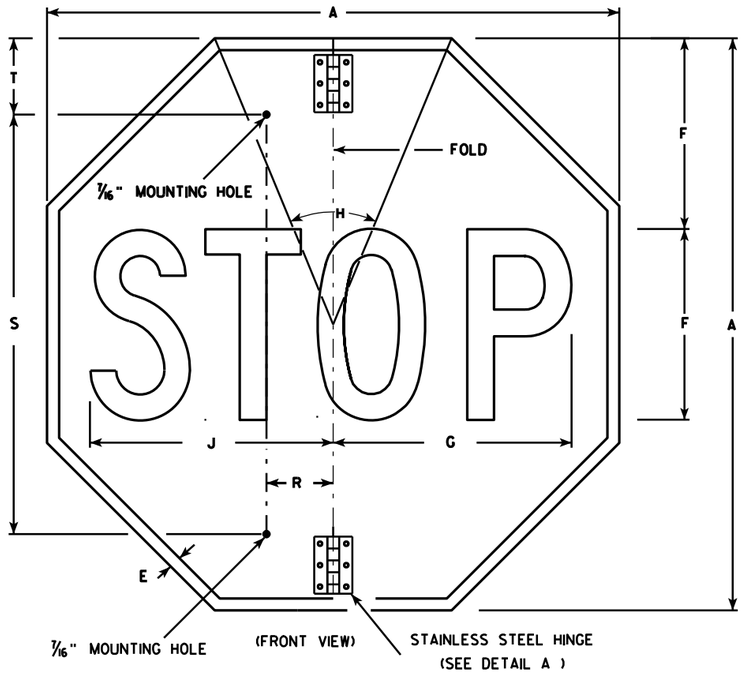
STANDARD SIGN
R1-1

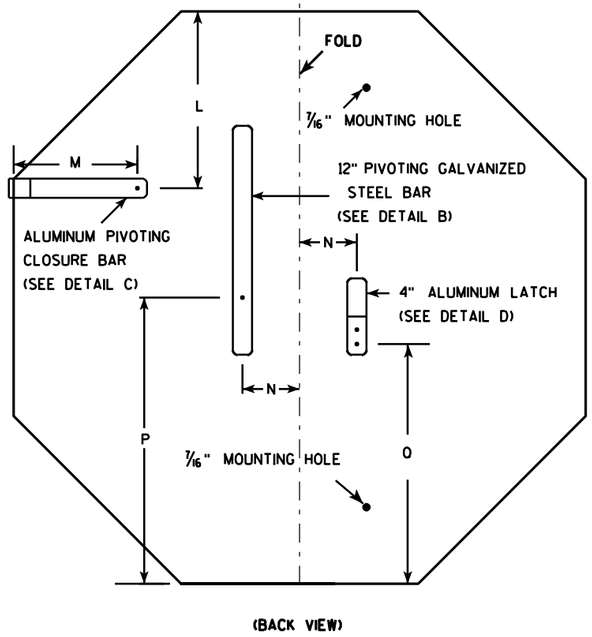
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

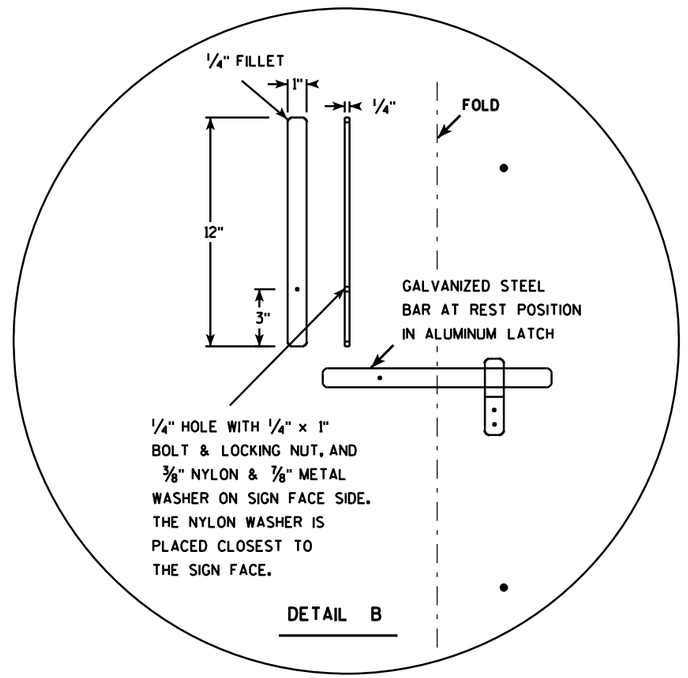
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 271	E

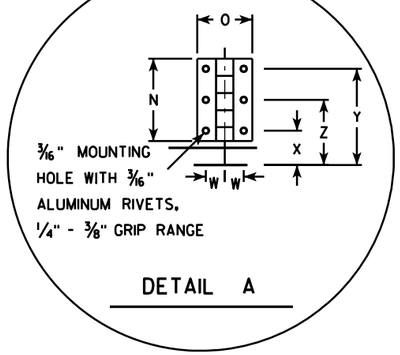


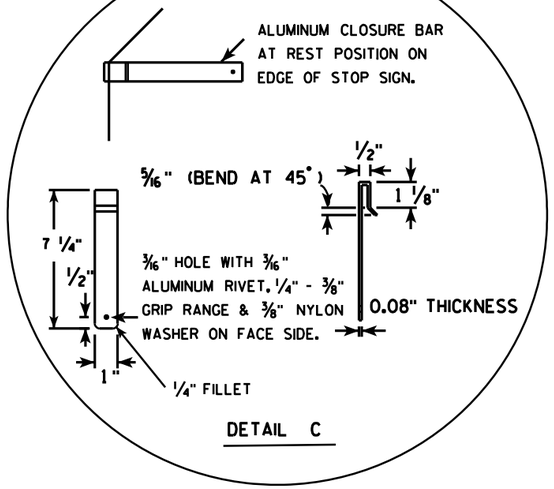


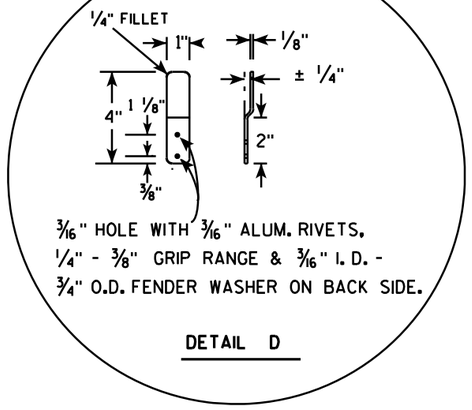
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

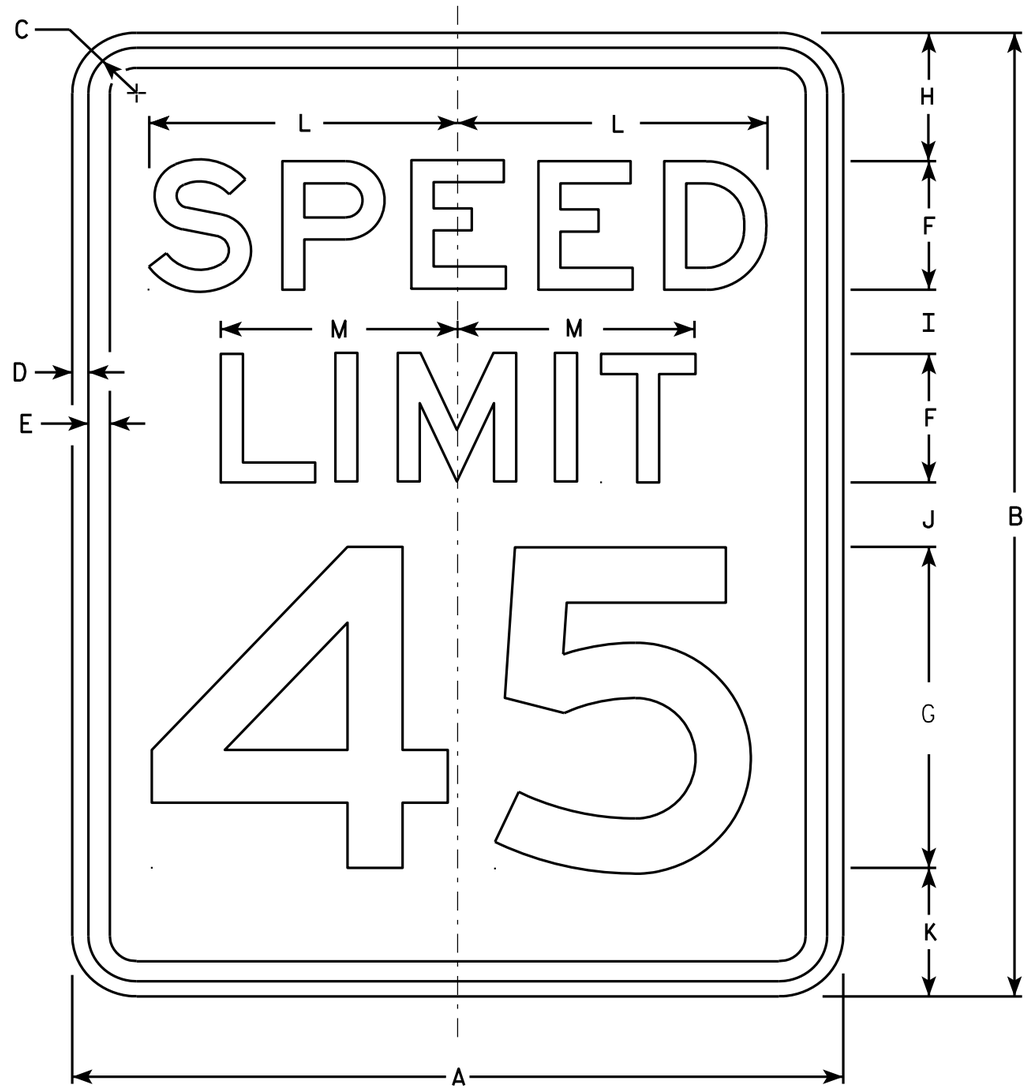
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 272	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

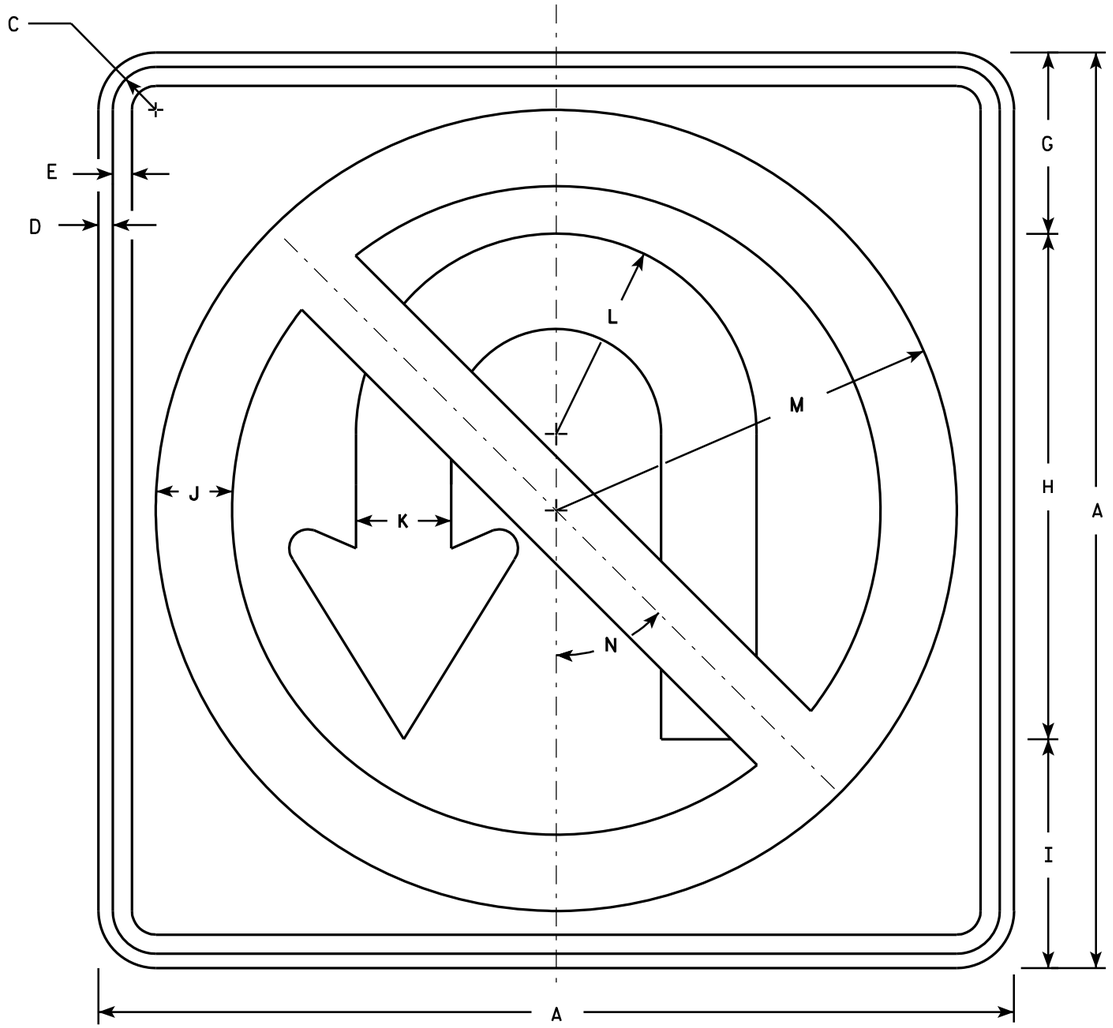
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

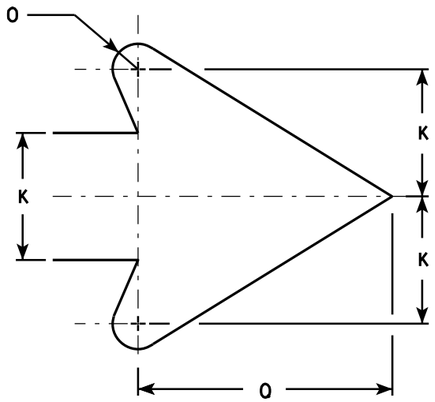
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 273 | E



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

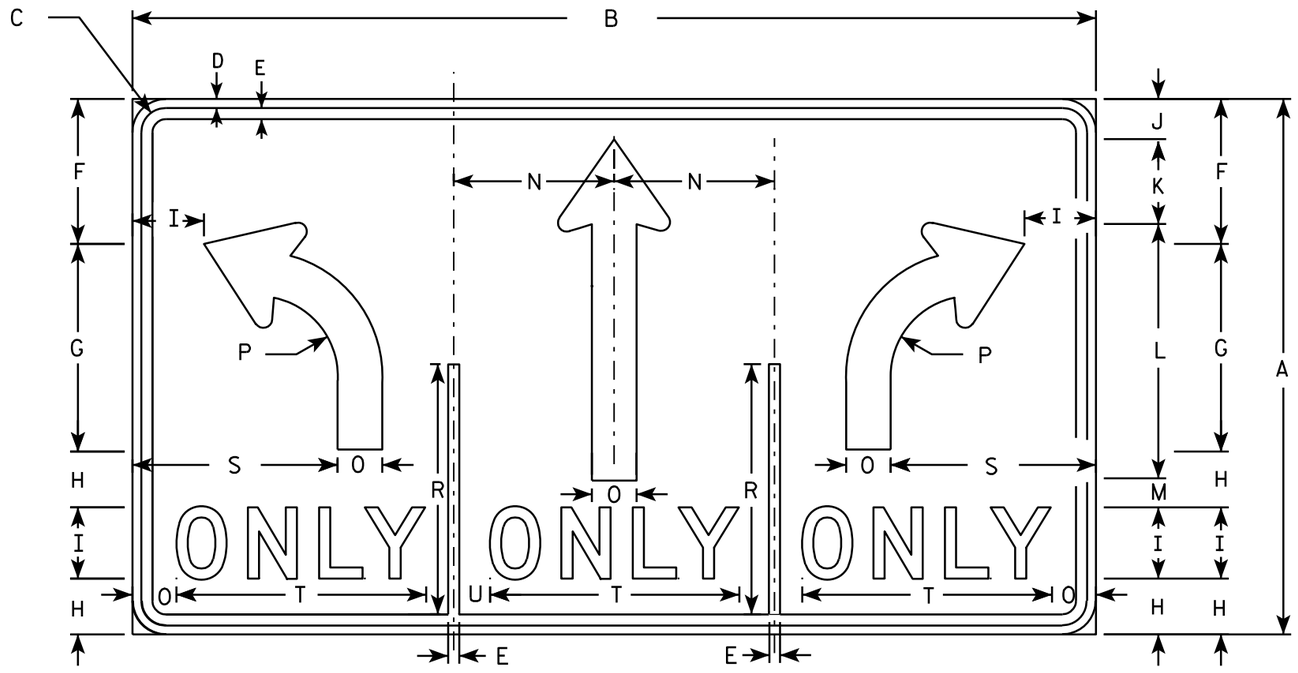
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

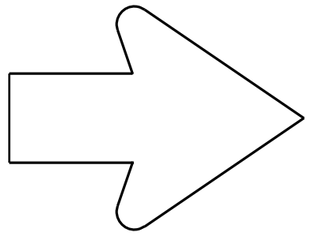
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

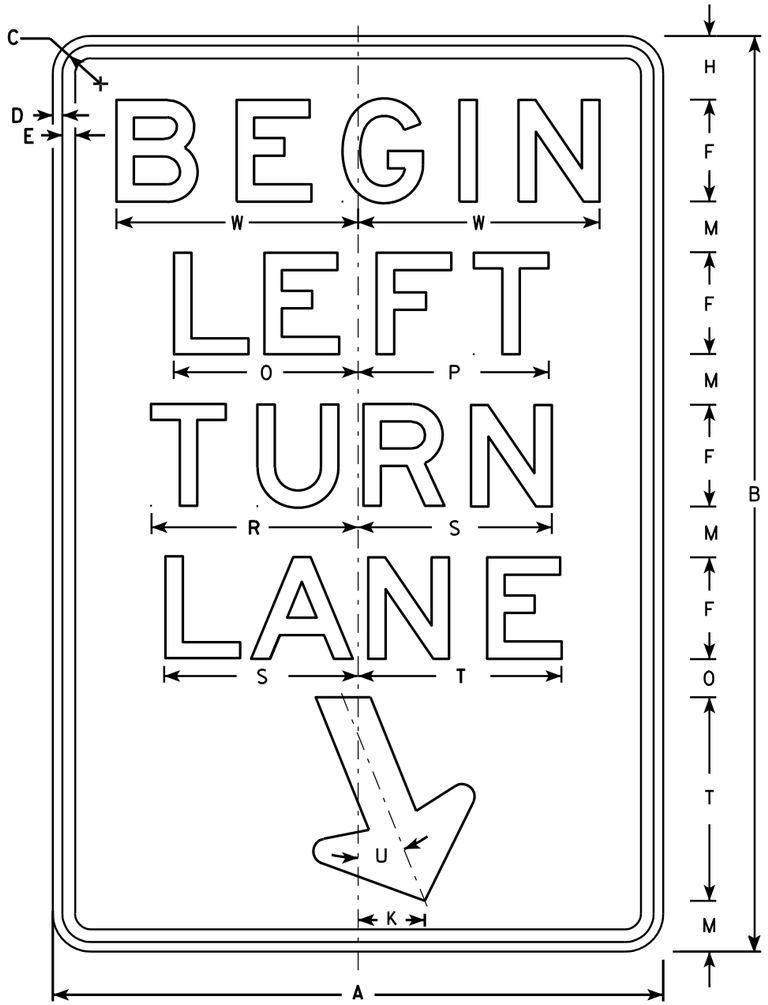
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

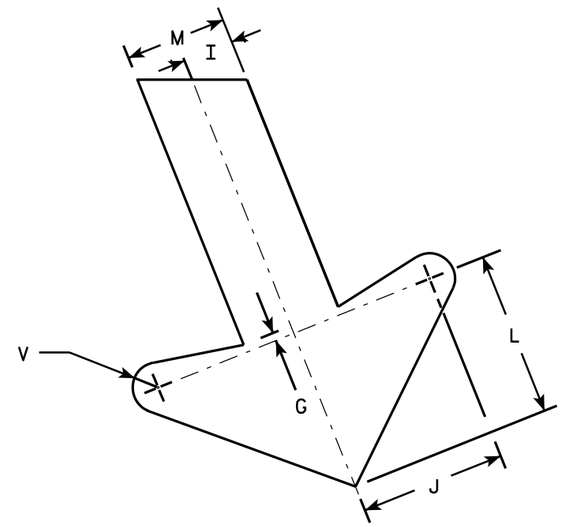
SHEET NO: 275 E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

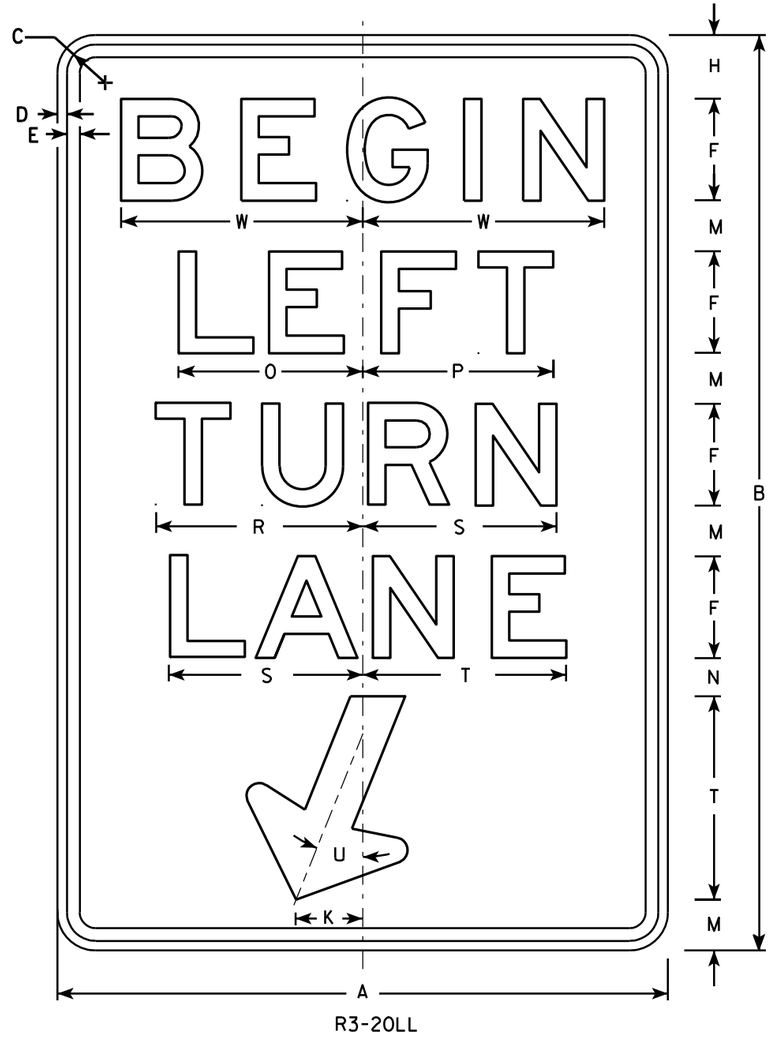
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

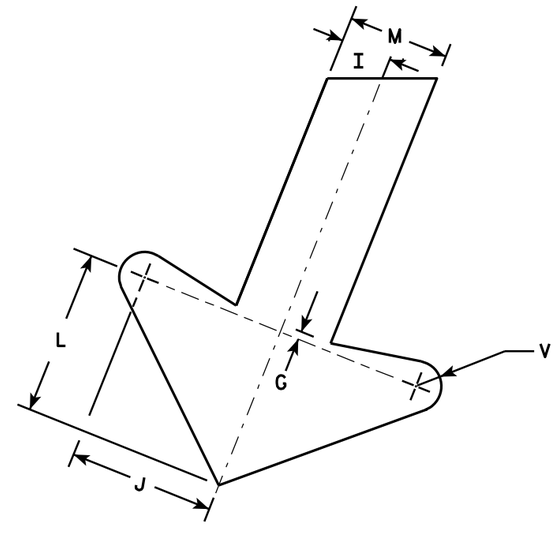
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 276 | E



R3-20LL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

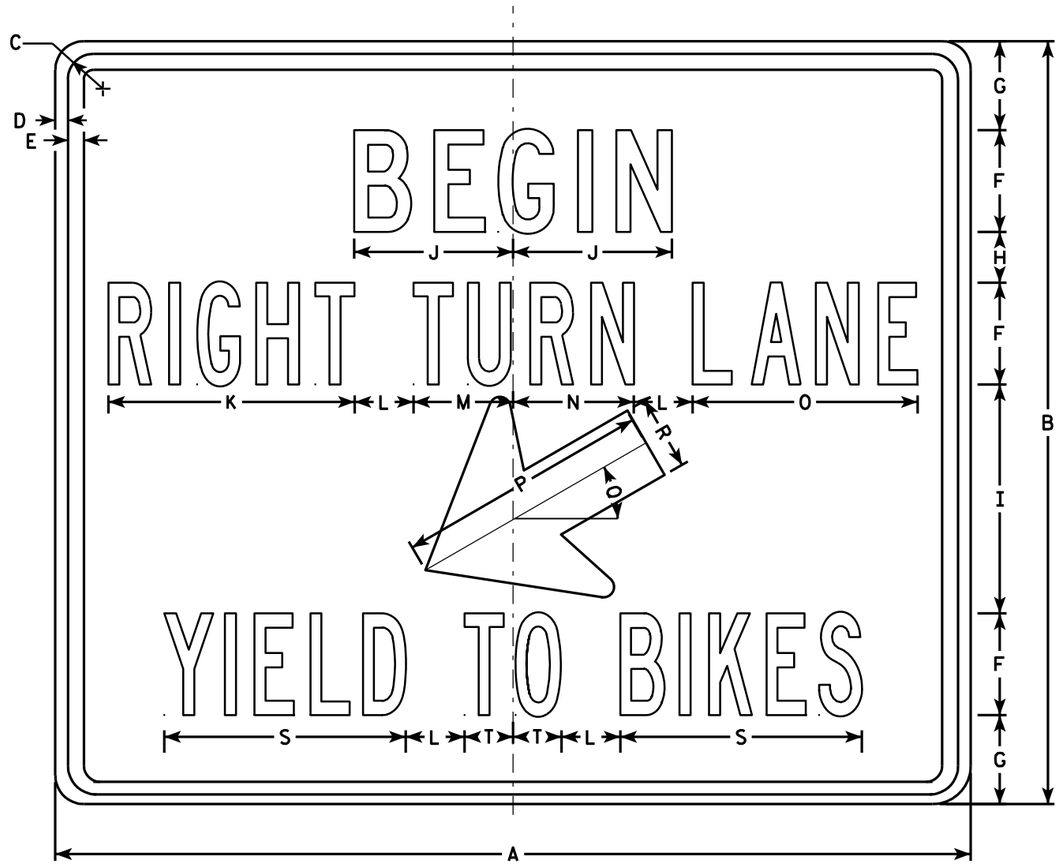
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 277	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42



R4-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C
   Lines 2 & 3 are Series B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
2M	36	30	1 3/8	1/2	5/8	4	3 1/2	2	9	6 1/4	9 3/4	2 3/8	3 7/8	4 3/4	8 7/8	10	30°	2 7/8	9 1/2	1 7/8							7.5
3																											
4																											
5																											

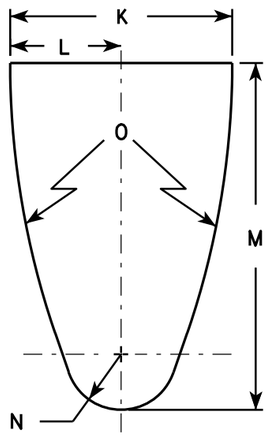
STANDARD SIGN
R4-4

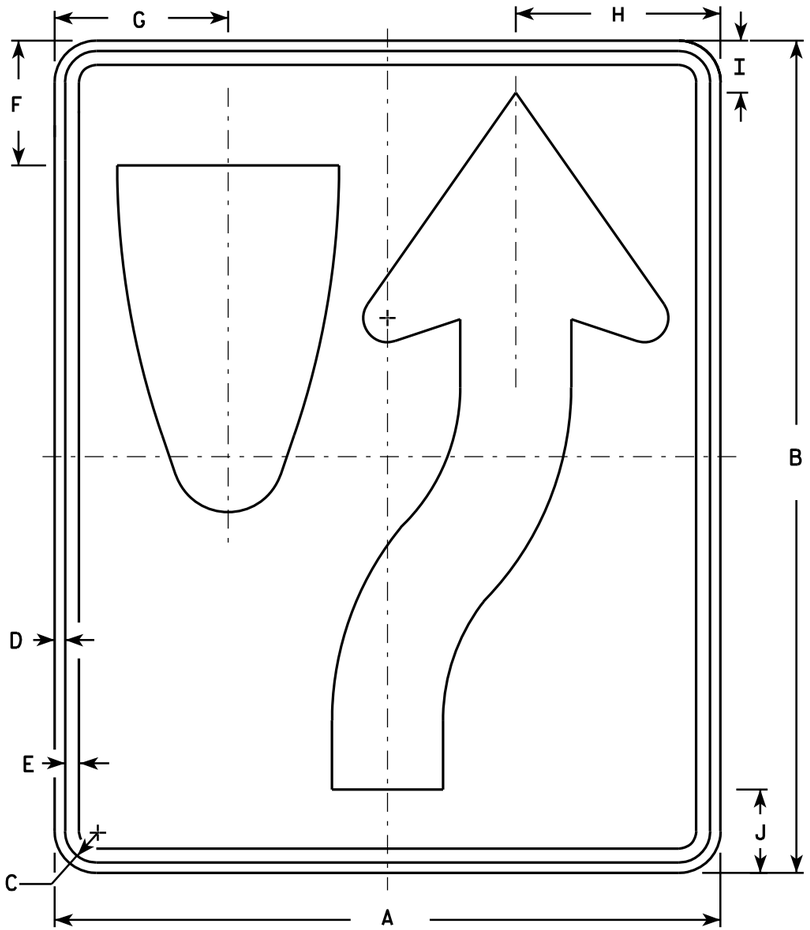
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 278 | E

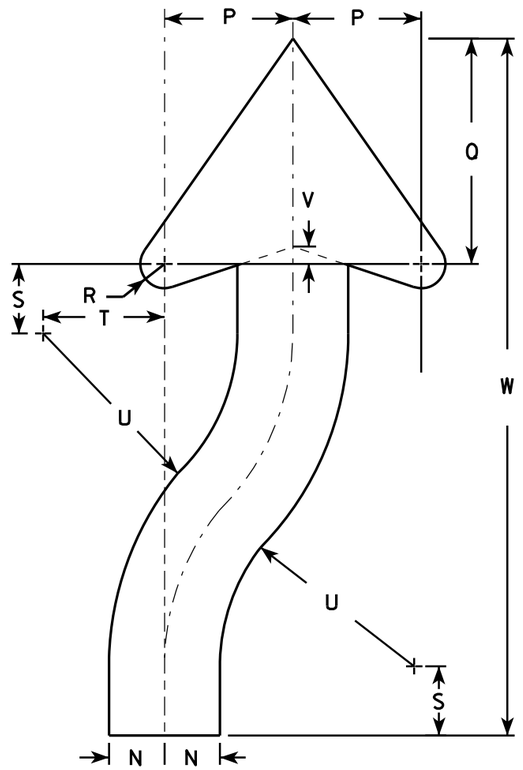




R4-7

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

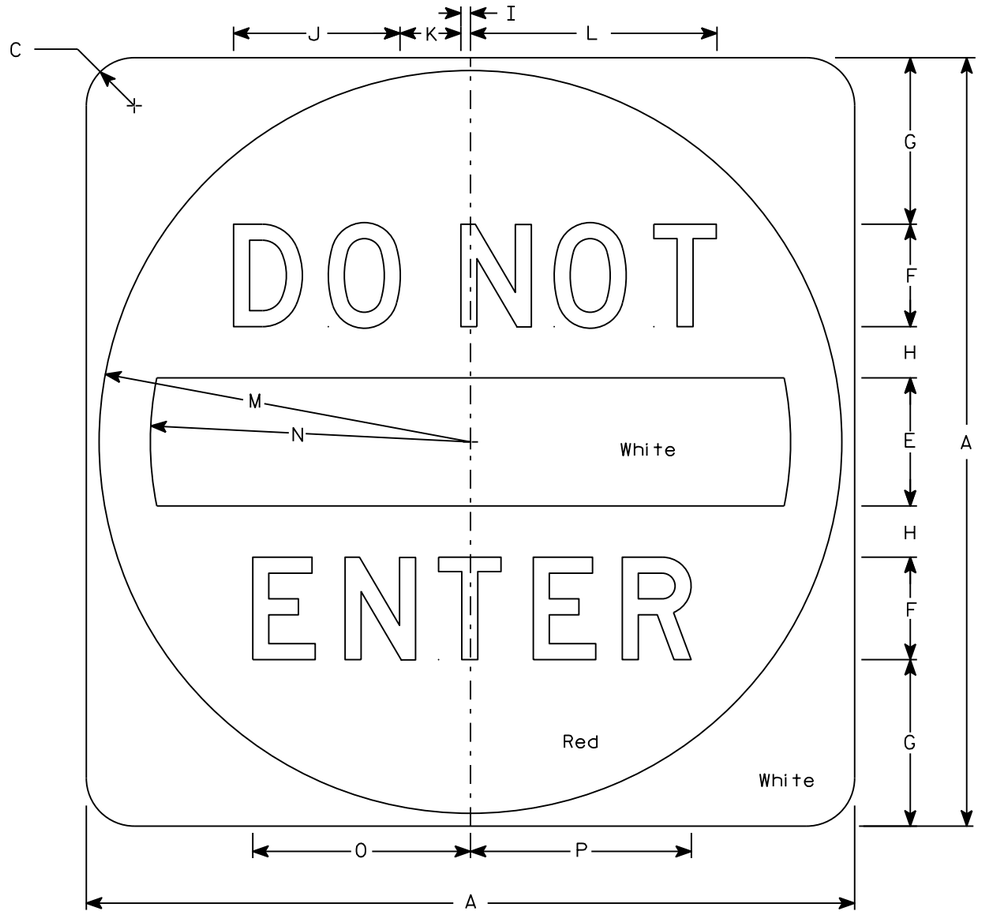
STANDARD SIGN
R4-7 & R4-8

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: 279	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

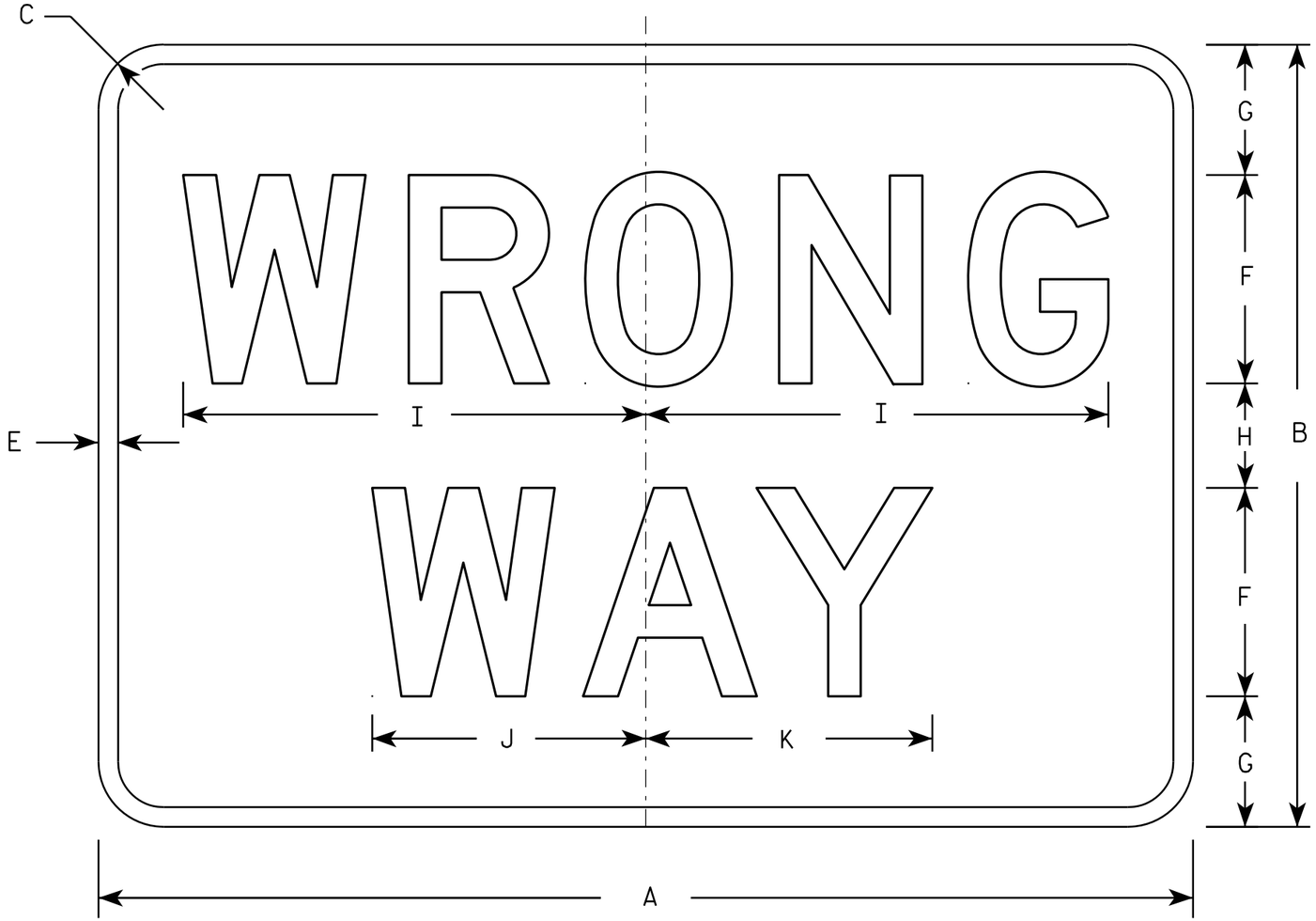
STANDARD SIGN
R5-1

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: 280 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

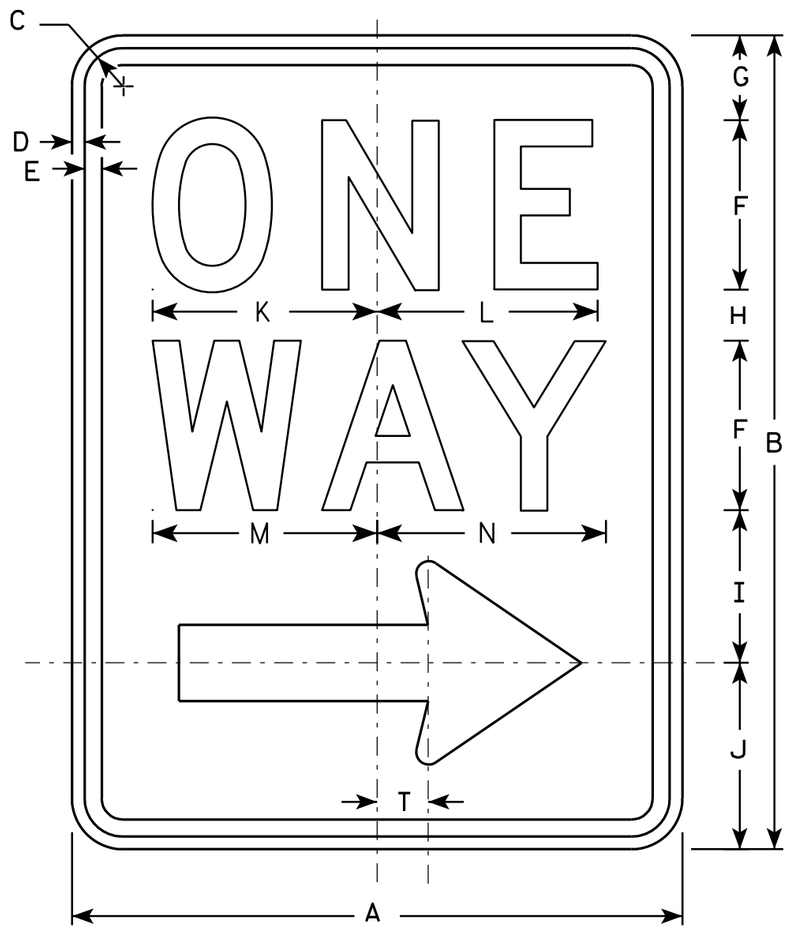
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

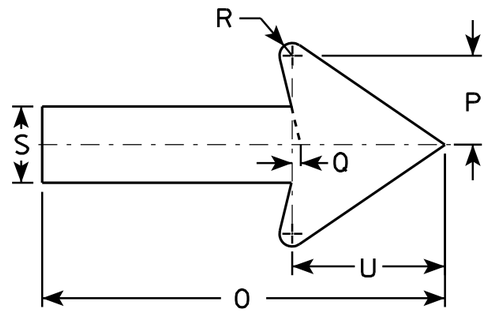
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 281 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

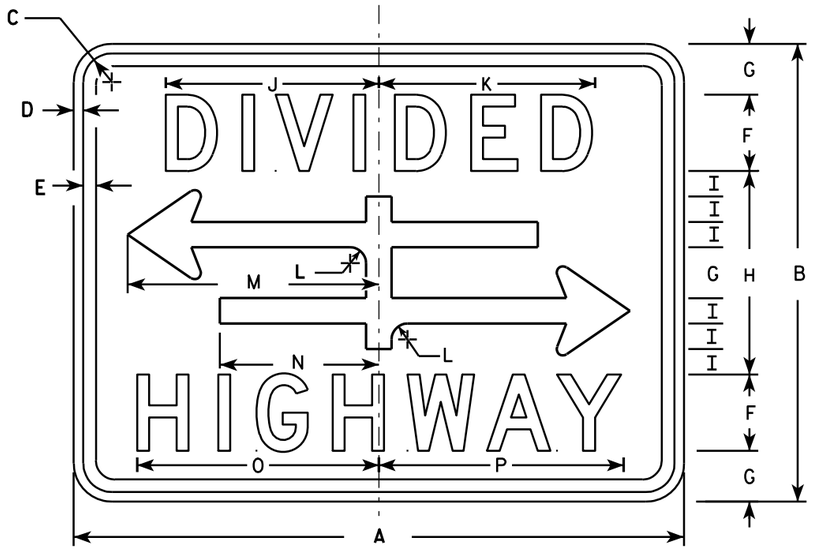
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

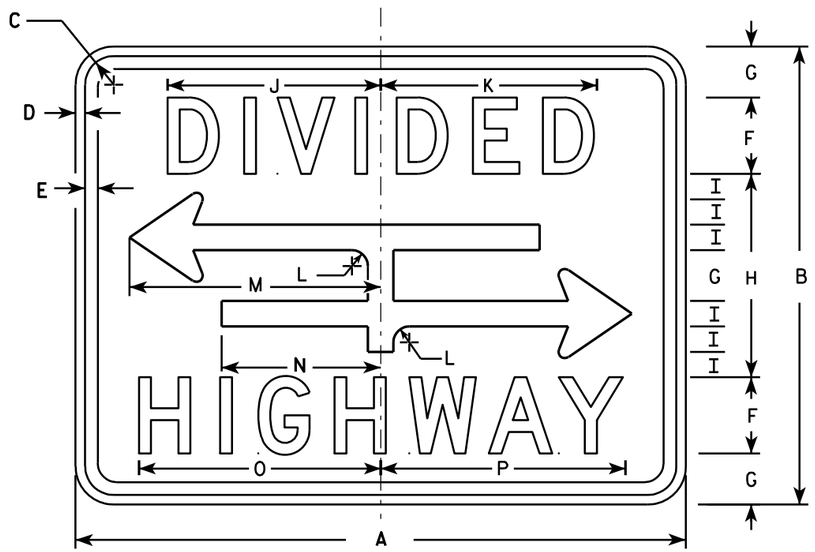
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 282	E



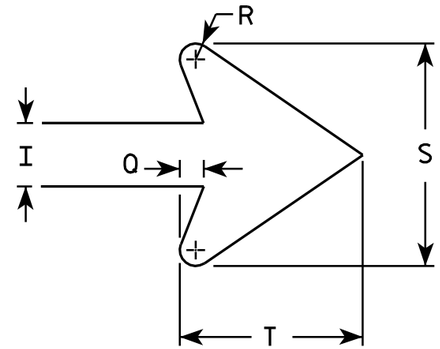
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-3A



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

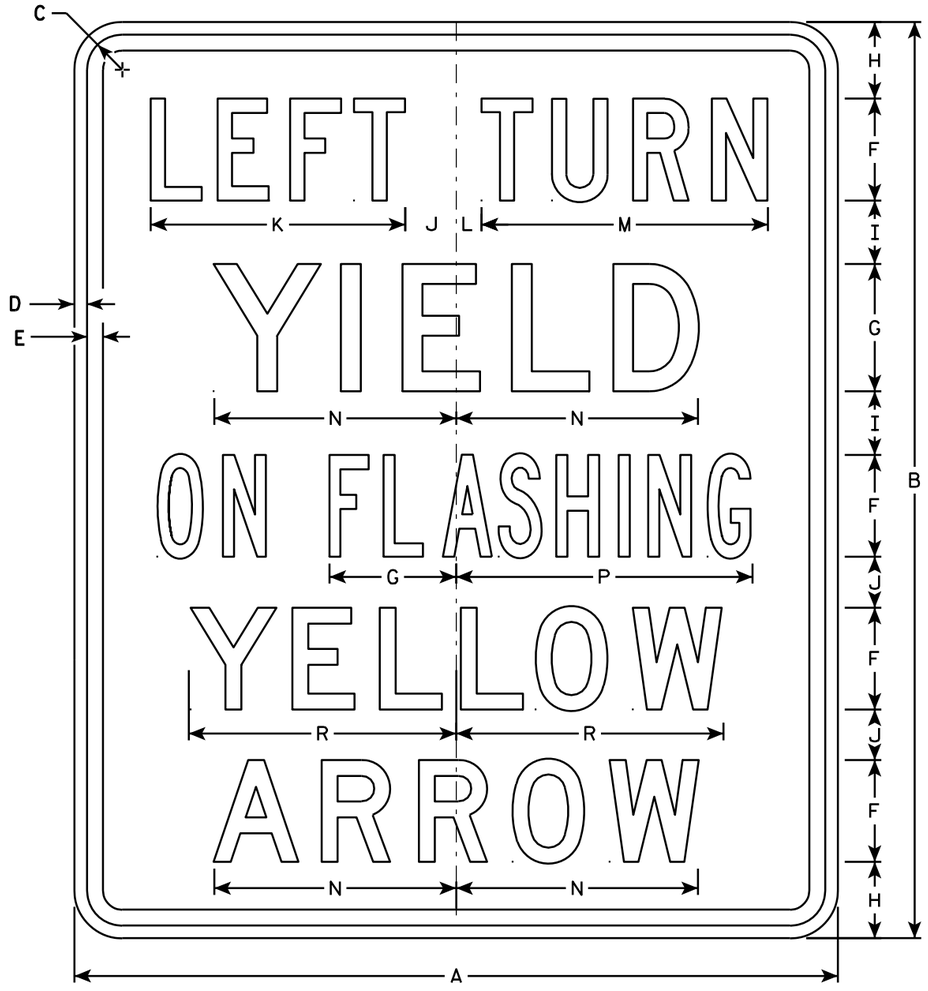
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 283 E

