MAD

APRIL 2019

PROJECT ID: 5843-00-73

WITH: N/A

COUNTY: COLUMBIA

ORDER OF SHEETS

TOTAL SHEETS = 194

33

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

OKEE - HARMONY ROAD

(STH 113 - RAPP ROAD)

CTH V

COLUMBIA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5843-00-73	WISC 2019154	1

STATE PROJECT NUMBER

5843-00-73

END PROJECT
STA 124+50.00
Y 328631.49
X 507237.07

BEGIN PROJECT
STA 97+91.07
Y 327342.67
X 504960.94

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.504 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), COLUMBIA COUNTY

DESIGN DESIGNATION

A.A D.T.	(2019)	=	1400
A.A.D.T.	(2039)	=	1500
D.H.V.		=	330
D.D.		=	50/50
T.		=	5.7%
DESIGN SPEED		=	30 MPH
ESALS		=	321,200

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	955.26
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'CB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

ACCEPTED FOR COLUMBIA COUNTY

10/18/2018 (Date) (County Commissioner)

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES

WISCONSIN
DAN J. SCHRUM
E-40185
MIDDLETON
WI
PROFESSIONAL ENGINEER

10/19/2018 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor: GROTHMAN & ASSOCIATES

Designer: AYRES ASSOCIATES INC

Management Consultant: KL ENGINEERING, INC

APPROVED FOR THE DEPARTMENT

DATE 10/30/18 (Management Consultant Signature)

E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\010101_TI DWG

PLOT DATE : 10/12/2018 8:46 AM

PLOT BY : RESHESKE, CARRIE

PLOT NAME :

GENERAL NOTES

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

EXACT LOCATION OF DRIVEWAY ENTRANCES TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

SHRINKAGE OF EARTHWORK IS VARIABLE. AN AVERAGE FACTOR FOR EXCAVATION COMMON IS 25%.

CROSS DRAIN PIPE LOCATIONS AND ELEVATIONS AS SHOWN ON THE CROSS SECTION SHEETS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE COVERED WITH SALVAGED TOPSOIL OR TOPSOIL, FERTILIZED, SEEDED, TEMPORARY SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLANDS, FLOODWAY OR FLOODPLAIN OF ANY WETLANDS.

KEEP ACTIVITIES OUTSIDE OF WETLAND AREA. DO NOT OPERATE MACHINERY OUTSIDE THE SLOPE INTERCEPTS.

SEED MIXTURE NO.20 SHALL BE USED THROUGHOUT, EXCEPT LAWN AREAS WHERE NO.40 SHALL BE USED.

DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATER BODY OR WETLAND.

WHEN THE QUANTITY OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD THE DEPTH OF THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

EROSION MAT WILL BE REQUIRED FOR ALL SLOPES GREATER THAN 3:1.

SPOT ELEVATIONS PROVIDED FOR CURB AND GUTTER ARE AT THE FLANGE LINE OF CURB AND GUTTER UNLESS OTHERWISE NOTED.

UTILITIES

WISCONSIN POWER AND LIGHT COMPANY, A
WISCONSIN CORPORATION (DBA ALLIANT ENERGY) - ELECTRIC DISTRIBUTION
520 COMMERCE AVENUE
BARABOO, WI 53913
ATTN: JOSH STRUTZ
jOSHUASTRUTZ@alliantenergy.com
(608) 356-0609
(608) 444-9148 (MOBILE)

CHARTER COMMUNICATIONS - COMMUNICATIONS
2701 DANIELS STREET
MADISON, WI 53718
ATTN: ANTHONY SANFRATELLO
anthony.sanfratello@charter.com
(608) 438-0554 (MOBILE)

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATIONS
2222 WEST WISCONSIN STREET
PORTAGE, WI 53901
ATTN: JERRY MOORE
Jerald.r.moore@ftr.com
(608) 742-9507
(608) 346-0353 (MOBILE)

MCI (DBA VERIZON BUSINESS) - COMMUNICATIONS
220 S. HALSTED AVENUE
CHICAGO, IL 60601
ATTN: SANDRA B. CISNEROS
scisneros@telecom-eng.com
(312) 612-5216

SPRINT COMMUNICATIONS COMPANY LP - COMMUNICATIONS
1901 NORTH ROSELLE ROAD, SUITE 500
SCHAUMBURG, IL 60195
ATTN: JAMES BURTON
james.m.burton@sprint.com
(708) 955-6659 (mobile)

MADISON GAS AND ELECTRIC COMPANY - GAS
133 SOUTH BLAIR
MADISON, WI 53713
ATTN: SHAUN ENDRES
sendres@mge.com
(608) 252-7224
(608) 213-6708 (MOBILE)

* OKEE SANITARY SEWER DISTRICT #1 - SANITARY SEWER
W10901 LAKE POINT DRIVE
LODI, WI 53555
OFFICE CONTACT: CONNIE SEARS, DISTRICT CLERK
hgokee@harmonygrove-okee.com
(608) 292-5795

FIELD CONTACT:
GENERAL ENGINEERING COMPANY
916 SILVER LAKE DRIVE
PORTAGE, WI 53901
ATTN: JERRY FOELLMI/LUKAS LYZWA
jfoellmi@generalengineering.net
llyzwa@generalengineering.net
(608) 742-2169
(608) 697-7772 (MOBILE)

* DENOTES NOT A DIGGERS HOTLINE MEMBER

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES AND UTILITY CONTACTS

TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVING DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING & PAVEMENT MARKING PLAN
TRAFFIC CONTROL & DETOUR

DESIGN CONTACT

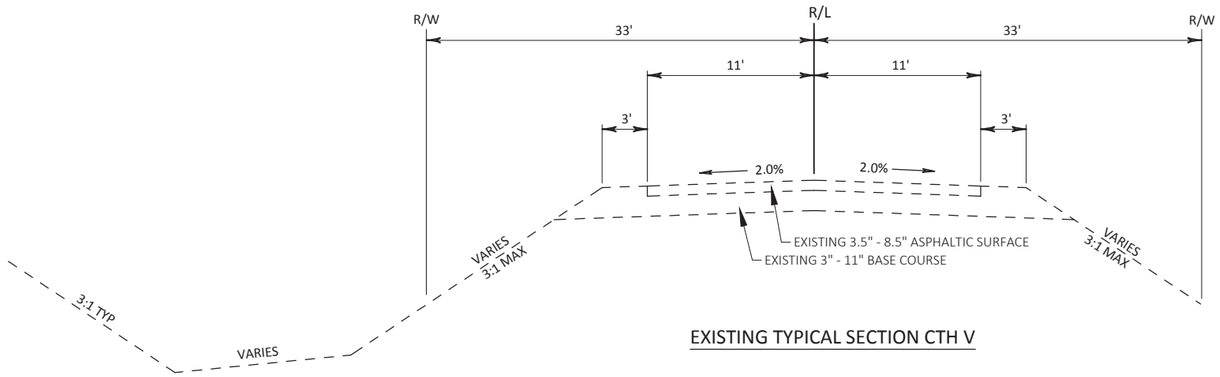
AYRES ASSOCIATES
5201 E. TERRACE DRIVE, SUITE 200
MADISON, WI 53718
ATTN: DAN SCHRUM, P.E.
schrumd@ayresassociates.com
(608) 443-1277

DNR CONTACT

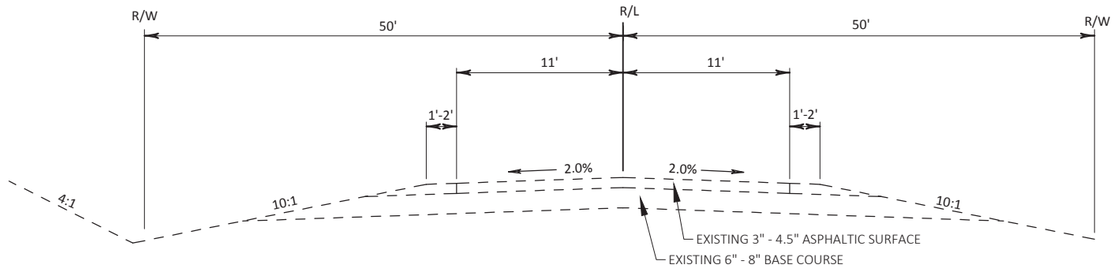
WISCONSIN DNR, SOUTHWEST REGION
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
ATTN: ERIC HEGGELUND
eric.heggelund@wisconsin.gov
(608) 275-3301

COUNTY CONTACT

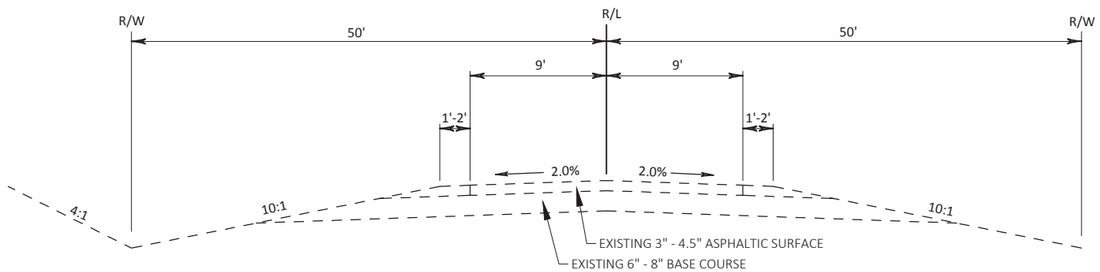
COLUMBIA COUNTY HIGHWAY
AND TRANSPORTATION DEPARTMENT
303 OLD HIGHWAY 16 WEST
WYOCENA, WI 53969-0875
ATTN: CHRIS HARDY, P.E.
chris.hardy@co.columbia.wi.us
(608) 429-2136



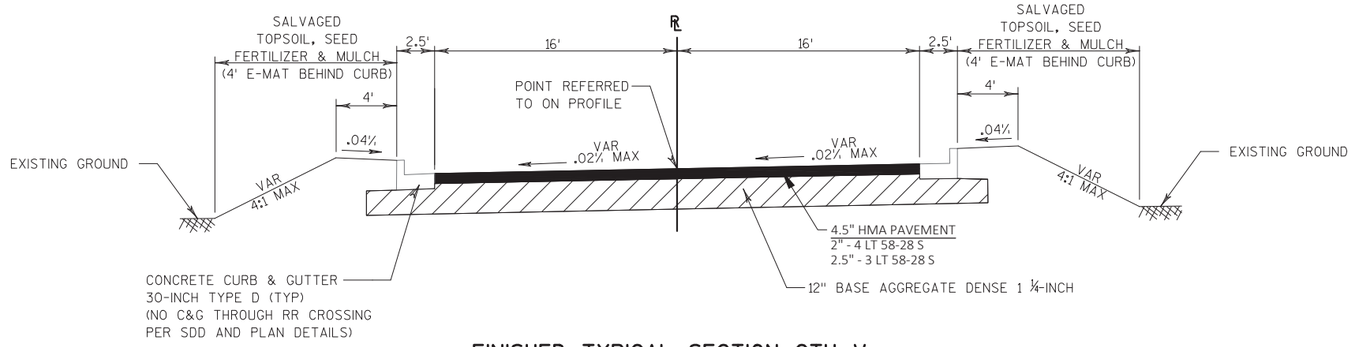
EXISTING TYPICAL SECTION CTH V



EXISTING TYPICAL SECTION SHAMROCK RD

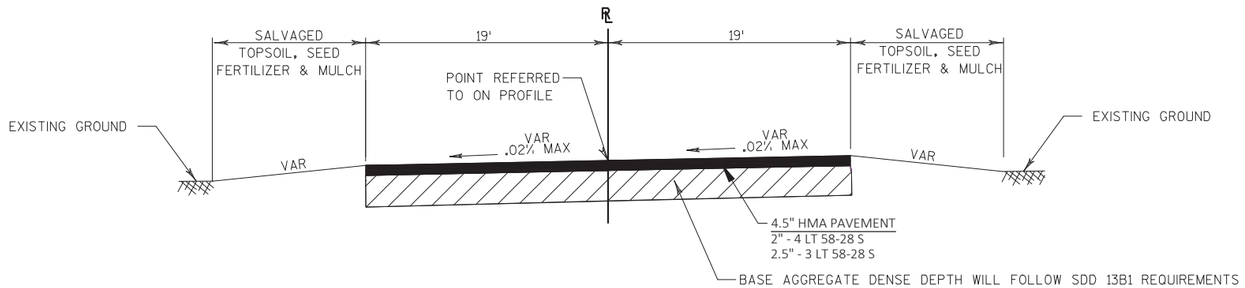


EXISTING TYPICAL SECTION OLD SAUK RD



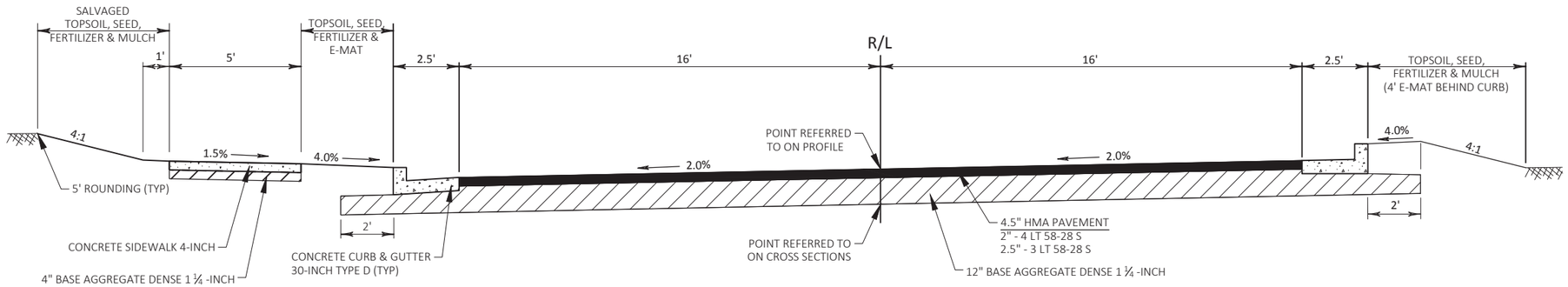
FINISHED TYPICAL SECTION CTH V

STA 97+91.06 - STA 100+20.00



FINISHED TYPICAL SECTION CTH V

TYPICAL SECTION DIRECTLY AT RAILROAD CROSSING (NO CURB & GUTTER)

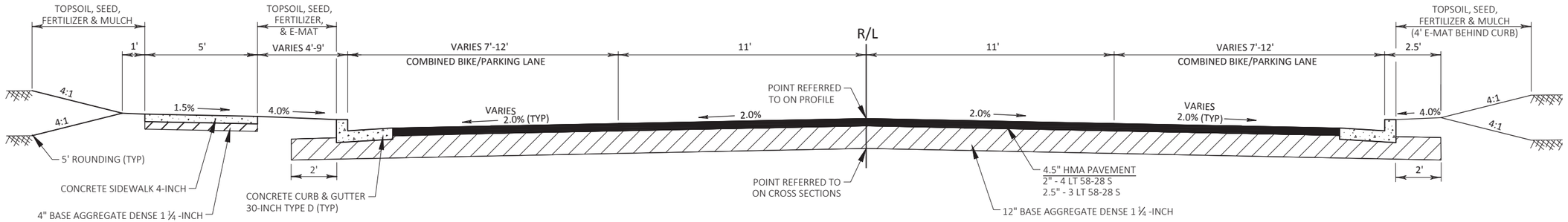


FINISHED TYPICAL SECTION CTH V

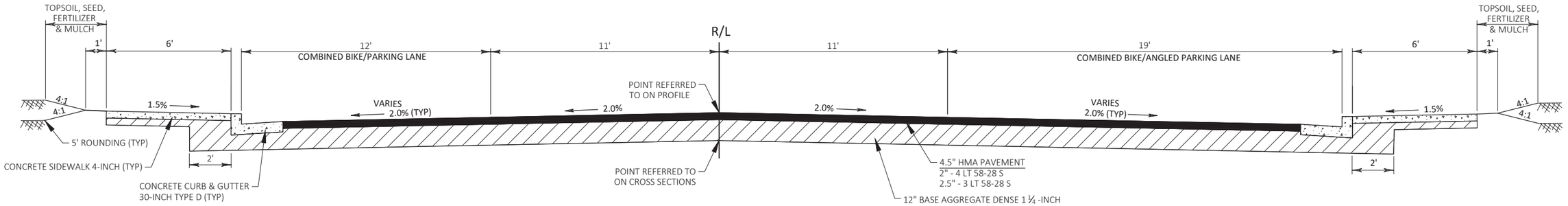
STA 100+20.00 - STA 102+00.00

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	TYPICAL FINISHED SECTIONS	SHEET 4	E

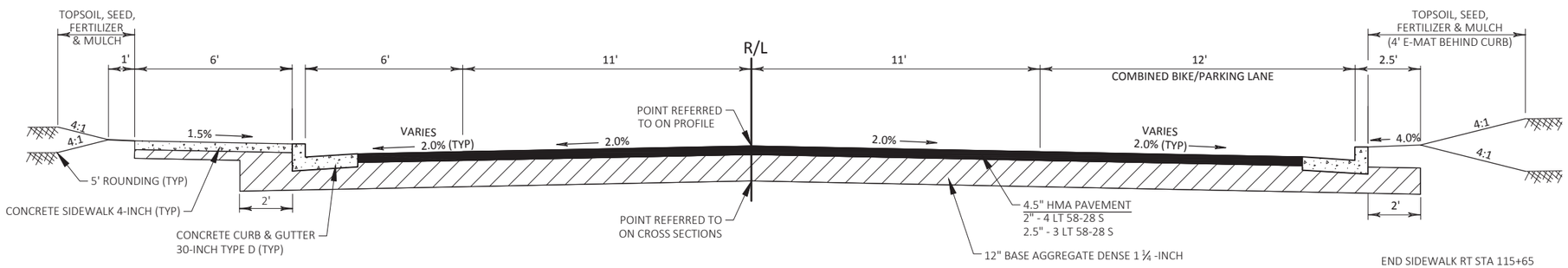
2



FINISHED TYPICAL SECTION CTH V
STA 102+00.00 - STA 110+00.00

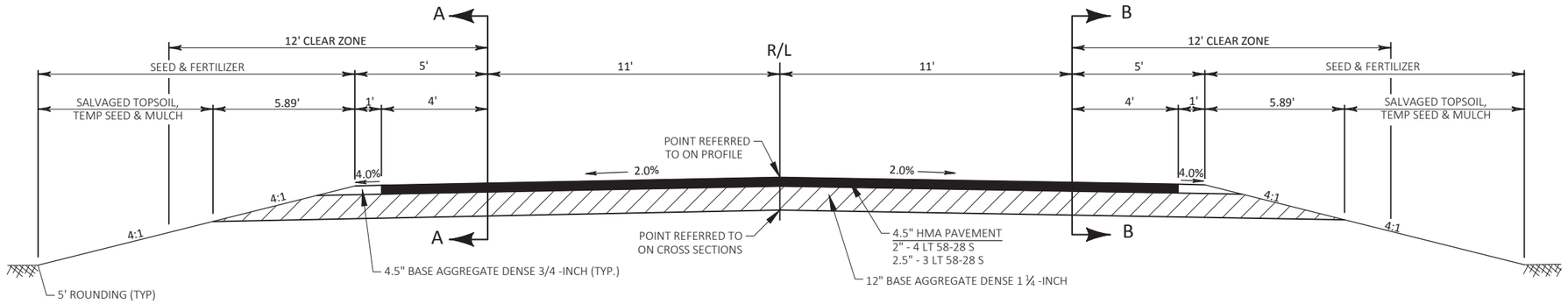


FINISHED TYPICAL SECTION CTH V
STA 110+00.00 - STA 114+75.00



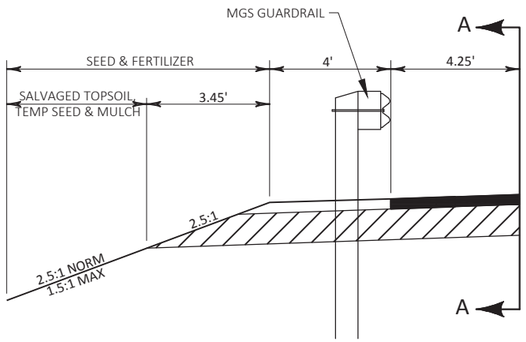
FINISHED TYPICAL SECTION CTH V
STA 114+75 - STA 116+00

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	TYPICAL FINISHED SECTIONS	SHEET 5	E



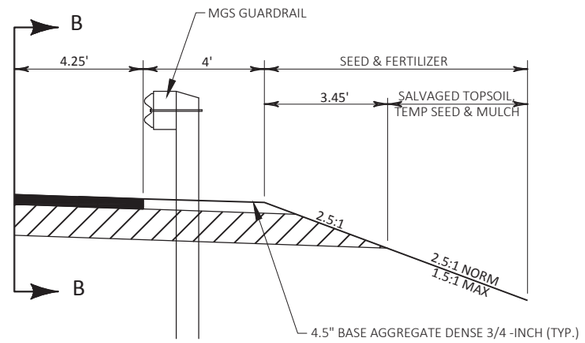
FINISHED TYPICAL SECTION CTH V

STA 116+00 - STA 118+80.30, LT
STA 117+15 - STA 118+80.30, RT



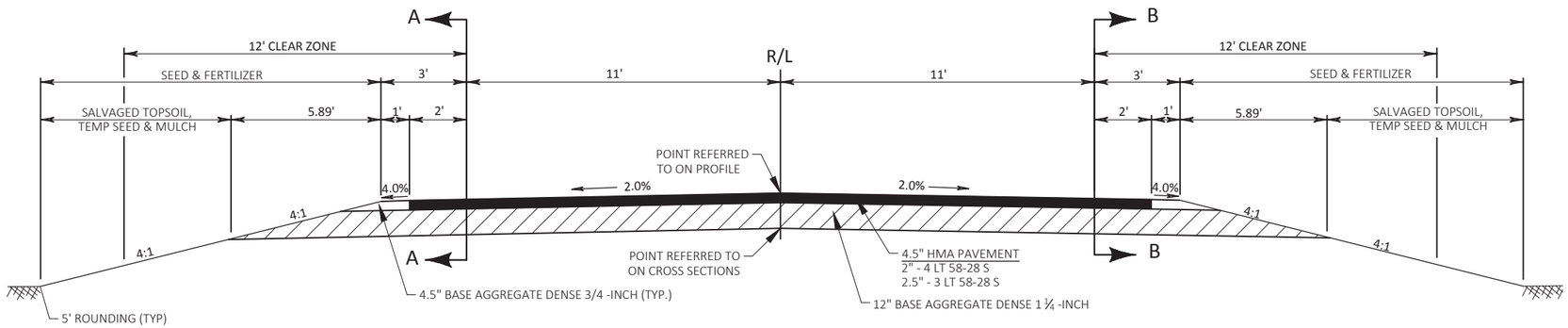
SECTION A-A

STA 118+80.30 - STA 121+78.30



SECTION B-B

STA 118+80.30 - STA 121+78.30

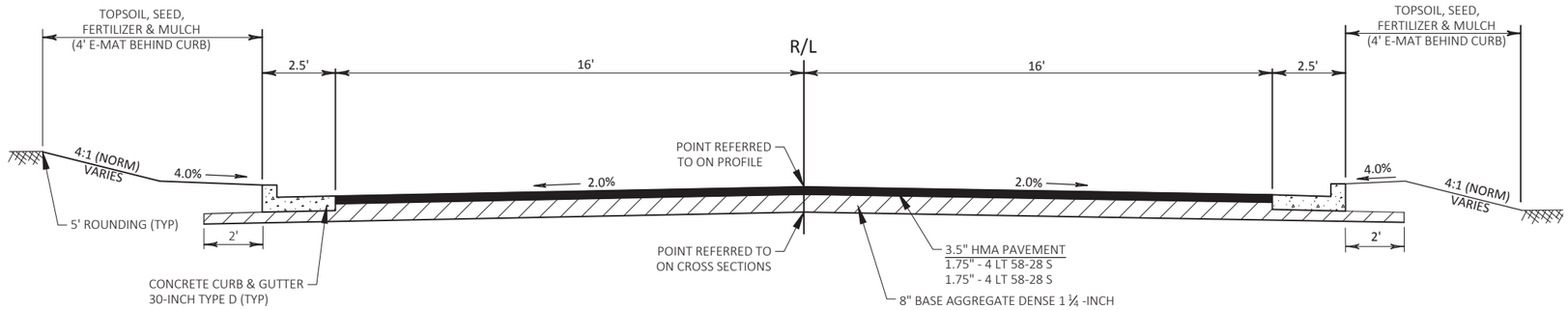


FINISHED TYPICAL SECTION CTH V

STA 121+78.30 - STA 124+50

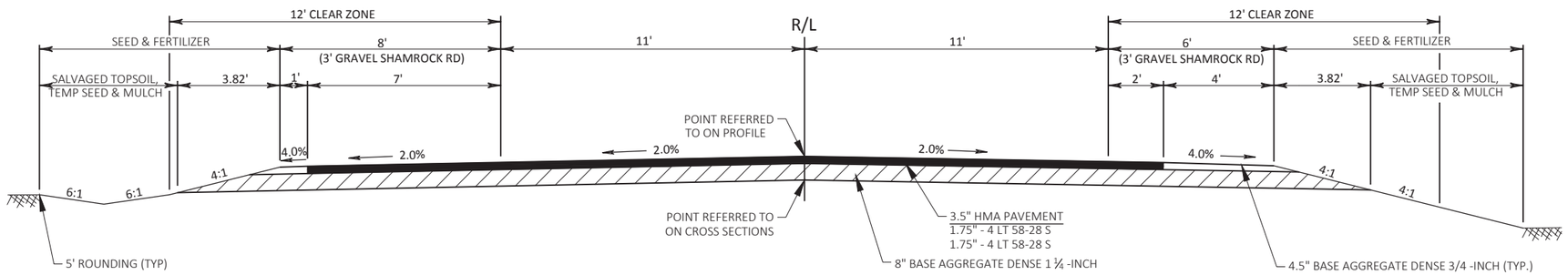
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	TYPICAL FINISHED SECTIONS	SHEET 6	E

2



FINISHED TYPICAL SECTION SHAMROCK RD

STA 11+25 - STA 16+00



FINISHED TYPICAL SECTION

STA 10+50 - STA 11+25 (SHAMROCK RD)
STA 20+00 - STA 24+50 (OLD SAUK RD)

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	TYPICAL FINISHED SECTIONS	SHEET 7	E

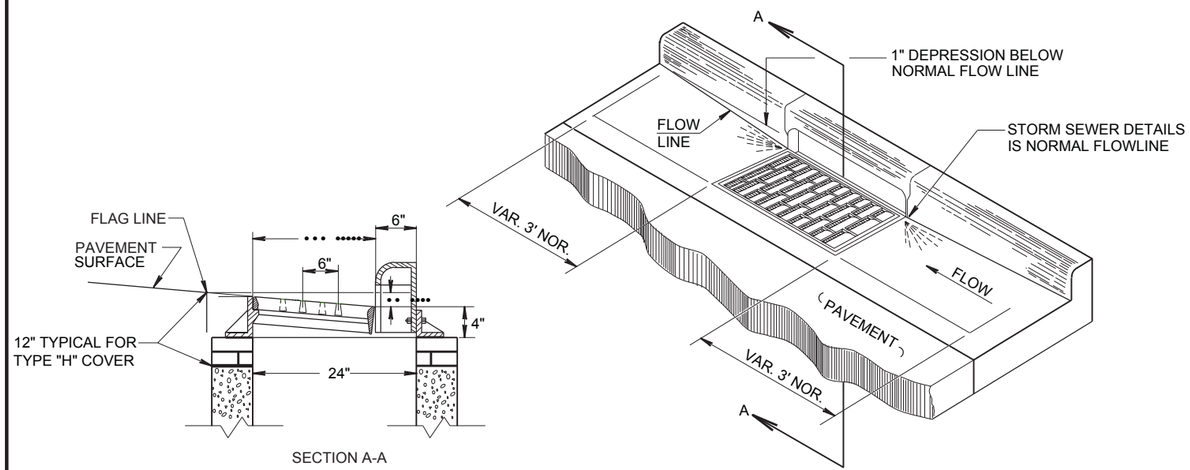
FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 020305_ts

PLOT DATE : 8/29/2018 1:53 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:200 FT

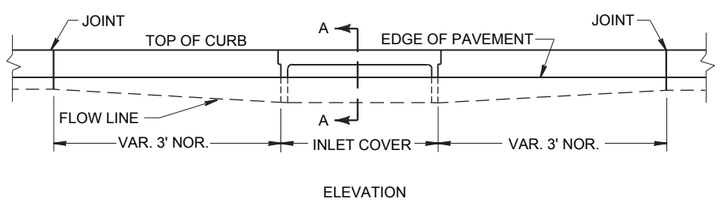
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 9.240 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.507 ACRES



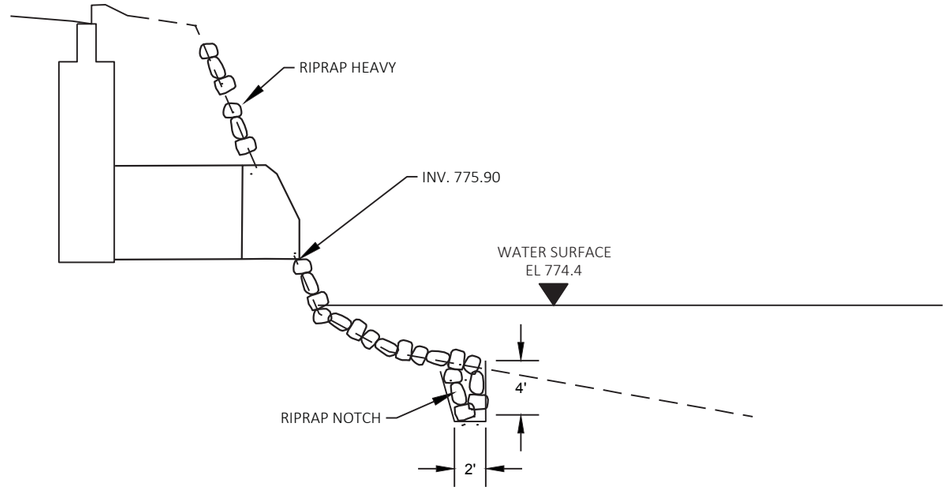
SECTION A-A



ELEVATION

DETAIL OF CURB AND GUTTER AT INLETS

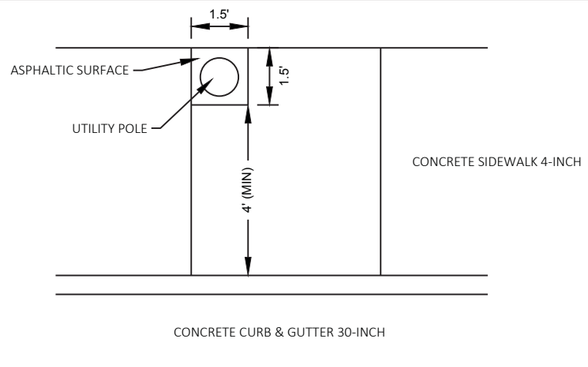
(TYPE 3-H INLET SHOWN)



SECTION A-A

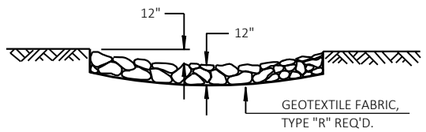
RIPRAP HEAVY TREATMENT AT OUTFALL

STA 116+05, LT

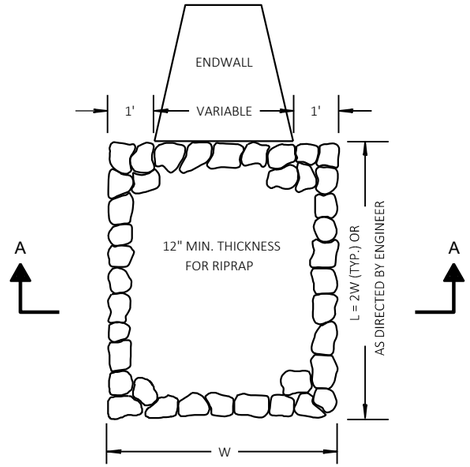


UTILITY POLE/SIDEWALK DETAIL

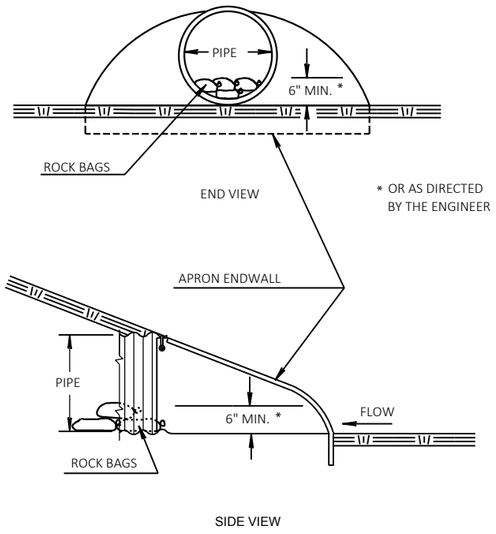
STA 109+80, 28' LT
STA 111+55, 28' LT
STA 112+65, 28' LT
STA 114+15, 28' LT



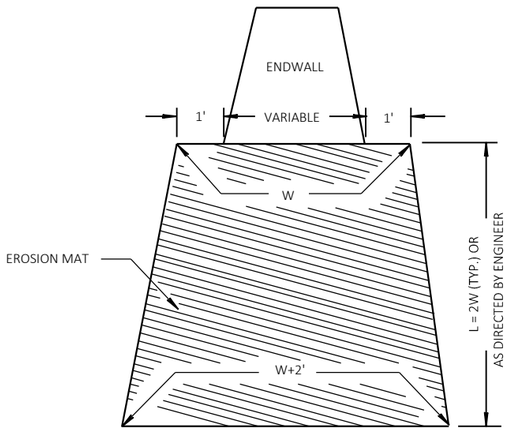
SECTION A-A



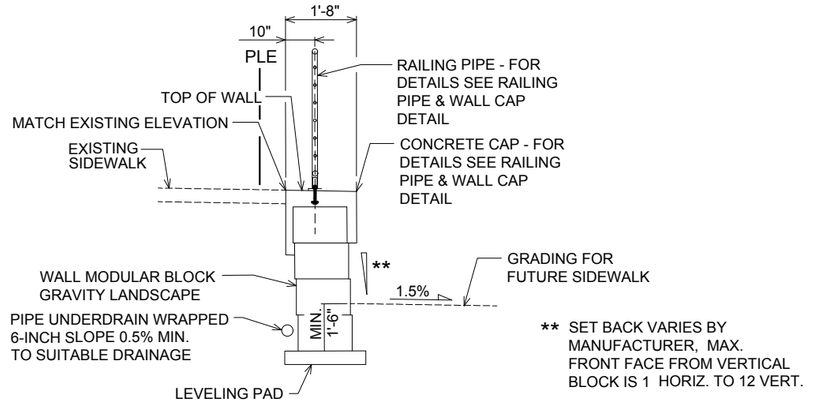
RIPRAP TREATMENT AT CULVERTS



CULVERT PIPE CHECK



EROSION MAT TREATMENT AT CULVERTS



WALL MODULAR BLOCK GRAVITY TYPICAL SECTION

GENERAL NOTES

WALL PROFILE SHOWS MINIMUM ELEVATION FOR THE TOP OF WALL. THE AREA CALCULATED FOR ESTIMATED QUANTITIES IS FROM THE MINIMUM TOP OF WALL ELEVATION TO THE TOP OF LEVELING PAD.

DRAWINGS SHALL NOT BE SCALED.

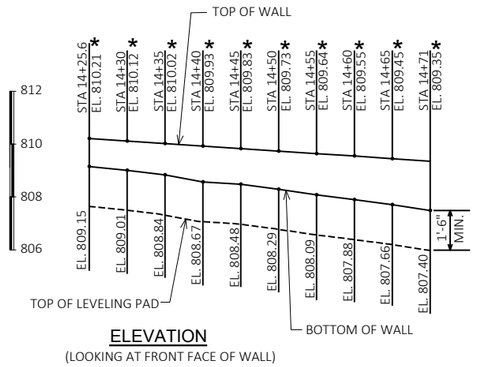
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

SOIL PARAMETERS

ALLOWABLE BEARING CAPACITY = 1.0 TONS/SF
ANGLE OF INTERNAL FRICTION = 15 DEGREE
COHESION = 0.8 TONS/SF
COEFFICIENT OF SLIDING FRICTION = 0.4

SAFETY FACTORS

SLIDING (FS > 1.5)
OVERTURNING (FS > 2.0)
GLOBAL STABILITY (FS > 1.3)
MINIMUM WALL EMBEDMENT 1'-6"



ELEVATION

(LOOKING AT FRONT FACE OF WALL)

* ELEVATIONS ARE APPROXIMATE, ADJUST WALL CAP PROPOSED ELEVATIONS TO THE FIELD VERIFIED ELEVATIONS OF TOP EDGE OF EXISTING SIDEWALK.

DESIGN DATA

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 LANDSCAPE".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO ANY 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 EXISTING ELEVATIONS OF THE TOP OF SIDEWALK AND BOTTOM OF WALL ELEVATIONS AS GIVEN ON THIS SHEET.

BLOCKS SHALL BE STRAIGHT FACE. COLOR SHALL BE SELECTED BY THE ENGINEER.

TEMPORARY SHORING REQUIRED ALONG EXISTING SIDEWALK FOR CONSTRUCTION OF WALL MODULAR BLOCK GRAVITY LANDSCAPE.

CONCRETE MASONRY ——— f'c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) ——— fy = 60,000 p.s.i.

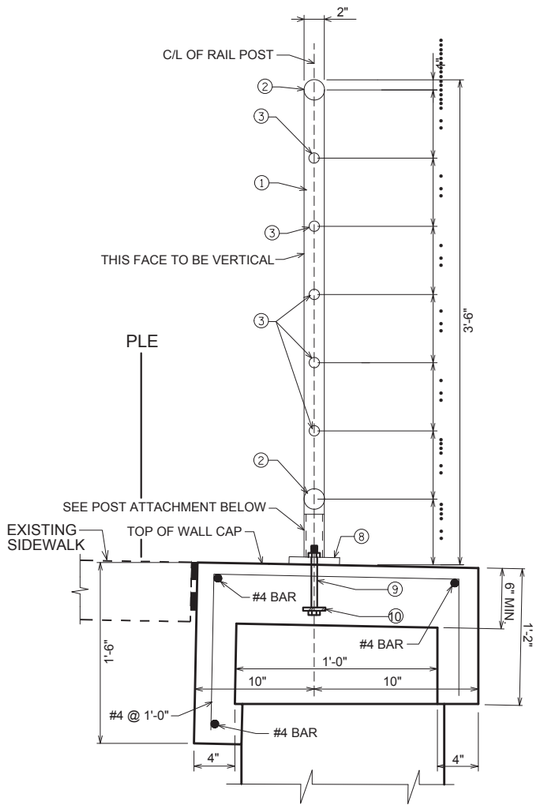
TOTAL ESTIMATED QUANTITIES

SPV. 0165.01	WALL MODULAR BLOCK GRAVITY LANDSCAPE	150 SF
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	50 LF
511.1100	TEMPORARY SHORING	300 SF
513.2001	RAILING PIPE	50 LF

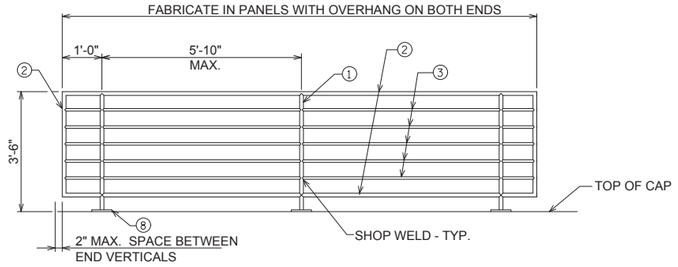
NOTE: COST OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT IN WALL CAP CONSIDERED INCIDENTAL TO THE BID ITEM "WALL MODULAR BLOCK GRAVITY LANDSCAPE".

WALL MODULAR BLOCK GRAVITY LANDSCAPE

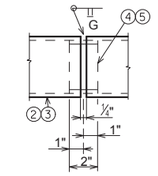
STA 14+25.6 - 14+71.0, LT (SHAMROCK)



SECTION THRU RAILING AND CAP

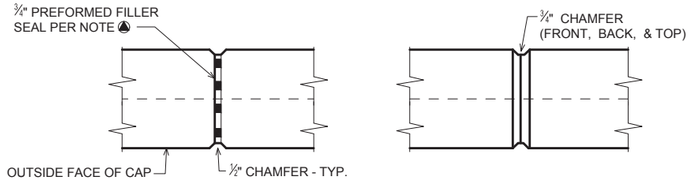


PART ELEVATION OF RAILING



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



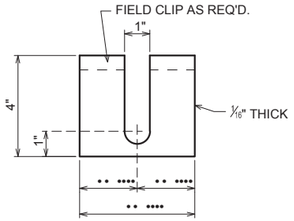
WALL CAP EXPANSION JOINT

DO NOT RUN ANY BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 50'

WALL CAP CONTRACTION JOINT

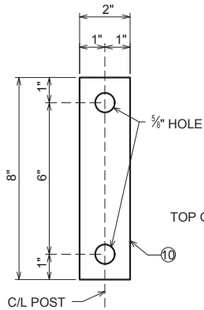
DO NOT RUN ANY BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'

▲ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW DURFACE OF CONCRETE).

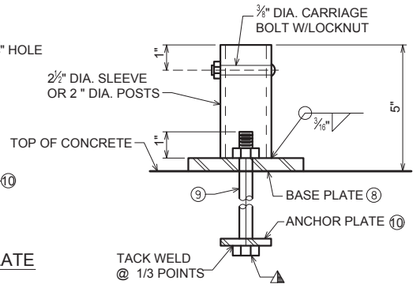


POST SHIM DETAILS

PROVIDE 4 SHIMS PER POST.



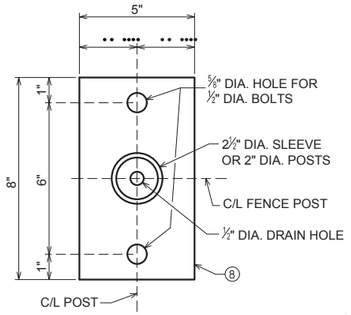
PLAN ANCHOR PLATE



ELEVATION

POST ATTACHMENT

UNIT SHALL BE GALV. AFTER FABRICATION



PLAN BASE PLATE

▲ 1/2" DIA. x 6 7/8" LONG GALVANIZED HEX. BOLT WITH NUT AND WASHER. TYPE S, 1/2" DIA. CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR 1/2" DIA. BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE ⊗ IN "GENERAL NOTES".

LEGEND

① 2" DIA. STEEL PIPE FOR POST. CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. PLACE POSTS VERTICAL.

② 2" DIA. STEEL PIPE FOR TOP & BOTTOM RAIL. WELD TO NO. 1.

③ 1" DIA. STEEL PIPE FOR INTERMEDIATE RAILS. WELD TO NO. 1.

④ 1 1/2" DIA. PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 1 3/16".

⑤ 1/2" DIA. ROD SLEEVE FOR NO. 3. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 5/16".

⑧ PLATE 3/4" x 5" x 8", WITH 5/8" DIA. HOLE FOR ANCHOR BOLTS NO. 9. WELD TO NO. 1 OR PIPE SLEEVE AS SHOWN.

⑨ A325 - 1/2" DIA. x 6 7/8" LONG HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 2 REQUIRED PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 8. CHAMFER TOP OF BOLTS BEFORE THREADING.

⑩ 1/4" x 2" x 8" FLAT BAR, WITH 5/8" DIA. HOLES FOR ANCHOR BOLTS NO. 9.

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE", WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 2 0R 3 POSTS.

RAILING SHALL BE CURVED TO FIT THE WALL ALIGNMENT.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 10) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 8 AND CAULK AROUND PERIMETER OF PLATE NO. 8 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

PLACE ALL NUTS ON OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACE TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

1/4" DIA. VENT HOLES LOCATED IN TOP RAIL OVER POSTS AND AT LOW END OF OTHER RAILS.

⊗ 1/2" DIA. CONCRETE MASONRY ANCHOR, TYPE "S", 6" EMBEDMENT (EPOXY ANCHORED) MIN. PULLOUT OF 10 KIPS. THREADED LENGTH OF ANCHOR, WASHER AND NUT SHALL BE GALVANIZED.

RETAINING WALL RAILING DETAIL

STA 14+25.6 - 14+71, LT (SHAMROCK)

2

50+94.2, 10.6' RT

51+00

2'

3'

STH 113

18'

BP: 97+88.17

799.79

800.38

R40'

STA 98+25.23 , 56' LT, CTH V =
STA 50+21.86 , 58' RT, STH 113
Y = 327408.17
X = 504964.40

CONCRETE CURB & GUTTER
36-INCH TYPE D

ASPHALTIC FLUMES REQ'D

50+00

75°1'31"

798.67

16'

0.02

98+00

796.33

796.37

16'

99+00

ASPHALTIC FLUMES REQ'D

STA 99+28.38 , 56' LT, CTH V =
STA 20+65.39 , 55' LT, OLD SAUK RD
Y = 327457.16
X = 505055.17

PC: 99+38.39

795.88

796.41

R40'

PT: 99+64.42

796.24

75°2'3"

797.38

16'

798.55

797.01

797.16

797.48

797.97

0.02

798.63

16'

799.40

100+00

90°9'16"

21+00

OLD SAUK RD

0.02

0.02

15'

795.34

15'

795.64

796.54

797.38

STA 99+82.80, CTH V =
STA 20+00.00, OLD SAUK RD
CONSTRUCT TYPE D MODIFIED
INTERSECTION

STA 100+56.02 , 81' LT, CTH V =
STA 20+65.17 , 80' RT, OLD SAUK RD
Y = 327534.92
X = 505165.52

R65'

CURB RAMP TYPE 4B1

CONCRETE CURB & GUTTER
36-INCH TYPE D

799.44

799.36

798.20

799.03

799.78

800.77

801.58

802.20

802.62

803.47

8'

16'

0.02

101+00

160.00

100°0'0"

CTH V

102+00

STA 101+11.42, CTH V =
STA 16+00.00, SHAMROCK RD
CONSTRUCT TYPE D MODIFIED
INTERSECTION

CONCRETE CURB & GUTTER
30-INCH TYPE D

102+18.0, -21.0' LT

102+00.0, -16.0' LT

PC: 102+18.82

802.75

802.56

802.27

801.98

801.91

801.83

5' CONCRETE SIDEWALK 4-INCH

4'

21'

PT: 103+53.57

103+00

0.02

0.02

16'

802.90

803.10

802.83

802.96

802.56

802.27

801.98

801.70

801.41

801.55

102+18.0, 21.0' RT

102+00.0, 16.0' RT

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 103+00 (CONCRETE)
CONSTRUCT PE
DRIVEWAY TYPE Y

STA 97+80.17, CTH V =
STA 49+79.40, STH 113
CONSTRUCT TYPE D
INTERSECTION

BEGIN PROJECT
STA 97+91.07
MATCH EXISTING
SAWCUT REQ'D

802.10

804.69

18'

49+00

3'

2'

48+30.2, 10.5' RT

48+00

R40'

ASPHALTIC FLUMES REQ'D

CONCRETE CURB & GUTTER
36-INCH TYPE D

STA 98+55.19 , 56' RT, CTH V =
STA 49+05.93 , 58' RT, STH 113
Y = 327323.83
X = 505043.94

CONCRETE CURB & GUTTER
30-INCH TYPE D

CONCRETE SURFACE
DRAIN REQ'D

FUTURE SIDEWALK
BY OTHERS

801.68

802.39

R40'

PT: 15+32.17

STA 100+44.69 , 56' RT, CTH V =
STA 15+33.27 , 56' LT, SHAMROCK RD
Y = 327404.82
X = 505209.92

803.67

16'

0.02

0.02

15+00

805.16

805.16

806.59

806.59

807.75

807.75

808.66

808.66

WALL MODULAR BLOCK
GRAVITY LANDSCAPE

SHAMROCK RD

801.46

R40'

CONCRETE
SURFACE
DRAIN REQ'D

STA 101+58.42 , 56' RT, CTH V =
STA 15+53.01 , 56' RT, SHAMROCK RD
Y = 327450.30
X = 505314.16

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PAVING DETAIL	SHEET 11	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021201_pd

PLOT DATE : 10/18/2018 3:31 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

STA 103+76 (GRAVEL)
CONSTRUCT PE
DRIVEWAY TYPE Y

STA 104+78 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

STA 105+58 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

5' CONCRETE SIDEWALK 4-INCH

STA 106+53 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 107+82 (GRAVEL)
CONSTRUCT PE
DRIVEWAY TYPE Y

STA 108+35 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

6' CONCRETE SIDEWALK 4-INCH

108+86.9, -25.5' LT

PT: 103+53.57

PC: 108+27.84

801.83 801.75 801.67 801.38 801.09 800.81 800.52 800.23 799.94 799.65 799.37 799.08 798.79 798.50 798.21 797.93 797.64 797.35 797.05 796.69 796.25 795.73 795.16 794.58 794.00

0.02 0.02 0.02 0.03

21' 21' 21' 4'

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

CTH V

801.41 801.12 800.83 800.54 800.25 799.97 799.68 799.39 799.10 798.81 798.53 798.24 797.95 797.66 797.37 797.09 796.80 796.51 796.21 795.85 795.41 794.89 794.32 793.74 793.16

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 105+29 (GRAVEL)
CONSTRUCT PE
DRIVEWAY TYPE Y

STA 105+88 (GRAVEL)
CONSTRUCT PE
DRIVEWAY TYPE Y

STA 107+04 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

STA 108+00 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

109+93.0, 21.0

110+00.0, 2

STA 109+54 (GRAVEL)
CONSTRUCT PE
DRIVEWAY TYPE X

STA 110+68 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE X

STA 111+44 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE X

STA 113+11 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE X

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 114+80 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE Y
(APRON ONLY)

STA 115+21 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE Y
(APRON ONLY)

ASPHALTIC SURFACE
SAWCUT REQ'D

114+50.0, -21.0' LT
114+65.5, -17.3' LT

PT: 115+09.10

8.5' 8.5'

6' CONCRETE SIDEWALK 4-INCH

PT: 109+01.39

794.00 793.42 792.85 792.27 791.69 790.91 790.35 789.80 789.24 788.48 787.71 787.16 786.39 785.86 785.40 785.02 784.71 784.42 784.13 783.84 783.56 783.35 783.08 782.79 782.51

0.02 0.02 0.02 0.02 0.01

21' 21' 28' 16' 21' 4'

110+00 111+00 112+00 113+00 114+00 115+00

CTH V

793.16 792.58 791.53 790.95 790.37 789.80 789.24 788.69 788.13 787.58 787.02 786.47 785.91 785.55 785.26 784.88 784.57 784.56 784.27 783.98 783.98 783.90 783.82 783.52 783.22

109+93.0, 21.0' RT

110+00.0, 28.0' RT

GATE CHAIN LINK 6-FT (2)

FENCE CHAIN LINK 4-FT

6' CONCRETE SIDEWALK 4-INCH

GATE CHAIN LINK 6-FT

CURB RAMP TYPE 7A

STA 109+59 (ASPHALT)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

STA 112+72 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE X

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 112+92 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE X

STA 113+72 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE X

114+57.2, 28.0' RT

114+72.6, 21.0' RT

5' CONCRETE SIDEWALK 4-INCH

STA 114+97 (CONCRETE)
CONSTRUCT PE
SAWCUT REQ'D
DRIVEWAY TYPE Y

N

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PAVING DETAIL	SHEET 12	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021202_pd
PLOT DATE : 10/29/2018 2:27 PM
PLOT BY : HEDRINGTON, MARK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

STA 115+60 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE Y
(APRON ONLY)

SAWCUT REQ'D

CONCRETE CURB & GUTTER
30-INCH TYPE D

CONCRETE SURFACE DRAIN REQ'D

8.5'

782.51 782.22 781.93 781.67

0.02

16'

116+00 117+00 118+00 119+00 120+00 121+00

116+70.0, -11.0' LT

1' 4' 11'

118+46.3, -16.00' LT
BEGIN TAPER

118+80.3, -15.30' LT
POST#1

119+05.3, -15.41' LT
POST#5

119+30.3, -15.20' LT
POST#9

PI: 119+07.53

MGS GUARDRAIL (TYP)

PC: 120+99.03

121+28.3, -15.30' LT
POST#9

121+53.3, -15.30' LT
POST#5

CTH V

0.02

783.22 782.92 782.62 781.65 782.13 781.98 781.75 781.58

14.7'

11' 1' 4'

5' CONCRETE SIDEWALK 4-INCH

SAWCUT REQ'D

ASPHALTIC SURFACE

8.5'

ASPHALTIC FLUME REQ'D

117+65.1, 11.0' RT

118+46.3, 16.00' RT
BEGIN TAPER

118+80.3, 15.30' RT
POST#1

119+05.3, 15.17' RT
POST#5

119+30.3, 15.26' RT
POST#9

STRUCTURE B-11-13

121+28.3, 15.30' RT
POST#9

121+53.3, 15.30' RT
POST#5

STA 115+80 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE Y
(APRON ONLY)

CONCRETE CURB & GUTTER
30-INCH TYPE D

STA 116+75 (ASPHALT)
CONSTRUCT CE
SAWCUT REQ'D
DRIVEWAY TYPE Y
(APRON ONLY)

STA 118+00 (ASPHALT)
CONSTRUCT PE
1-18" CP REQ'D
SAWCUT REQ'D

NOTE: EAT GRADING MINIMIZED
TO REDUCE POTENTIAL IMPACTS

N

5.30' LT
POST#5

121+78.3, -15.3' LT
POST#1

122+12.3, -14.0' LT
END TAPER

PT: 122+76.64

1' 2' 11' 0.02

122+00 123+00 124+00 125+00 126+00 127+00

CTH V

121+78.3, 15.3' RT
POST#1

122+12.3, 14.0' RT
END TAPER

0' RT
ST#5

MGS GUARDRAIL REQ'D

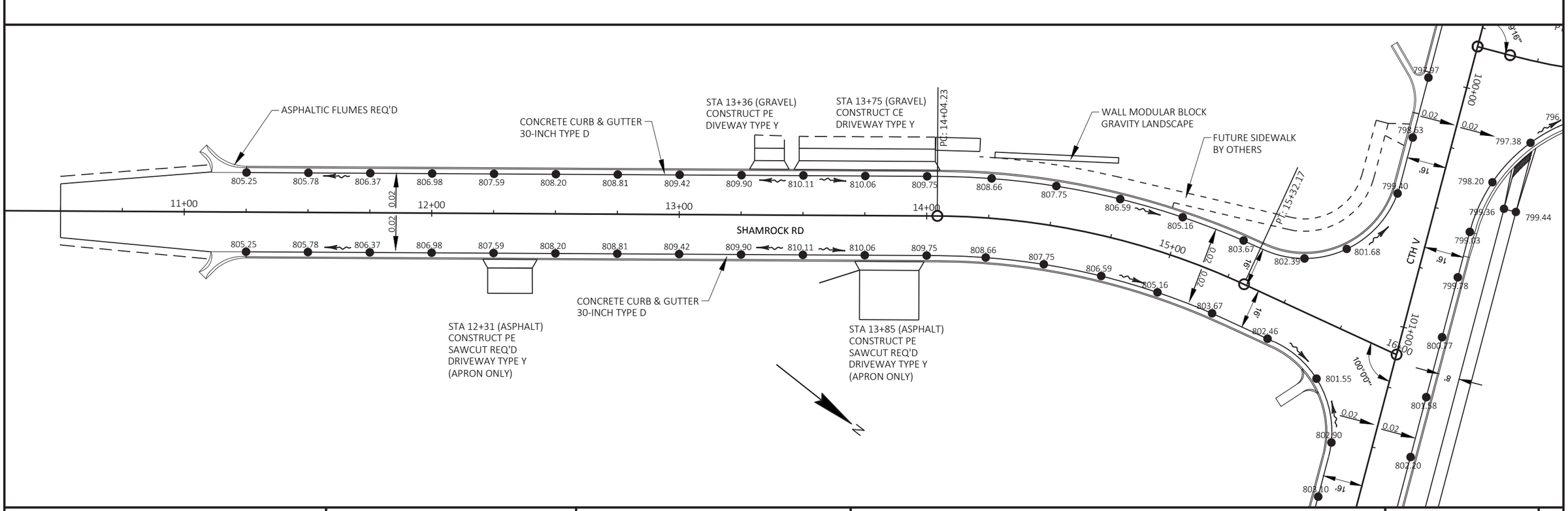
END PROJECT
STA 124+50.00
MATCH EXISTING
SAWCUT REQ'D

NOTE: EAT GRADING MINIMIZED
TO REDUCE POTENTIAL IMPACTS

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PAVING DETAIL	SHEET 13	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021203_pd
PLOT DATE : 10/29/2018 2:27 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PAVING DETAIL	SHEET 14	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 021204_pd

PLOT DATE : 10/15/2018 4:28 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP HEAVY (UNLESS OTHERWISE NOTED)
- INLET PROTECTION TYPES A & C (UNLESS OTHERWISE NOTED)