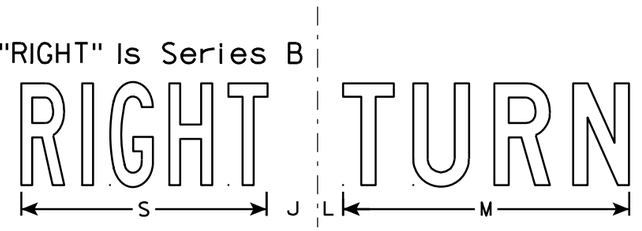


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series C.
   Lines 2, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

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	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

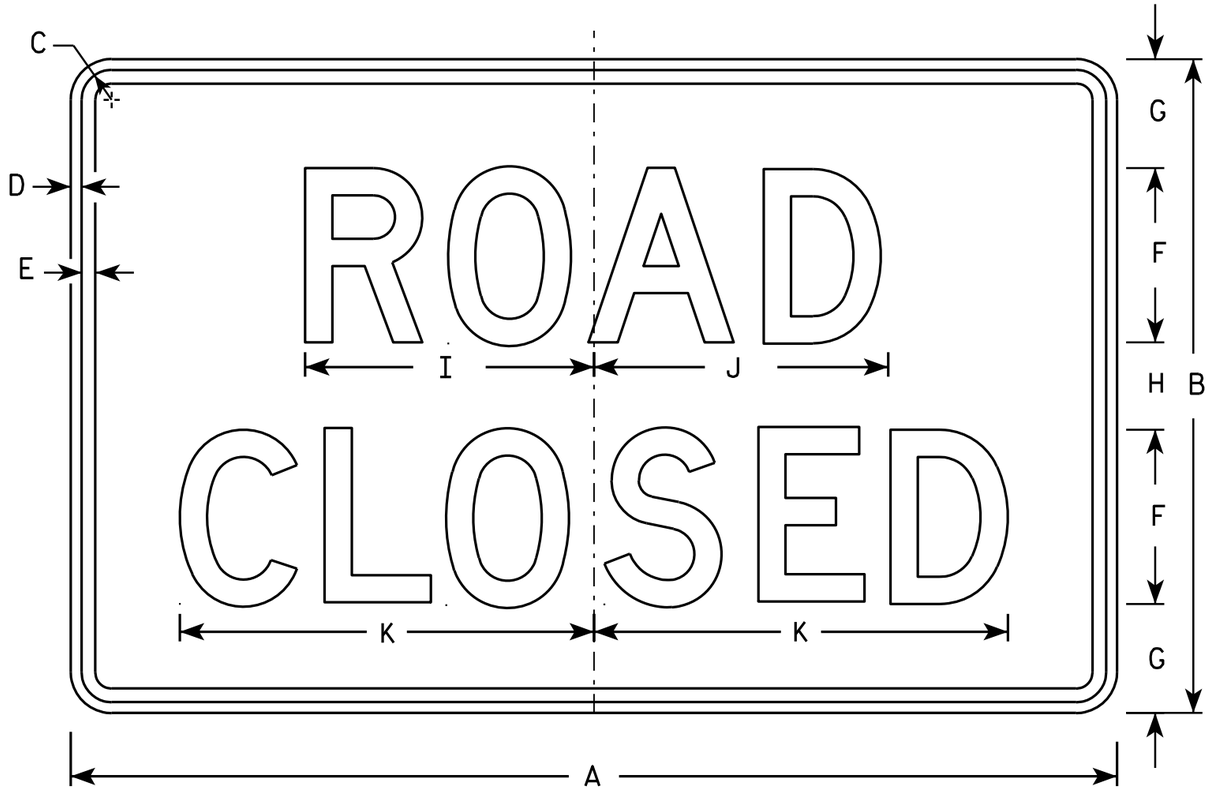
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

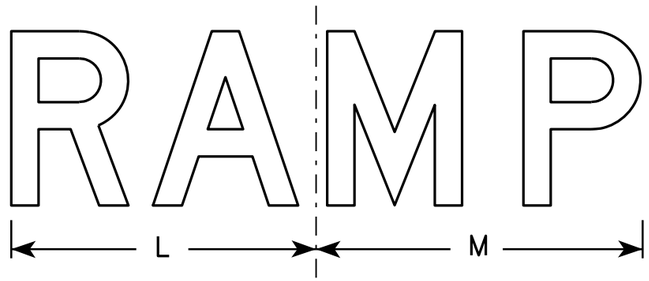
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 284	E



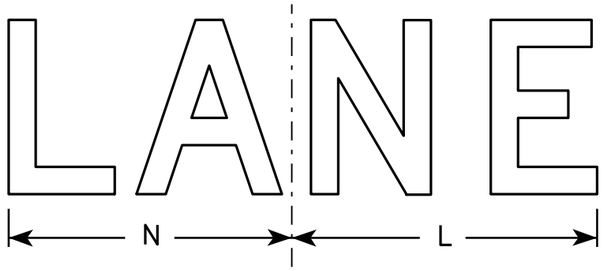
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

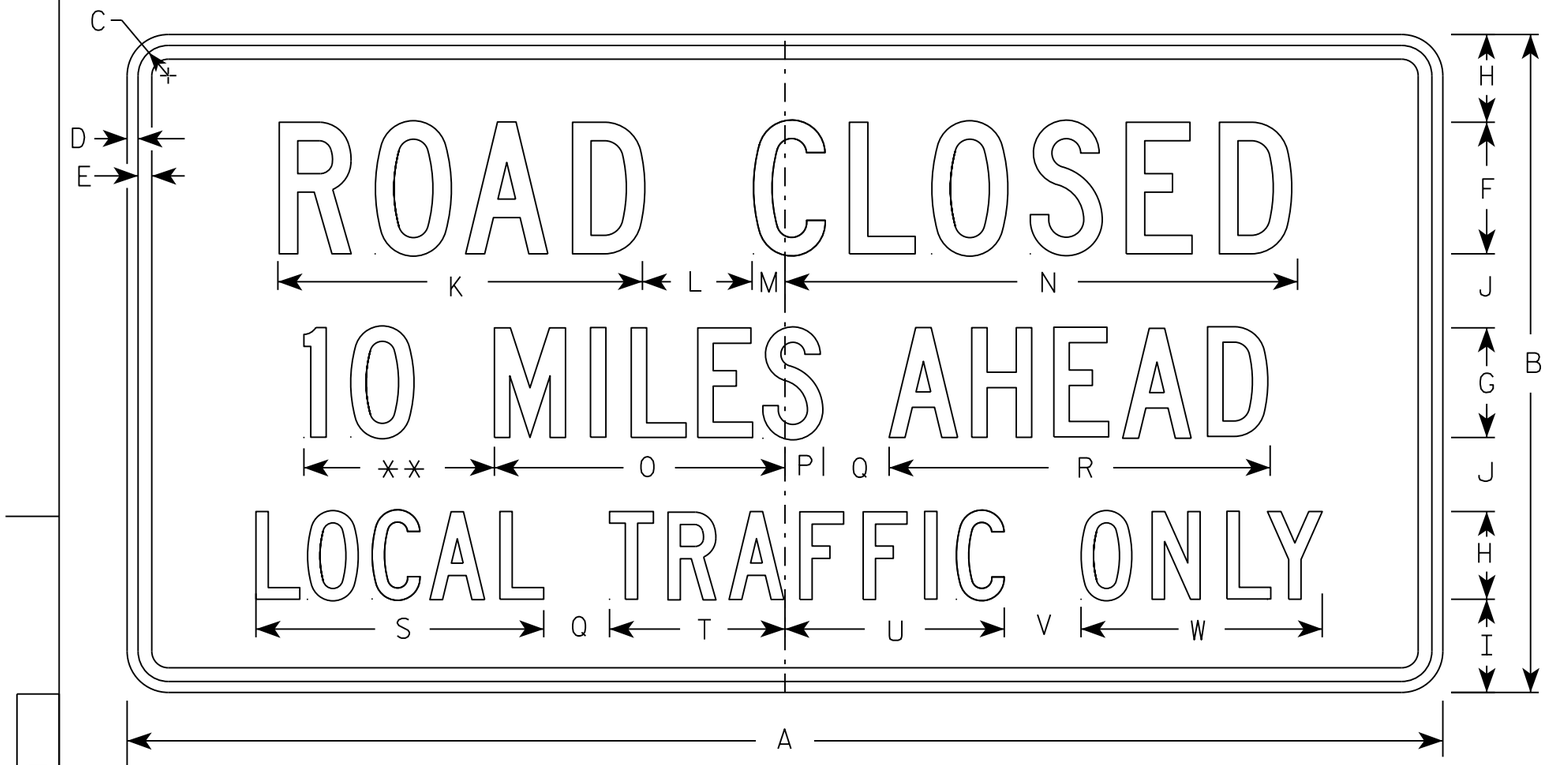
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 285	E

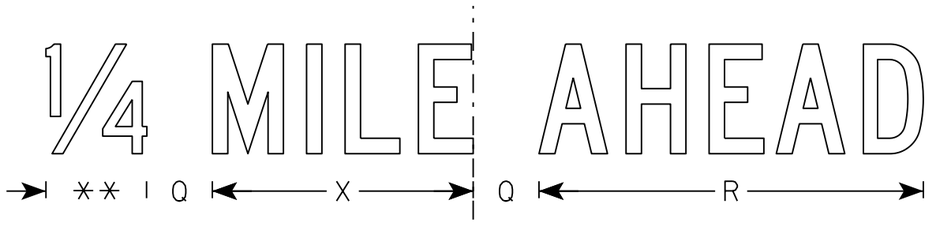
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.DGN PLOT DATE : 01-APR-2011 14:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

WISDOT/CADDS SHEET 42



R11-3

** See Note 5



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

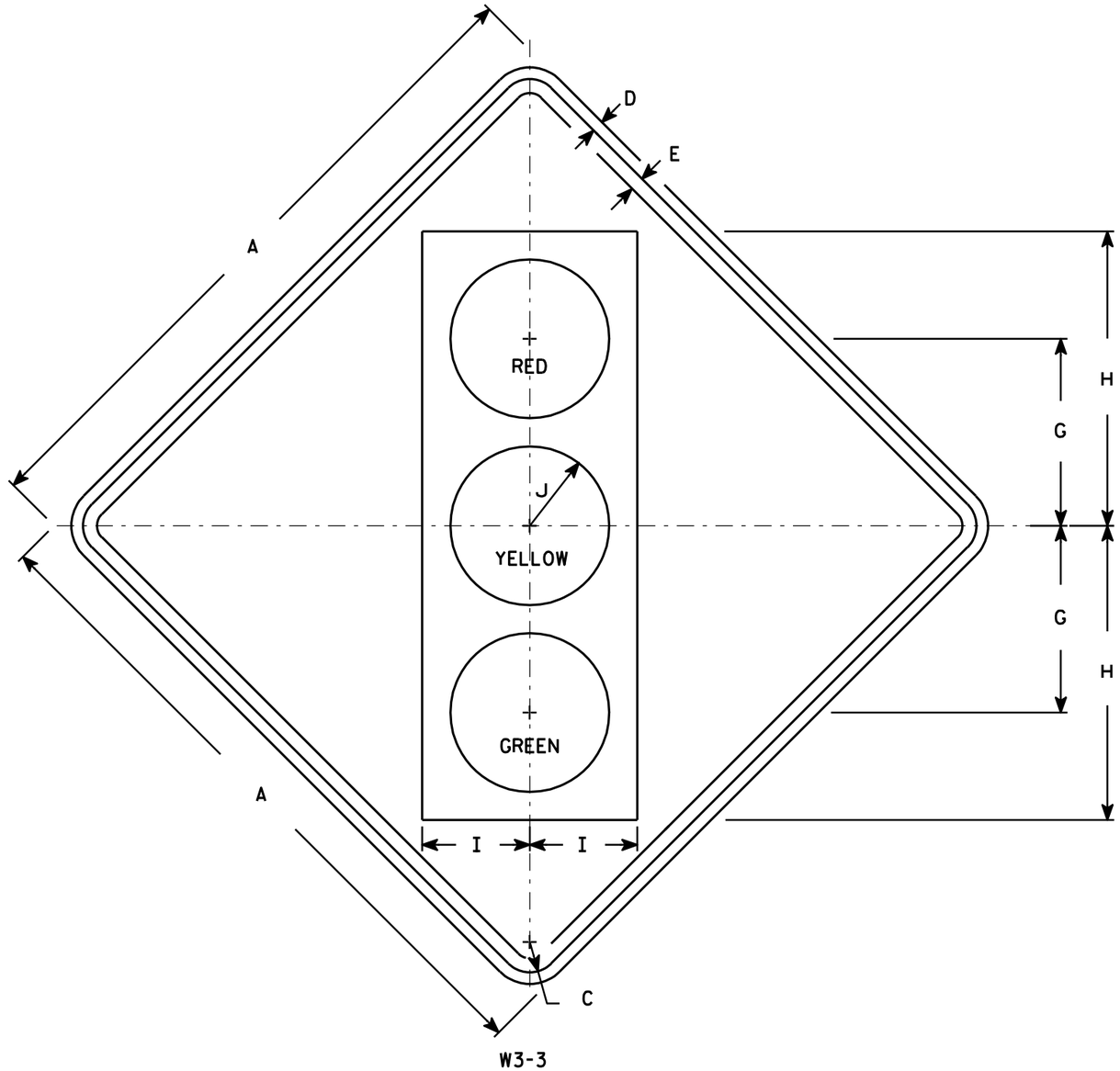
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/17 PLATE NO. R11-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 286 | 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 - 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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

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		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

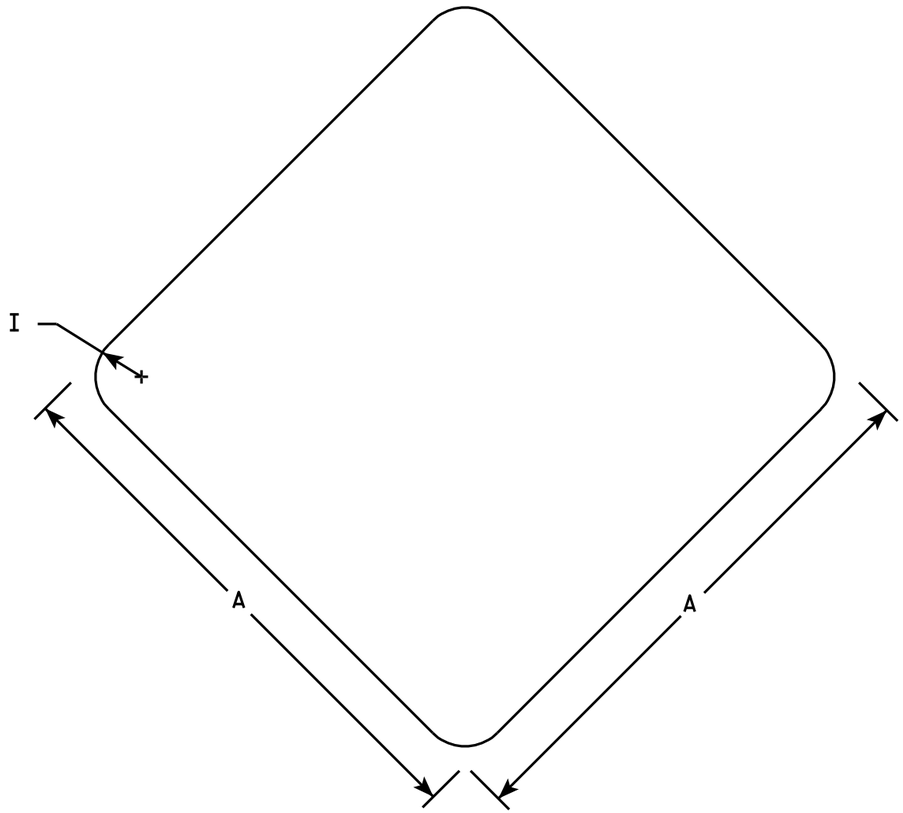
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 287 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000
WISDOT/CADDS SHEET 42



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
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																											

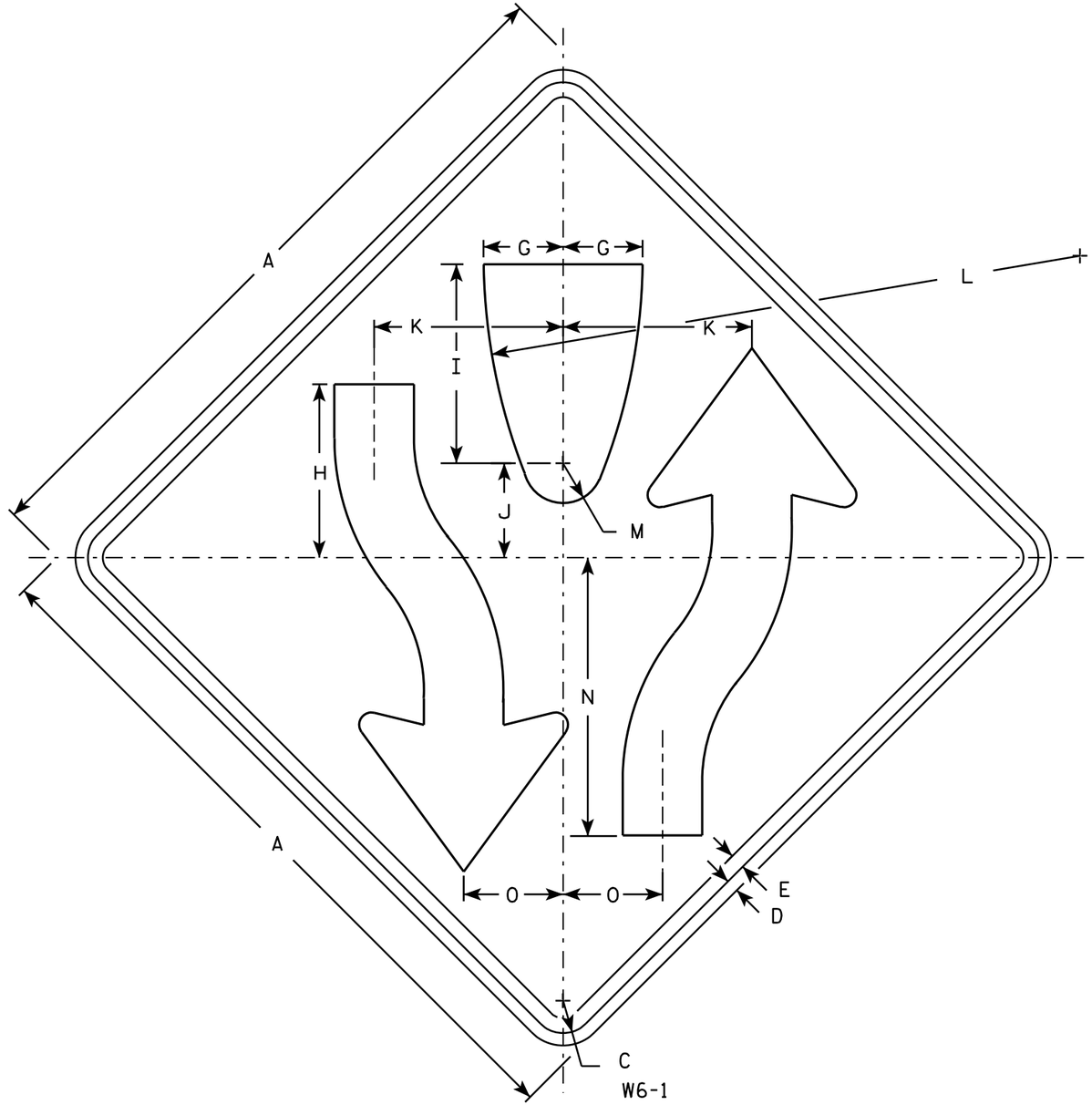
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

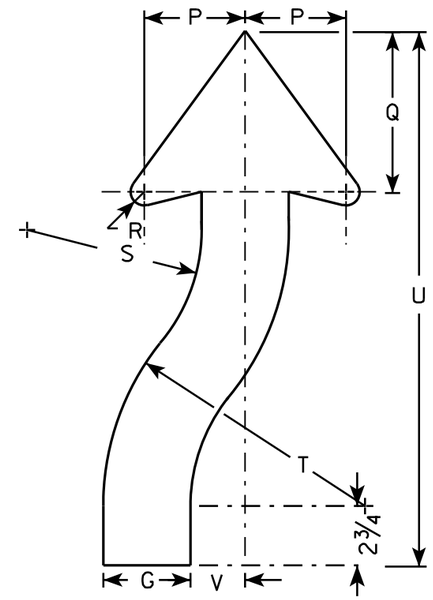
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

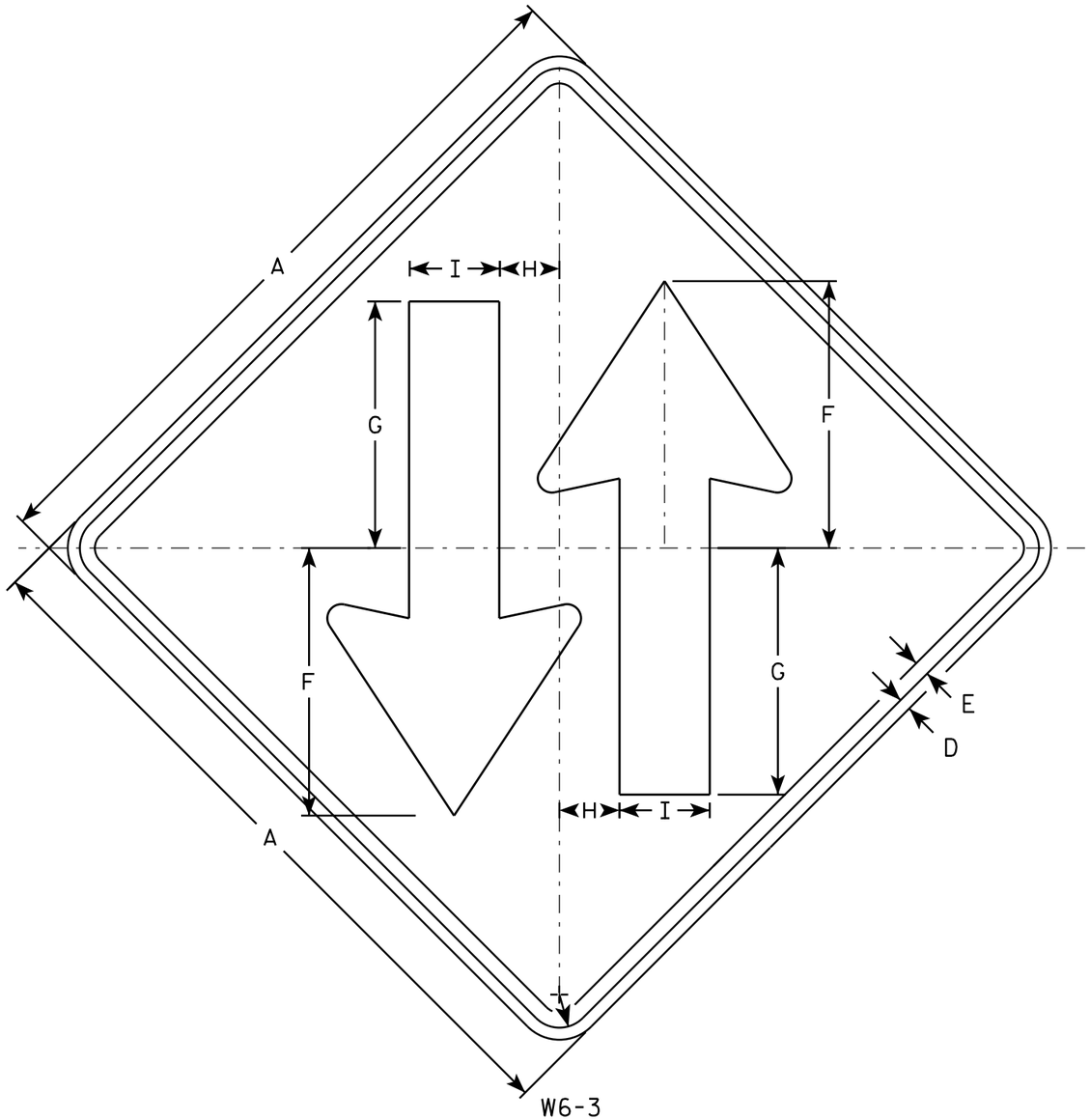
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 289	E

7

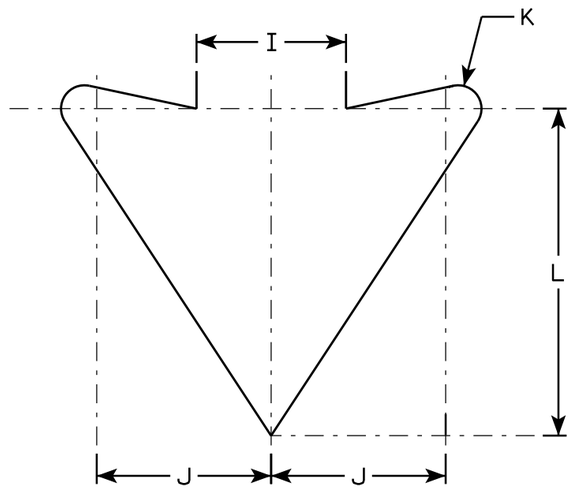
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
WISDOT/CADDS SHEET 42



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

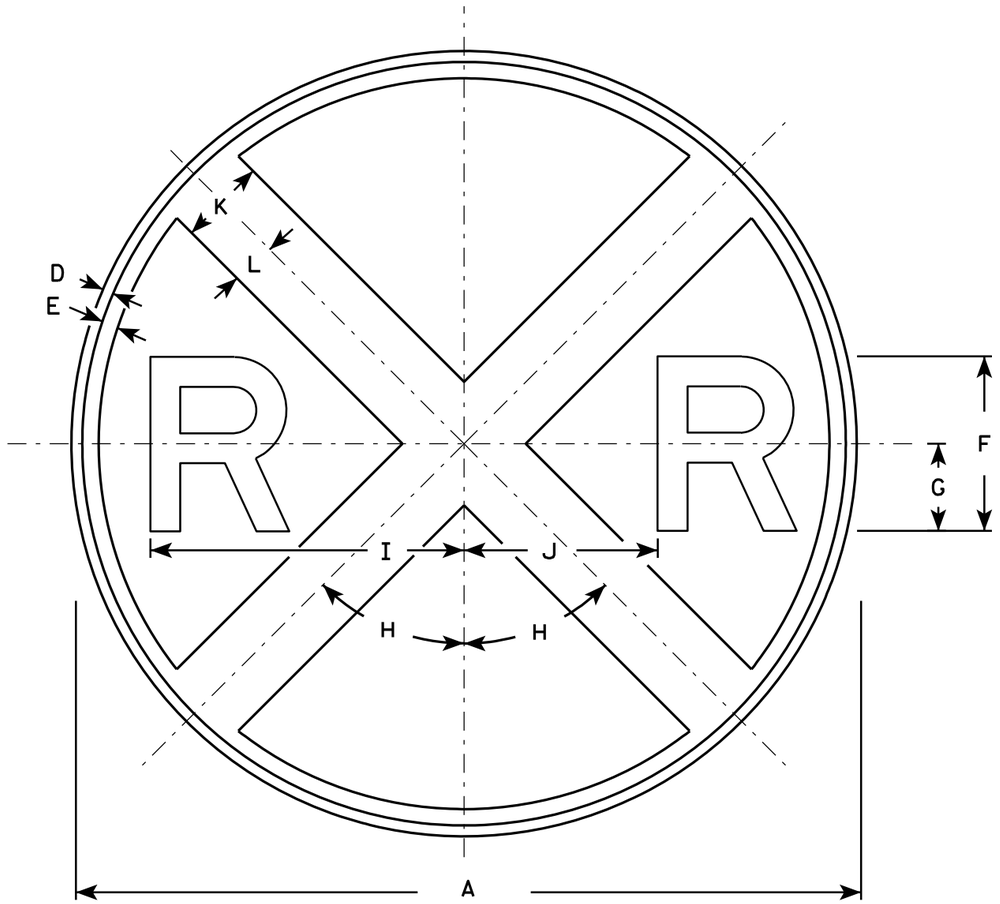
WISCONSIN DEPT OF TRANSPORTATION

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



W10-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message 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	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

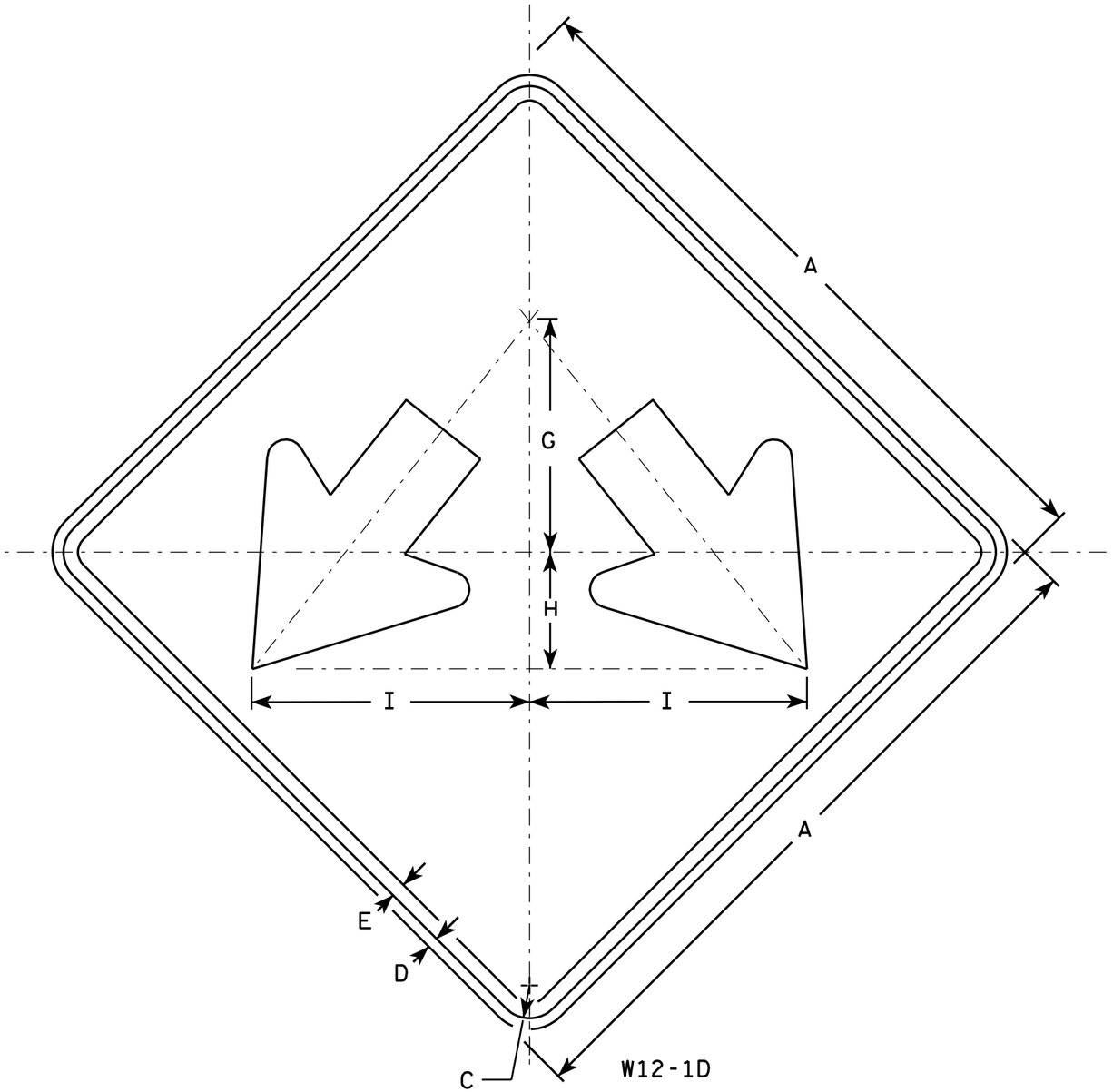
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 291	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W101.DGN PLOT DATE : 13-MAR-2013 11:06 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.946657:1.000000

WISDOT/CADDS SHEET 42

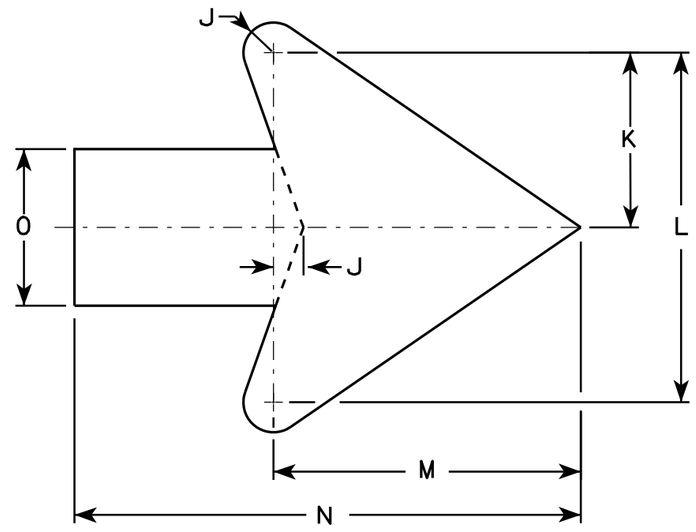
7

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.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

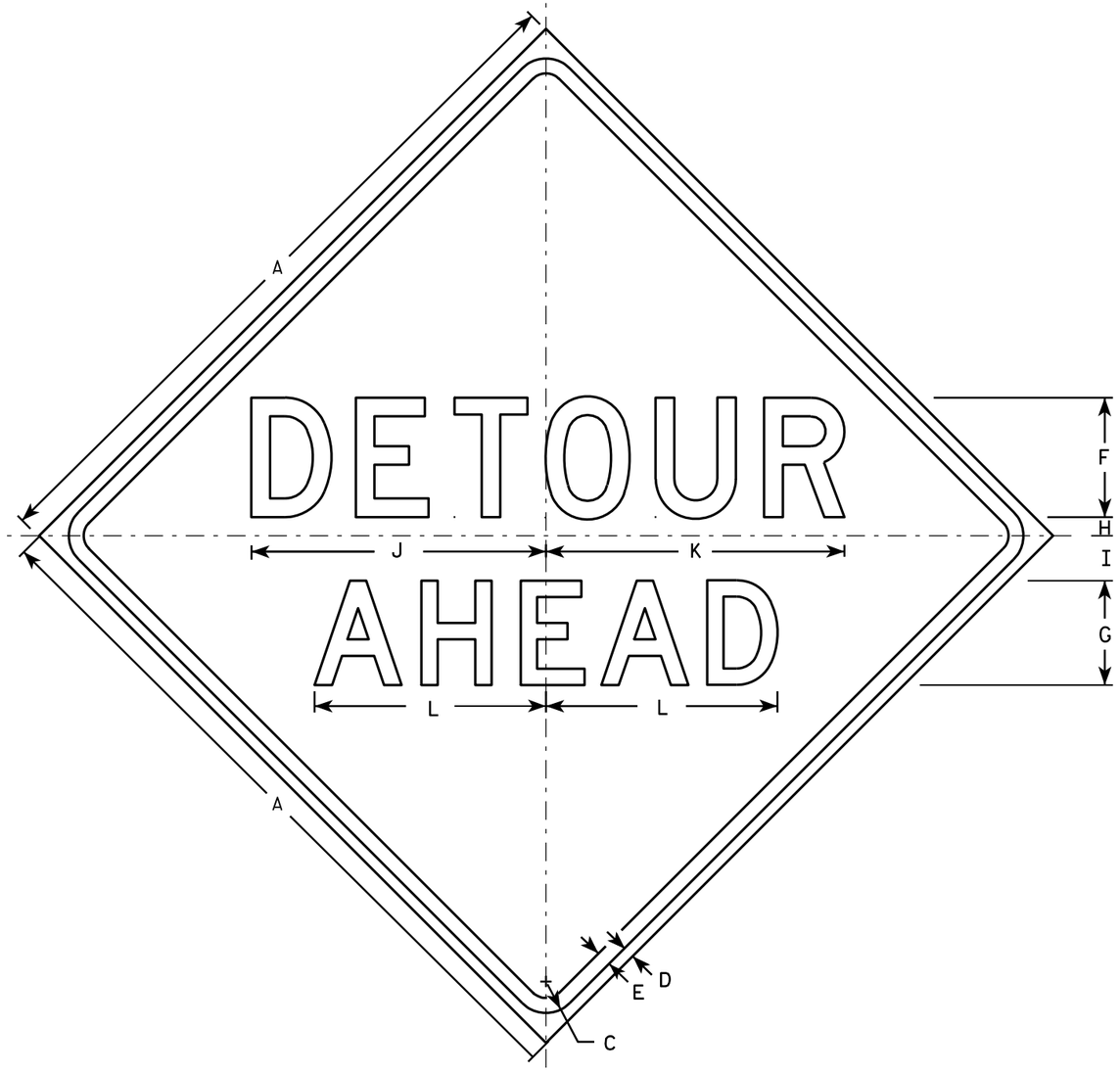
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 292	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

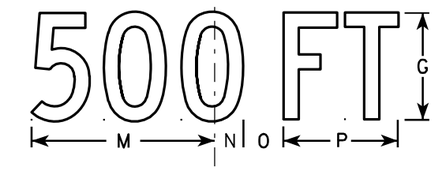
WISDOT/CADDS SHEET 42

7

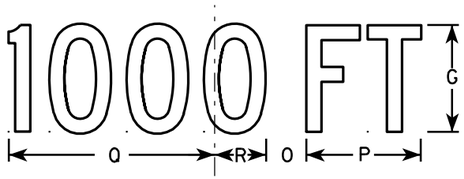
7



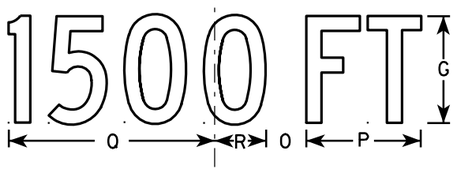
W20-2A



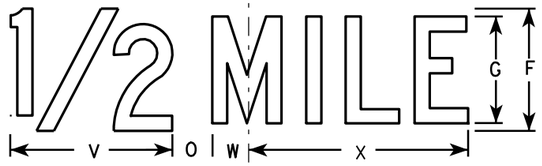
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

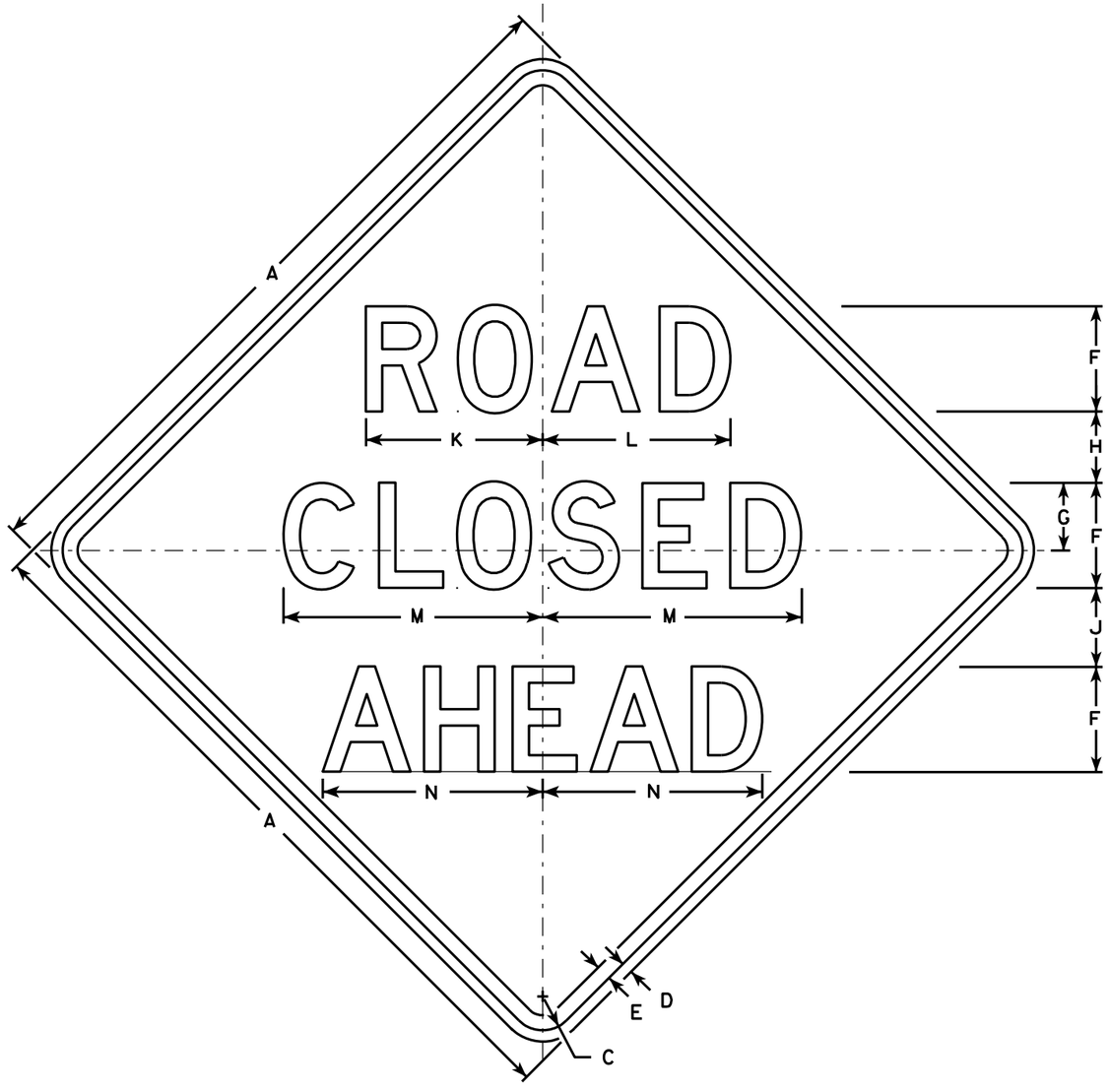
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

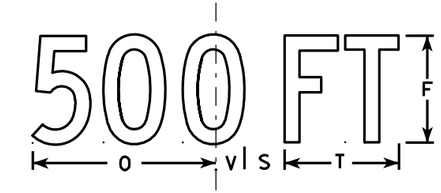
DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 293 | E

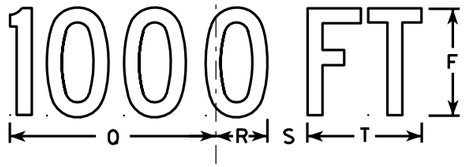
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



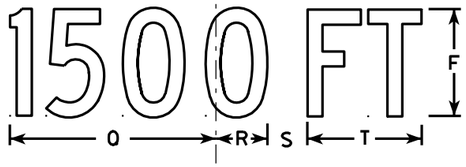
W20-3A



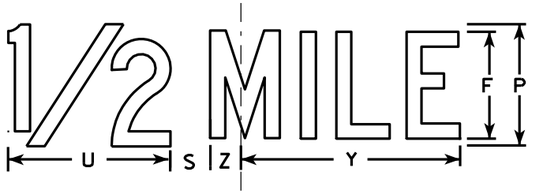
W20-3D



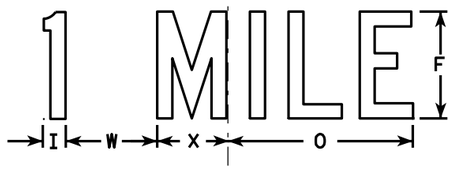
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

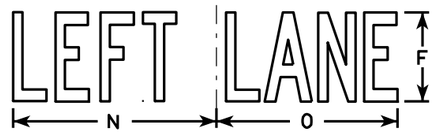
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

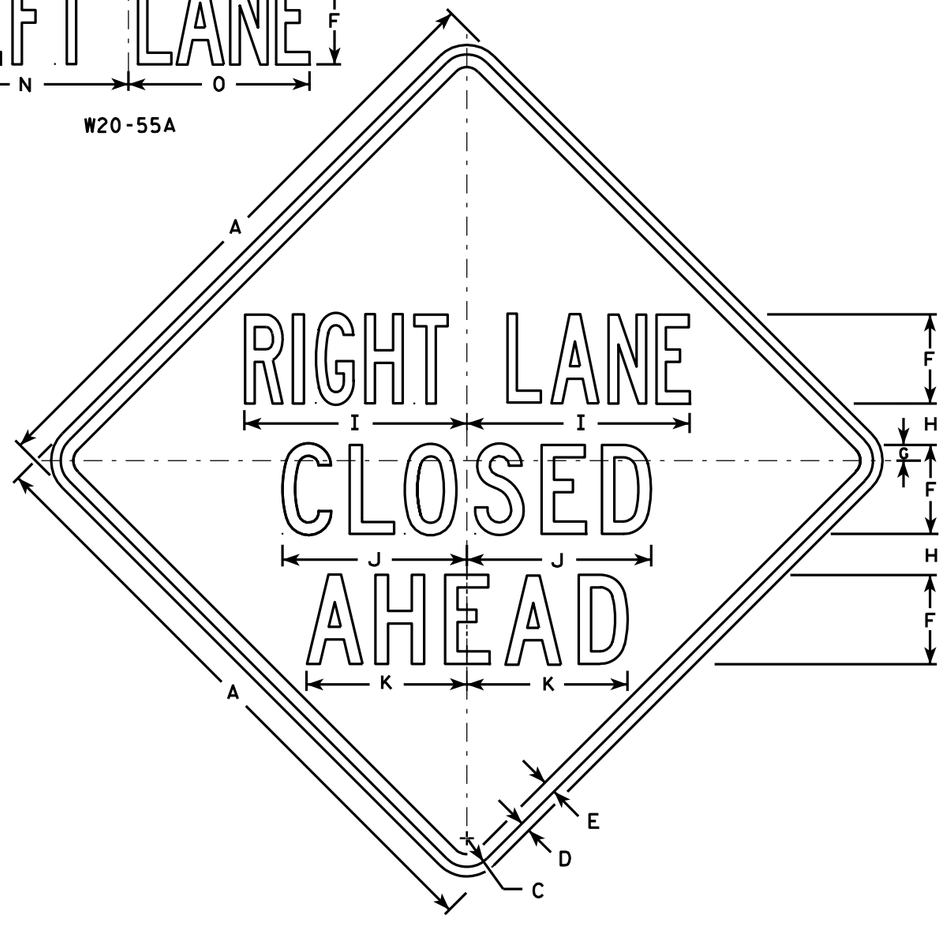
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 294 | E

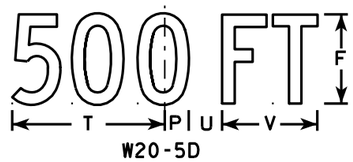
W20-56A



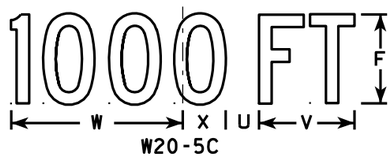
W20-55A



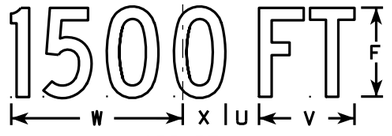
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