N

STH 113

OLD SAUK RD

SHAMROCK RD

CTH V

49+00

50+00

98+00

99+00

100+00

101+00

102+00

103+00

104+00

105+00

106+00

107+00

108+00

109+00

SLOPE INTERCEPT

CULVERT PIPE DITCH CHECK

SLOPE INTERCEPT

SLOPE INTERCEPT

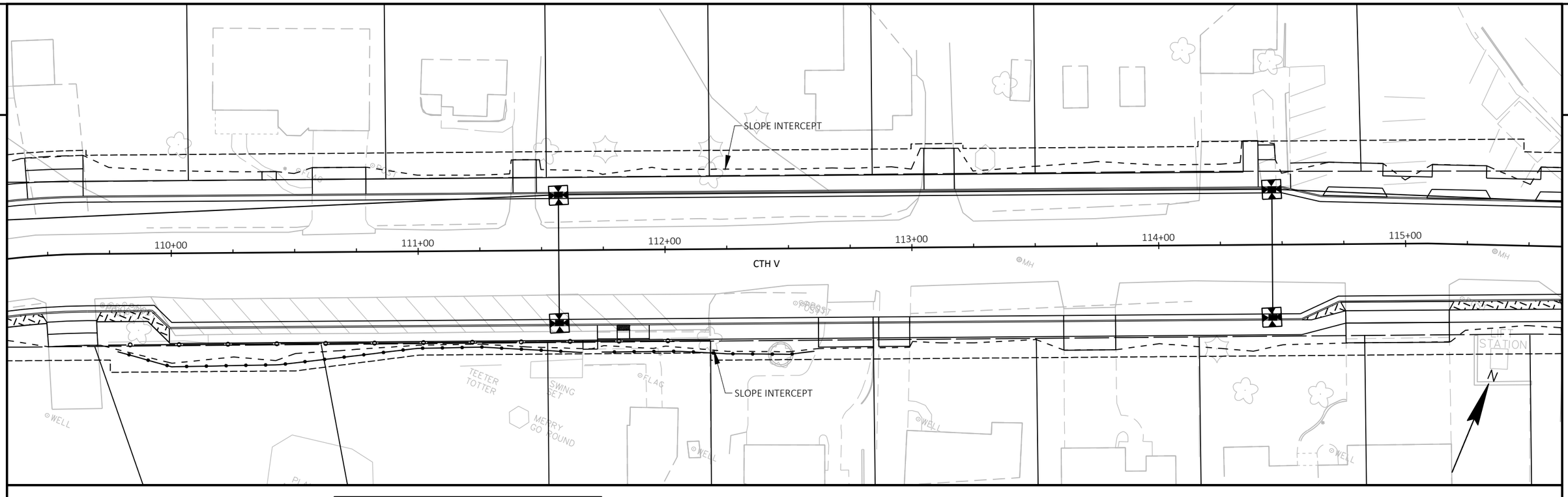
SLOPE INTERCEPT

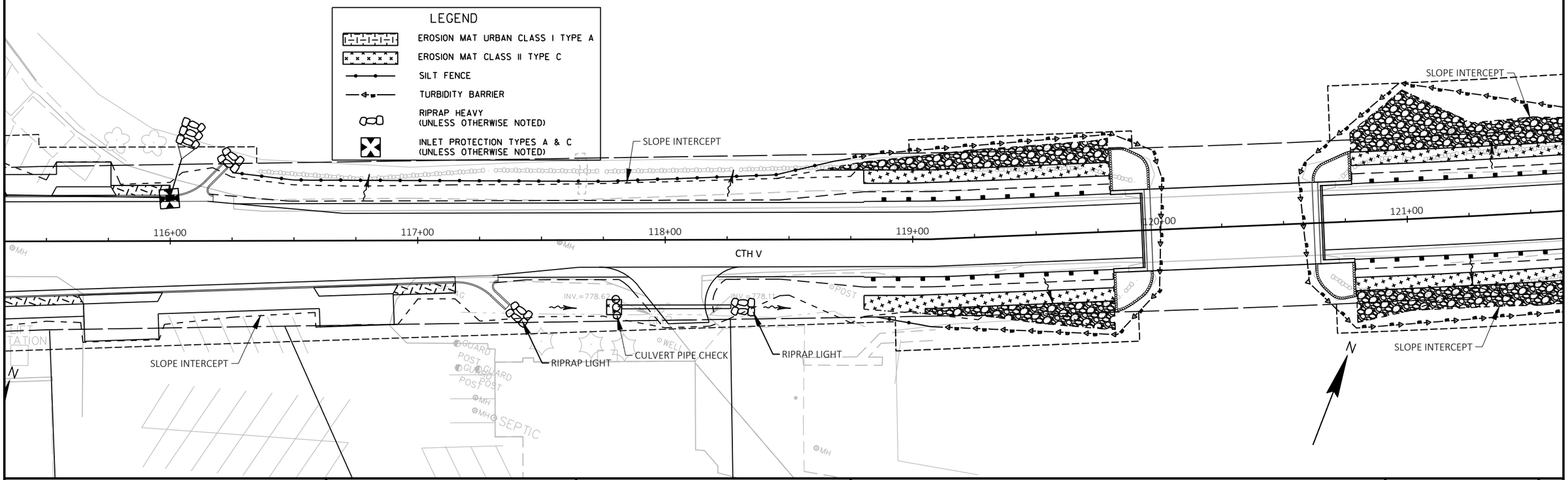
SLOPE INTERCEPT

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	EROSION CONTROL	SHEET 15	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022001_ec
PLOT DATE : 1/8/2019 2:13 PM
PLOT BY : RESHESKE, CARRIE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2





2

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	EROSION CONTROL	SHEET 16	E

2

SLOPE INTERCEPT

122+00 123+00 124+00 125+00 126+00 127+00

CTH V

SLOPE INTERCEPT

INV.=778.47

18" CMP

INV.=779.43

INV.=782.53

18" CMP

INV.=784.82

INV.=787.9

BENCH BENCH BENCH SANDBOX GRILL GRILL

SHED

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- EROSION MAT CLASS II TYPE C
- SILT FENCE
- TURBIDITY BARRIER
- RIPRAP HEAVY (UNLESS OTHERWISE NOTED)
- INLET PROTECTION TYPES A & C (UNLESS OTHERWISE NOTED)

TEMPORARY DITCH CHECK

RIPRAP LIGHT

SLOPE INTERCEPT

11+00 12+00 13+00 14+00 15+00 16+00

SHAMROCK RD

RIPRAP LIGHT

SLOPE INTERCEPT

100+00 101+00

CTH V

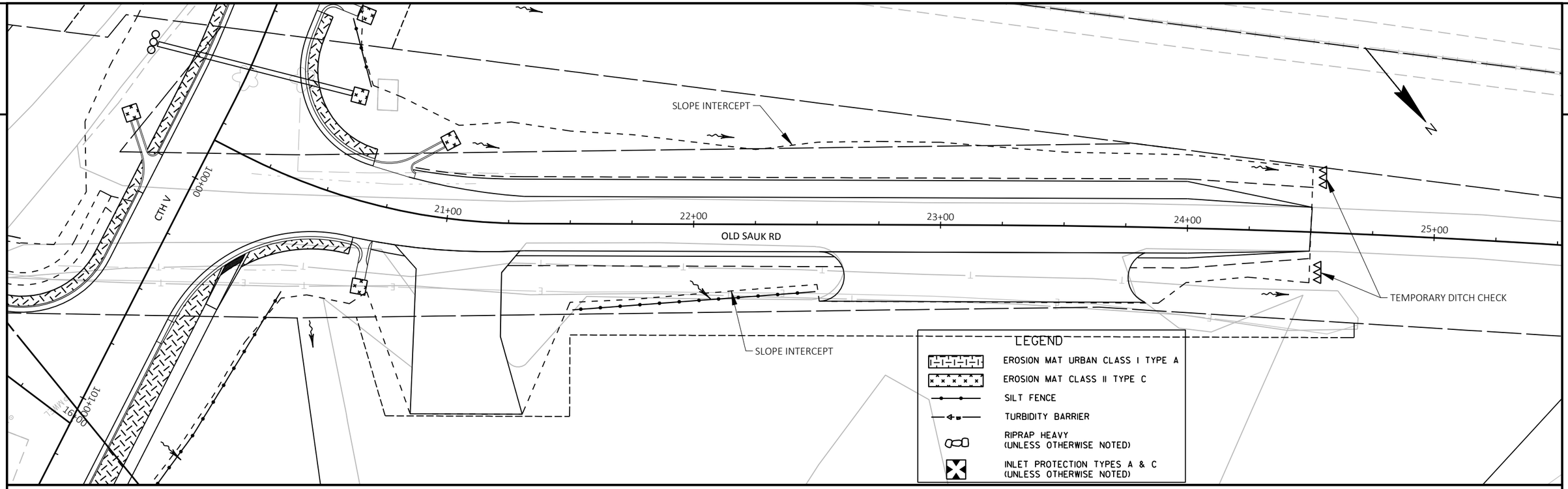
N

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	EROSION CONTROL	SHEET 17	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022003_ec

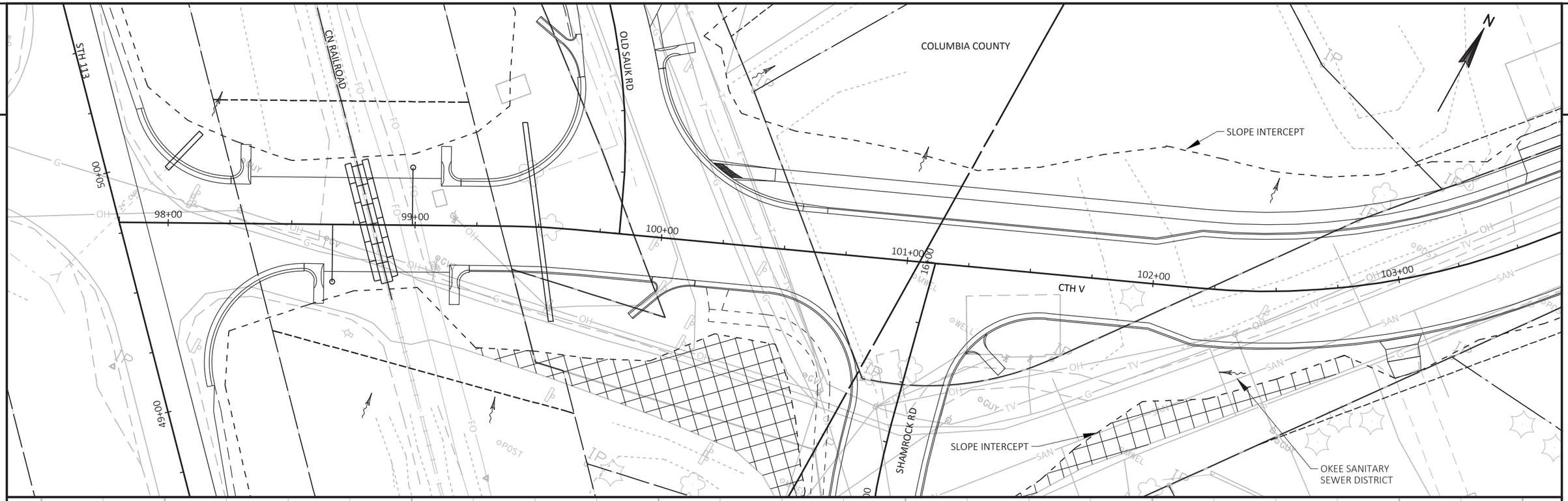
PLOT DATE : 1/8/2019 2:14 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	EROSION CONTROL	SHEET 18	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 022004_ec
PLOT DATE : 1/8/2019 2:14 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ##########



NOTE: SANITARY SERVICE ELEVATION INFORMATION PROVIDED FROM SANITARY SEWER DISTRICT RECORD DRAWINGS. FIELD VERIFY CROSSINGS.

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	STORM SEWER - CTH V	SHEET 19	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 01 0225-ss

PLOT DATE : 10/16/2018 4:14 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

STA 105+00, 22.5' LT
INLETS 5-H

SLOPE INTERCEPT

STA 108+90, 22.5' LT
INLETS 5-H

CAUTION

104+00

105+00

106+00

107+00

108+00

109+00

CTH V

CAUTION

CAUTION

STA 105+00, 22.5' RT
CATCH BASINS 2x3-H

SLOPE INTERCEPT

OKEE SANITARY SEWER DISTRICT

STA 108+80, 22.5' RT
CATCH BASINS 2x3-H

815
810
805
800
795
790
785
780
775
770

FINISHED PROFILE

EXISTING PROFILE

800.44

793.79

SSPRC CLASS IV 24-INCH @ 1.05%

795.30

789.63

789.53

VERIFY EX SAN CROSSING

VERIFY EX SAN CROSSING

VERIFY EX SAN CROSSING

VERIFY EX SAN CROSSING

VERIFY EX SAN CROSSING

VERIFY EX SAN CROSSING

800.44

799.60

794.79

795.01

SSPRC CLASS IV 12-INCH @ 0.50%

795.30

794.70

790.53

790.76

SSPRC CLASS IV 12-INCH @ 0.49%

NOTE: SANITARY SERVICE ELEVATION INFORMATION PROVIDED FROM SANITARY SEWER DISTRICT RECORD DRAWINGS. FIELD VERIFY CROSSINGS.

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	STORM SEWER - CTH V	SHEET 20	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 02 0225-ss
PLOT DATE : 10/16/2018 4:14 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

CAUTION

EXISTING PYLON
SIGN TO REMAIN

6 STA 111+57, 22.5' LT
INLETS 5-H

SLOPE INTERCEPT

8 STA 114+46, 22.5' LT
INLETS 5-H

FIELD VERIFY SANITARY
FORCEMAIN CROSSING

110+00 111+00 112+00 113+00 114+00 115+00

CTH V

POSSIBLE MH
UNDER
PAVEMENT

CAUTION

CAUTION

OKEE SANITARY SEWER DISTRICT

SLOPE INTERCEPT

5 STA 111+57, 29.5' RT
CATCH BASINS 2x3-H

7 STA 114+46, 29.5' RT
CATCH BASINS 2x3-H

805
800
795
790
785
780
775
770
765
760

FINISHED PROFILE

EXISTING PROFILE

SSPRC CLASS IV 24-INCH @ 2.44%

VERIFY EX SAN
CROSSING

VERIFY
EX SAN
CROSSING

6 788.78

782.89

782.00

SSPRC CLASS IV 24-INCH @ 1.13%

VERIFY
EX SAN
CROSSING

8 783.52

778.72

778.62

SSPRC CLASS IV 24-INCH @ 0.94%

VERIFY EX SAN
CROSSING

VERIFY EX SAN
CROSSING

6 788.78

5 787.88

783.00

783.26

SSPRC CLASS IV 12-INCH @ 0.49%

8 783.52

7 783.75

779.62

779.88

SSPRC CLASS IV 12-INCH @ 0.49%

NOTE: SANITARY SERVICE ELEVATION INFORMATION PROVIDED FROM SANITARY SEWER DISTRICT RECORD DRAWINGS. FIELD VERIFY CROSSINGS.

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	STORM SEWER - CTH V	SHEET 21	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 03 0225-ss
PLOT DATE : 12/3/2018 4:02 PM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

SANITARY SEWER LINE LOCATION WAS PROVIDED BY GENERAL ENGINEERING COMPANY.

9 STA 116+00, 17.5' LT
INLETS 5-H

10 STA 116+05, 33.2' LT
APRON ENDWALLS FOR CPRC 24-INCH

OKEE SANITARY SEWER DISTRICT

SLOPE INTERCEPT

116+00 117+00 118+00 119+00 120+00 121+00

CTH V

INV.=778.62

INV.=778.11

SLOPE INTERCEPT

DRIVEWAY EASEMENT

EXISTING PROFILE

FINISHED PROFILE

781.85

777.16

SSPRC CLASS IV 24-INCH @ 0.94%

781.85

777.00

EL 774.4

776.67

SSPRC CLASS IV 24-INCH @ 2.00%

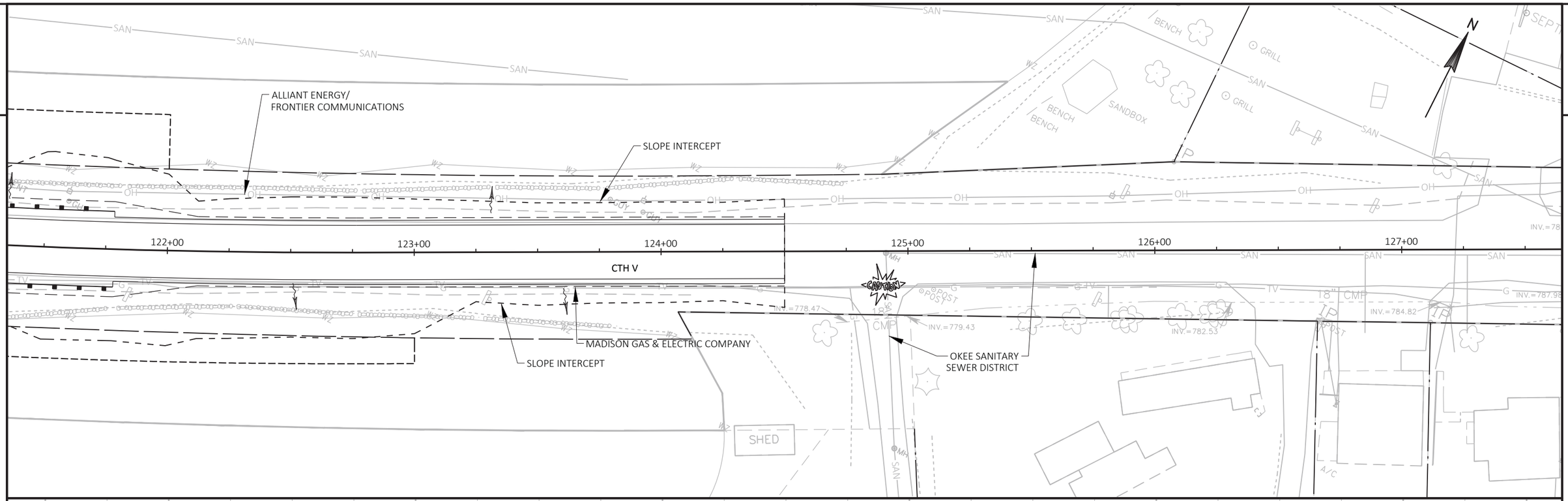
NOTE: SANITARY SERVICE ELEVATION INFORMATION PROVIDED FROM SANITARY SEWER DISTRICT RECORD DRAWINGS. FIELD VERIFY CROSSINGS.

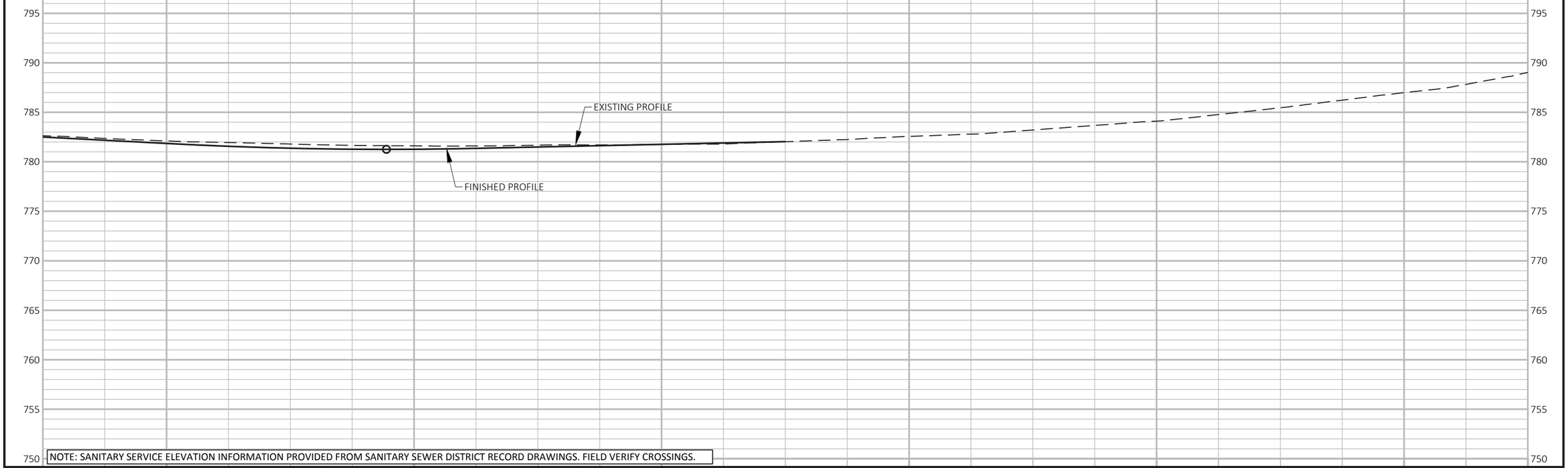
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	STORM SEWER - CTH V	SHEET 22	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 04 0225-ss

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44





NOTE: SANITARY SERVICE ELEVATION INFORMATION PROVIDED FROM SANITARY SEWER DISTRICT RECORD DRAWINGS. FIELD VERIFY CROSSINGS.

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	STORM SEWER - CTH V	SHEET 23	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 05 0225-ss

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
LOCAL STREET SIGNS TO BE REMOVED AND RESTORED BY THE TOWN OF LODI

N

OLD SAUK RD

STH 113

CTH V

SHAMROCK RD

W10-2
36"X36"
1-4

60 FEET BETWEEN TRACKS & HIGHWAY
W10-11A
30"X30"
PLACE APPROX. 325' FROM INTERSECTION

NORTH 113
J4-1
24"X36"
1-3

STOP
R1-1
36"X36"
1-5

113
J13-1
24"X45"
1-6

70 FEET BETWEEN HIGHWAY & TRACKS BEHIND YOU
W10-11B
30"X36"
1-7

MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)

MARKING STOP LINE EPOXY 18-INCH

MARKING STOP LINE EPOXY 24-INCH

DYNAMIC ENVELOPE MARKING EPOXY
4-INCH WHITE (6' FROM RAIL)
12-INCH WHITE AT 45° W/5' C-C SPACING

MARKING RAILROAD CROSSING EPOXY

W10-1
36"X36"
1-9

MARKING PARKING STALL EPOXY (TYP)

MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE)

JCT 113
J1-1
24"X39"
1-11

SPEED LIMIT 25
R2-1
24"X30"
1-10

MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)

COUNTY V
J13-1
24"X45"
1-2

MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)

SPEED LIMIT 25
REMOVE
1-8

W10-2
36"X36"

60 FEET BETWEEN TRACKS & HIGHWAY
W10-11A
30"X30"
1-1

PLACE APPROX. 325' FROM INTERSECTION

LEGEND

X-X REMOVE & REPLACE SIGN

X-X REMOVE SIGN

X-X NEW SIGN

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 24	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023201_ps

PLOT DATE : 1/17/2019 11:32 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MARKING PARKING STALL EPOXY (TYP)

REMOVE
2-4

REMOVE
2-2

108+00

109+00

107+00

106+00

105+00

CTH V

104+00

MARKING LINE EPOXY 4-INCH
(WHITE EDGELINE)

MARKING LINE EPOXY 4-INCH
(DOUBLE YELLOW CENTERLINE)

2-1

REMOVE

2-3

NO PASSING ZONE

W14-3
48"X36"

LEGEND

X-X REMOVE & REPLACE SIGN

X-X REMOVE SIGN

X-X NEW SIGN

N

SPEED LIMIT 25

R2-1
24"X30"

2-5

MARKING PARKING STALL EPOXY (TYP)

MARKING LINE EPOXY 4-INCH
(WHITE EDGELINE)

MARKING LINE EPOXY 4-INCH
(DOUBLE YELLOW CENTERLINE)

20'

110+00

111+00

112+00

113+00

114+00

115+00

CTH V

45°

18'

9'

2-6

SPEED LIMIT 25

R2-1
24"X30"

2-7

REMOVE

2-7

R7-8A
12"X18"

MARKING SYMBOL EPOXY
(HANDICAP SYMBOL)

MARKING LINE EPOXY 4-INCH (TYP)

2-8

R7-8A
12"X18"

MARKING SYMBOL EPOXY
(HANDICAP SYMBOL)

N

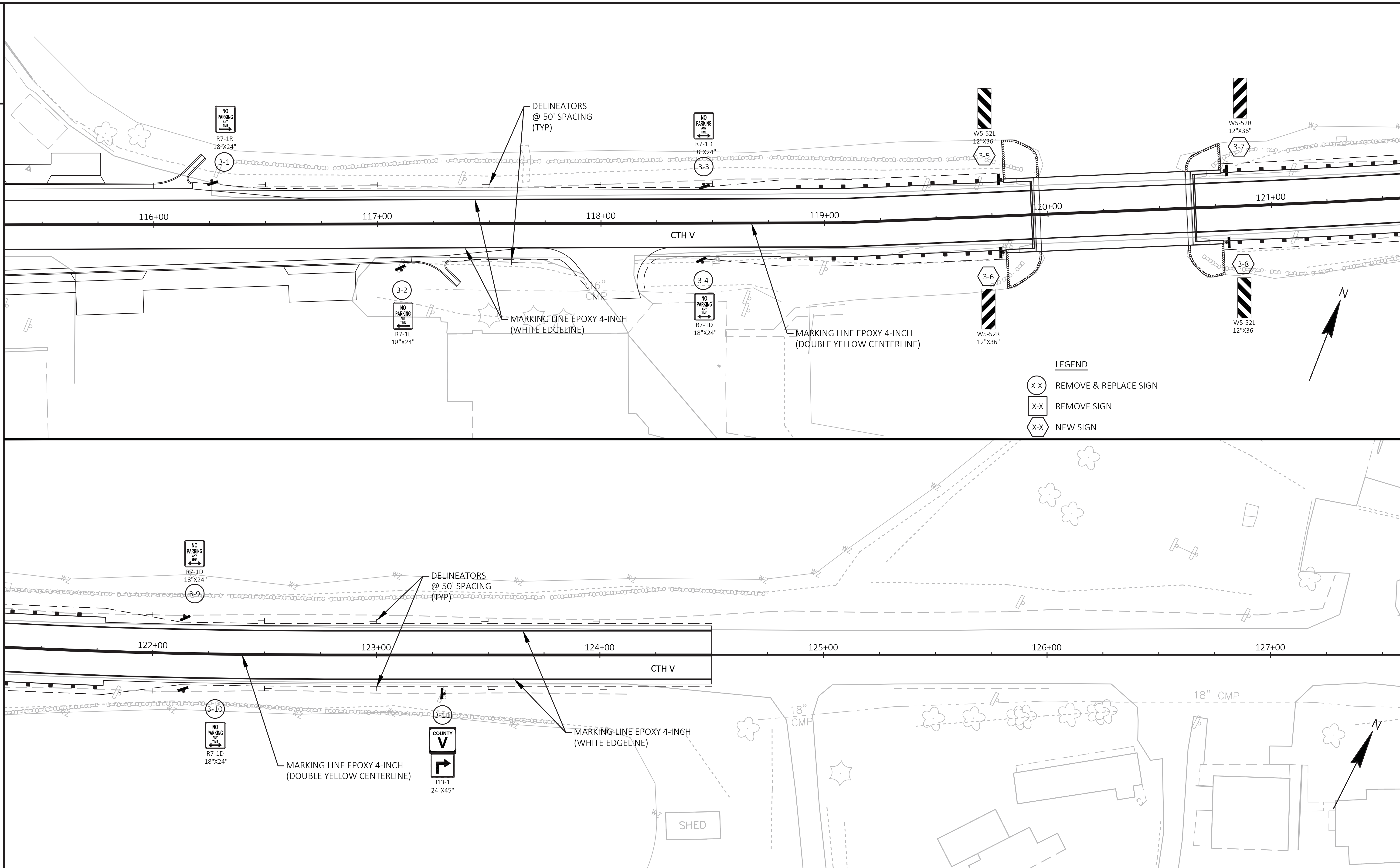
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 25	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023202_ps

PLOT DATE : 10/15/2018 4:05 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2



2

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 26	E

FILE NAME : V:\TRANS-EC\4105520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 023203_ps
PLOT DATE : 10/15/2018 4:05 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

SHAMROCK RD

11+00 12+00 13+00 14+00 15+00

CTH V

100+00 101+00 102+00

SPEED LIMIT 25
R2-1
24"X30"
4-4

4-1
NO PARKING ON THIS SIDE
REMOVE

4-2
NO PARKING ON THIS SIDE
REMOVE

4-3
NO PARKING ON THIS SIDE
REMOVE

4-5
STOP
R1-1
30"X30"

MARKING STOP LINE
EPOXY 18-INCH

LEGEND

X-X REMOVE & REPLACE SIGN

X-X REMOVE SIGN

X-X NEW SIGN

MARKING STOP LINE
EPOXY 18-INCH

STOP
R1-1
30"X30"
4-6

W10-4R
36"X36"

55 FEET BETWEEN TRACKS & HIGHWAY
W10-11A
30"X30"
4-10

NO PARKING ON THIS SIDE
REMOVE
4-12

OLD SAUK RD

21+00 22+00 23+00 24+00 25+00

CTH V

100+00 101+00 102+00

4-7
NO PARKING BETWEEN SIGNS
R7-52L
18"X24"

4-8
STOP
R1-1
30"X30"

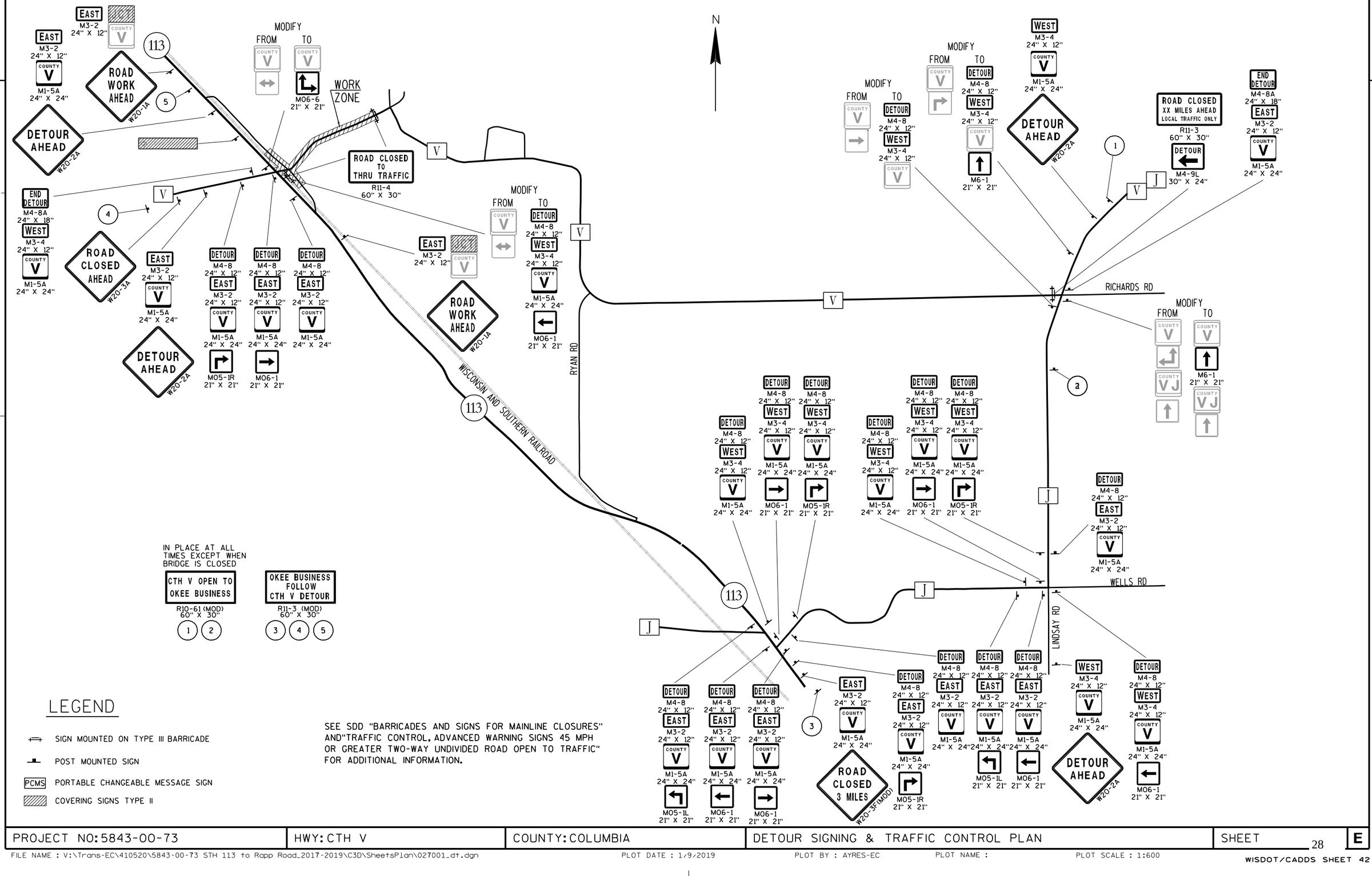
4-9
SPEED LIMIT 35
R2-1
24"X30"

4-11
STOP
R1-1
30"X30"

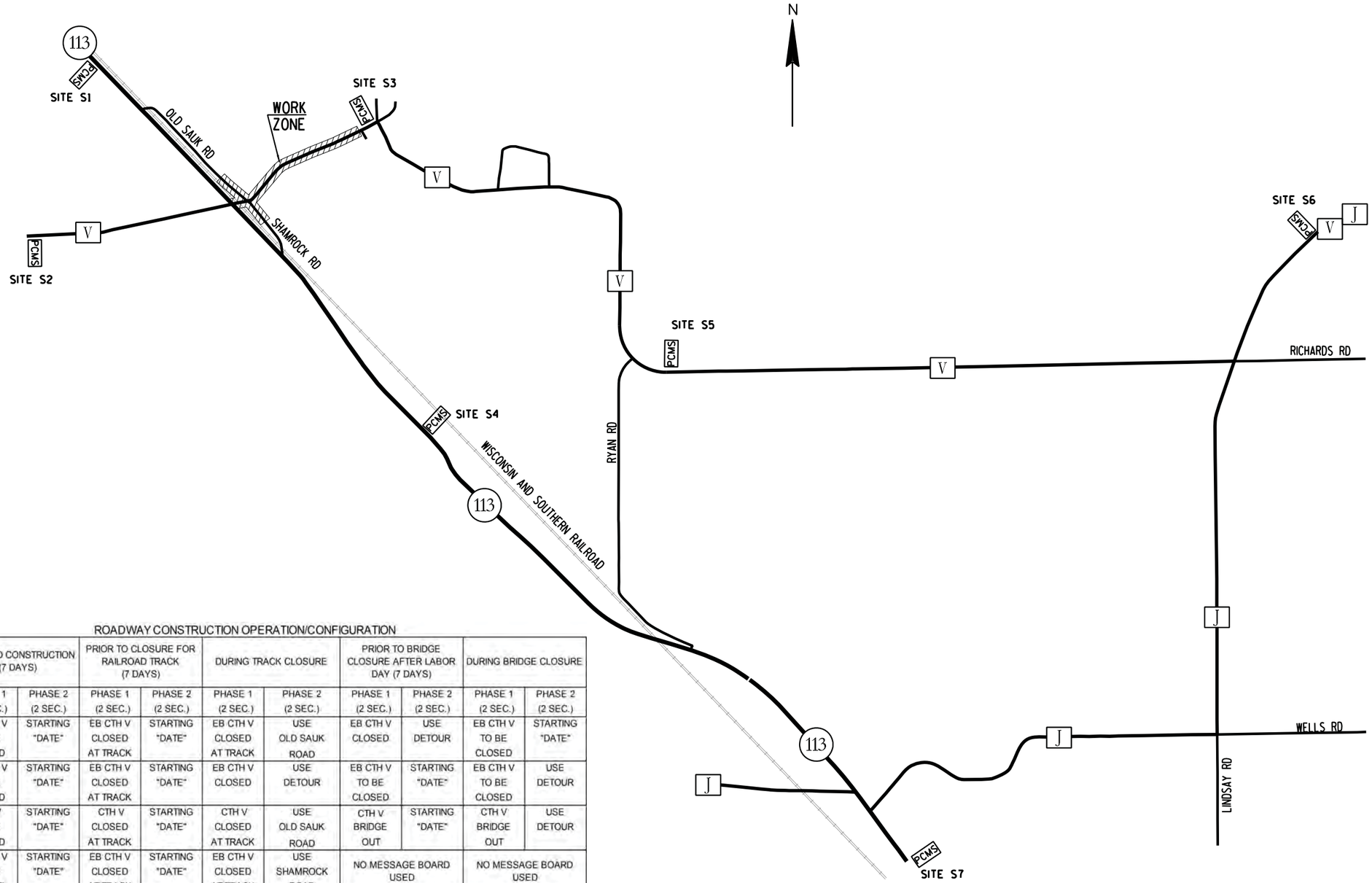
4-13
STOP
R1-1
30"X30"

4-14
NO PARKING ANY TIME
R7-1D
18"X24"

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PERMANENT SIGNING/PAVEMENT MARKING	SHEET 27	E



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	DETOUR SIGNING & TRAFFIC CONTROL PLAN	SHEET 28	E



ROADWAY CONSTRUCTION OPERATION/CONFIGURATION

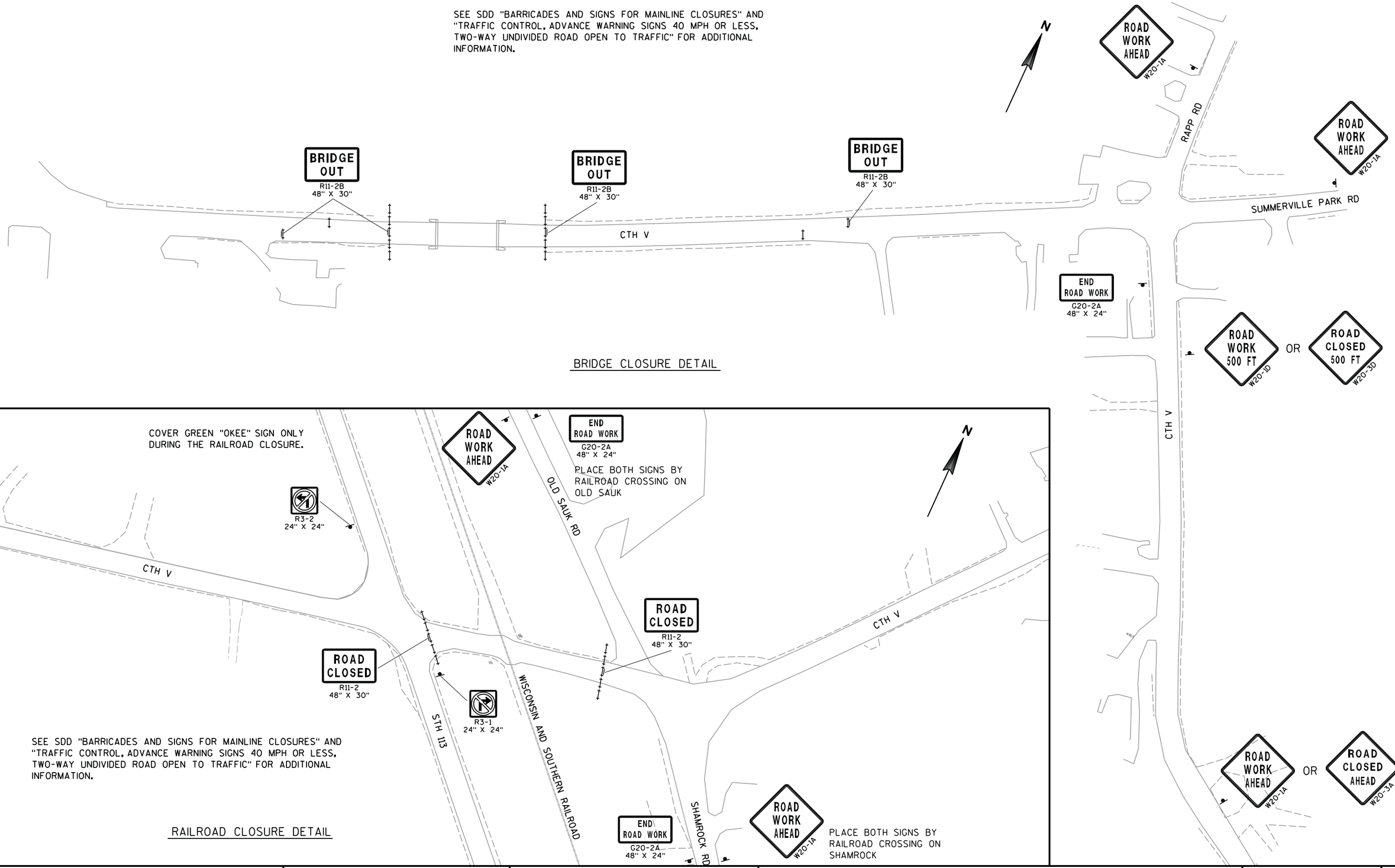
	PRIOR TO CONSTRUCTION (7 DAYS)		PRIOR TO CLOSURE FOR RAILROAD TRACK (7 DAYS)		DURING TRACK CLOSURE		PRIOR TO BRIDGE CLOSURE AFTER LABOR DAY (7 DAYS)		DURING BRIDGE CLOSURE	
SITE NO.	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
SITE S1	EB CTH V TO BE CLOSED	STARTING "DATE"	EB CTH V CLOSED AT TRACK	STARTING "DATE"	EB CTH V CLOSED AT TRACK	USE OLD SAUK ROAD	EB CTH V CLOSED	USE DETOUR	EB CTH V TO BE CLOSED	STARTING "DATE"
SITE S2	EB CTH V TO BE CLOSED	STARTING "DATE"	EB CTH V CLOSED AT TRACK	STARTING "DATE"	EB CTH V CLOSED	USE DETOUR	EB CTH V TO BE CLOSED	STARTING "DATE"	EB CTH V TO BE CLOSED	USE DETOUR
SITE S3	CTH V TO BE CLOSED	STARTING "DATE"	CTH V CLOSED AT TRACK	STARTING "DATE"	CTH V CLOSED AT TRACK	USE OLD SAUK ROAD	CTH V BRIDGE OUT	STARTING "DATE"	CTH V BRIDGE OUT	USE DETOUR
SITE S4	EB CTH V TO BE CLOSED	STARTING "DATE"	EB CTH V CLOSED AT TRACK	STARTING "DATE"	EB CTH V CLOSED AT TRACK	USE SHAMROCK ROAD	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
SITE S5	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		WB CTH V BRIDGE OUT	STARTING "DATE"	CTH V BRIDGE OUT	"X" MILES
SITE S6	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		WB CTH V BRIDGE OUT	STARTING "DATE"	CTH V BRIDGE OUT	"X" MILES
SITE S7	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		EB CTH V BRIDGE OUT	STARTING "DATE"	EB CTH V CLOSED AT TRACK	USE DETOUR

LEGEND

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PORTABLE CHANGEABLE MESSAGE SIGNS	SHEET 29	E

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION.



BRIDGE CLOSURE DETAIL

COVER GREEN "OKEE" SIGN ONLY DURING THE RAILROAD CLOSURE.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADDITIONAL INFORMATION.

RAILROAD CLOSURE DETAIL

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	RAILROAD & BRIDGE CLOSURE DETAILS	SHEET 30	E

5843-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	14.000	14.000
0004	201.0205	Grubbing	STA	14.000	14.000
0006	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0008	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 120+29.14	LS	1.000	1.000
0010	204.0100	Removing Pavement	SY	254.000	254.000
0012	204.0110	Removing Asphaltic Surface	SY	1,047.000	1,047.000
0014	204.0150	Removing Curb & Gutter	LF	203.000	203.000
0016	204.0155	Removing Concrete Sidewalk	SY	101.000	101.000
0018	204.0165	Removing Guardrail	LF	168.000	168.000
0020	204.0170	Removing Fence	LF	268.000	268.000
0022	204.0185	Removing Masonry	CY	1.200	1.200
0024	205.0100	Excavation Common	CY	8,987.000	8,987.000
0026	205.0300	Excavation Stone Piles and Stone Fences	CY	460.000	460.000
0028	206.1000	Excavation for Structures Bridges (structure) 01. B-11-0013	LS	1.000	1.000
0030	210.1500	Backfill Structure Type A	TON	95.000	95.000
0032	213.0100	Finishing Roadway (project) 01. 5843-00-73	EACH	1.000	1.000
0034	214.0100	Obliterating Old Road	STA	4.000	4.000
0036	305.0110	Base Aggregate Dense 3/4-Inch	TON	183.000	183.000
0038	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	11,908.000	11,908.000
0040	312.0110	Select Crushed Material	TON	1,045.000	1,045.000
0042	416.0160	Concrete Driveway 6-Inch	SY	542.000	542.000
0044	416.1010	Concrete Surface Drains	CY	4.100	4.100
0046	455.0605	Tack Coat	GAL	1,015.300	1,015.300
0048	460.2000	Incentive Density HMA Pavement	DOL	2,220.000	2,220.000
0050	460.5223	HMA Pavement 3 LT 58-28 S	TON	1,537.000	1,537.000
0052	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,921.000	1,921.000
0054	465.0105	Asphaltic Surface	TON	0.160	0.160
0056	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	178.000	178.000
0058	465.0315	Asphaltic Flumes	SY	90.000	90.000
0060	502.0100	Concrete Masonry Bridges	CY	109.000	109.000
0062	502.3200	Protective Surface Treatment	SY	295.000	295.000
0064	502.4205	Adhesive Anchors No. 5 Bar	EACH	72.000	72.000
0066	502.4206	Adhesive Anchors No. 6 Bar	EACH	72.000	72.000
0068	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	19,130.000	19,130.000
0070	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	12.000	12.000
0072	506.4000	Steel Diaphragms (structure) 01. B-11-0013	EACH	5.000	5.000
0074	506.7050.S	Removing Bearings (structure) 01. B-11-0013	EACH	12.000	12.000
0076	509.1500	Concrete Surface Repair	SF	45.000	45.000

5843-00-73

Line	Item	Item Description	Unit	Total	Qty
0078	511.1100	Temporary Shoring	SF	300.000	300.000
0080	513.2001	Railing Pipe	LF	50.000	50.000
0082	513.4061	Railing Tubular Type M	LF	200.000	200.000
0084	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0086	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0088	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	3.000	3.000
0090	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	36.000	36.000
0092	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	99.000	99.000
0094	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0096	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	4,195.000	4,195.000
0098	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	291.000	291.000
0100	601.0600	Concrete Curb Pedestrian	LF	21.000	21.000
0102	602.0405	Concrete Sidewalk 4-Inch	SF	9,834.000	9,834.000
0104	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	10.000	10.000
0106	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	19.000	19.000
0108	606.0100	Riprap Light	CY	10.000	10.000
0110	606.0300	Riprap Heavy	CY	604.000	604.000
0112	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	194.000	194.000
0114	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	1,127.000	1,127.000
0116	611.0624	Inlet Covers Type H	EACH	9.000	9.000
0118	611.1230	Catch Basins 2x3-FT	EACH	4.000	4.000
0120	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	210.000	210.000
0122	614.2300	MGS Guardrail 3	LF	50.000	50.000
0124	614.2500	MGS Thrie Beam Transition	LF	150.000	150.000
0126	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0128	616.0204	Fence Chain Link 4-FT	LF	250.000	250.000
0130	616.0329	Gates Chain Link (width) 01. 6-FT	EACH	3.000	3.000
0132	616.0600.S	Fence Temporary	LF	250.000	250.000
0134	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5843-00-73	EACH	1.000	1.000
0136	619.1000	Mobilization	EACH	1.000	1.000
0138	624.0100	Water	MGAL	357.000	357.000
0140	625.0100	Topsoil	SY	3,778.000	3,778.000
0142	625.0500	Salvaged Topsoil	SY	2,862.000	2,862.000
0144	627.0200	Mulching	SY	5,320.000	5,320.000
0146	628.1504	Silt Fence	LF	2,270.000	2,270.000
0148	628.1520	Silt Fence Maintenance	LF	2,270.000	2,270.000
0150	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000

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Line	Item	Item Description	Unit	Total	Qty
0152	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0154	628.2006	Erosion Mat Urban Class I Type A	SY	1,458.000	1,458.000
0156	628.2027	Erosion Mat Class II Type C	SY	334.000	334.000
0158	628.6005	Turbidity Barriers	SY	1,285.000	1,285.000
0160	628.7005	Inlet Protection Type A	EACH	11.000	11.000
0162	628.7015	Inlet Protection Type C	EACH	11.000	11.000
0164	628.7504	Temporary Ditch Checks	LF	56.000	56.000
0166	628.7555	Culvert Pipe Checks	EACH	5.000	5.000
0168	628.7560	Tracking Pads	EACH	5.000	5.000
0170	629.0210	Fertilizer Type B	CWT	4.600	4.600
0172	630.0120	Seeding Mixture No. 20	LB	33.000	33.000
0174	630.0140	Seeding Mixture No. 40	LB	103.000	103.000
0176	630.0200	Seeding Temporary	LB	28.000	28.000
0178	633.0100	Delineator Posts Steel	EACH	17.000	17.000
0180	633.0500	Delineator Reflectors	EACH	17.000	17.000
0182	633.5200	Markers Culvert End	EACH	3.000	3.000
0184	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	1.000	1.000
0186	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	25.000	25.000
0188	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	8.000	8.000
0190	637.2210	Signs Type II Reflective H	SF	126.610	126.610
0192	637.2230	Signs Type II Reflective F	SF	77.880	77.880
0194	638.2602	Removing Signs Type II	EACH	32.000	32.000
0196	638.3000	Removing Small Sign Supports	EACH	26.000	26.000
0198	642.5001	Field Office Type B	EACH	1.000	1.000
0200	643.0300	Traffic Control Drums	DAY	230.000	230.000
0202	643.0420	Traffic Control Barricades Type III	DAY	1,760.000	1,760.000
0204	643.0705	Traffic Control Warning Lights Type A	DAY	2,830.000	2,830.000
0206	643.0900	Traffic Control Signs	DAY	12,960.000	12,960.000
0208	643.0920	Traffic Control Covering Signs Type II	EACH	3.000	3.000
0210	643.1000	Traffic Control Signs Fixed Message	SF	62.500	62.500
0212	643.1050	Traffic Control Signs PCMS	DAY	488.000	488.000
0214	643.5000	Traffic Control	EACH	1.000	1.000
0216	644.1420.S	Temporary Pedestrian Surface Plywood	SF	32.000	32.000
0218	644.1601.S	Temporary Curb Ramp	EACH	1.000	1.000
0220	645.0111	Geotextile Type DF Schedule A	SY	60.000	60.000
0222	645.0120	Geotextile Type HR	SY	959.000	959.000
0224	645.0130	Geotextile Type R	SY	29.000	29.000
0226	646.1020	Marking Line Epoxy 4-Inch	LF	10,365.000	10,365.000
0228	646.5220	Marking Symbol Epoxy	EACH	2.000	2.000
0230	646.5320	Marking Railroad Crossings Epoxy	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0232	646.6120	Marking Stop Line Epoxy 18-Inch	LF	67.000	67.000
0234	646.7120	Marking Diagonal Epoxy 12-Inch	LF	134.000	134.000
0236	646.8320	Marking Parking Stall Epoxy	LF	1,295.000	1,295.000
0238	650.4000	Construction Staking Storm Sewer	EACH	10.000	10.000
0240	650.4500	Construction Staking Subgrade	LF	3,544.000	3,544.000
0242	650.5000	Construction Staking Base	LF	3,544.000	3,544.000
0244	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	4,486.000	4,486.000
0246	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0248	650.6500	Construction Staking Structure Layout (structure) 01. B-11-0013	LS	1.000	1.000
0250	650.6500	Construction Staking Structure Layout (structure) 02. Wall Modular Block Gravity Landscape	LS	1.000	1.000
0252	650.9000	Construction Staking Curb Ramps	EACH	2.000	2.000
0254	650.9910	Construction Staking Supplemental Control (project) 01. 5843-00-73	LS	1.000	1.000
0256	650.9920	Construction Staking Slope Stakes	LF	3,544.000	3,544.000
0258	690.0150	Sawing Asphalt	LF	1,036.000	1,036.000
0260	690.0250	Sawing Concrete	LF	178.000	178.000
0262	715.0502	Incentive Strength Concrete Structures	DOL	654.000	654.000
0264	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	500.000	500.000
0266	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	425.000	425.000
0268	SPV.0060	Special 01. Inlets 5-FT Diameter	EACH	5.000	5.000
0270	SPV.0090	Special 01. Marking Stop Line Epoxy 24-Inch	LF	16.000	16.000
0272	SPV.0105	Special 01. Sanitary Lateral	LS	1.000	1.000
0274	SPV.0165	Special 01. Wall Modular Block Gravity Landscape	SF	150.000	150.000
0276	SPV.0195	Special 01. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	320.000	320.000

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CLEARING & GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
99+00 - 100+00	CTH V	1	1
102+00 - 105+00	CTH V	3	3
106+00 - 109+00	CTH V	3	3
112+00 - 113+00	CTH V	1	1
10+00 - 13+00	SHAMROCK	3	3
20+00 - 23+00	OLD SAUK	3	3
PROJECT ID TOTALS		**14**	**14**

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	205.0100 (4) EXCAVATION COMMON CY	EBS EXCAVATION CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	312.0110 SELECT CRUSHED MATERIAL TON	(2) AVAILABLE MATERIAL CY	UNEXPANDED FILL CY	(1) EXPANDED FILL CY	MASS ORDINATE +/- CY	(3) WASTE CY
97+91 - 124+50	CTH V	7075	---	940	---	6135	1795	2244	3891	3891
10+50 - 15+84	SHAMROCK	1149	---	100	---	1049	94	118	932	932
20+16 - 24+50	OLD SAUK	213	---	67	---	146	897	1121	-975	-975
UNDISTRIBUTED		---	550	---	1,045	---	---	---	---	---
PROJECT ID TOTALS		**8437**	**550**	**1,107**	**1,045**	**7,330**	**2,786**	**3,483**	**3,848**	**3,848**

(1) EXPANSION FACTOR = 1.25
(2) AVAILABLE MATERIAL = EXCAVATION COMMON - UNUSABLE PAVEMENT MATERIAL
(3) WASTE = AVAILABLE MATERIAL - EXPANDED FILL
(4) EBS EXCAVATION TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	TYPE	203.0100 EACH
97+99	LT	ENDWALL ONLY	1
118+00	RT	16"x25' CMP	1
PROJECT ID TOTAL			**2**

NOTE: REMOVAL OF MARKER CULVERT END IS CONSIDERED INCIDENTAL TO REMOVING SMALL PIPE CULVERT

REMOVING CURB & GUTTER

LOCATION	LOCATION	204.0150 LF
110+15 - 112+18	CTH V, RT	203
PROJECT ID TOTAL		**203**

REMOVING FENCE

STATION TO STATION	LOCATION	TYPE	204.0170 LF
110+15 - 112+17	CTH V, RT	CHAIN LINK	250
114+16	CTH V, RT	CHAIN LINK	10
114+16	CTH V, LT	WOOD	8
PROJECT ID TOTAL			**268**

OBLITERATING OLD ROAD

STATION TO STATION	LOCATION	214.0100 STA
99+20 - 100+70	CTH V	2
101+20 - 102+80	CTH V	2
PROJECT ID TOTAL		**4**

REMOVING PAVEMENT

STATION	LOCATION	204.0100 SY
108+35	LT	64
110+68	LT	68
112+72	RT	40
112+92	RT	33
113+72	RT	40
114+97	RT	9
PROJECT ID TOTAL		**254**

REMOVING CONCRETE SIDEWALK

STATION TO STATION	LOCATION	204.0155 SY
103+89	LT	2
104+46	LT	6
108+52	LT	6
110+15 - 111+73	RT	71
110+37 - 110+57	LT	7
114+44	LT	5
114+51	LT	4
PROJECT ID TOTAL		**101**

REMOVING MASONRY

STATION	LOCATION	TYPE	204.0185 CY
103+09	CTH V, LT	BRICK	0.6
104+65	CTH V, LT	BRICK	0.6
PROJECT ID TOTAL			**1.2**

EXCAVATION STONE PILES AND STONE FENCES

STATION TO STATION	LOCATION	205.0300 CY	COMMENTS
118+63 - 119+80	LT	87	HEAVY RIPRAP
119+05 - 119+80	RT	56	HEAVY RIPRAP
120+78 - 122+12	LT	99	HEAVY RIPRAP
120+78 - 123+14	RT	140	HEAVY RIPRAP
UNDISTRIBUTED		78	
PROJECT ID TOTAL		**460**	

REMOVING ASPHALTIC SURFACE

LOCATION	204.0110 SY
BEGIN OLD SAUK - 22+75	1023
114+25, LT	24
PROJECT ID TOTAL	**1047**

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	204.0165 LF
119+45 - 119+86	LT	42
119+45 - 119+86	RT	42
120+72 - 121+14	LT	42
120+72 - 121+14	RT	42
PROJECT ID TOTAL		**168**

FINISHING ROADWAY

LOCATION	213.0100 EACH
5743-00-73	1
PROJECT ID TOTAL	**1**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON
97+91 - 98+78	CTH V	16	514
98+88 - 119+93	CTH V	---	7463
116+17 - 119+80	SHLDR, LT	30	---
117+32 - 119+80	SHLDR, RT	27	---
100+22 - 114+40	SIDEWALK, LT	---	172
109+99 - 115+65	SIDEWALK, RT	---	68
120+66 - 124+50	CTH V	62	1109
10+50 - 15+84	SHAMROCK	10	1106
14+03 - 14+20	SIDEWALK, LT	---	2
20+16 - 24+50	OLD SAUK	39	878
CTH V DRWYS, LT	(13)	---	163
CTH V DRWYS, RT	(11)	---	194
SHAMROCK DRWYS	(4)	---	56
OLD SAUK DRWYS	(2)	---	182
PROJECT ID TOTALS		**183**	**11908**