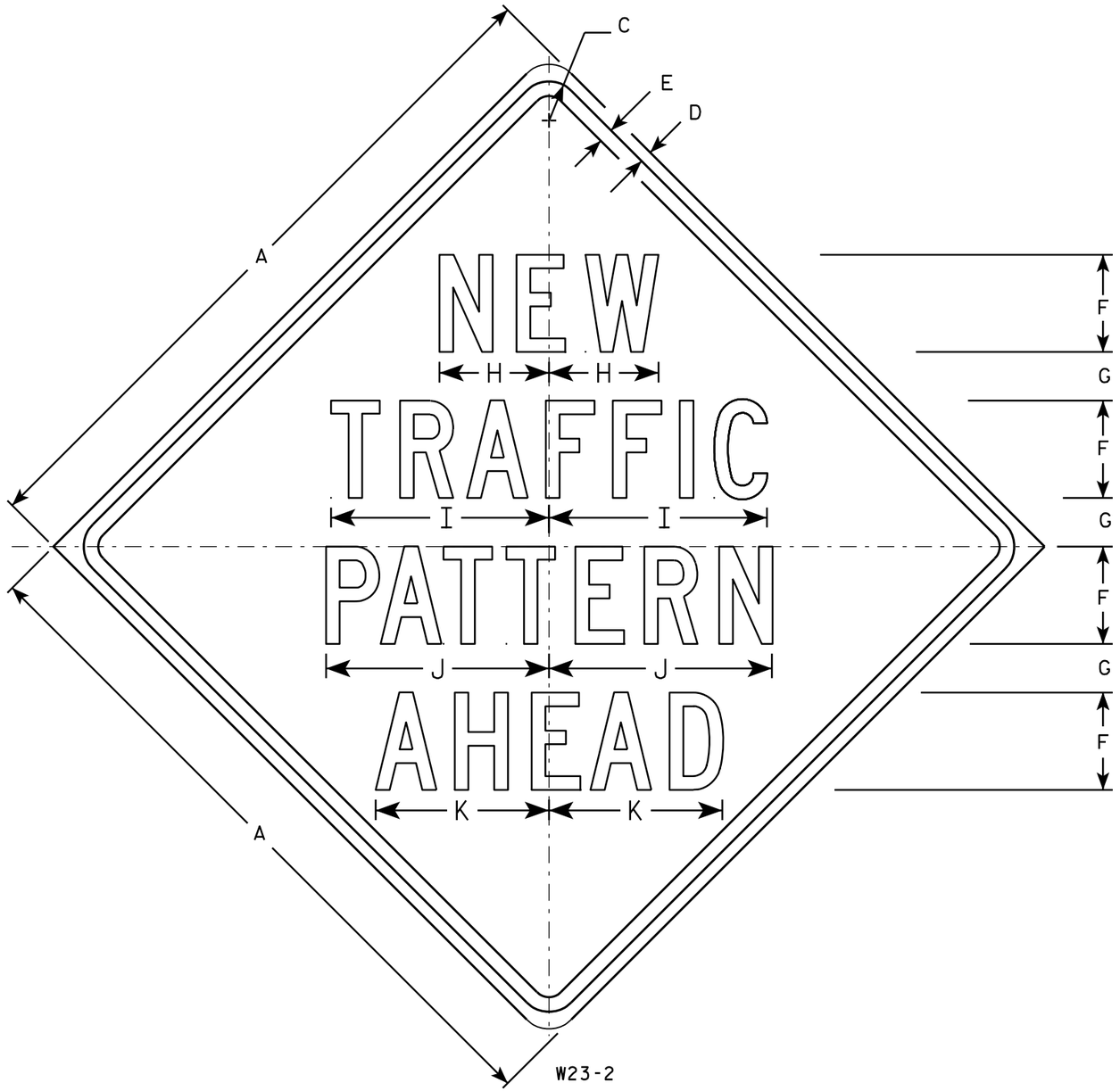
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 295	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



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																											

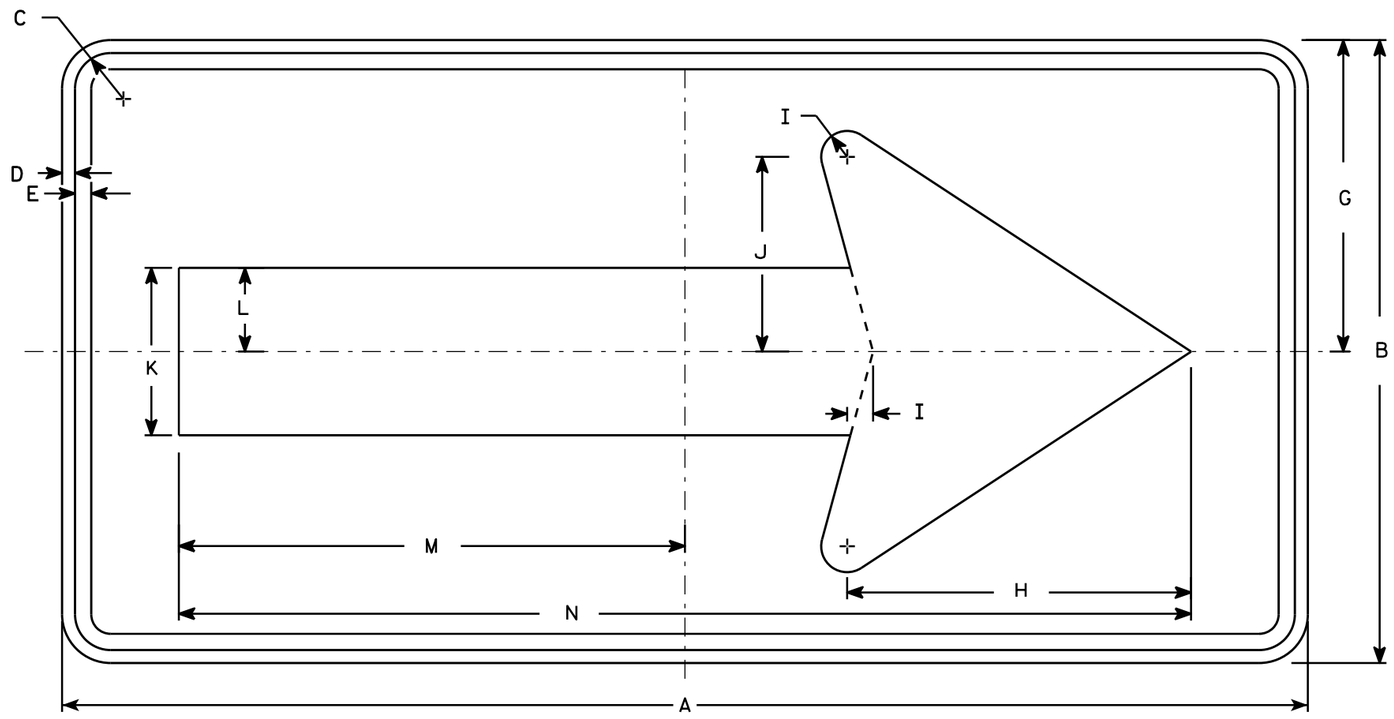
STANDARD SIGN
W23-2

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: 296 | E



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

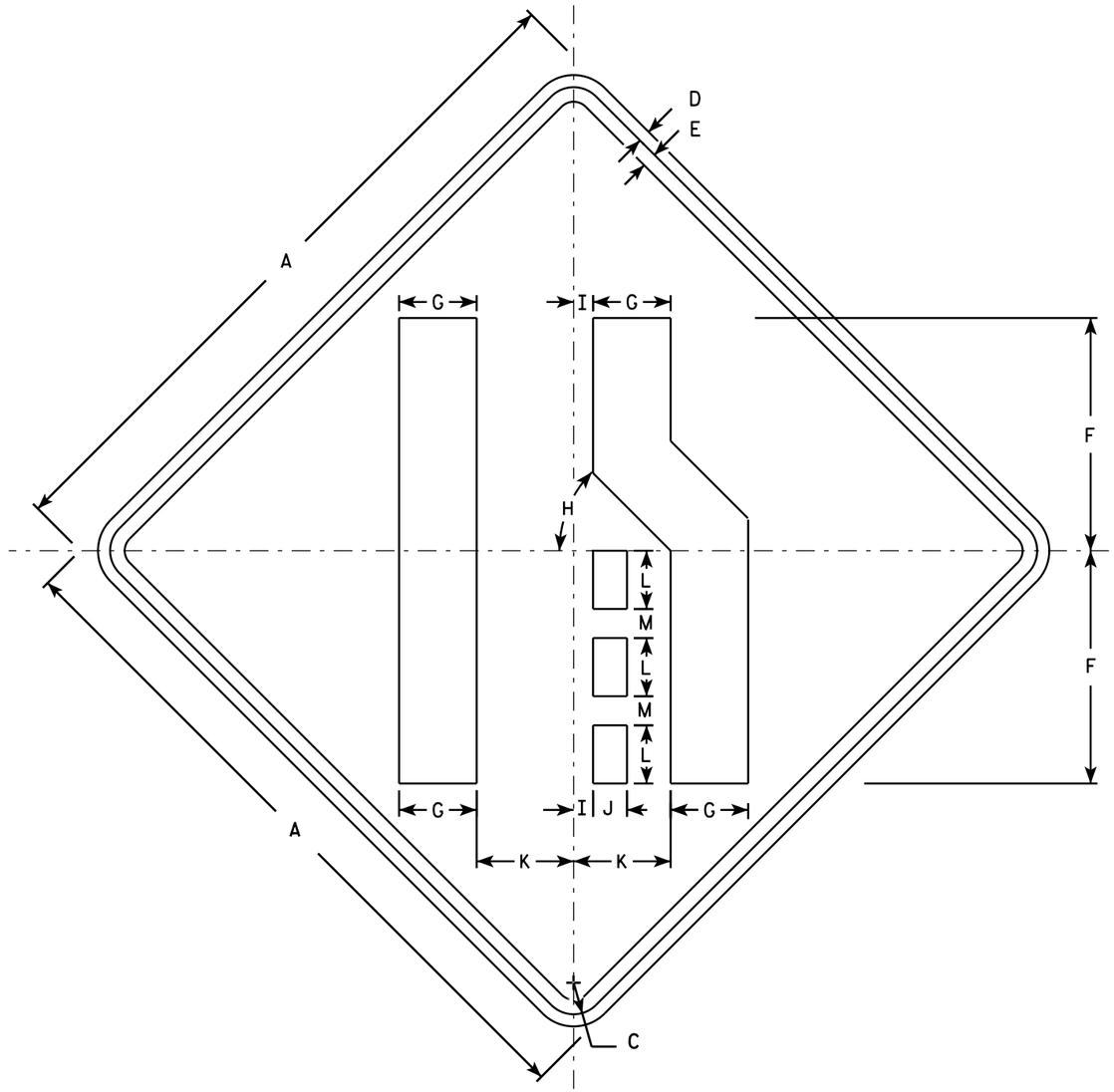
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

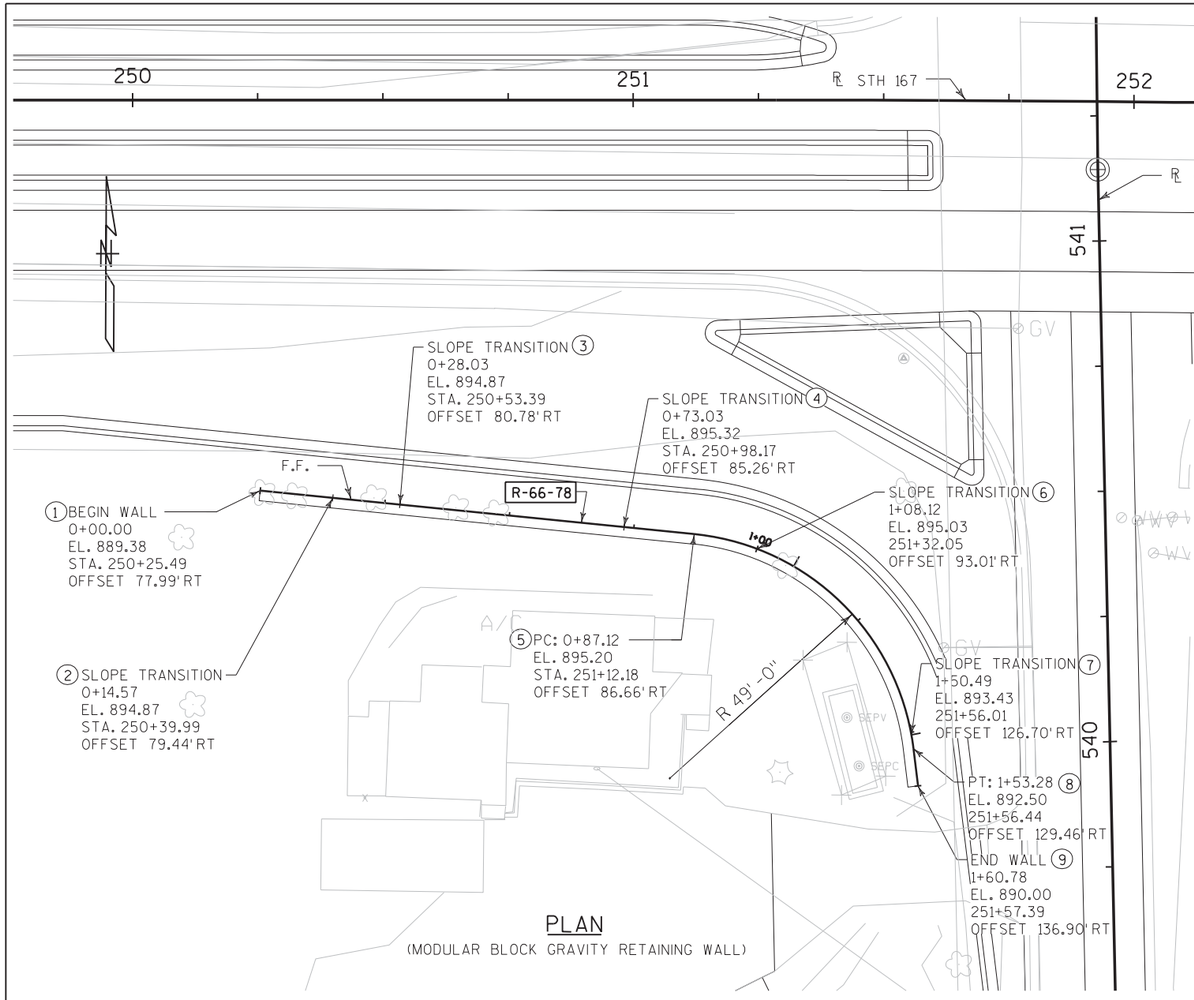
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 298 W04-2.1

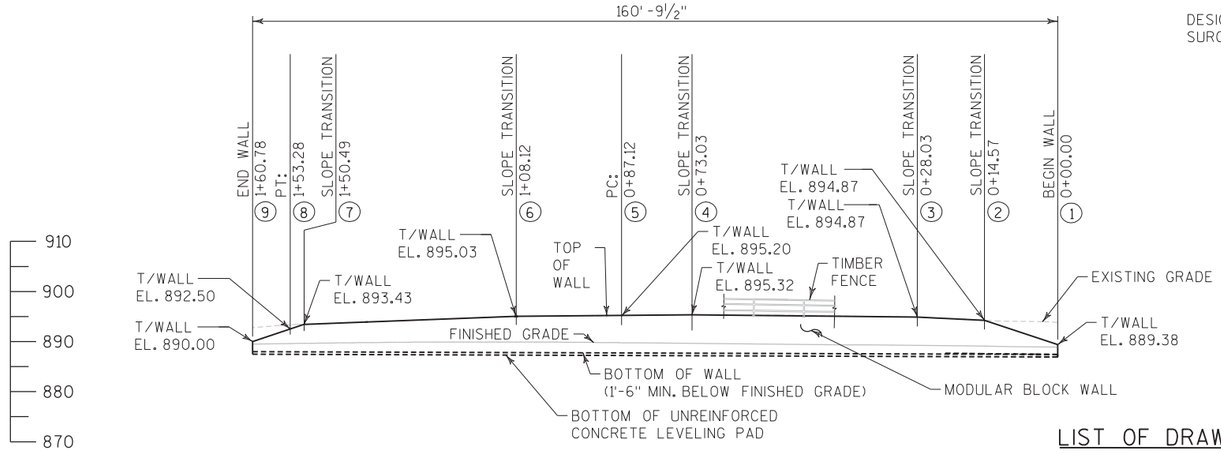
PROJECT NO: | SHEET NO: E

STATE PROJECT NUMBER
1380-00-70



PLAN

(MODULAR BLOCK GRAVITY RETAINING WALL)



ELEVATION

(LOOKING SOUTH AT F.F. OF WALL)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

BEVEL ALL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-78".

PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN IN THE GEOMETRY TABLE ON SHEET 2.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE PLAN QUANTITY FOR THE ITEM "WALL MODULAR BLOCK GRAVITY R-66-78" IS BASED ON A WALL HEIGHT MEASURED FROM THE TOP OF THE LEVELING PAD TO THE TOP OF WALL. THE TOP OF LEVELING PAD IS ASSUMED TO BE A CONSTANT 1'-6" BELOW FINISHED GRADE.

ALL EARTHWORK, CONCRETE AND REINFORCMENT FOR COPING AND LEVELING PAD, IS INCIDENTAL TO BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-78".

BLOCKS SHALL HAVE A STRAIGHT SPLIT FACE. COLOR TO BE TAN.

DESIGN DATA

LIVE LOAD

LIVE LOAD SURCHARGE (ROADWAY)_____ 100 P.S.F.

ALLOWABLE BEARING CAPACITY_____ 3500 P.S.F.

DESIGN THE RETAINING WALL FOR A HORIZONTAL FINISHED GRADE BEHIND THE WALL, AND A MINIMUM LIVE LOAD SURCHARGE OF 100 PSF, UNLESS NOTED OTHERWISE.

WISCONSIN
ANN C. THIELMANN
E-42457
MADISON
WI
PROFESSIONAL ENGINEER
3/2/18

TRAFFIC DATA:

STH 167

A.D.T. = ------ 12300 (2015)
A.D.T. = ------ 21400 (2038)
R.D.S. = 50 M.P.H.

COUNTRY AIRE DR

A.D.T. = ------ 1700 (2015)
A.D.T. = ------ 4600 (2038)
R.D.S. = 45 M.P.H.

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. GEOMETRY TABLE, CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. TIMBER FENCE

BUREAU OF STRUCTURES:
WILLIAM DREHER (608) 266-8489
CONSULTANT CONTACT:
ANN THIELMANN (608) 229-1414

NO.	DATE	REVISION	BY

DAAR ENGINEERING, INC.
www.daareorp.com
Madison, WI 53703
608-249-8340

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 03/05/18
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE R-66-78

COUNTY	VILLAGE
WASHINGTON	GERMANTOWN

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	ACT	DESIGN CK'D.	FKH	DRAWN BY	ACT	PLANS CK'D.	FKH

GENERAL PLAN & ELEVATION

SHEET 1 OF 4

299

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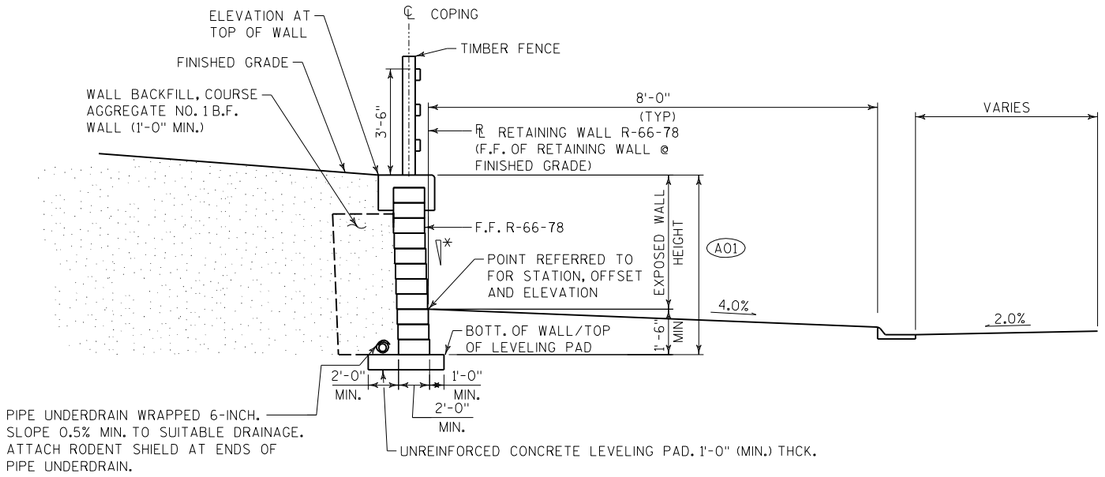
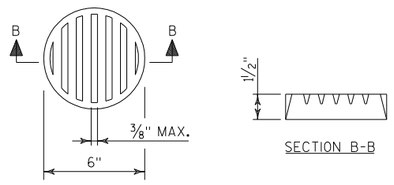
3/2/2018

STATE PROJECT NUMBER
1380-00-70

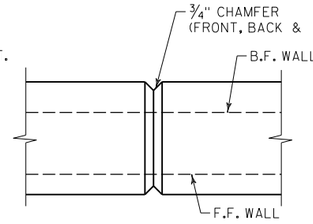


CROSS SECTION THRU WALL

* SET BACK PER BLOCK VARIES BY MANUFACTURER. MAXIMUM FRONT FACE FROM VERTICAL IS 3" HORIZ. TO 1'-0" VERT.

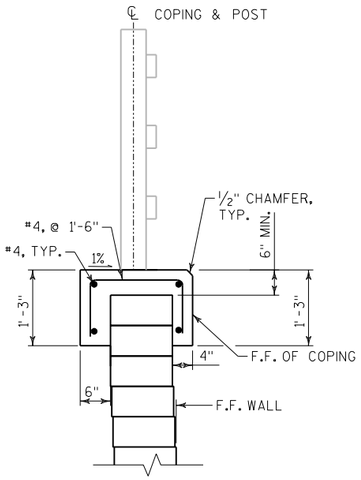


A02 RODENT SHIELD

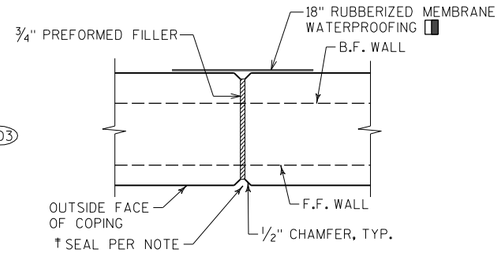


COPING CONTRACTION JOINT A03

DO NOT RUN BAR STEEL THRU JOINT.



COPING DETAIL



COPING EXPANSION JOINT A03

DO NOT RUN BAR STEEL THRU JOINT.

▮ MEMBRANE WATERPROOFING TO EXTEND FROM TOP OF COPING TO BOTTOM OF COPING.

† SEAL ALL EXPOSED HORIZ. & VERTICAL SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONC.)

NOTES

BETWEEN STA. 0+87.12 AND STA. 1+53.28, BUILD COPING TO WALL RADIUS.

A01 PAY LIMIT FOR BID ITEM "WALL MODULAR BLOCK GRAVITY R-66-78"

A02 DIMENSIONS ARE APPROXIMATE, GRATE TO BE SIZED TO FIT INTO A PIPE COUPLING. ORIENT RODENT SHIELD SO SLOTS ARE VERTICAL. COST OF RODENT SHIELD AND ALL FITTINGS TO BE INCLUDED IN THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH." THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL . THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

A03 SPACE COPING EXPANSION JOINTS 30'-0" MAX. SPACING. SPACE COPING CONTRACTION JOINTS AT 10'-0" MAX. SPACING.

TOTAL ESTIMATED QUANTITIES

BID - ITEM NUMBER	BID - ITEM	UNITS	QUANTITY
516.0500	RUBBERIZED MEMBRAINE WATERPROOFING	SY	2
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	161
SPV.0090.01	TIMBER FENCE	LF	161
SPV.0165.01	WALL MODULAR BLOCK GRAVITY R-66-78	SF	1067
	NON BID - ITEM		
	FILLER	SIZE	3/4"

BENCH MARKS

NO.	STATION		DESCRIPTION	ELEVATION
1005	524+23.03	35.56 LT	CP BERN W SIDE COUNTRY AIRE	886.21
1007	557+41.06	22.02 RT	CP BERN E SIDE COUNTRY AIRE	884.21
1008	236+17.03	42.13 LT	CP BERN N SIDE STH 167	885.12
1009	262+84.24	6.00 RT	CP BERN S SIDE STH 167	906.15

DESIGN PARAMETERS - SOIL PROPERTIES

				DRAINED		UNDRAINED	
STRUCTURE INFORMATION	SOIL ZONE AND ELEVATION (FT)	SOIL DESCRIPTION	MOIST UNIT WEIGHT (y) (pcf)	COHESION (psf)	INTERNAL ANGLE OF FRICTION (DEGREES)	COHESION (psf)	INTERNAL ANGLE OF FRICTION (DEGREES)
STRUCTURE ID: R-66-78 MODULAR BLOCK WALL	RETAINED EMBANKMENT TOW EL. 894.90	SILTY CLAYS	120	100	30	1500	0
	FOUNDATION SOILS TOF EL. 887.50 BOF EL. 886.50	SILTY CLAYS	125	100	32	3000	0

GEOMETRY TABLE

WALL STATION	STH 167 STATION	OFFSET TO F.F. WALL	TOP OF WALL	FINISHED GROUND
0+00.00	250+25.49	77.99 RT	889.38	888.88
0+14.57	250+39.99	79.44 RT	894.87	889.05
0+25.00	250+50.37	80.48 RT	894.73	889.19
0+28.03	250+53.39	80.78 RT	894.87	889.22
0+50.00	250+75.25	82.97 RT	895.09	889.42
0+73.03	250+98.17	85.26 RT	895.32	889.63
0+75.00	251+00.13	85.46 RT	895.30	889.65
0+87.12	251+12.18	86.66 RT	895.20	889.76
1+00.00	251+24.68	89.60 RT	895.09	889.88
1+08.12	251+32.05	93.10 RT	895.03	889.91
1+25.00	251+45.08	103.91 RT	894.39	889.90
1+50.00	251+55.92	126.22 RT	893.45	889.65
1+50.49	251+56.01	126.70 RT	893.43	889.64
1+53.28	251+56.44	129.46 RT	892.50	889.60
1+60.78	251+57.39	136.90 RT	890.00	889.50

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-78

DRAWN BY ACT | PLANS CK'D. FKH

GEOMETRY TABLE, CROSS-SECTION, & QUANTITIES

SHEET 2 OF 4

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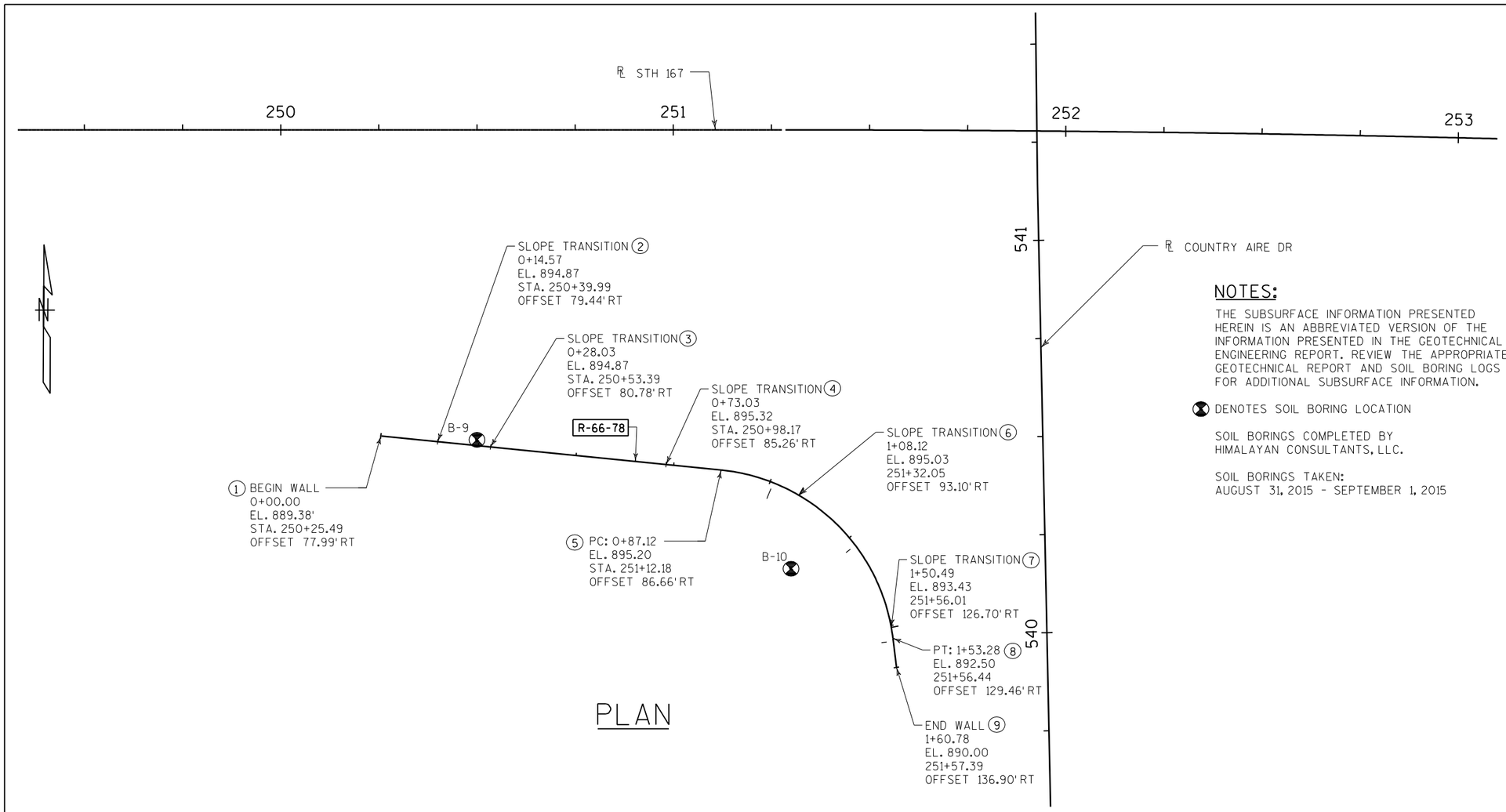
3/2/2018



PLAN

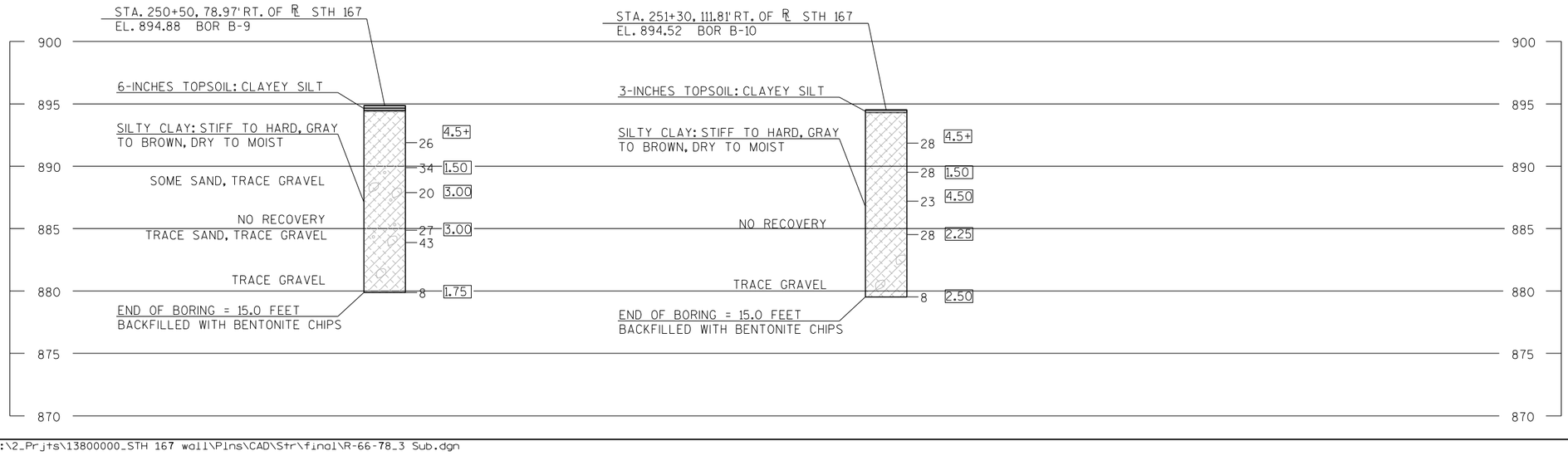
NOTES:

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.

⊗ DENOTES SOIL BORING LOCATION

SOIL BORINGS COMPLETED BY HIMALAYAN CONSULTANTS, LLC.

SOIL BORINGS TAKEN: AUGUST 31, 2015 - SEPTEMBER 1, 2015



STATE PROJECT NUMBER

1380-00-70

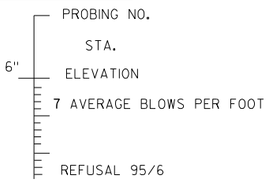
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

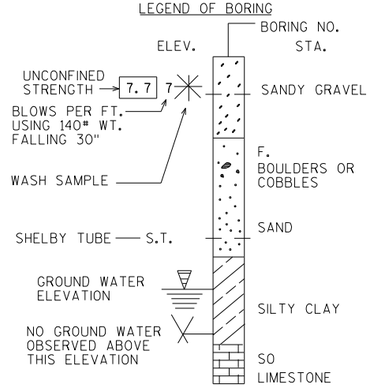
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-78

DRAWN BY ACT | PLANS CK'D. FKH

SUBSURFACE EXPLORATION

SHEET 3 OF 4

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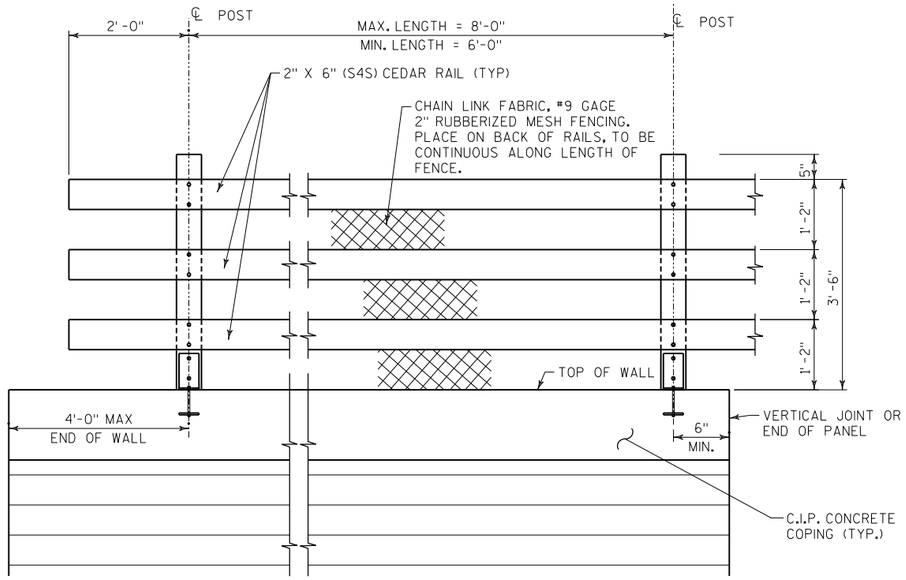
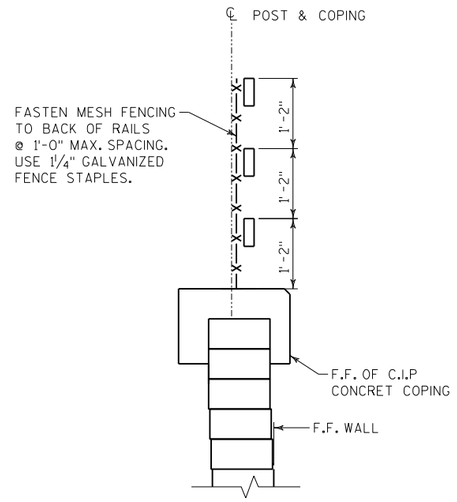
3/2/2018

STATE PROJECT NUMBER

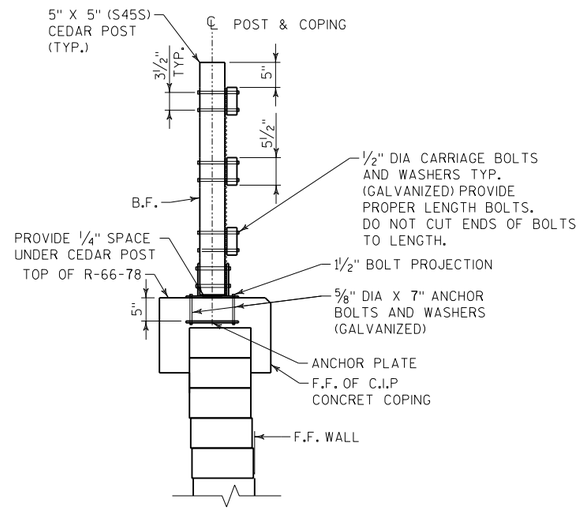
1380-00-70



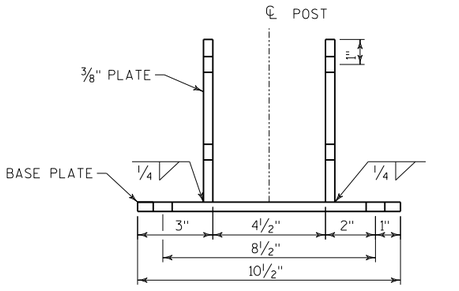
WALL RAILING ELEVATION
(LOOKING AT FRONT FACE OF COPING)



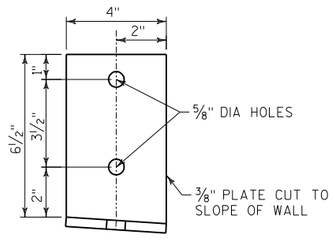
MESH FENCING CONNECTION



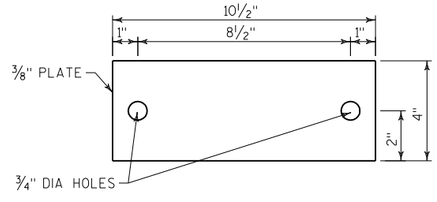
POST CONNECTION



POST BRACKET ASSEMBLY



SIDE PLATE DETAIL



ANCHOR PLATE AND
BASE PLATE

NOTES

1) FENCING LAYOUT BY CONTRACTOR AND SUBMITTED TO ENGINEER FOR APPROVAL.

2) HARDWARE POST, CHAIN LINK FABRIC, BRACKETS, ANCHOR PLATE DETAIL INCIDENTAL TO THE BID ITEM "TIMBER FENCE".

3) THE EMBEDDED ANCHOR PLATE AND ANCHOR BOLTS ARE SUPPLIED BY THE FENCE FABRICATOR AND INSTALLED BY THE MASONRY CONTRACTOR.

4) HARDWARE AND POST BRACKETS TO BE GALVANIZED (ASTM A123) AFTER WELDING & DRILLING.

5) STEEL PLATE SHALL BE AASHTO ASTM GR 36.

6) 5" X 5" POSTS TO FIT TIGHT IN THE POST BRACKET. TRIM/SHIM POST TO TIGHT FIT IN FIELD.

7) FABRICATE THE POST BRACKET ASSEMBLY TO BE PLUMB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-66-78

DRAWN BY ACT | PLANS CK'D. FKH

TIMBER FENCE

SHEET 4 OF 4

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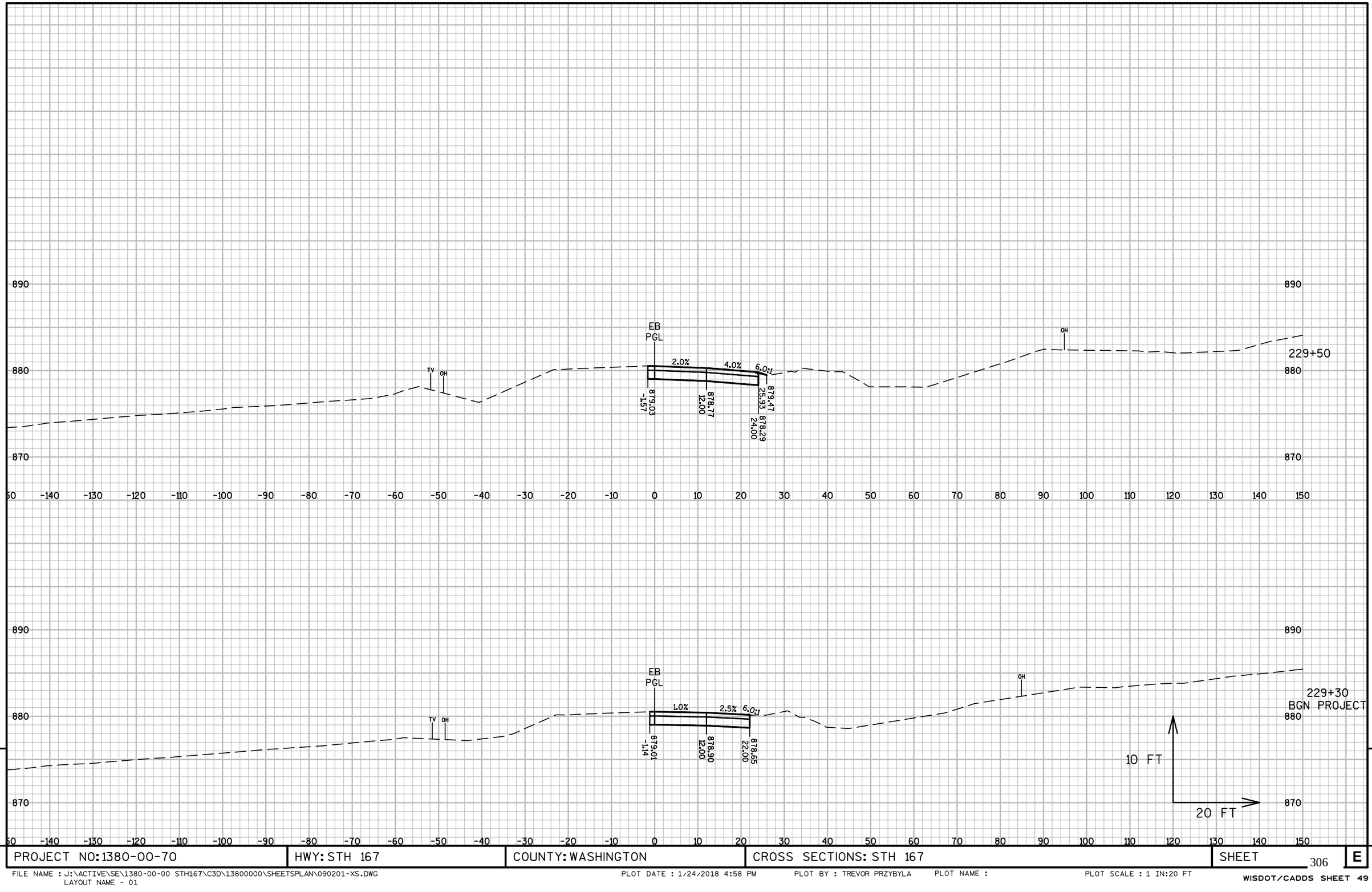
3/2/2018

STH 167													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material Note 2	Fill	EBS	Cut 1.00 Note 1	Expanded Fill 1.30	Mass Ordinate Note 9
229+30	22,930	--	35	--	--	--	--	--	--	--	--	--	--
229+50	22,950	20	39	--	0	--	27	--	0	--	27	0	27
230+00	23,000	50	40	--	0	--	73	--	0	--	100	0	100
230+50	23,050	50	40	--	1	--	74	--	1	--	174	2	172
231+00	23,100	50	39	--	4	--	74	--	5	--	248	8	239
231+50	23,150	50	38	--	2	--	72	--	6	--	320	16	304
232+00	23,200	50	37	--	9	--	70	--	11	--	389	30	359
232+50	23,250	50	43	--	7	--	74	--	15	--	463	49	414
233+00	23,300	50	53	--	7	--	88	--	13	--	551	66	486
233+50	23,350	50	69	--	8	--	113	--	14	--	665	84	581
234+00	23,400	50	54	--	--	--	114	--	8	--	779	94	685
234+50	23,450	50	39	--	44	--	86	--	40	--	865	146	718
235+00	23,500	50	38	--	37	--	71	--	75	--	935	243	692
235+50	23,550	50	37	--	27	--	69	--	59	--	1,005	321	684
236+00	23,600	50	38	--	21	--	69	--	44	--	1,074	379	695
236+50	23,650	50	37	--	15	--	69	--	33	--	1,142	421	721
237+00	23,700	50	46	--	6	--	77	--	19	--	1,219	446	773
237+50	23,750	50	105	--	--	--	140	--	5	--	1,359	453	907
238+00	23,800	50	96	--	0	--	187	--	0	--	1,546	453	1,093
238+50	23,850	50	98	--	3	--	180	--	3	--	1,726	457	1,269
239+00	23,900	50	122	--	4	--	204	--	7	--	1,931	466	1,465
239+50	23,950	50	159	--	3	--	260	--	6	--	2,191	474	1,717
240+00	24,000	50	133	--	3	--	271	--	5	--	2,462	481	1,981
240+50	24,050	50	108	--	6	--	224	--	8	--	2,685	491	2,194
241+00	24,100	50	227	--	4	--	311	--	9	--	2,996	503	2,493
241+50	24,150	50	163	--	72	--	361	--	71	--	3,357	594	2,762
242+00	24,200	50	165	--	216	--	303	--	267	--	3,660	942	2,718
242+50	24,250	50	151	--	218	--	293	--	403	--	3,953	1,466	2,487
243+00	24,300	50	90	--	220	--	224	--	406	--	4,176	1,993	2,183
243+50	24,350	50	77	--	338	--	155	--	517	--	4,331	2,665	1,666
244+00	24,400	50	92	--	252	--	156	--	547	--	4,487	3,376	1,111
244+50	24,450	50	85	--	227	--	164	--	444	--	4,650	3,953	698
245+00	24,500	50	101	--	182	--	172	--	379	--	4,822	4,446	376
245+50	24,550	50	107	--	130	--	193	--	289	--	5,015	4,821	194
246+00	24,600	50	147	--	88	--	235	--	201	--	5,250	5,083	167
246+50	24,650	50	101	--	70	--	229	--	146	--	5,479	5,273	207
247+00	24,700	50	139	--	74	--	222	--	133	--	5,701	5,446	256
247+50	24,750	50	127	--	58	--	246	--	122	--	5,948	5,604	344
248+00	24,800	50	122	--	50	--	231	--	100	--	6,178	5,734	444
248+50	24,850	50	126	--	62	--	230	--	104	--	6,409	5,869	540
249+00	24,900	50	165	--	31	--	270	--	87	--	6,678	5,981	697
249+50	24,950	50	234	--	21	--	370	--	49	--	7,048	6,045	1,003
250+00	25,000	50	332	--	13	--	525	--	32	--	7,573	6,087	1,486
250+50	25,050	50	429	--	9	--	705	--	21	--	8,277	6,114	2,163
						SUBTOTALS	8,277	--	4,703				

STH 167													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material Note 2	Fill	EBS	Cut 1.00 Note 1	Expanded Fill 1.30	Mass Ordinate Note 9
251+00	25,100	50	572	--	2	--	927	--	11	--	9,204	6,128	3,076
251+50	25,150	50	839	--	--	--	1,307	--	2	--	10,511	6,131	4,380
251+70	25,170	20	244	--	--	--	401	--	--	--	10,912	6,131	4,781
252+00	25,200	30	251	--	--	--	275	--	--	--	11,187	6,131	5,056
252+18	25,218	18	252	--	--	--	168	--	--	--	11,355	6,131	5,224
252+50	25,250	32	515	--	77	--	455	--	45	--	11,810	6,190	5,619
253+00	25,300	50	242	--	79	--	702	--	144	--	12,511	6,377	6,134
253+50	25,350	50	199	--	180	--	409	--	240	--	12,920	6,689	6,231
254+00	25,400	50	175	--	343	--	346	--	484	--	13,267	7,318	5,948
254+50	25,450	50	159	--	386	--	309	--	675	--	13,576	8,196	5,380
255+00	25,500	50	177	--	373	--	311	--	703	--	13,887	9,110	4,777
255+50	25,550	50	152	--	457	--	304	--	769	--	14,191	10,109	4,081
256+00	25,600	50	159	--	503	--	288	--	889	--	14,479	11,265	3,214
256+50	25,650	50	200	--	317	--	332	--	760	--	14,811	12,253	2,558
257+00	25,700	50	176	--	447	--	347	--	708	--	15,158	13,173	1,986
257+50	25,750	50	185	--	428	--	334	--	811	--	15,492	14,227	1,265
258+00	25,800	50	237	--	250	--	391	--	629	--	15,883	15,044	839
258+50	25,850	50	191	--	277	--	397	--	488	--	16,280	15,679	601
259+00	25,900	50	204	--	79	--	366	--	330	--	16,647	16,108	539
259+50	25,950	50	221	--	27	--	393	--	98	--	17,040	16,235	805
260+00	26,000	50	290	--	0	--	472	--	25	--	17,512	16,268	1,244
260+50	26,050	50	399	--	1	--	637	--	1	--	18,150	16,270	1,880
261+00	26,100	50	169	--	34	--	525	--	33	--	18,675	16,312	2,363
261+50	26,150	50	121	--	20	--	269	--	50	--	18,944	16,377	2,567
262+00	26,200	50	111	--	27	--	215	--	43	--	19,159	16,433	2,726
262+50	26,250	50	102	--	22	--	197	--	45	--	19,356	16,492	2,864
263+00	26,300	50	53	--	19	--	143	--	38	--	19,499	16,542	2,958
263+50	26,350	50	56	--	8	--	101	--	26	--	19,600	16,575	3,025
264+00	26,400	50	67	--	5	--	114	--	12	--	19,714	16,590	3,123
264+50	26,450	50	78	--	13	--	134	--	16	--	19,848	16,612	3,236
265+00	26,500	50	67	--	15	--	134	--	26	--	19,982	16,646	3,336
265+50	26,550	50	37	--	21	--	97	--	34	--	20,079	16,689	3,389
266+00	26,600	50	51	--	0	--	82	--	20	--	20,160	16,715	3,446
266+50	26,650	50	38	--	25	--	83	--	23	--	20,243	16,744	3,499
267+00	26,700	50	37	--	26	--	69	--	47	--	20,312	16,805	3,507
267+50	26,750	50	37	--	30	--	69	--	52	--	20,381	16,873	3,507
268+00	26,800	50	38	--	38	--	70	--	64	--	20,451	16,956	3,495
268+50	26,850	50	37	--	32	--	70	--	66	--	20,521	17,041	3,479
269+00	26,900	50	37	--	39	--	69	--	66	--	20,589	17,127	3,462
269+50	26,950	50	36	--	19	--	68	--	53	--	20,657	17,196	3,461
270+00	27,000	50	35	--	51	--	66	--	65	--	20,723	17,280	3,443
270+50	27,050	50	37	--	8	--	67	--	55	--	20,790	17,352	3,439
271+00	27,100	50	38	--	2	--	70	--	9	--	20,860	17,364	3,496
271+49	27,149	49	38	--	1	--	69	--	3	--	20,929	17,368	3,561
					TOTALS		20,929	2,350	13,360	--			

COUNTRY AIRE DRIVE													
			AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)		
STATION	Real Station	Distance	Cut	Salvaged/ Unusable Pavement Material	Fill	EBS	Cut	Salvaged/ Unusable Pavement Material Note 2	Fill	EBS	Cut 1.00	Expanded Fill 1.30	Mass Ordinate Note 9
534+05	53,405	--	--	--	--	--	--	--	--	--	--	--	--
534+50	53,450	45	55	--	2	--	46	--	2	--	46	2	44
535+00	53,500	50	52	--	23	--	99	--	23	--	145	33	112
535+50	53,550	50	44	--	30	--	89	--	49	--	234	97	137
536+00	53,600	50	47	--	26	--	85	--	52	--	318	164	154
536+50	53,650	50	74	--	9	--	112	--	32	--	430	206	224
537+00	53,700	50	104	--	1	--	165	--	9	--	595	218	377
537+50	53,750	50	113	--	15	--	201	--	14	--	796	237	559
538+00	53,800	50	105	--	26	--	202	--	38	--	998	286	712
538+50	53,850	50	74	--	57	--	166	--	77	--	1,165	386	778
539+00	53,900	50	68	--	74	--	131	--	121	--	1,296	544	752
539+50	53,950	50	95	--	58	--	151	--	123	--	1,447	704	743
540+00	54,000	50	226	--	--	--	298	--	54	--	1,744	774	971
540+50	54,050	50	351	--	--	--	534	--	--	--	2,279	774	1,505
540+85	54,085	35	168	--	--	--	336	--	--	--	2,615	774	1,841
541+70	54,170	--	156	--	--	--	--	--	--	--	2,615	774	1,841
542+00	54,200	30	331	--	10	--	271	--	6	--	2,886	781	2,104
542+50	54,250	50	193	--	46	--	485	--	52	--	3,370	849	2,522
543+00	54,300	50	173	--	26	--	339	--	66	--	3,710	935	2,775
543+50	54,350	50	161	--	14	--	309	--	37	--	4,019	983	3,036
544+00	54,400	50	143	--	14	--	281	--	26	--	4,300	1,017	3,283
544+50	54,450	50	103	--	31	--	228	--	41	--	4,528	1,071	3,457
545+00	54,500	50	77	--	43	--	167	--	68	--	4,695	1,160	3,535
545+50	54,550	50	68	--	30	--	134	--	67	--	4,829	1,247	3,581
546+00	54,600	50	90	--	2	--	147	--	29	--	4,976	1,286	3,690
546+50	54,650	50	126	--	0	--	201	--	2	--	5,176	1,288	3,888
547+00	54,700	50	123	--	2	--	231	--	2	--	5,407	1,290	4,117
547+50	54,750	50	106	--	5	--	212	--	7	--	5,619	1,299	4,320
548+00	54,800	50	54	--	12	--	148	--	16	--	5,768	1,319	4,449
548+15	54,815	15	51	--	18	--	29	--	8	--	5,797	1,330	4,468
					TOTALS		5,797	300	1,023	0			



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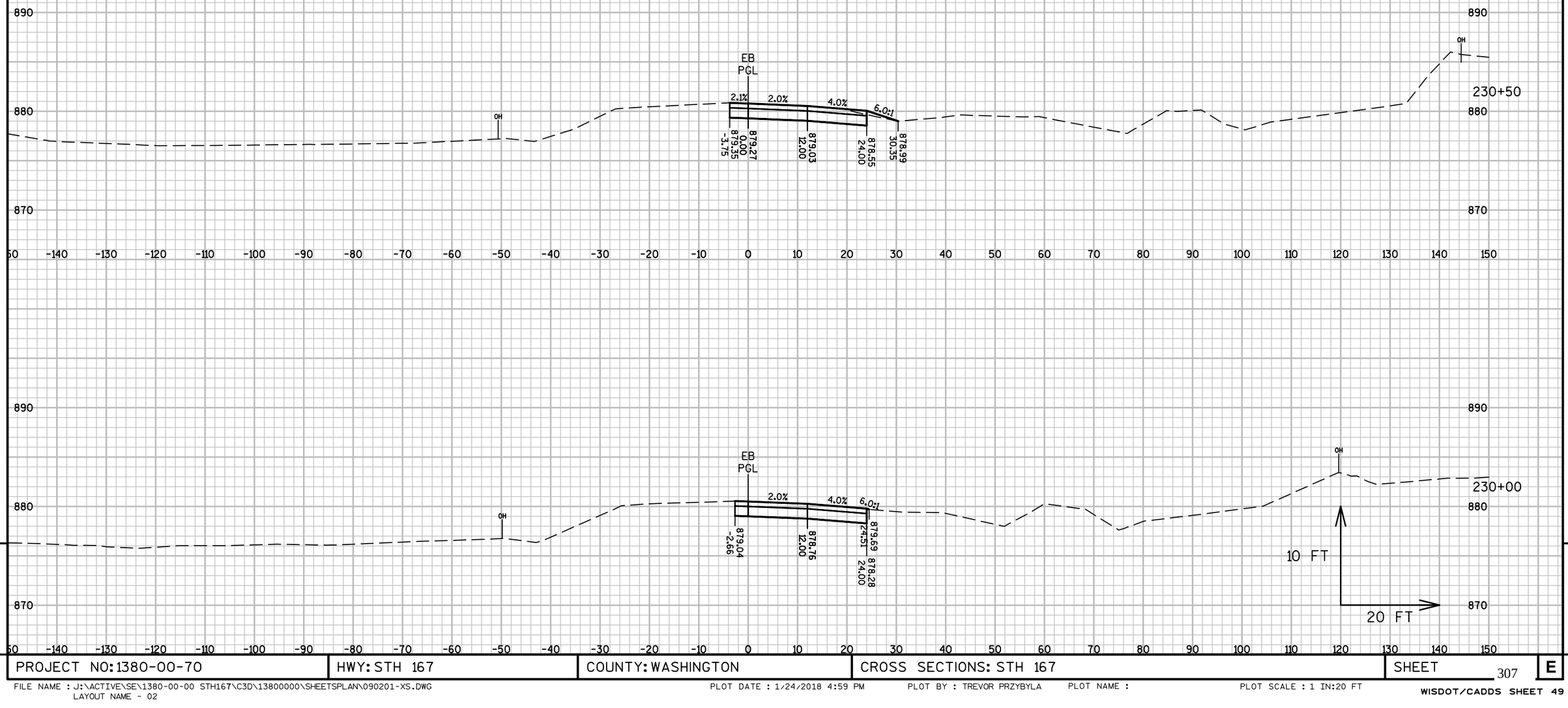
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 306	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 1/24/2018 4:58 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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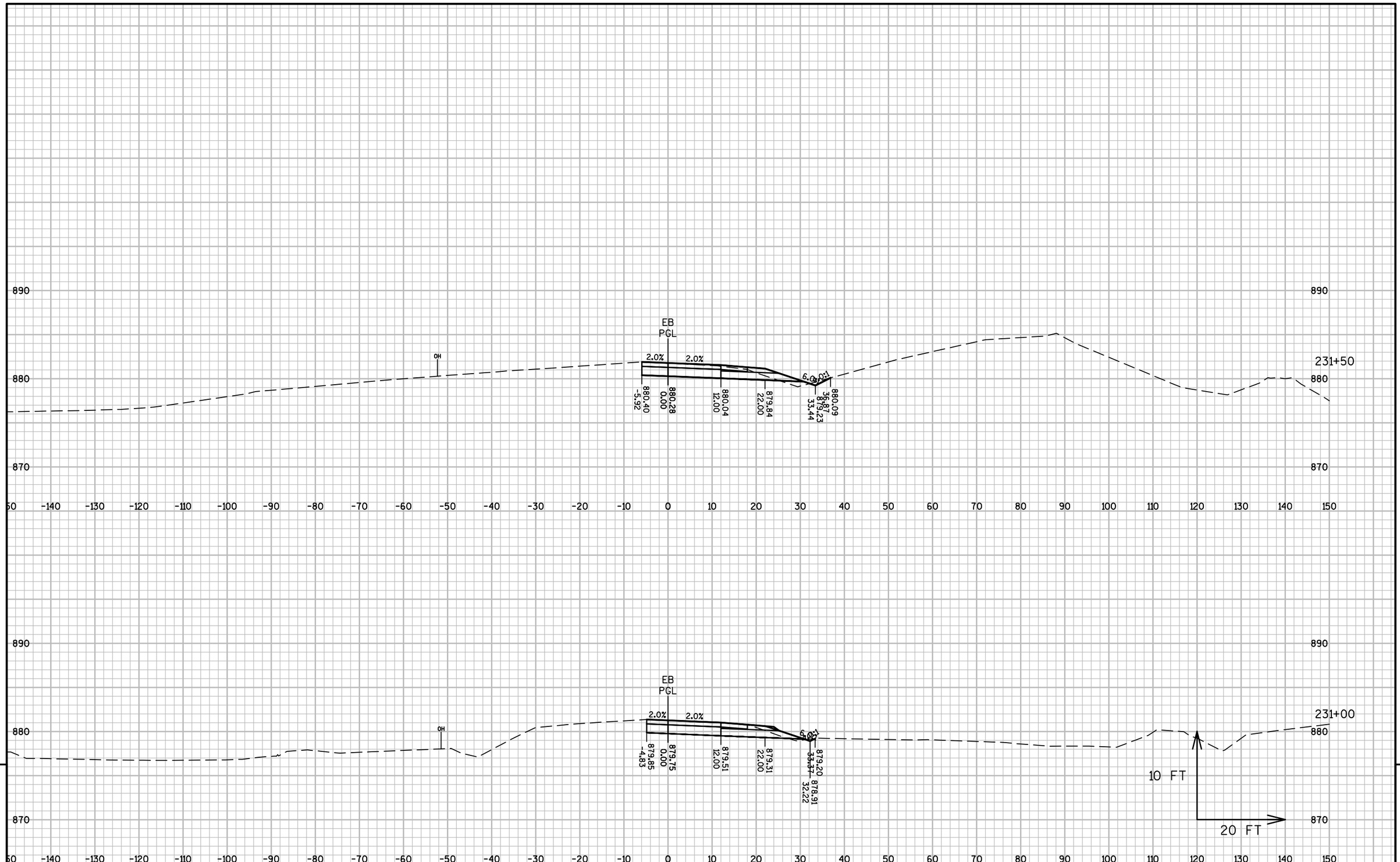
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 307	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 1/24/2018 4:59 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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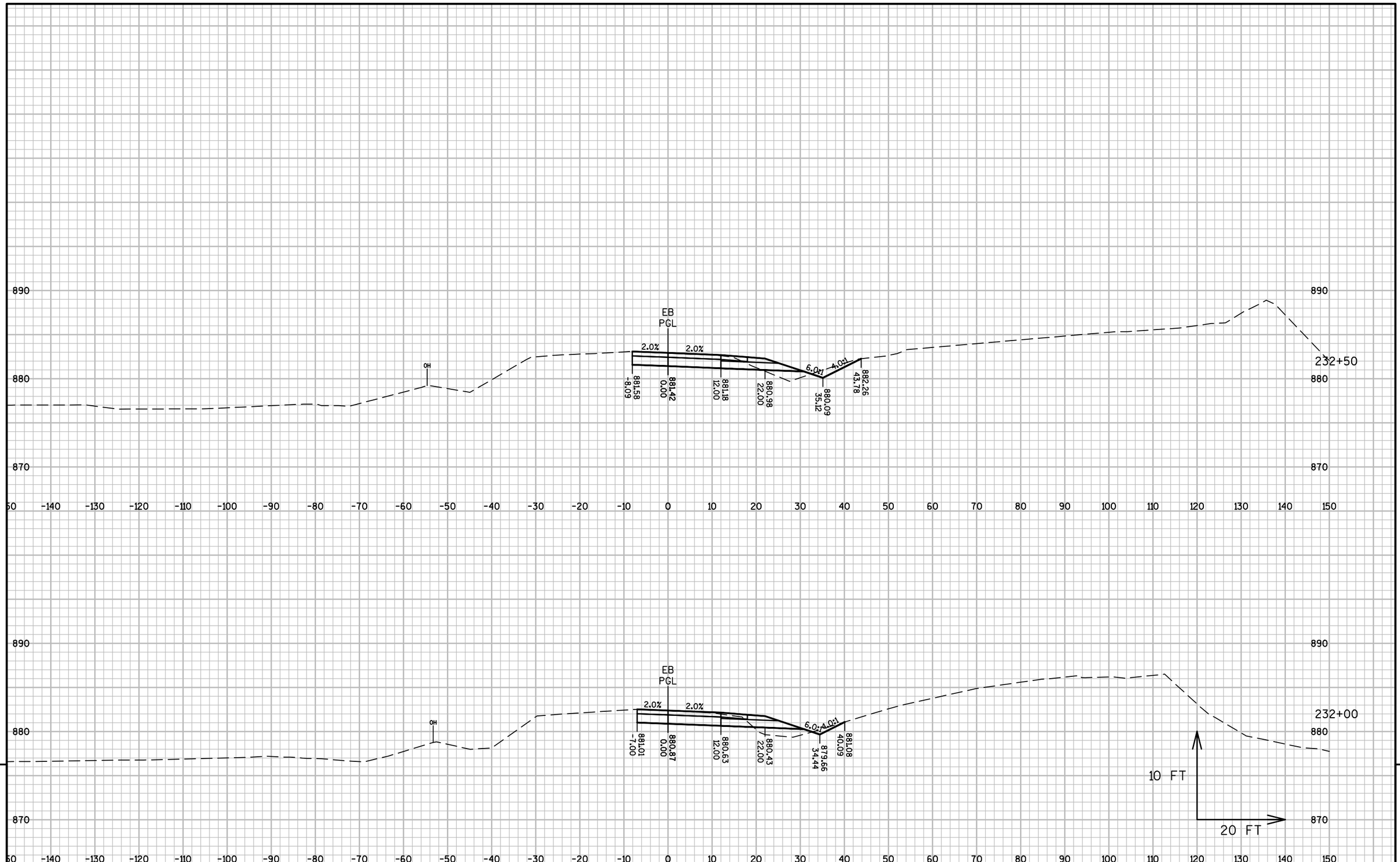
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 308 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 1/24/2018 4:59 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 309	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 1/24/2018 4:59 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

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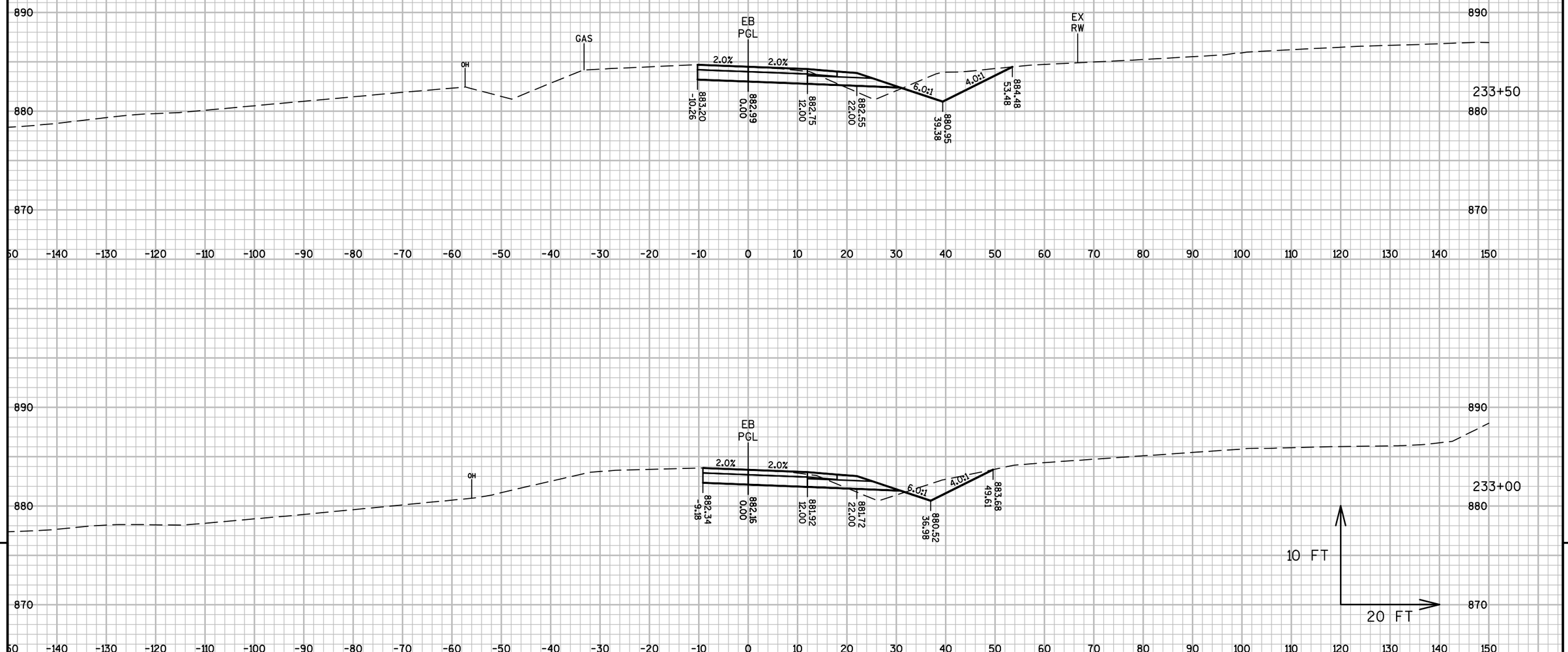
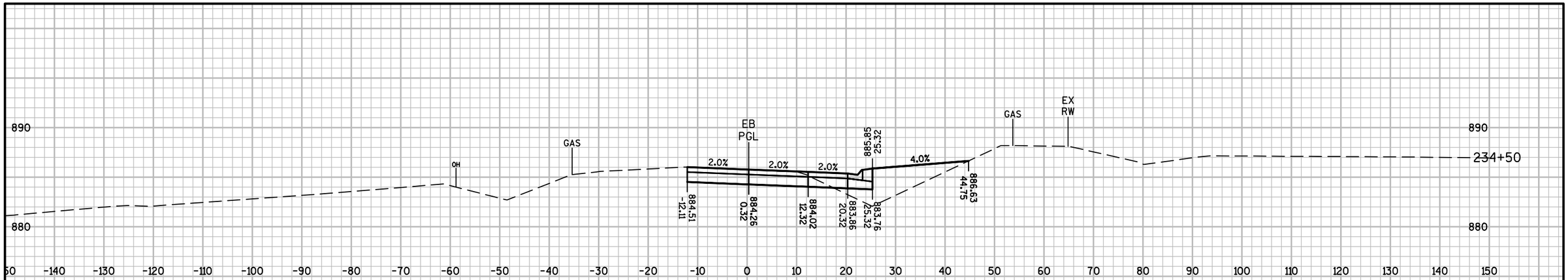


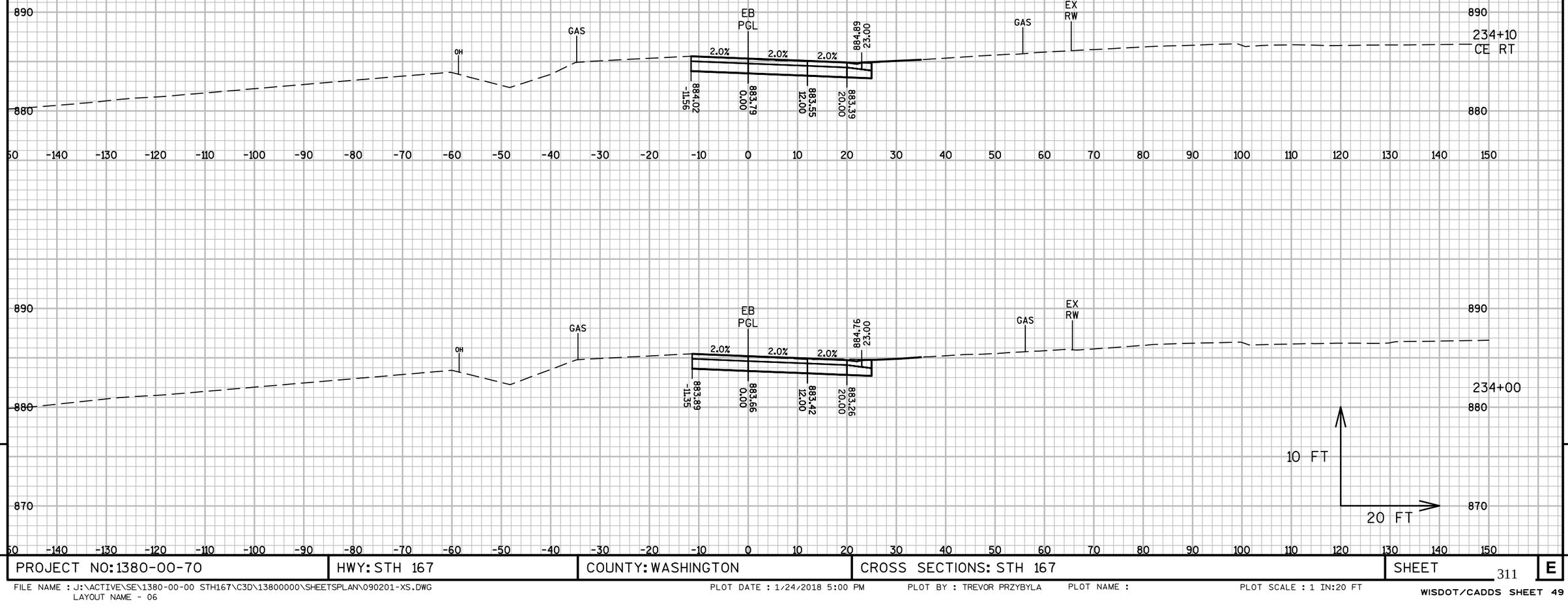
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 310 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 1/24/2018 5:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





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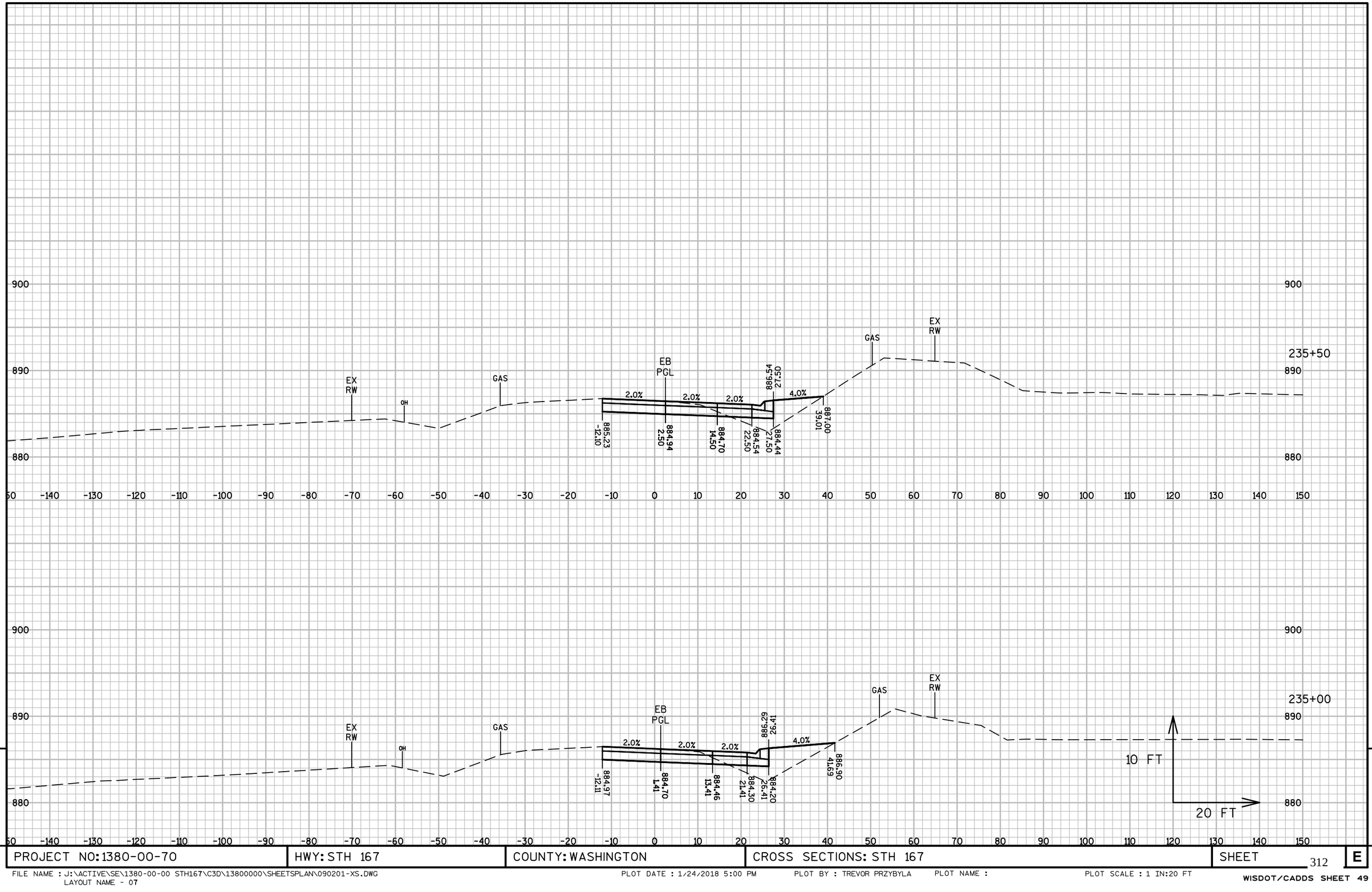
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 1/24/2018 5:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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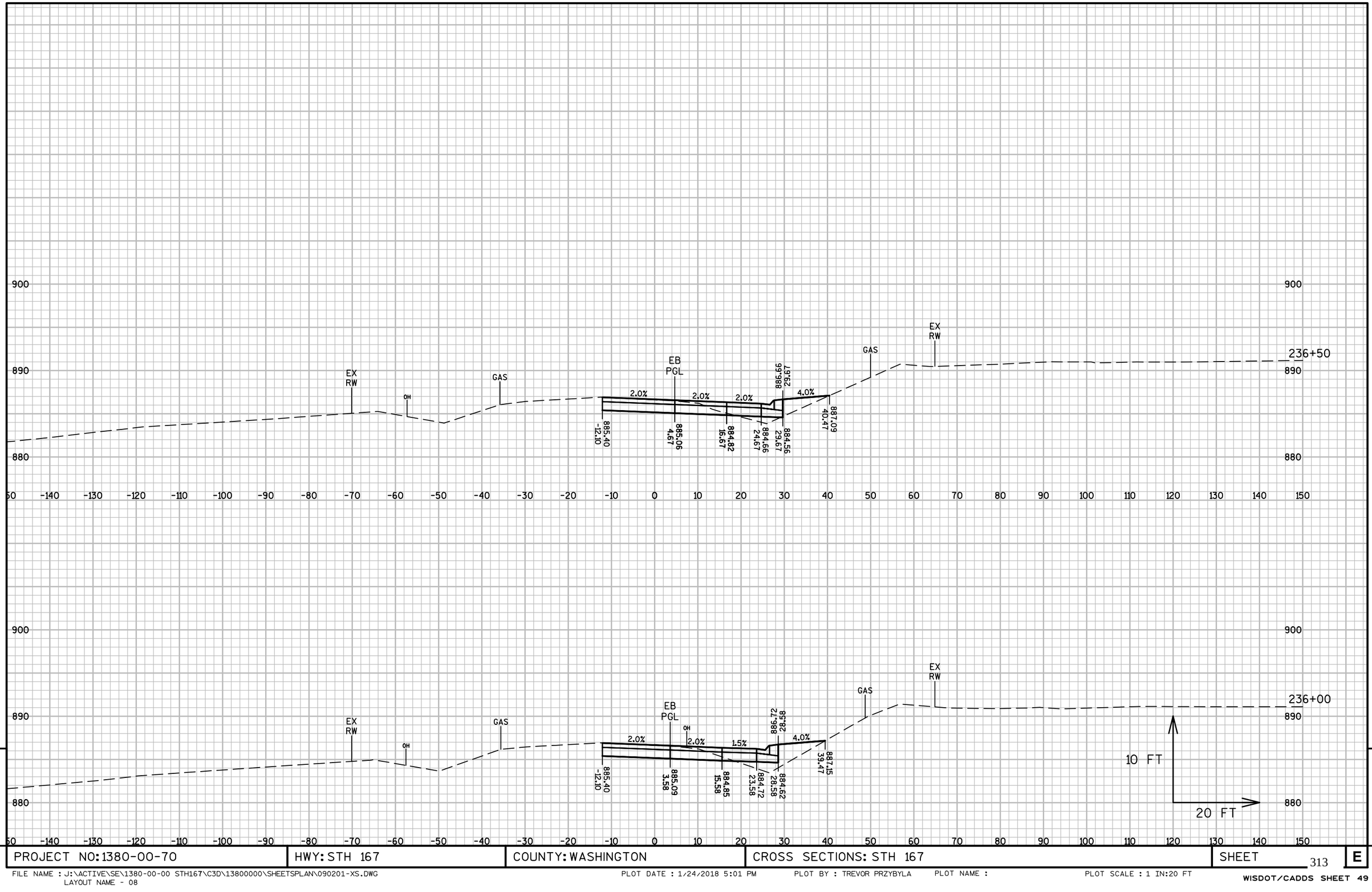
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 1/24/2018 5:00 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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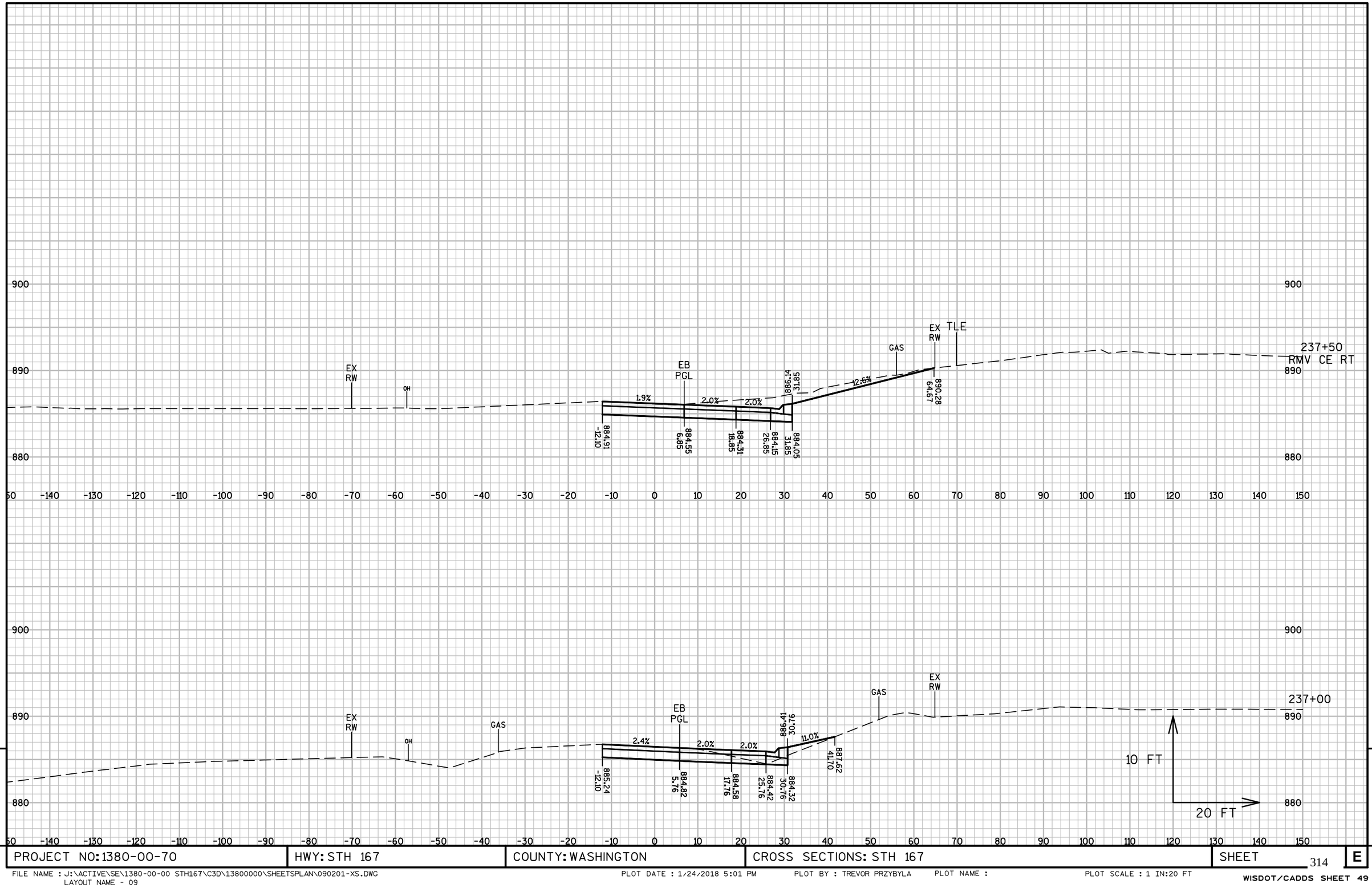
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 1/24/2018 5:01 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 314	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 1/24/2018 5:01 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

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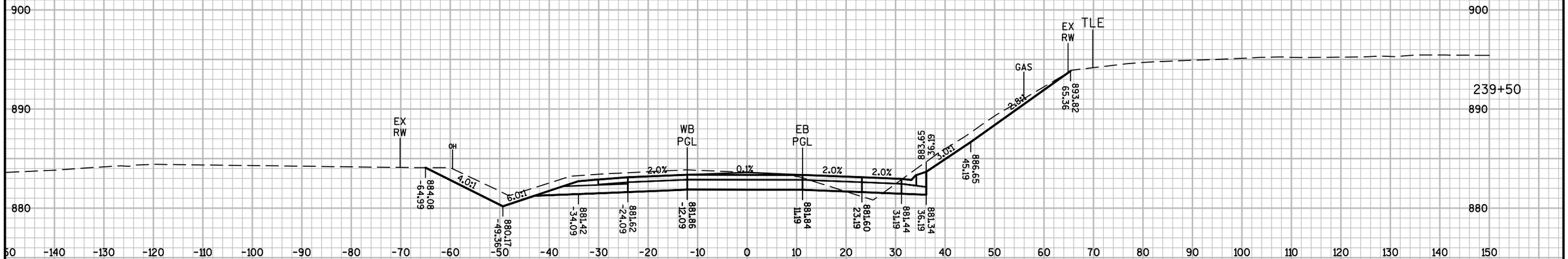
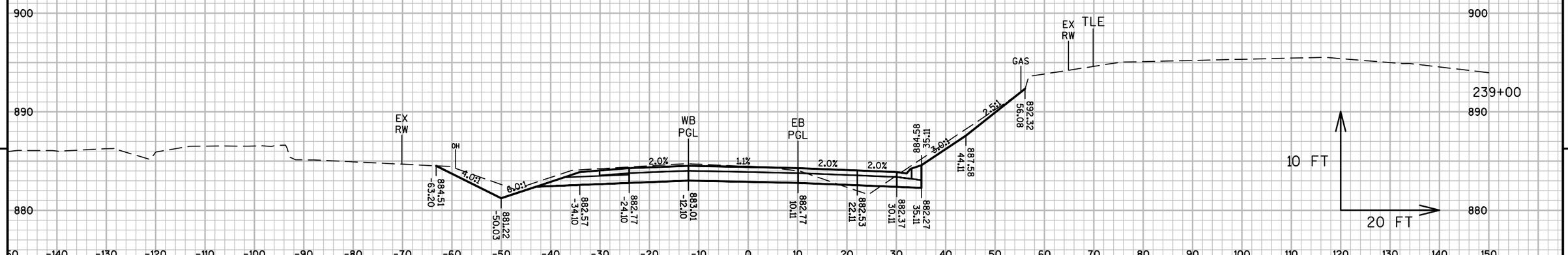
PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 315	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 1/24/2018 5:01 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





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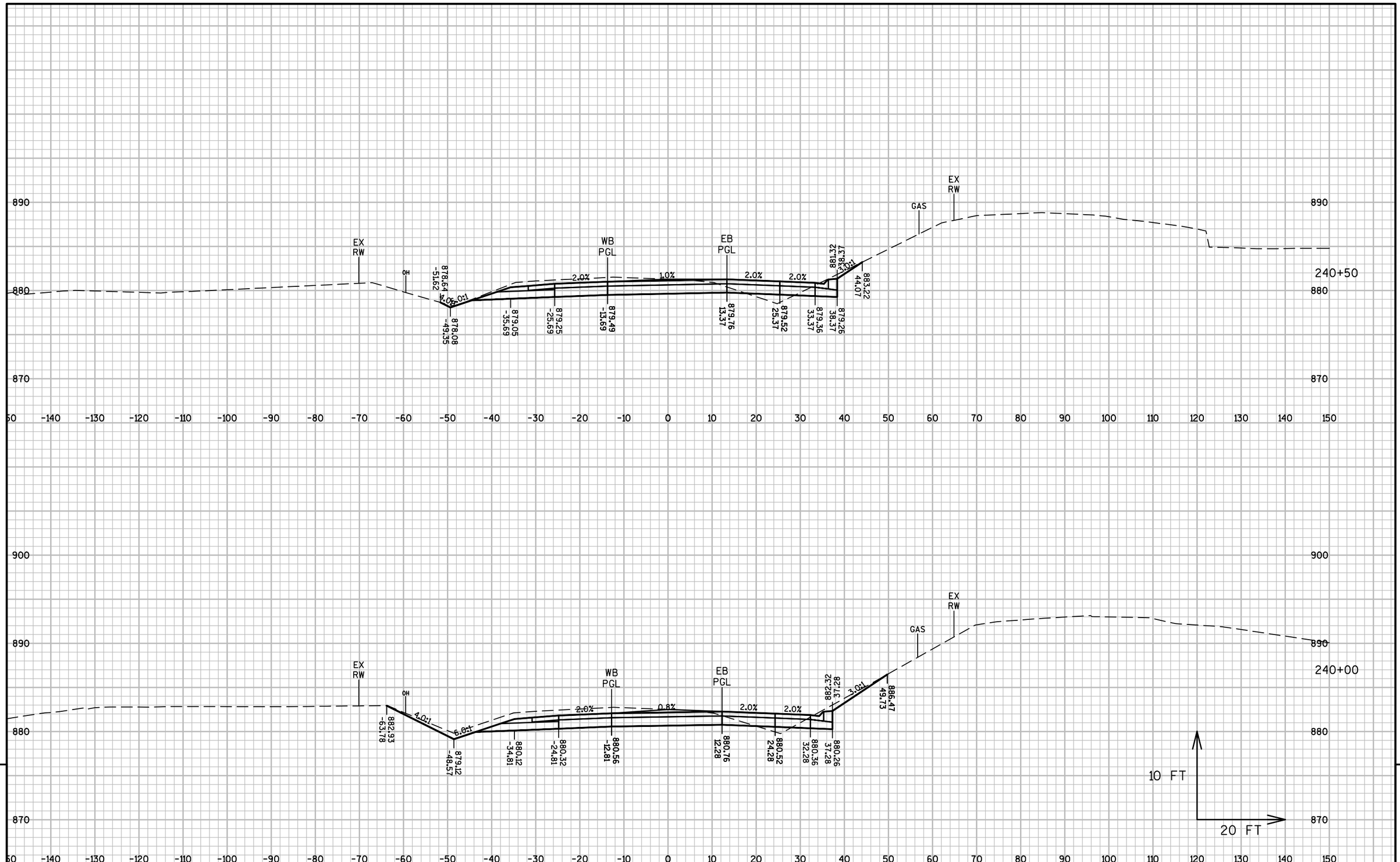
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 316	E

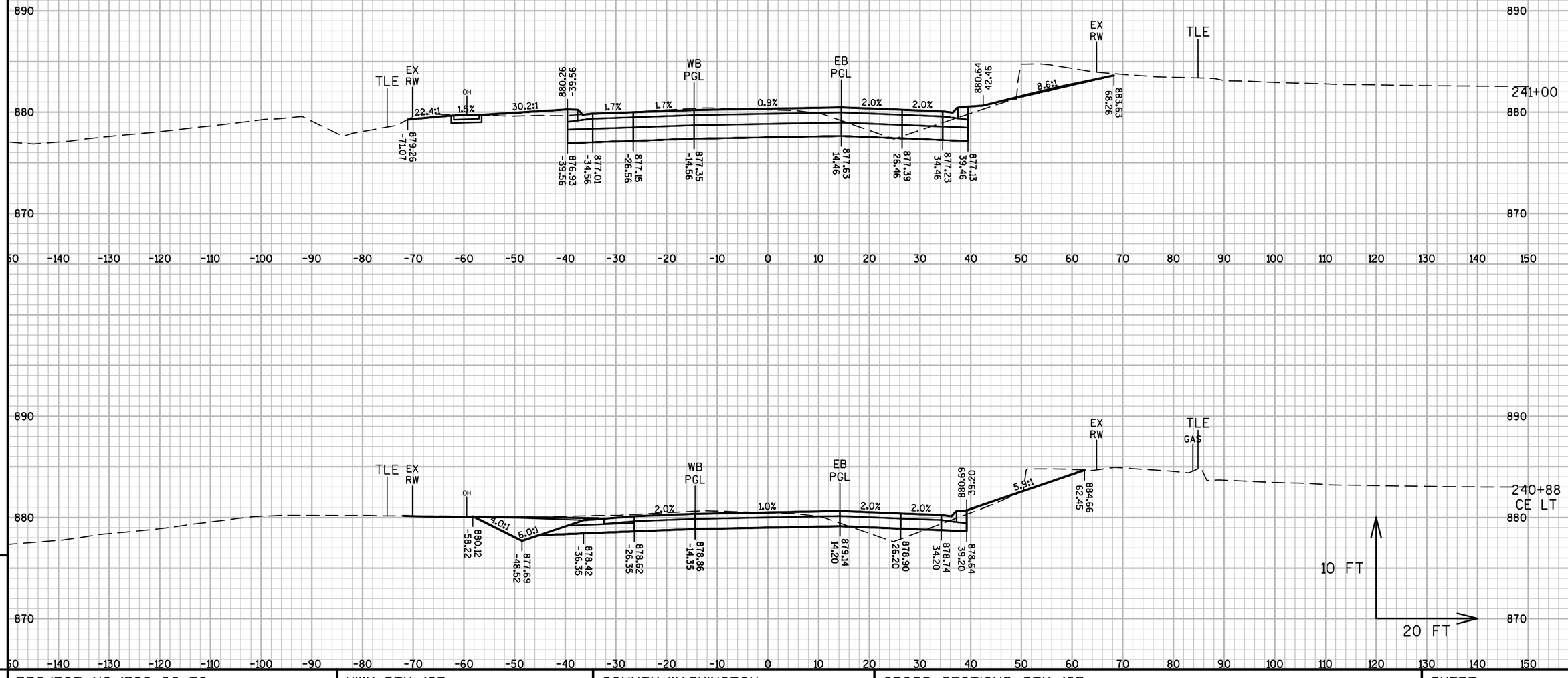


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 317 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 1/24/2018 5:02 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