ASPHALTIC SURFACE

STATION	LOCATION	465.0105 TON
109+80	LT	0.04
111+55	LT	0.04
112+65	LT	0.04
114+15	LT	0.04
PROJECT ID TOTAL		**0.16**

CONCRETE SURFACE DRAINS

STATION	LOCATION	416.1010 CY
100+15	RT	1.5
101+31	RT	1.3
116+20	LT	1.3
PROJECT ID TOTAL		**4.1**

ASPHALTIC FLUMES

STATION	LOCATION	465.0315 SY
98+25	LT	9
98+55	RT	9
99+18	LT	9
99+22	RT	9
20+65	OLD SAUK, LT	13
20+65	OLD SAUK, RT	9
11+25	SHAMROCK, LT	10
11+25	SHAMROCK, RT	10
117+15	RT	12
PROJECT ID TOTAL		**90**

HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	455.0605 TACK COAT GAL
97+91 - 98+78	CTH V	79	64	---	40
98+88 - 119+93	CTH V	1295	1036	---	647
120+66 - 124+50	CTH V	163	130	---	82
10+50 - 15+84	SHAMROCK	---	379	---	136
20+16 - 24+50	OLD SAUK	---	312	---	111
103+76	LT	---	---	2	---
104+78	LT	---	---	5	---
105+58	LT	---	---	4	---
106+53	LT	---	---	3	---
107+04	RT	---	---	2	---
107+82	LT	---	---	1	---
109+54	LT	---	---	2	---
109+59	RT	---	---	2	---
111+44	LT	---	---	1	---
113+11	LT	---	---	2	---
114+80	LT	---	---	7	---
115+21	LT	---	---	6	---
115+60	LT	---	---	6	---
115+80	RT	---	---	7	---
116+75	RT	---	---	14	---
118+00	RT	---	---	10	---
12+31	SHAMROCK, RT	---	---	3	---
13+36	SHAMROCK, LT	---	---	1	---
13+75	SHAMROCK, LT	---	---	5	---
13+85	SHAMROCK, RT	---	---	4	---
21+00	OLD SAUK, RT	---	---	47	---
23+25	OLD SAUK, RT	---	---	44	---
PROJECT ID TOTALS		**1537**	**1921**	**178**	**1015.3**

TEMPORARY SHORING

STATION TO STATION	LOCATION	511.1100 SF
14+25.6 - 14+71	SHAMROCK, LT	300
PROJECT ID TOTAL		**300**

RAILING PIPE

STATION TO STATION	LOCATION	513.2001 LF
14+25.6 - 14+71	SHAMROCK, LT	50
PROJECT ID TOTAL		**50**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE DRIVEWAY & CONCRETE SIDEWALK

STATION TO STATION	LOCATION	416.0160 DRIVEWAY 6-INCH SY	602.0405 SIDEWALK 4-INCH SF
100+22 - 114+40	LT	---	6912
103+00	RT	22	---
103+76	LT	24	---
103+90	LT	---	8
104+43	LT	---	20
104+78	LT	11	---
105+29	RT	28	---
105+58	LT	17	---
105+88	RT	24	---
106+53	LT	12	---
107+04	RT	16	---
107+82	LT	12	---
108+35	LT	53	---
108+52	LT	---	49
109+54	LT	16	---
109+59	RT	20	---
109+99 - 115+65	RT	---	2751
110+68	LT	26	---
111+44	LT	7	---
112+72/112+92	RT	39	---
113+11	LT	8	---
113+72	RT	27	---
114+80	LT	10	---
114+97	RT	78	---
115+21	LT	10	---
115+60	LT	10	---
115+80	RT	13	---
116+75	RT	13	---
12+31	SHAMROCK, RT	8	---
13+36	SHAMROCK, LT	6	---
13+75	SHAMROCK, LT	22	---
13+85	SHAMROCK, RT	10	---
14+03 - 14+20	SHAMROCK, LT	---	94
PROJECT ID TOTALS		**542**	**9834**

CULVERT PIPE CORRUGATED STEEL & APRON ENDWALL STEEL

STATION	LOCATION	521.1018 ENDWALL 18-INCH EACH	521.1024 ENDWALL 24-INCH EACH	521.3118 PIPE 18-INCH LF	521.3124 PIPE 24-INCH LF
98+00	CTH V, LT	---	1	---	17
99+50	CTH V	---	2	---	82
118+00	RT	2	---	36	---
PROJECT ID TOTALS		**2**	**3**	**36**	**99**

CONCRETE CURB PEDESTRIAN

STATION TO STATION	LOCATION	601.0600 LF
111+72 - 111+93	CURB RAMP TYPE 7A	21
PROJECT ID TOTAL		**21**

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION	LOCATION	RAMP TYPE	602.0505 SF
111+83	RT	7A	10
PROJECT ID TOTAL			**10**

CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW

STATION	LOCATION	RAMP TYPE	602.0605 SF
100+22	LT	4B1	19
PROJECT ID TOTAL			**19**

CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0411 30-INCH TYPE D LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF
50+22 - 98+25	STH 113, RT/CTH V, LT	---	50
49+06 - 98+55	STH 113, RT/CTH V, RT	---	70
99+18 - 20+65	CTH V, LT/OLD SAUK, LT	---	75
99+22 - 11+25	CTH V, RT/SHAMROCK, RT	604	---
20+65 - 100+66	OLD SAUK, RT/CTH V, LT	---	96
100+66 - 116+20	CTH V, LT	1556	---
11+25 - 117+15	SHAMROCK, LT/CTH V, RT	2035	---
PROJECT ID TOTALS		**4195**	**291**

RIPRAP & GEOTEXTILE

STATION TO STATION	LOCATION	606.0100 LIGHT CY	606.0300* HEAVY CY	645.0120* TYPE HR SY	645.0130 TYPE R SY
100+15	RT	---	---	---	6
101+31	RT	---	---	---	5
116+18	LT	---	59	94	---
117+39	RT	2	---	---	4
118+30	RT	2	---	---	4
11+04	SHAMROCK LT	2	---	---	4
11+05	SHAMROCK RT	2	---	---	4
118+63 - 119+80	LT	---	53	80	---
119+05 - 119+80	RT	---	37	55	---
120+78 - 122+12	LT	---	115	172	---
120+78 - 123+14	RT	---	208	312	---
UNDISTRIBUTED		2	47	71	2
PROJECT ID TOTALS		**10**	**519**	**784**	**29**

* ADDITIONAL QUANTITIES LOCATED IN STRUCTURE PLANS

PIPE UNDERDRAIN WRAPPED 6-INCH

STATION TO STATION	LOCATION	612.0406 LF
14+25.6 - 14+71	SHAMROCK, LT	50
PROJECT ID TOTAL		**50**

GATES CHAIN LINK 6-FT

STATION	LOCATION	616.0329 EACH
110+00	RT	2
111+69	RT	1
PROJECT ID TOTAL		**3**

MGS GUARDRAIL ITEMS

STATION TO STATION	LOCATION	614.2300 GUARDRAIL 3 LF	**614.2500 THRIE BEAM TRANSITION LF**	614.2610 TERMINAL EAT EACH
118+80.3 - 119+83.4	LT	12.5	37.5	1
118+80.3 - 119+83.4	RT	12.5	37.5	1
120+75.2 - 121+78.3	LT	12.5	37.5	1
120+75.2 - 121+78.3	RT	12.5	37.5	1
PROJECT ID TOTALS		**50**	**150**	**4**

FENCE CHAIN LINK 4-FT

STATION TO STATION	LOCATION	616.0204 LF
110+15 - 112+17	CTH V, RT	250
PROJECT ID TOTAL		**250**

FENCE TEMPORARY

STATION TO STATION	LOCATION	616.0600.S LF
110+15 - 112+17	CTH V, RT	250
PROJECT ID TOTAL		**250**

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	PROJECT	618.0100 EACH
0040	5843-00-73	1
PROJECT ID TOTAL		**1**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER PIPES

FROM	-	TO	LOCATION	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	JOINT TIES* EACH	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
1	-	2	CTH V	45	-	-	795.01	794.79	0.0050
2	-	4	CTH V	-	395	-	793.79	789.63	0.0105
3	-	4	CTH V	45	-	-	790.76	790.53	0.0049
4	-	6	CTH V	-	272	-	789.53	782.89	0.0244
5	-	6	CTH V	52	-	-	783.26	783.00	0.0049
6	-	8	CTH V	-	289	-	782.00	778.72	0.0113
7	-	8	CTH V	52	-	-	779.88	779.62	0.0049
8	-	9	CTH V	-	155	-	778.62	776.16	0.0094
9	-	10	CTH V	-	16	6	777.00	776.67	0.0200
PROJECT ID TOTALS				**194**	**1127**				

* NON-BID ITEM: FOR INFORMATION ONLY

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0624 INLET COVERS TYPE H EACH	611.1230 CATCH BASINS 2X3-FT EACH	SPV.0060.01 INLETS 5-FT DIAMETER EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH*** FT
1	105+00.00	22.5' RT	CTH V	-	1	1	-	1	799.60	793.01	5.76
2	105+00.00	22.5' LT	CTH V	-	1	-	1	1	800.44	793.79	5.82
3	108+80.00	22.5' RT	CTH V	-	1	1	-	1	794.70	788.76	5.11
4	108+90.00	22.5' LT	CTH V	-	1	-	1	1	795.30	789.53	4.94
5	111+57.00	29.5' RT	CTH V	-	1	1	-	1	787.88	781.26	5.79
6	111+57.00	22.5' LT	CTH V	-	1	-	1	1	788.78	782.00	5.95
7	114+46.00	29.5' RT	CTH V	-	1	1	-	1	783.75	777.88	5.04
8	114+46.00	22.5' LT	CTH V	-	1	-	1	1	783.52	778.62	4.07
9	116+00.00	17.5' LT	CTH V	-	1	-	1	1	781.85	777.00	4.02
10	116+05.00	33.2' LT	CTH V	1	-	-	-	1		776.67	
PROJECT ID TOTALS				**1**	**9**	**4**	**5**	**10**			

REMARKS
* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP.
FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
*** DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

3

MOBILIZATION

CATEGORY	619.1000 EACH
0010	0.8
0020	0.2
PROJECT ID TOTAL	**1**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	179
DUST CONTROL	179
PROJECT ID TOTAL	**357**

SILT FENCE

STATION TO STATION	LOCATION	628.1504 LF	628.1520 MAINTENANCE LF
98+00 - 98+65	LT	59	59
98+86 - 99+39	LT	54	54
100+20 - 103+50	LT	314	314
103+98 - 105+11	RT	113	113
106+04 - 106+95	RT	92	92
107+74 - 109+25	RT	140	140
109+78 - 112+60	RT	284	284
116+00 - 118+68	LT	244	244
118+85 - 119+01	RT	22	22
123+18 - 124+26	RT	109	109
121+99 - 124+50	LT	254	254
14+81 - 15+34	SHAMROCK, LT	63	63
21+52 - 22+50	OLD SAUK, RT	98	98
UNDISTRIBUTED		424	424
PROJECT ID TOTALS		**2270**	**2270**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
5843-00-73	3	5
PROJECT ID TOTALS	**3**	**5**

TOPSOIL, SALVAGED TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 NO. 40 LB	630.0200 SEEDING TEMPORARY LB
97+80 - 124+50	3015	1824	3368	3	20	80	20
10+50 - 15+50	584	232	1043	1	4	12	3
20+50 - 24+50	---	669	655	0	8	7	3
UNDISTRIBUTED	180	136	253	1	2	5	3
PROJECT ID TOTALS	**3778**	**2862**	**5320**	**4.6**	**33**	**103**	**28**

EROSION MAT

STATION TO STATION	LOCATION	628.2006 URBAN CLASS I TYPE A SY	628.2027 CLASS II TYPE C SY
50+22 - 98+25	STH 113, RT/CTH V, LT	21	---
49+06 - 98+55	STH 113, RT/CTH V, RT	29	---
99+18 - 20+65	CTH V, LT/OLD SAUK, LT	31	---
99+22 - 11+25	CTH V, RT/SHAMROCK, RT	231	---
20+65 - 108+87	OLD SAUK, RT/CTH V, LT	394	---
11+25 - 110+00	SHAMROCK, LT/CTH V, RT	510	---
98+20	LT	---	4
98+31	LT	---	4
98+61	RT	---	4
99+12	LT	---	4
99+16	RT	---	4
99+45	CTH V, LT/OLD SAUK, LT	---	4
99+88	RT	---	4
100+11	CTH V, LT/OLD SAUK, RT	---	4
101+47	RT	---	4
116+25	LT	---	4
117+77	RT	---	4
118+80 - 119+80	LT	---	59
118+80 - 119+80	RT	---	64
120+78 - 121+78	LT	---	59
120+78 - 121+78	RT	---	60
UNDISTRIBUTED		242	48
PROJECT ID TOTALS		**1458**	**334**

TURBIDITY BARRIERS

STATION TO STATION	628.6005 SY
119+07, RT - 118+68, LT	448
123+19, RT - 121+99, LT	837
PROJECT ID TOTAL	**1285**

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555 EACH
99+50	CTH V, RT	3
118+00	CTH V, RT	2
PROJECT ID TOTAL		**5**

INLET PROTECTION

STATION	LOCATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH
105+00	LT	1	1
105+00	RT	1	1
108+75	LT	1	1
108+75	RT	1	1
111+57	LT	1	1
111+57	RT	1	1
114+46	LT	1	1
114+46	RT	1	1
116+00	LT	1	1
UNDISTRIBUTED		2	2
PROJECT ID TOTALS		**11**	**11**

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 LF
10+50	LT	14
24+50	LT	14
24+50	RT	14
UNDISTRIBUTED		14
PROJECT ID TOTAL		**56**

TRACKING PADS

LOCATION	628.7560 EACH
PROJECT LIMITS	5
PROJECT ID TOTAL	**5**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING

SIGN NO	APPROX STATION LOCATION	SIGN CODE	SIGN SIZE WxH (INCHES)	634.0612 POSTS 12-FT EACH	634.0614 WOOD 4X6-INCH 14-FT EACH	634.0616 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 REFLECTIVE F SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENT
1-1	46+50, RT	W10-2	36 X 36	---	---	1	---	9.00	---	---	
		W10-11A	30 X 30	---	---	---	---	6.25	---	---	"60", SHARES POST W/W10-2
1-2	48+95, RT	J13-1	24 X 45	---	---	1	7.50	---	1	1	COUNTY V, ARROW
1-3	50+86, RT	J4-1	24 X 36	---	---	1	6.00	---	1	1	NORTH, 113
1-4	53+00, LT	W10-2	36 X 36	---	---	1	---	9.00	---	---	
		W10-11A	30 X 30	---	---	---	6.25	6.25	---	---	"60", SHARES POST W/W10-2
1-5	98+16, LT	R1-1	36 X 36	---	---	1	7.46	---	1	1	
1-6	98+16, LT	J13-1	24 X 45	---	---	1	7.50	---	1	1	113, ARROW
1-7		W10-11B	36 X 36	---	---	---	---	7.50	---	---	"70", SHARES POST W/R1-1
1-8	99+61, RT	---	---	---	---	---	---	---	1	1	
1-9	101+00, LT	W10-1	36 X 36	---	1	---	---	7.07	1	1	
1-10	102+00, RT	R2-1	24 X 30	---	1	---	5.00	---	1	1	25 MPH
1-11	103+00, LT	J1-1	24 X 39	---	1	---	6.50	---	1	1	JCT, 113
2-1	103+77, RT	---	---	---	---	---	---	---	1	1	
2-2	103+86, LT	---	---	---	---	---	---	---	1	---	
2-3	104+00, RT	W14-3	48 X 36	---	1	---	---	5.56	---	---	
2-4	107+02, LT	---	---	---	---	---	---	---	1	---	
2-5	109+75, LT	R2-1	24 X 30	---	1	---	5.00	---	---	---	25 MPH
2-6	109+75, RT	R2-1	24 X 30	---	1	---	5.00	---	---	---	25 MPH
2-7	109+87, RT	---	---	---	---	---	---	---	1	1	
2-8	111+96, RT	R7-8A	12 X 18	---	---	---	1.50	---	1	---	ATTACH TO FENCE
2-9	114+14, RT	R7-8A	12 X 18	1	---	---	1.50	---	---	---	
3-1	116+25, LT	R7-1R	18 X 24	---	1	---	3.00	---	1	1	
3-2	117+11, RT	R7-1L	18 X 24	---	1	---	3.00	---	1	1	
3-3	118+46, LT	R7-1D	18 X 24	---	1	---	3.00	---	1	---	
3-4	118+46, RT	R7-1D	18 X 24	---	1	---	3.00	---	1	1	
3-5	119+80, LT	W5-52L	12 X 36	---	1	---	---	3	---	---	
3-6	119+80, RT	W5-52R	12 X 36	---	1	---	---	3	---	---	
3-7	120+80, LT	W5-52L	12 X 36	---	1	---	---	3	---	---	
3-8	120+80, RT	W5-52R	12 X 36	---	1	---	---	3	---	---	
3-9	122+14, LT	R7-1D	18 X 24	---	1	---	3.00	---	1	---	
3-10	122+14, RT	R7-1D	18 X 24	---	1	---	3.00	---	1	1	
3-11	123+30, RT	J13-1	24 X 45	---	---	1	7.50	---	1	1	COUNTY V, ARROW
4-1	11+79, RT	---	---	---	---	---	---	---	1	1	
4-2	13+87, RT	---	---	---	---	---	---	---	1	1	
4-3	14+87, RT	---	---	---	---	---	---	---	1	---	
4-4	15+00, LT	R2-1	24 X 30	---	1	---	5.00	---	---	---	25 MPH
4-5	15+63, RT	R1-1	30 X 30	---	1	---	5.18	---	1	1	
4-6	20+45, LT	R1-1	30 X 30	---	1	---	5.18	---	1	1	
4-7	20+78, RT	R7-52L	18 X 24	---	1	---	3.00	---	1	1	
4-8	21+26, RT	R1-1	30 X 30	---	1	---	5.18	---	1	1	
4-9	21+36, RT	R2-1	24 X 30	---	1	---	5.00	---	1	1	35 MPH
4-10	21+50, RT	W10-4R	36 X 36	---	---	1	---	9.00	---	---	
		W10-11A	30 X 30	---	---	---	---	6.25	---	---	"55", SHARES POST W/W10-4R
4-11	22+57, RT	R1-1	30 X 30	---	1	---	5.18	---	1	1	
4-12	33+10, LT	---	---	---	---	---	---	---	1	1	
4-13	23+80, RT	R1-1	30 X 30	---	1	---	5.18	---	1	1	
4-14	24+06, RT	R7-1D	18 X 24	---	1	---	3.00	---	1	1	
PROJECT ID TOTALS				**1**	**25**	**8**	**126.61**	**77.88**	**32**	**26**	

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

DELINEATOR REFLECTORS & POSTS STEEL

STATION TO STATION	LOCATION	633.0100 POST EACH	633.0500 DELINEATOR EACH
116+50 - 118+50	CTH V, LT	5	5
117+60	CTH V, RT	1	1
118+50	CTH V, RT	1	1
122+00 - 124+00	CTH V, LT	5	5
122+00 - 124+00	CTH V, RT	5	5
PROJECT ID TOTALS		**17**	**17**

MARKERS CULVERT END

STATION	LOCATION	633.5200 EACH
98+00	CTH V, LT	1
99+50	CTH V	2
PROJECT ID TOTAL		**3**

TRAFFIC CONTROL COVERING SIGNS TYPE II

LOCATION	NUMBER OF SIGNS	CYCLES	643.0920 EACH
PROJECT DETOUR	3	1	3
PROJECT ID TOTAL			**3**

TRAFFIC CONTROL SIGNS PCMS

LOCATION	EACH	643.1050 DAY
SITE 1	1	96
SITE 2	1	96
SITE 3	1	96
SITE 4	1	44
SITE 5	1	52
SITE 6	1	52
SITE 7	1	52
PROJECT ID TOTAL		**488**

TRAFFIC CONTROL

LOCATION	643.5000 EACH
PROJECT 5843-00-73	1
PROJECT ID TOTAL	**1**

TEMPORARY PEDESTRIAN SURFACE PLYWOOD

STATION	LOCATION	644.1420.S SF
111+69	RT	32
PROJECT ID TOTAL		**32**

TEMPORARY CURB RAMP

STATION	LOCATION	644.1601.S EACH
111+69	RT	1
PROJECT ID TOTAL		**1**

FIELD OFFICE TYPE B

CATEGORY	642.5001 EACH
0010	0.8
0020	0.2
PROJECT ID TOTAL	**1**

MARKING SYMBOL EPOXY

STATION	LOCATION	SYMBOL	646.5220 EACH
111+91	RT	HANDICAP	1
114+07	RT	HANDICAP	1
PROJECT ID TOTAL			**2**

MARKING LINE EPOXY 4-INCH

STATION TO STATION	LOCATION	DESCRIPTION	646.1020 WHITE LF	YELLOW LF
	STH 113	EDGELINE	200	---
98+06 - 124+50	CTH V	CENTERLINE	---	5288
98+74	CTH V	DYNAMIC ENVELOPE	40	---
98+91	CTH V	DYNAMIC ENVELOPE	40	---
101+50 - 124+50	CTH V	EDGELINE	2300	---
101+50 - 124+50	CTH V	EDGELINE	2300	---
111+78 - 111+91	RT	NO PARKING AREA	96	---
113+87 - 114+00	RT	NO PARKING AREA	101	---
SUBTOTALS			5077	5288
PROJECT ID TOTAL			**10365**	

MARKING RAILROAD CROSSING EPOXY

STATION TO STATION	LOCATION	646.5320 EACH	COMMENT
99+11 - 100+99	CTH V	1	
PROJECT ID TOTAL		**1**	

MARKING STOP LINE EPOXY

STATION	LOCATION	646.6120 18-INCH LF	SPV.0090.01 24-INCH LF
98+06	CTH V	20	---
98+54	CTH V	---	16
15+72	SHAMROCK	21	---
20+28	OLD SAUK	26	---
PROJECT ID TOTALS		**67**	**16**

TRAFFIC CONTROL ITEMS

LOCATION	643.0300 DRUMS EACH	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS EACH	643.0900 SIGNS DAY
RAILROAD TRACK CLOSURE	---	---	10	300	12	360	2	60
BRIDGE CLOSURE	---	---	14	630	20	900	4	180
DETOUR	---	---	6	600	12	1200	110	11000
UNDISTRIBUTED	---	230	---	230	---	370	---	1720
PROJECT ID TOTALS		**230**		**1760**		**2830**		**12960**

TRAFFIC CONTROL SIGNS FIXED MESSAGE

SIGN NO	SIZE W x H	MESSAGE	643.1000 SF
1	60 x 30	"CTH V OPEN TO OKEE BUSINESS"	12.5
2	60 x 30	"CTH V OPEN TO OKEE BUSINESS"	12.5
3	60 x 30	"OKEE BUSINESS FOLLOW CTH V DETOUR"	12.5
4	60 x 30	"OKEE BUSINESS FOLLOW CTH V DETOUR"	12.5
5	60 x 30	"OKEE BUSINESS FOLLOW CTH V DETOUR"	12.5
PROJECT ID TOTAL			**62.5**

MARKING PARKING STALL EPOXY

STATION TO STATION	LOCATION	STALLS	DESCRIPTION	646.8320 LF
102+20 - 103+60	LT	7	PARALLEL	70
102+20 - 102+80	RT	3	PARALLEL	34
103+08 - 105+08	RT	10	PARALLEL	97
104+00 - 104+60	LT	3	PARALLEL	34
104+96 - 105+36	LT	2	PARALLEL	25
105+49 - 105+69	RT	1	PARALLEL	16
105+76 - 106+36	LT	3	PARALLEL	34
106+08 - 106+88	RT	4	PARALLEL	43
106+67 - 107+67	LT	5	PARALLEL	52
107+20 - 107+80	RT	3	PARALLEL	34
107+96 - 108+16	LT	1	PARALLEL	16
108+20 - 109+40	RT	6	PARALLEL	61
108+55 - 109+35	LT	4	PARALLEL	43
109+71 - 110+51	LT	4	PARALLEL	43
110+13 - 111+78	RT	13	ANGLED	259
110+89 - 111+29	LT	2	PARALLEL	25
111+56 - 112+96	LT	7	PARALLEL	70
111+91 - 112+54	RT	5	ANGLED	111
113+18 - 113+56	RT	3	ANGLED	74
113+28 - 114+48	LT	6	PARALLEL	61
114+06 - 114+57	RT	4	ANGLED	93
PROJECT ID TOTAL				**1295**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

MARKING DIAGONAL EPOXY 12-INCH

STATION TO STATION	LOCATION	646.7120 WHITE LF
98+74 - 98+91	CTH V, DYNAMIC ENVELOPE	134
PROJECT ID TOTAL		**134**

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9920 SLOPE STAKES LF
97+91 - 98+78	CTH V	87	87	87
98+88 - 119+93	CTH V	2105	2105	2105
120+66 - 124+50	CTH V	**384**	**384**	**384**
10+50 - 15+84	SHAMROCK	534	534	534
20+16 - 24+50	OLD SAUK	434	434	434
PROJECT ID TOTALS		3544	3544	3544

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

STATION TO STATION	LOCATION	650.5500 LF
50+22 - 98+25	STH 113, RT/CTH V, LT	50
49+06 - 98+55	STH 113, RT/CTH V, RT	70
99+18 - 20+65	CTH V, LT/OLD SAUK, LT	75
99+22 - 11+25	CTH V, RT/SHAMROCK, RT	604
20+65 - 116+20	OLD SAUK, RT/CTH V, LT	1652
11+25 - 117+15	SHAMROCK, LT/CTH V, RT	2035
PROJECT ID TOTAL		**4486**

CONSTRUCTION STAKING PIPE CULVERTS

STATION	LOCATION	650.6000 EACH
98+00	CTH V, LT	1
99+50	CTH V	1
118+00	CTH V, RT	1
PROJECT ID TOTAL		**3**

CONSTRUCTION STAKING STRUCTURE LAYOUT (B-11-0013)

STRUCTURE	CATEGORY	650.6500.01 LS
B-11-0013	0020	1
PROJECT ID TOTAL		**1**

CONSTRUCTION STAKING STRUCTURE LAYOUT (WALL MODULAR BLOCK GRAVITY LANDSCAPE)

STRUCTURE	650.6500.02 LS
14+25.6 - 14+71, SHAMROCK LT	1
PROJECT ID TOTAL	**1**

CONSTRUCTION STAKING CURB RAMPS

STATION	LOCATION	650.9000 EACH
100+22	LT	1
111+83	RT	1
PROJECT ID TOTAL		**2**

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

PROJECT	650.9910.01 LS
5843-00-73	1
PROJECT ID TOTAL	**1**

SAWING

STATION TO STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
97+80.16	CTH V	264.0	---
103+90	LT	---	2.3
104+43	LT	---	2.6
104+78	LT	11.0	---
105+58	LT	16.8	---
106+53	LT	12.1	---
107+04	RT	16.2	---
108+00	RT	16.2	---
108+35	LT	---	25.9
108+52	LT	---	5.0
109+93	RT	20.0	---
110+40	LT	---	5.7
110+68	LT	---	21.7
111+44	LT	9.5	---
111+70	RT	---	5.9
112+72	RT	---	22.2
112+92	RT	---	12.5
113+11	LT	12.2	---
113+72	RT	---	21.0
114+47	LT	---	5.9
114+51	LT	---	4.9
114+97	RT	---	41.9
114+54 - 115+80	LT	152.6	---
115+65 - 116+89	RT	141.0	---
118+00	RT	18.8	---
124+50	CTH V	27.8	---
10+50	SHAMROCK	21.7	---
12+31	SHAMROCK, RT	18.1	---
13+85	SHAMROCK, RT	41.2	---
21+00	OLD SAUK, RT	87.3	---
23+25	OLD SAUK, RT	131.9	---
24+50	OLD SAUK	17.8	---
PROJECT ID TOTALS		**1036**	**178**

SANITARY LATERAL

CATEGORY	PROJECT	SPV.0105.01 LS
0030	5843-00-73	1
PROJECT ID TOTAL		**1**

WALL MODULAR BLOCK GRAVITY LANDSCAPE

STATION TO STATION	LOCATION	SPV.0165.01 SF
14+25.6 - 14+71	SHAMROCK. LT	150
PROJECT ID TOTAL		**150**

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM-CONTAMINATED SOIL

STATION TO STATION	CATEGORY	LOCATION	SPV.0195.01 TON
13+50 - 14+75	0030	SHAMROCK	320
PROJECT ID TOTAL			**320**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TRADITIONAL PLAT TITLE SHEET

5843-00-03

OKEE - HARMONY ROAD

(S.T.H. 113 - RAPP ROAD)

C.T.H. "V"

COLUMBIA COUNTY

R/W PROJECT NUMBER 5843-00-03	SHEET NUMBER	TOTAL SHEETS
R/W PROJECT NUMBER	4.01	11

PLAT OF RIGHT OF WAY REQUIRED FOR

Okee – Harmony Road

S.T.H. 113 – RAPP ROAD

C.T.H. "V" COLUMBIA COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

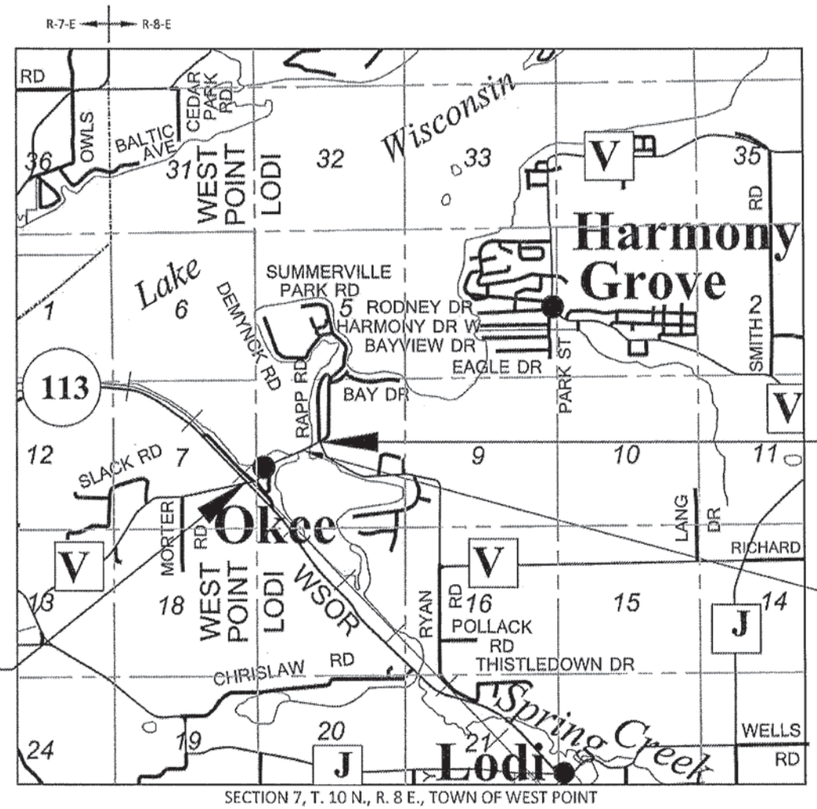
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB



BEGIN RELOCATION ORDER
STA 97+91.07
Y 327342.663
X 504960.928
1768.56 FT NORTH AND 281.27 FT WEST OF THE SOUTHWEST CORNER OF SEC. 8 T10N, R8E

END RELOCATION ORDER
STA 125+40.56
Y 328672.409
X 507317.871
3109.41 FT NORTH AND 2069.38 FT EAST OF THE SOUTHWEST CORNER OF SEC. 8 T10N, R8E

STRUCTURE B-11-13

SECTION 7, T. 10 N., R. 8 E., TOWN OF WEST POINT
SECTION 8, T. 10 N., R. 8 E., TOWN OF LODI
COLUMBIA COUNTY, WISCONSIN
TOTAL NET LENGTH OF CENTERLINE = 0.556 MILES

GN
LAYOUT
SCALE 0 1/2 MI.

CONVENTIONAL UTILITY SYMBOLS

W WATER
G GAS
T TELEPHONE
OH OVERHEAD TRANSMISSION LINES
E ELECTRIC
TV CABLE TELEVISION
FO FIBER OPTIC
SAN SANITARY SEWER
SS STORM SEWER

NOTES:

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE COLUMBIA COUNTY HIGHWAY DEPARTMENT OFFICE IN WYOCENA.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: C.S.M. NO. 731,1669,1754,2224, 2553,4768, 5534, 5968, PLAT OF OKEE, 4TH ADDITION TO SUMMERVILLE PARK, OKEE BAY PLAT, OKEE BAY 2ND ADDITION AND EXISTING HWY PROJECT INDEX NO. 51133(1), FOUND IRONS AND EXISTING CENTERLINE OF PAVEMENT, RIGHT OF WAY MAPPING.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, COLUMBIA COUNTY, NAD83(91), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

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

REVISION DATE
09-18-2018
10-08-2018 N.C.
10-12-2018 N.C.
11-21-2018 N.C.

ACCEPTED FOR COLUMBIA COUNTY

11/29/2018 (Date)

(County Commissioner)

PLAT PREPARED BY

GROTHMAN & ASSOCIATES S.C.
LAND SURVEYORS

825 EAST SLIFER STREET, P.O. BOX 373 PORTAGE, WI. 53901
PHONE: PORTAGE: (608) 742-7788 BARK: (608) 644-8877
FAX: (608) 742-0434 E-MAIL: surveying@grothman.com

WISCONSIN JAMES R. GROTHMAN S-1321 PORTAGE WISCONSIN LAND SURVEYOR

June 20, 2018 (Date)

(Signature)

SCHEDULE OF LANDS AND INTEREST

OWNERS NAMES ARE SHOW FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTEREST TO THE COUNTY

Parcel Number	Sheet Number	Owner(s)	Interest Required	R/W Sq.Ft. Required			H.E. Sq.Ft.	T.L.E. Sq.Ft.	P.L.E. Sq.Ft.
				New	Existing	Total			
1	4.04 4.10	State of Wisconsin Dept. of Transportation	H.E., T.L.E.				11,348	816	
2	4.04 4.09	State of Wisconsin Dept. of Natural Resources	T.L.E.					6,379	
3	4.04 4.10	Investa Properties LLC	FEE, T.L.E., P.L.E.		5,723	5,723		1,250	275
4	4.10	Douglas D. Severson	T.L.E.					2,612	
6	4.10	Audrey J. Messinger Irrevocable Trust dated 6-9-2017	T.L.E.					1,168	
7	4.10	Michael P. & Beth S. Concannon	T.L.E.					1,166	
8	4.04 4.10	Thomas L. Yaeger	T.L.E.					1,877	
9	4.04 4.05 4.10	Roberta Lynne Arnold	T.L.E.					271	
11	4.04 4.05	Randolph E. Fox	T.L.E.					485	
12	4.05	Robert H. Hellenbrand	T.L.E.					1,197	
13	4.05	Roy W. & Cheryl A. Rapp	T.L.E.					900	
14	4.05 4.06	Vernon J. & Joni R. Greiber	T.L.E.					949	
15	4.05	Robert H. & Lois M. Hellenbrand	T.L.E.					1,193	
16	4.04 4.05	Vincent P. Demarte	T.L.E.					1,501	
17	4.05	Clay Investments LLC	T.L.E.					1,434	
18	4.05	Stanley A. & Kim H. Karls	T.L.E.					2,464	
19	4.05 4.06	Joshua Bartholomew & Brandon Clemens	T.L.E.					963	
21	4.06	ownership unknown	T.L.E.					251	
22	4.06	Robert H. & Yoshiko Rapp	T.L.E.					844	
23	4.06	Patrick G. & Nancy C. Gatling	T.L.E.					678	
24	4.06	Russell T. Burhop Revocable Trust dated 6/29/2012	T.L.E.					2,737	
26	4.06 4.07	Highland On The Lake LLC	T.L.E.					1,650	
27	4.05 4.06	Town of Lodi	T.L.E.					1,758	
28	4.06	Timothy E. & Sheila J. Hall	T.L.E.					512	
29	4.06	Lindsey L. & Diane J. Czerwonka	T.L.E.					516	
31	4.06	Timothy Irving Ruff	T.L.E.					520	
32	4.06 4.07	Marvin L. & Carol J. Zimmerman	T.L.E.					866	
33	4.07	Okee Sanitary District #1	T.L.E.					200	
34	4.07	Luckys Okee Real Estate LLC	T.L.E.					1,701	
38	4.07 4.08	Wisconsin Power & Light Company, a Wisconsin corporation	T.L.E., P.L.E.					633	7,367
39	4.04 4.09 4.10	Martha D. Alberti	FEE	10,721		10,721			
101	4.04 4.05 4.06 4.07 4.09 4.10	Wisconsin Power & Light Company, a Wisconsin corporation	Release of Rights						
102	4.10	Madison Gas & Electric Company (Gas)	Release of Rights						
103	4.06 4.07	Okee Sanitary District #1	Release of Rights						
104	4.09	Charter Communications, LLC	Release of Rights						
105	4.04 4.09	Frontier Communications of WI LLC	Release of Rights						
106	4.04 4.09	Sprint Communications Company LP	Release of Rights						

4

4

REVISION DATE
09-18-2018
10-08-2018
10-12-2018 N.C.
11-21-2018

DATE June 20, 2018
GRID FACTOR

SCALE, FEET

HWY: C.T.H. V
COUNTY: COLUMBIA

R/W PROJECT NUMBER 5843-00-03
CONSTRUCTION PROJECT NUMBER 5843-00-73

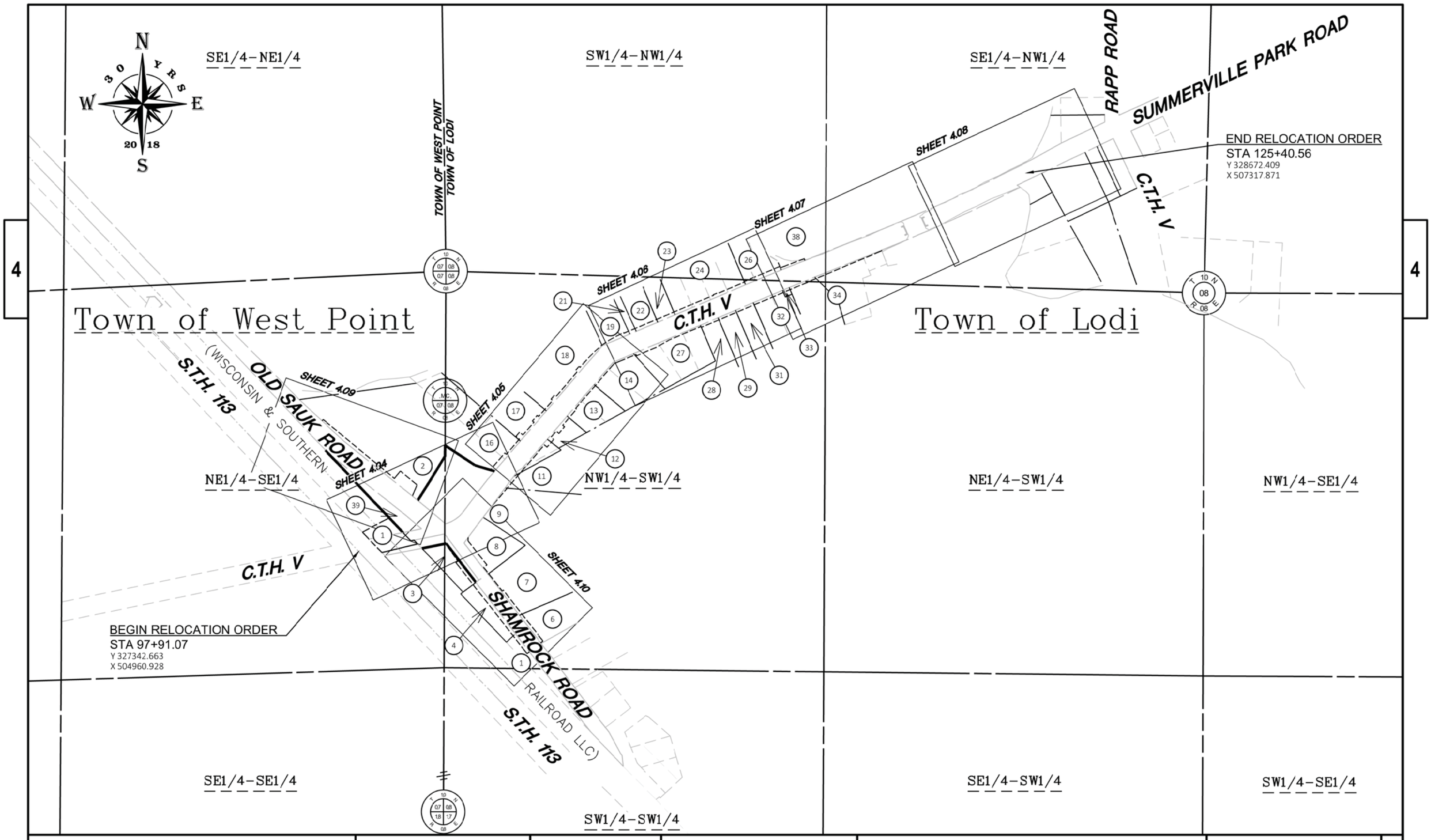
PLAT SHEET 4.02
PS&E SHEET 44

E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - Sch Interest

PLOT DATE : 11/21/2018 9:45 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 75

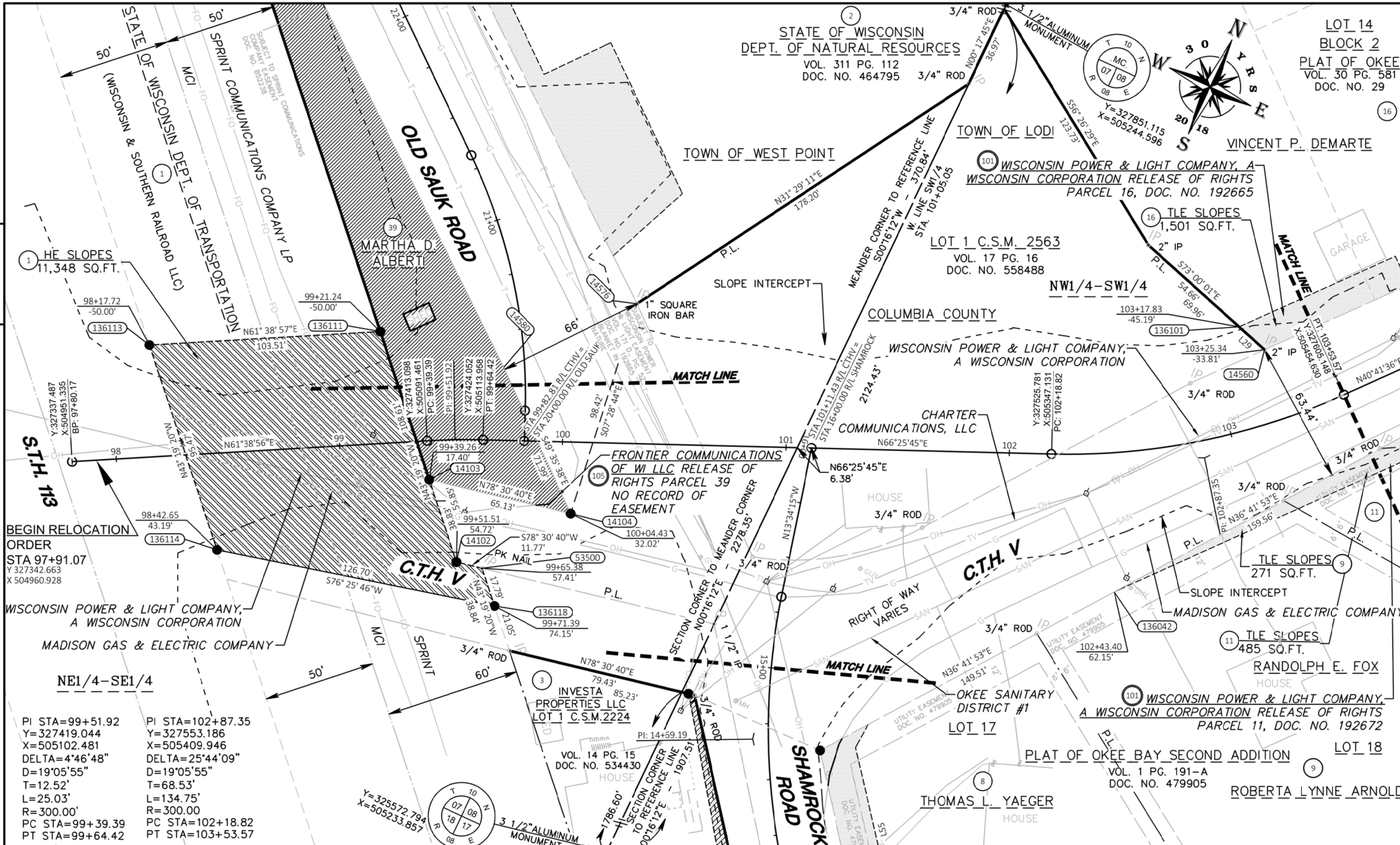


REVISION DATE 11-21-2018 N.C. 09-18-2018 N.C. 10-08-2018 10-12-2018 N.C.	DATE June 20, 2018 GRID FACTOR N/A	SCALE, FEET 0 150 300	HWY: C.T.H. V COUNTY: COLUMBIA	R/W PROJECT NUMBER 5843-00-03 CONSTRUCTION PROJECT NUMBER 5843-00-73	PLAT SHEET 4.03 PS&E SHEET 45 E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - Project Layout

PLOT DATE : 11/21/2018 9:47 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 75


STATE OF WISCONSIN DEPT. OF NATURAL RESOURCES
VOL. 311 PG. 112
DOC. NO. 464795
3/4" ROD
3 1/2" ALUMINUM MONUMENT
LOT 14
BLOCK 2
PLAT OF OKEE
VOL. 30 PG. 581
DOC. NO. 29
TOWN OF LODI
TOWN OF WEST POINT
VINCENT P. DEMARTE
Y=327851.115
X=505244.596
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION RELEASE OF RIGHTS PARCEL 16, DOC. NO. 192665
TLE SLOPES
1,501 SQ.FT.
STATE OF WISCONSIN DEPT. OF TRANSPORTATION
(WISCONSIN & SOUTHERN RAILROAD LLC)
MCI
SPRINT COMMUNICATIONS COMPANY LP
OLD SAUK ROAD
MARTHA D. ALBERTI
HE SLOPES
11,348 SQ.FT.
LOT 1 C.S.M. 2563
VOL. 17 PG. 16
DOC. NO. 558488
NW1/4-SW1/4
COLUMBIA COUNTY
SLOPE INTERCEPT
1" SQUARE IRON BAR
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION
MATCH LINE
CHARTER COMMUNICATIONS, LLC
S.T.H. 113
BEGIN RELOCATION ORDER
STA 97+91.07
Y 327342.663
X 504960.928
FRONTIER COMMUNICATIONS OF WI LLC RELEASE OF RIGHTS PARCEL 39 NO RECORD OF EASEMENT
C.T.H. V
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION
MADISON GAS & ELECTRIC COMPANY
NE1/4-SE1/4
TLE SLOPES
271 SQ.FT.
SLOPE INTERCEPT
MADISON GAS & ELECTRIC COMPANY
TLE SLOPES
485 SQ.FT.
RANDOLPH E. FOX
RIGHT OF WAY VARIES
OKEE SANITARY DISTRICT #1
LOT 17
INVESTA PROPERTIES LLC
LOT 1 C.S.M.2224
VOL. 14 PG. 15
DOC. NO. 534430
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION RELEASE OF RIGHTS PARCEL 11, DOC. NO. 192672
LOT 18
PLAT OF OKEE BAY SECOND ADDITION
VOL. 1 PG. 191-A
DOC. NO. 479905
THOMAS L. YAEGER
ROBERTA LYNNE ARNOLD
SHAMROCK ROAD
Y=325572.794
X=505233.857
3 1/2" ALUMINUM MONUMENT
PI STA=99+51.92
Y=327419.044
X=505102.481
DELTA=4°46'48"
D=19°05'55"
T=12.52'
L=25.03'
R=300.00'
PC STA=99+39.39
PT STA=99+64.42
PI STA=102+87.35
Y=327553.186
X=505409.946
DELTA=25°44'09"
D=19°05'55"
T=68.53'
L=134.75'
R=300.00
PC STA=102+18.82
PT STA=103+53.57

REVISION DATE 11-21-2018 N.C. 09-18-2018 10-08-2018 N.C. 10-12-2018	DATE June 20, 2018 GRID FACTOR N/A	SCALE, FEET 0 20 40	HWY: C.T.H. V COUNTY: COLUMBIA	R/W PROJECT NUMBER 5843-00-03 CONSTRUCTION PROJECT NUMBER 5843-00-73	PLAT SHEET 4.04 PS&E SHEET 46

E

FILE NAME: 1117-683 PLAT.DWG LAYOUT NAME - RW 4.04 PLOT DATE: 11/21/2018 9:49 AM PLOT BY: AMY L. MAST PLOT NAME: PLOT SCALE: 1" = 40' WISDOT/CADDS SHEET 75

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION RELEASE OF RIGHTS
PARCEL 16, DOC. NO. 192665

VINCENT P. DEMARTE
LOT 14
BLOCK 2
PLAT OF OKEE
VOL. 30 PG. 581
DOC. NO. 29

TLE SLOPES
1,501 SQ.FT.

SECTION CORNER TO MEANDER CORNER
N00°16'12"E - 2278.35'

MEANDER CORNER TO REFERENCE LINE EXTENDED
S00°16'12"W - 492.92'

MEANDER CORNER TO RIGHT OF WAY
W. LINE SW1/4 MEANDER CORNER TO RIGHT OF WAY - 441.81'
STA. 101+05.05 EXTENDED S00°16'12"W

3 1/2" ALUMINUM MONUMENT
Y=327851.115
X=505244.596

CLAY INVESTMENTS LLC
LOT 2 C.S.M. 2563
VOL. 17 PG. 16
DOC. NO. 558488

TOWN OF LODI

OKEE SANITARY DISTRICT #1

TLE SLOPES
1,434 SQ.FT.

TLE SLOPES
2,464 SQ.FT.

STANLEY A. & KIM H. KARLS
LOT 1 C.S.M. 1669
VOL. 8 PG. 83
DOC. NO. 492400

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION

CHARTER COMMUNICATIONS, LLC

PI STA=108+98.06
Y=328017.983
X=505809.639
DELTA=26°20'58"
D=19°05'55"
T=70.22'
L=137.94'
R=300.00
PC STA=08+27.84
PT STA=109+65.80

DELTA=26°20'58"
ARC = 157.28'
RADIUS=342.00'
CHORD=N53°52'05"E
LENGTH=155.90'

JOSHUA BARTHOLOMEW AND BRANDON CLEMENS

MATCH LINE

Y:327605.148
X:505454.630
PT: 103+53.57

N40°41'36"E 325.70'

N40°43'33"E 399.39' EXTENSION OF REF. LINE TO SECTION LINE

SECTION CORNER TO EXTENSION OF REFERENCE LINE N00°16'12"E - 1785.43'
1 1/4" ROD

3/4" ROD

N60° 56' 37"E 17.52'

65.82'

65.63'

1 1/4" IP

N40° 43' 33"E 568.59'

N40°41'36"E

SLOPE INTERCEPT

C.T.H. V

N40° 39' 40"E 480.33'

Y:327964.738
X:505763.852
PC: 108+27.84

PI: 108+98.06

N33° 28' 46"W 67.92'

3 1/2" ALUMINUM MONUMENT
Y=325572.794
X=505233.857

ROBERT H. HELLENBRAND

P.L. ROBERT H. HELLENBRAND

LOT 13

TLE SLOPES
485 SQ.FT.

TLE SLOPES
1,197 SQ.FT.

TLE SLOPES
1,193 SQ.FT.

ROBERT H. & LOIS M. HELLENBRAND

TLE SLOPES
900 SQ.FT.

TLE SLOPES
949 SQ.FT.

MADISON GAS & ELECTRIC COMPANY

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION RELEASE OF RIGHTS
PARCEL 11, DOC. NO. 192672

BLOCK 1
LOT 12
ROY W. & CHERYL A. RAPP

LOT 11
LOT 10
LOT 9
PLAT OF OKEE
VOL. 30 PG. 581
DOC. NO. 29

ROBERTA LYNNE ARNOLD

PLAT OF OKEE BAY SECOND ADDITION
VOL. 1 PG. 191-A
DOC. NO. 479905

RANDOLPH E. FOX
LOT 12

TOWN OF LODI

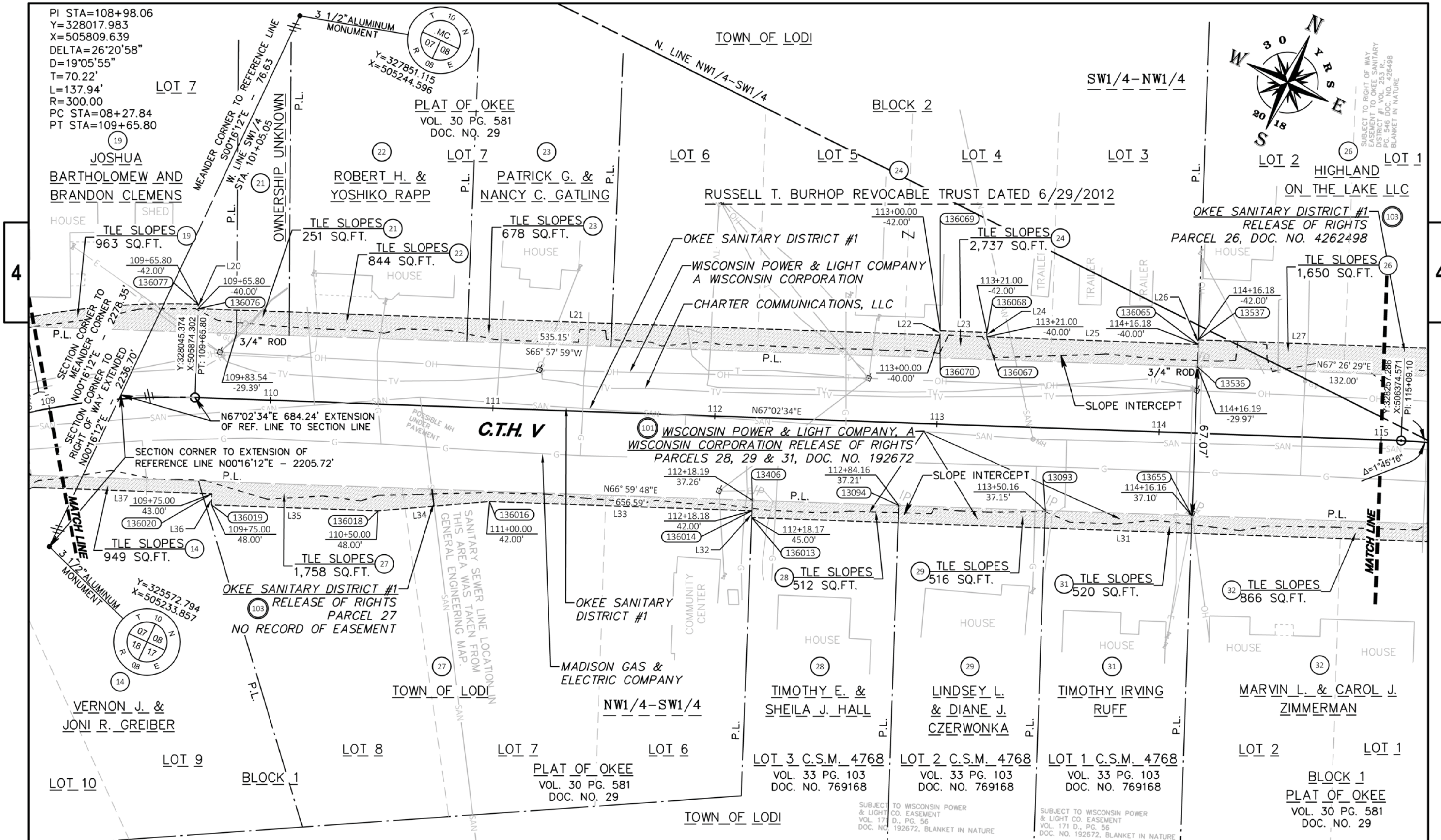
VERNON J. & JONI R. GREIBER

TOWN OF LODI

NW1/4-SW1/4

REVISION DATE 09-18-2018 N.C. 10-08-2018 N.C. 10-12-2018 11-21-2018 N.C.	DATE June 20, 2018	SCALE, FEET 0 20 40	HWY: C.T.H. V	R/W PROJECT NUMBER 5843-00-03	PLAT SHEET 4.05
	GRID FACTOR N/A		COUNTY: COLUMBIA	CONSTRUCTION PROJECT NUMBER 5843-00-73	PS&E SHEET 47 E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.05
PLOT DATE : 11/21/2018 9:50 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ########
WISDOT/CADDS SHEET 75



PI STA=108+98.06
Y=328017.983
X=505809.639
DELTA=26°20'58"
D=19°05'55"
T=70.22'
L=137.94'
R=300.00
PC STA=08+27.84
PT STA=109+65.80
3 1/2" ALUMINUM MONUMENT
Y=327851.115
X=505244.596
MEANDER CORNER TO REFERENCE LINE S00°16'12"E - 76.63
W. LINE SW1/4 STA. 101+05.05
OWNERSHIP UNKNOWN
TOWN OF LODI
N. LINE NW1/4-SW1/4
SW1/4-NW1/4
BLOCK 2
PLAT OF OKEE
VOL. 30 PG. 581
DOC. NO. 29
LOT 7
LOT 6
LOT 5
LOT 4
LOT 3
LOT 2
LOT 1
SUBJECT TO RIGHT OF WAY EASEMENT TO OKEE SANITARY DISTRICT #1 VOL. 253 R., PG. 546 DOC. NO. 426498 BLANKET IN NATURE
19 JOSHUA BARTHOLOMEW AND BRANDON CLEMENS
22 ROBERT H. & YOSHIKO RAPP
23 PATRICK G. & NANCY C. GATLING
24 RUSSELL T. BURHOP REVOCABLE TRUST DATED 6/29/2012
26 HIGHLAND ON THE LAKE LLC
OKEE SANITARY DISTRICT #1 RELEASE OF RIGHTS PARCEL 26, DOC. NO. 4262498 (103)
TLE SLOPES 963 SQ.FT. (19)
TLE SLOPES 251 SQ.FT. (21)
TLE SLOPES 844 SQ.FT. (22)
TLE SLOPES 678 SQ.FT. (23)
TLE SLOPES 2,737 SQ.FT. (24)
TLE SLOPES 1,650 SQ.FT. (26)
OKEE SANITARY DISTRICT #1
WISCONSIN POWER & LIGHT COMPANY A WISCONSIN CORPORATION
CHARTER COMMUNICATIONS, LLC
HOUSE
SHED
TRAILER
P.L.
3/4" ROD
Y:328045.374
X:505874.302
PT: 109+65.80
109+65.80 -42.00' 136077
109+65.80 -40.00' 136076
109+83.54 -29.39'
L20
L21
L22
L23
L24
L25
L26
L27
535.15'
S66° 57' 59"W
113+00.00 -42.00' 136069
113+00.00 -40.00' 136070
113+21.00 -42.00' 136068
113+21.00 -40.00' 136067
114+16.18 -42.00' 13537
114+16.18 -40.00' 136065
114+16.19 -29.97' 13535
N67° 26' 29"E 132.00'
Y:328257.288
X:506374.571
PI: 115+09.10
Δ=1°45'16"
SLOPE INTERCEPT
67.07'
SECTION CORNER TO MEANDER CORNER N00°16'12"E - 2278.35'
SECTION CORNER TO RIGHT OF WAY EXTENDED N00°16'12"E - 2236.70'
N67°02'34"E 684.24' EXTENSION OF REF. LINE TO SECTION LINE
SECTION CORNER TO EXTENSION OF REFERENCE LINE N00°16'12"E - 2205.72'
C.T.H. V
POSSIBLE MH UNDER PAVEMENT
109
110
111
112
113
114
115
N67°02'34"E
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION RELEASE OF RIGHTS PARCELS 28, 29 & 31, DOC. NO. 192672 (101)
112+18.19 37.26' 13406
112+84.16 37.21' 13094
113+50.16 37.15' 13093
114+16.16 37.10' 13655
N66° 59' 48"E 656.59'
112+18.18 42.00' 136014
112+18.17 45.00' 136013
109+75.00 43.00' 136020
109+75.00 48.00' 136019
110+50.00 48.00' 136018
111+00.00 42.00' 136016
L31
L32
L33
L34
L35
L36
L37
MATCH LINE
3 1/2" ALUMINUM MONUMENT
Y=325572.794
X=505233.857
TLE SLOPES 949 SQ.FT. (14)
TLE SLOPES 1,758 SQ.FT. (27)
TLE SLOPES 512 SQ.FT. (28)
TLE SLOPES 516 SQ.FT. (29)
TLE SLOPES 520 SQ.FT. (31)
TLE SLOPES 866 SQ.FT. (32)
OKEE SANITARY DISTRICT #1 RELEASE OF RIGHTS PARCEL 27 NO RECORD OF EASEMENT (103)
SANITARY SEWER LINE LOCATION IN THIS AREA WAS TAKEN FROM GENERAL ENGINEERING MAP.
OKEE SANITARY DISTRICT #1
MADISON GAS & ELECTRIC COMPANY
COMMUNITY CENTER
NW1/4-SW1/4
14 VERNON J. & JONI R. GREIBER
27 TOWN OF LODI
28 TIMOTHY E. & SHEILA J. HALL
29 LINDSEY L. & DIANE J. CZERWONKA
31 TIMOTHY IRVING RUFF
32 MARVIN L. & CAROL J. ZIMMERMAN
LOT 10
LOT 9
BLOCK 1
LOT 8
LOT 7
PLAT OF OKEE VOL. 30 PG. 581 DOC. NO. 29
LOT 6
LOT 3 C.S.M. 4768 VOL. 33 PG. 103 DOC. NO. 769168
LOT 2 C.S.M. 4768 VOL. 33 PG. 103 DOC. NO. 769168
LOT 1 C.S.M. 4768 VOL. 33 PG. 103 DOC. NO. 769168
LOT 2
LOT 1
BLOCK 1 PLAT OF OKEE VOL. 30 PG. 581 DOC. NO. 29
TOWN OF LODI
SUBJECT TO WISCONSIN POWER & LIGHT CO. EASEMENT VOL. 171 D., PG. 56 DOC. NO. 192672, BLANKET IN NATURE
SUBJECT TO WISCONSIN POWER & LIGHT CO. EASEMENT VOL. 171 D., PG. 56 DOC. NO. 192672, BLANKET IN NATURE
4
4

REVISION DATE 09-18-2018 N.C. 10-08-2018 N.C. 10-12-2018	DATE June 20, 2018 GRID FACTOR N/A	SCALE, FEET 0 20 40	HWY: C.T.H. V COUNTY: COLUMBIA	R/W PROJECT NUMBER 5843-00-03 CONSTRUCTION PROJECT NUMBER 5843-00-73	PLAT SHEET 4.06 PS&E SHEET 48	E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.06
PLOT DATE : 10/12/2018 3:04 PM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ########
WISDOT/CADDS SHEET 75

PLAT OF OKEE
BLOCK 2
VOL. 30 PG. 581
DOC. NO. 29

HIGHLAND
ON THE
LAKE LLC

LOT 1

3 1/2" ALUMINUM MONUMENT

Y=327851.115
X=505244.596

SECTION CORNER TO MEANDER CORNER N00°16'12"E – 2278.35'

MEANDER CORNER TO REFERENCE LINE EXTENDED S00°16'12"W – 72.63

MEANDER CORNER TO RIGHT OF WAY EXTENDED S00°16'12"W – 31.55

W. LINE SW1/4 STA. 101+05.05

SW1/4–NW1/4

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION

W. LINE SE1/4–NW1/4

TOWN OF LODI

SE1/4–NW1/4

38

WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION

N
W 30 E
S 20 18

4

26

TLE SLOPES 26
1,650 SQ.FT.

OKEE SANITARY DISTRICT #1
RELEASE OF RIGHTS
PARCEL 26
NO RECORD OF EASEMENT

TLE SLOPES 38
633 SQ.FT.

115+45.98
-43.18'

115+47.13
-35.91'

116+35.00
-38.00'

PK NAIL

136061

L27

N67° 26' 29"E
1250.46'

L28

136225

14079

L65

136223

L64

L66

136224

116+35.00
-31.43'

115+47.28
-30.23'

L67

EXTENSION R/W TO SECTION LINE

SECTION CORNER TO EXTENSION R/W 2246.80'

Y:328257.288
X:506374.571
PI: 115+09.10

N67°02'34"E 1227.54' EXTENSION OF REF. LINE TO SECTION LINE

115+23.17

S24°38'43"E
66.07'

Δ=1°45'16"

SECTION CORNER TO EXTENSION OF REFERENCE LINE N00°16'12"E – 2205.72'

115+26.26
36.51'

14075

13095

115+51.25
35.72'

14076

116+46.18
34.50'

N68°03'29"E

341.70'

N68°03'29"E
329.57'

13611

LOT 1
CSM
731

33

136122

136008

115+51.50
43.72'

L31

P.L.

115+26.51
44.49'

SLOPE INTERCEPT

TLE SLOPES 33
200 SQ.FT.

OKEE SANITARY DISTRICT #1

MATCH LINE

3 1/2" ALUMINUM MONUMENT

LOT 1

HOUSE

Y=325572.794
X=505233.857

32

MARVIN L.
& CAROL J.
ZIMMERMAN

BLOCK 1
PLAT OF OKEE
VOL. 30 PG. 581
DOC. NO. 29

OKEE SANITARY DISTRICT #1
RELEASE OF RIGHTS
PARCEL 33
NO RECORD OF EASEMENT

103

W. LINE NW1/4–SW1/4

NW1/4–SW1/4

LUCKYS OKEE REAL ESTATE LLC

34

LOT 1 C.S.M. 1754
VOL. 9 PG. 48
DOC. NO. 506423

SUBJECT TO WISCONSIN POWER & LIGHT CO. EASEMENT VOL. 171 D., PG. 56 DOC. NO. 192672, BLANKET IN NATURE

PK NAIL

NE1/4–SW1/4

LUCKYS OKEE REAL ESTATE LLC

34

LOT 1 C.S.M. 5534
VOL. 39 PG. 49
DOC. NO. 860499

SUBJECT TO WISCONSIN POWER & LIGHT CO. EASEMENT VOL. 171 D., PG. 56 DOC. NO. 192672, BLANKET IN NATURE

N. LINE NE1/4–SW1/4

TOWN OF LODI

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION

SLOPE INTERCEPT

351.44'
S68° 03' 29"W

P.L.

116+99.03
N68°47'50"E

OKEE SANITARY DISTRICT #1

C.T.H. V

99'

118

117

118+92.92
31.31'

136007

14074

17271

118+25.11
31.94'

118+80.80
31.47'

12'±

L68

135070

118+92.95
33.26'

136005

L71

L30

136225

118+93.13
45.10'

L70

PLE SLOPES 38
1,256 SQ.FT.

DRIVEWAY EASEMENT VOL. 283 REC., PG. 136–142 DOC. NO. 441657 & VOL. 402 REC., PG. 101–109 DOC. NO. 497138 & DOC. NO. 576032

EASEMENT A

EASEMENT B

EASEMENT C PARKING & DRIVEWAY EASEMENT VOL. 283 REC., PG. 136–142 DOC. NO. 441657

EASEMENT D DOC. NO. 497137 & VOL. 402 REC., PG. 101–109 DOC. NO. 497138 & VOL. 578 REC., PG. 355–356 DOC. NO. 576032

EASEMENT E PARKING & DRIVEWAY EASEMENT VOL. 402 REC., PG. 101–109 DOC. NO. 497138 & DOC. NO. 576032

VOL. 402 REC., PG. 99 DOC. NO. 497137 & VOL. 402 REC., PG. 101–109 DOC. NO. 497138 & VOL. 578 REC., PG. 355–356 DOC. NO. 576032

RESTAURANT

101

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION RELEASE OF RIGHTS
PARCEL 34, DOC. NO. 192672

TLE SLOPES 34
1,701 SQ.FT.

MADISON GAS & ELECTRIC COMPANY

CHARTER COMMUNICATIONS, LLC

OKEE SANITARY DISTRICT #1

DELTA=00°51'01"
ARC = 84.53'
RADIUS=5696.58'
CHORD=S67°37'59"W
LENGTH=84.53'

PLE SLOPES 38
568 SQ.FT.

L76

119+00.00
-34.60'

136240

136239

119+00.00
-40.00'

L77

119+05.49
-34.47'

135071

L79

Y:328396.866
X:506734.378
PI: 118+95.02

DELTA=00°48'17"
ARC = 80.00'
RADIUS=5696.58'
CHORD=N66°48'21"E
LENGTH=80.00'

119+90.00
-40.00'

136238

L78

136237

119+90.00
-33.01'

P.L.

HWY PROJECT INDEX S1133(1)

120+70.00
-55.00'

120+94.98
-55.00'

136235

11521

L81

L80

136236

120+70.00
-32.78'

Y:328476.141
X:506917.941
PC: 120+94.98

MATCH LINE

120

N66°38'31"E

99'

121

S68° 03' 29"W
12'±

Δ=2°9'18"

119+03.85
31.51'

119+90.00
33.00'

136228

L69

136227

119+90.00
45.00'

136229

120+70.00
33.22'

L75

L74

136230

120+70.00
45.00'

11523

120+94.98
45.00'

DELTA=00°51'24"
ARC = 86.16'
RADIUS=5762.58'
CHORD=N67°37'47"E
LENGTH=86.16'

DELTA=02°57'03"
ARC = 293.37'
RADIUS=5696.58'
CHORD=S66°34'58"W
LENGTH=293.34'

DELTA=00°47'43"
ARC = 80.00'
RADIUS=5762.58'
CHORD=S66°48'14"W
LENGTH=80.00'

38

WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION

REVISION DATE			
09-18-2018	11-21-2018		
10-08-2018			
10-12-2018			

DATE June 20, 2018	SCALE, FEET 0 20 40	HWY: C.T.H. V	R/W PROJECT NUMBER 5843-00-03	PLAT SHEET 4.07	
GRID FACTOR N/A		COUNTY: COLUMBIA	CONSTRUCTION PROJECT NUMBER 5843-00-73	PS&E SHEET	E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.07

PLOT DATE : 11/21/2018 9:54 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ########

WISDOT/CADDS SHEET 75

PI STA=121+87.86
Y=328513.026
X=507003.171
DELTA=3°23'32"
D=1°54'35"
T=68.83'
L=177.61'
R=3000.00
PC STA=120+99.03
PT STA=120+76.64

DELTA=01°17'45"
ARC = 128.84'
RADIUS=5696.58'
CHORD=S65°45'19"W
LENGTH=128.84'

PLE SLOPES
2,821 SQ.FT.

DELTA=02°00'20"
ARC = 103.09'
RADIUS=2945.00'
CHORD=N65°38'21"E
LENGTH=103.09'

3 1/2"ALUMINUM MONUMENT
Y=327851.115
X=505244.596

MEANDER CORNER TO REFERENCE LINE EXTENDED
S00°16'12"W - 229.27

W. LINE SW1/4
STA. 101+05.05

TOWN OF LODI

WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION

OKEE SANITARY DISTRICT #1

DELTA=05°17'00"
ARC = 525.30'
RADIUS=5696.58'
CHORD=S65°24'59"W
LENGTH=525.12'

DELTA=03°57'33"
ARC = 398.20'
RADIUS=5762.58'
CHORD=N66°04'43"E
LENGTH=398.12'

WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION

LAKE PARK
TOWN OF LODI

P.L.

3/4" ROD
N64° 09' 27"E
165.89'
126+07.81
-35.84'

37.00'
S62° 46' 29"W
20'±
119'±

C.T.H. V

SLOPE INTERCEPT

Y:328553.949
X:5070083.973
PT: 122+78.37

122+00.00
-55.00'
136234

122+00.00
-32.95'
136233

L82

MATCH LINE

PC: 120+94.98

SECTION CORNER TO MEANDER CORNER
N00°16'12"E
2278.35'

121 122 123 124 125 126 127

N63°08'23"E - 2063.04'
EXTENSION OF REF. LINE
TO SECTION LINE

N63°08'23"E

SLOPE INTERCEPT

94'±

S28° 48' 57"E
25.98'

P.L.

N64° 07' 08"E
273.71'

VIRGIL E. &
WANDA L. WETZEL
LIVING TRUST
DATED 1/28/2010

END RELOCATION
ORDER
STA 125+40.56
Y 328672.409
X 507317.871

COTTAGE
STORE
DECK
HOUSE
BOAT HOUSE

ACCESS & UTILITY EASEMENT PER C.S.M. 5968

ORKE SANITARY DISTRICT EASEMENT
DOC. NO. 426503
DOC. NO. 426504

3/4" ROD

P.L.

123+00.00
34.59'
136232

L72

L73

11524
122+78.37
45.00'

136231
123+00.00
45.00'

PPI: 121+86.71

SECTION CORNER TO REFERENCE LINE EXTENDED
N00°16'12"E - 2049.06'

DELTA=03°30'09"
ARC = 186.14'
RADIUS=3045.00'
CHORD=S64°53'27"W
LENGTH=186.11'

PLE SLOPES
2,722 SQ.FT.

CHARTER COMMUNICATIONS, LLC

MADISON GAS & ELECTRIC COMPANY

DELTA=02°18'26"
ARC = 232.04'
RADIUS=5762.58'
CHORD=N65°15'09"E
LENGTH=232.03'

DELTA=04°51'43"
ARC = 489.00'
RADIUS=5762.58'
CHORD=N65°37'38"E
LENGTH=488.86'

WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION

LOT 1 C.S.M. 5968
VOL. 43 PG. 9
DOC. NO. 899784

MARTIN T. & MARY K. WETZEL

BETTY J. JOHNSON

SE1/4-NW1/4

TOWN OF LODI

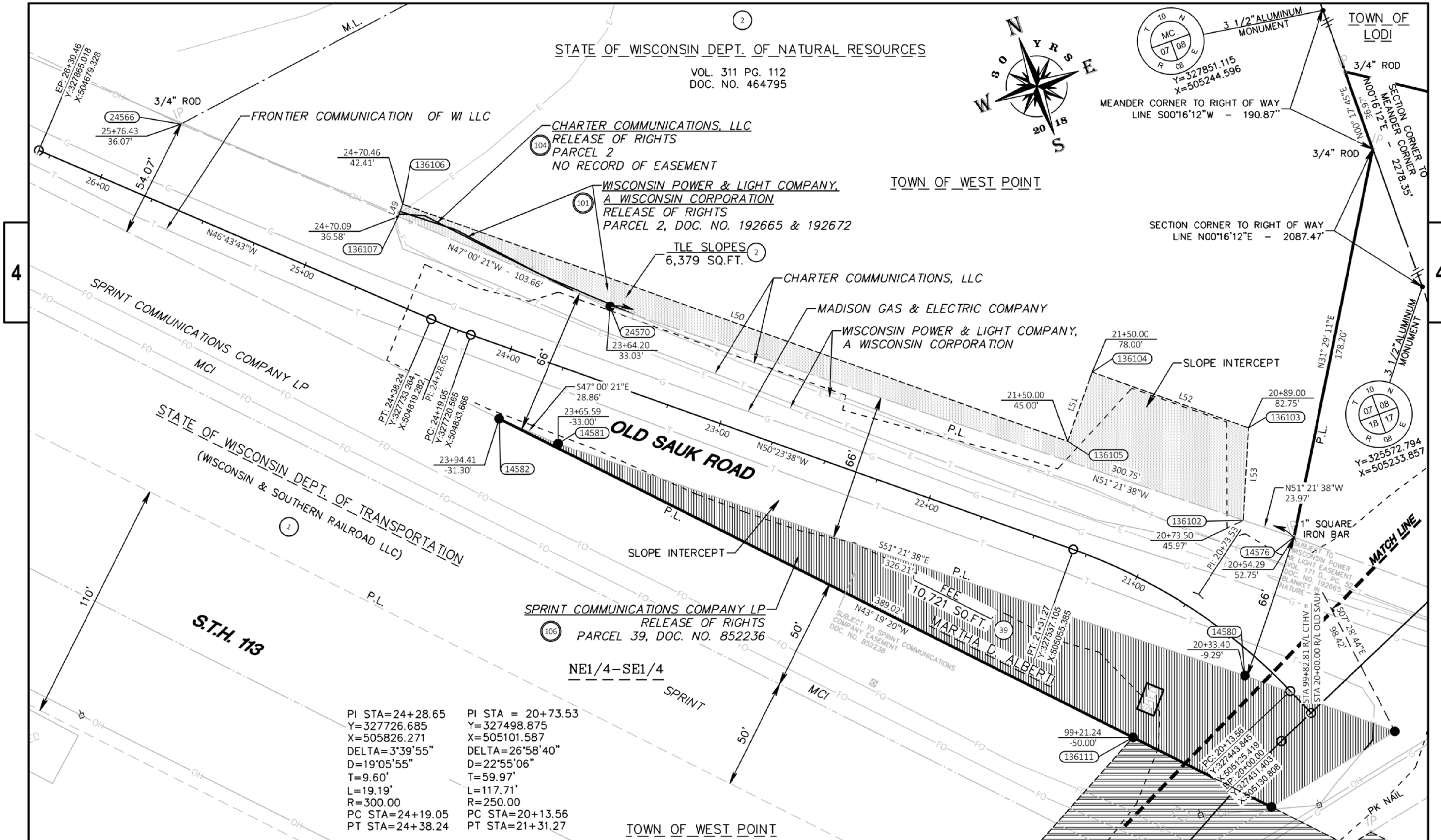
Y=325572.794
X=505233.857

3 1/2"ALUMINUM MONUMENT

REVISION DATE 11-21-2018 09-18-2018 10-08-2018 10-12-2018	DATE June 20, 2018	SCALE, FEET 0 20 40	HWY: C.T.H. V	R/W PROJECT NUMBER 5843-00-03	PLAT SHEET 4.08
	GRID FACTOR N/A		COUNTY: COLUMBIA	CONSTRUCTION PROJECT NUMBER 5843-00-73	PS&E SHEET 50 E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.08
PLOT DATE : 11/21/2018 9:56 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ########

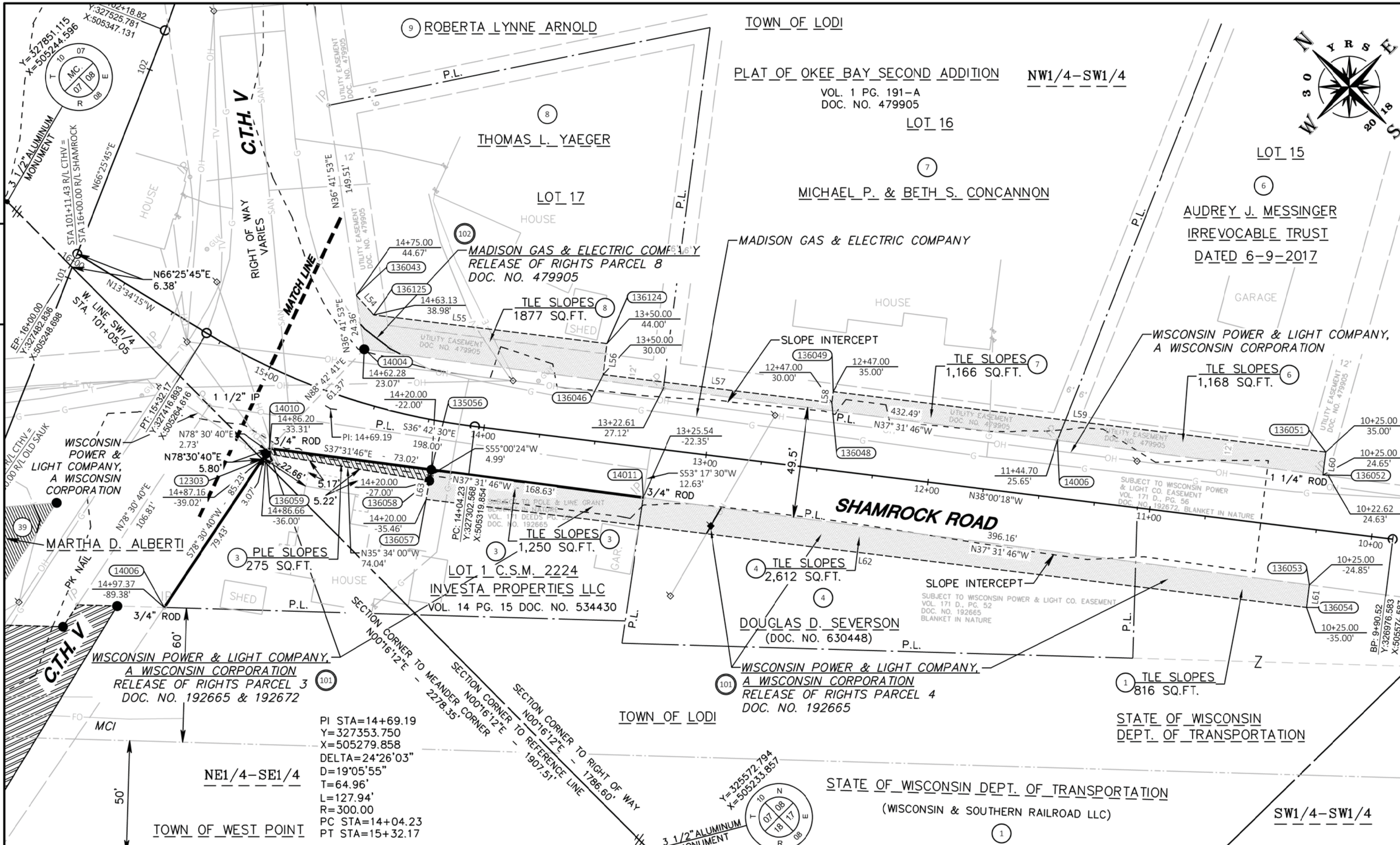
WISDOT/CADDS SHEET 75



STATE OF WISCONSIN DEPT. OF NATURAL RESOURCES
VOL. 311 PG. 112
DOC. NO. 464795
TOWN OF LODI
TOWN OF WEST POINT
3 1/2" ALUMINUM MONUMENT
Y=327851.115
X=505244.596
MEANDER CORNER TO RIGHT OF WAY LINE S00°16'12"W - 190.87'
3/4" ROD
SECTION CORNER TO MEANDER CORNER N00°16'12"E - 2278.35'
SECTION CORNER TO RIGHT OF WAY LINE N00°16'12"E - 2087.47'
N31° 29' 11"E 178.20'
Y=325572.794
X=505233.857
EP: 26+30.46
Y:327865.018
X:504679.328
M.L.
3/4" ROD
24566
25+76.43
36.07'
54.07'
FRONTIER COMMUNICATION OF WI LLC
CHARTER COMMUNICATIONS, LLC
RELEASE OF RIGHTS
PARCEL 2
NO RECORD OF EASEMENT
104
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION
RELEASE OF RIGHTS
PARCEL 2, DOC. NO. 192665 & 192672
101
24+70.46
42.41'
136106
24+70.09
36.58'
136107
N46°43'43"W
N47° 00' 21"W - 103.66'
TLE SLOPES
6,379 SQ.FT.
CHARTER COMMUNICATIONS, LLC
MADISON GAS & ELECTRIC COMPANY
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION
24570
23+64.20
33.03'
SPRINT COMMUNICATIONS COMPANY LP
MCI
PT: 24+38.24
Y:327733.264
X:504819.282
PI: 24+28.65
PC: 24+19.05
Y:327720.565
X:504833.666
66'
S47° 00' 21"E
28.86'
23+65.59
-33.00'
14581
23+94.41
-31.30'
14582
OLD SAUK ROAD
N50°23'38"W
21+50.00
78.00'
136104
SLOPE INTERCEPT
21+50.00
45.00'
136105
20+89.00
82.75'
136103
300.75'
N51° 21' 38"W
N51° 21' 38"W
23.97'
136102
20+73.50
45.97'
1" SQUARE IRON BAR
14576
20+54.29
52.75'
PI: 20+73.53
SUBJECT TO WISCONSIN POWER & LIGHT EASEMENT VOL. 171 D., PG. 55 BLANKET IN NATURE
MATCH LINE
STATE OF WISCONSIN DEPT. OF TRANSPORTATION
(WISCONSIN & SOUTHERN RAILROAD LLC)
SLOPE INTERCEPT
S51° 21' 38"E
326.21'
FEE
10,721 SQ.FT.
389.02'
N43° 19' 20"W
MARTHA D. ALBERT
39
SUBJECT TO SPRINT COMMUNICATIONS COMPANY EASEMENT DOC. NO. 852238
PT: 21+31.27
Y:327537.105
X:505055.385
S07° 28' 44"E
98.42'
STA 99+82.81 R/L CTHV = STA 20+00.00 R/L OLD SAUK
14580
20+33.40
-9.29'
SPRINT COMMUNICATIONS COMPANY LP
RELEASE OF RIGHTS
PARCEL 39, DOC. NO. 852236
106
110'
S.T.H. 113
NE1/4-SE1/4
SPRINT
50'
50'
99+21.24
-50.00'
136111
PC: 20+13.56
Y:327443.845
X:505125.419
BP: 20+00.00
Y:327431.403
X:505130.808
PK NAIL
P.L.
PI STA=24+28.65
Y=327726.685
X=505826.271
DELTA=3°39'55"
D=19°05'55"
T=9.60'
L=19.19'
R=300.00
PC STA=24+19.05
PT STA=24+38.24
PI STA = 20+73.53
Y=327498.875
X=505101.587
DELTA=26°58'40"
D=22°55'06"
T=59.97'
L=117.71'
R=250.00
PC STA=20+13.56
PT STA=21+31.27
TOWN OF WEST POINT

REVISION DATE 11-21-2018 N.C. 09-18-2018 N.C. 10-08-2018 N.C. 10-12-2018	DATE June 20, 2018	SCALE, FEET 0 20 40	HWY: C.T.H. V	R/W PROJECT NUMBER 5843-00-03	PLAT SHEET 4.09
	GRID FACTOR N/A		COUNTY: COLUMBIA	CONSTRUCTION PROJECT NUMBER 5843-00-73	PS&E SHEET 51 E

FILE NAME: 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.09
PLOT DATE: 11/21/2018 9:57 AM PLOT BY: AMY L. MAST PLOT NAME: PLOT SCALE: ########
WISDOT/CADDS SHEET 75



ROBERTA LYNNE ARNOLD
TOWN OF LODI
PLAT OF OKEE BAY SECOND ADDITION
VOL. 1 PG. 191-A
DOC. NO. 479905
NW1/4-SW1/4
LOT 16
LOT 15
THOMAS L. YAEGER
LOT 17
MICHAEL P. & BETH S. CONCANNON
AUDREY J. MESSINGER
IRREVOCABLE TRUST
DATED 6-9-2017
C.T.H. V
RIGHT OF WAY VARIES
MATCH LINE
MADISON GAS & ELECTRIC COMPANY
RELEASE OF RIGHTS PARCEL 8
DOC. NO. 479905
TLE SLOPES
1877 SQ.FT.
SLOPE INTERCEPT
TLE SLOPES
1,166 SQ.FT.
WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION
TLE SLOPES
1,168 SQ.FT.
SHAMROCK ROAD
WISCONSIN POWER & LIGHT COMPANY, A WISCONSIN CORPORATION
MARTHA D. ALBERTI
PLE SLOPES
275 SQ.FT.
TLE SLOPES
1,250 SQ.FT.
LOT 1 C.S.M. 2224
INVESTA PROPERTIES LLC
VOL. 14 PG. 15 DOC. NO. 534430
TLE SLOPES
2,612 SQ.FT.
DOUGLAS D. SEVERSON
(DOC. NO. 630448)
WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION
RELEASE OF RIGHTS PARCEL 3
DOC. NO. 192665 & 192672
WISCONSIN POWER & LIGHT COMPANY,
A WISCONSIN CORPORATION
RELEASE OF RIGHTS PARCEL 4
DOC. NO. 192665
TLE SLOPES
816 SQ.FT.
TOWN OF LODI
STATE OF WISCONSIN
DEPT. OF TRANSPORTATION
PI STA=14+69.19
Y=327353.750
X=505279.858
DELTA=24°26'03"
D=19°05'55"
T=64.96'
L=127.94'
R=300.00
PC STA=14+04.23
PT STA=15+32.17
NE1/4-SE1/4
TOWN OF WEST POINT
STATE OF WISCONSIN DEPT. OF TRANSPORTATION
(WISCONSIN & SOUTHERN RAILROAD LLC)
SW1/4-SW1/4
3 1/2" ALUMINUM MONUMENT
SECTION CORNER TO MEANDER CORNER
SECTION CORNER TO REFERENCE LINE
SECTION CORNER TO RIGHT OF WAY

REVISION DATE 11-21-2018 N.C. 09-18-2018 10-08-2018 N.C. 10-12-2018	DATE June 20, 2018	SCALE, FEET 0 20 40	HWY: C.T.H. V	R/W PROJECT NUMBER 5843-00-03	PLAT SHEET 4.10
	GRID FACTOR N/A		COUNTY: COLUMBIA	CONSTRUCTION PROJECT NUMBER 5843-00-73	PS&E SHEET E

FILE NAME: 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.10
PLOT DATE: 11/21/2018 9:59 AM PLOT BY: AMY L. MAST PLOT NAME: PLOT SCALE: ########
WISDOT/CADDS SHEET 75

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
11521	328526.634	506896.135
11523	328434.829	506935.782
11524	328513.804	507104.305
12303	327359.378	505242.279
13093	328161.078	506242.708
13094	328135.287	506181.956
13095	328239.227	506426.786
13123	328039.251	505784.848
13404	327982.603	505822.313
13406	328109.506	506121.230
13407	327618.235	505509.337
13408	327797.818	505663.591
13536	328248.640	506277.333
13537	328259.714	506272.625
13655	328186.870	506303.460
14001	327609.725	505494.021
14004	327361.914	505309.321
14006	327113.862	505499.860
14010	327360.534	505247.966
14011	327226.803	505350.690
14075	328229.458	506403.774
14076	328274.701	506514.843
14079	328299.279	506399.234
14095	327343.558	505164.441
14102	327369.469	505126.258
14103	327397.727	505099.608
14104	327410.700	505163.435
14560	327608.351	505413.876
14576	327508.279	505150.625
14580	327457.362	505108.618
14581	327661.056	504853.814
14582	327680.738	504832.704
14583	327590.177	505479.452
17271	328341.969	506681.840
24566	327854.245	504743.387
24570	327711.041	504896.986
53500	327371.813	505137.793
135056	327302.624	505292.449
135070	328371.435	506754.970
135071	328432.654	506730.308

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
136005	328365.100	506744.465
136007	328366.907	506743.731
136008	328231.858	506429.915
136013	328102.374	506124.236
136014	328105.139	506123.071
136016	328059.045	506014.255
136018	328034.018	505970.555
136019	328004.764	505901.495
136020	328009.368	505899.545
136022	327977.921	505825.307
136027	327824.080	505693.014
136028	327821.472	505696.047
136030	327766.126	505648.453
136031	327760.910	505654.519
136032	327738.164	505634.959
136033	327745.988	505625.860
136034	327725.516	505608.256
136035	327717.692	505617.355
136037	327691.155	505594.534
136038	327698.979	505585.436
136042	327481.787	505398.665
136043	327381.450	505323.881
136046	327278.309	505376.883
136048	327197.149	505440.304
136049	327200.228	505444.243
136051	327025.302	505580.936
136052	327018.930	505572.782
136053	326988.451	505533.778
136054	326982.201	505525.779
136057	327294.905	505281.423
136058	327299.759	505288.356
136059	327359.990	505245.288
136061	328311.241	506394.265
136065	328257.874	506273.407
136067	328220.750	506185.767
136068	328222.591	506184.987
136069	328214.400	506165.650
136070	328212.559	506166.430
136076	328082.206	505858.700
136077	328084.048	505857.920

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
136080	327992.122	505732.007
136081	327964.955	505708.645
136082	327968.215	505704.854
136083	327953.051	505691.814
136084	327948.487	505697.122
136085	327866.600	505626.705
136086	327871.164	505621.397
136087	327856.000	505608.357
136088	327851.436	505613.664
136090	327795.328	505565.416
136091	327799.892	505560.108
136092	327780.937	505543.808
136093	327776.373	505549.115
136094	327733.155	505511.951
136095	327742.935	505500.578
136096	327728.529	505488.190
136097	327718.749	505499.563
136099	327666.433	505454.574
136100	327670.997	505449.267
136101	327612.825	505399.243
136102	327523.246	505131.902
136103	327561.503	505148.251
136104	327609.140	505090.680
136105	327583.715	505069.642
136106	327786.230	504824.896
136107	327781.726	504821.170
136111	327448.481	505051.743
136113	327399.325	504960.645
136114	327329.144	505026.832
136118	327358.874	505149.996
136122	328222.107	506406.895
136124	327286.929	505387.915
136125	327369.783	505323.170
136223	328338.247	506478.203
136224	328332.059	506480.604
136225	328306.456	506396.253
136226	328354.129	506748.919
136227	328393.206	506839.403
136228	328404.226	506834.644
136229	328435.736	506908.177

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
136230	328424.924	506912.846
136231	328523.577	507123.601
136232	328532.867	507118.896
136233	328549.234	506999.488
136234	328569.155	506990.044
136235	328516.728	506873.199
136236	328496.327	506882.009
136237	328464.819	506808.475
136238	328471.240	506805.702
136239	328435.557	506723.078
136240	328430.603	506725.217

Line Table		
Line #	Length	Direction
L1	76.72	N40° 41' 36"E
L2	7.00	S49° 18' 24"E
L3	69.00	N40° 41' 36"E
L4	15.00	N49° 18' 24"W
L5	19.00	N40° 41' 36"E
L6	15.00	S49° 18' 24"E
L7	57.00	N40° 41' 36"E
L8	7.00	N49° 18' 24"W
L9	25.00	N40° 41' 36"E
L10	7.00	S49° 18' 24"E
L11	74.00	N40° 41' 36"E
L12	7.00	N49° 18' 24"W
L13	20.00	N40° 41' 36"E
L14	7.00	S49° 18' 24"E
L15	108.00	N40° 41' 36"E
L16	7.00	N49° 18' 24"W
L17	20.00	N40° 41' 36"E
L18	5.00	S49° 18' 24"E
L19	35.83	N40° 41' 36"E
L20	2.00	S22° 57' 26"E
L21	334.20	N67° 02' 34"E
L22	2.00	N22° 57' 26"W
L23	21.00	N67° 02' 34"E
L24	2.00	S22° 57' 26"E
L25	95.18	N67° 02' 34"E
L26	2.00	N23° 02' 01"W
L27	132.10	N67° 02' 34"E
L28	5.18	S22° 33' 31"E
L29	15.30	N73° 00' 01"W
L30	1.95	S22° 05' 37"E

Line Table		
Line #	Length	Direction
L31	673.58	S67° 02' 34"W
L32	3.00	N22° 51' 03"W
L33	118.18	S67° 02' 34"W
L34	50.36	S60° 12' 00"W
L35	75.00	S67° 02' 34"W
L36	5.00	N22° 57' 26"W
L37	80.62	S67° 02' 34"W
L38	202.90	S40° 41' 36"W
L39	4.00	S49° 18' 24"E
L40	73.00	S40° 41' 36"W
L41	8.00	S49° 18' 24"E
L42	30.00	S40° 41' 36"W
L43	12.00	N49° 18' 24"W
L44	27.00	S40° 41' 36"W
L45	12.00	S49° 18' 24"E
L46	35.00	S40° 41' 36"W
L47	12.00	N49° 18' 24"W
L48	286.45	S40° 41' 36"W
L49	5.85	N39° 36' 22"E
L50	317.67	S50° 23' 38"E
L51	33.00	N39° 36' 22"E
L52	74.72	S50° 23' 38"E
L53	41.60	S23° 08' 18"W
L54	11.69	S03° 29' 15"W
L55	105.15	S38° 00' 18"E
L56	14.00	S51° 59' 42"W
L57	103.00	S38° 00' 18"E
L58	5.00	N51° 59' 42"E
L59	222.00	S38° 00' 18"E
L60	10.35	S51° 59' 42"W

Line Table		
Line #	Length	Direction
L61	10.15	S51° 59' 42"W
L62	396.86	N38° 00' 18"W
L63	13.46	N55° 00' 24"E
L64	7.77	N22° 33' 31"W
L65	87.90	N68° 47' 50"E
L66	6.64	S21° 12' 10"E
L67	87.72	S68° 03' 29"W
L68	12.12	N68° 03' 29"E
L69	12.00	S23° 21' 29"E
L70	98.56	S66° 38' 31"W
L71	13.79	N22° 05' 37"W
L72	10.41	S26° 51' 37"E
L73	21.63	S63° 08' 23"W
L74	24.98	S66° 38' 31"W
L75	11.78	N23° 21' 29"W
L76	5.40	N23° 21' 29"W
L77	90.00	N66° 38' 31"E
L78	6.99	S23° 21' 29"E
L79	5.49	S68° 03' 29"W
L80	22.22	N23° 21' 29"W
L81	24.98	N66° 38' 31"E
L82	22.05	S25° 21' 49"E

4

4

REVISION DATE
09-18-2018
10-08-2018
10-12-2018 N.C.
11-21-2018

DATE June 20, 2018
GRID FACTOR N/A

SCALE, FEET
0 20 40

HWY: C.T.H. V
COUNTY: COLUMBIA

R/W PROJECT NUMBER 5843-00-03
CONSTRUCTION PROJECT NUMBER 5843-00-73

PLAT SHEET 4.11
PS&E SHEET 53

E

FILE NAME : 1117-683 PLAT.DWG
LAYOUT NAME - RW 4.11

PLOT DATE : 11/21/2018 10:01 AM PLOT BY : AMY L. MAST PLOT NAME : PLOT SCALE : ########

WISDOT/CADDS SHEET 75

STH 113

STA 98+15, 36' LT
1-20' CP EXTENSION
REMOVING SMALL PIPE
CULVERT (ENDWALL ONLY)

CN RAILROAD

SPRINT & MCI COMMUNICATIONS

MARTHA D. ALBERTI

OLD SAUK RD

SEE PAVING DETAIL FOR DRIVEWAY LOCATIONS AND TYPE

COLUMBIA COUNTY

PI STA = 99+51.92
Y = 327419.044
X = 505102.481
DELTA = 4°46'48"
D = 19°05'55"
T = 12.52'
L = 25.03'
R = 300.00'
PC STA = 99+39.39
PT STA = 99+64.42

PI STA = 102+87.35
Y = 327553.186
X = 505409.946
DELTA = 25°44'09"
D = 19°05'55"
T = 68.53'
L = 134.75'
R = 300.00'
PC STA = 102+18.82
PT STA = 103+53.57

BEAVER ENTERPRISE INC

STA 103+09
REMOVING MASONRY

PI STA = 97+80.17
Y = 327337.49
X = 504951.34

BP: 97+80.17

ASPHALTIC FLUME REQ'D

PC: 99+39.39

PT: 99+64.42

STA 99+82.80, CTH V =
STA 20+00.00, OLD SAUK RD
CONSTRUCT TYPE D MODIFIED
INTERSECTION

PC: 20+13.56

SLOPE INTERCEPT

ALLIANT ENERGY/
FRONTIER COMMUNICATIONS

STA 101+11.42, CTH V =
STA 16+00.00, SHAMROCK RD
CONSTRUCT TYPE D MODIFIED
INTERSECTION

PC: 102+18.82

CHARTER COMMUNICATIONS

PT: 103+53.57

98+00

99+00

BP: 20+00.00

100+00

EP: 16+00.00

101+00

N61° 38' 56"E

N66° 25' 45"E

16.00

102+00

103+00

CTH V

STA 97+80.17, CTH V =
STA 49+79.40, STH 113
CONSTRUCT TYPE D
INTERSECTION

CP#5
49+23.53, 17.0' LT
(¾ " ROD)
Y 327285.16
X 504977.30

CP#5

BEGIN PROJECT
STA 97+91.07
MATCH EXISTING
SAWCUT REQ'D
Y 327342.67
X 504960.94

ASPHALTIC FLUME REQ'D

MADISON GAS & ELECTRIC COMPANY

STA 99+20 - STA 100+70
OBLITERATING OLD ROAD

CONCRETE SURFACE DRAIN REQ'D

FUTURE SIDEWALK BY OTHERS

CP#11
48+42.08, 118.3' RT
(60D NAIL)
Y 327318.75
X 505131.61

CP#11

BEVERLY J. DAVIS-REARDON & MICHAEL J. REARDON

PT: 16+32.17

SHAMROCK RD

CONCRETE SURFACE DRAIN REQ'D

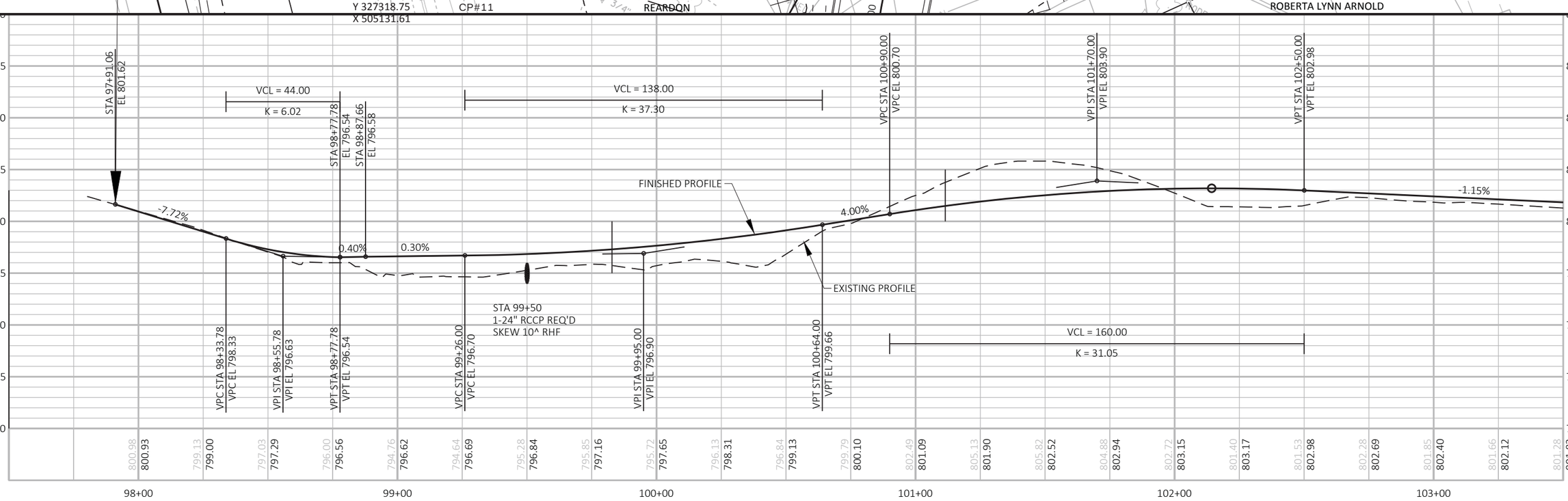
STA 101+20 - STA 102+80
OBLITERATING OLD ROAD

OKEE SANITARY SEWER DISTRICT

SLOPE INTERCEPT

MADISON GAS & ELECTRIC COMPANY

ROBERTA LYNN ARNOLD

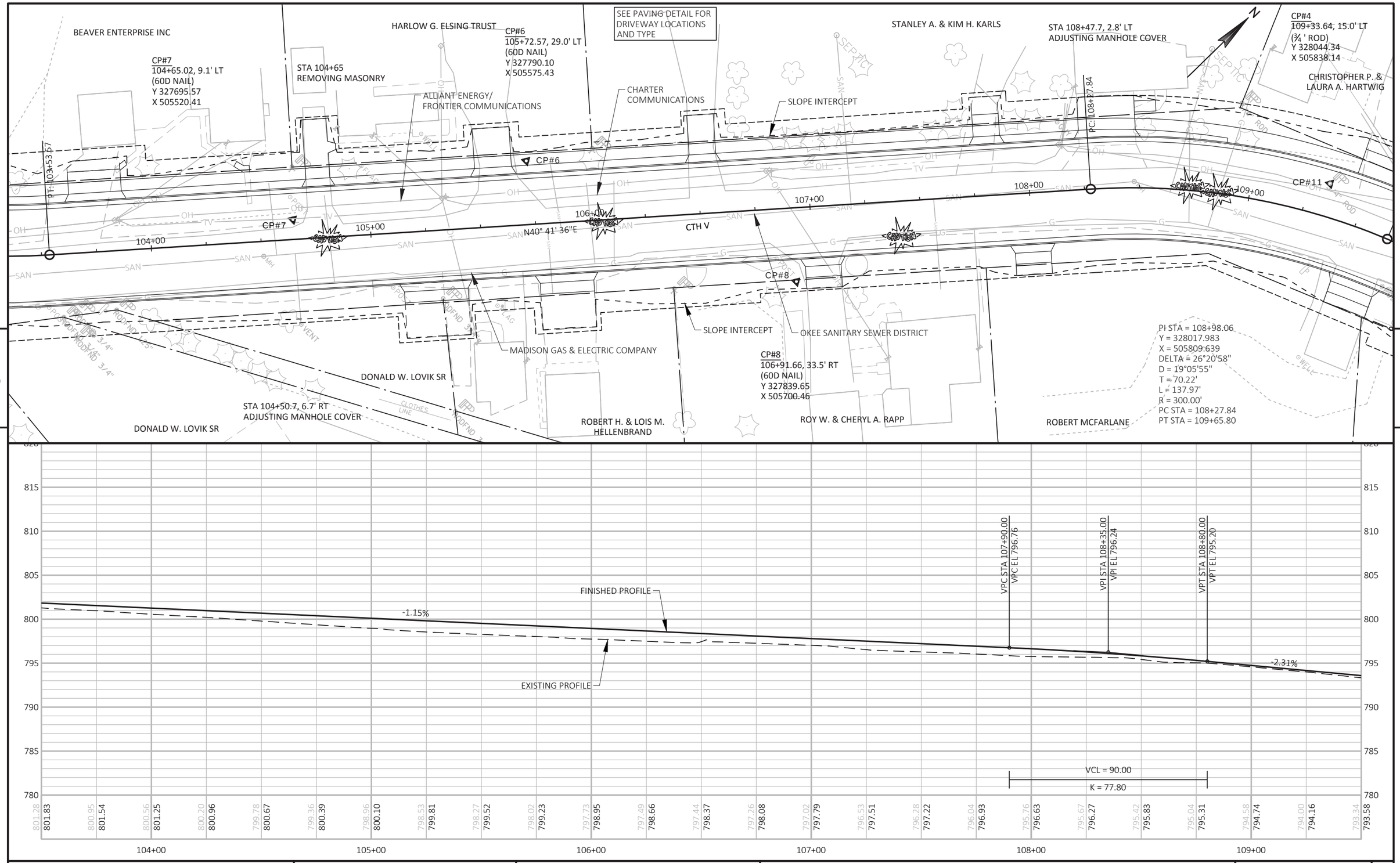


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: CTH V	SHEET 54	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050101_pp

PLOT DATE : 10/18/2018 3:31 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: CTH V	SHEET 55	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050102_pp
PLOT DATE : 10/19/2018 8:52 AM
PLOT BY : HEDRINGTON, MARK
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

CHRISTOPHER P. & LAURA A. HARTWIG

ROBERT H. & YOSHIKO RAPP

STA 110+67.2, 3.7' LT
ADJUSTING MANHOLE COVER

JEANNE RADEMAKER

RUSSELL T. BURHOP, BURHOP'S LAKESIDE LODGE INC

CHARTER COMMUNICATIONS

SLOPE INTERCEPT

RUSSELL T. BURHOP, BURHOP'S LAKESIDE LODGE INC

SEE PAVING DETAIL FOR DRIVEWAY LOCATIONS AND TYPE

CHARTER COMMUNICATIONS

RUSSELL T. BURHOP, BURHOP'S LAKESIDE LODGE INC

ALLIANT ENERGY/
FRONTIER COMMUNICATIONS

FITZ'S ON THE LAKE INC

STA = 115+09.10
Y = 328257.29
X = 506374.57
DELTA = 1°45'16"

STA 114+16
REMOVING FENCE
(1 PANEL, APPROX 8')

FITZ'S ON THE LAKE INC

CP#10
115+44.04, 25.0' LT
(60D NAIL)
Y 328293.26
X 506398.09

PT 109+65.80

PT 115+09.10

110+00 111+00 112+00 113+00 114+00 115+00

N67° 02' 34"E

CTH V

POSSIBLE MH UNDER PAVEMENT

CP#9

CP#10

TREE TO REMAIN

OKEE SANITARY SEWER DISTRICT

STA 110+15 - STA 112+17
REMOVING FENCE

STA 110+15 - STA 112+18
REMOVING CURB & GUTTER

STA 110+15 - STA 111+73
REMOVING CONCRETE SIDEWALK

SLOPE INTERCEPT

CP#9
113+01.22, 17.7' RT
(60D NAIL)
Y 328159.92
X 506190.05

STA 113+43.5, 5.2' RT
ADJUSTING MANHOLE COVER

MADISON GAS & ELECTRIC COMPANY

STA 114+16
REMOVING FENCE
(1 SECTION, APPROX 10')

MARVIN L. & CAROL J. ZIMMERMAN

BM#2

STA 115+36.2, 2.6' RT
ADJUSTING MANHOLE COVER

ROBERT MCFARLANE

TOWN OF LODI

TOWN OF LODI

TOWN OF LODI

OKEE DEVELOPMENT LLC

OKEE DEVELOPMENT LLC

OKEE DEVELOPMENT LLC

BENCHMARKS

NO.	STATION	ELEV.	DESCRIPTION
2	115+52	786.37	NE CORNER OF EAST END OF BRICK WALL

STA 110+75.00
EL 790.70

VCL = 90.00
K = 84.11

-2.31%

-2.22%

-1.15%

EXISTING PROFILE

FINISHED PROFILE

VPC STA 112+55.00
VPC EL 786.70

VPI STA 113+00.00
VPI EL 785.70

VPT STA 113+45.00
VPT EL 785.18

793.34	793.58	792.78	793.00	791.95	792.43	791.67	791.85	791.21	791.27	790.72	790.70	790.16	790.14	789.59	789.59	789.01	789.03	788.55	788.48	788.08	787.92	787.63	787.37	787.19	786.81	786.74	786.28	786.26	785.82	785.81	785.44	785.50	785.13	785.24	784.84	784.98	784.55	784.71	784.26	784.39	783.98	784.10	783.69	783.85	783.40	783.63	783.11	783.42	782.83

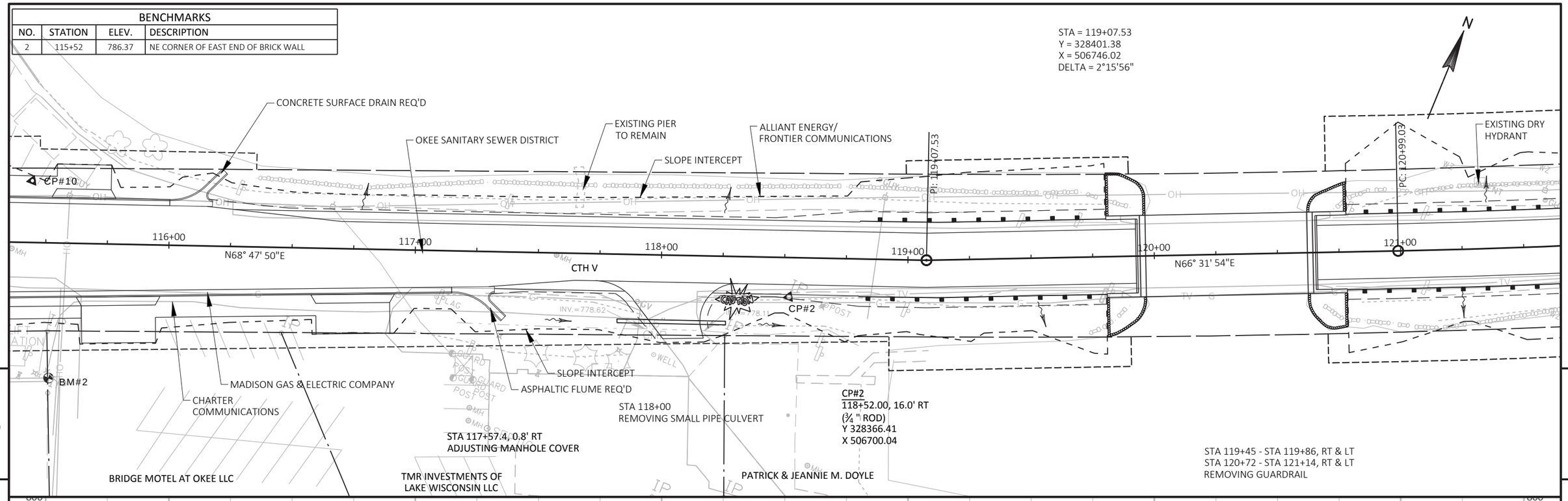
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: CTH V	SHEET 56	E

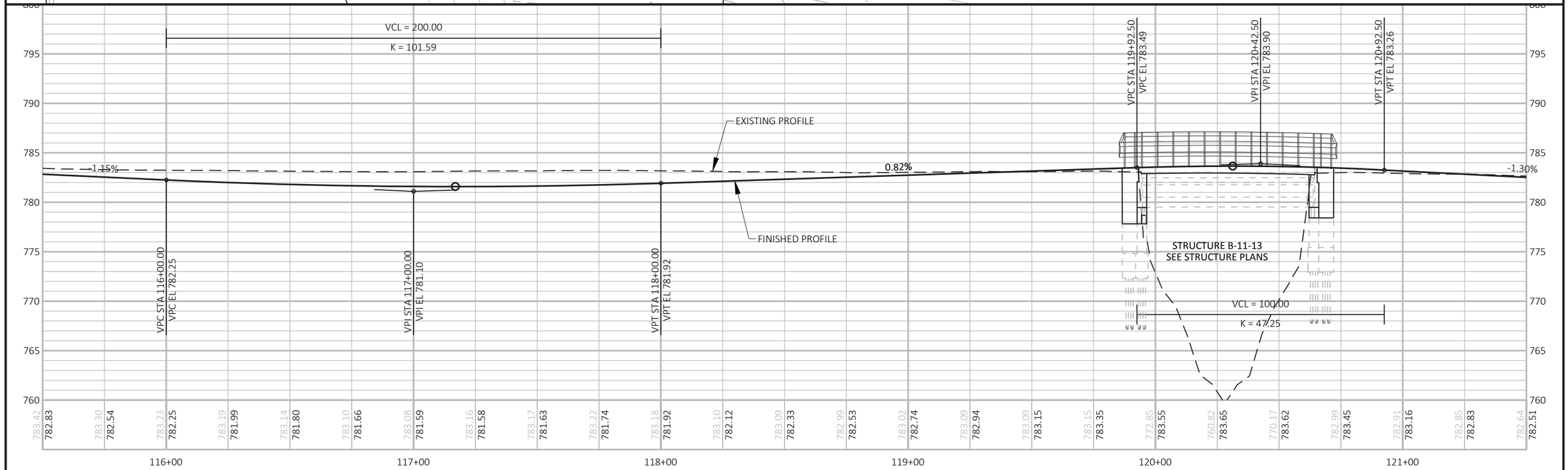
FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050103_pp