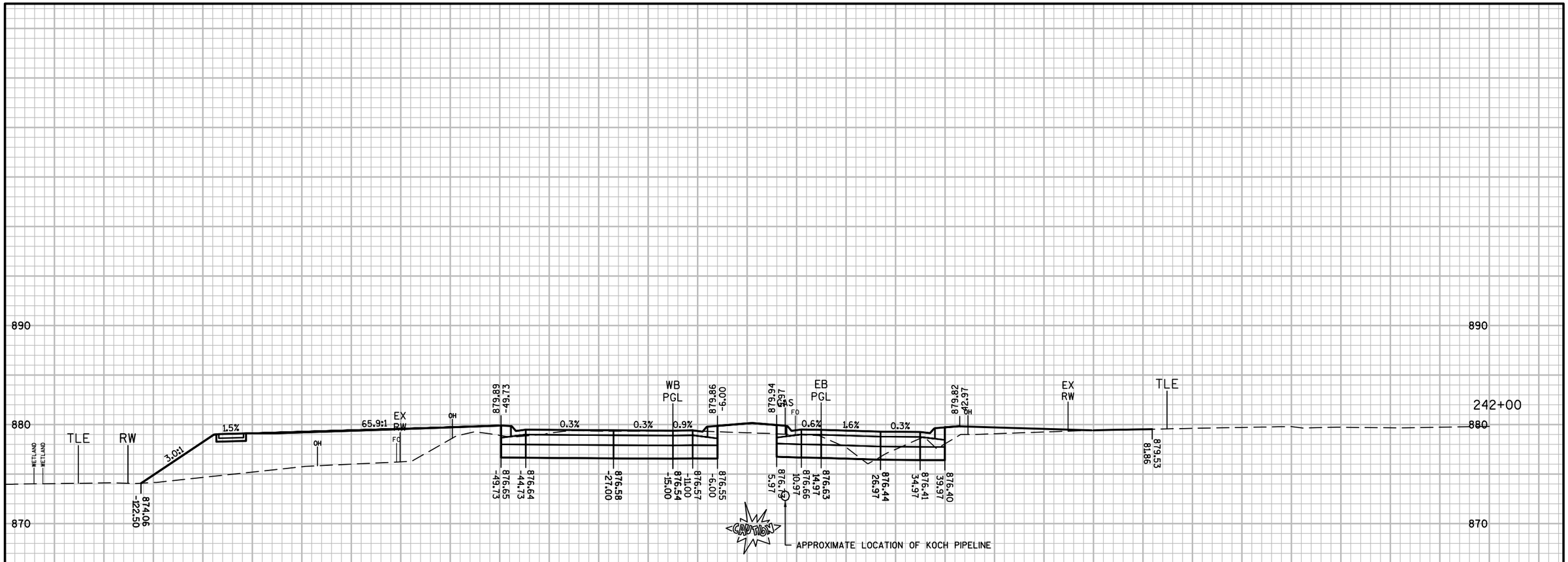


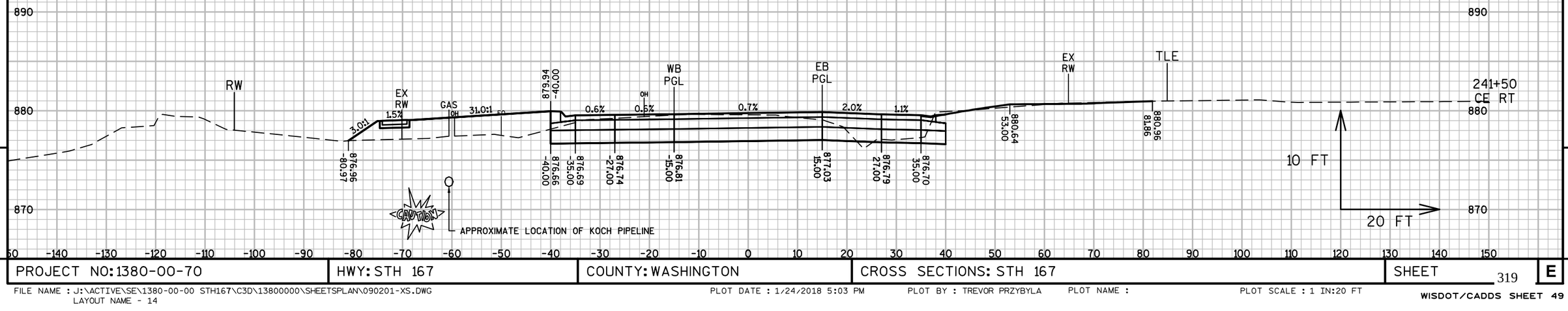
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 318 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 1/24/2018 5:02 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





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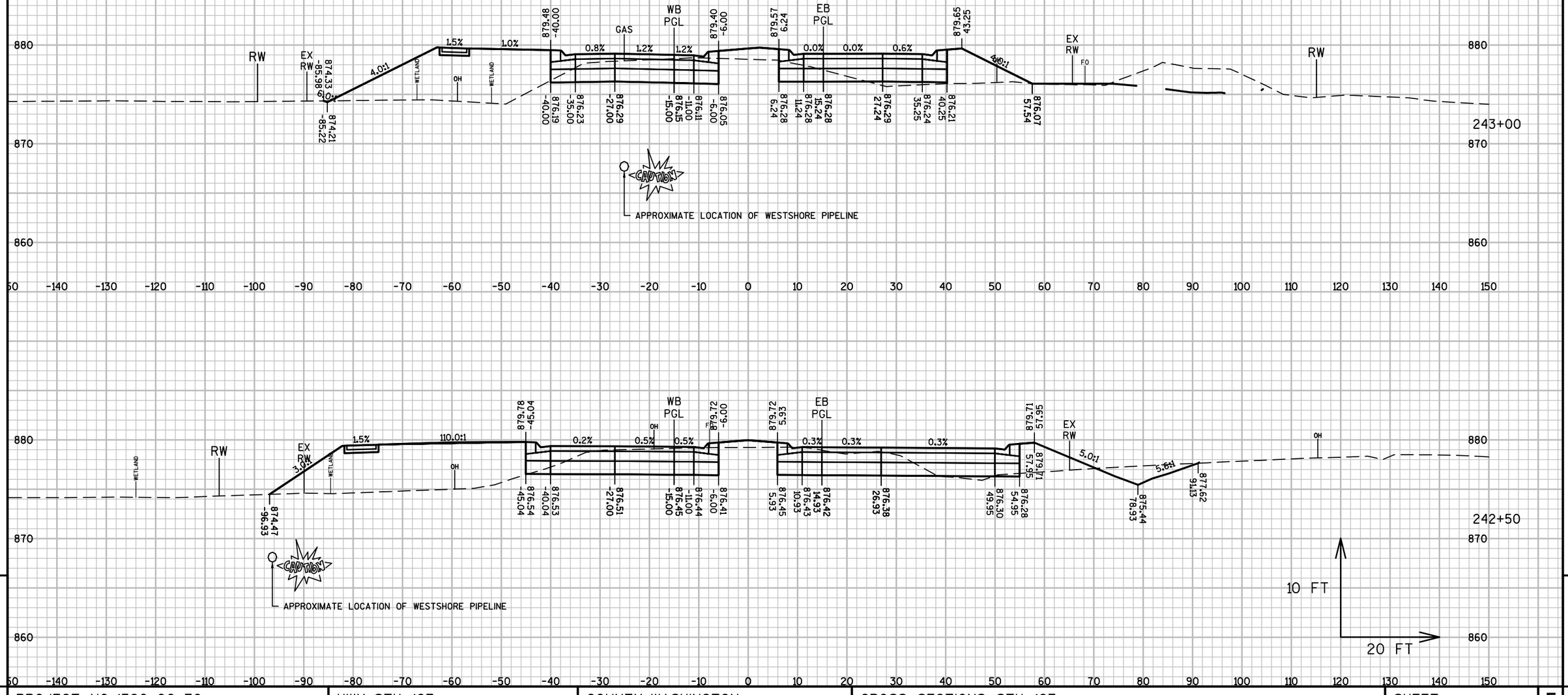
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 319	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14
PLOT DATE : 1/24/2018 5:03 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



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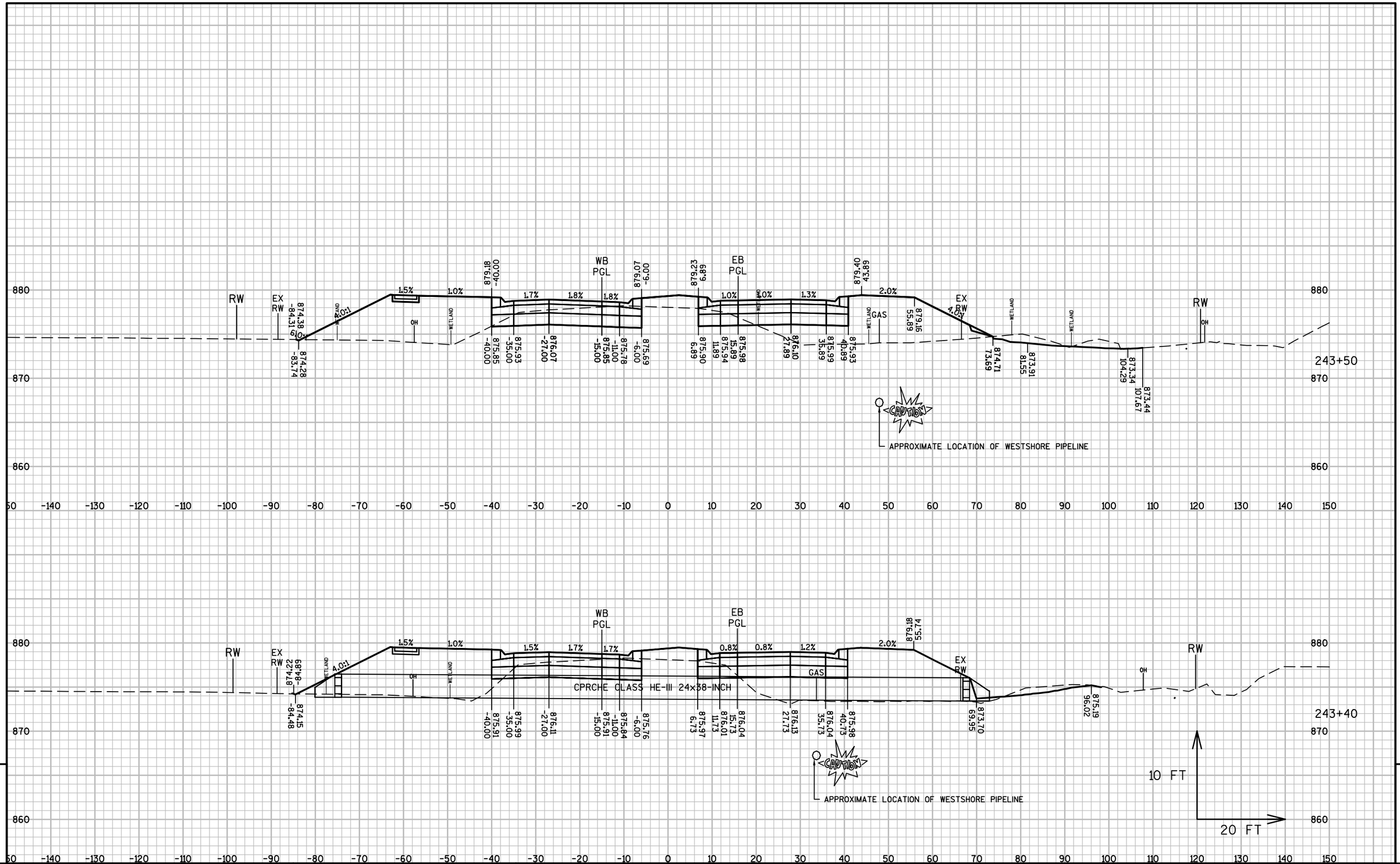
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 320	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 1/24/2018 5:03 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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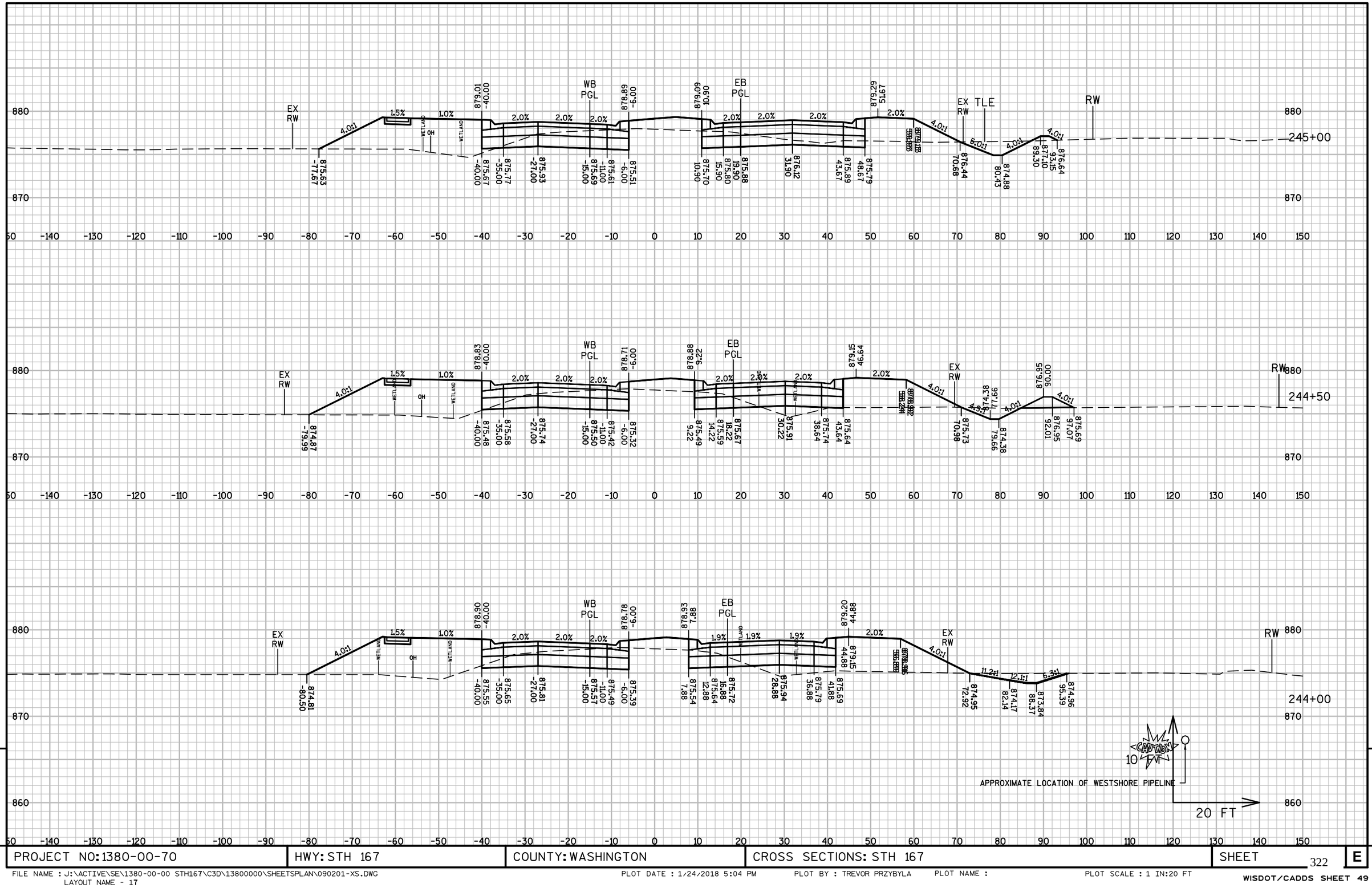
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 321	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 1/24/2018 5:03 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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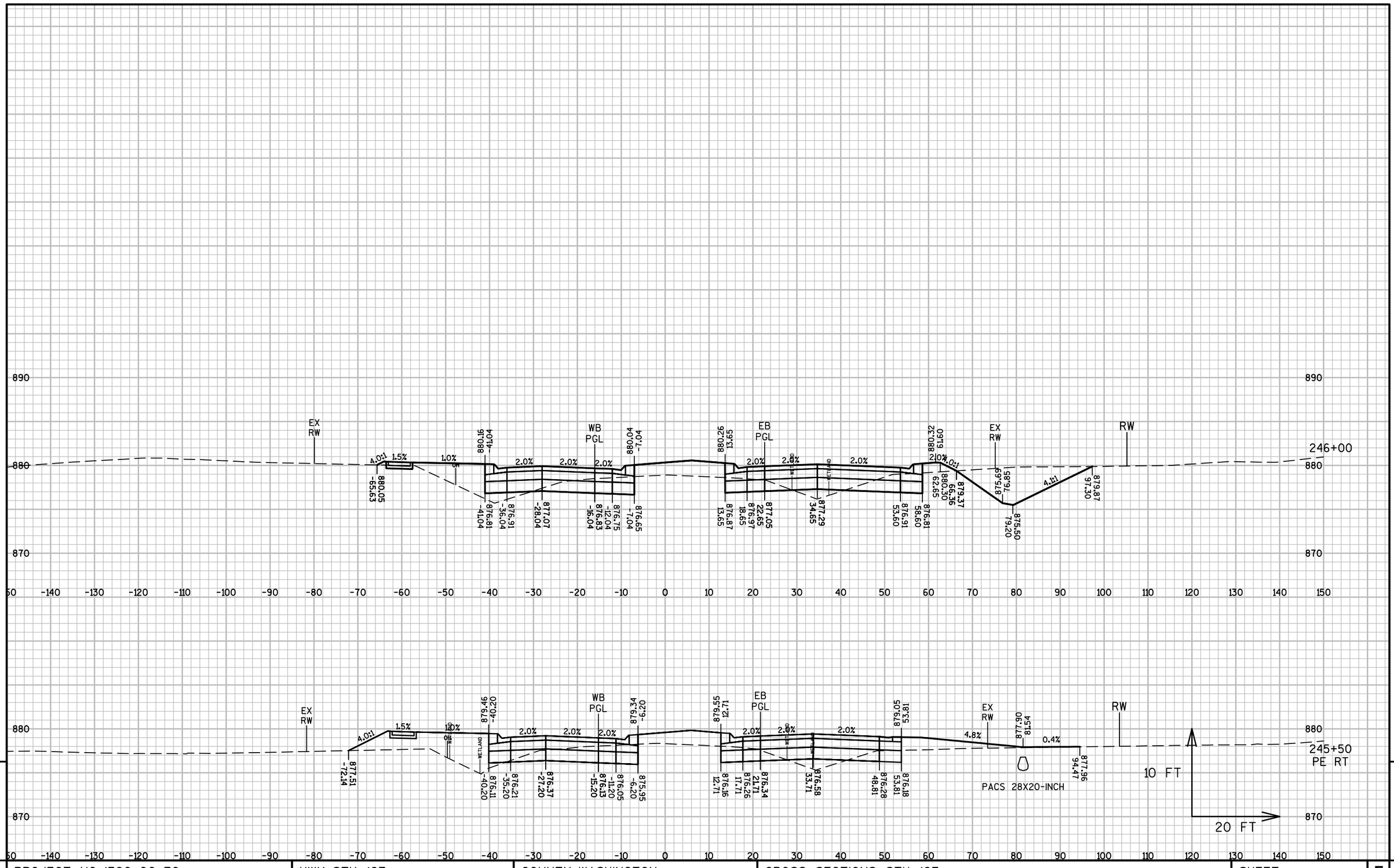
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 322	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 1/24/2018 5:04 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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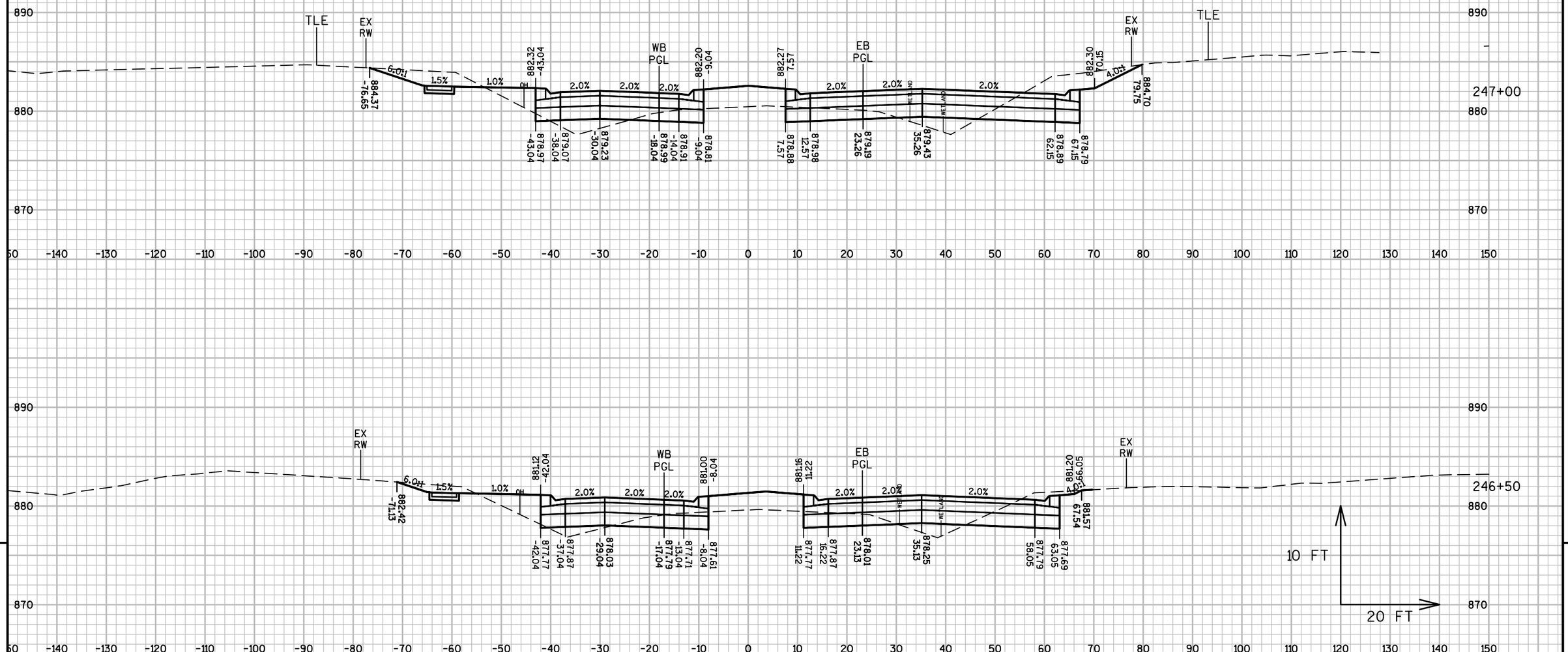
PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 323	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 1/24/2018 5:04 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

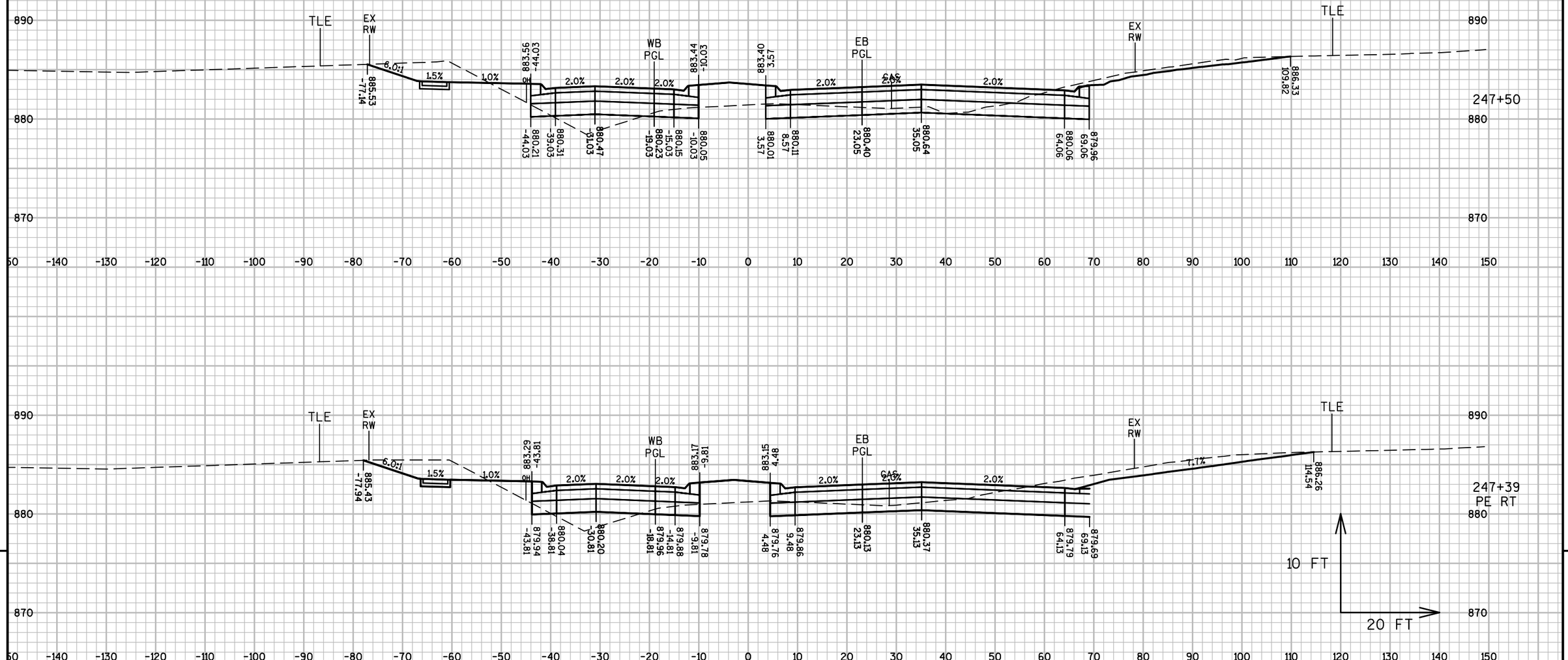


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 324 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 1/24/2018 5:04 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

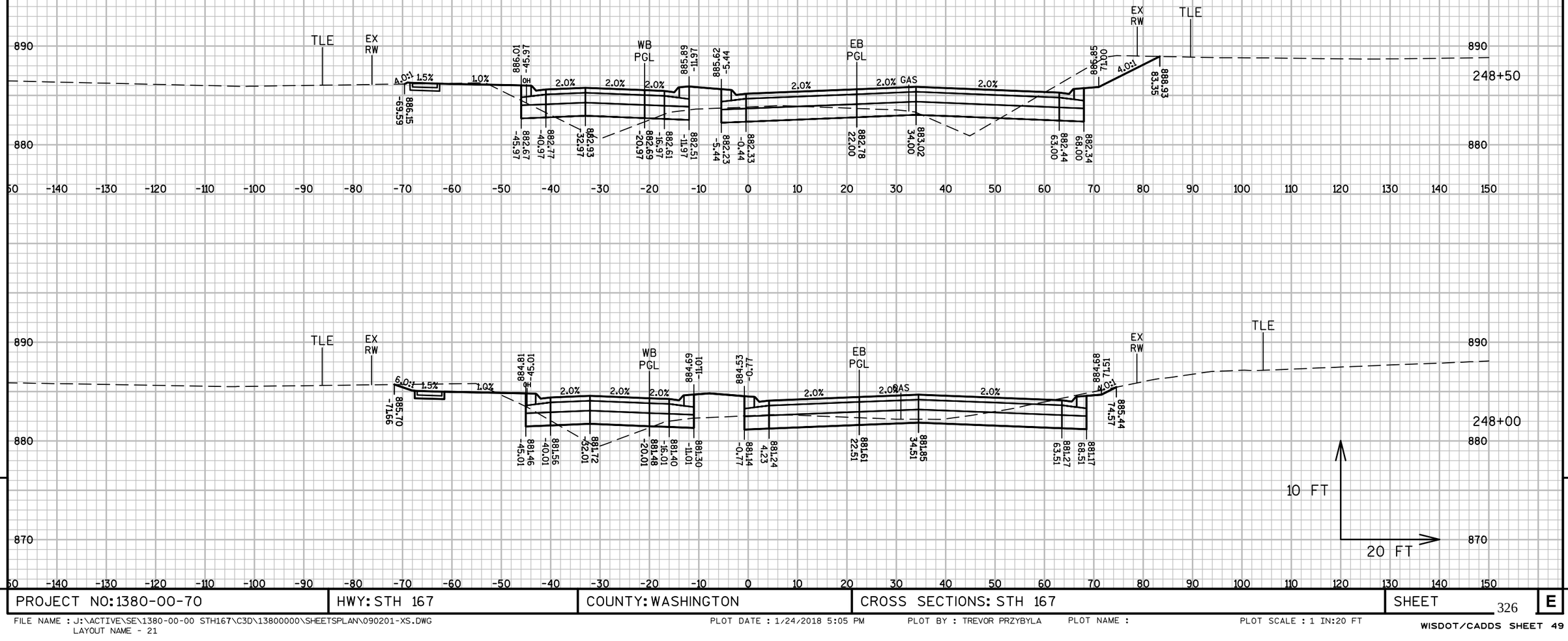


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 325 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 1/24/2018 5:04 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

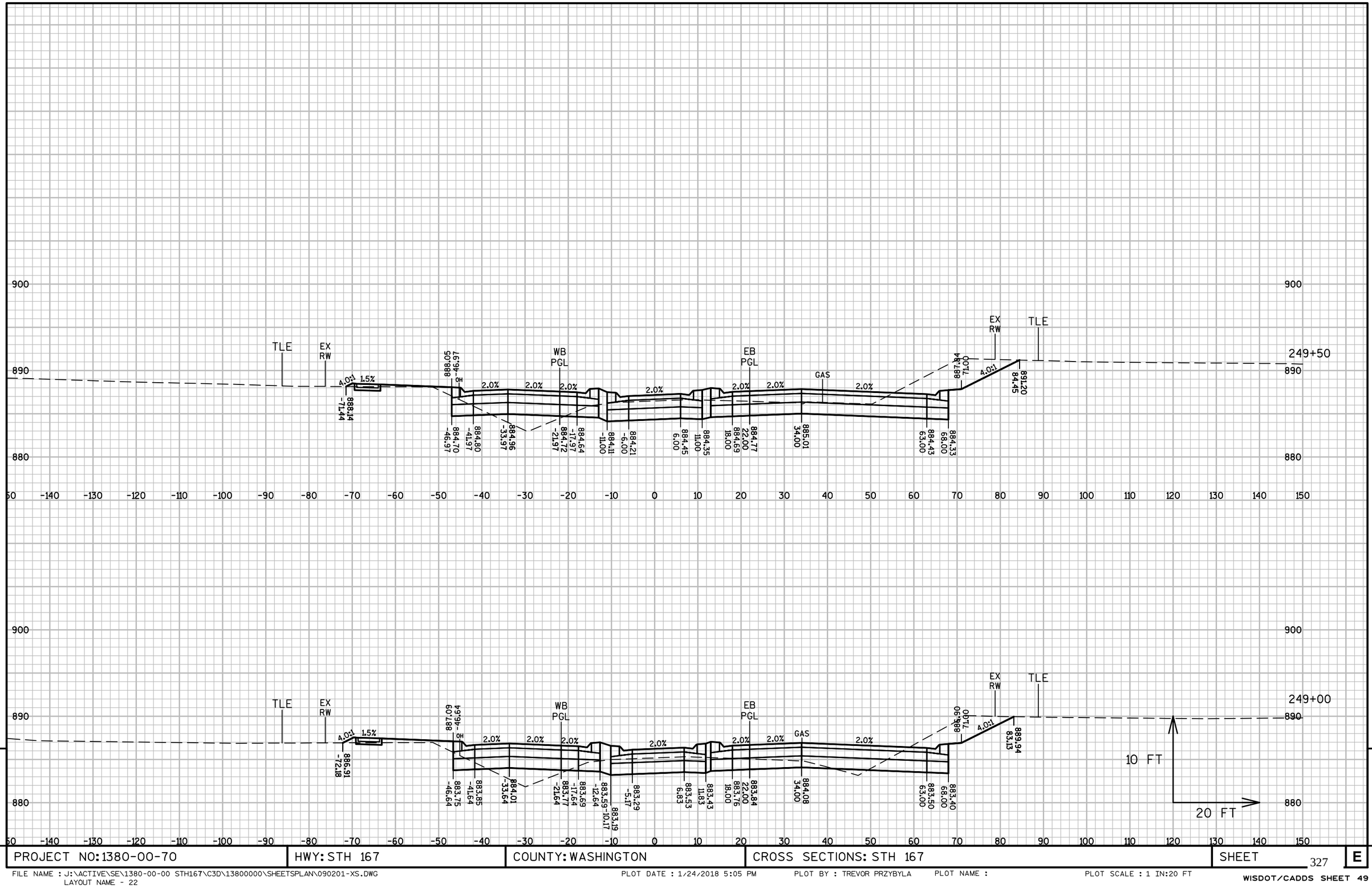


PROJECT NO:1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 326	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 1/24/2018 5:05 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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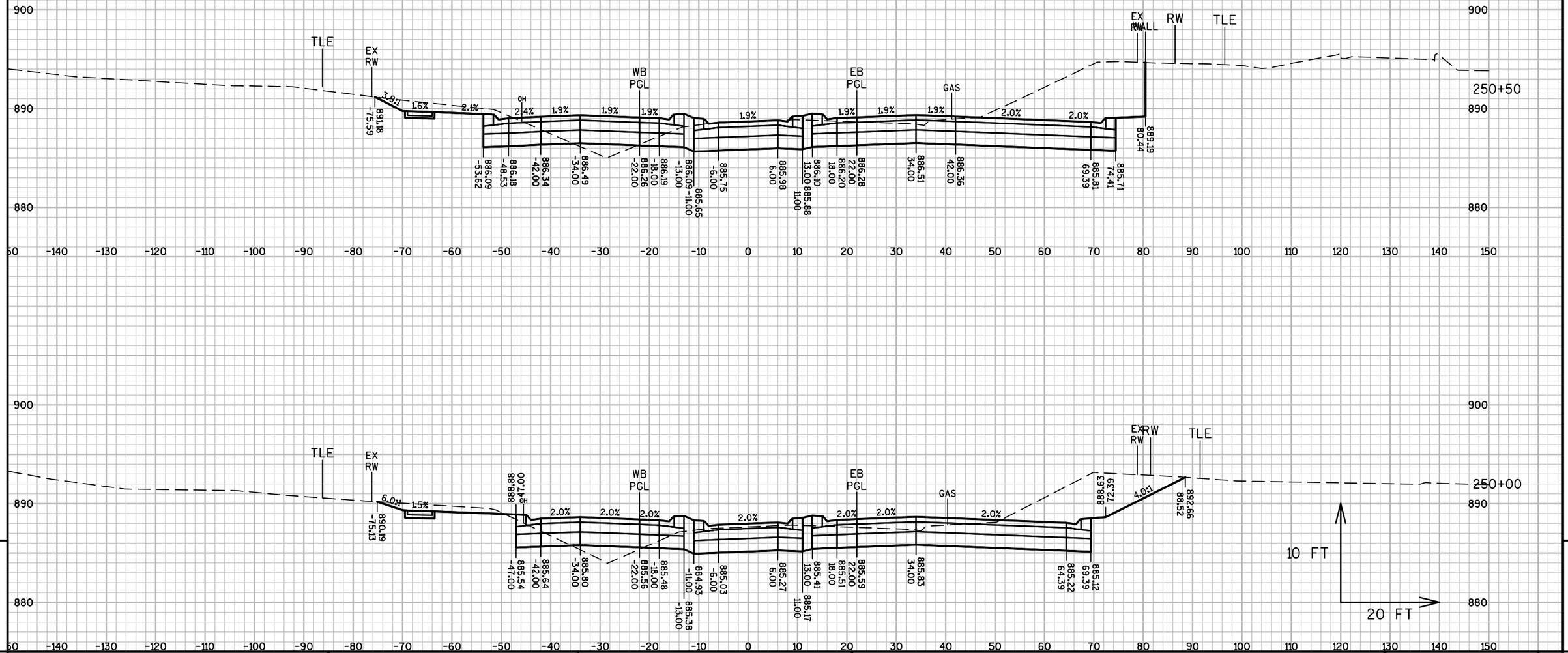
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 327	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 1/24/2018 5:05 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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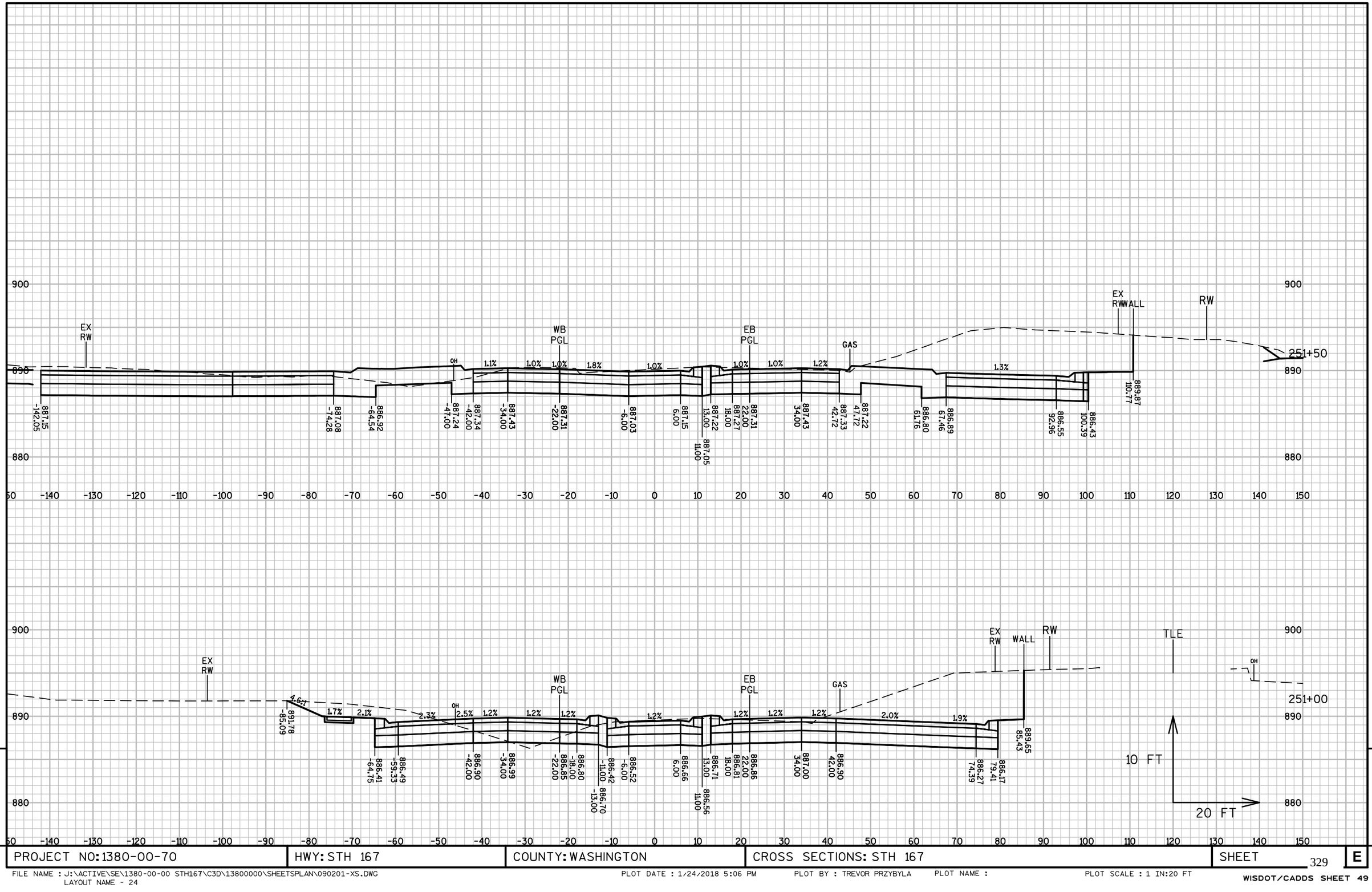
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 328	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 23

PLOT DATE : 1/24/2018 5:05 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

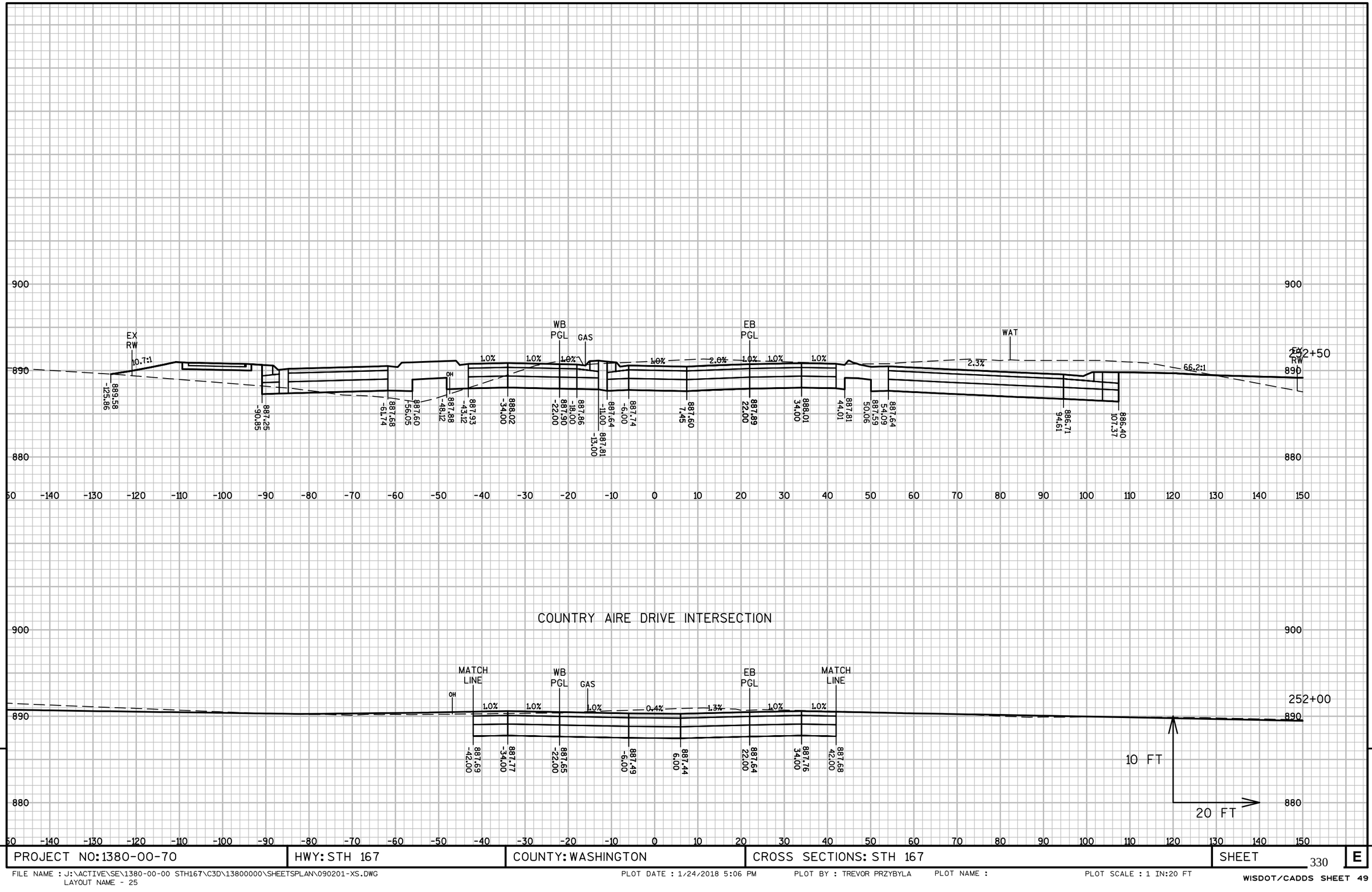


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 329	E

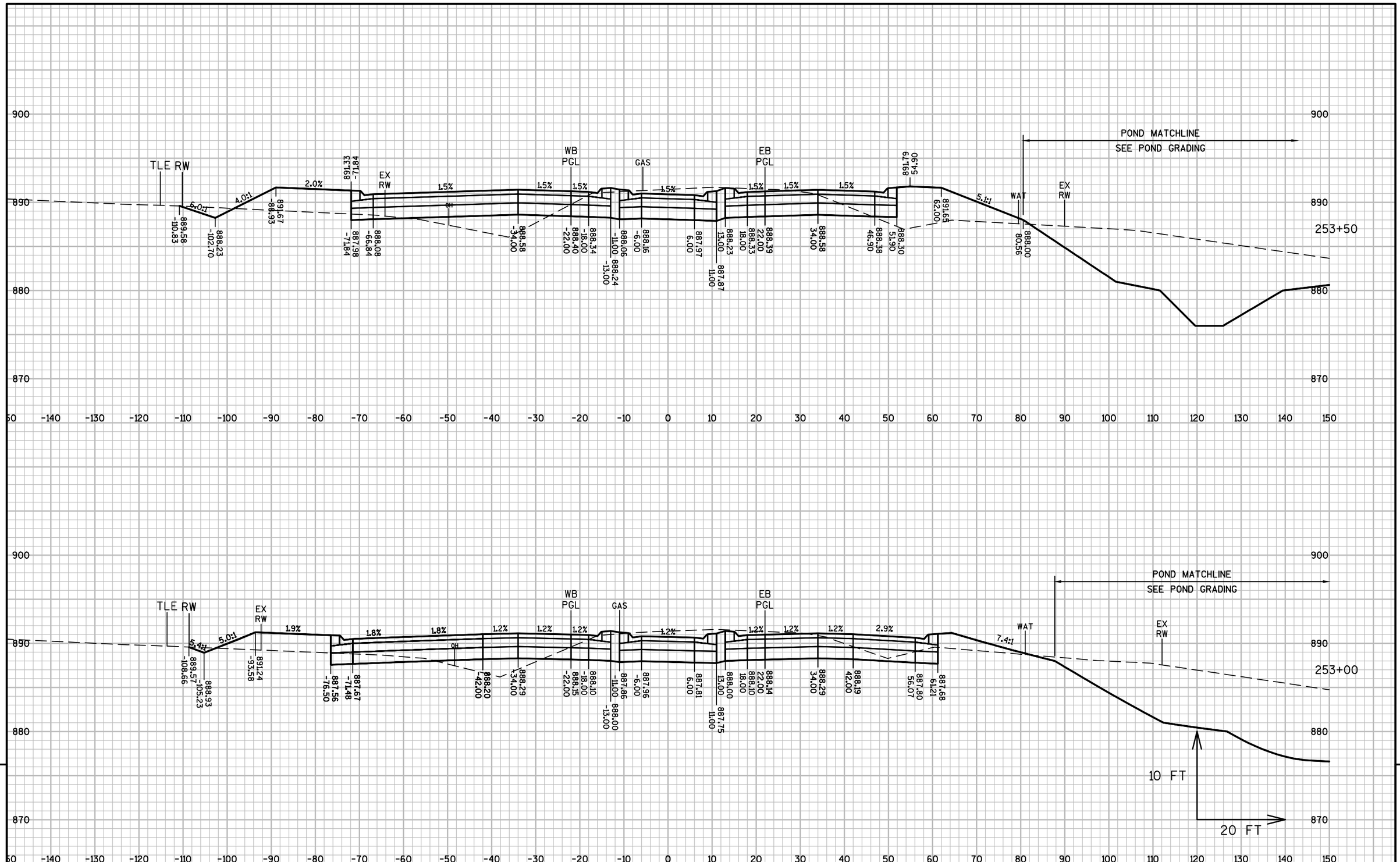
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 1/24/2018 5:06 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 330	E