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
2	115+52	786.37	NE CORNER OF EAST END OF BRICK WALL





PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: CTH V	SHEET 57	E

ALLIANT ENERGY/
FRONTIER COMMUNICATIONS

PT: 122+76.64

SLOPE INTERCEPT

WETLAND BOUNDARY

TOWN OF LODI

TOWN OF LODI

PI STA = 128+08.53
Y = 328793.48
X = 507556.92

N

122+00 123+00 124+00 125+00 126+00 127+00

CTH V

N63° 08' 23"E

CAUTION

INV.=778.47

INV.=779.43

INV.=782.53

INV.=784.82

INV.=787.98

18" CMP

SLOPE INTERCEPT

MADISON GAS & ELECTRIC COMPANY

OKEE SANITARY
SEWER DISTRICT

PI STA = 121+87.86
Y = 328513.026
X = 507003.171
DELTA = 3°23'32"
D = 1°54'35"
T = 88.83'
L = 177.61'
R = 3000.00'
PC STA = 120+99.03
PT STA = 122+76.64

END PROJECT
STA 124+50.00
MATCH EXISTING
SAWCUT REQ'D

MATCH EXISTING
SAWCUT REQ'D

SHED

VIRGIL E. WETZEL

MARTIN T. & MARY KAY WETZEL

BETTY J. JOHNSON

MARY ANN JOHNSON

VCL = 120.00
K = 65.35

STA 124+50.00
EL 782.03

EXISTING PROFILE

-1.30%

0.54%

FINISHED PROFILE

VPC STA 122+04.05
VPC EL 781.81

VPI STA 122+64.05
VPI EL 781.03

VPT STA 123+24.05
VPT EL 781.35

795 790 785 780 775 770 765 760

782.64 782.51 782.36 782.18 782.11 781.86 781.95 781.57 781.80 781.37 781.67 781.27 781.61 781.27 781.60 781.36 781.68 781.49 781.70 781.63 781.75 781.76 781.80 781.90 782.03 782.03 782.25 782.57 782.80 783.21 783.68 784.11 784.77 785.46 786.23 786.98 787.83 789.03

122+00 123+00 124+00 125+00 126+00 127+00

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: CTH V	SHEET 58	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 050105_pp

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

BENCHMARKS			
NO.	STATION	ELEV.	DESCRIPTION
1	14+68	812.52	NORTH CORNER OF UPPER CONCRETE PORCH

CONSTRUCTION LIMITS
STA 10+50.00
MATCH EXISTING
SAWCUT REQ'D

BEVERLY J. DAVIS- REARDON
& MICHAEL J. REARDON

SEE PAVING DETAIL FOR
DRIVEWAY LOCATIONS
AND TYPE

BEVERLY J. DAVIS- REARDON
& MICHAEL J. REARDON

APPROXIMATE EXTENT OF
RESIDUAL SOIL CONTAMINATION

STA 14+25.6 - 14+71.0 LT
WALL MODULAR BLOCK
GRAVITY LANDSCAPE
SEE DETAILS

STA 14+84.6, 14.6' LT
ADJUSTING MANHOLE COVER

FUTURE SIDEWALK
BY OTHERS

BM#1

ASPHALTIC FLUME REQ'D

SLOPE INTERCEPT

SHAMROCK RD

N38° 00' 18"W

N13° 34' 15"W

SLOPE INTERCEPT

PC 14+04.23

PT 15+32.17

TREES TO REMAIN

MADISON GAS & ELECTRIC COMPANY

ALLIANT ENERGY/
FRONTIER COMMUNICATIONS

CHARTER COMMUNICATIONS

MADISON GAS & ELECTRIC COMPANY

CTH V

EP: 16+00.00

PI STA = 9+90.52
Y = 326976.58
X = 505574.59

PI STA = 14+69.19
Y = 327353.750
X = 505279.858
DELTA = 24°26'03"
D = 19°05'55"
T = 64.96'
L = 127.94'
R = 300.00'
PC STA = 14+04.23
PT STA = 15+32.17

PI STA = 16+00.00
Y = 327482.84
X = 505248.70

STA 101+11.42, CTH V =
STA 16+00.00, SHAMROCK RD
CONSTRUCT TYPE D MODIFIED
INTERSECTION

ROBERT & AUDREY J.
MESSINGER

JANIS E. SCHNEIDER

THOMAS D. & JUDITH K.
DICKSON

VCL = 100.00
K = 136.99

VCL = 60.00
K = 14.99

VCL = 200.00
K = 23.54

STA 10+50.00
EL 803.83

VPC STA 10+75.00
VPC EL 804.27

VPI STA 11+25.00
VPI EL 805.15

VPT STA 11+75.00
VPT EL 806.40

VPC STA 12+94.00
VPC EL 809.36

VPI STA 13+94.00
VPI EL 811.85

VPT STA 14+94.00
VPT EL 805.84

VPC STA 15+20.00
VPC EL 804.28

VPI STA 15+50.00
VPI EL 802.48

VPT STA 15+80.00
VPT EL 801.88

STA 16+00.00
EL 801.48

EXISTING PROFILE

FINISHED PROFILE

1.76%

2.49%

-6.00%

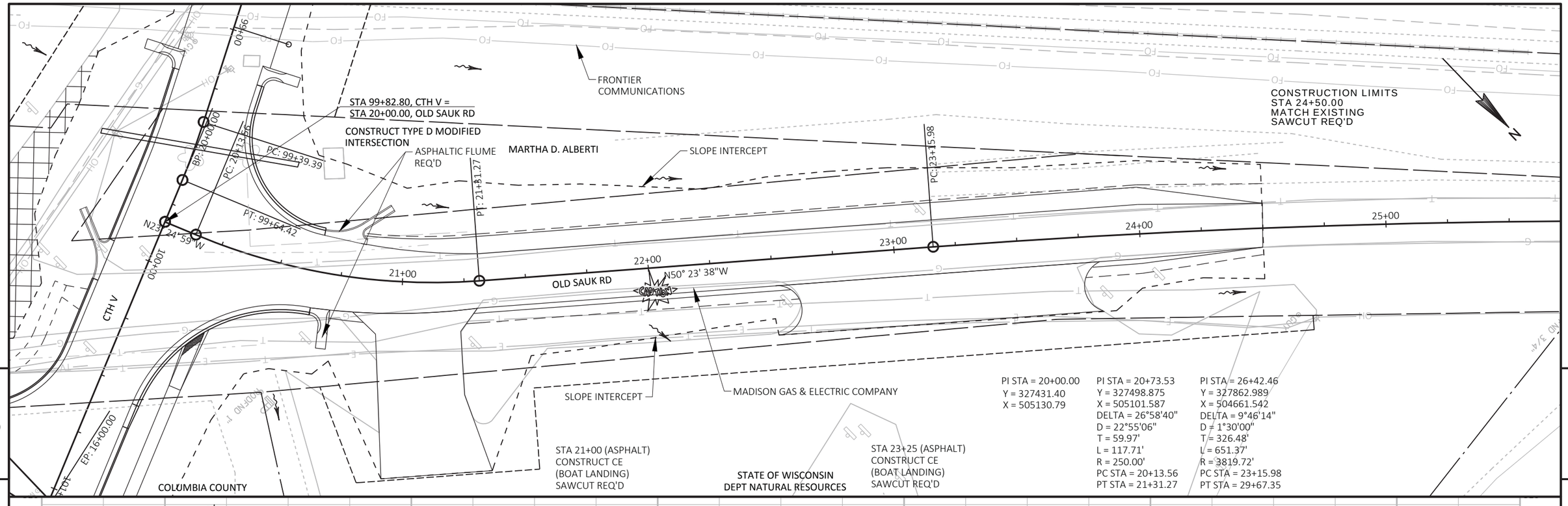
-2.00%

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: SHAMROCK ROAD	SHEET 59	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050102_PP.DWG
LAYOUT NAME - 050106_pp

PLOT DATE : 10/17/2018 2:16 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	PLAN AND PROFILE: OLD SAUK ROAD	SHEET 60	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\SHEETSPLAN\050102_PP.DWG
LAYOUT NAME - 050107_pp

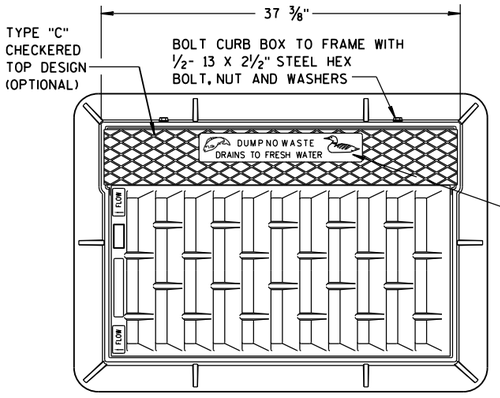
PLOT DATE : 10/17/2018 2:16 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

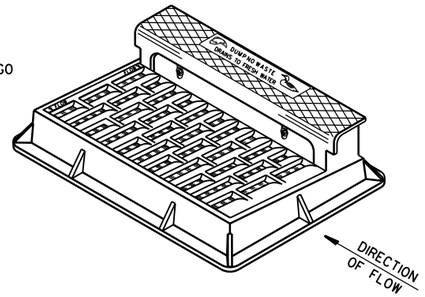
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A09-02	CATCH BASINS 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
08D05-19D	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
08D18-02	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-14A	PAVEMENT MARKING SYMBOLS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D30-04A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-04B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-04C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

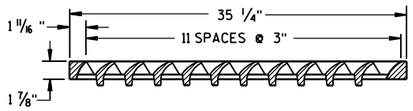
6

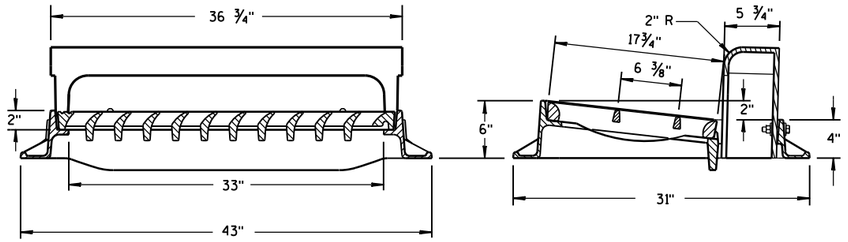


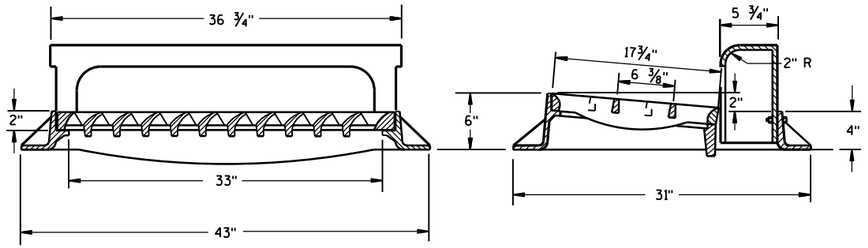
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

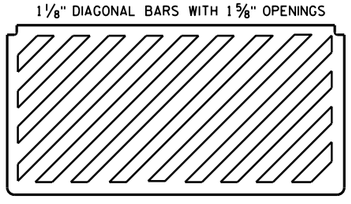






TYPE "H"

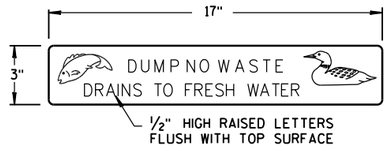
NOTE: EITHER CASTING IS ACCEPTABLE



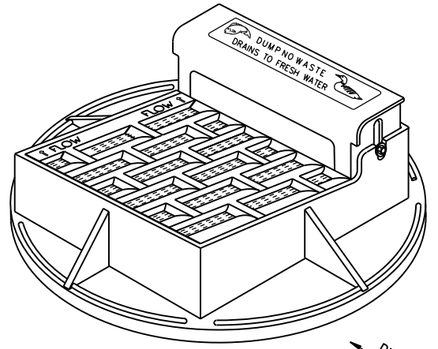
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

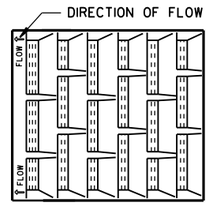
NOTE:
GRATE IS REVERSIBLE.

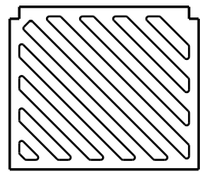
GENERAL NOTES

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

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

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

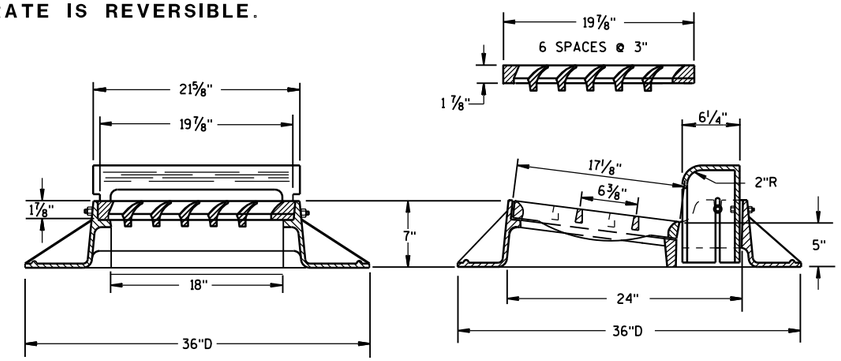




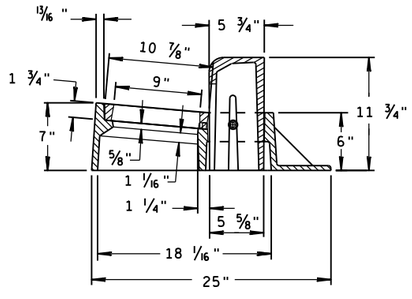
SPECIAL GRATE FOR TYPE "A" COVER

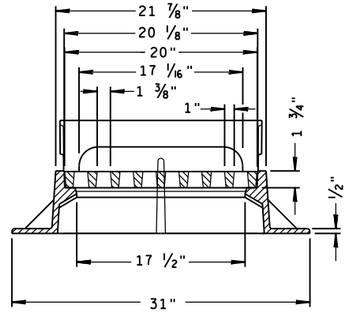
(MEASURES 19 3/4" X 17" X 1 7/8")

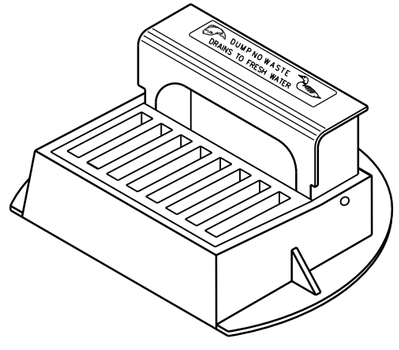
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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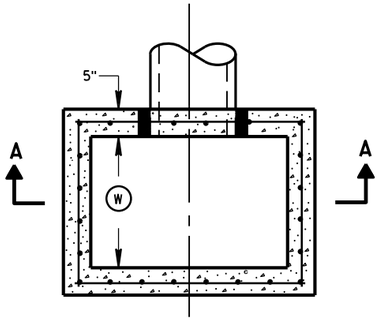
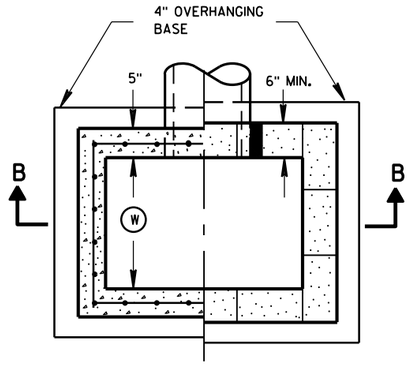
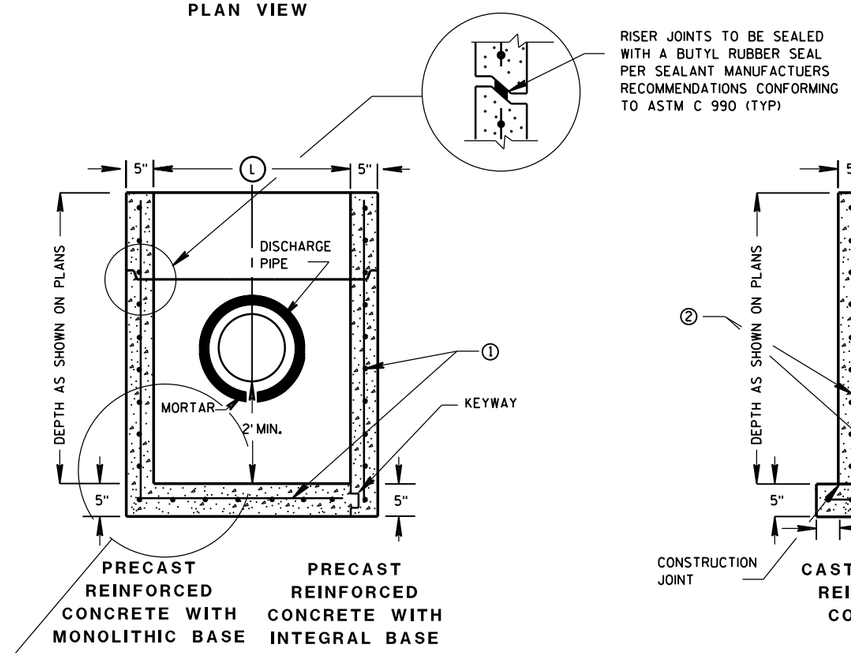
S.D.D. 8 A 5-19a



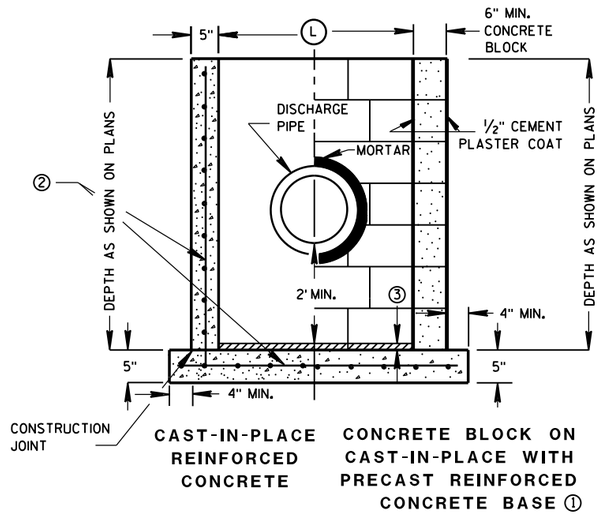
PLAN VIEW



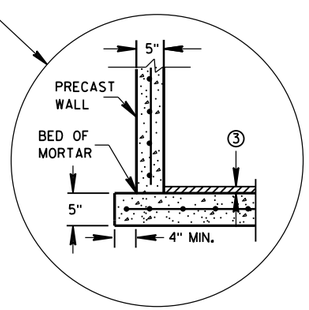
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

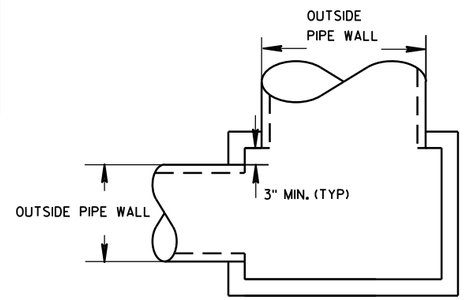
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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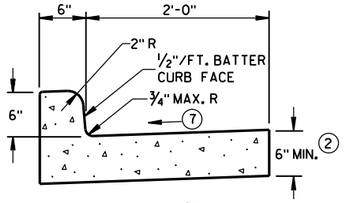
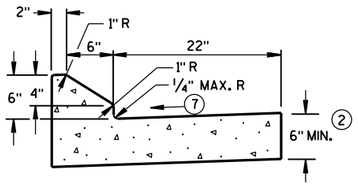
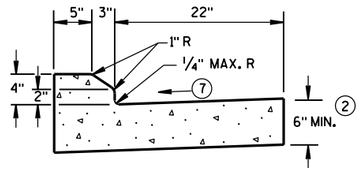
S.D.D. 8 A 9-2



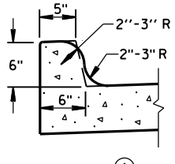
TYPES A (1) & D



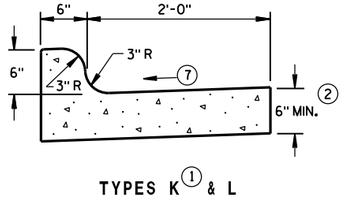
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

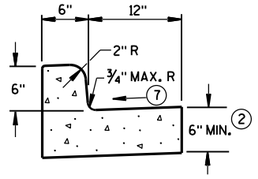


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



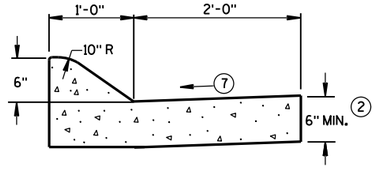
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

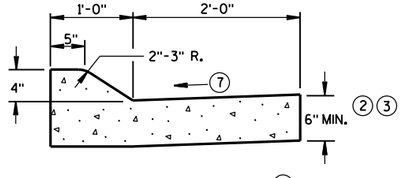


TYPES A (1) & D

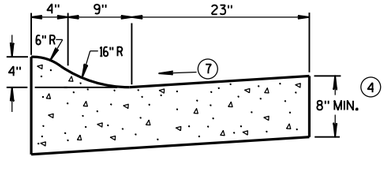
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

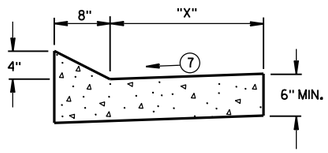


4" SLOPED CURB TYPES A (1) & D



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

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

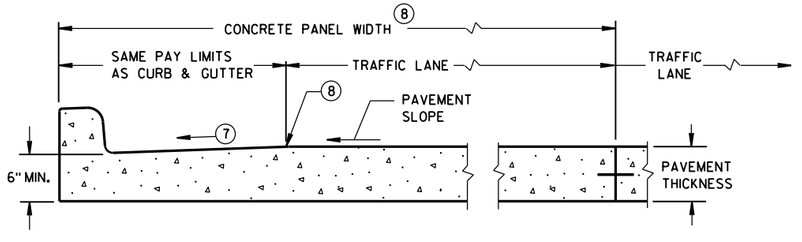
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

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

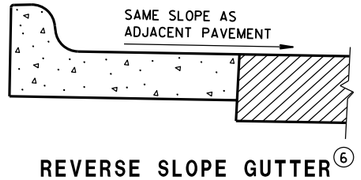
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.

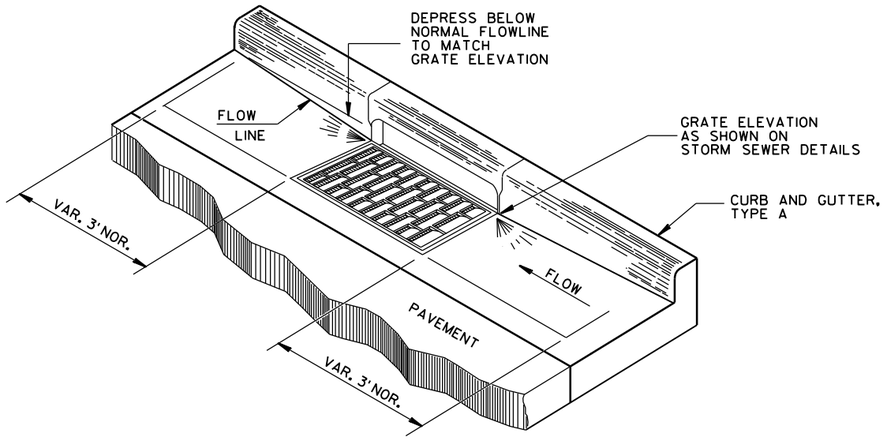


REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

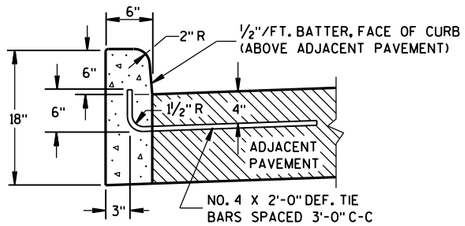
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

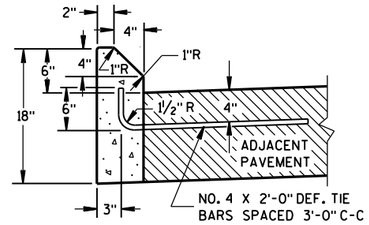
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

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

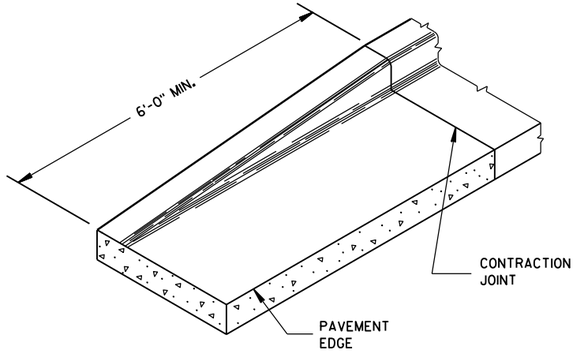


TYPES A (1) & D

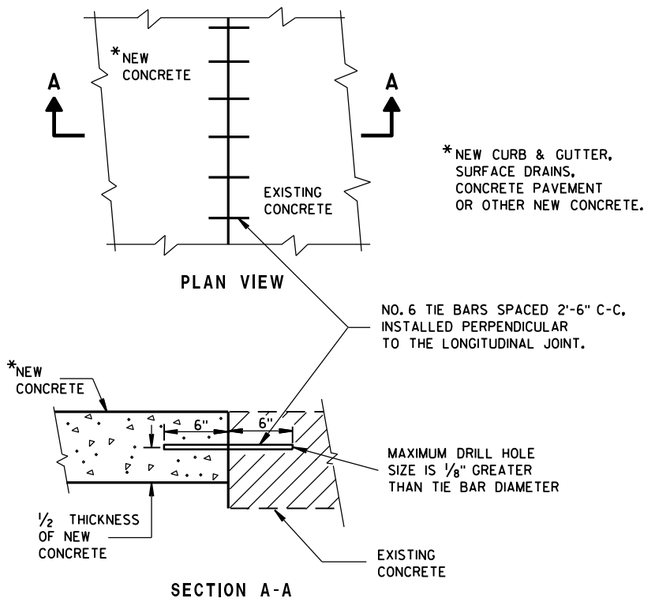


TYPES G (1) & J

CONCRETE CURB



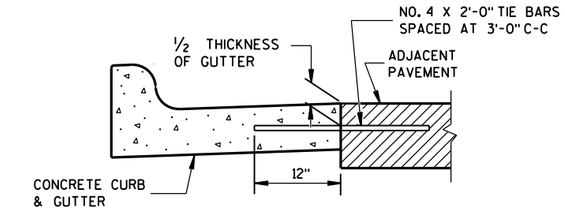
END SECTION CURB & GUTTER



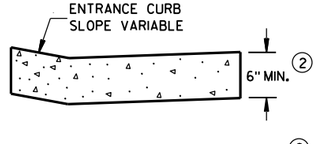
PLAN VIEW

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

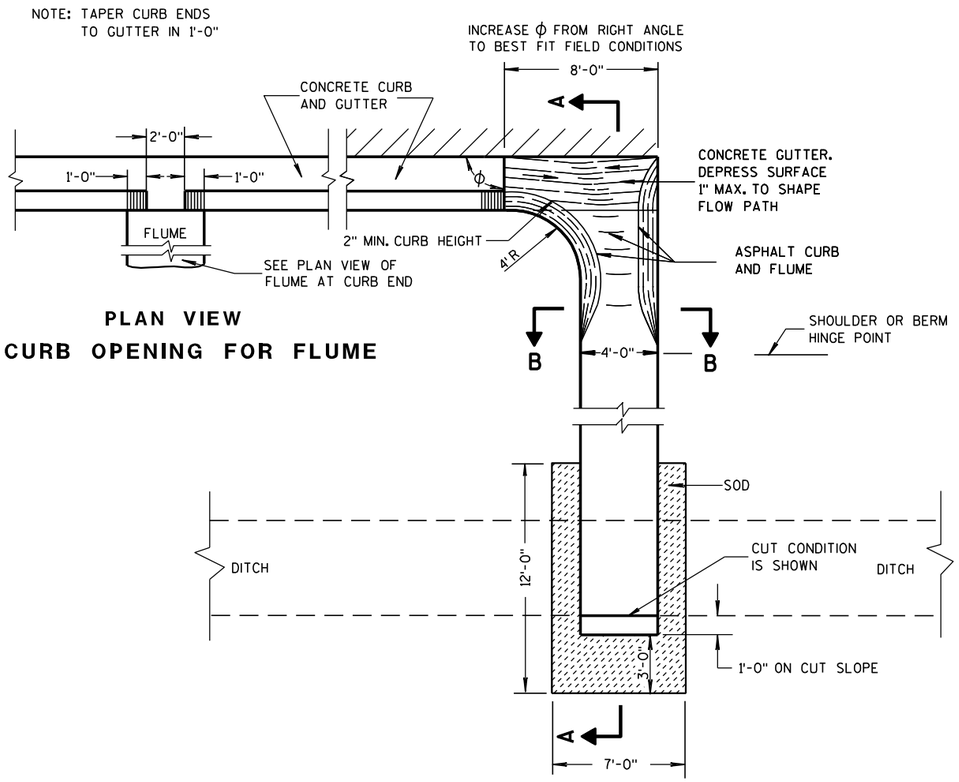
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS 65 UNIT SUPERVISOR — ENT
FHWA

6

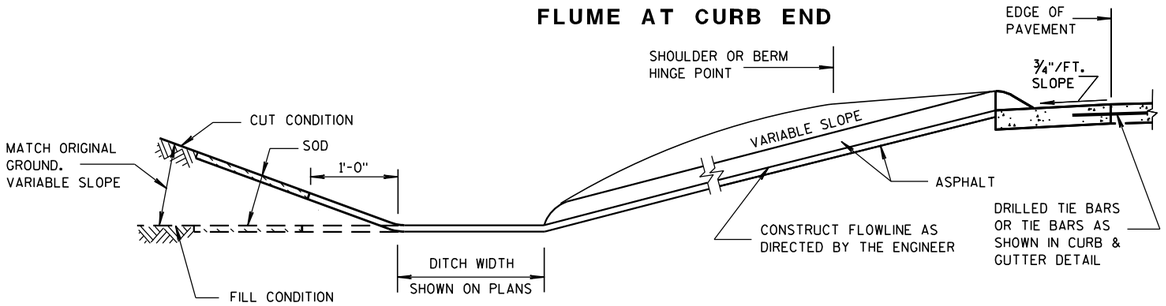
S.D.D. 8 D 1-20b

ASPHALTIC FLUME

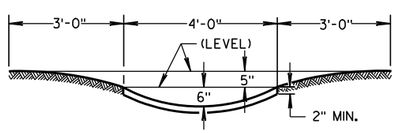


PLAN VIEW
CURB OPENING FOR FLUME

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.

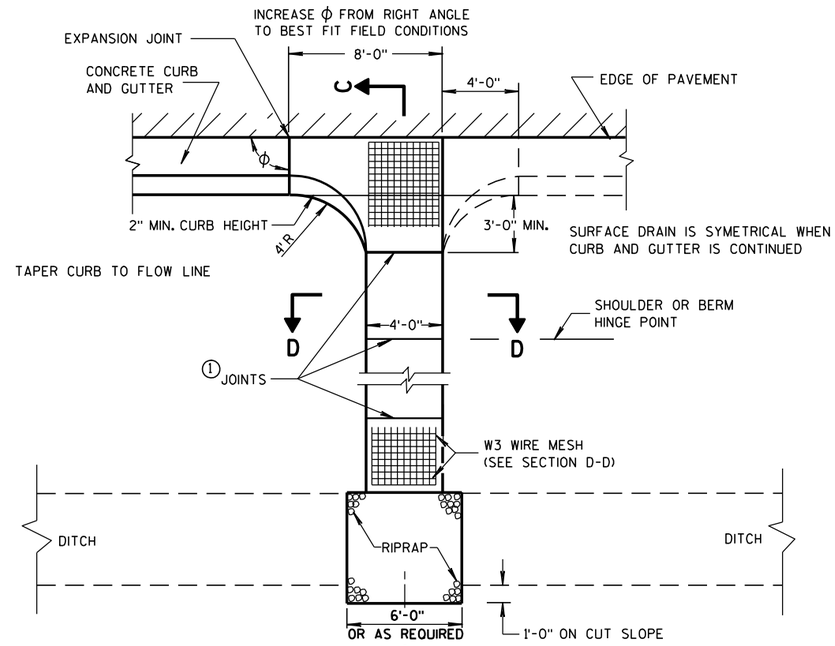
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

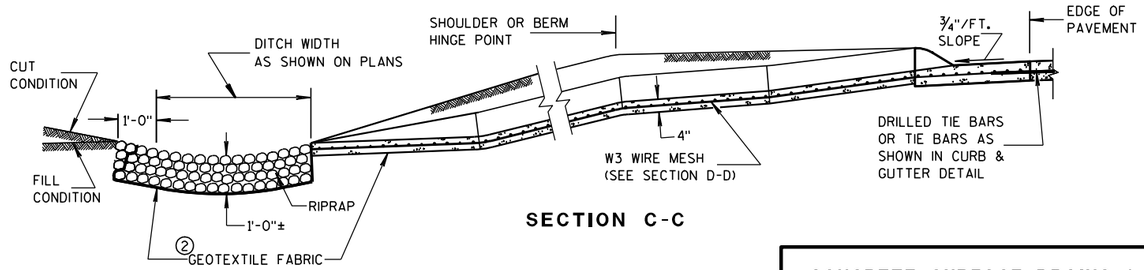
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

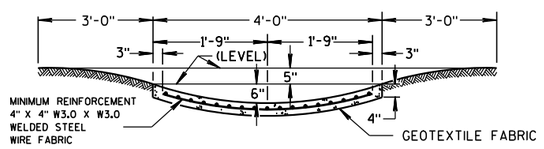
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C

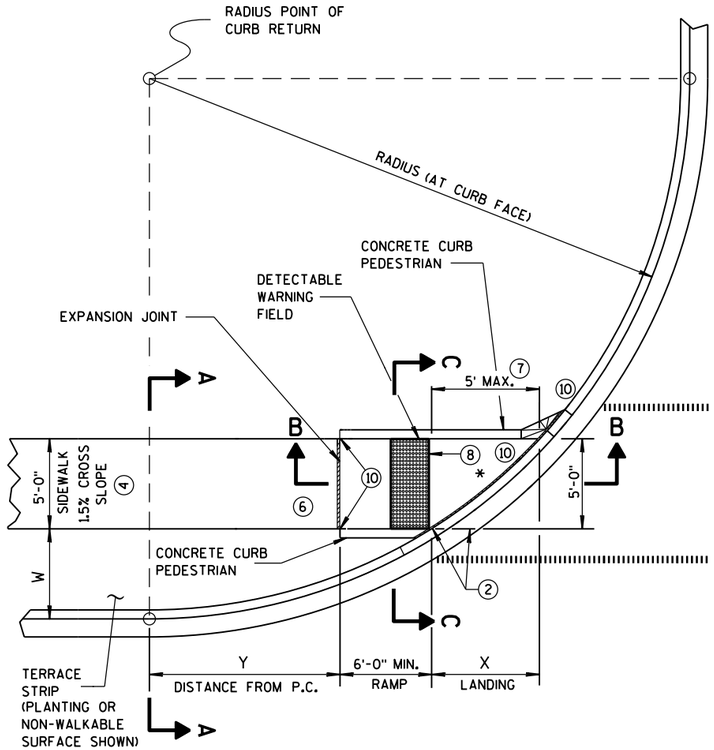


SECTION D-D

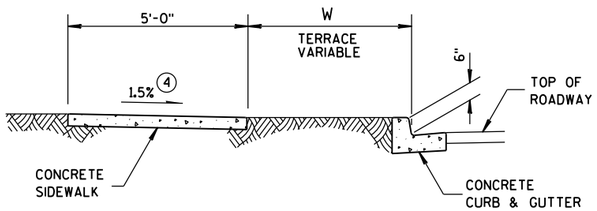
CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

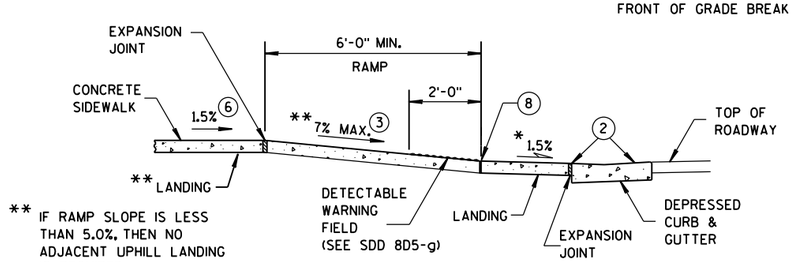
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA



CURB RAMP TYPE 4B
PLAN VIEW

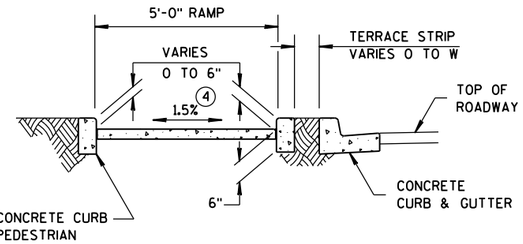


SECTION A-A FOR TYPE 4B

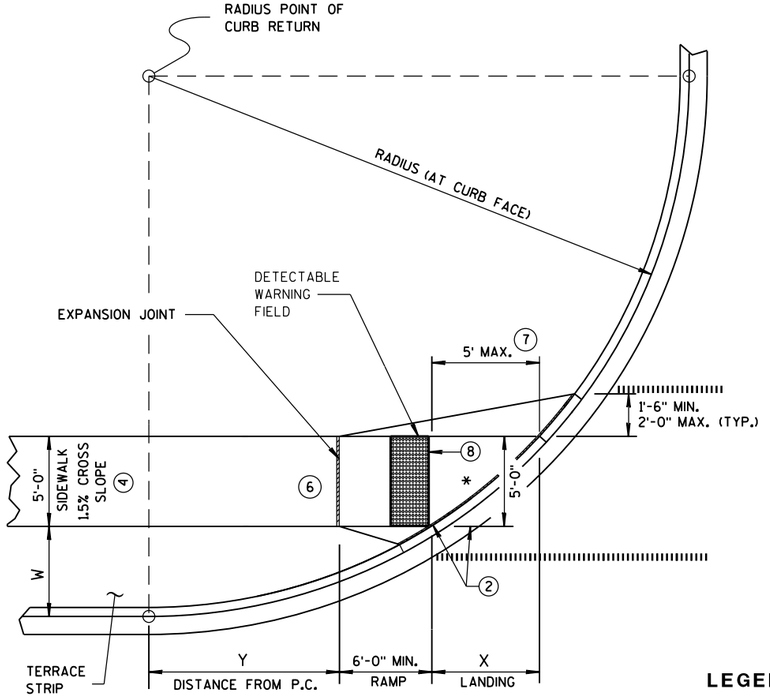


* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

SECTION B-B FOR TYPE 4B



SECTION C-C FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW

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

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.

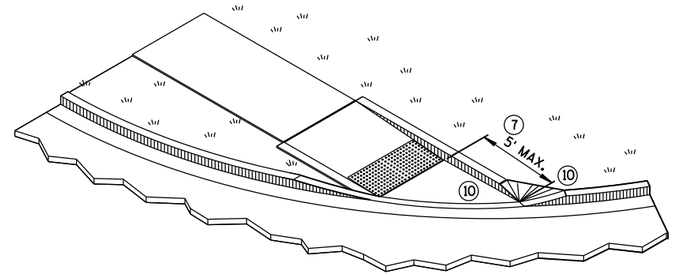
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

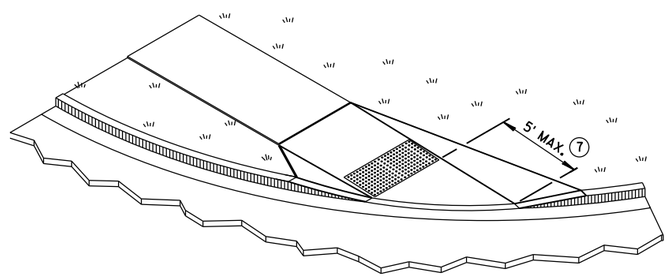
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(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 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

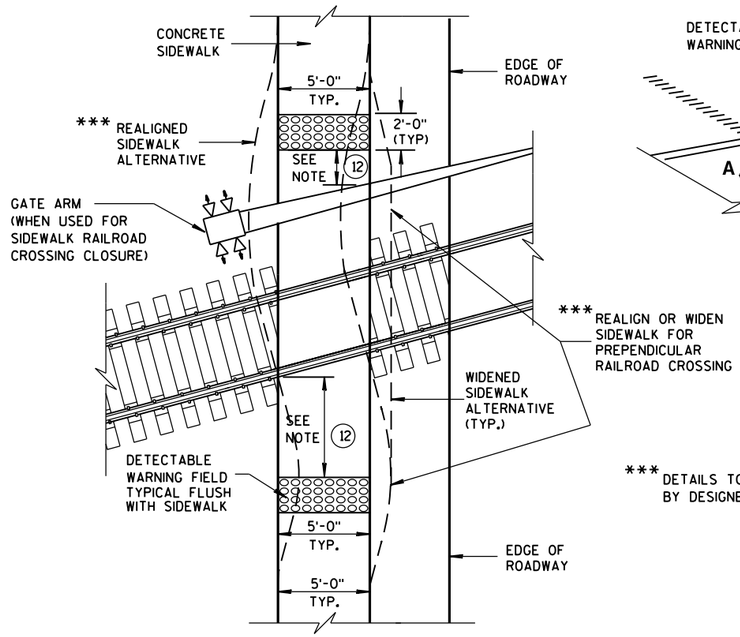
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

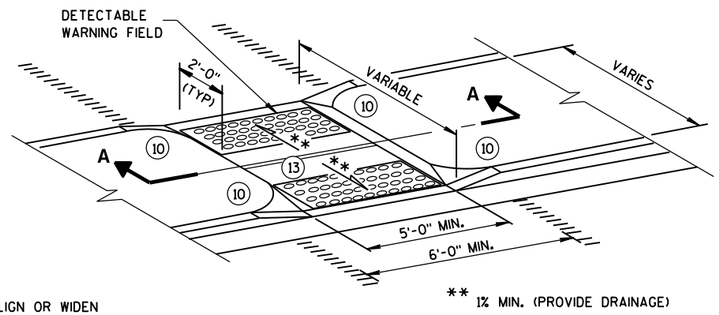
6

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.

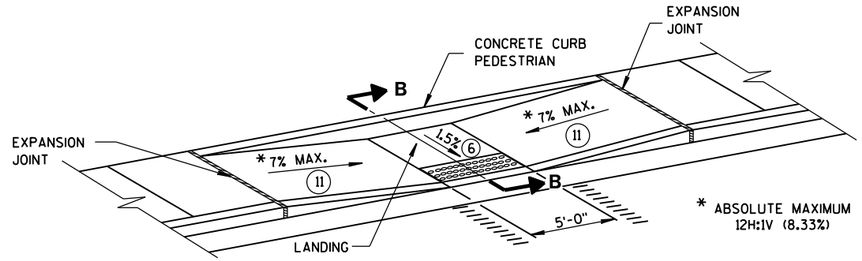
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

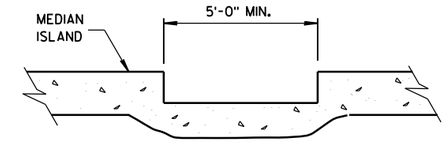
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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.

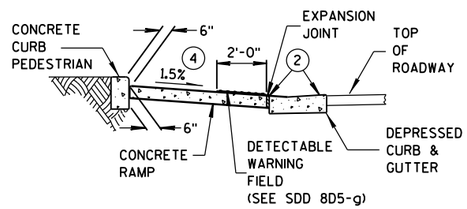
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



MID-BLOCK CROSSING
TYPE 7A

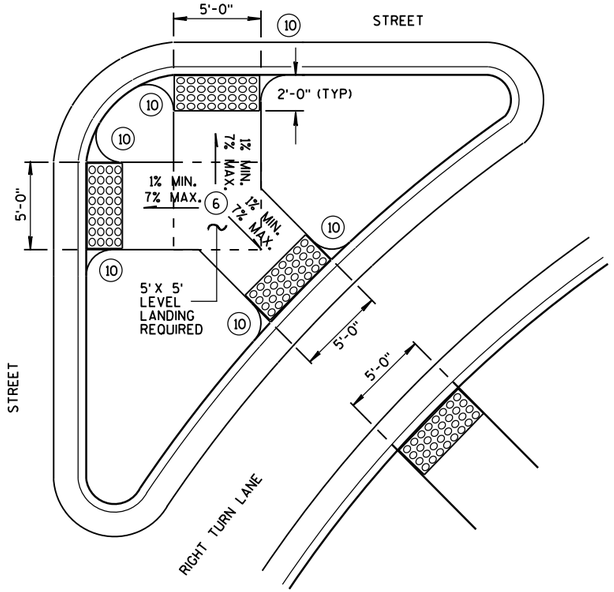


SECTION A-A

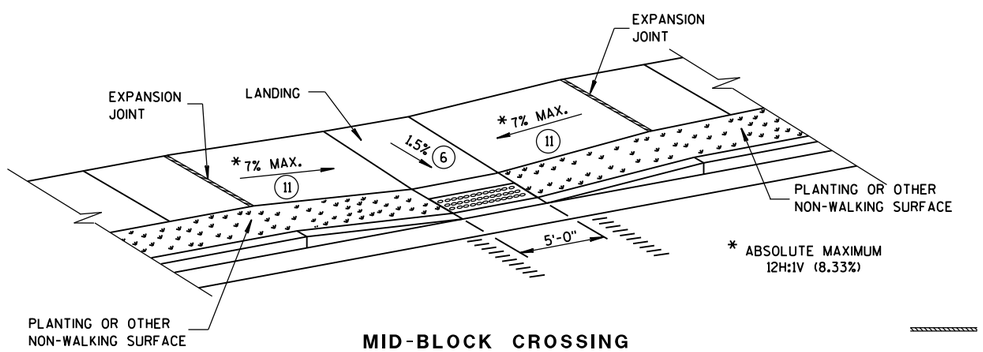


SECTION B-B

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

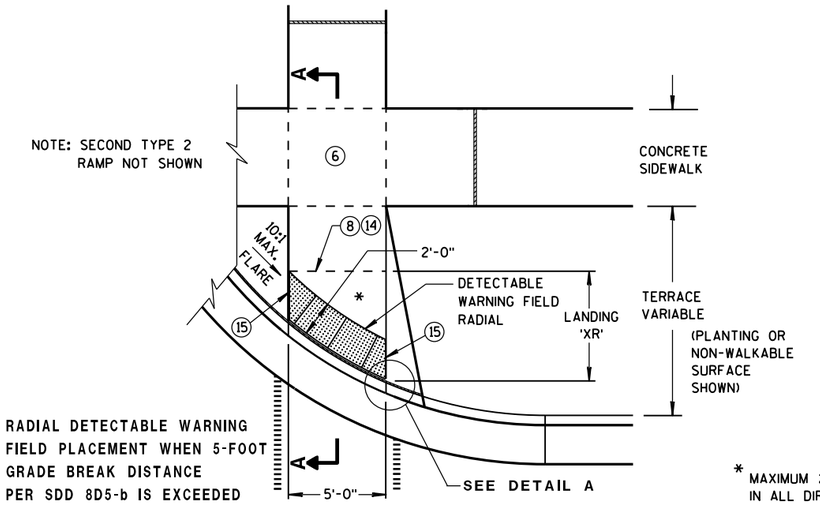
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-19e

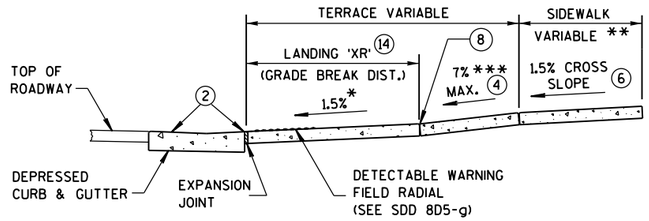


TYPE 2 RAMP
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

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

LEGEND

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



** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

SECTION A-A

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.

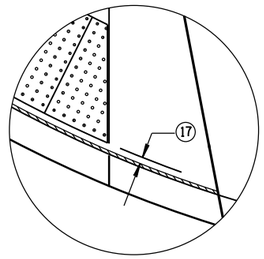
(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

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

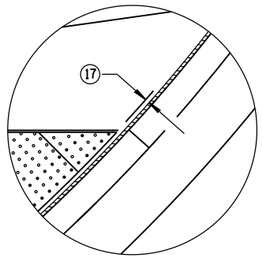
(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(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.

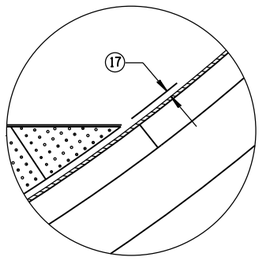
(17) A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



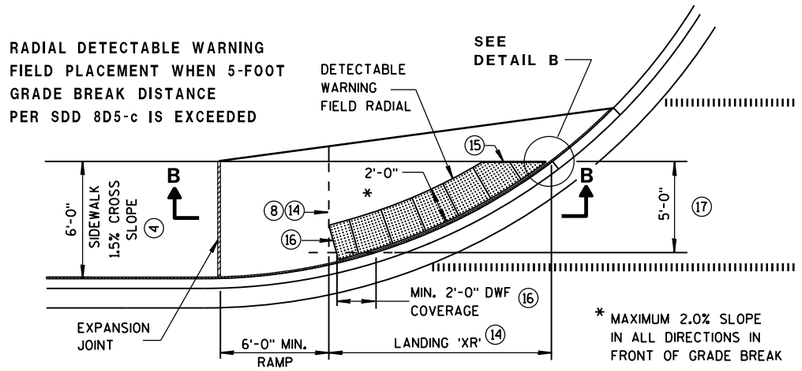
DETAIL A



DETAIL C

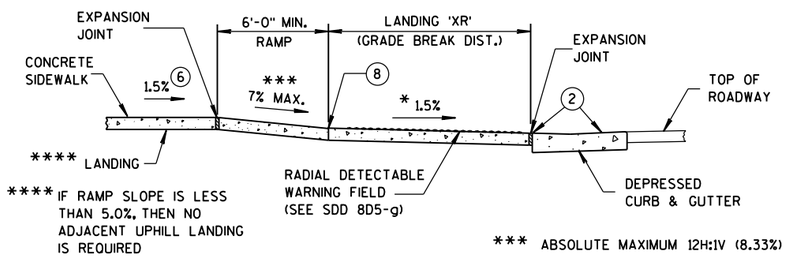


DETAIL B



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

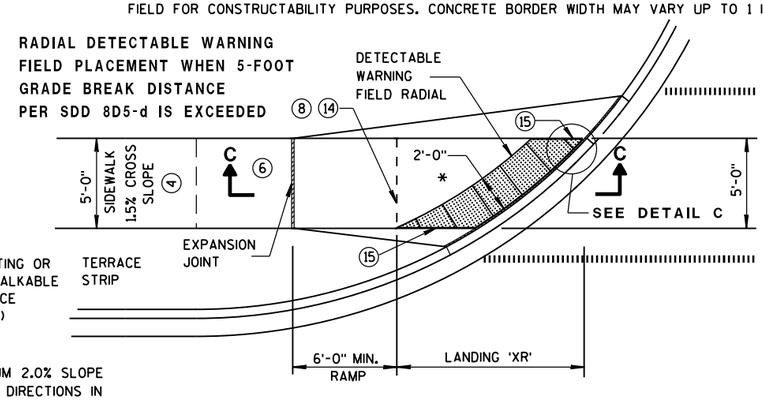
CURB RAMP TYPE 4A1
PLAN VIEW
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



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

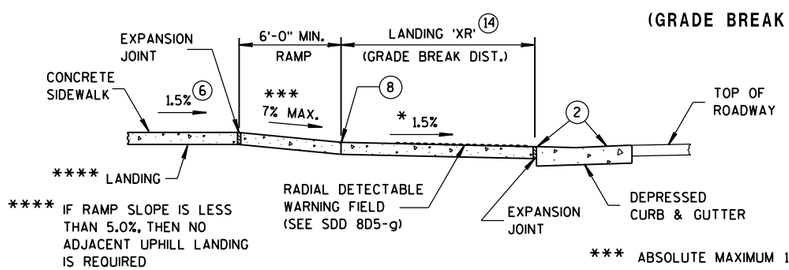
*** ABSOLUTE MAXIMUM 12H:1V (8.33%)

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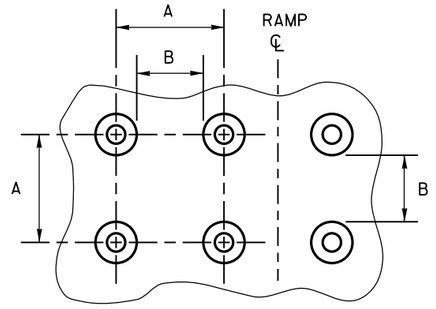
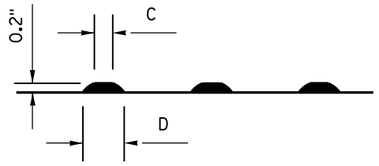
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* 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.