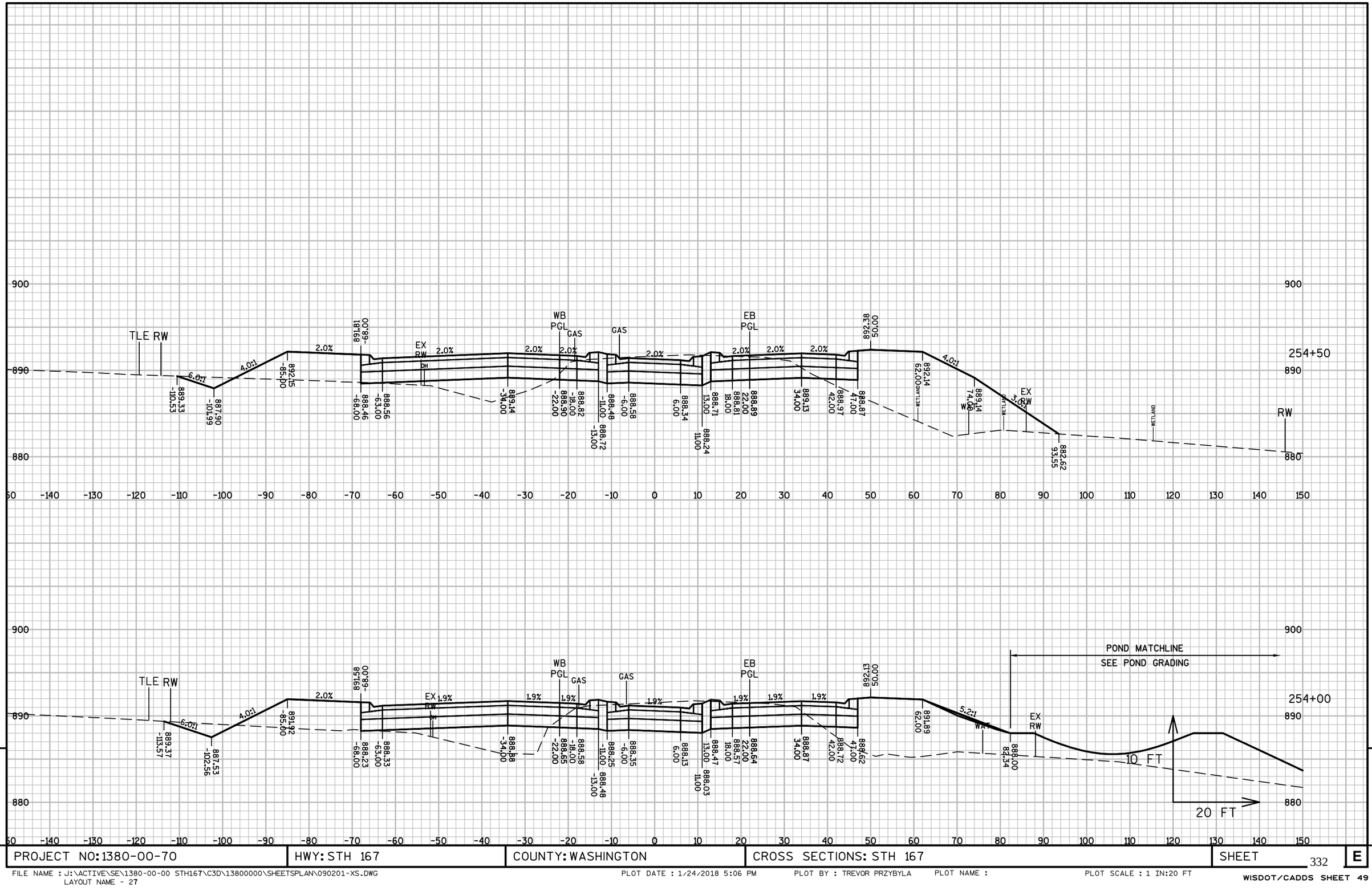


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 331 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 1/24/2018 5:06 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

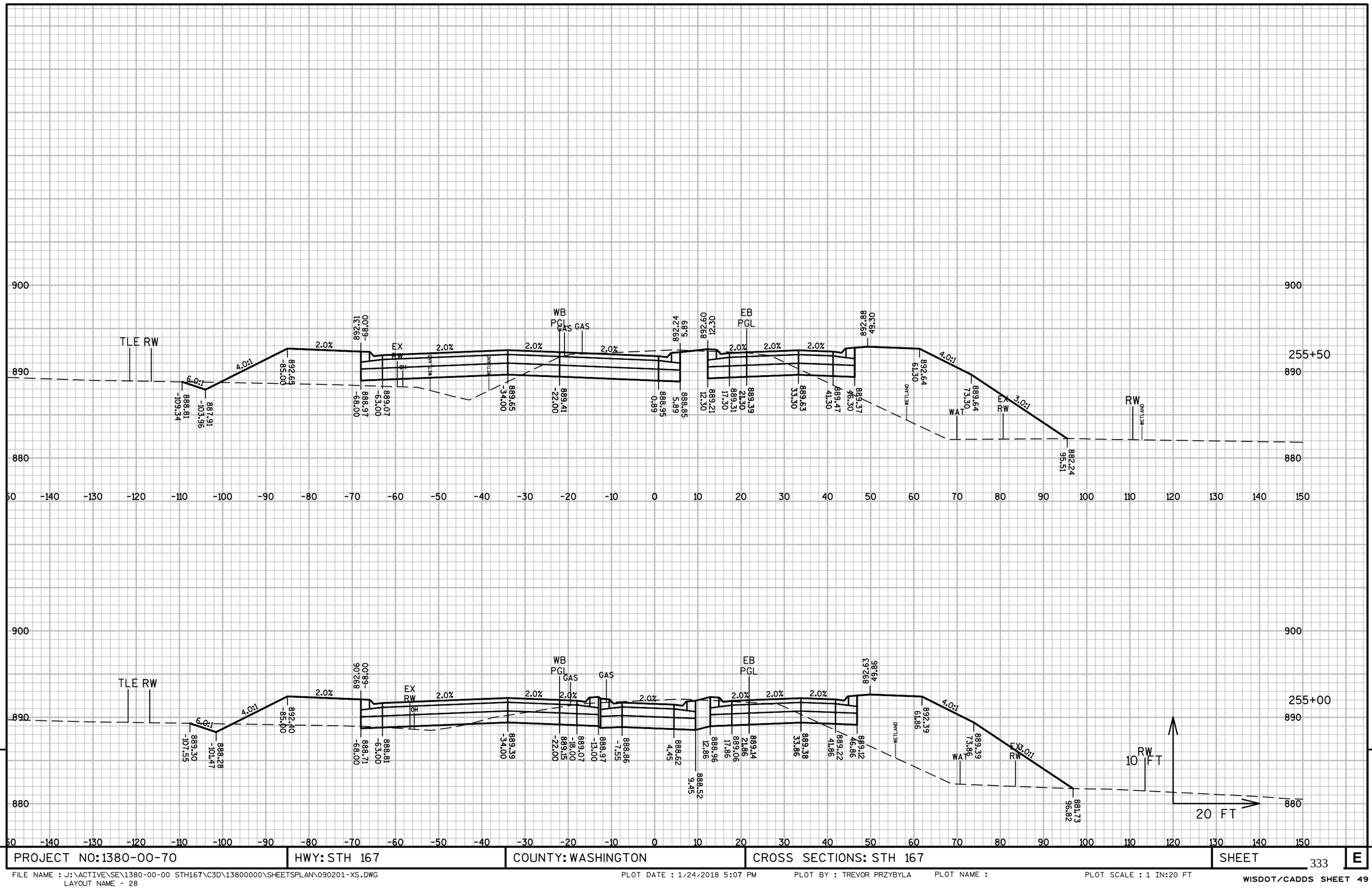


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 332 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 1/24/2018 5:06 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

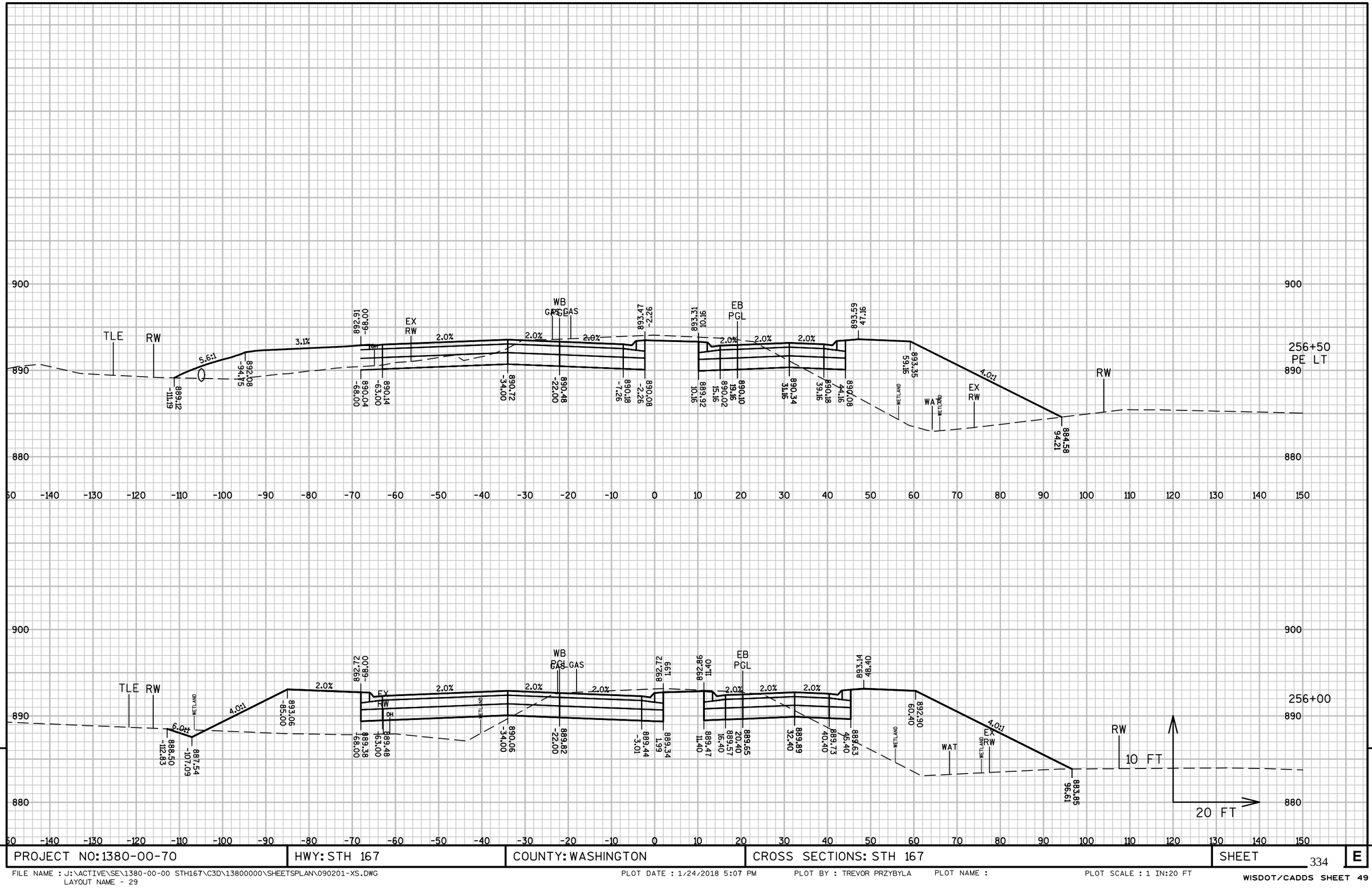


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 28

PLOT DATE : 1/24/2018 5:07 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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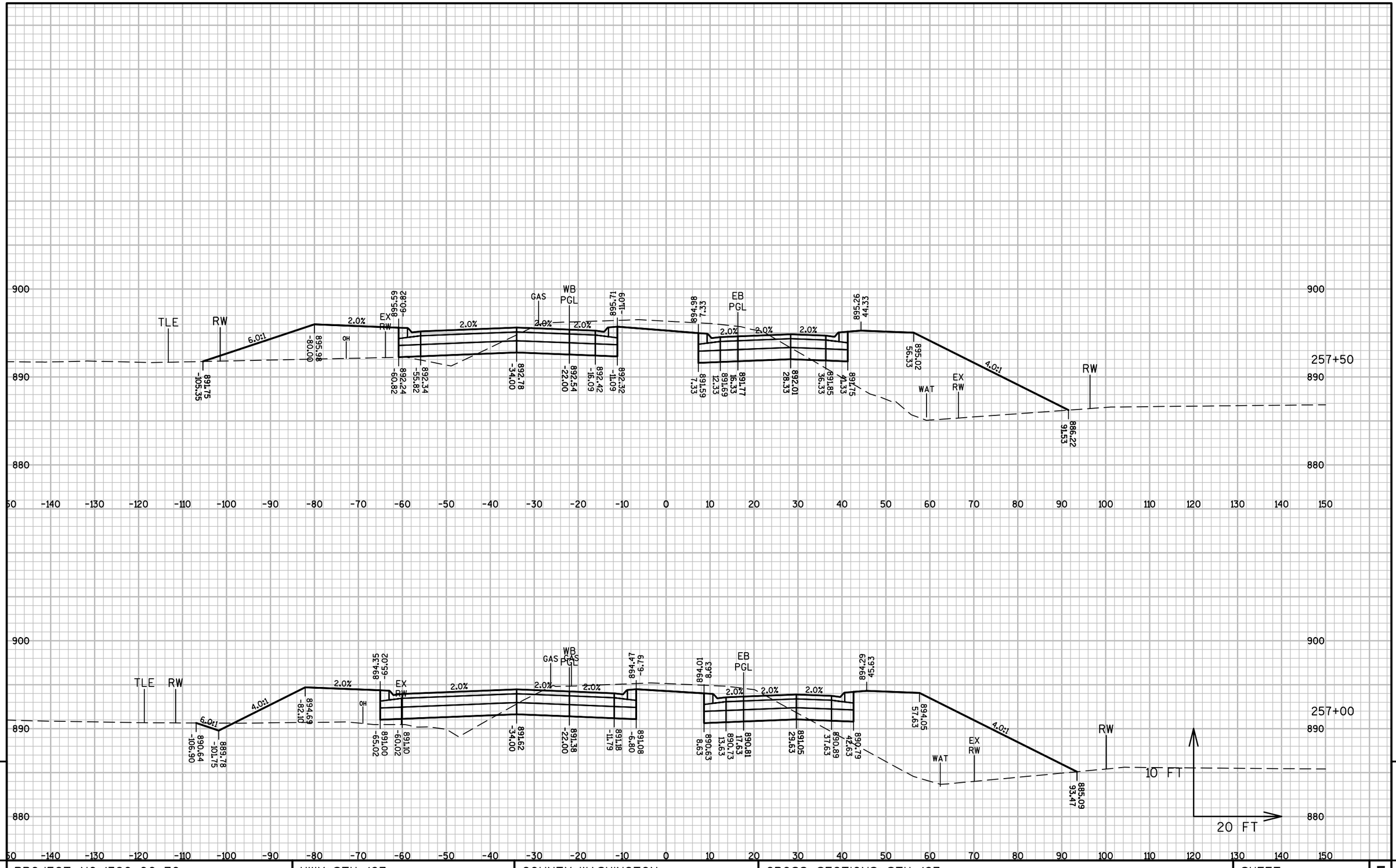
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 334	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 1/24/2018 5:07 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

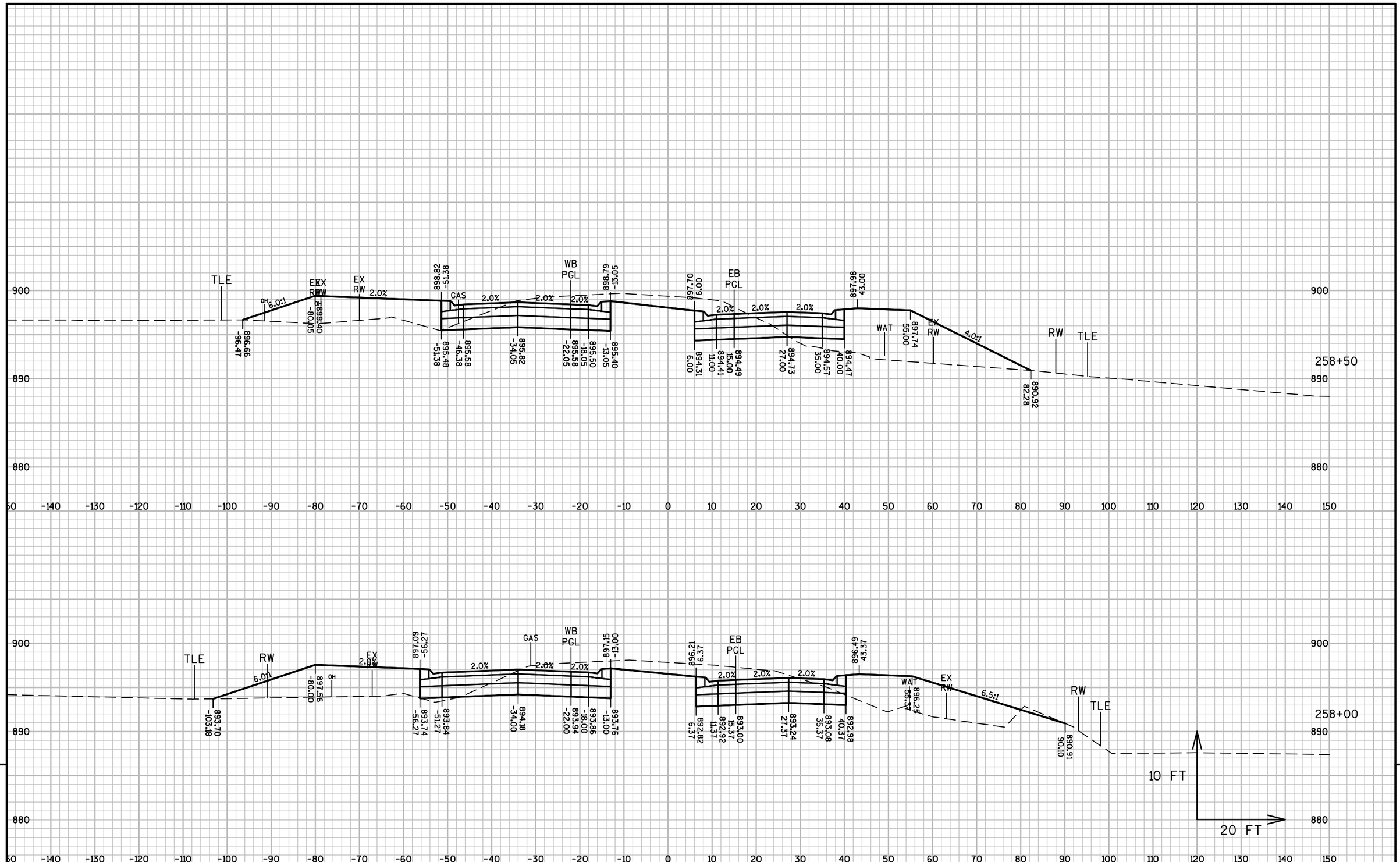


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 335 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 1/24/2018 5:07 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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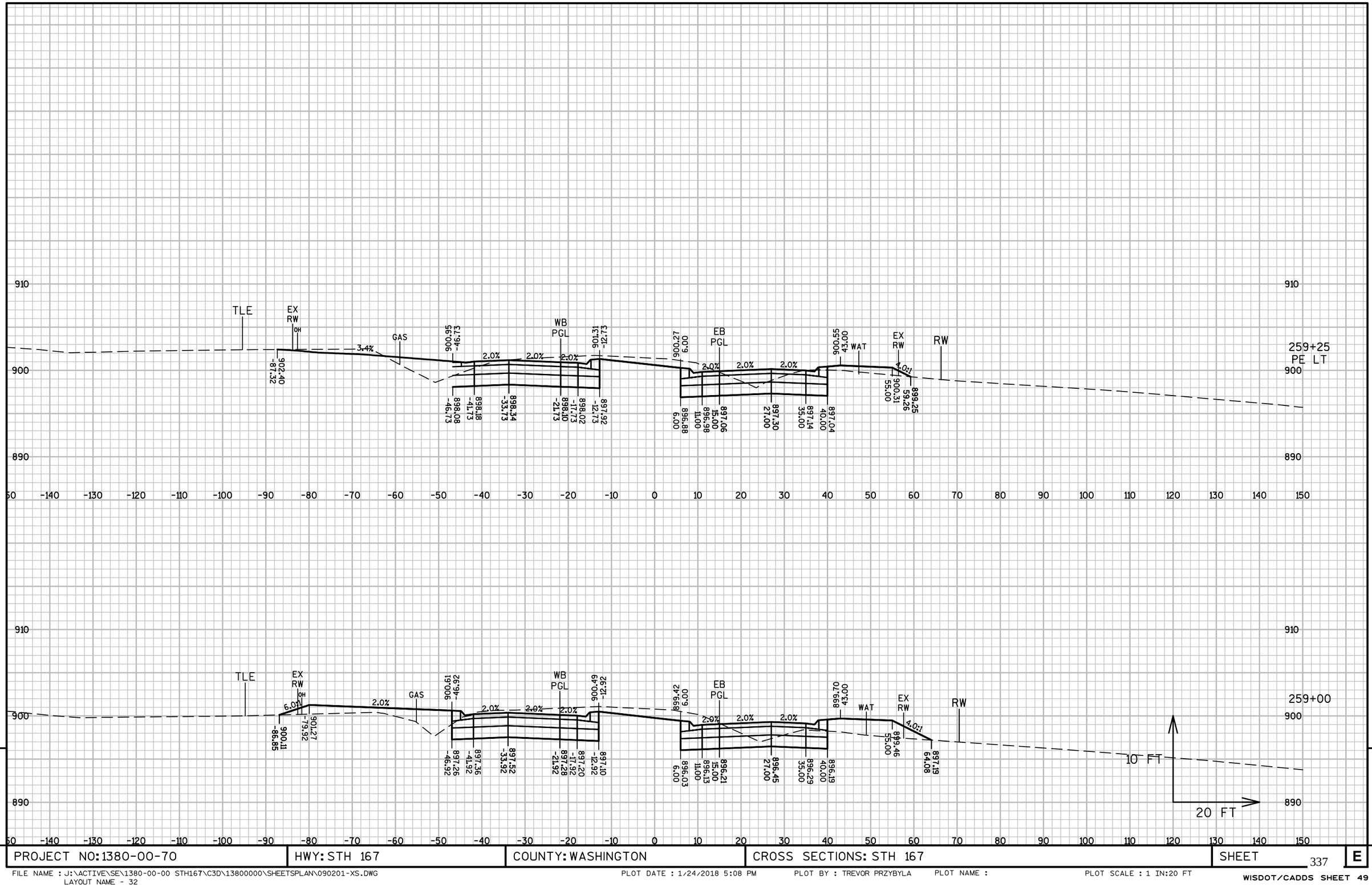
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 336	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 1/24/2018 5:07 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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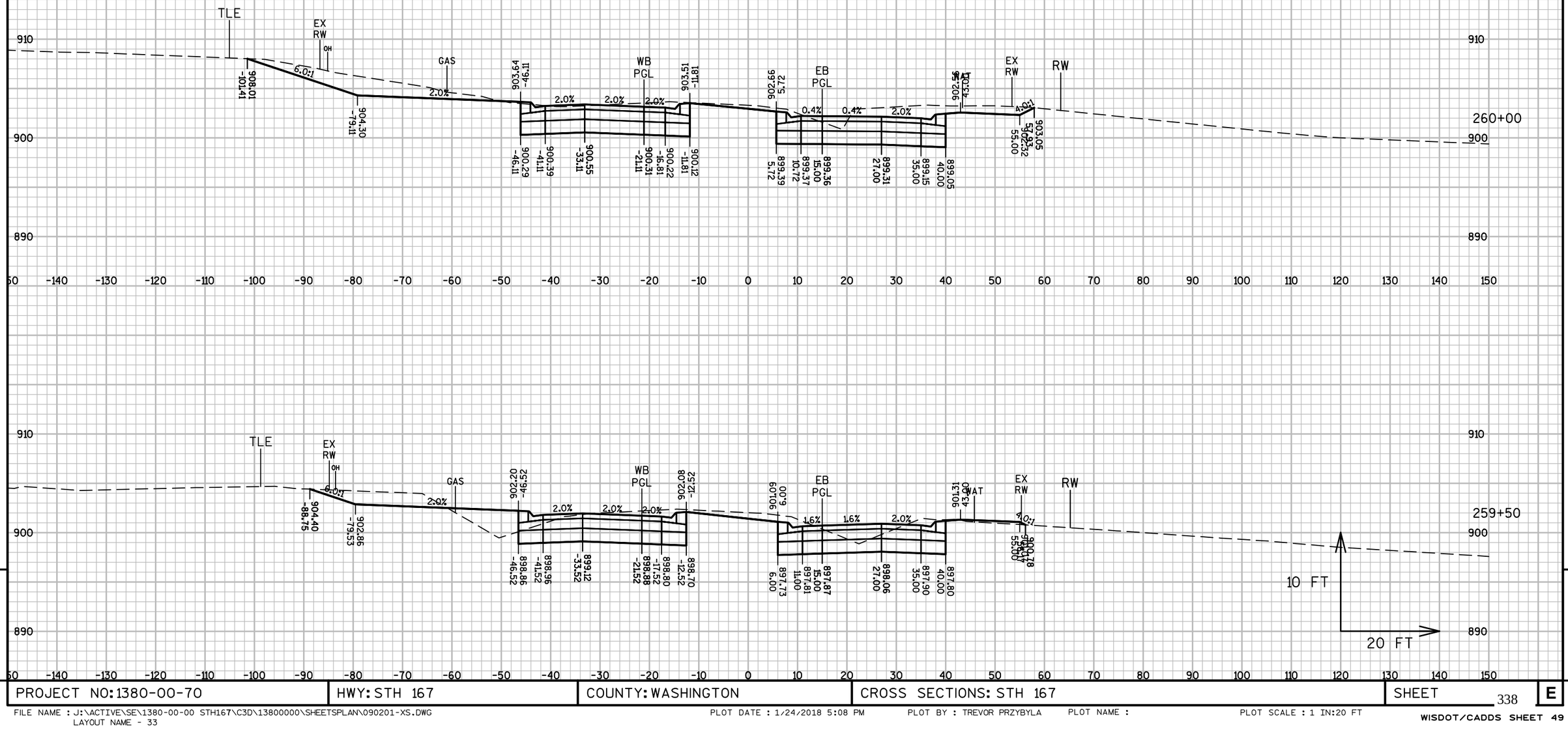
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 337	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 1/24/2018 5:08 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

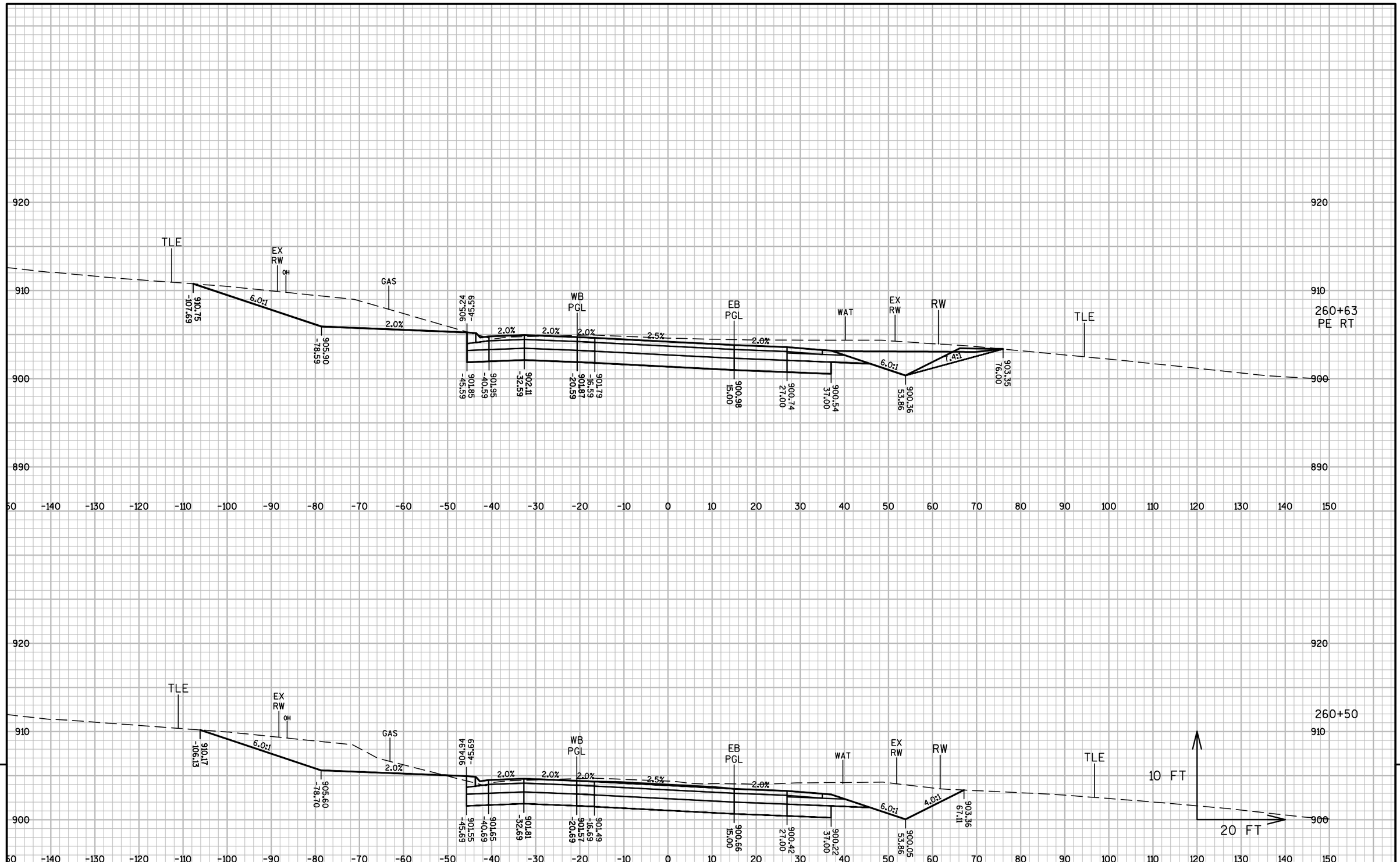


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 338 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 33

PLOT DATE : 1/24/2018 5:08 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

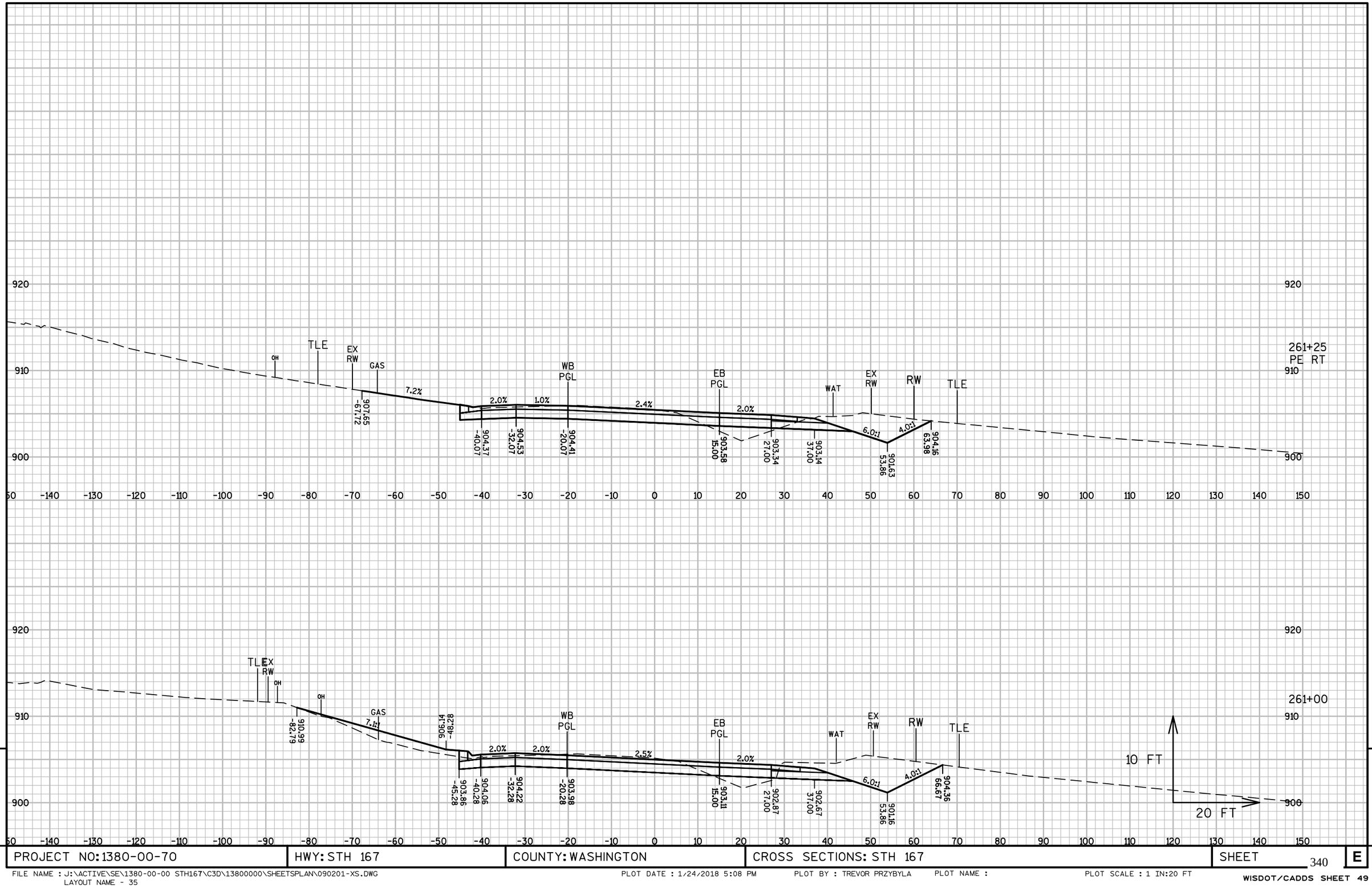


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 339 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 1/24/2018 5:08 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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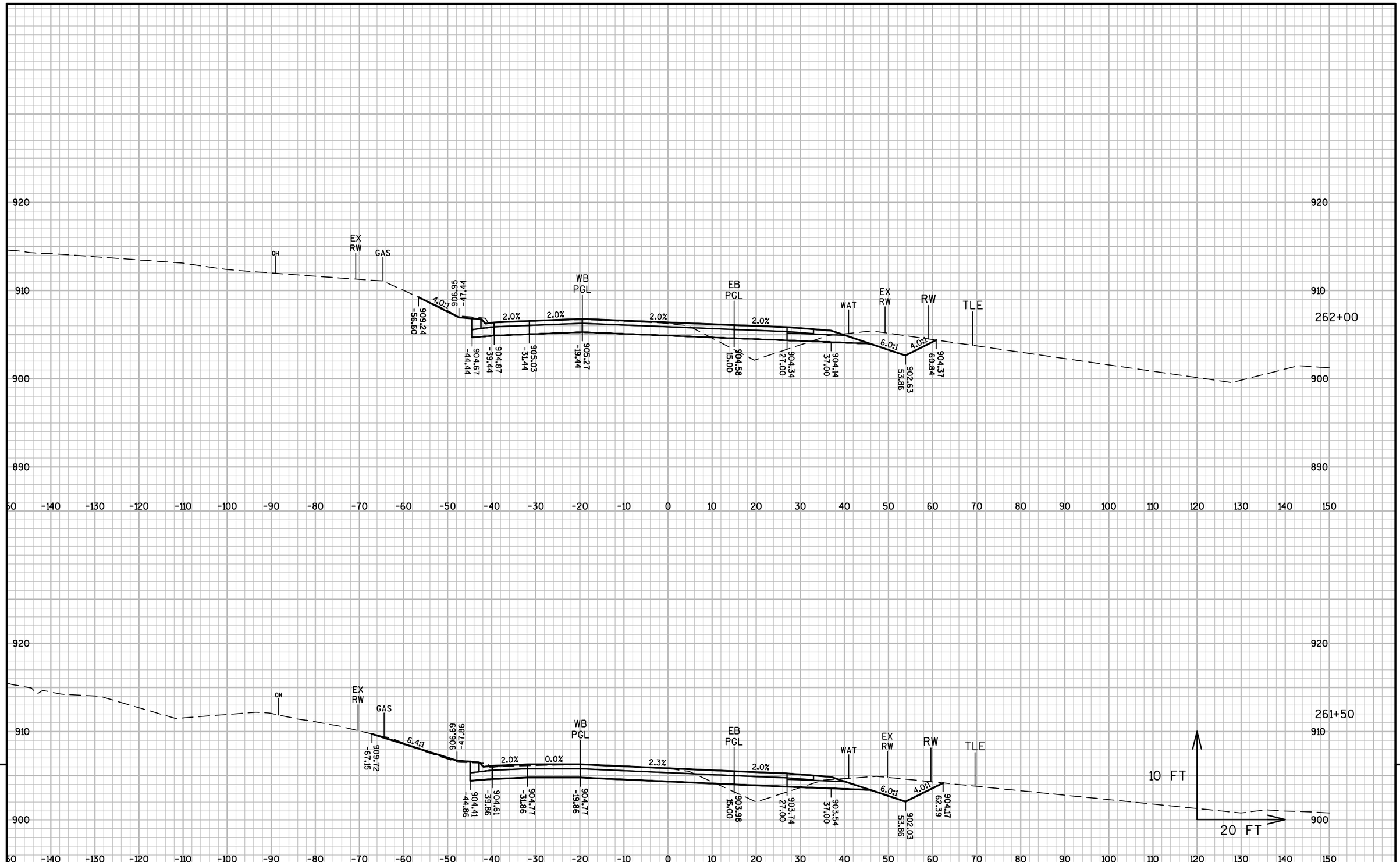
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 340	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 1/24/2018 5:08 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

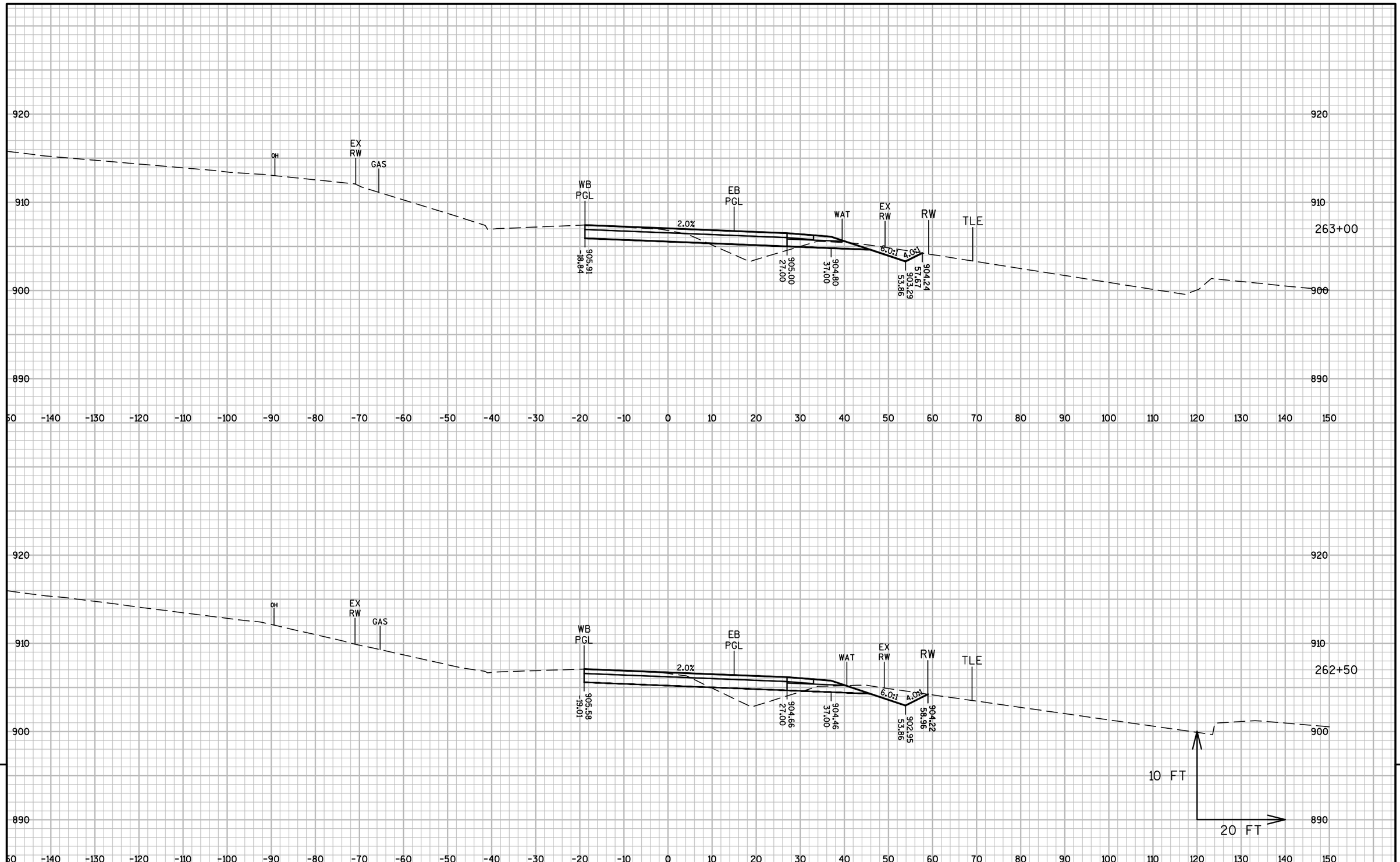


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 341 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 36

PLOT DATE : 1/24/2018 5:09 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

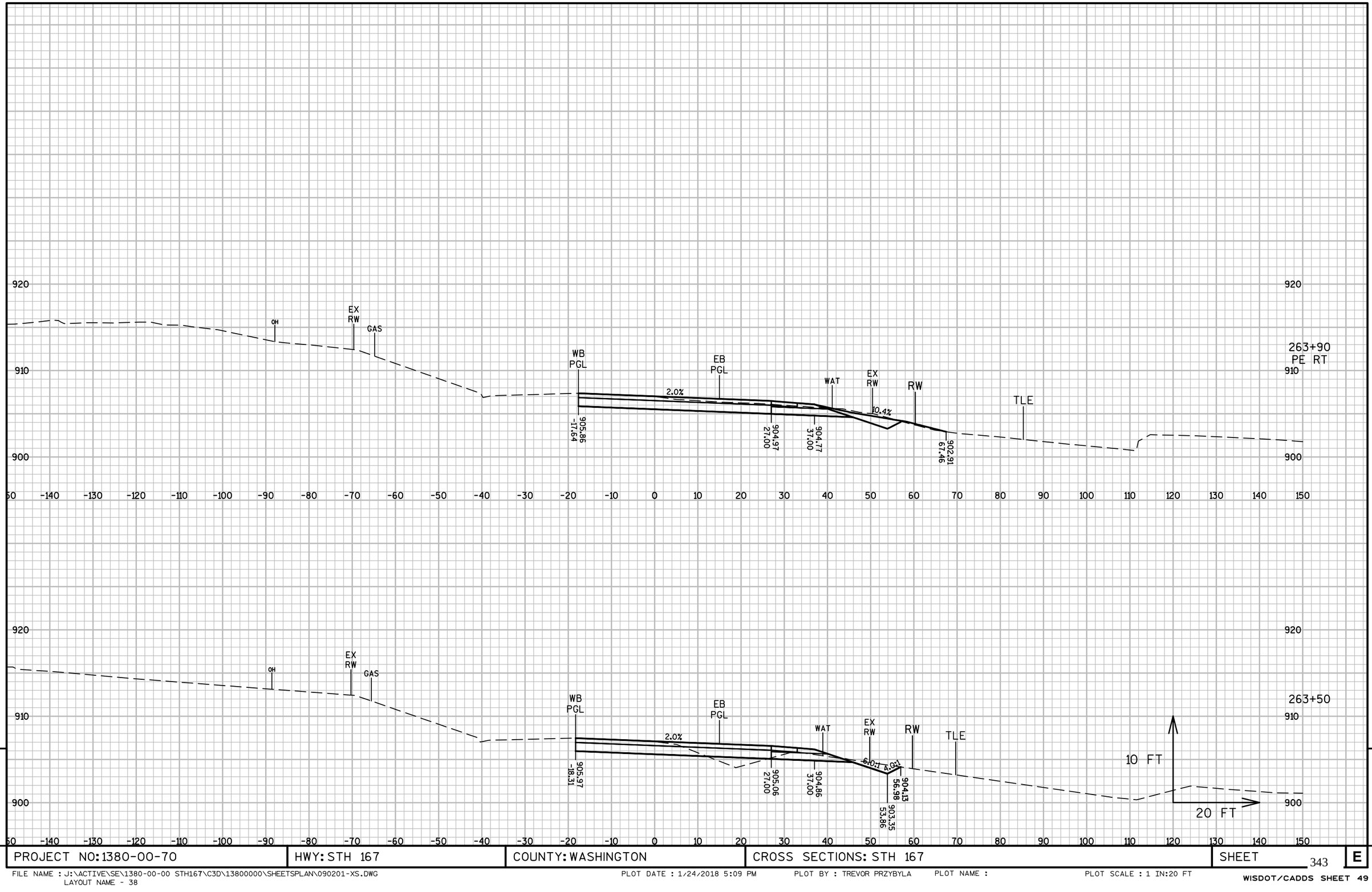


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 342 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 37