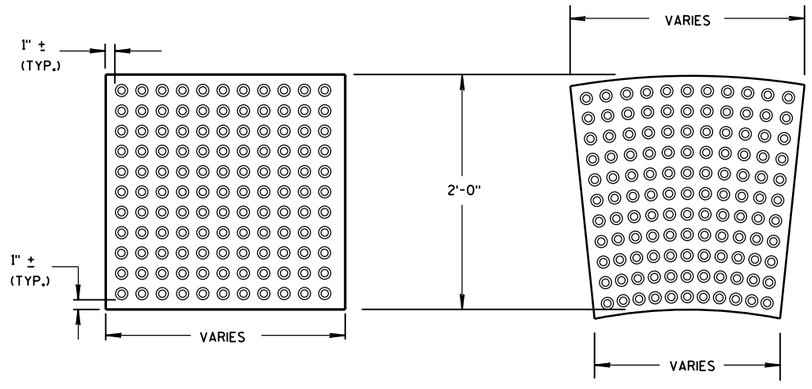
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

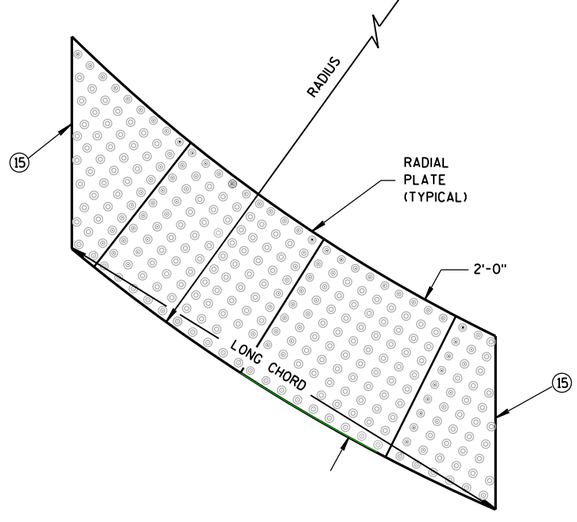


RECTANGULAR PLATES

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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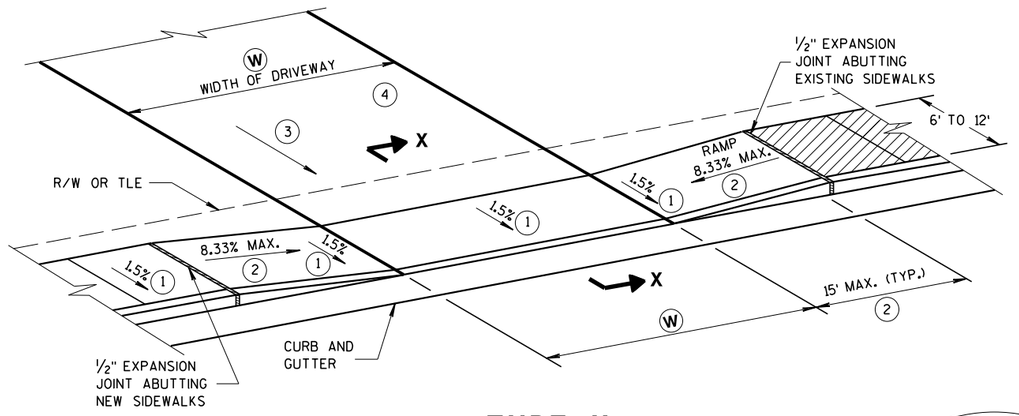
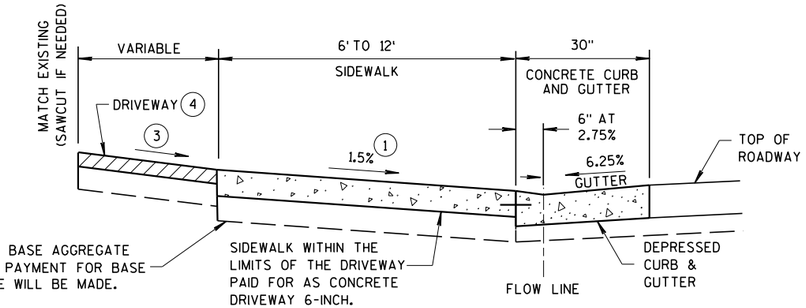
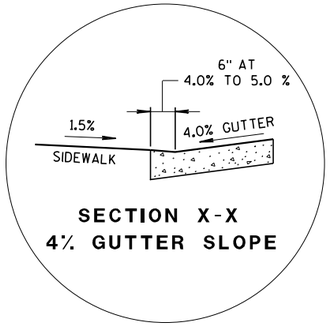


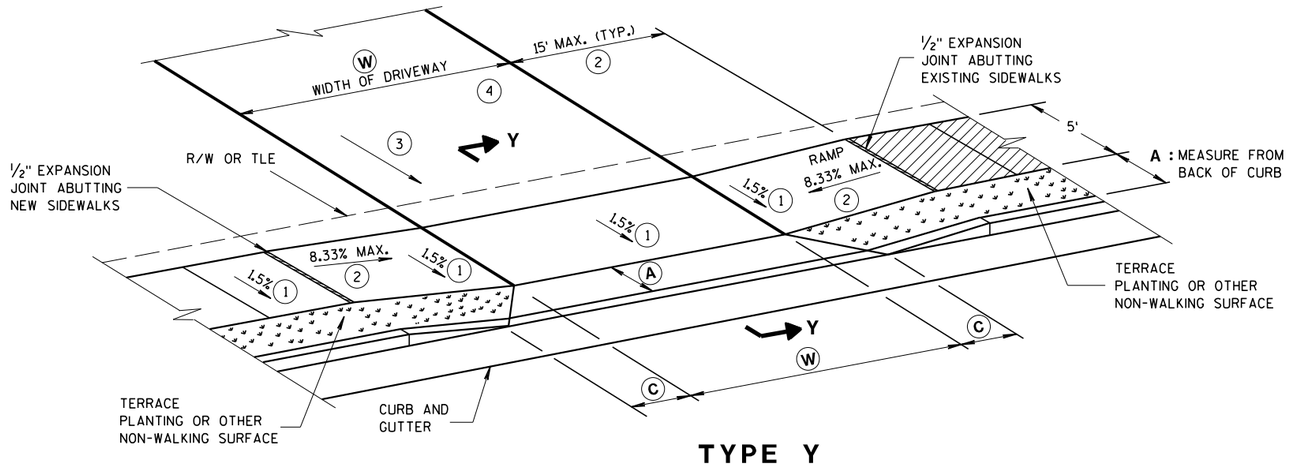
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



SECTION X-X
4% GUTTER SLOPE



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

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

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

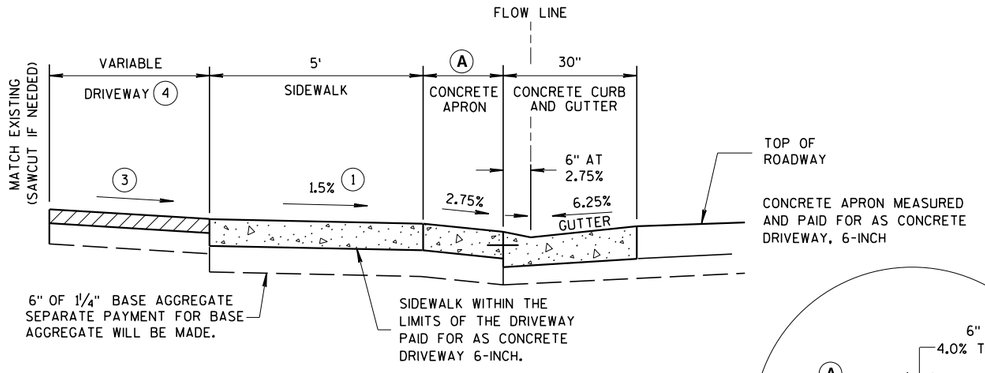
OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

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

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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

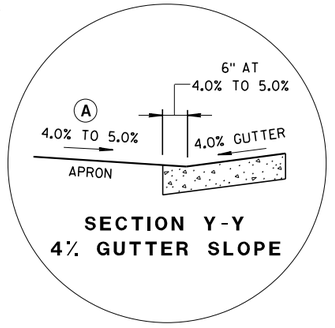
(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y

DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)



SECTION Y-Y
4% GUTTER SLOPE

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
March 2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
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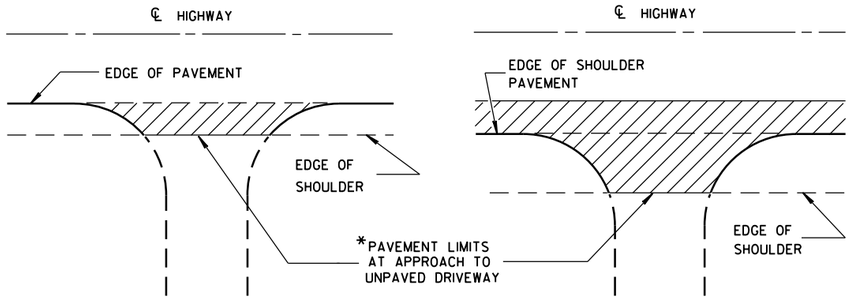
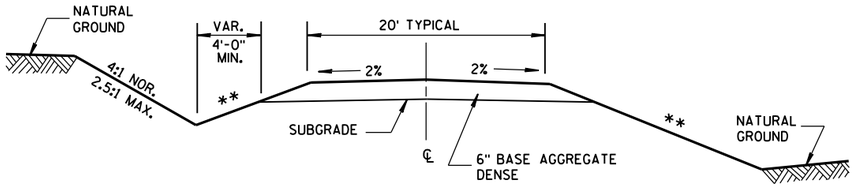


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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

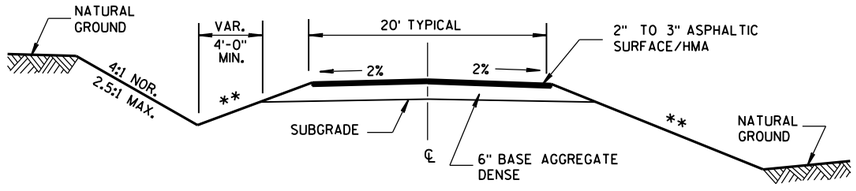


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

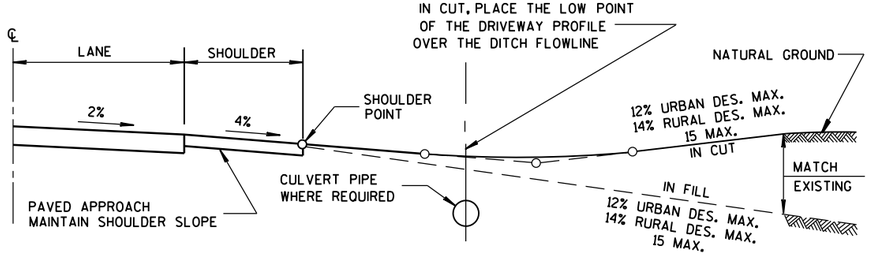
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

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



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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December, 2016 /S/ Rodney Taylor
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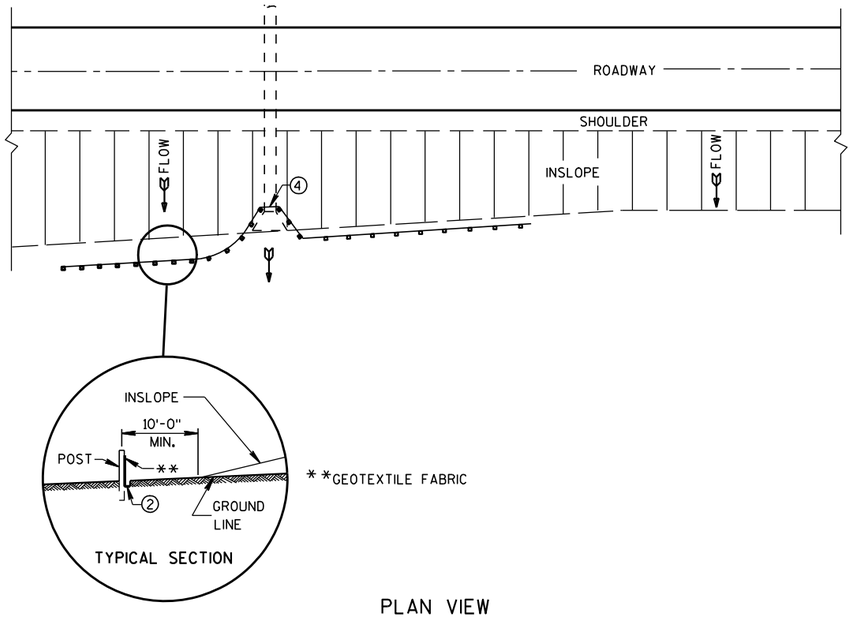
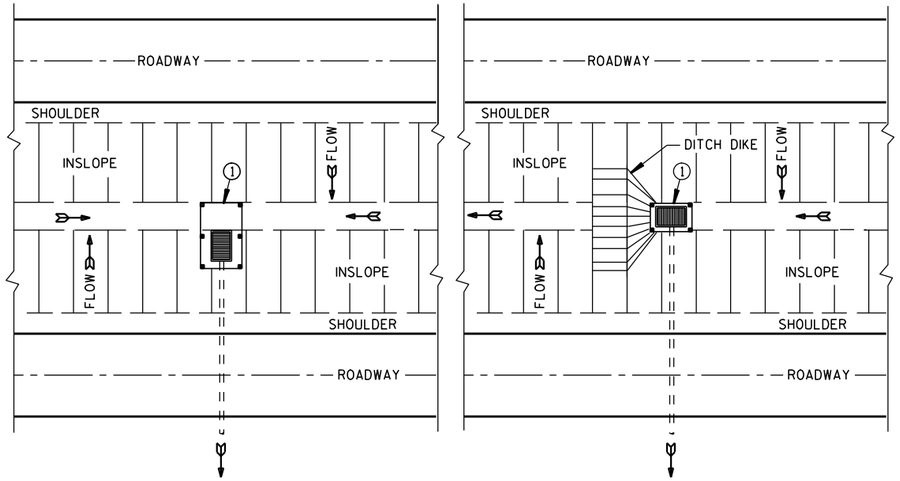


PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



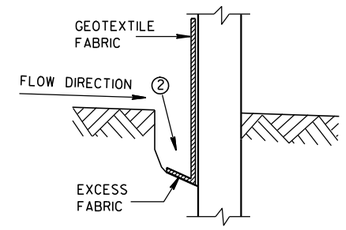
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

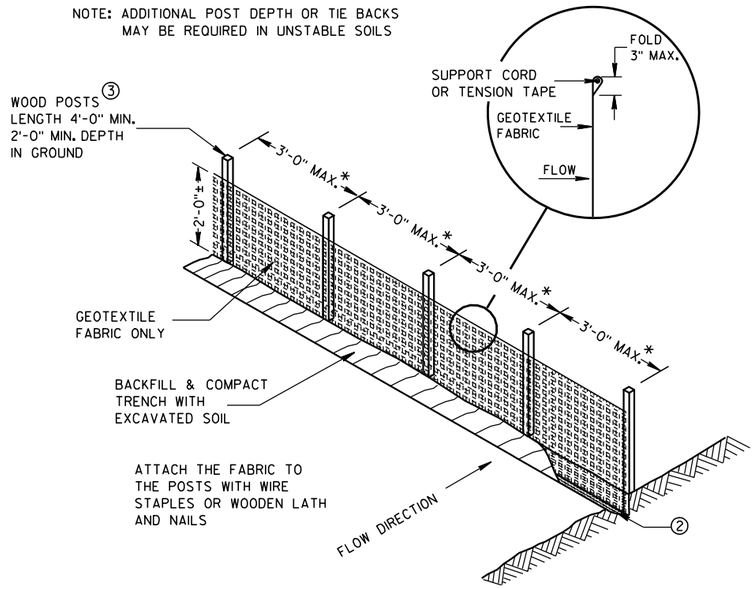
GENERAL NOTES

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

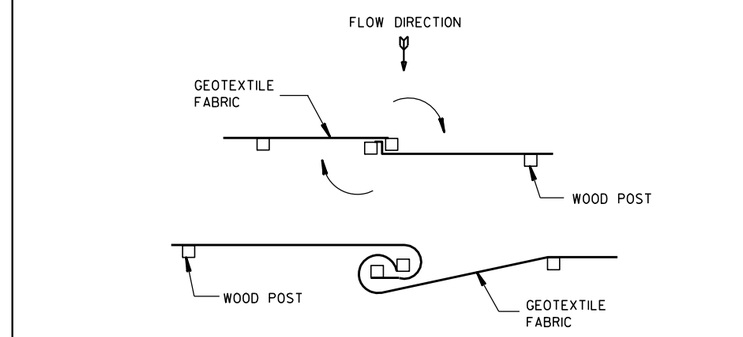
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



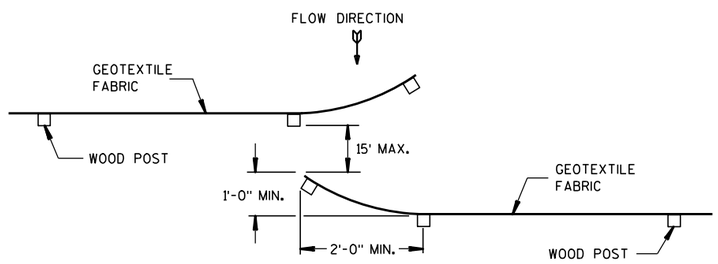
TRENCH DETAIL



SILT FENCE

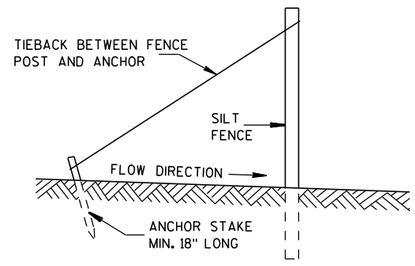


TWIST METHOD



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
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CHIEF ROADWAY DEVELOPMENT ENGINEER
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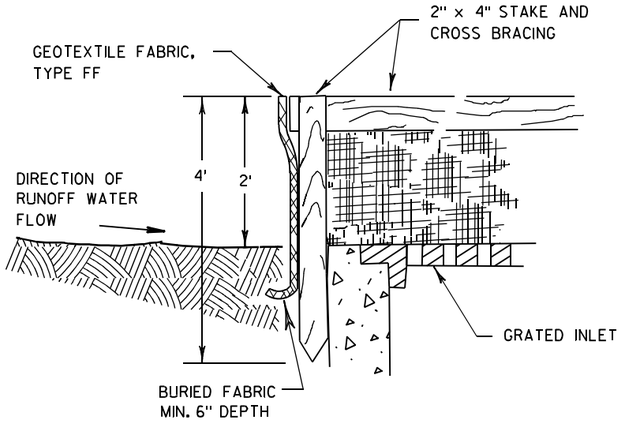
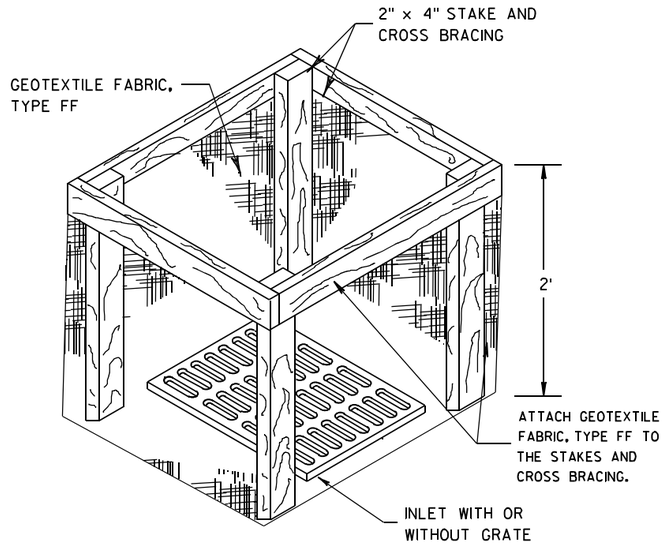
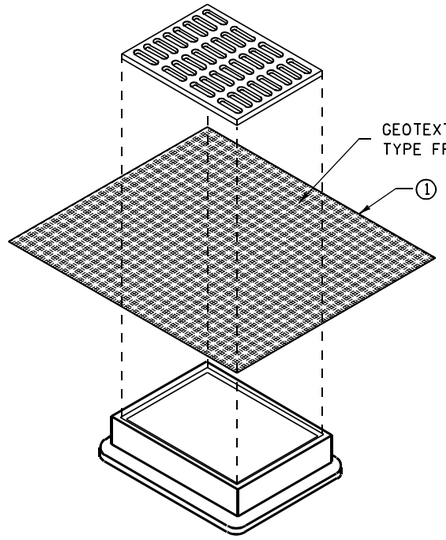
S.D.D. 8 E 9-6



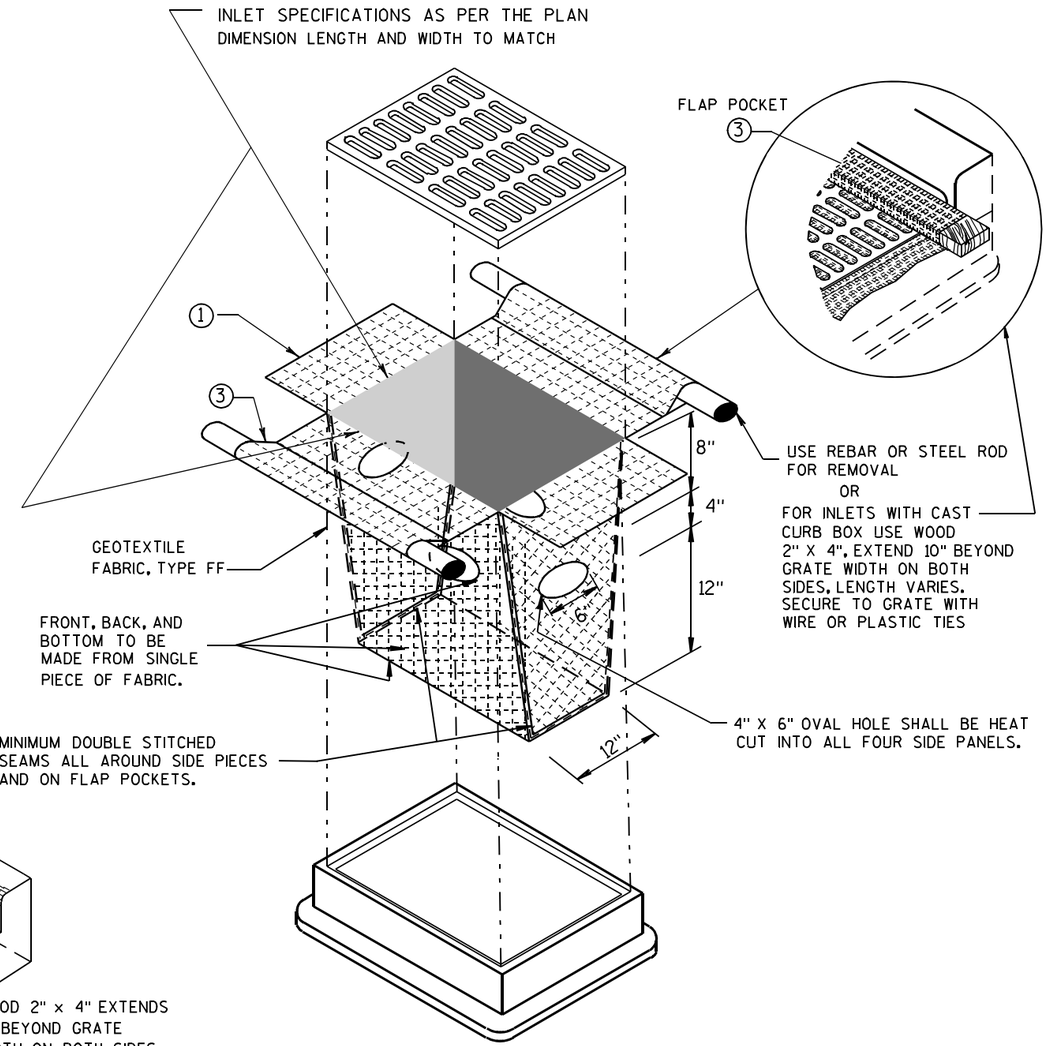


INLET PROTECTION, TYPE A



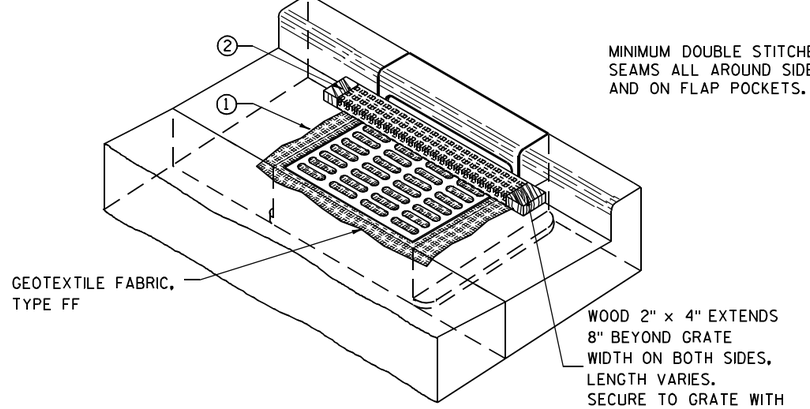
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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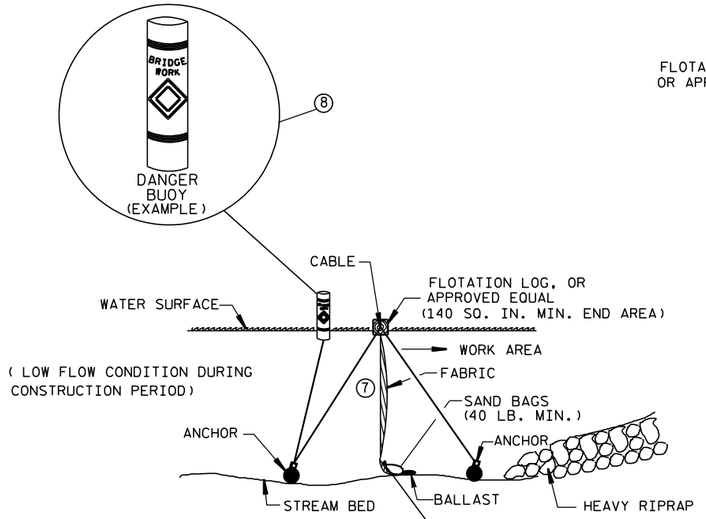
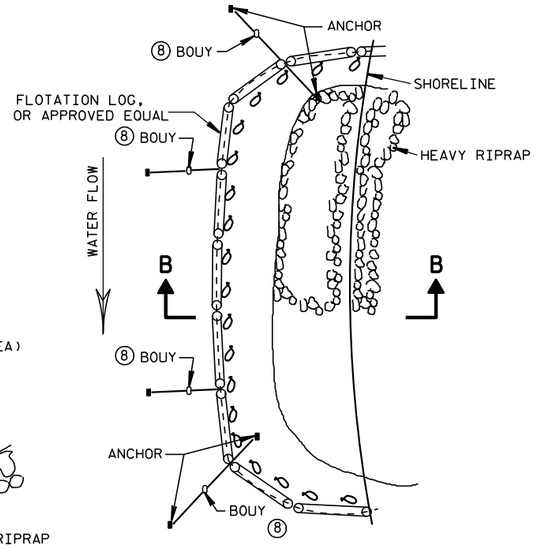
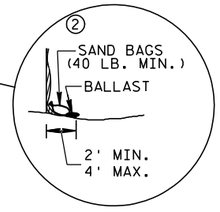
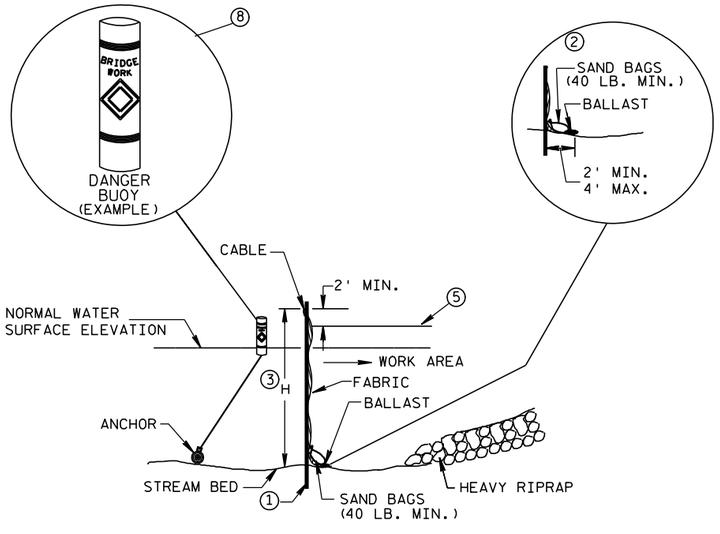


SECTION B-B

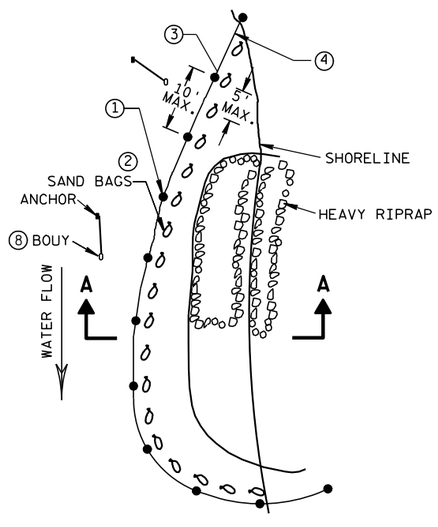




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT 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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

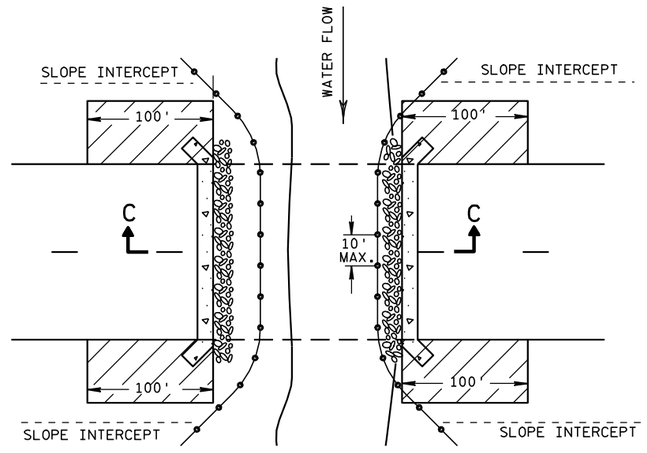
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

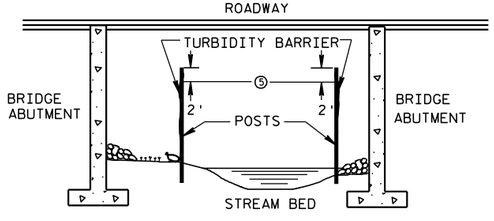
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

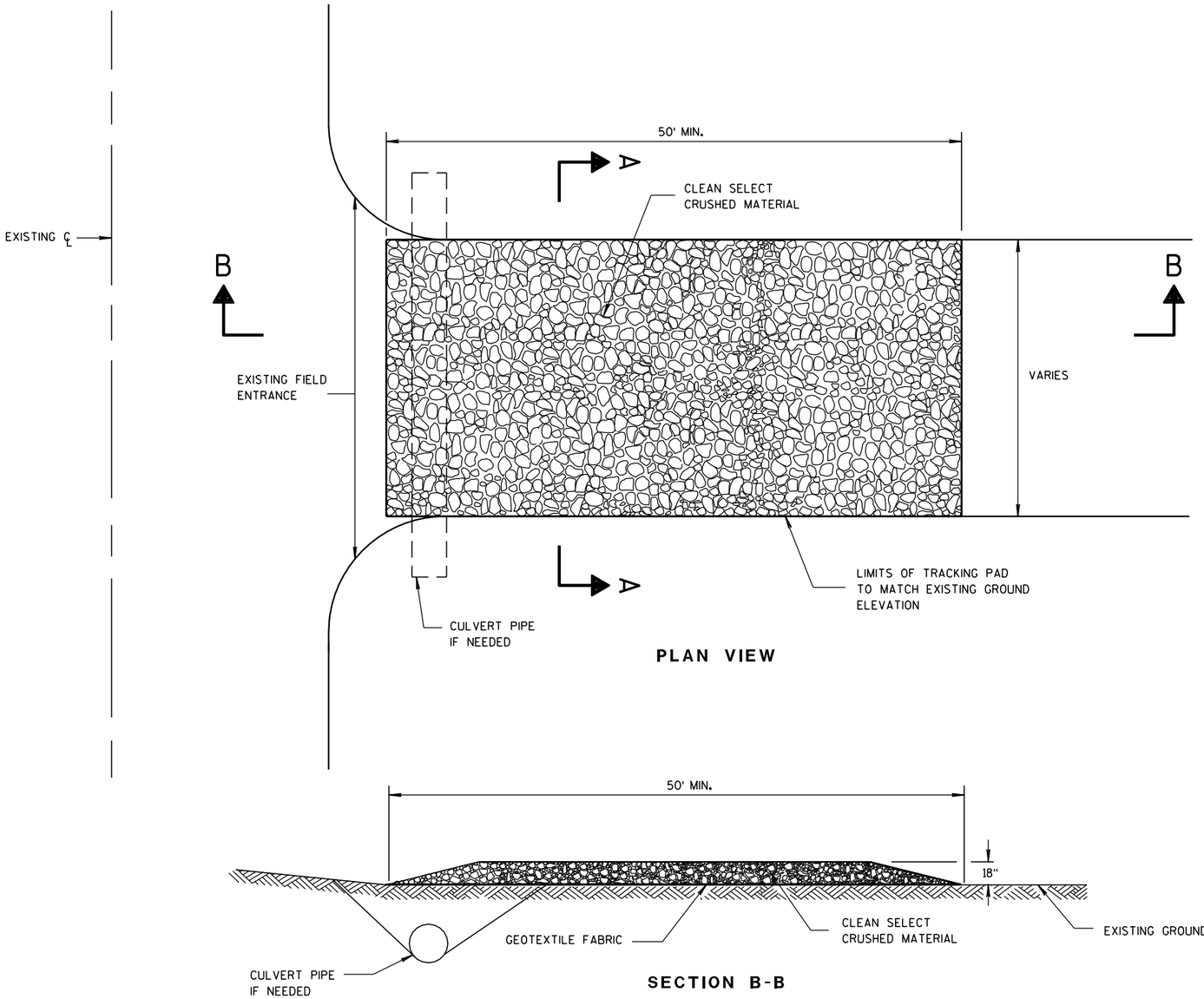
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 11-2



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.

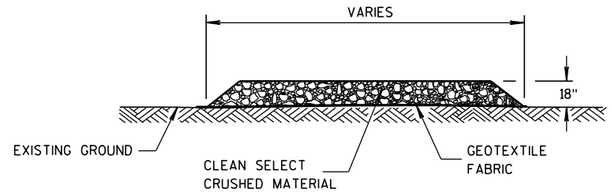
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER

FHWA

ENT

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

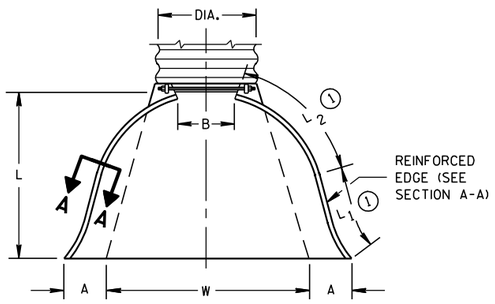
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

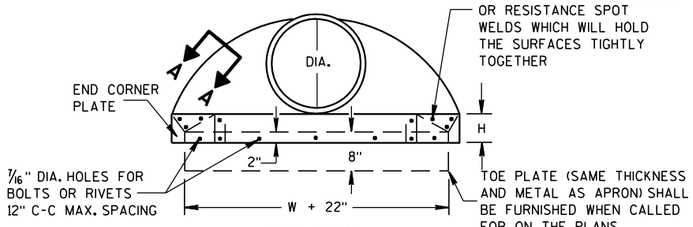
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

*MINIMUM
**MAXIMUM



PLAN VIEW



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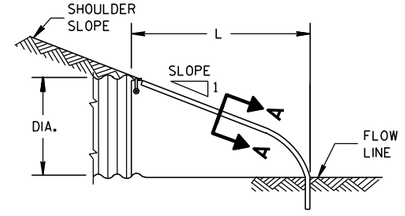
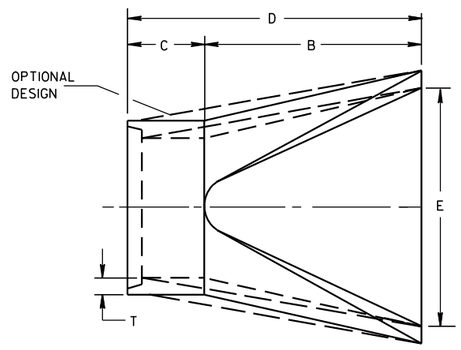
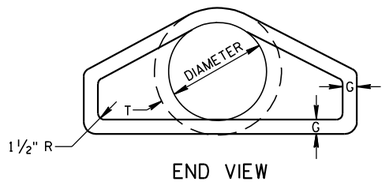


SIDE ELEVATION

METAL ENDWALLS



PLAN



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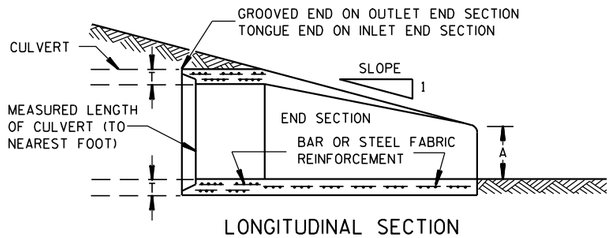
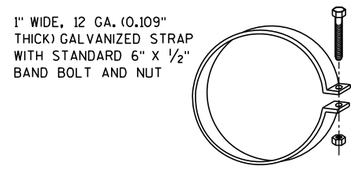


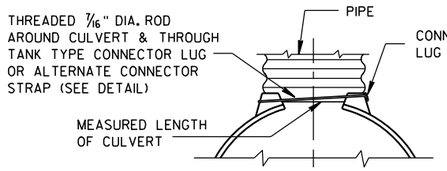
LONGITUDINAL SECTION

CONCRETE ENDWALLS

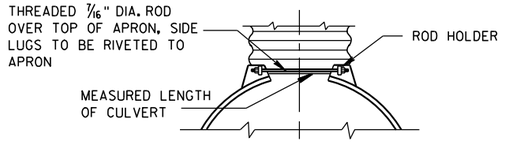


ALTERNATE FOR TYPE 1 CONNECTION

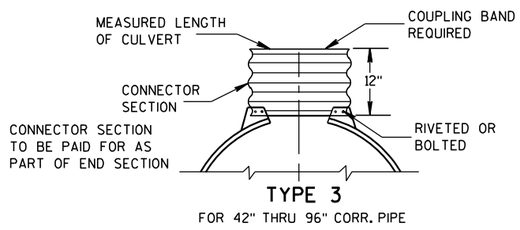
END SECTION CONNECTOR STRAP



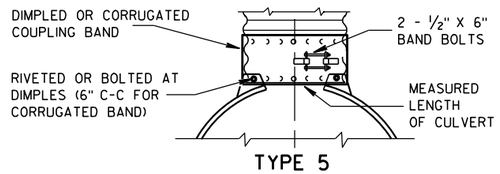
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

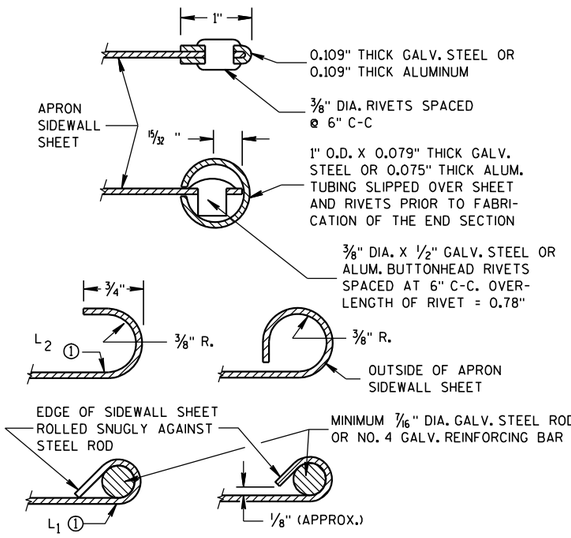
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

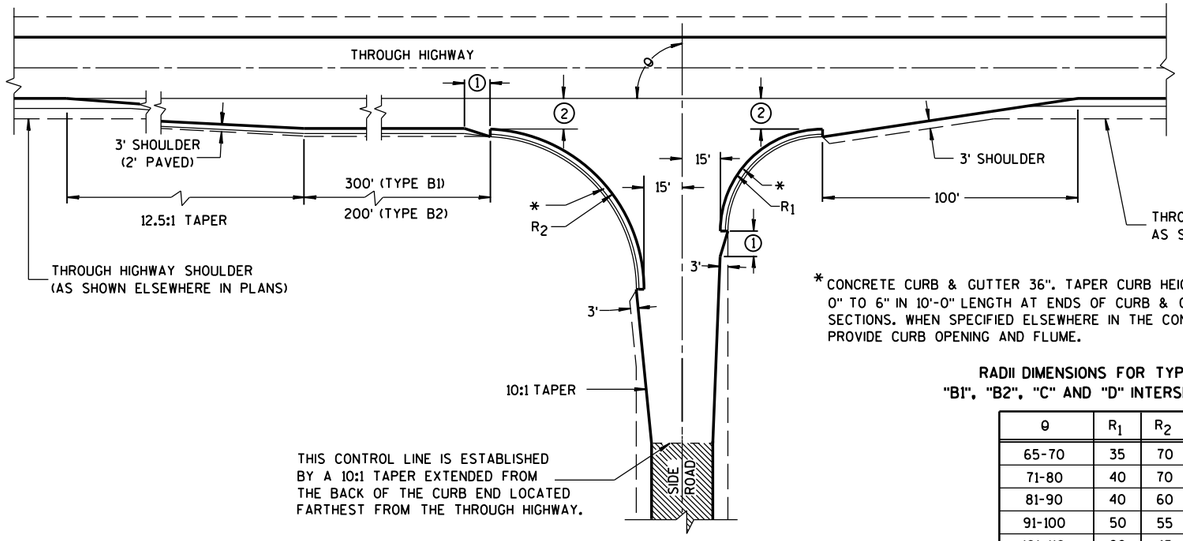
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

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

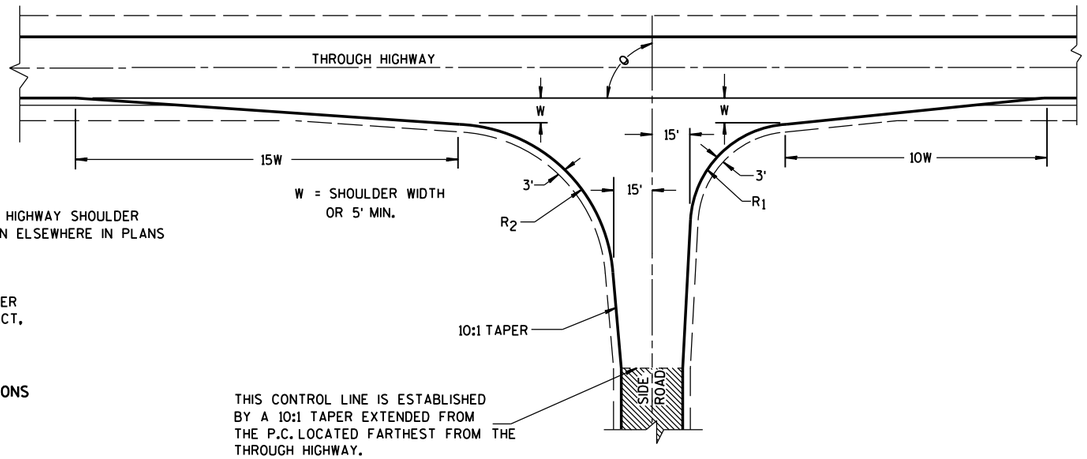


TYPE "B1" AND "B2"

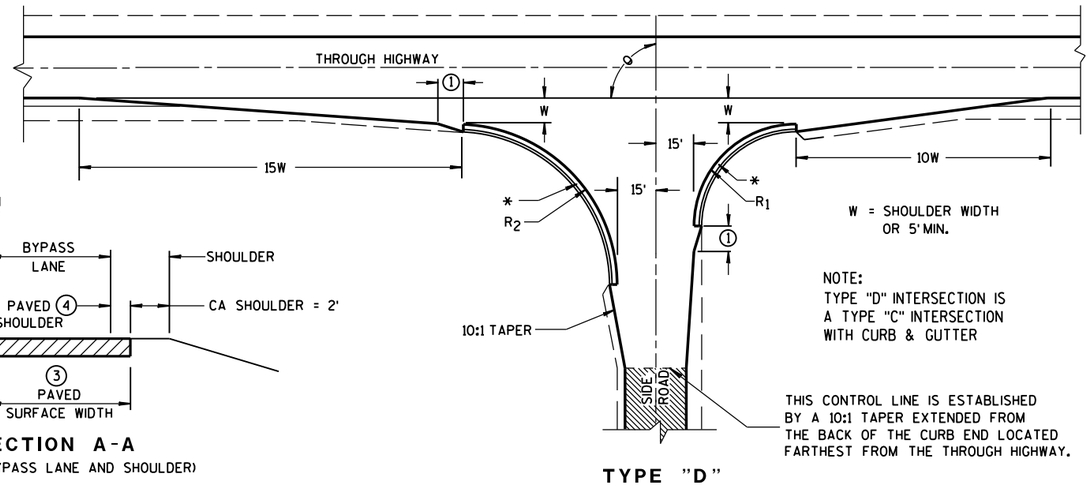
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

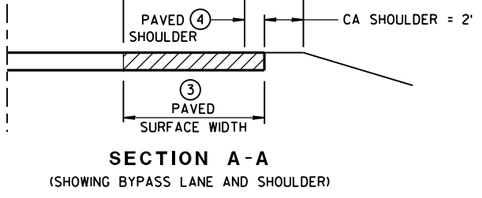
(1) 10-FT TYPICAL.

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

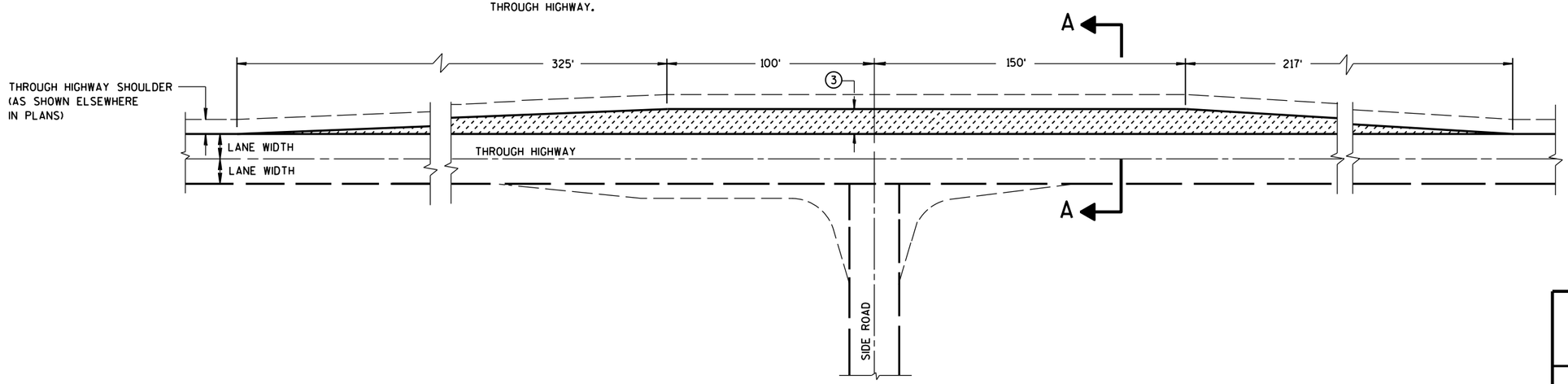
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

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



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

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

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

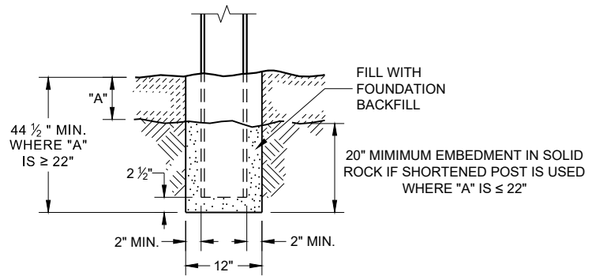
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

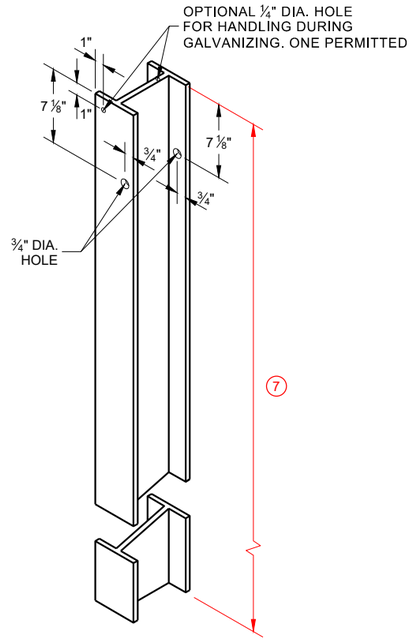
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

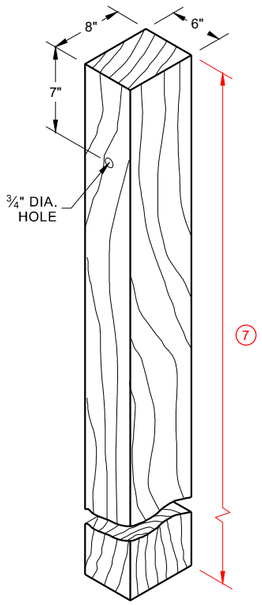
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



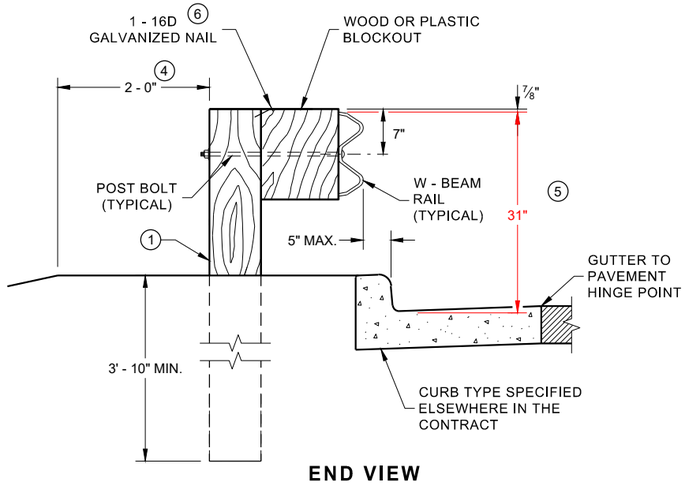
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



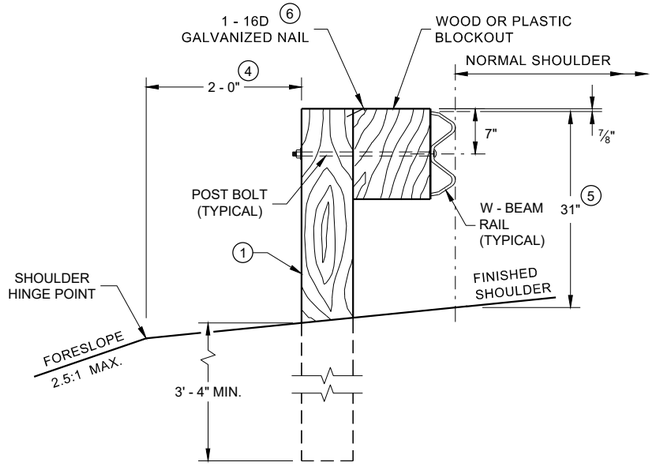
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



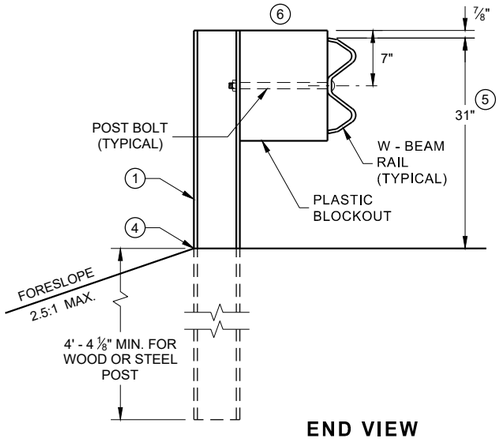
WOOD POST (6" X 8") NOMINAL (1)



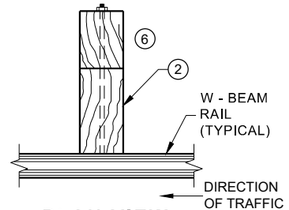
END VIEW
LOCATED ALONG A CURBED ROADWAY



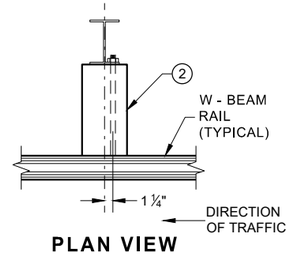
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



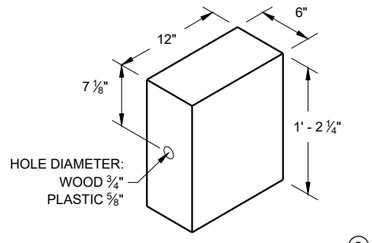
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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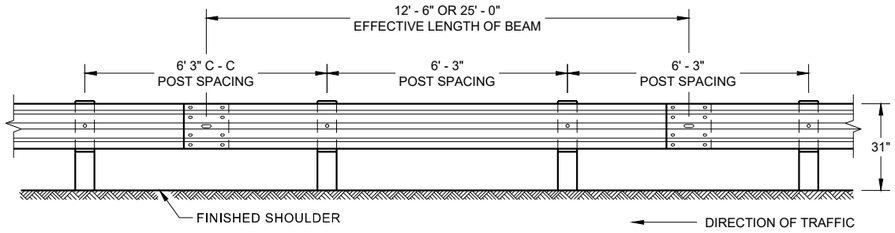
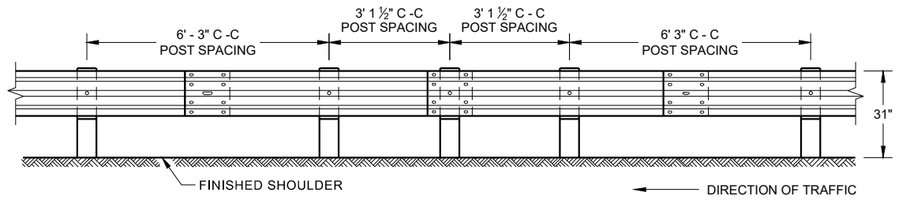
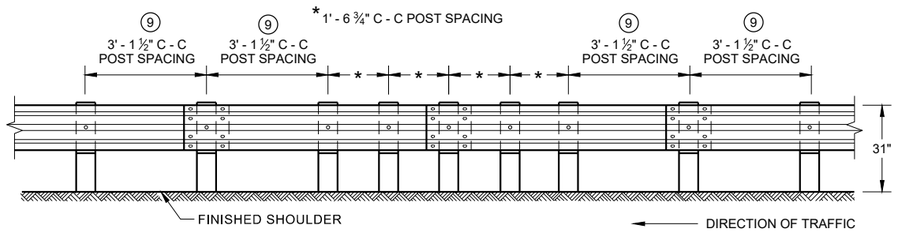


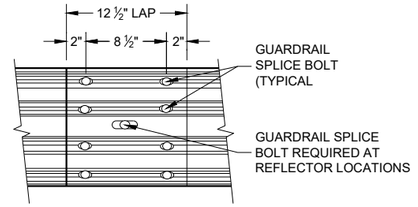
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

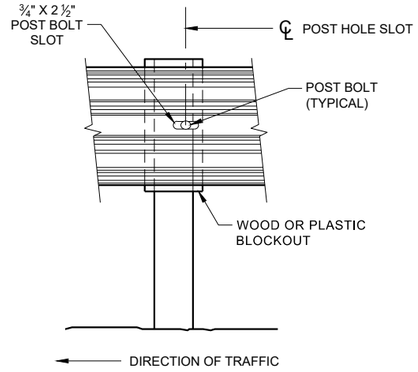
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

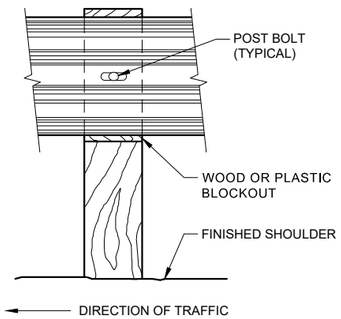
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ¾" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

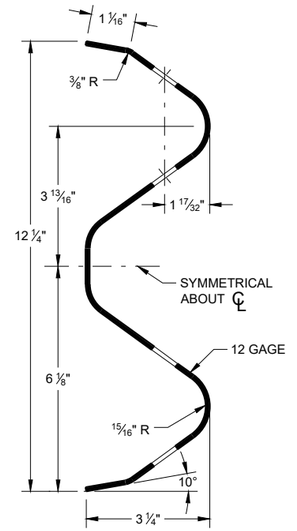
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



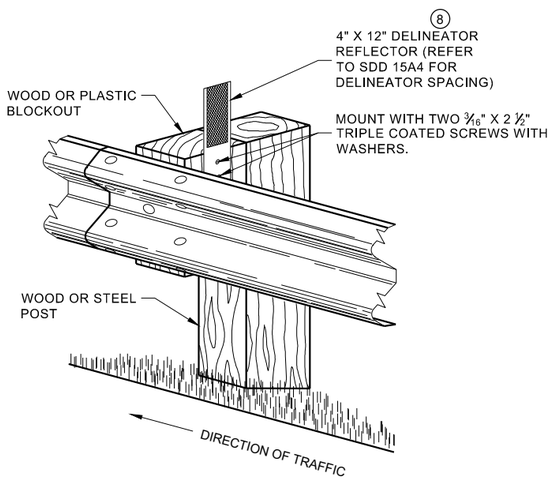
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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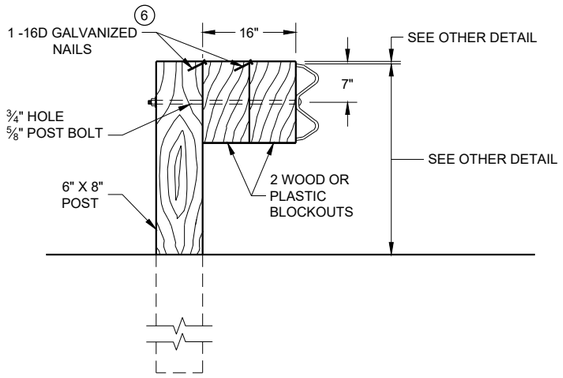
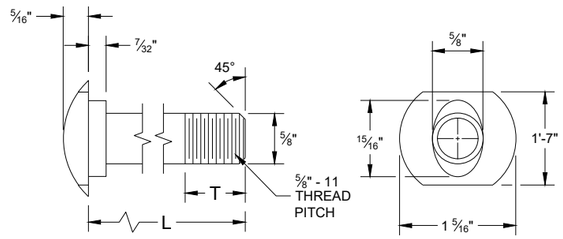


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

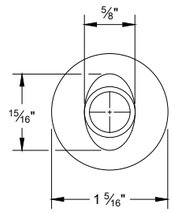
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

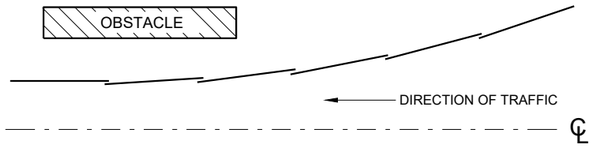


POST BOLT TABLE

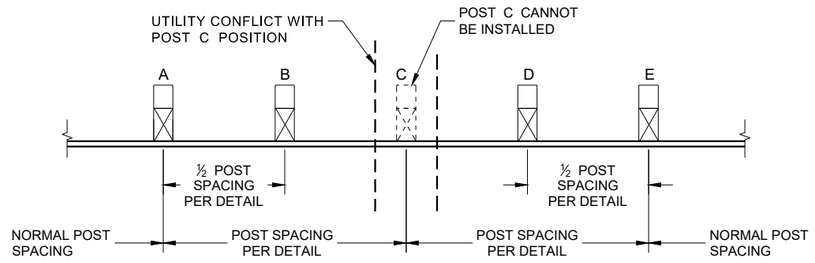
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



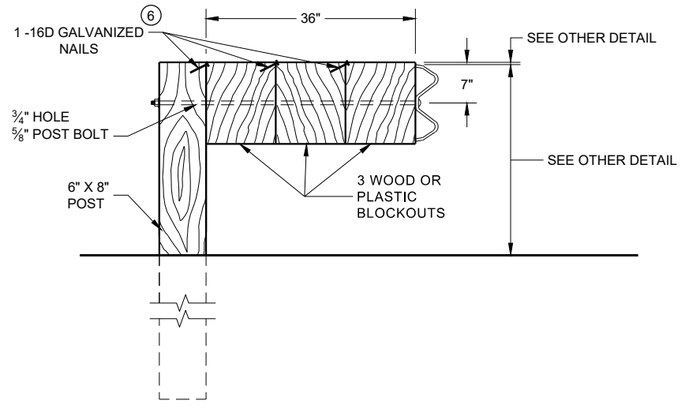
ALTERNATE BOLT HEAD



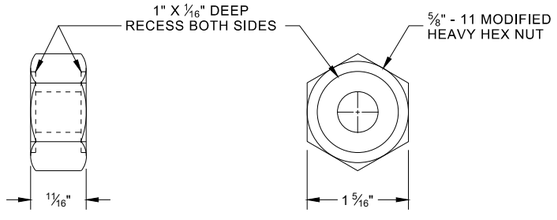
PLAN VIEW
BEAM LAPPING DETAIL



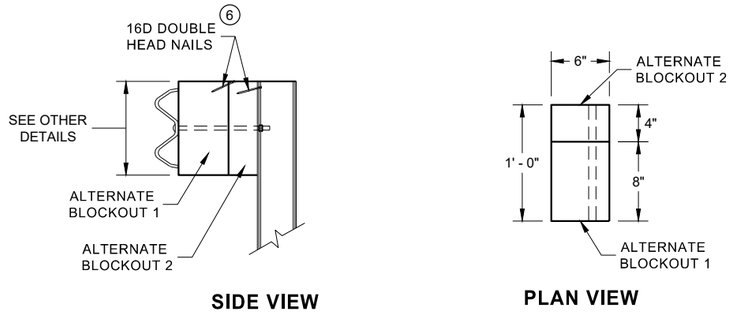
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

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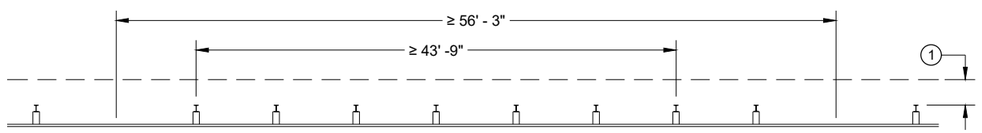
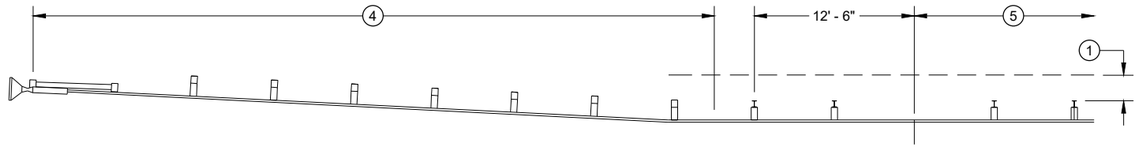
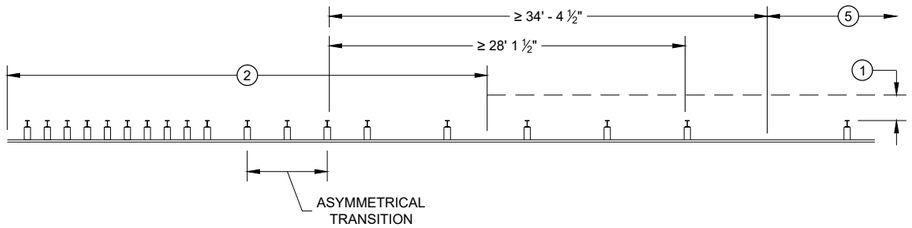
SDD 14B42 - 06c



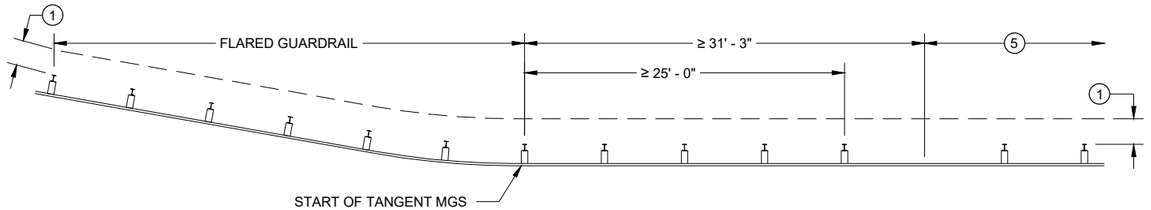
MISSING POST IN NORMAL BEAM GUARD RUN



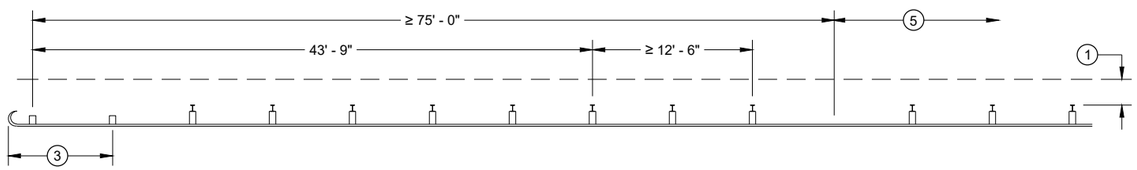
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



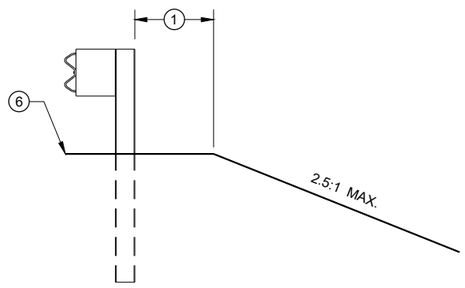
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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SDD 14B42 - 06d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

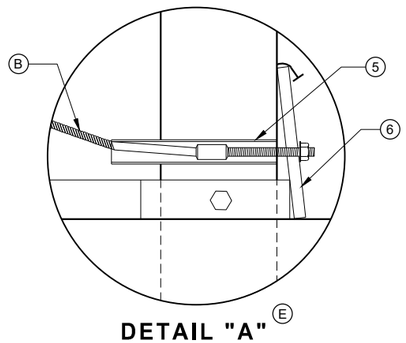
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

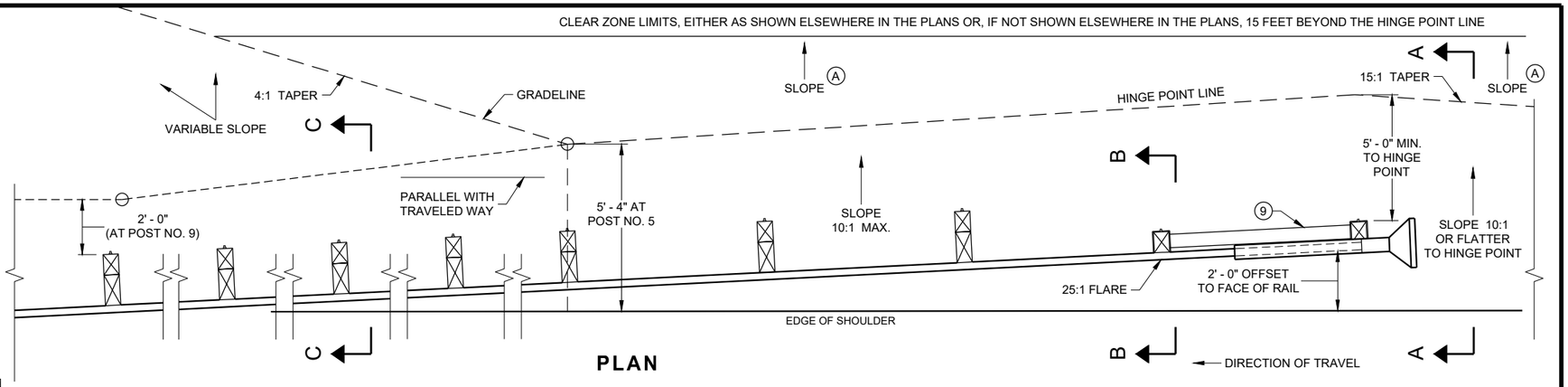
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

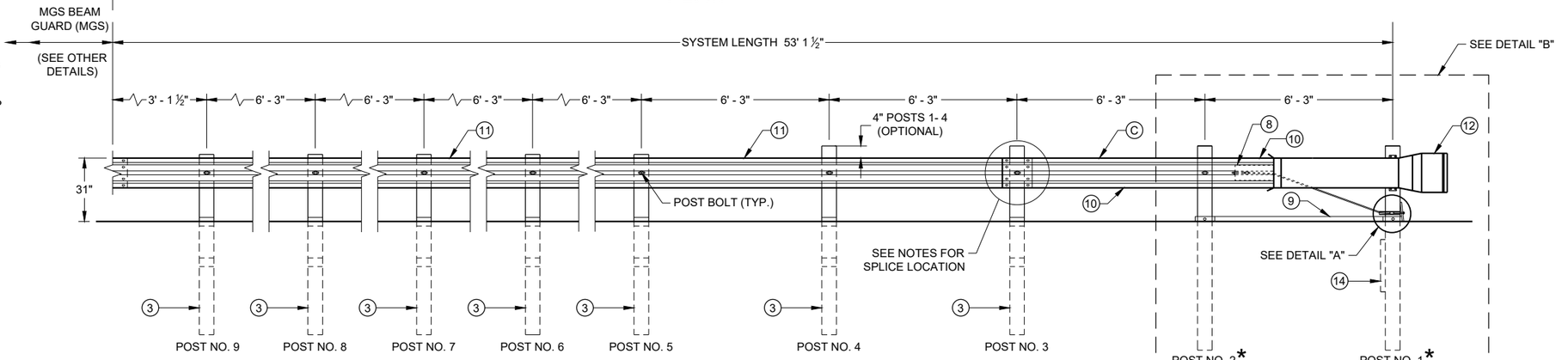
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



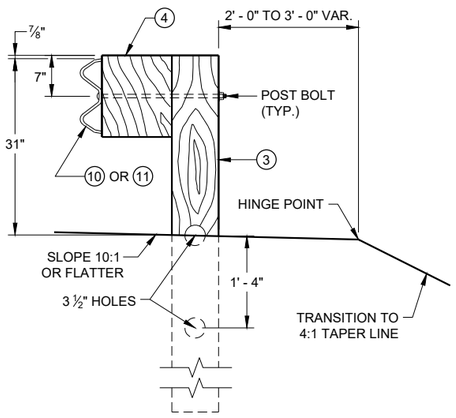
DETAIL "A" (E)



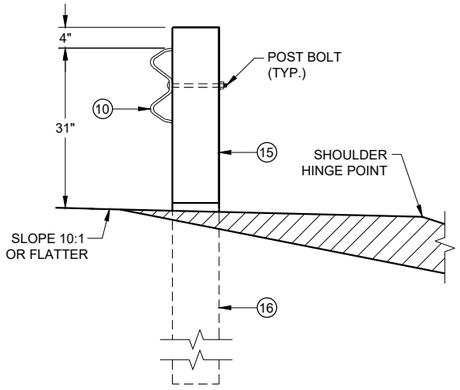
PLAN



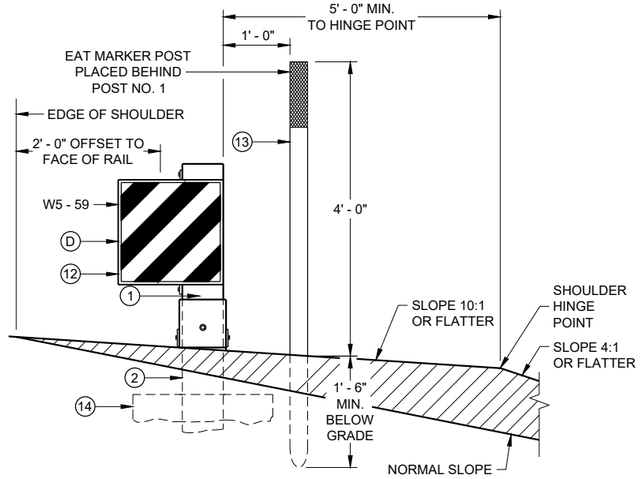
ELEVATION



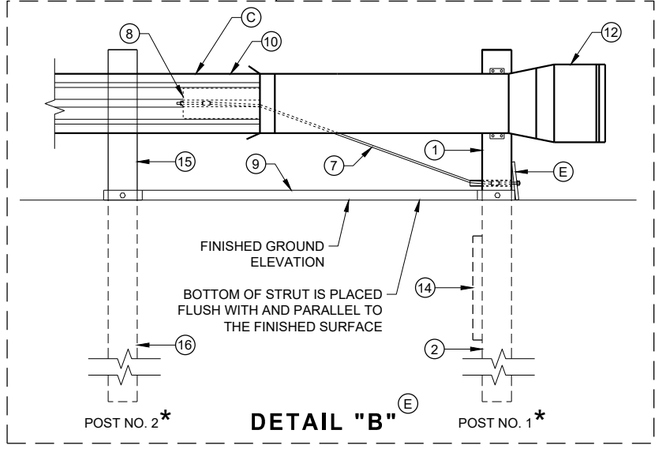
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



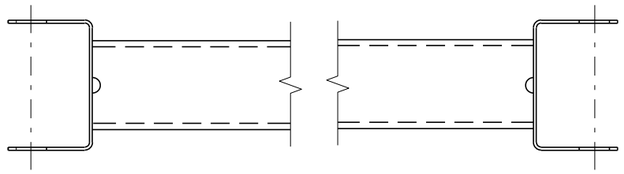
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

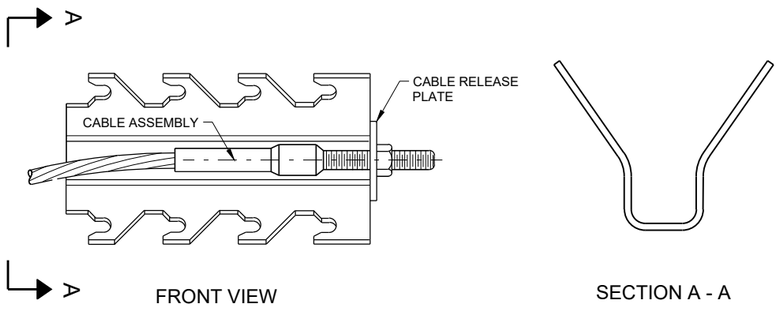
SDD 14B44 - 04a



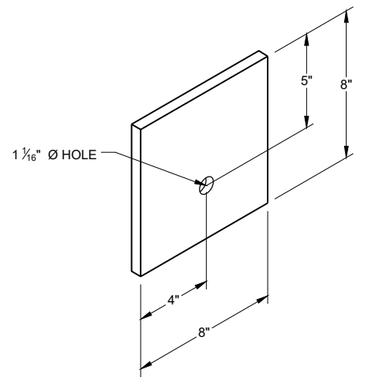
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

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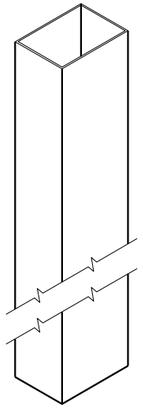
6

SDD 14B45 - 04b

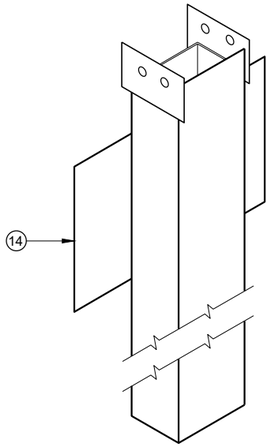
SDD 14B45 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

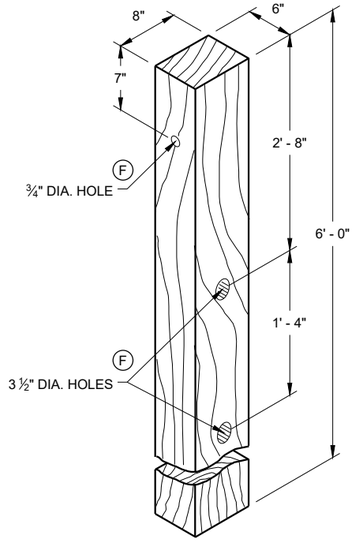
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



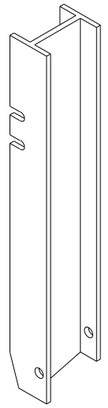
UPPER POST NO. 1 (1) (E)



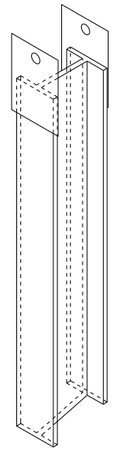
LOWER POST NO. 1 (2) (E)



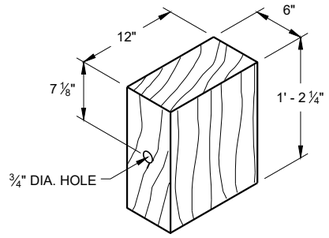
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



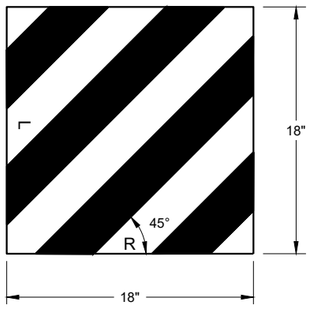
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

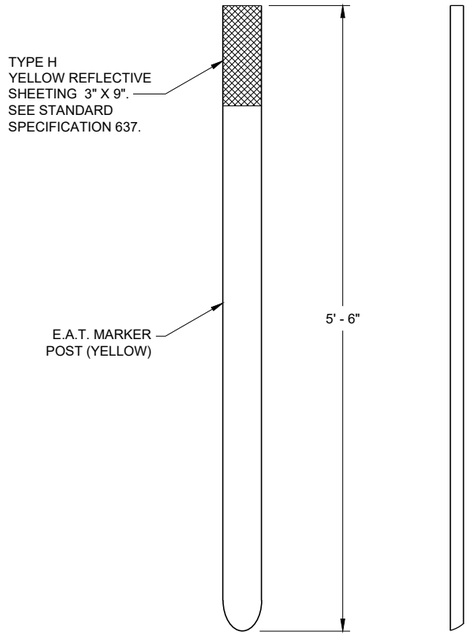


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



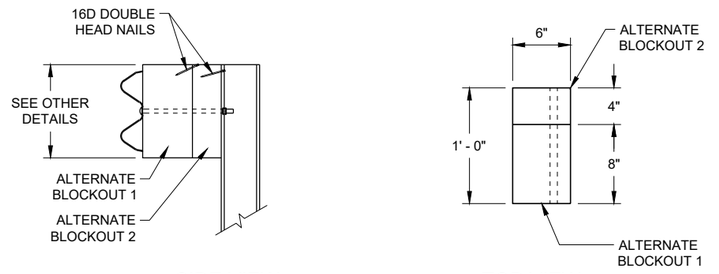
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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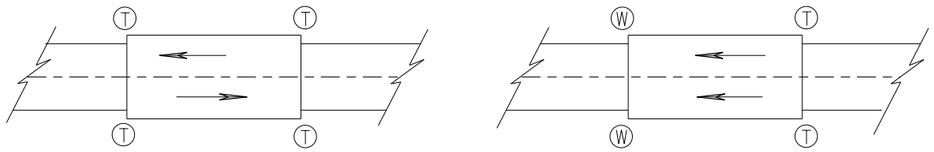
SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

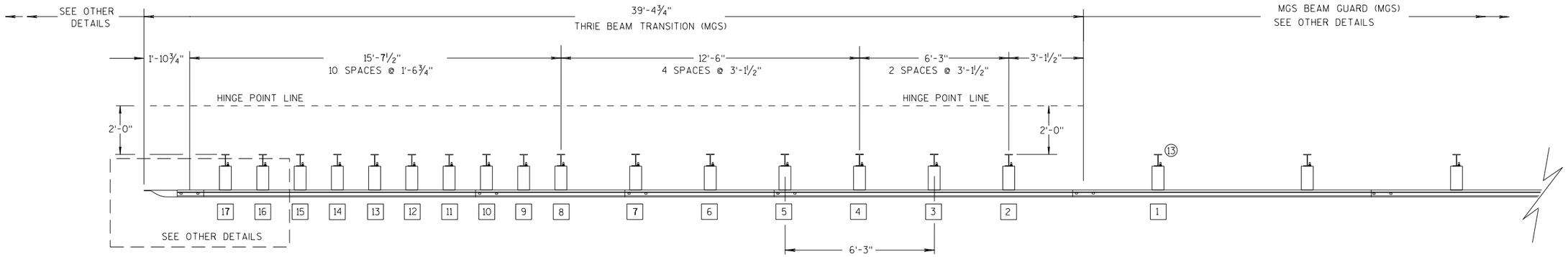
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

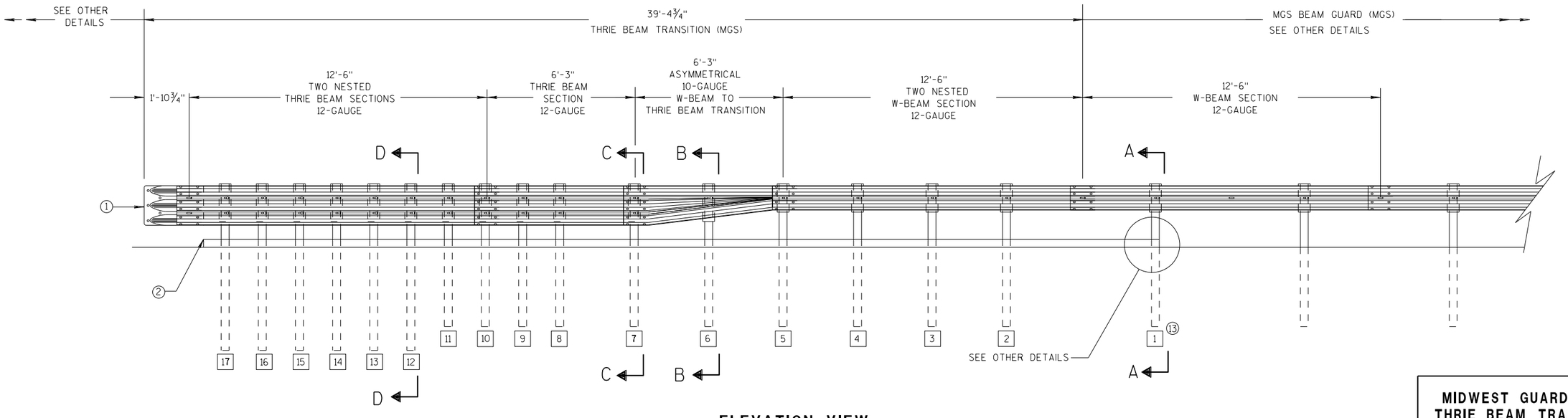
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

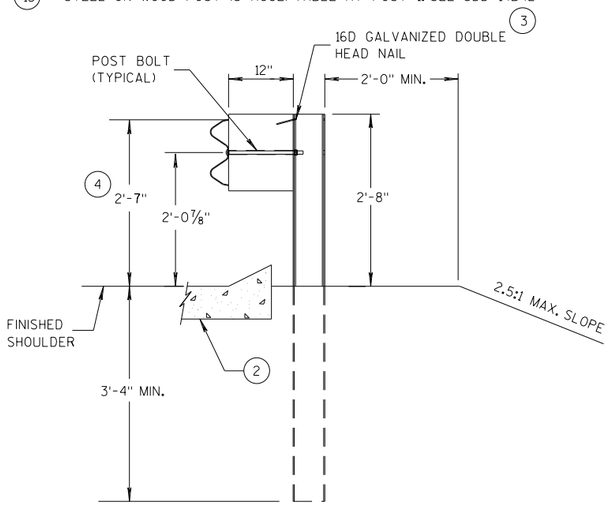
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

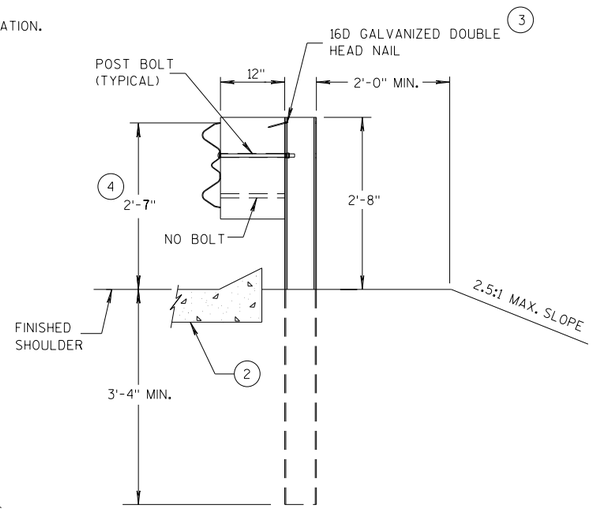
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



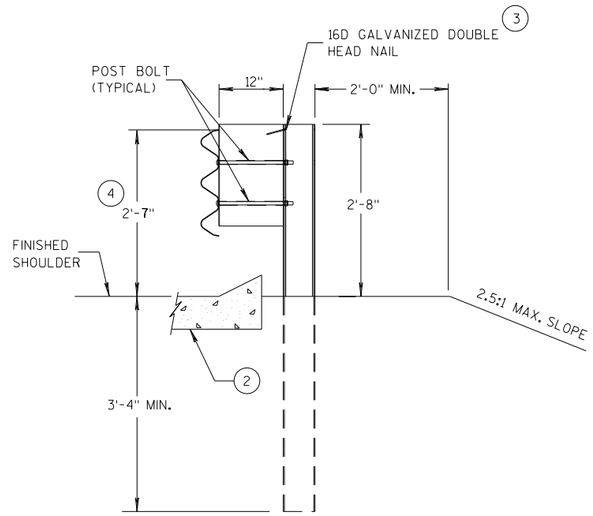
SECTION A-A (13)

POSTS 1-5



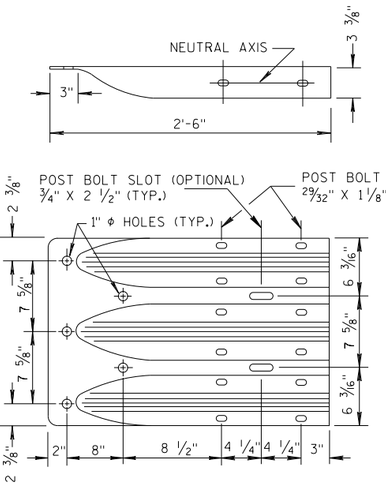
SECTION B-B

POST 6

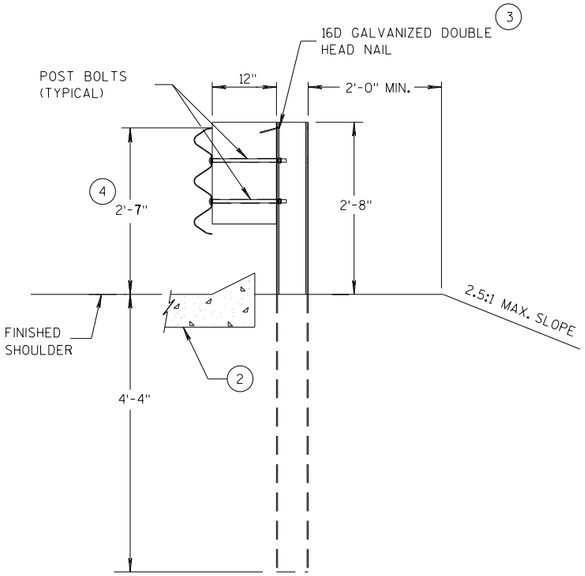


SECTION C-C

POSTS 7-11

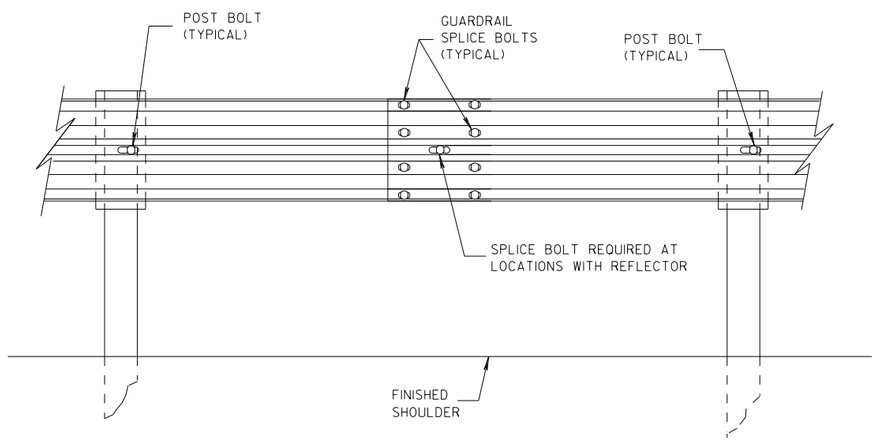


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

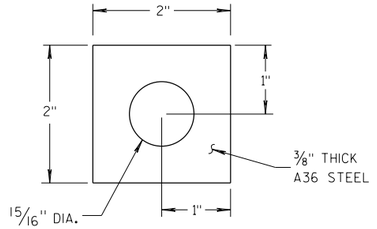
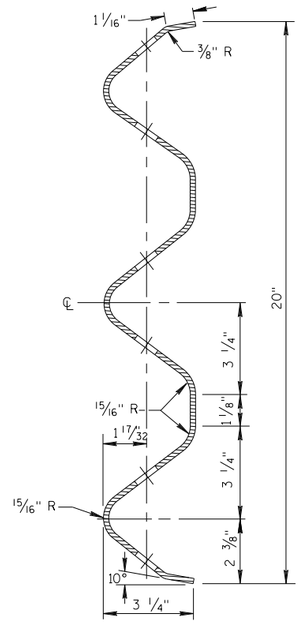


PLATE WASHER DETAIL



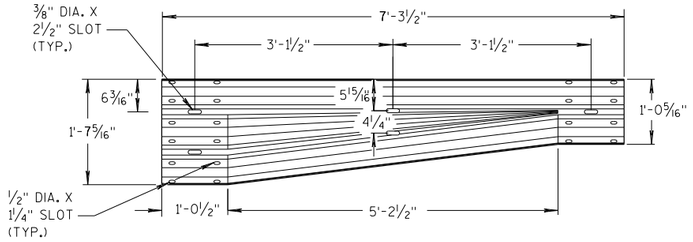
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

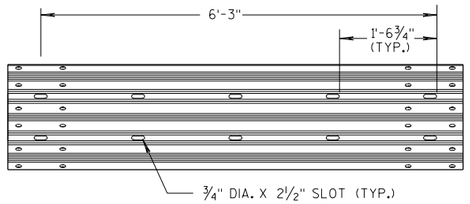
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

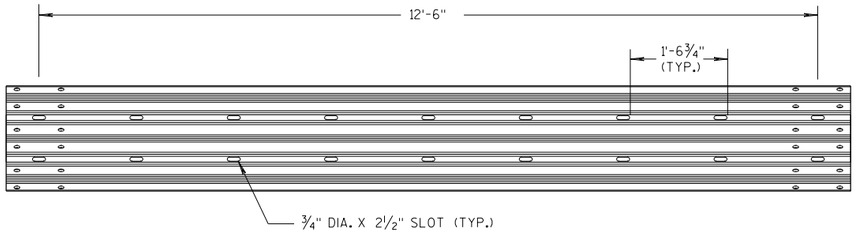
S.D.D. 14 B 45-5b



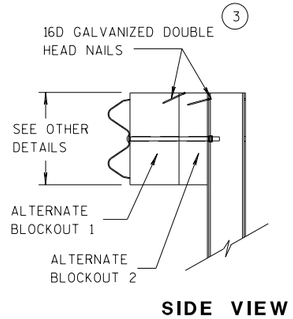
W-BEAM TO THRIE BEAM TRANSITION SECTION



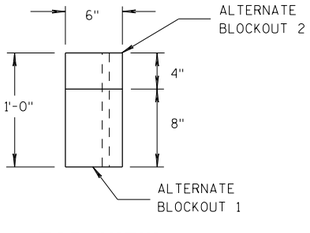
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

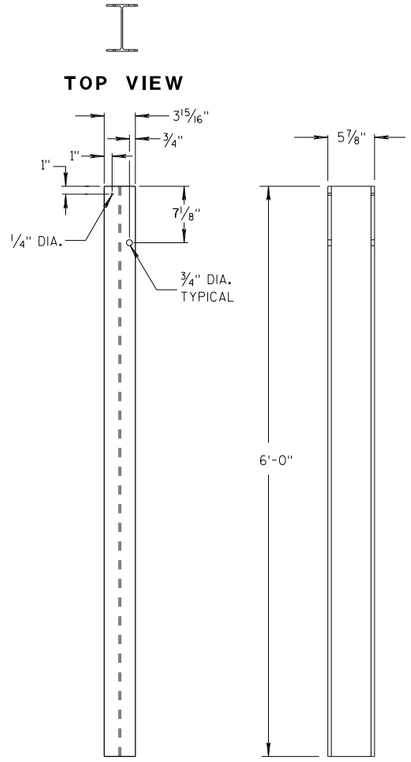


SIDE VIEW



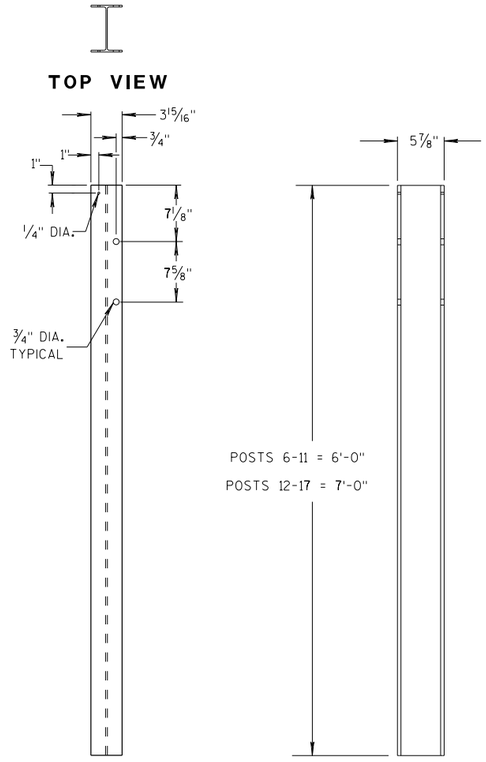
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



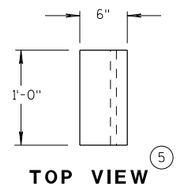
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

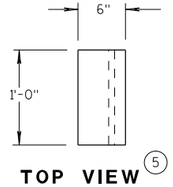


FRONT VIEW SIDE VIEW

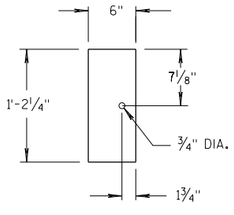
STEEL POSTS 6-17



TOP VIEW (5)

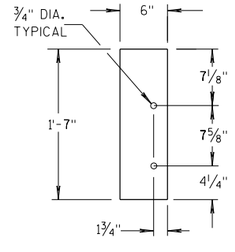


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

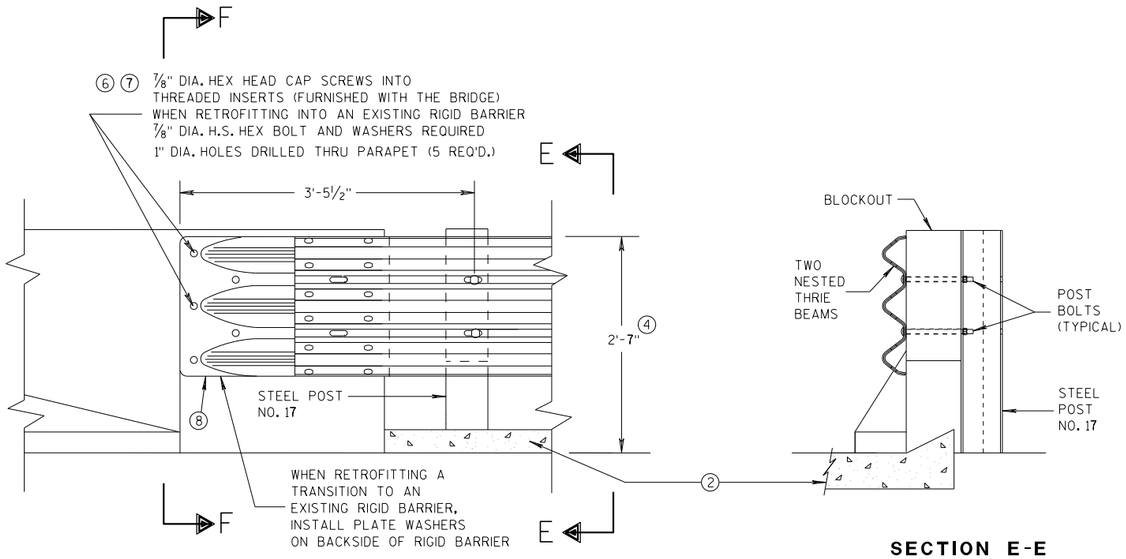
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

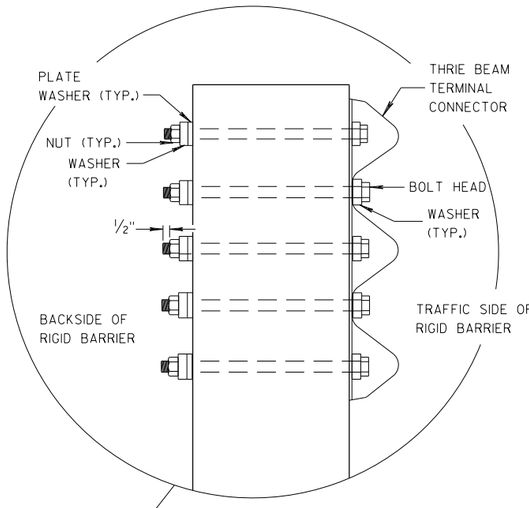
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

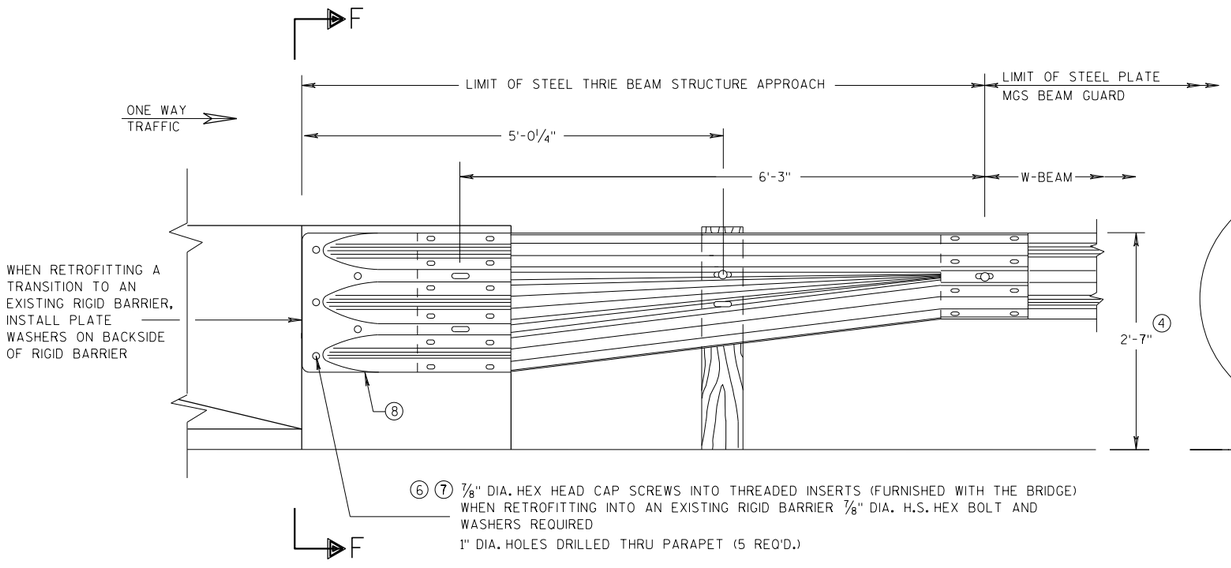
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

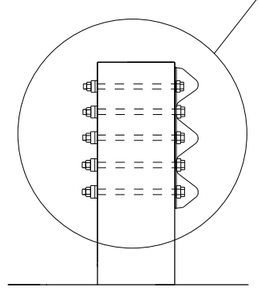
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

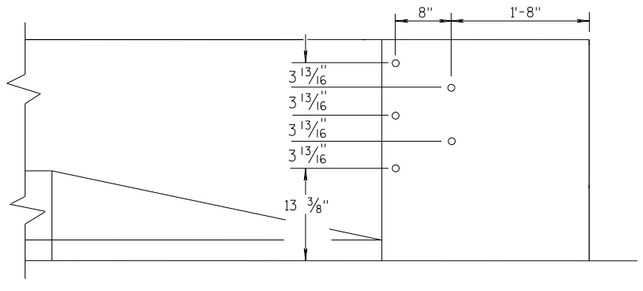




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS
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FHWA

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S.D.D. 14 B 45-5d

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

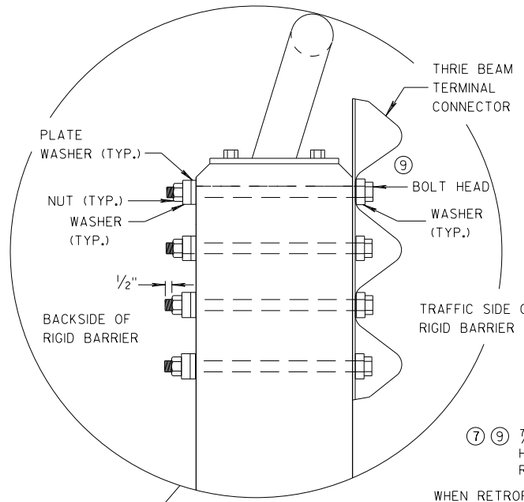
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

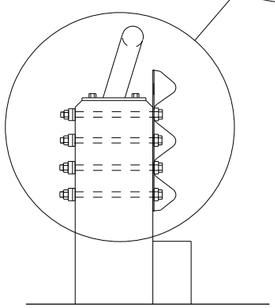
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

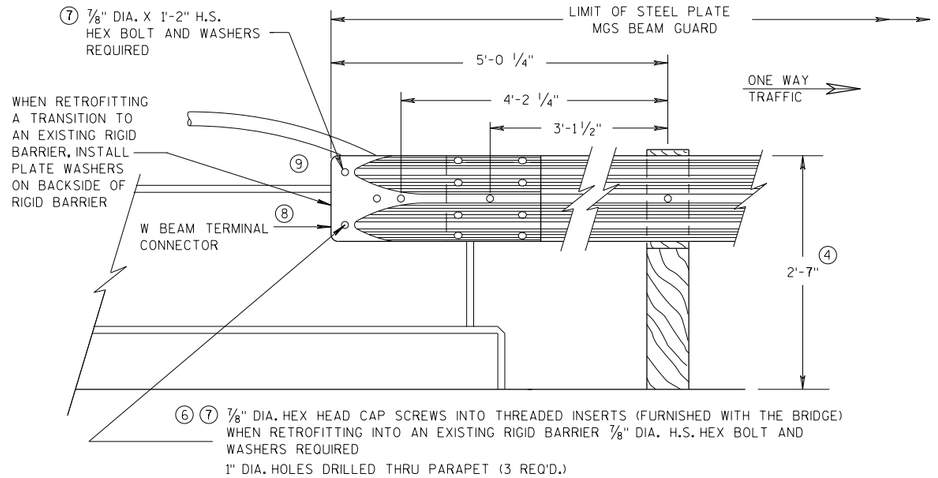
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





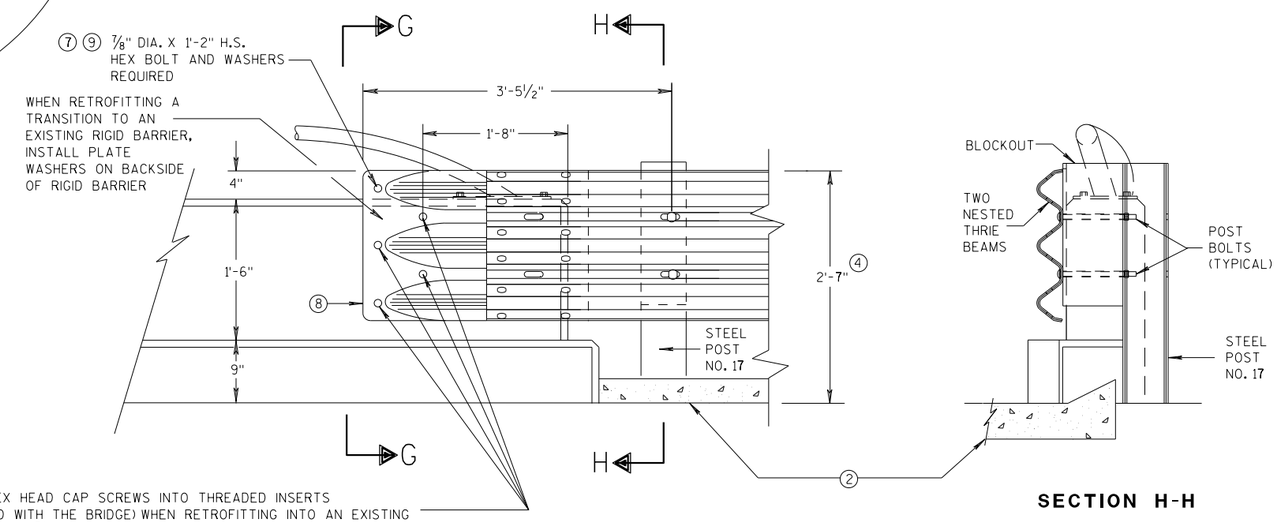
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 45-5e

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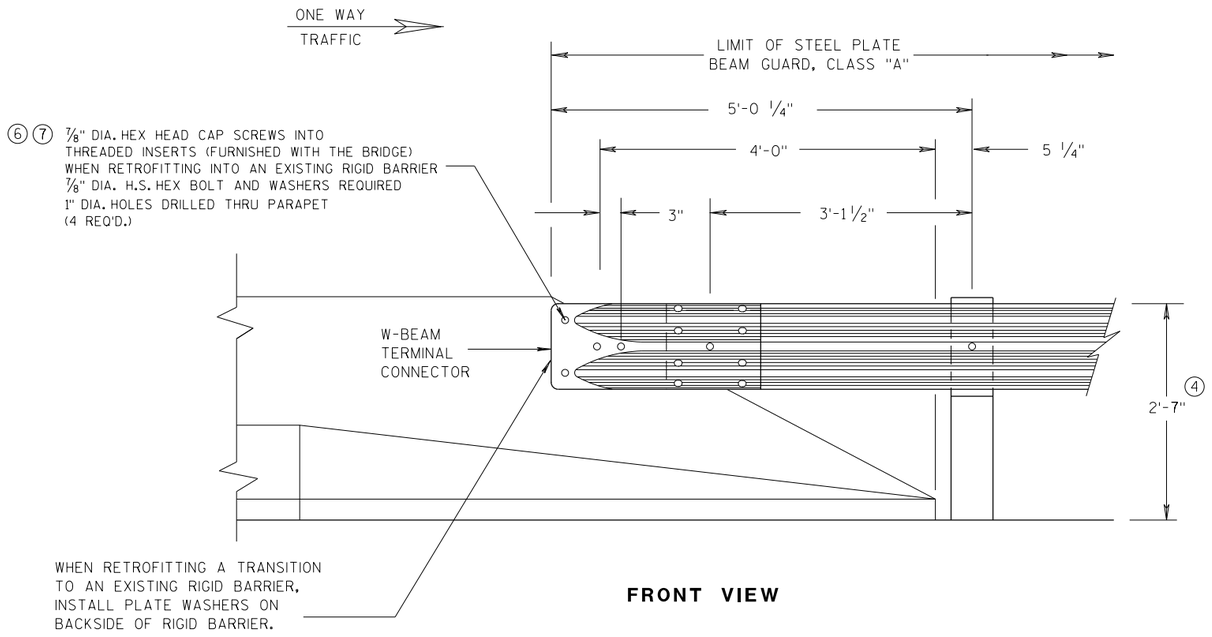
S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

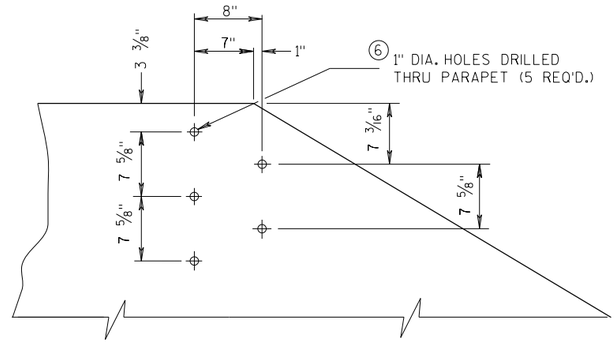
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

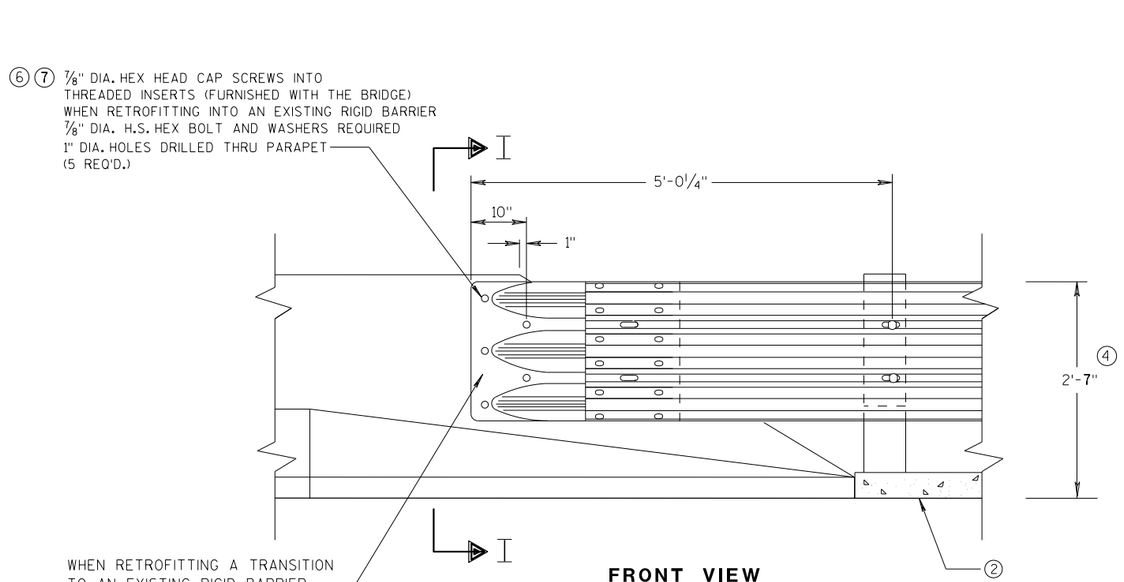
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

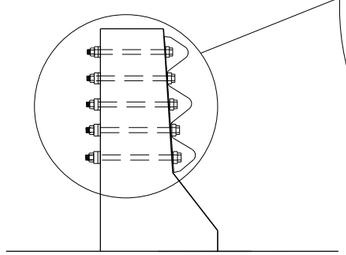
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



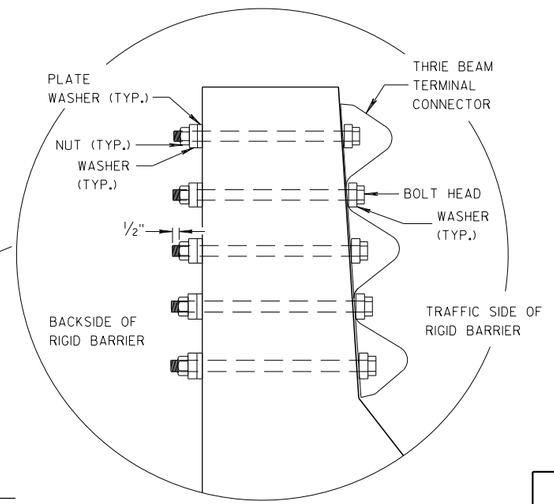
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI
ENT
FHWA

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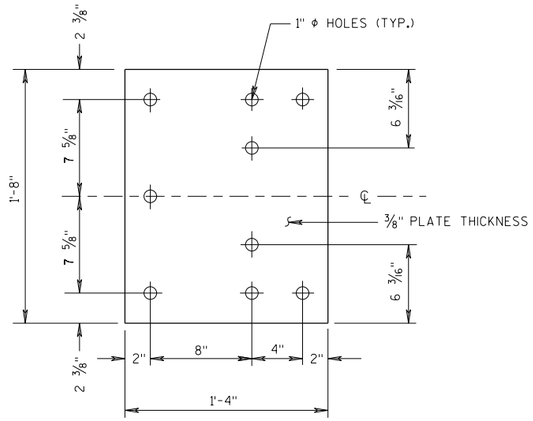
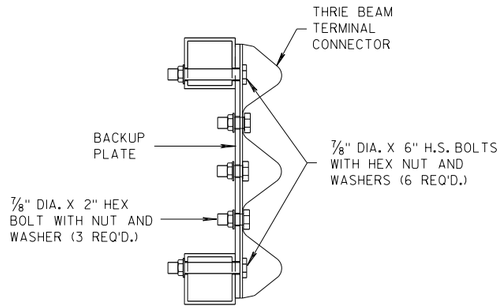
S.D.D. 14 B 45-5f

6

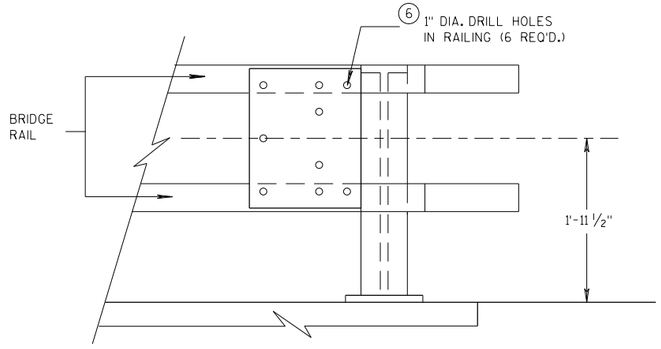
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

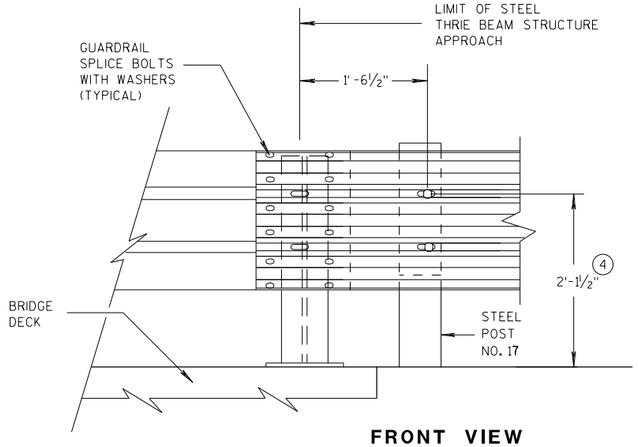


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

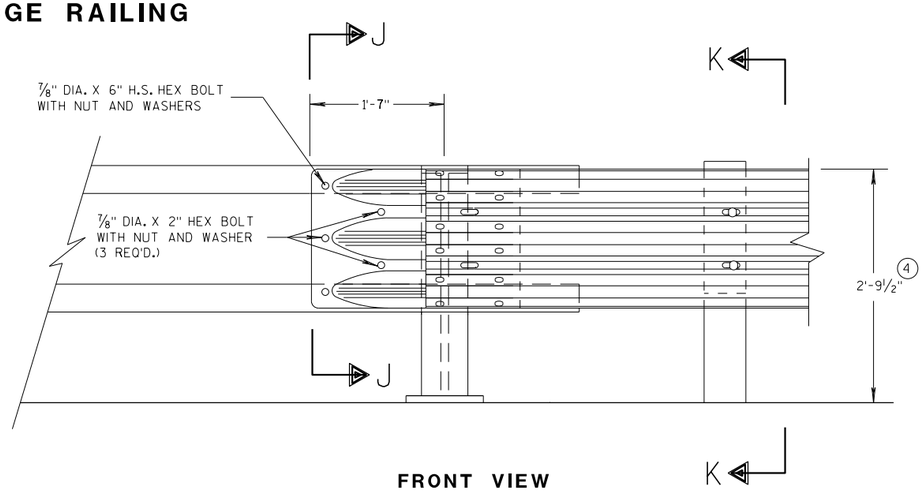
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