PLOT DATE : 1/24/2018 5:09 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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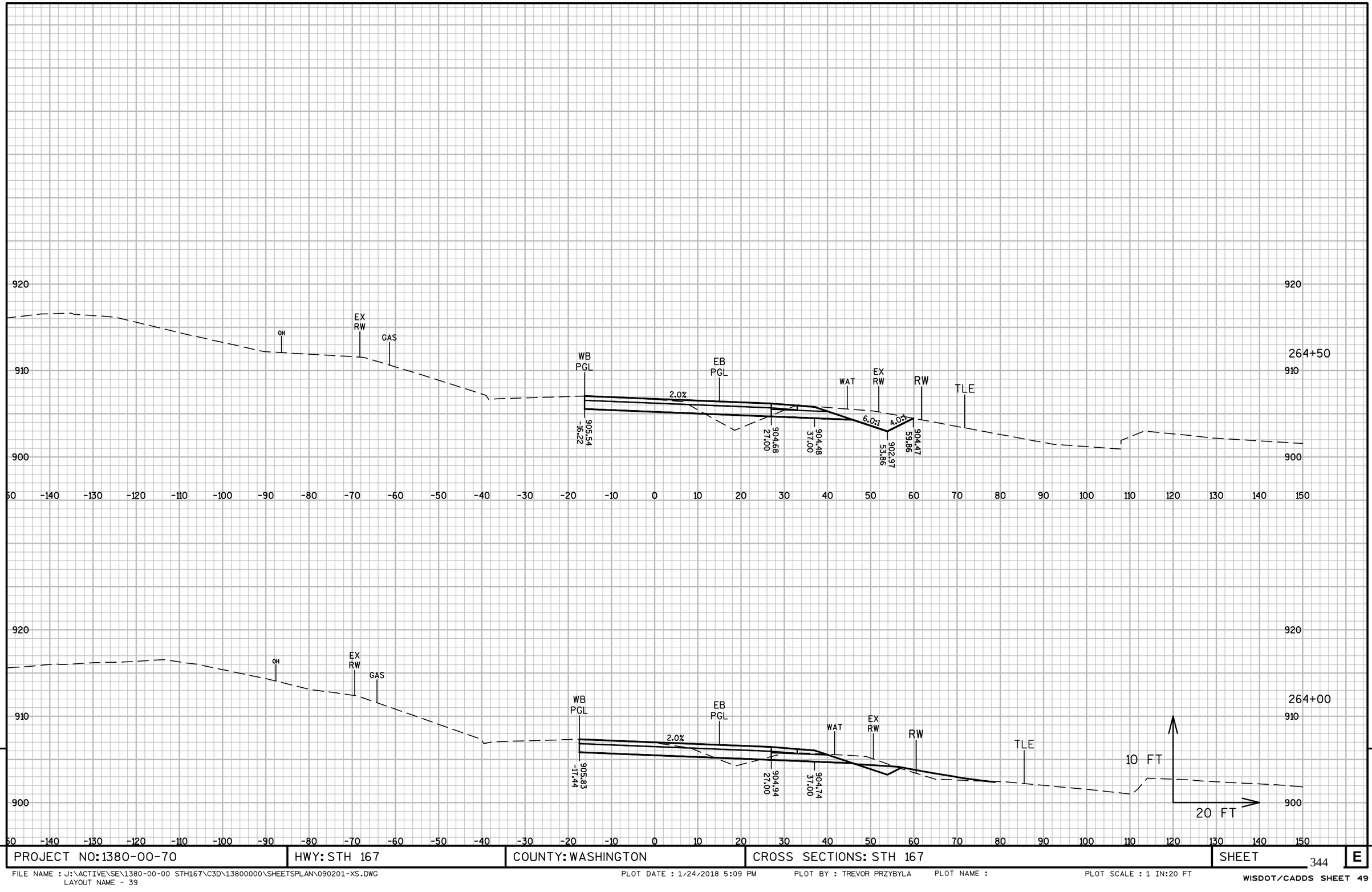
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 343	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 1/24/2018 5:09 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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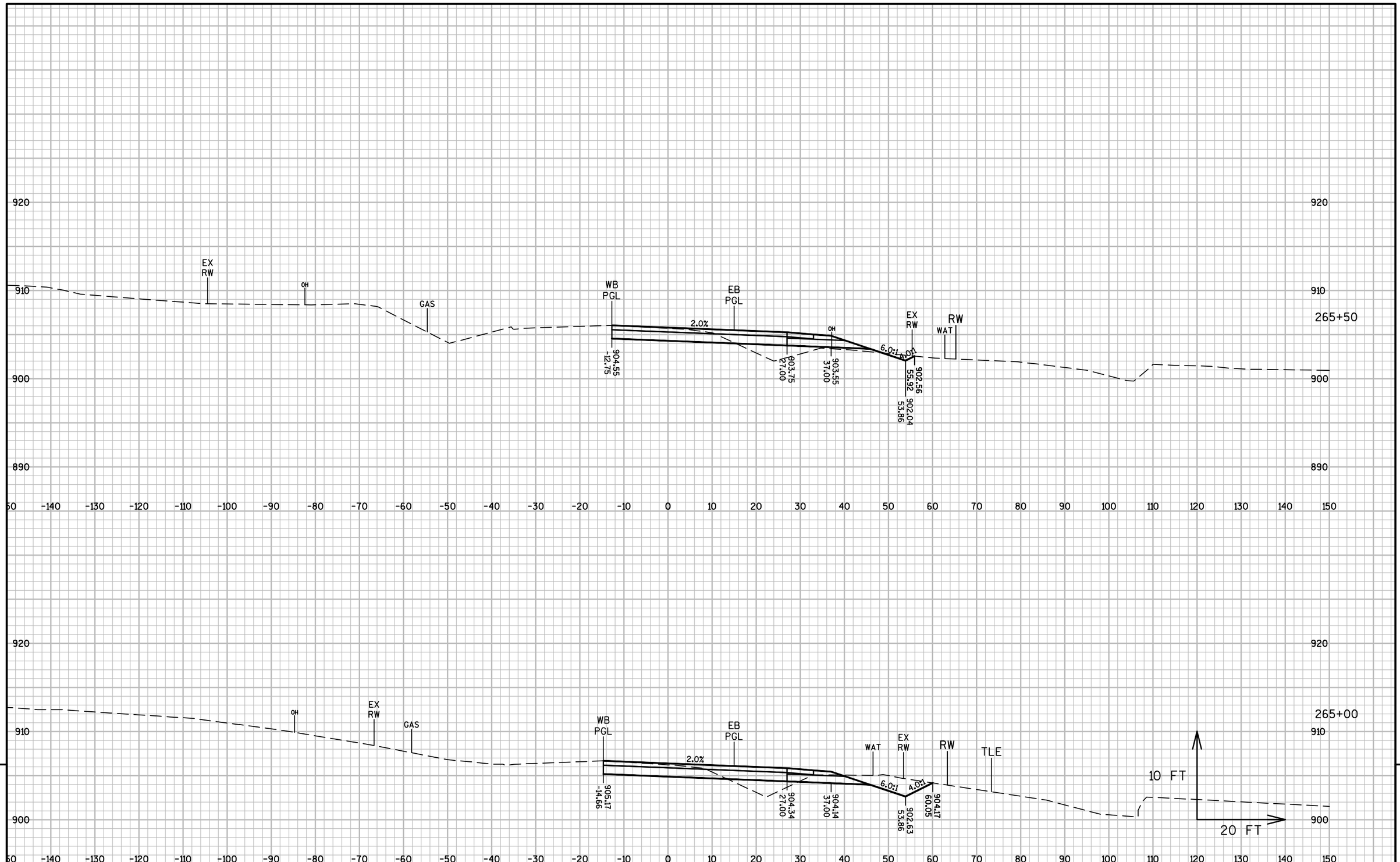
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 344	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 39

PLOT DATE : 1/24/2018 5:09 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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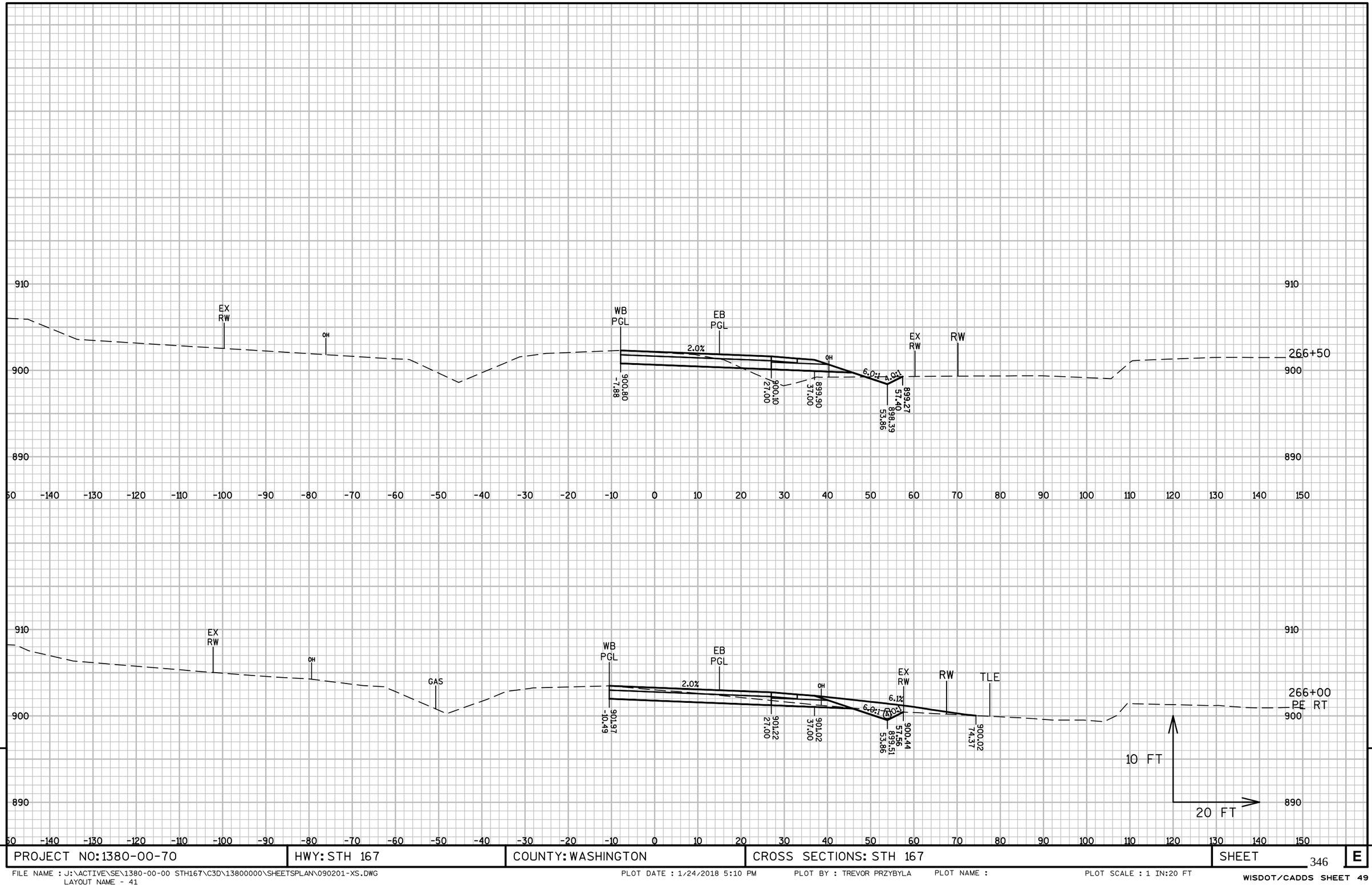
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 345	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 40

PLOT DATE : 1/24/2018 5:10 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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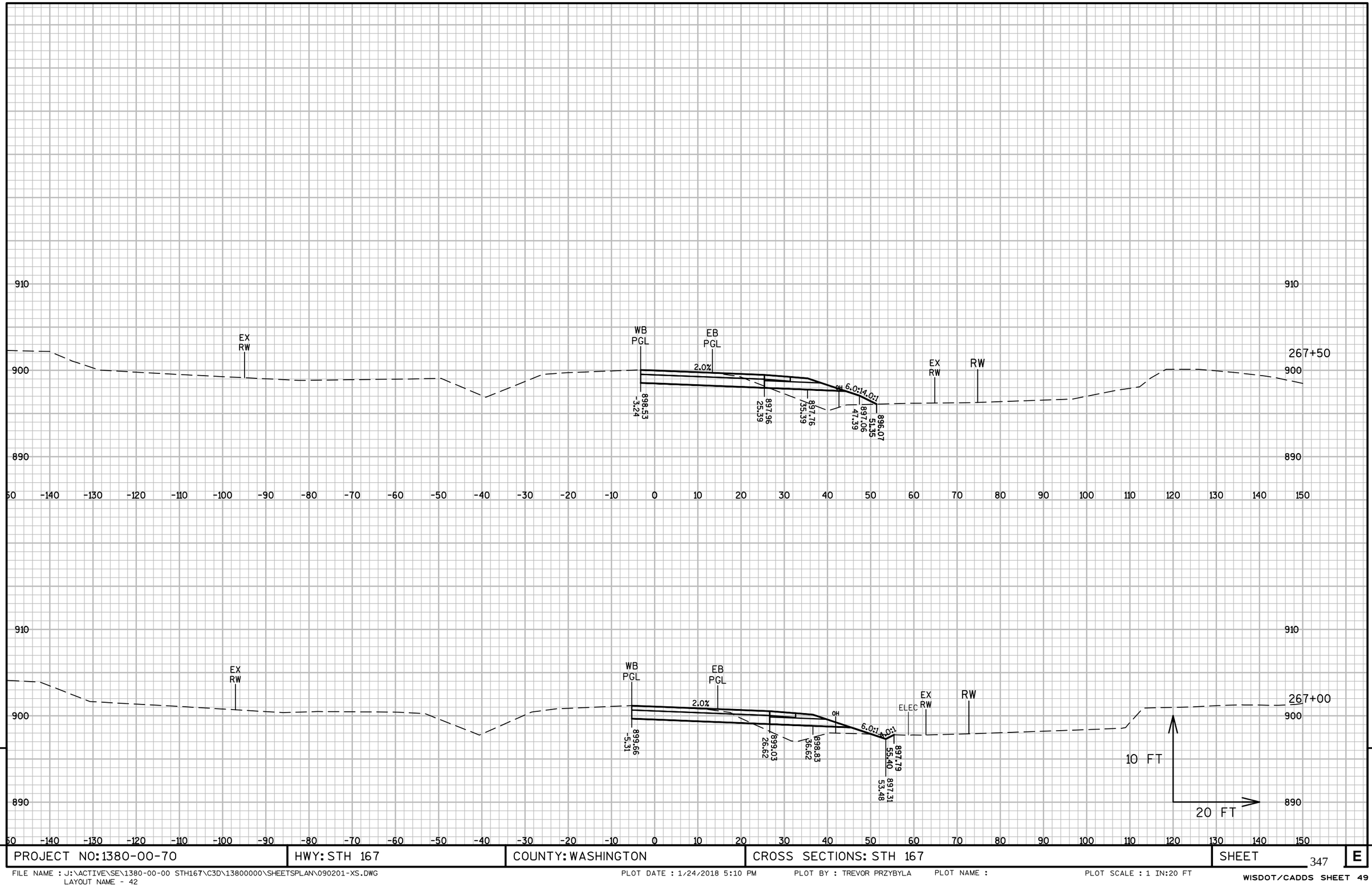
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 346	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 1/24/2018 5:10 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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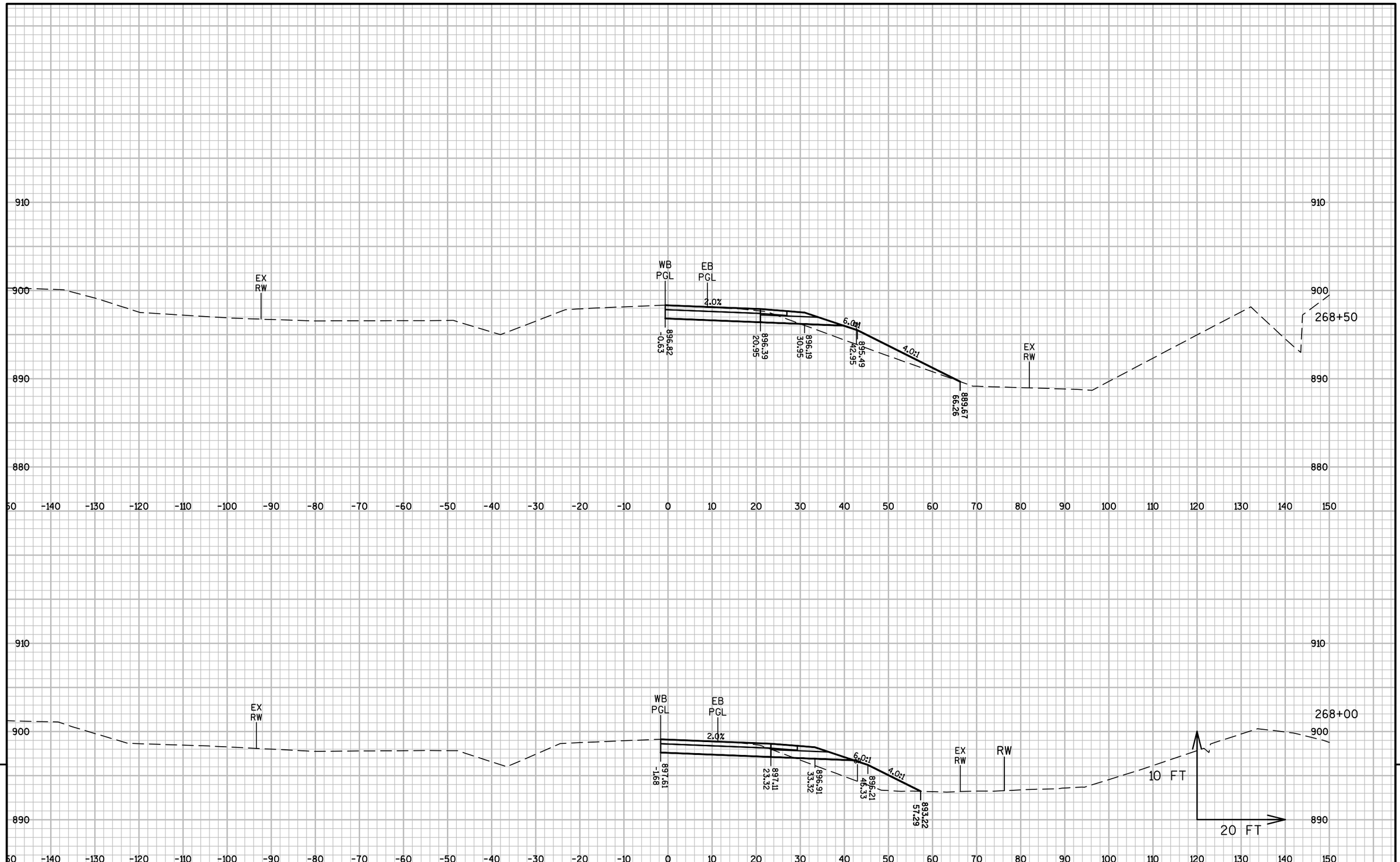
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 347	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 1/24/2018 5:10 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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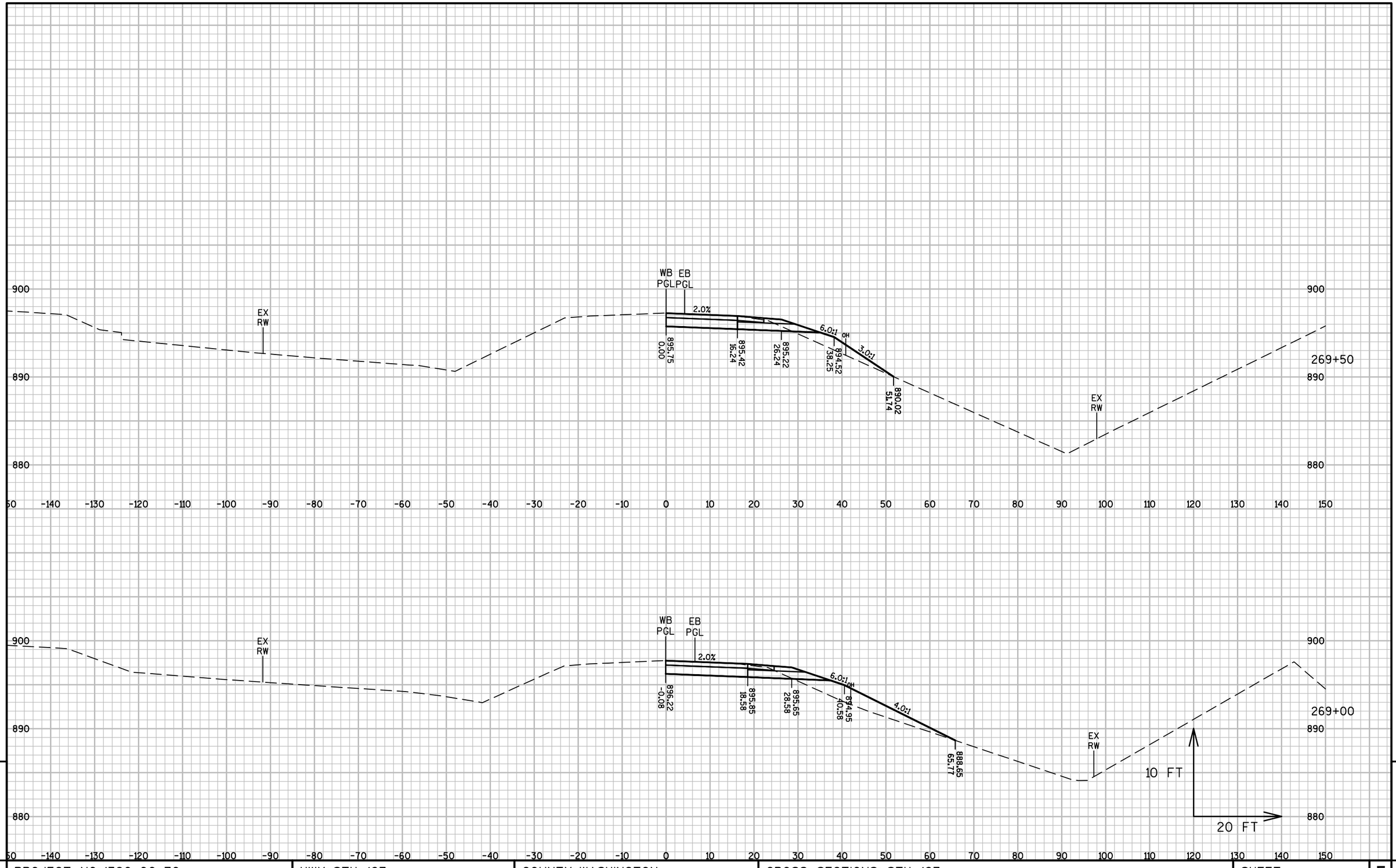
9

PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 348	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 43

PLOT DATE : 1/24/2018 5:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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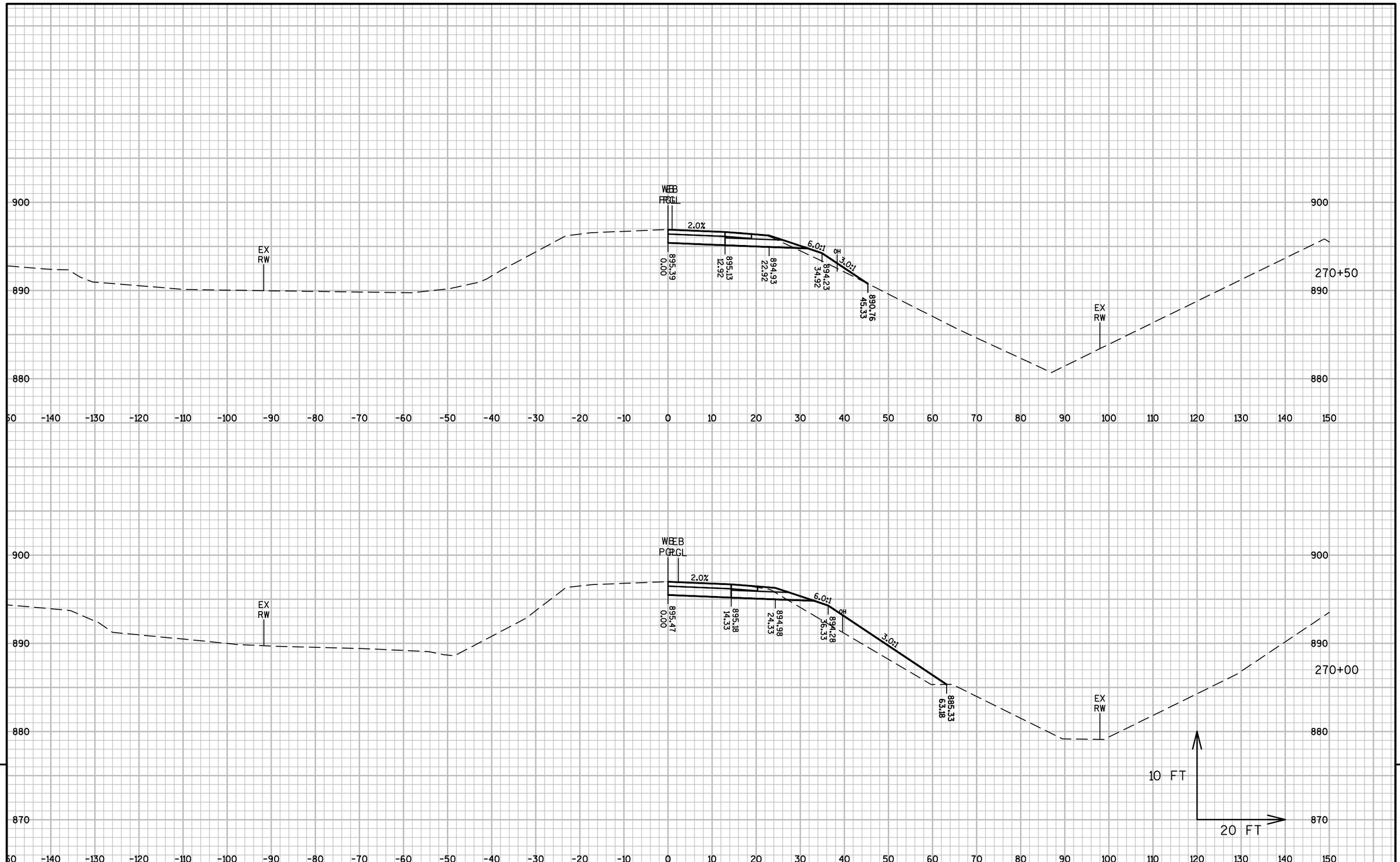
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 349	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 1/24/2018 5:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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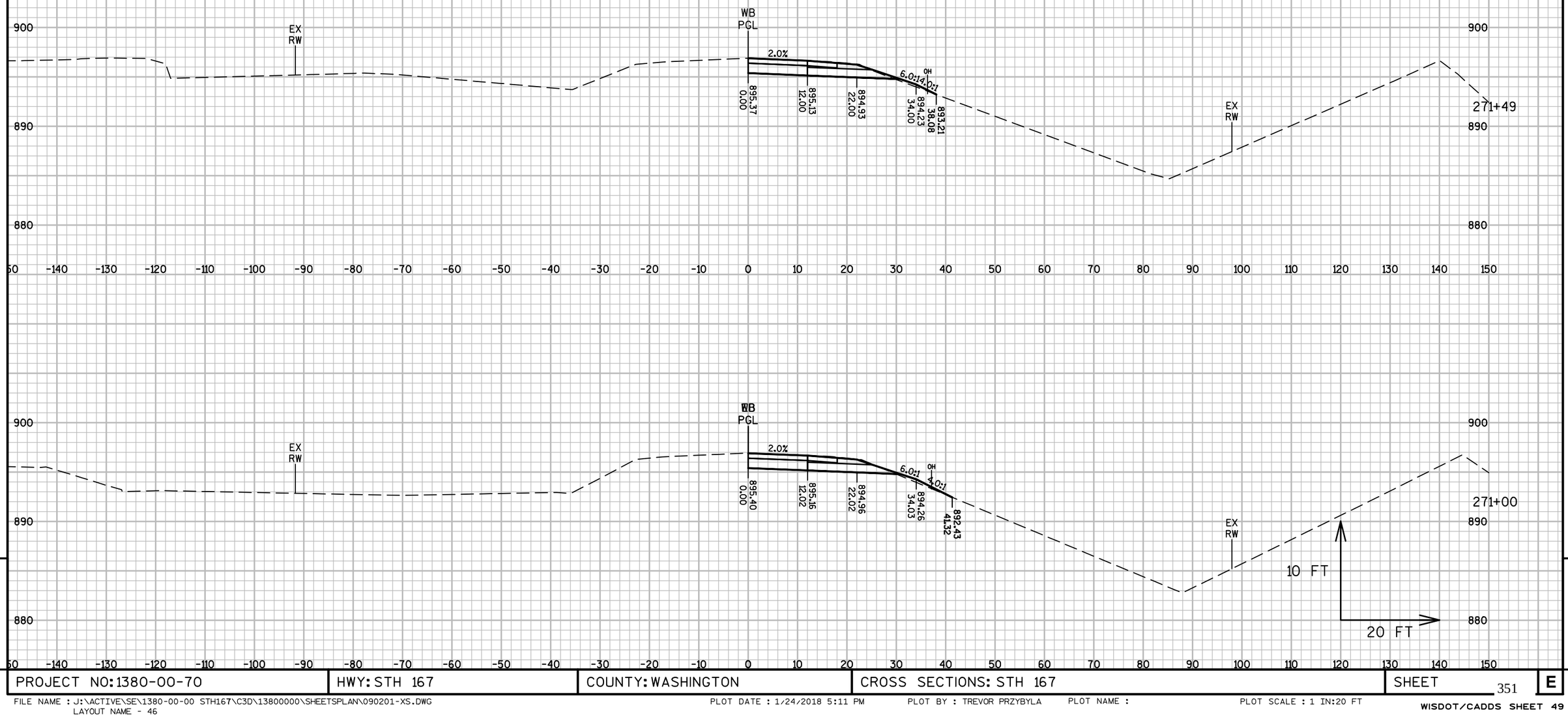
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 350	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 1/24/2018 5:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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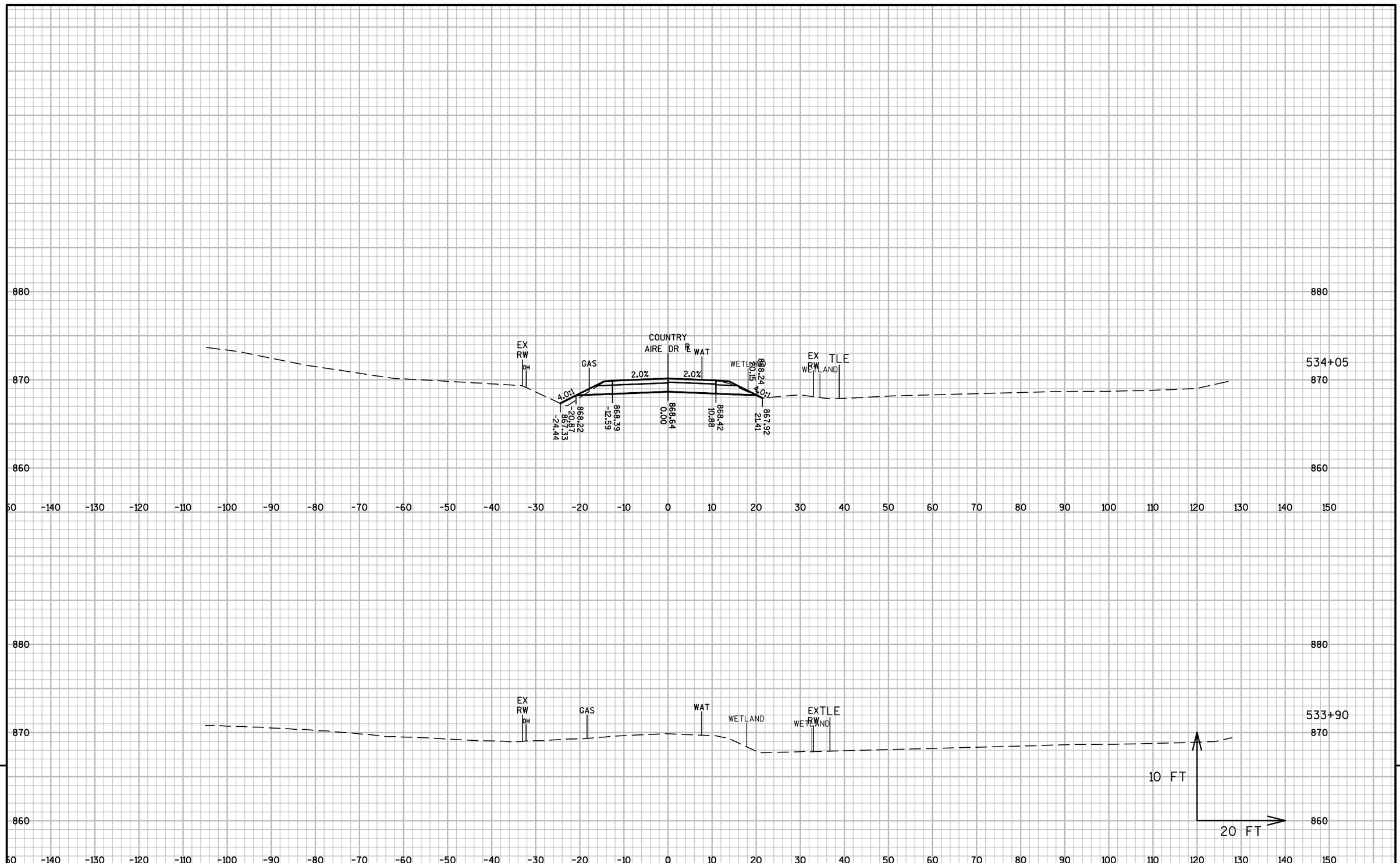
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: STH 167	SHEET 351	E

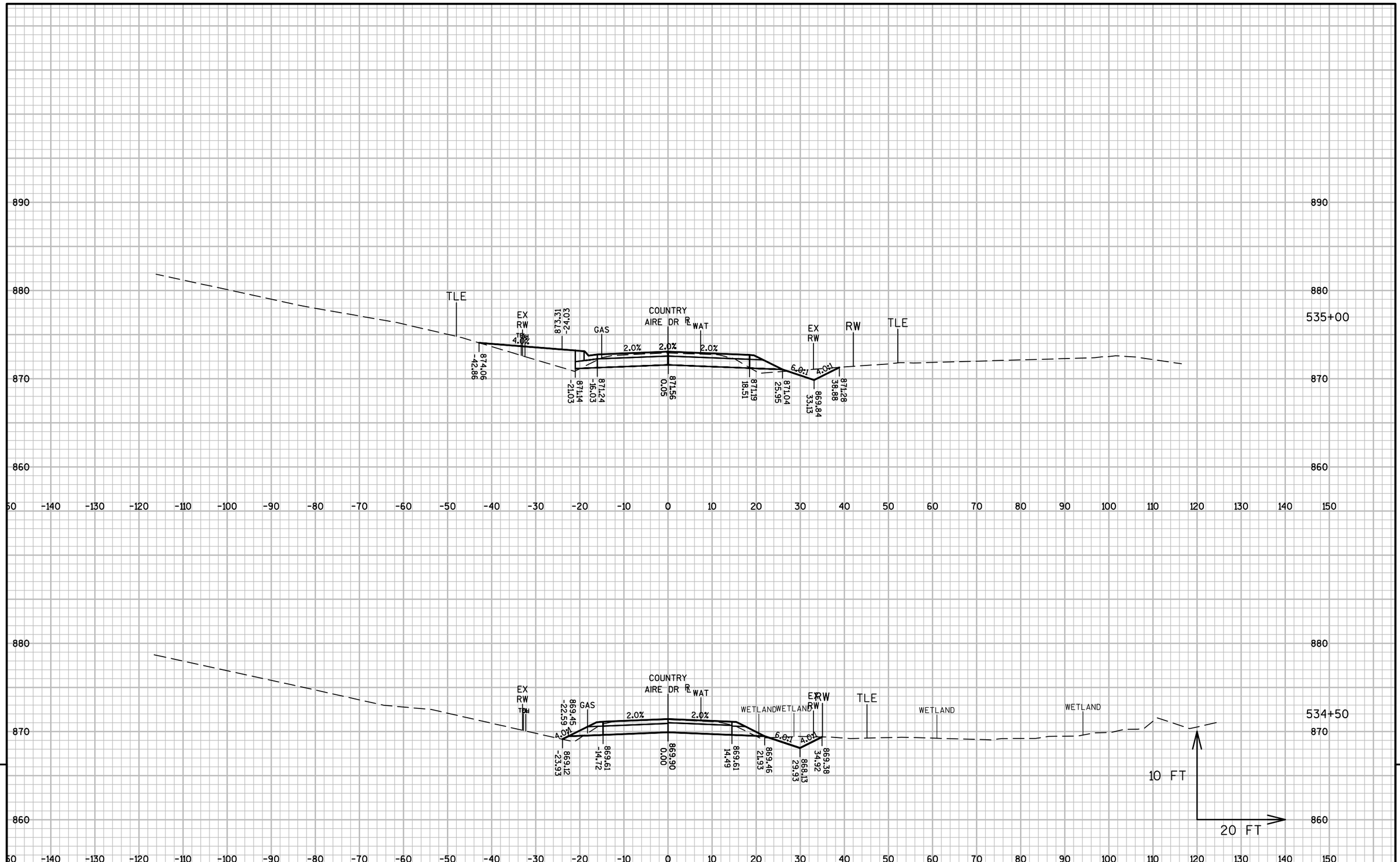
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 1/24/2018 5:11 PM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 352	E



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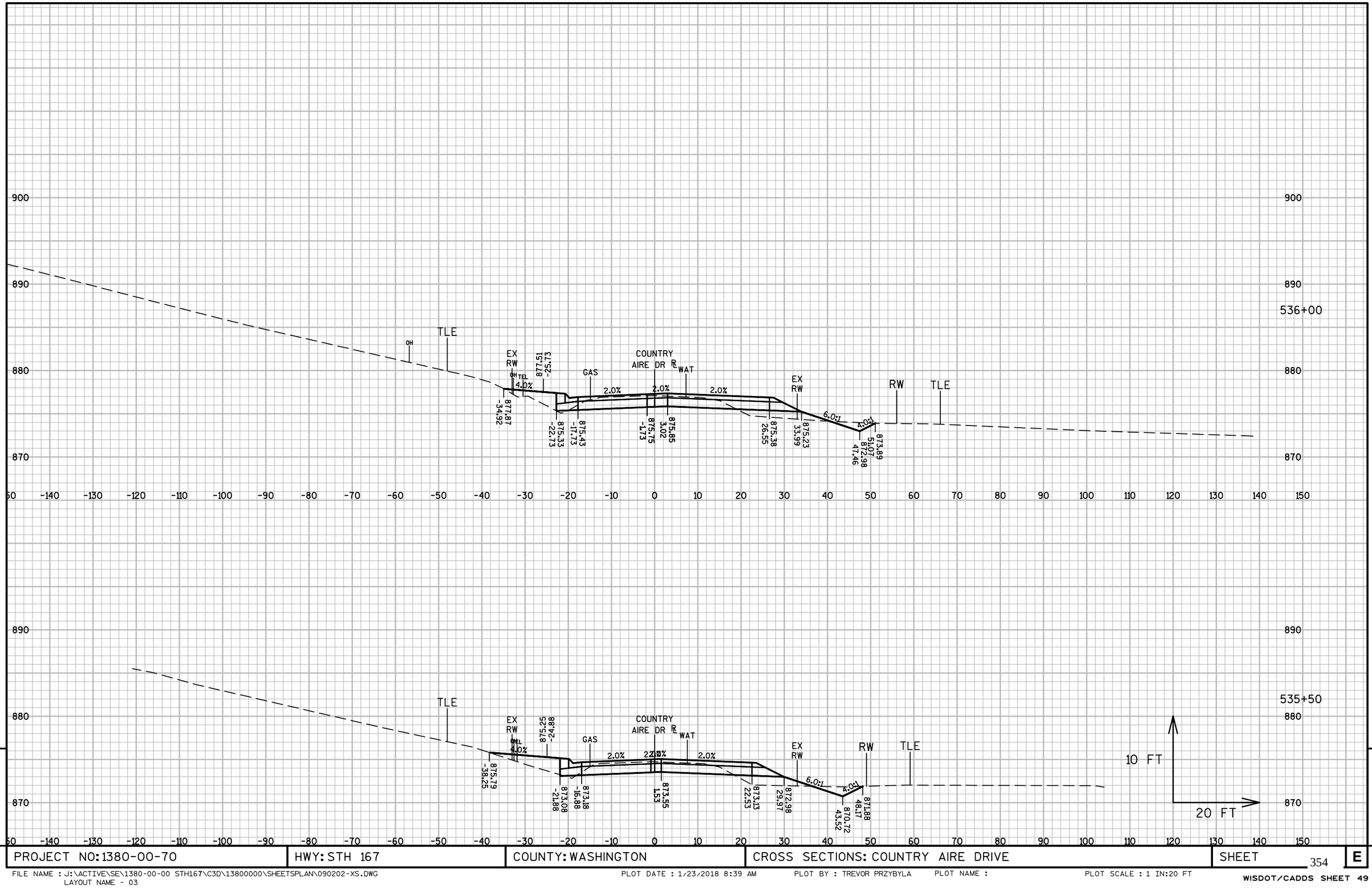
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 353	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2018 8:39 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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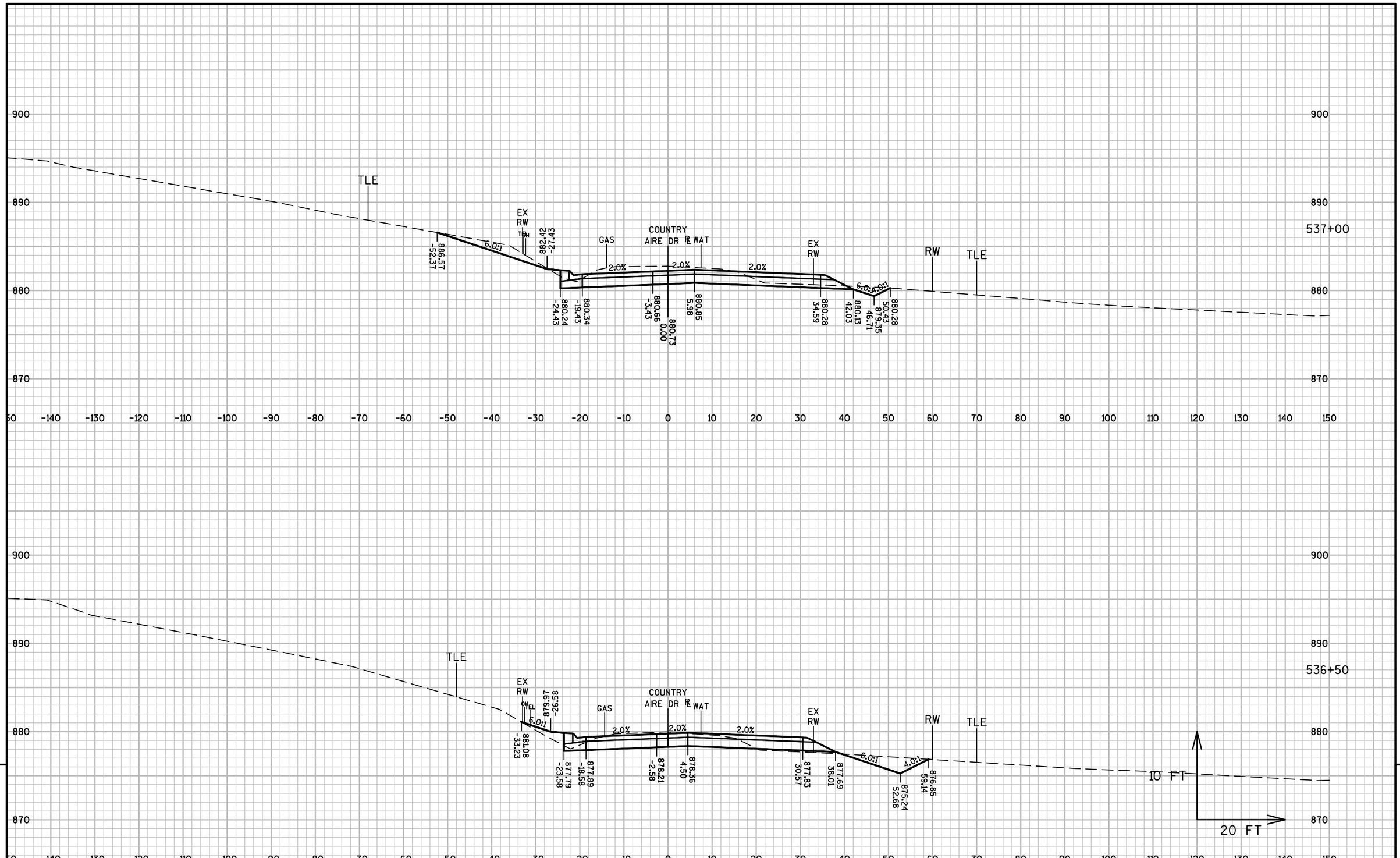
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 354	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 1/23/2018 8:39 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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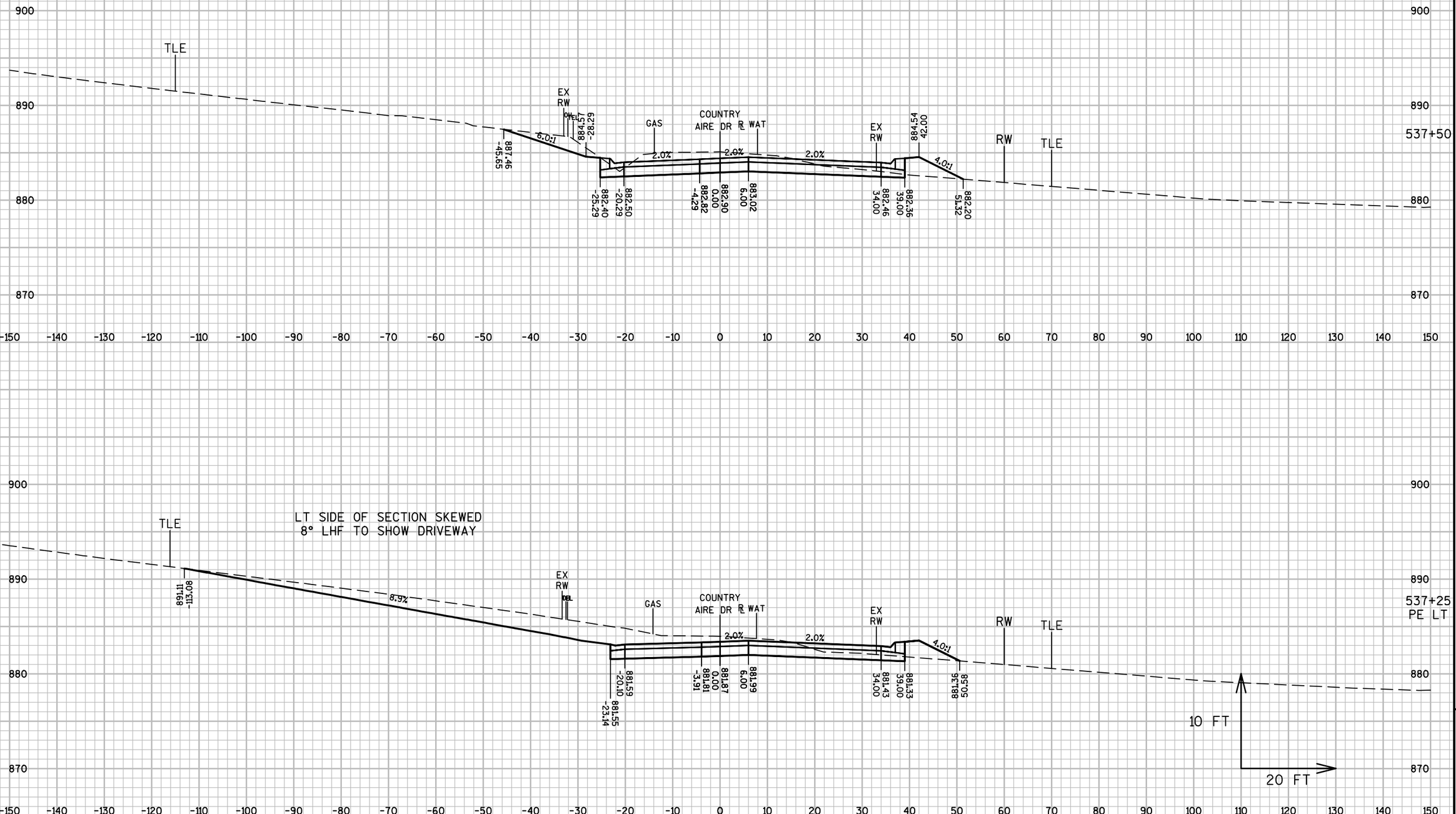
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 355	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 1/23/2018 8:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

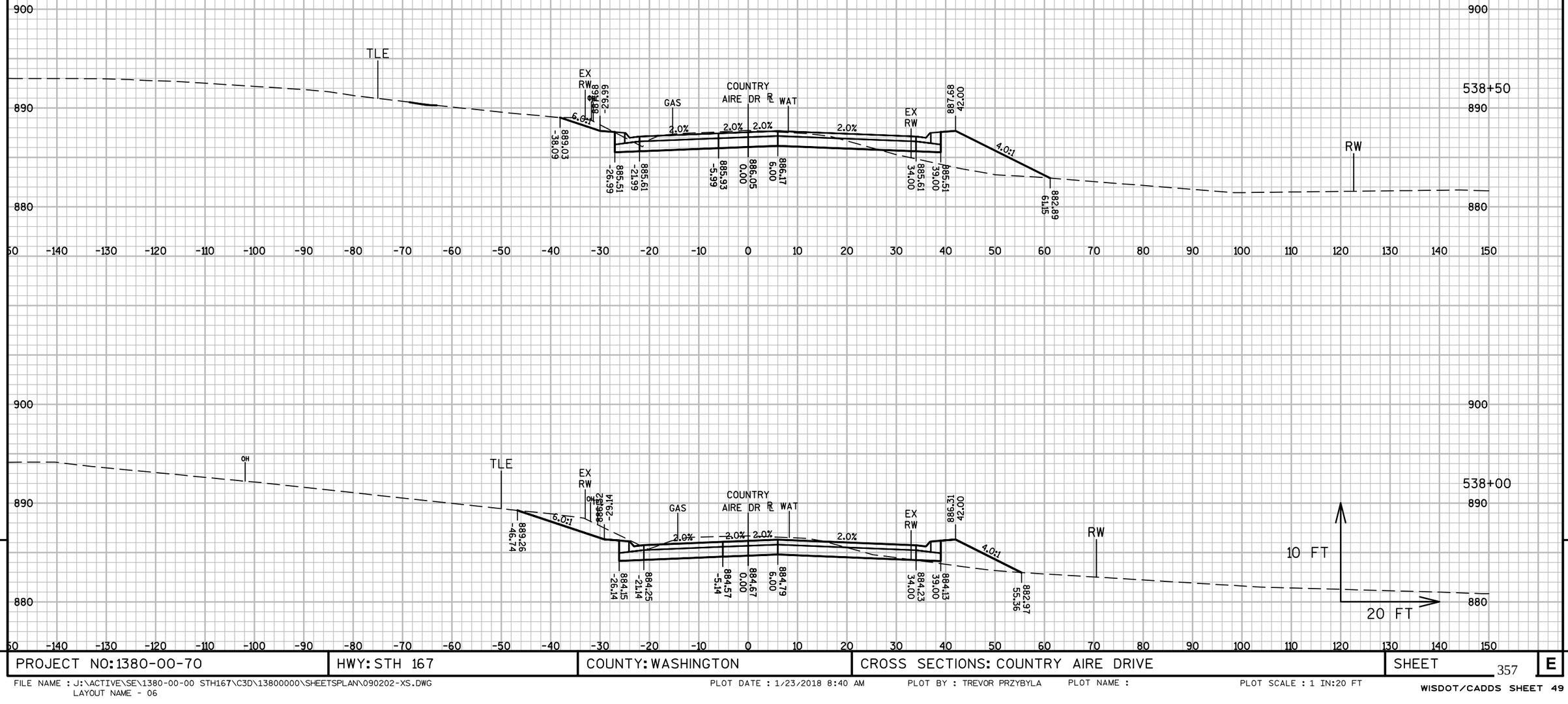


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 356 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 1/23/2018 8:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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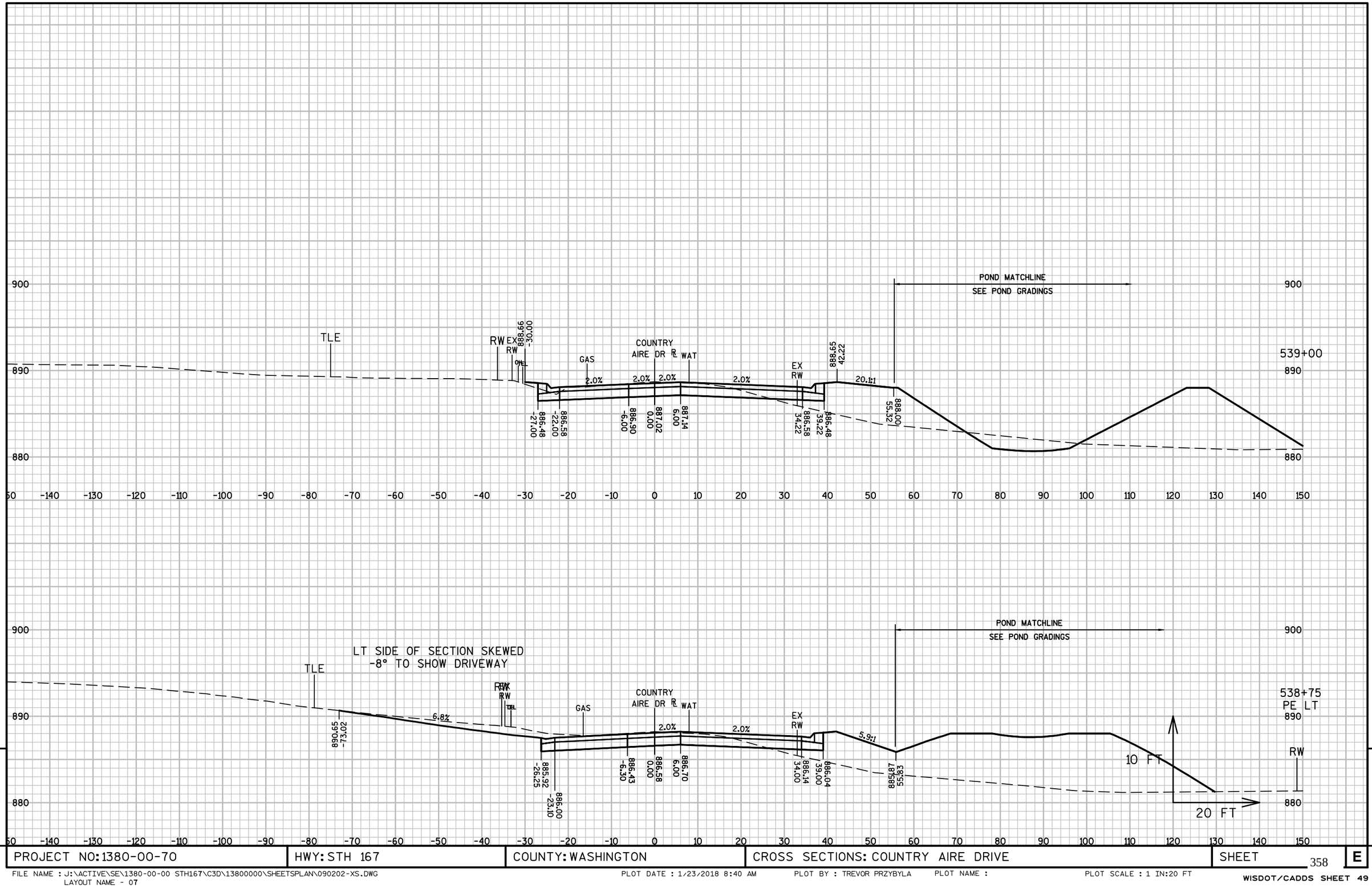
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 357	E

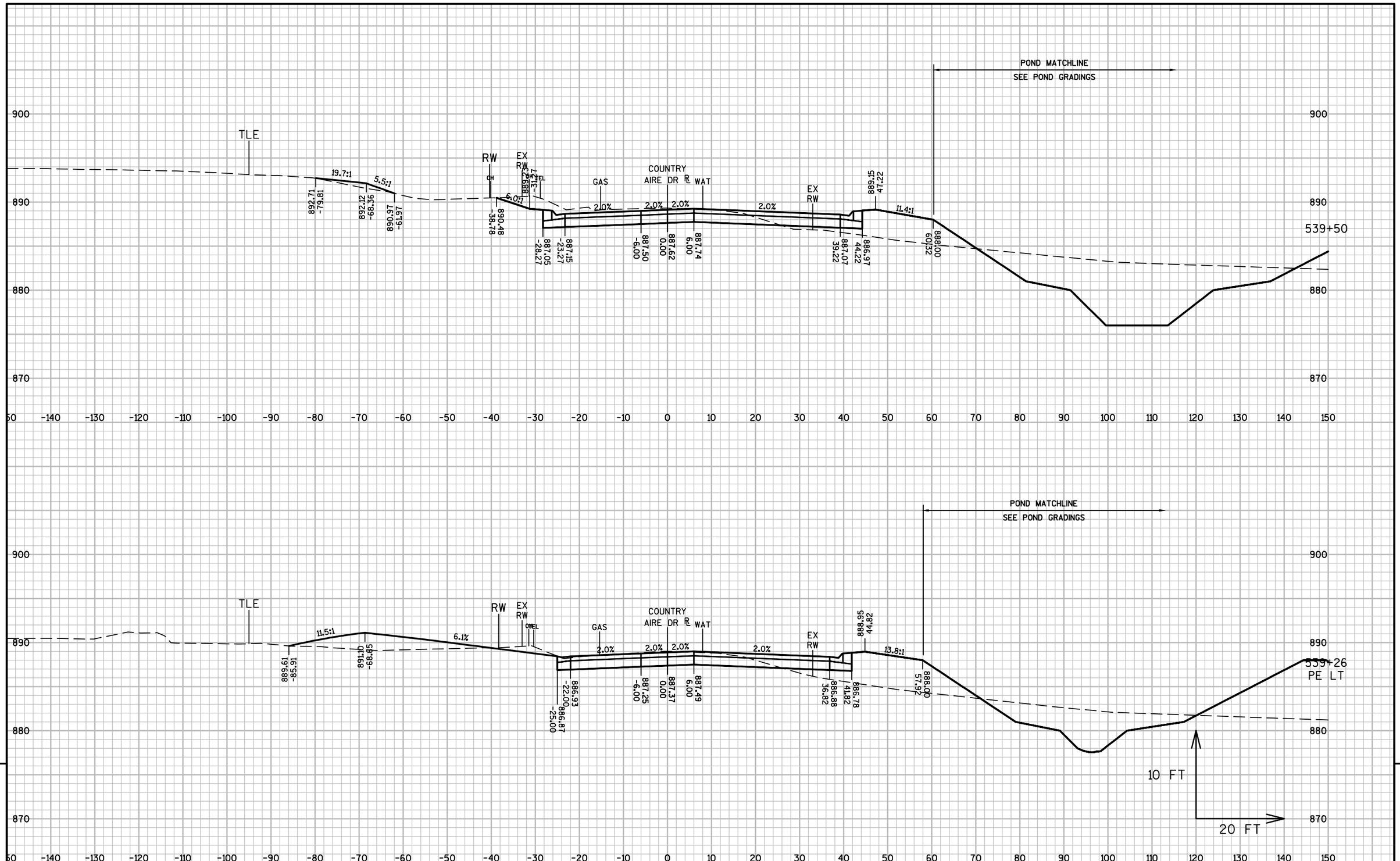
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 1/23/2018 8:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 358	E



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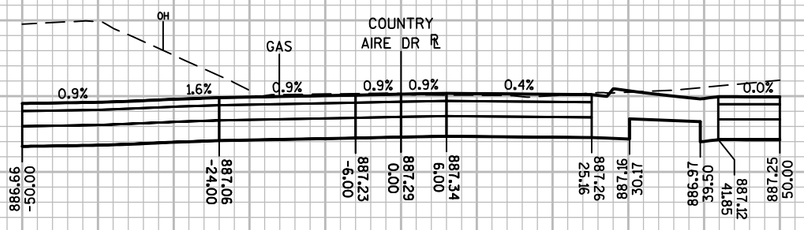
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 359	E

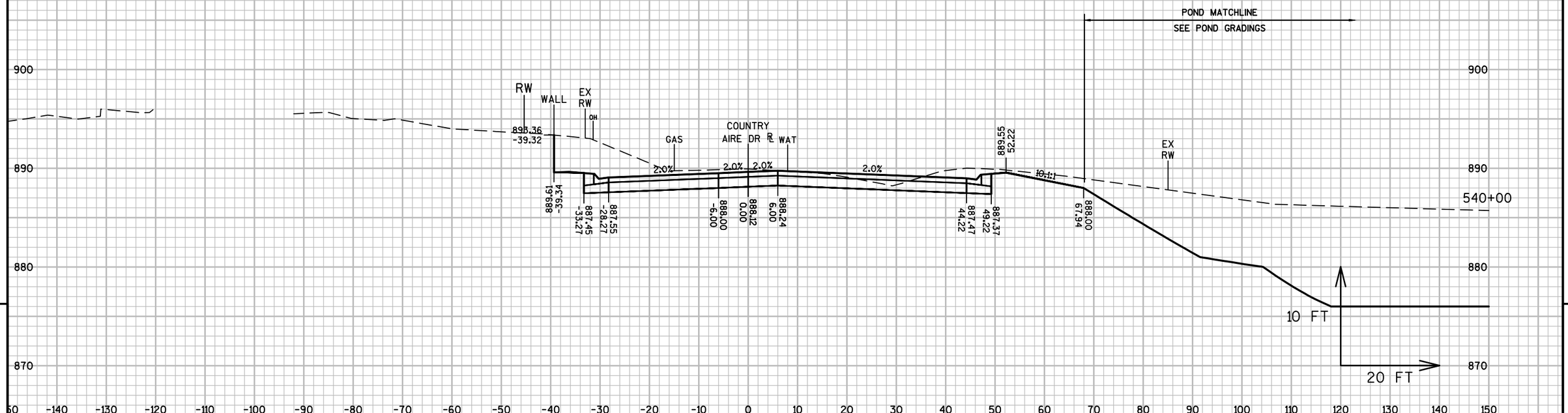
FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 1/23/2018 8:40 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

STH 167 INTERSECTION



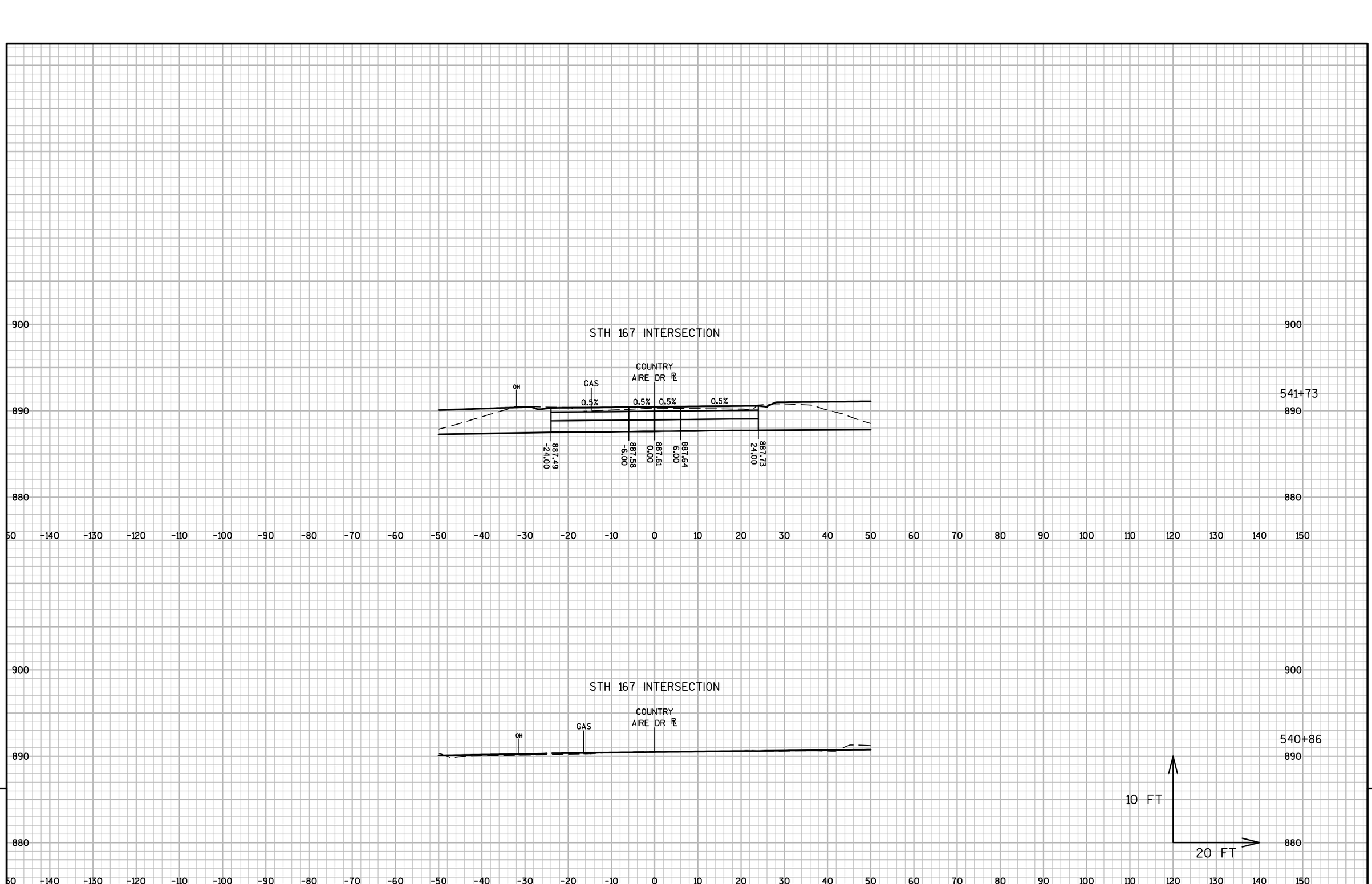


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 360	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 1/23/2018 8:41 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

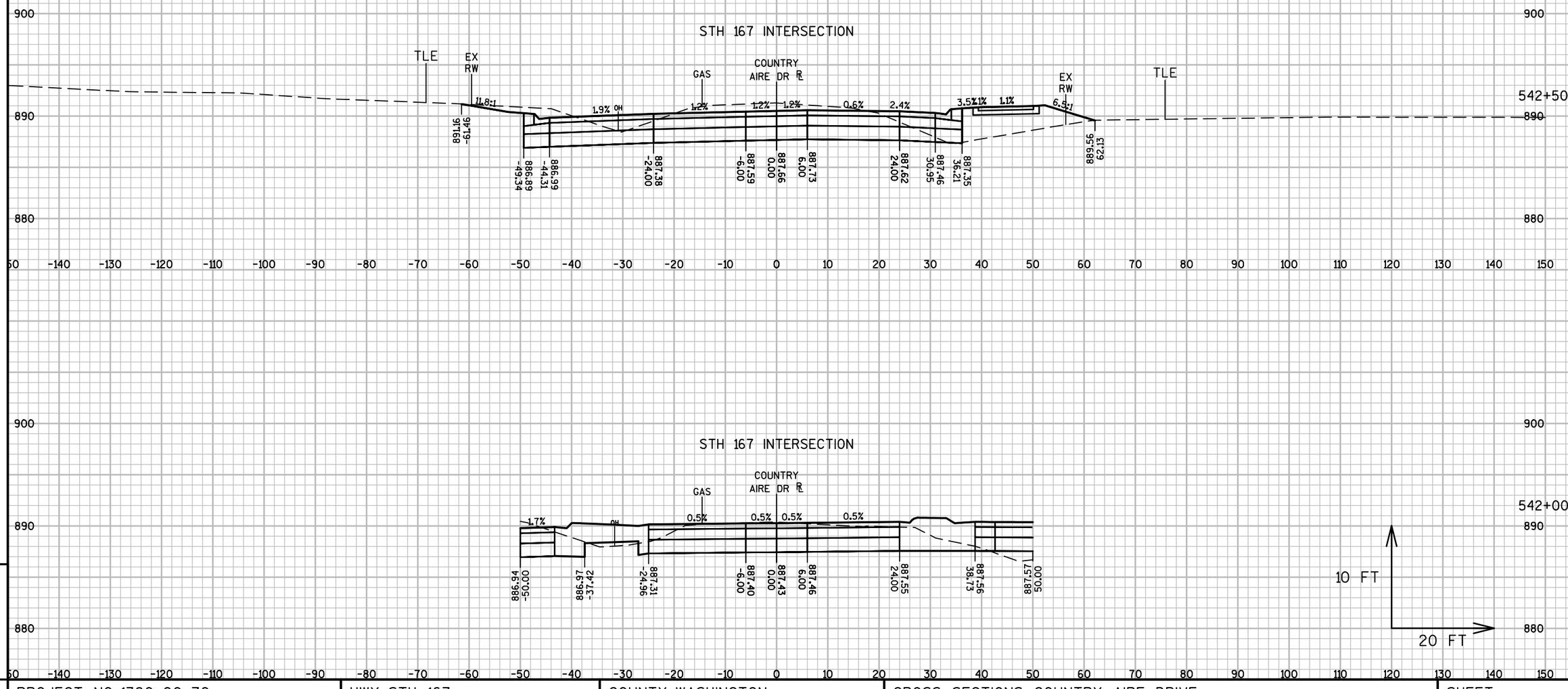


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 361	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 1/23/2018 8:41 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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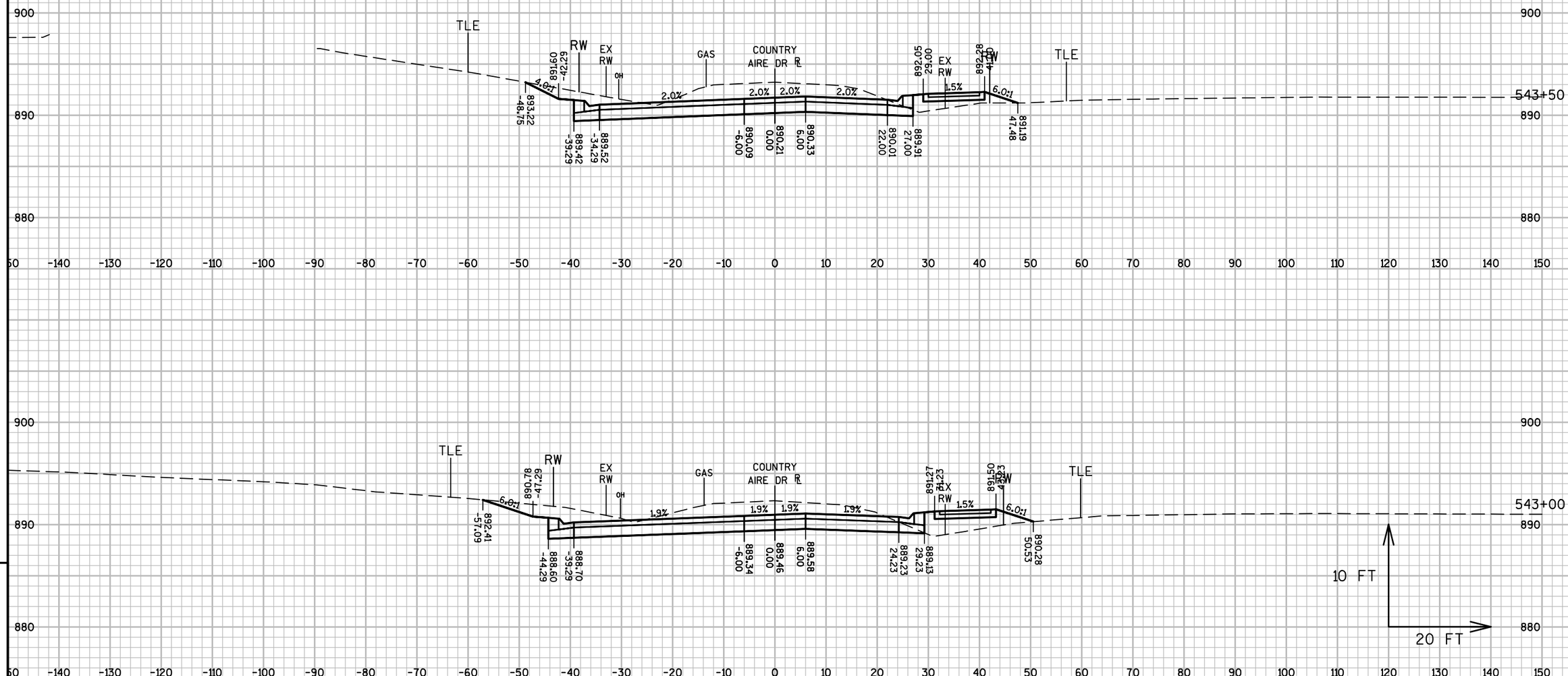
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 362	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 11

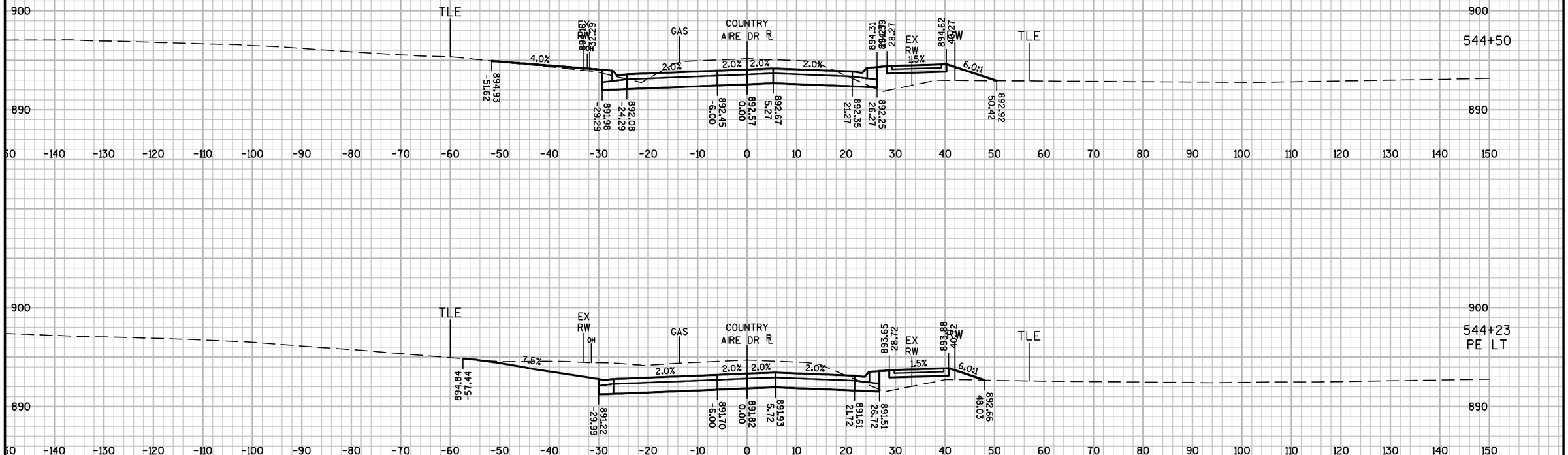
PLOT DATE : 1/23/2018 8:41 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

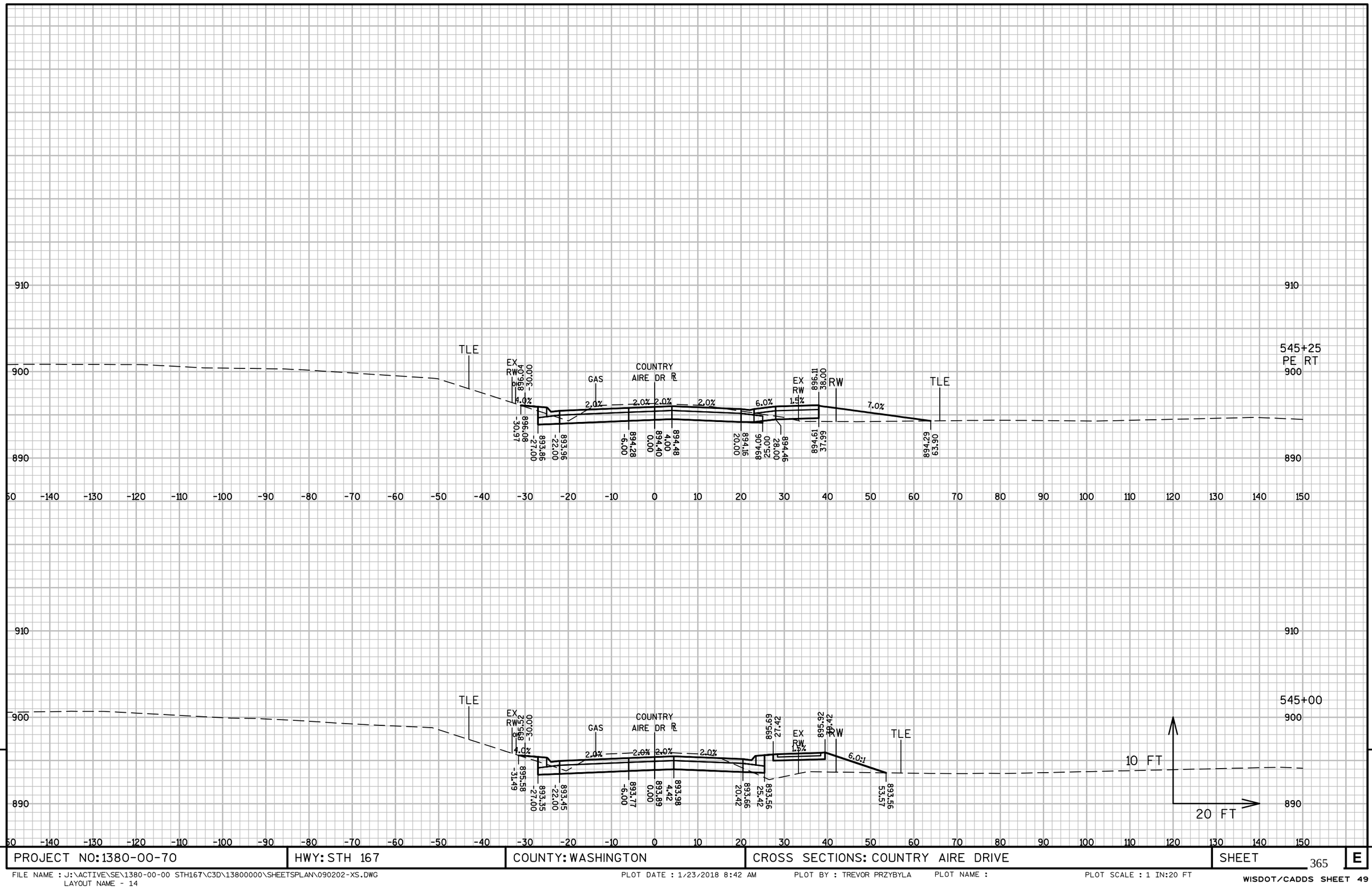


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 363 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 12
PLOT DATE : 1/23/2018 8:41 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 364	E

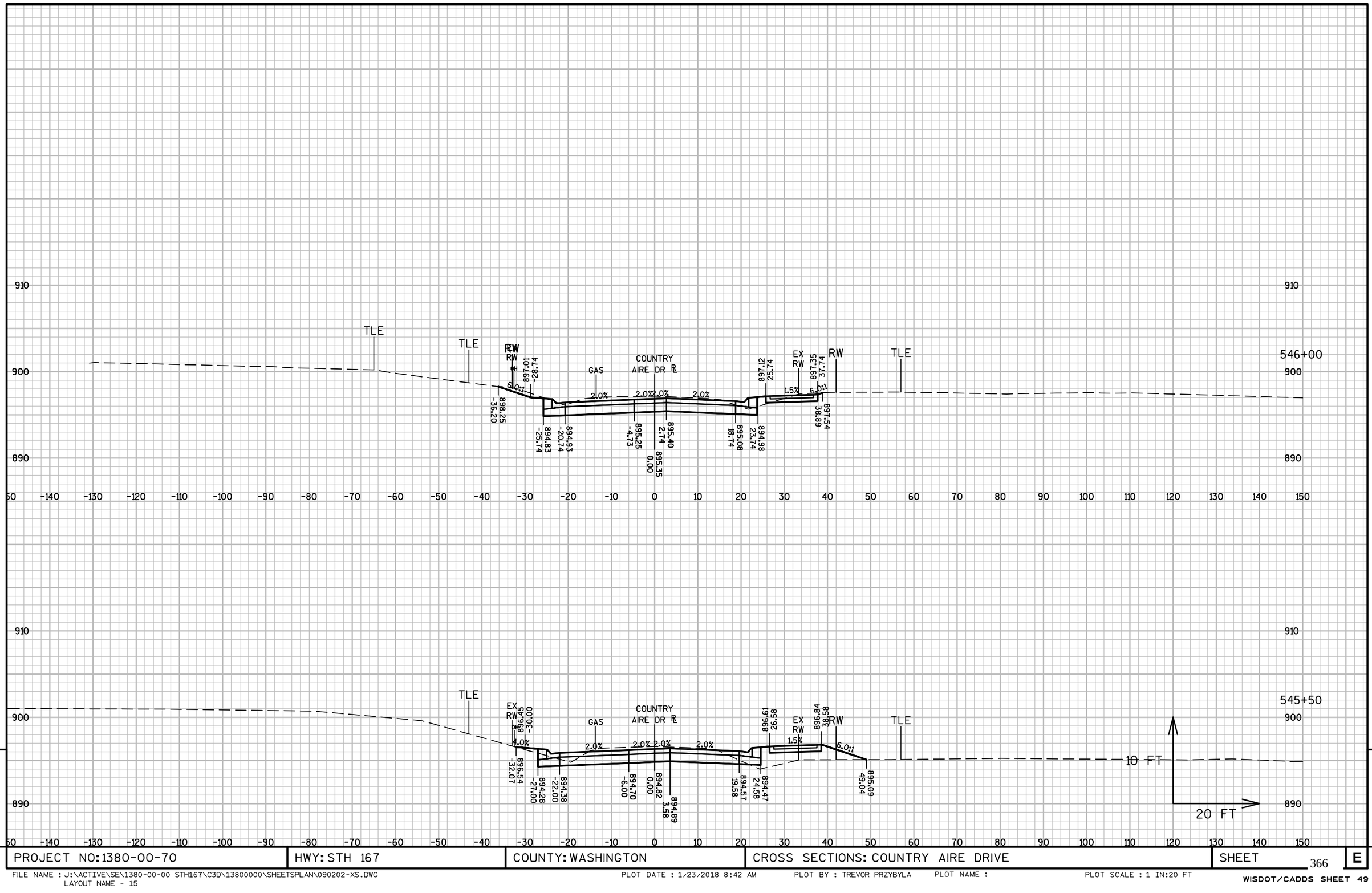


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 1/23/2018 8:42 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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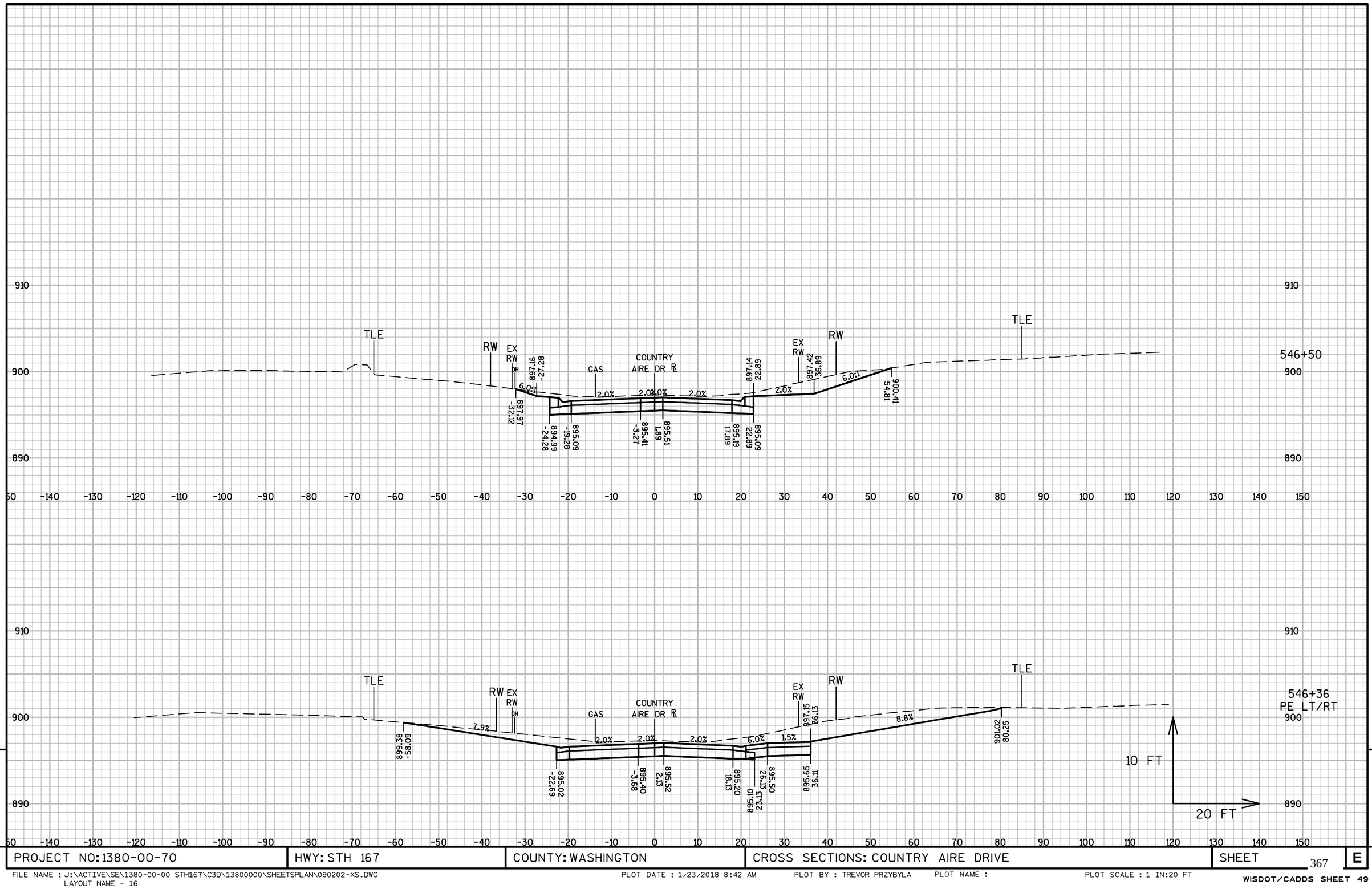
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 366	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 1/23/2018 8:42 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

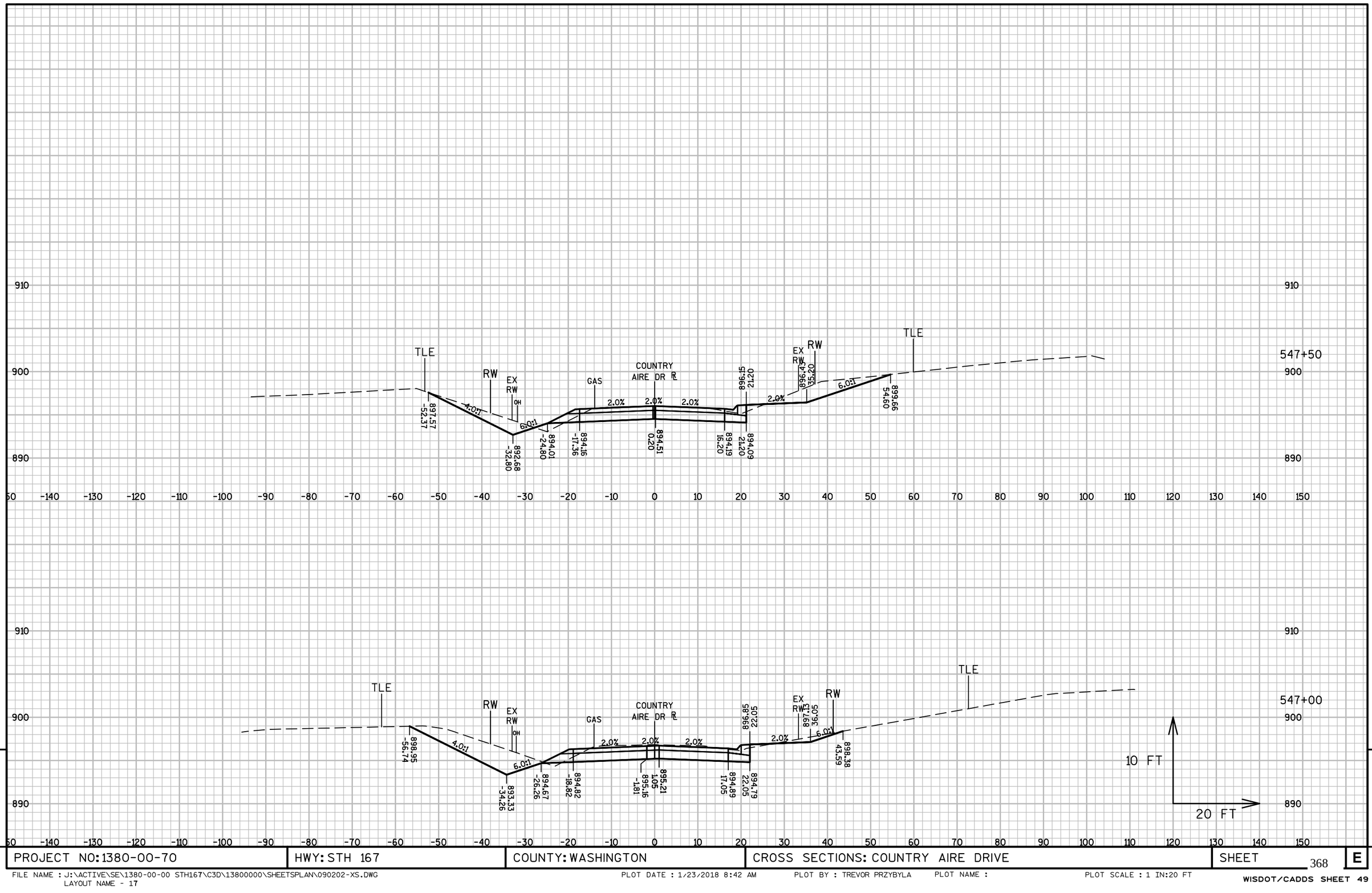


PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 1/23/2018 8:42 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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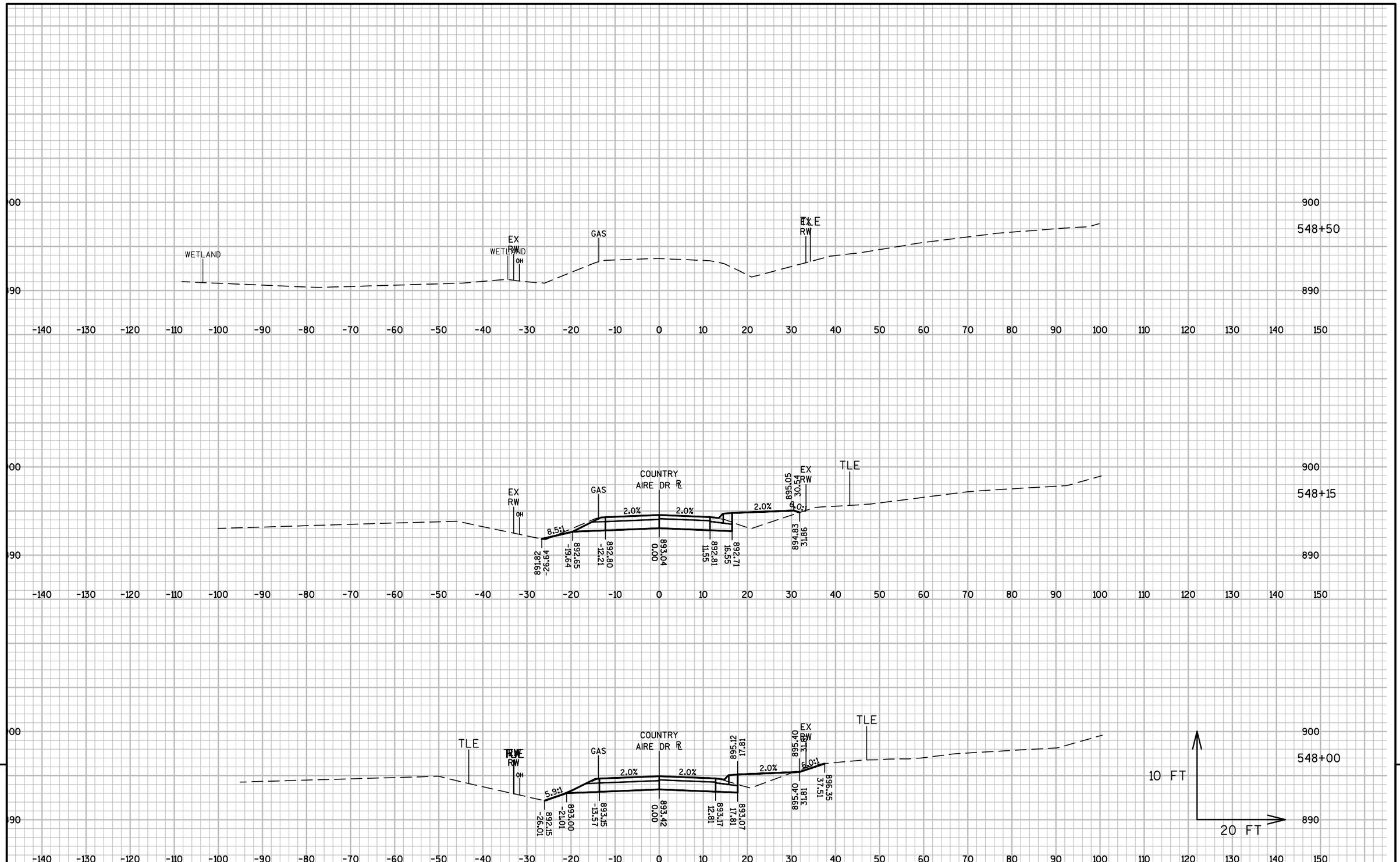
PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 368	E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 1/23/2018 8:42 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1380-00-70	HWY: STH 167	COUNTY: WASHINGTON	CROSS SECTIONS: COUNTRY AIRE DRIVE	SHEET 369 E

FILE NAME : J:\ACTIVE\SE\1380-00-00 STH167\C3D\13800000\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 1/23/2018 8:43 AM PLOT BY : TREVOR PRZYBYLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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