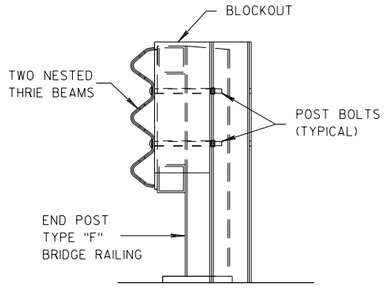


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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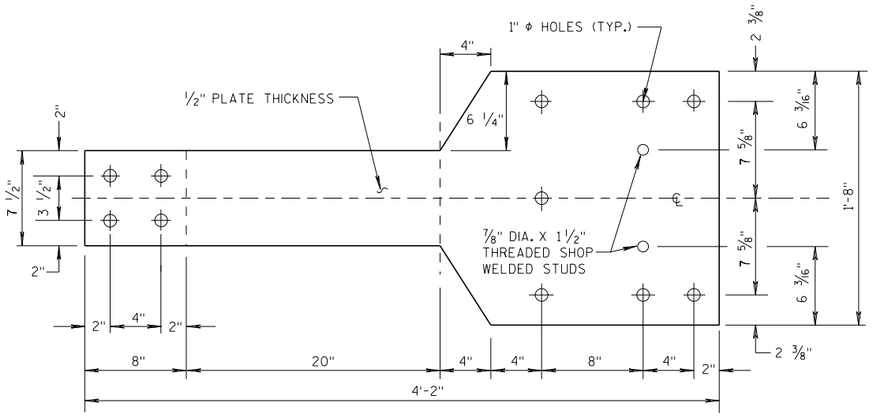
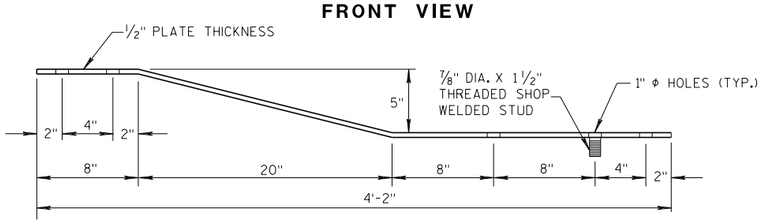
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

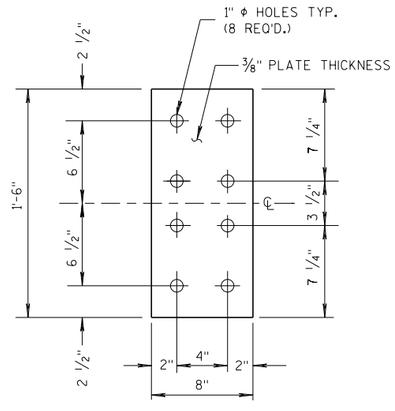


FRONT VIEW



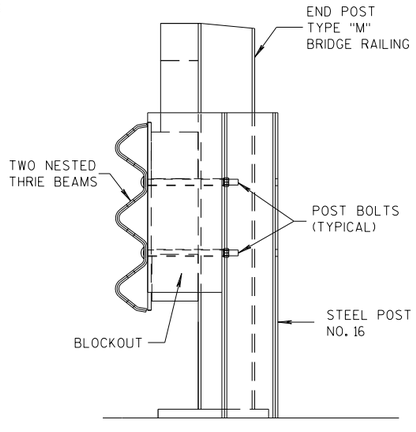
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

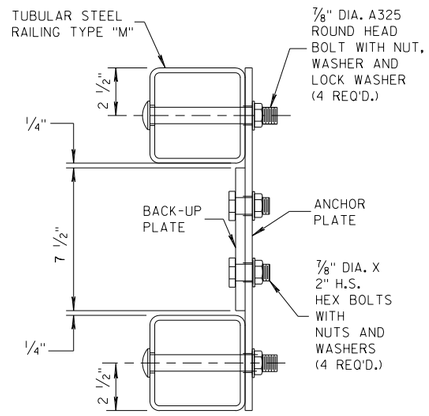


FRONT VIEW

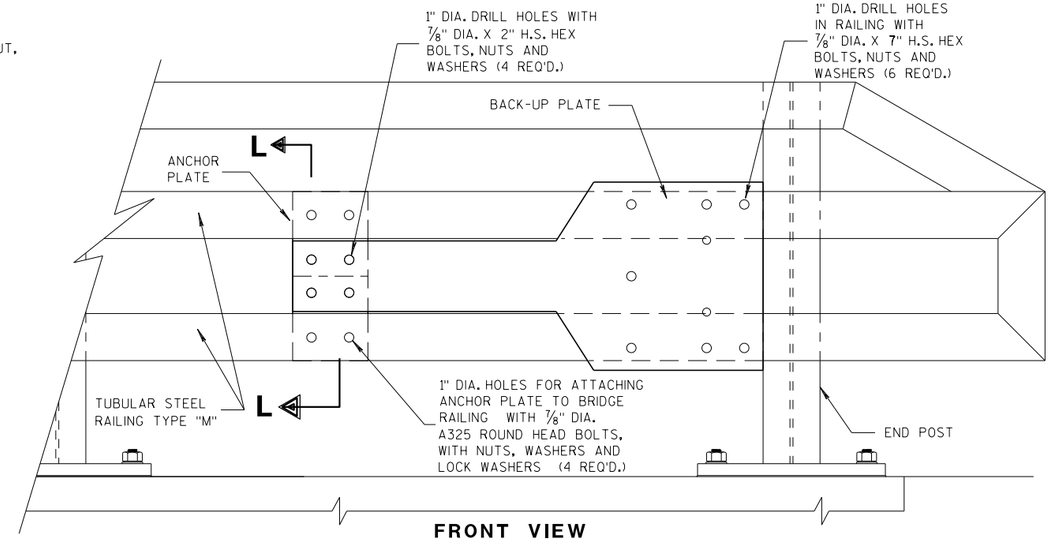
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

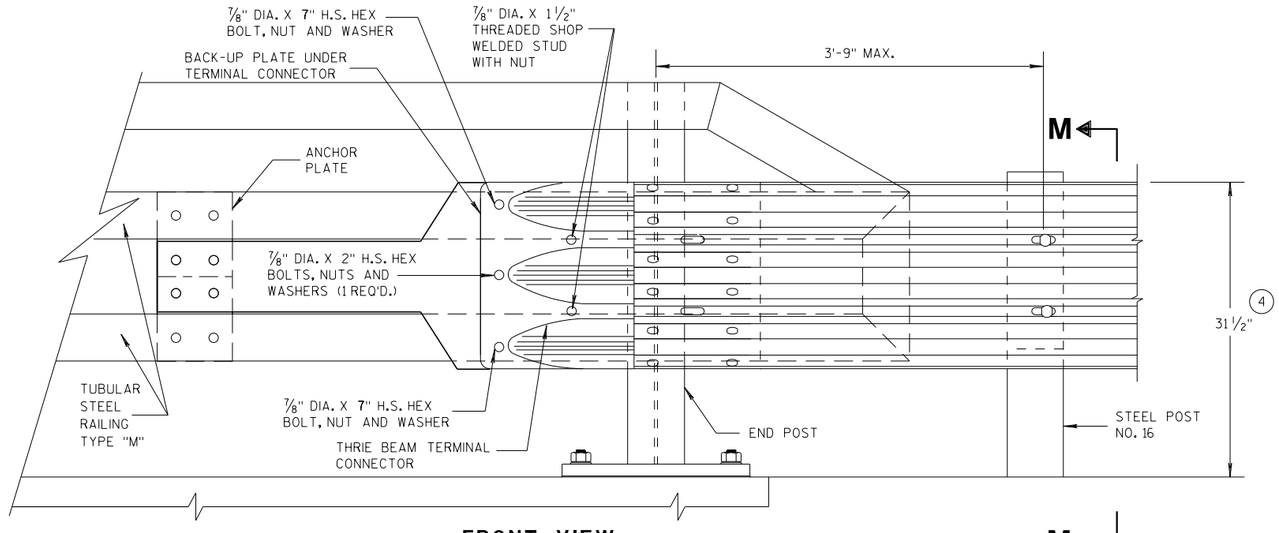


SECTION L-L

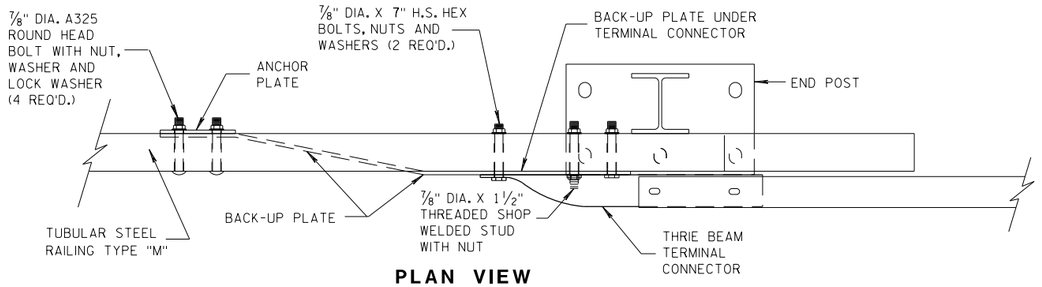


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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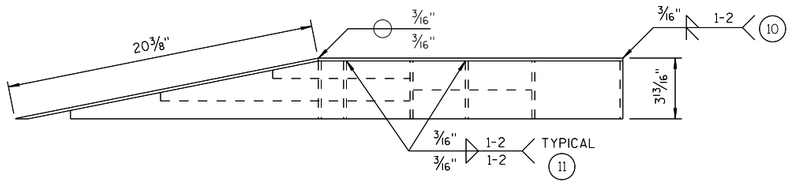

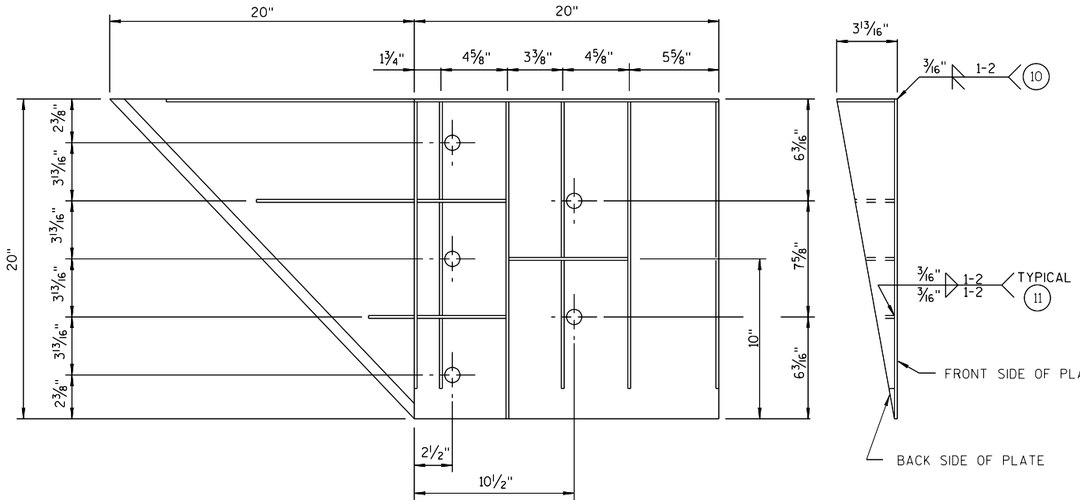

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

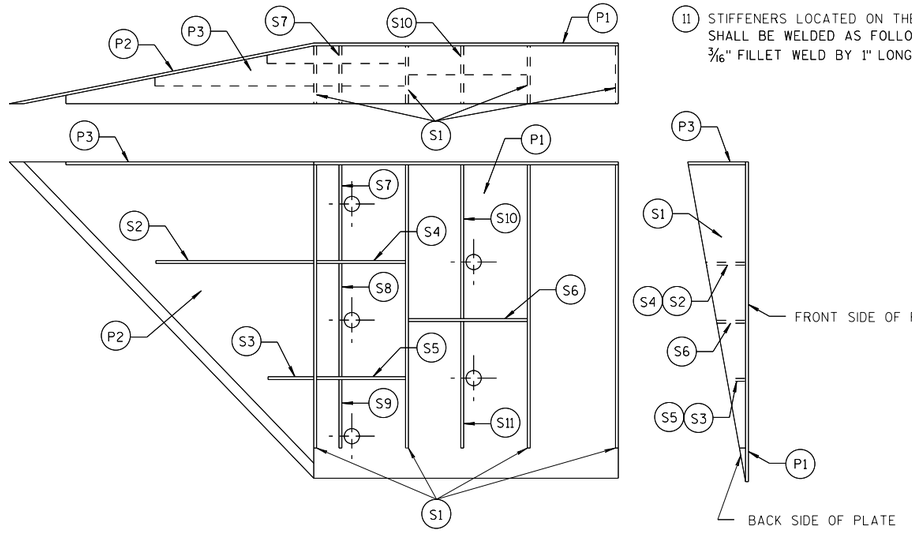

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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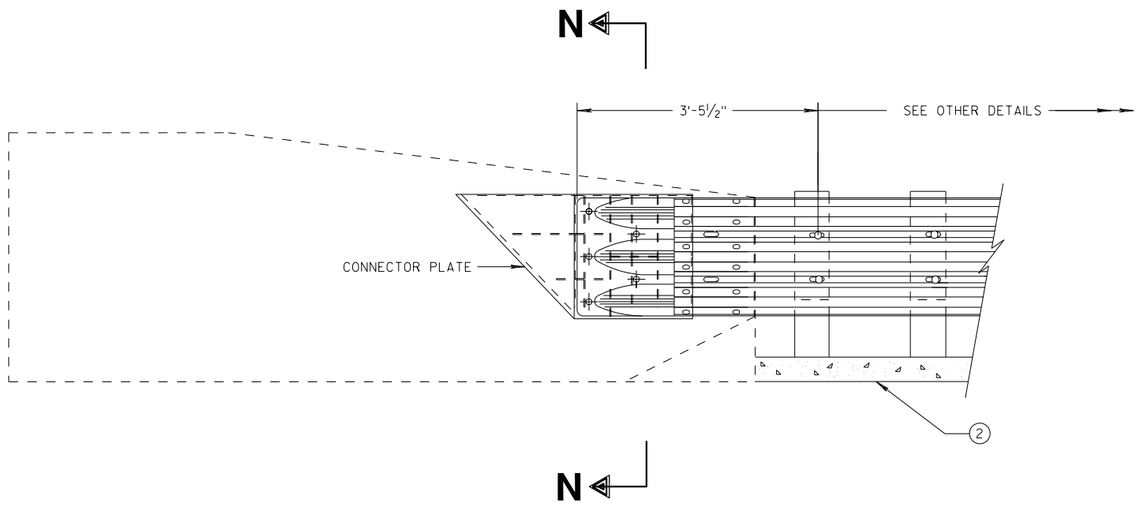
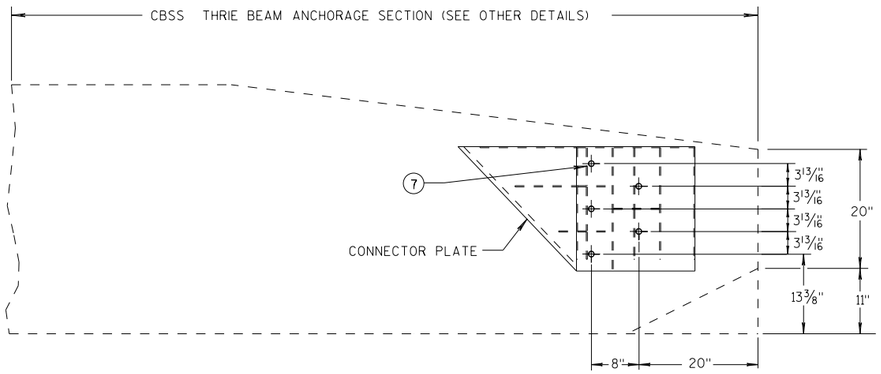


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



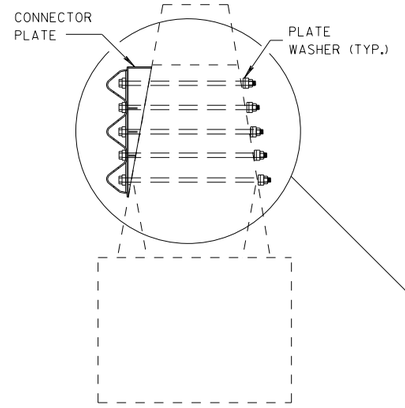
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

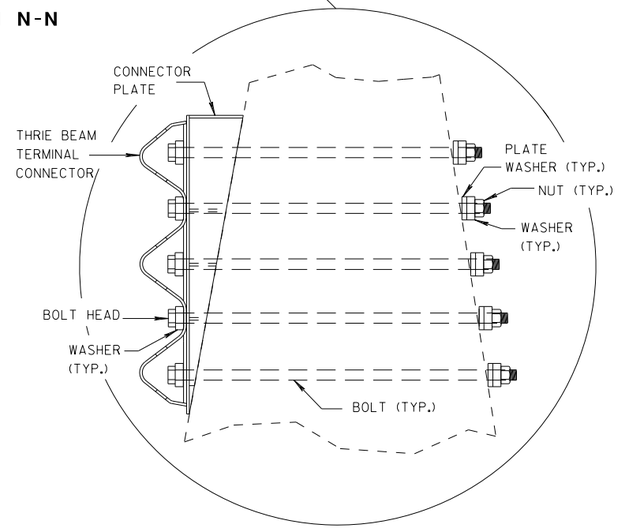
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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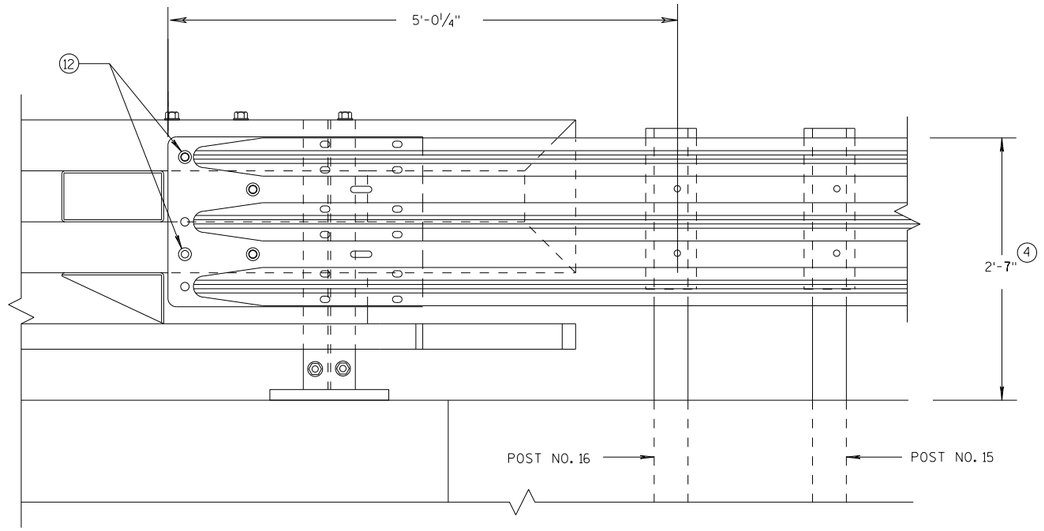
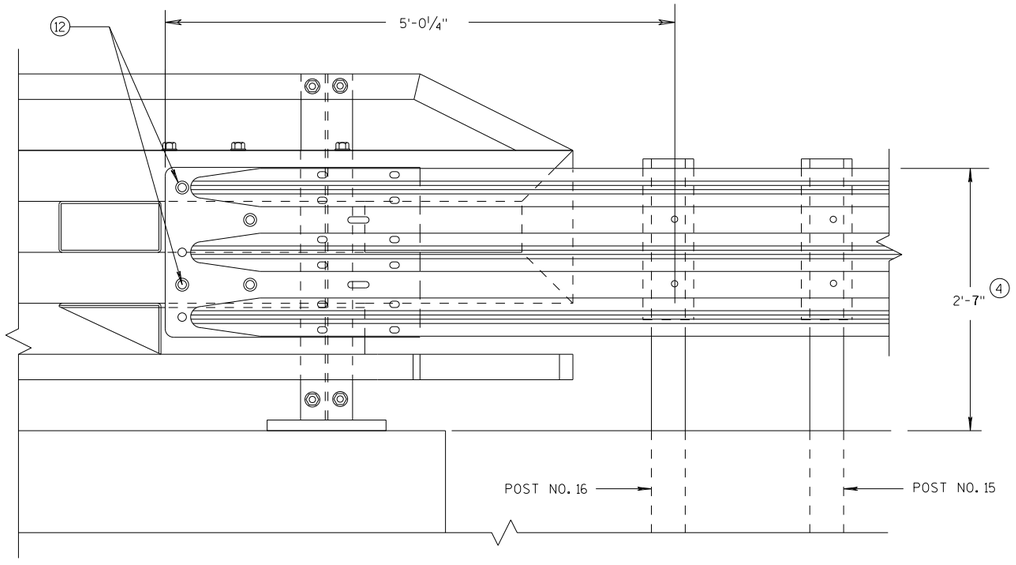


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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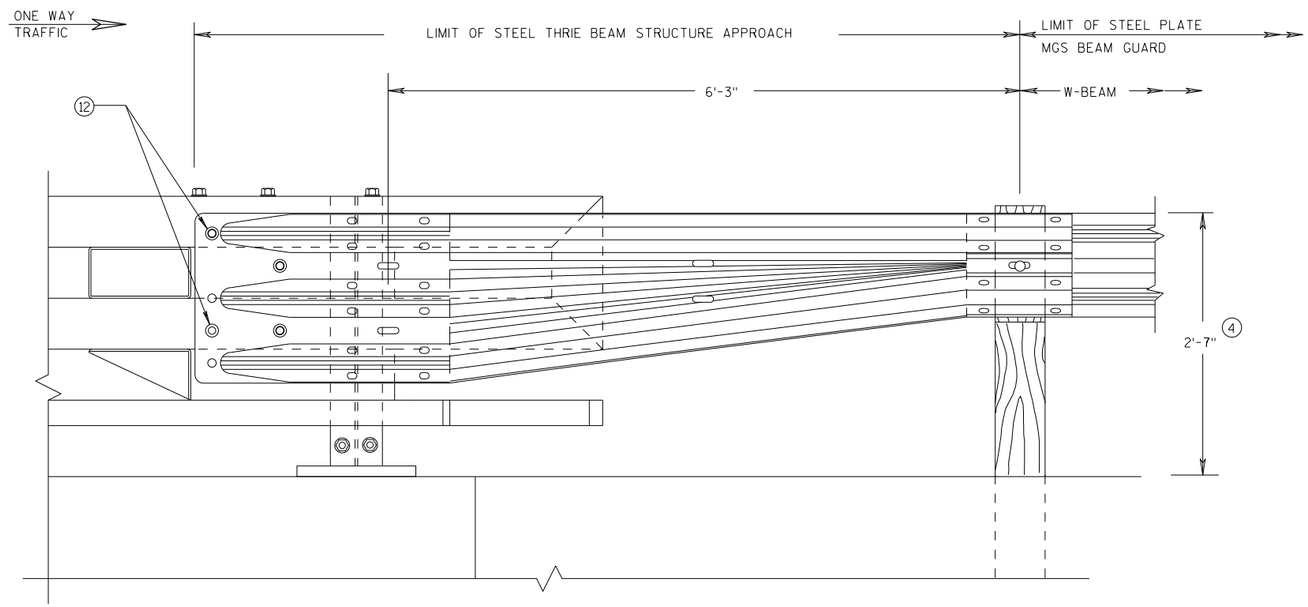


FRONT VIEW

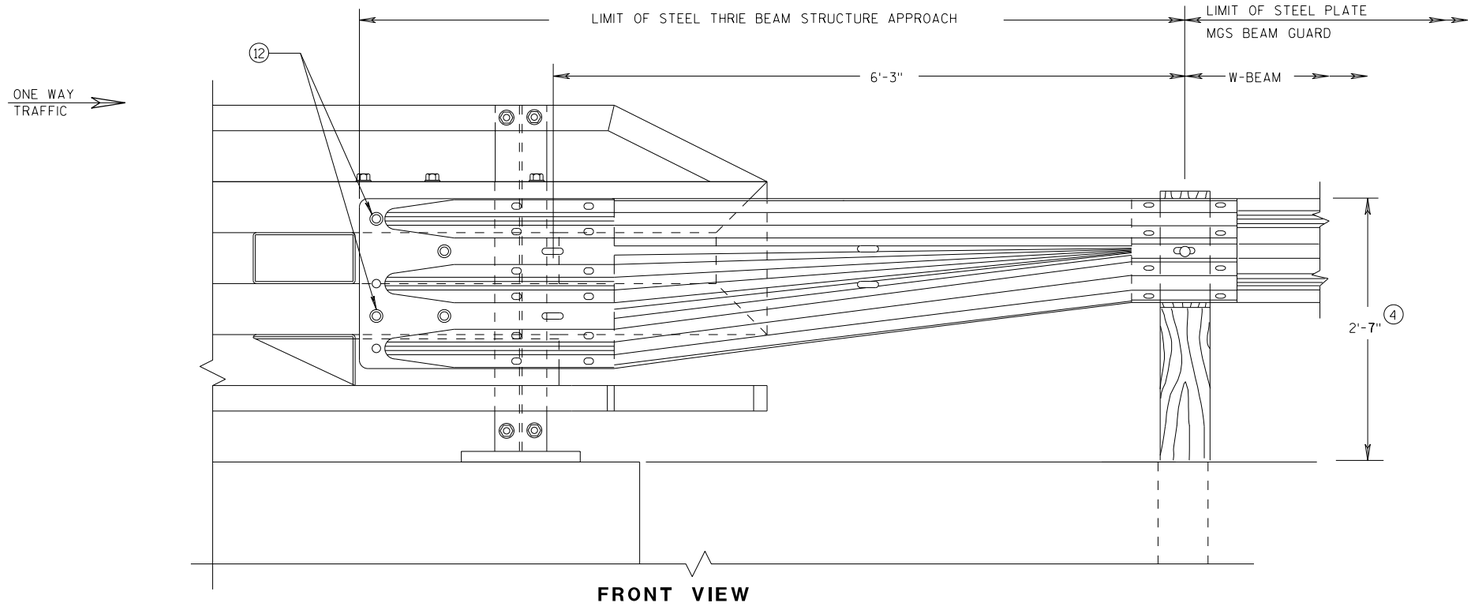
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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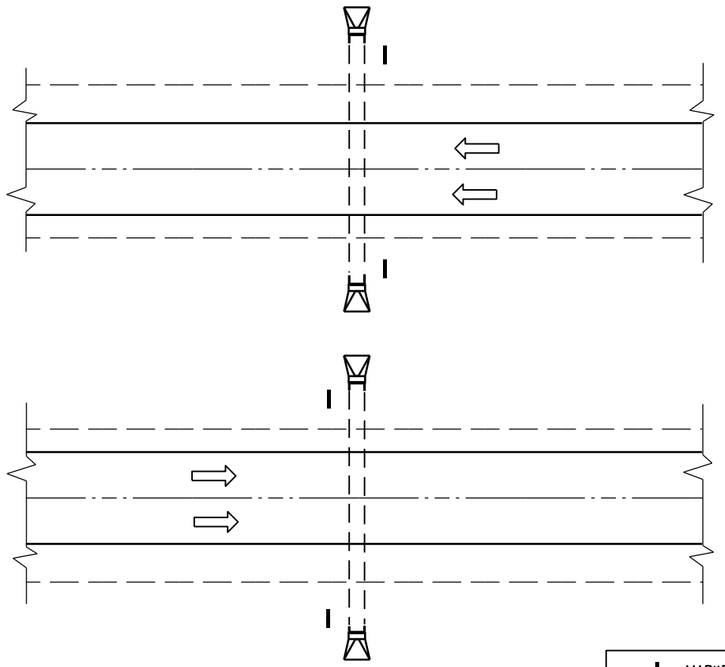
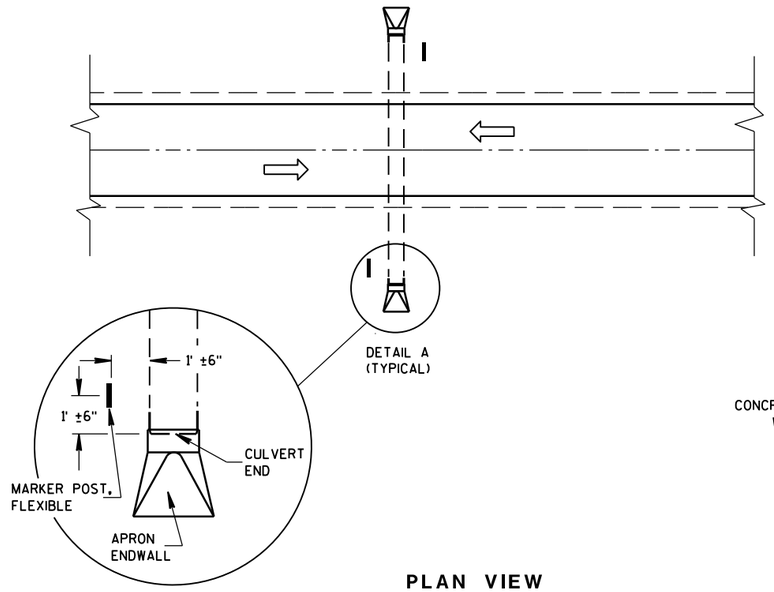


PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

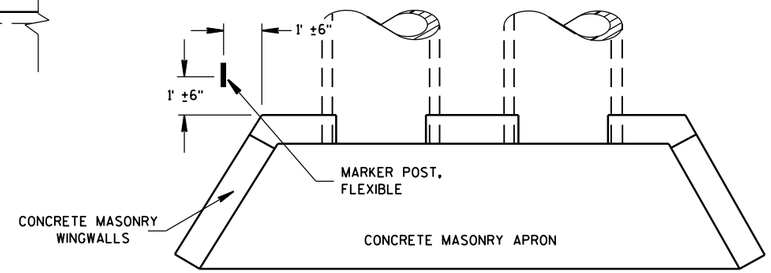
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

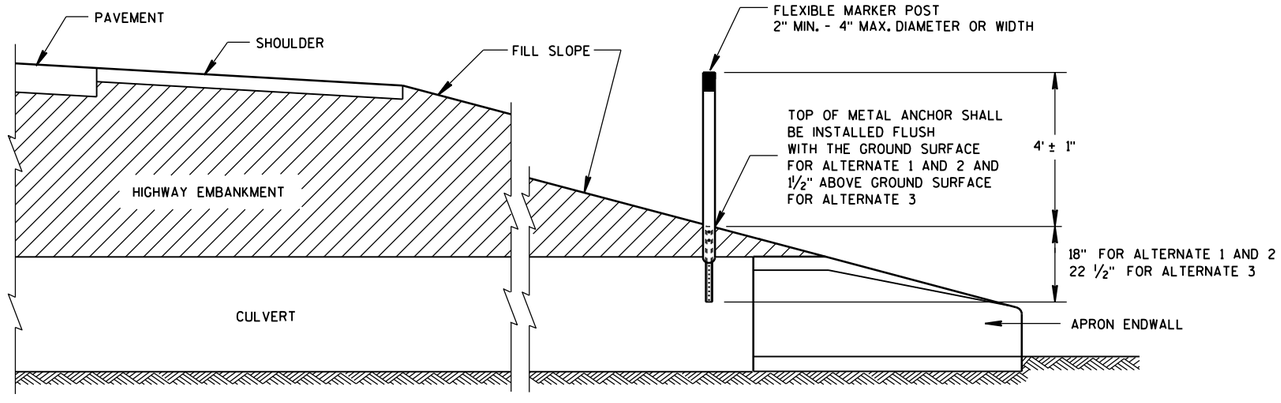
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

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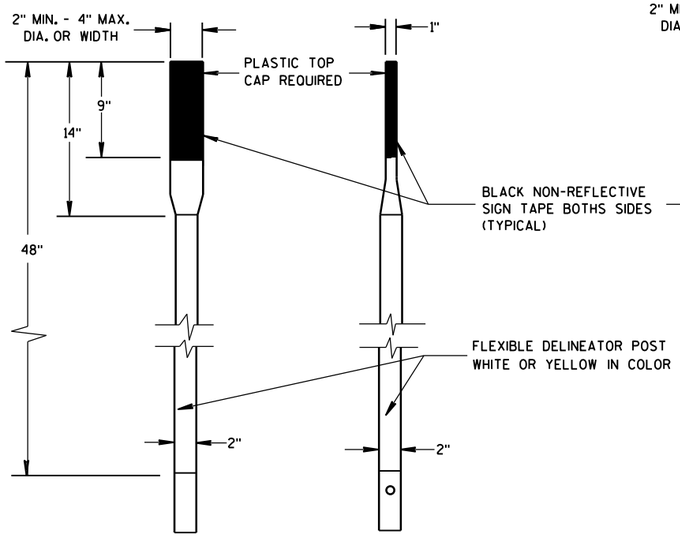
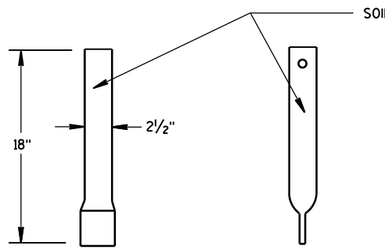
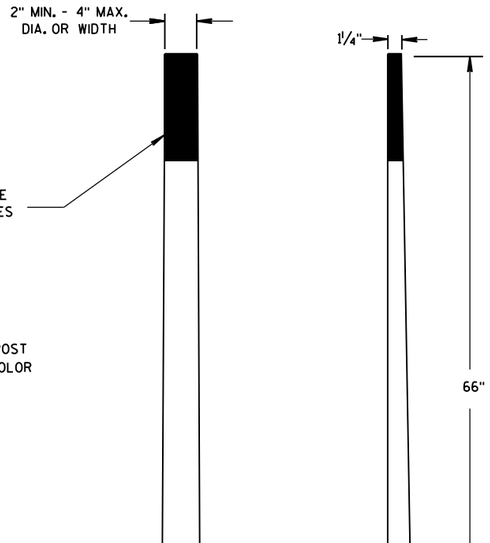
S.D.D. 15 A 3-2a





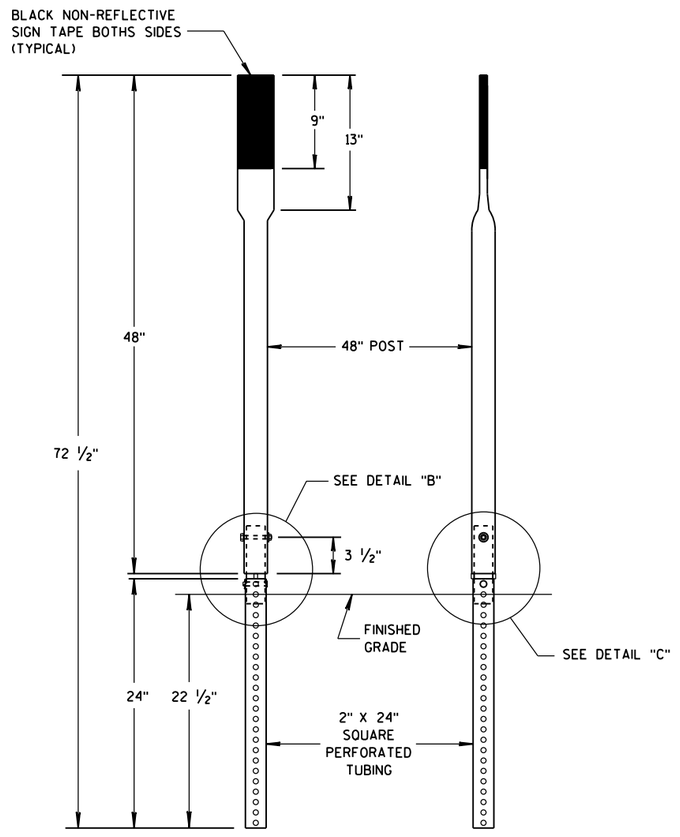
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

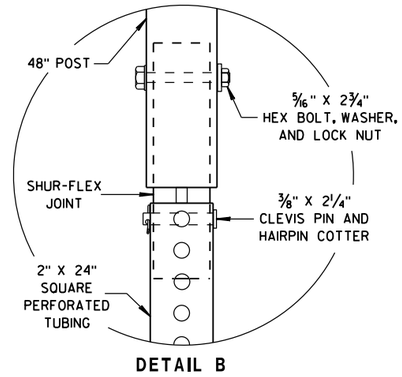
ALTERNATE 2



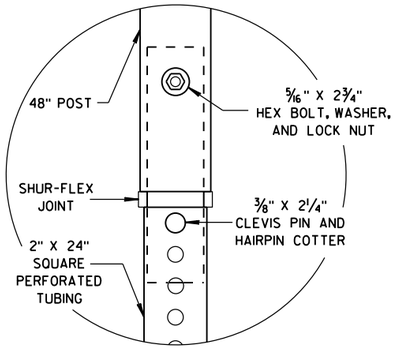
FRONT VIEW SIDE VIEW

ALTERNATE 3

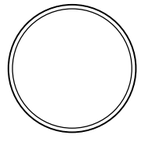
FLEXIBLE MARKER POSTS



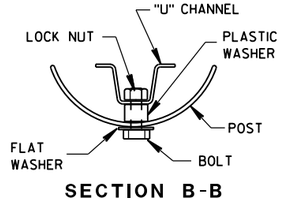
DETAIL B



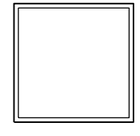
DETAIL C



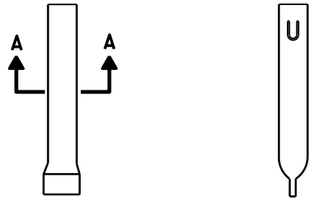
SECTION A-A



SECTION B-B

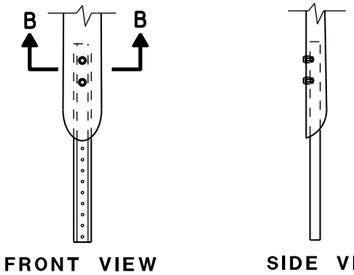


SECTION C-C



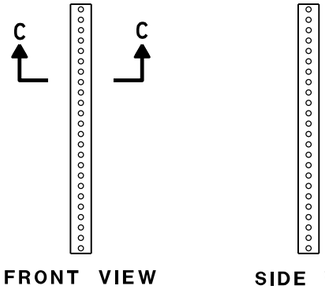
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

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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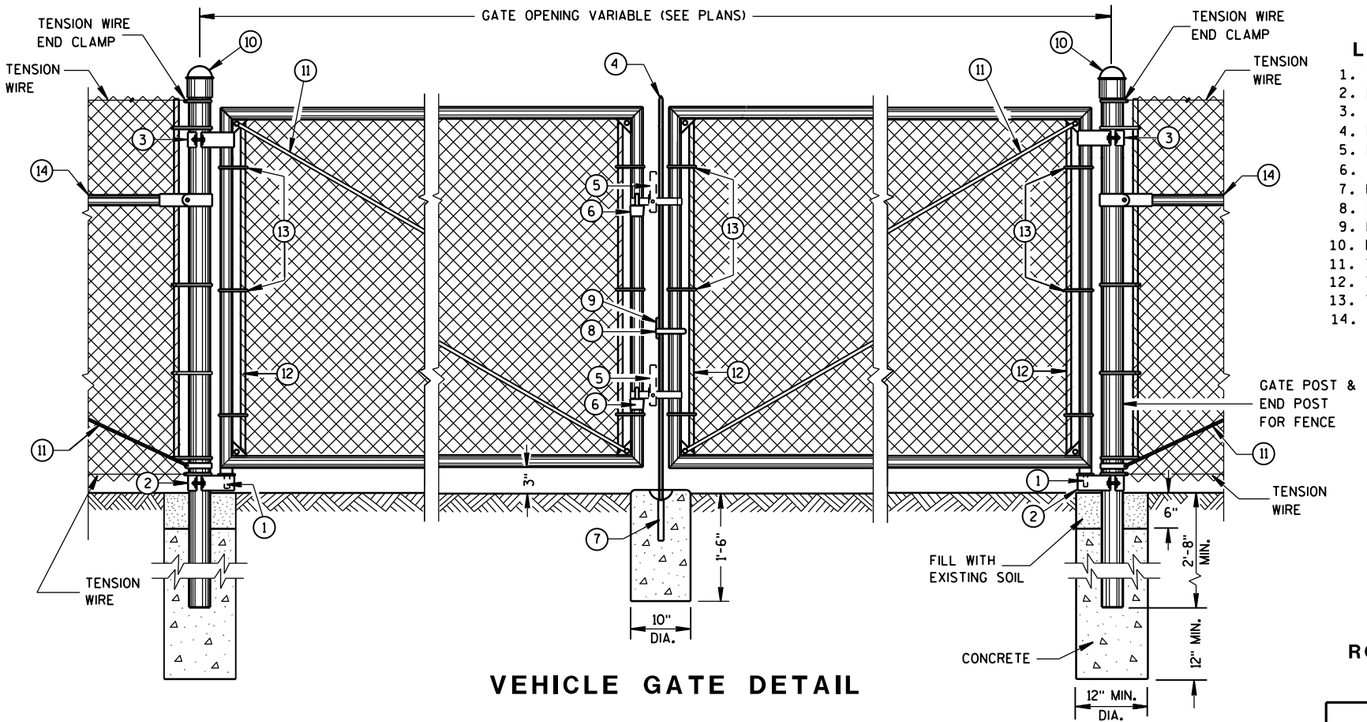
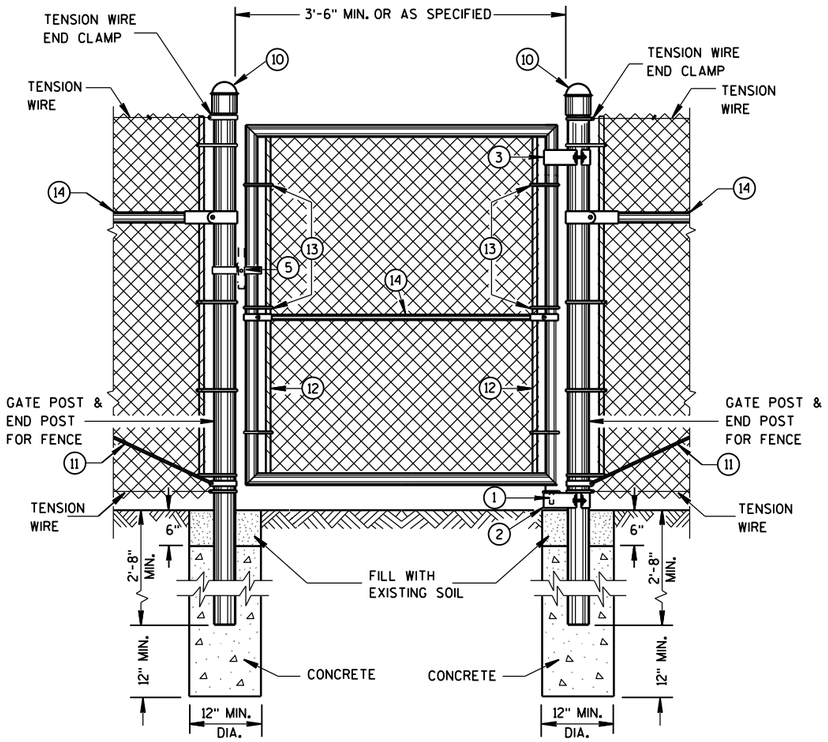
S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

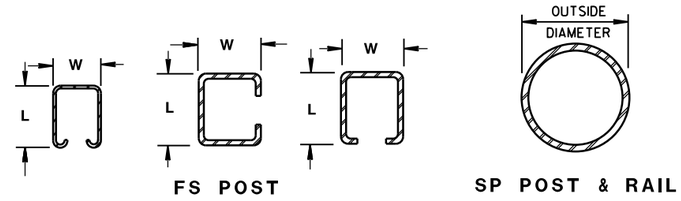
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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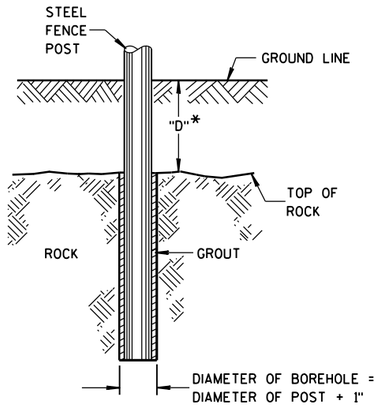
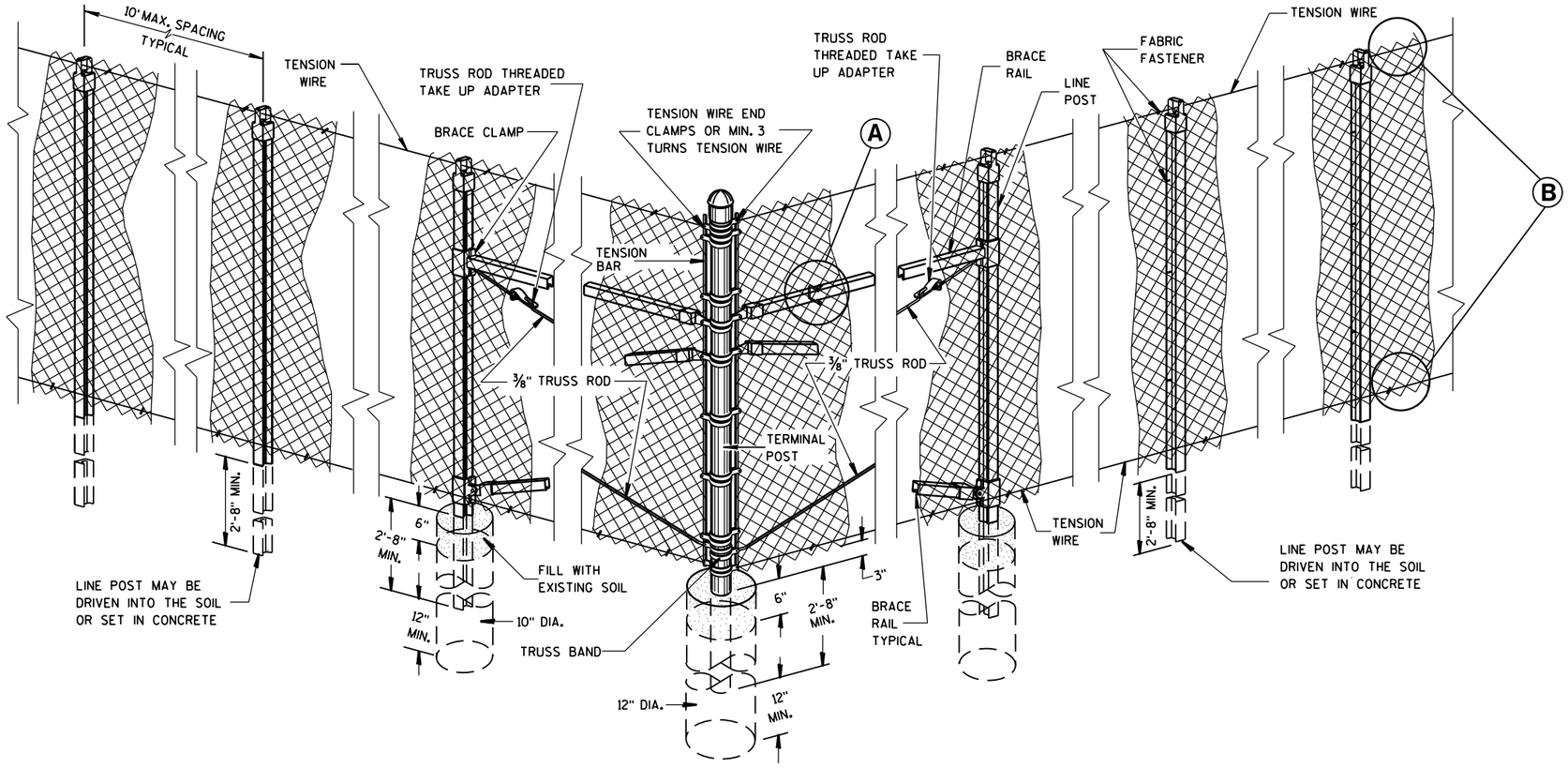
S.D.D. 15 B 3-15a

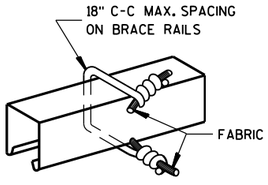


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



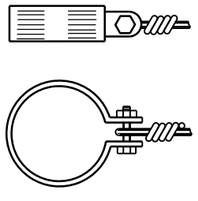
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



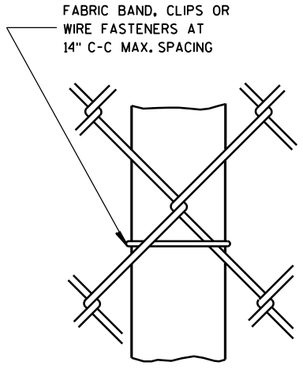
BRACE RAIL

FABRIC FASTENER

Ⓐ



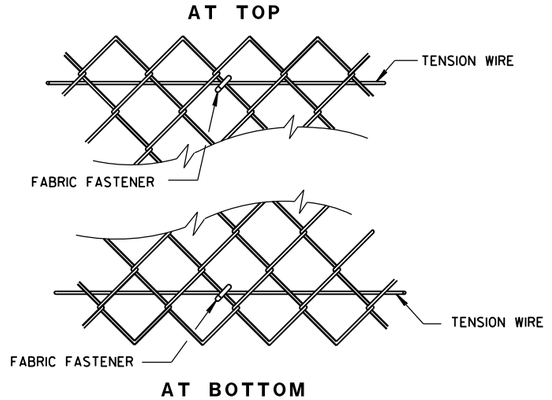
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

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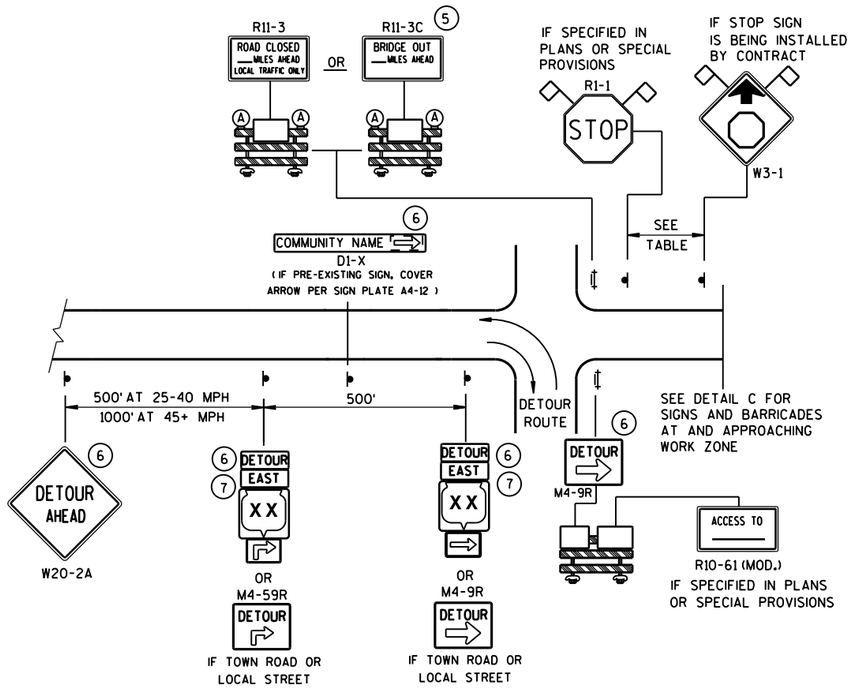
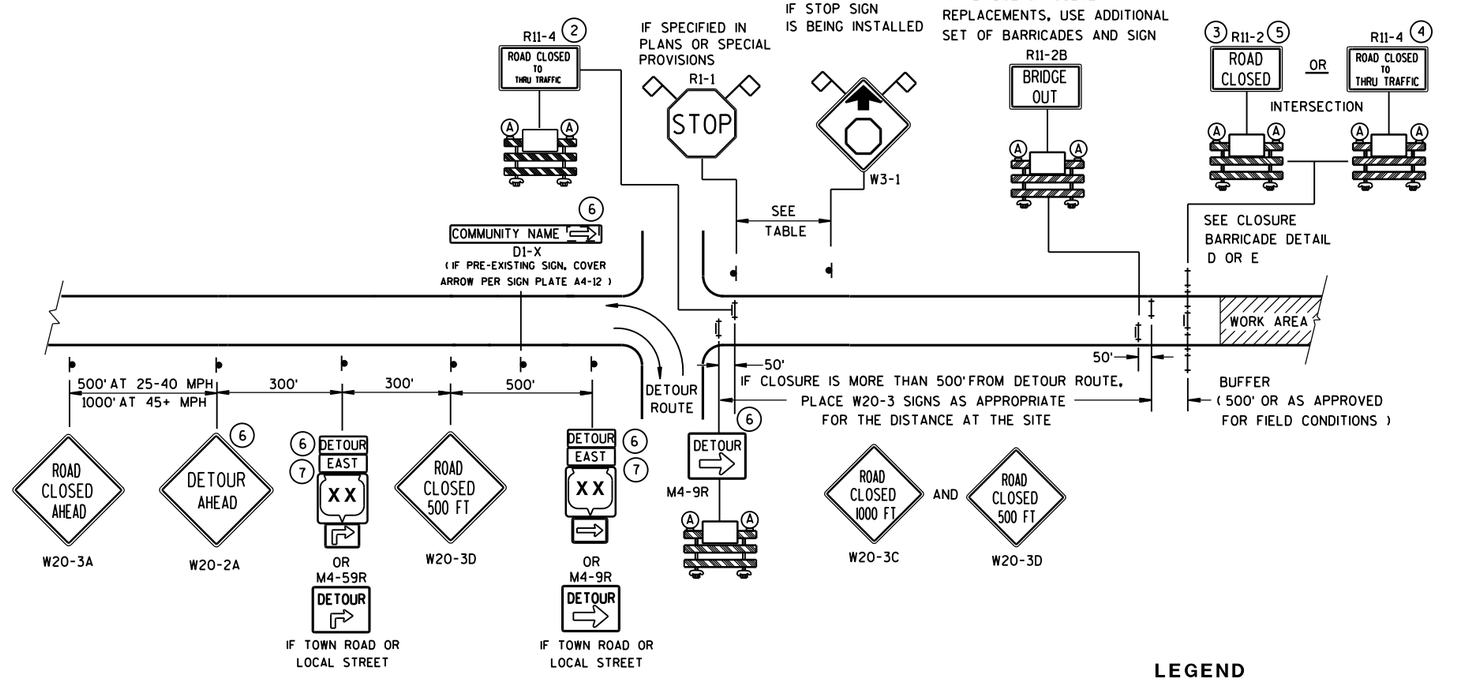
S.D.D. 15 B 3-15b



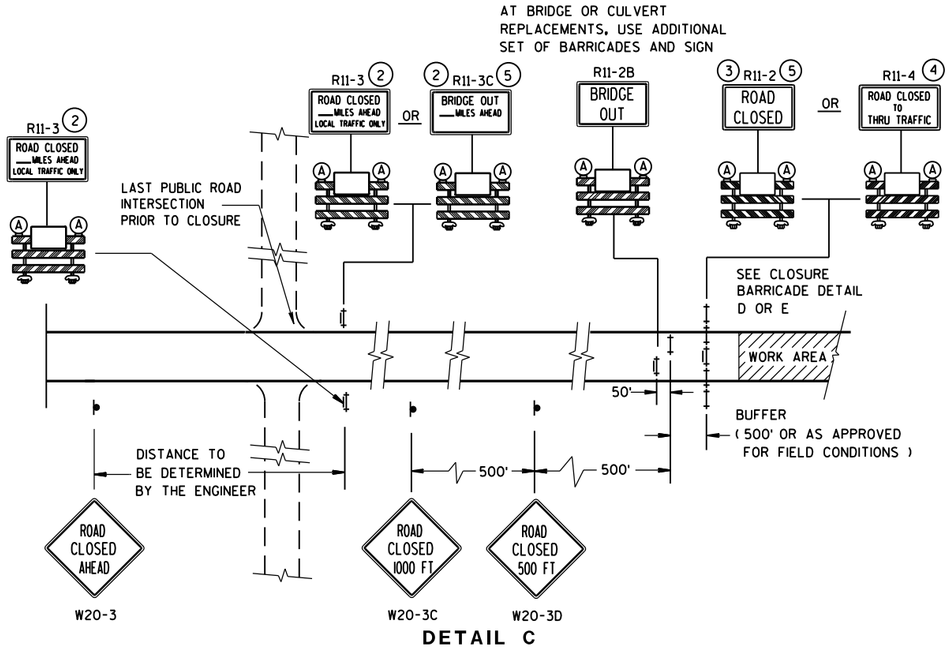
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "**b**"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

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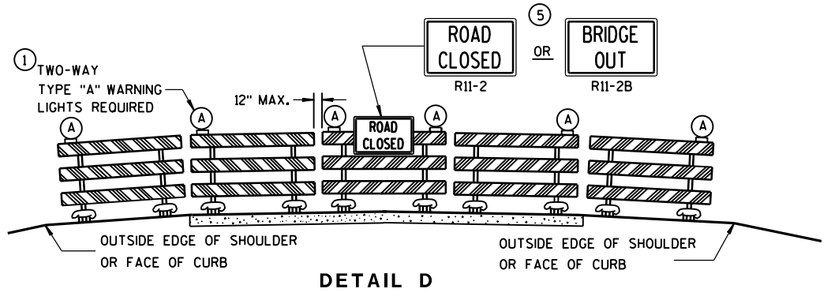
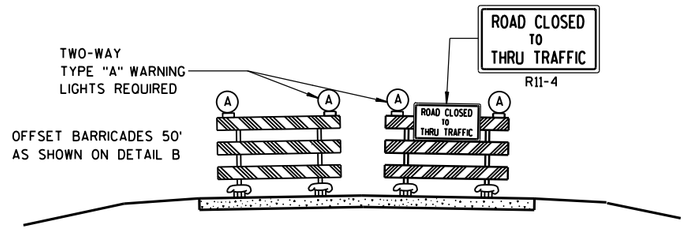
S.D.D. 15 C 2-6a



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.

GENERAL NOTES

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

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

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

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

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

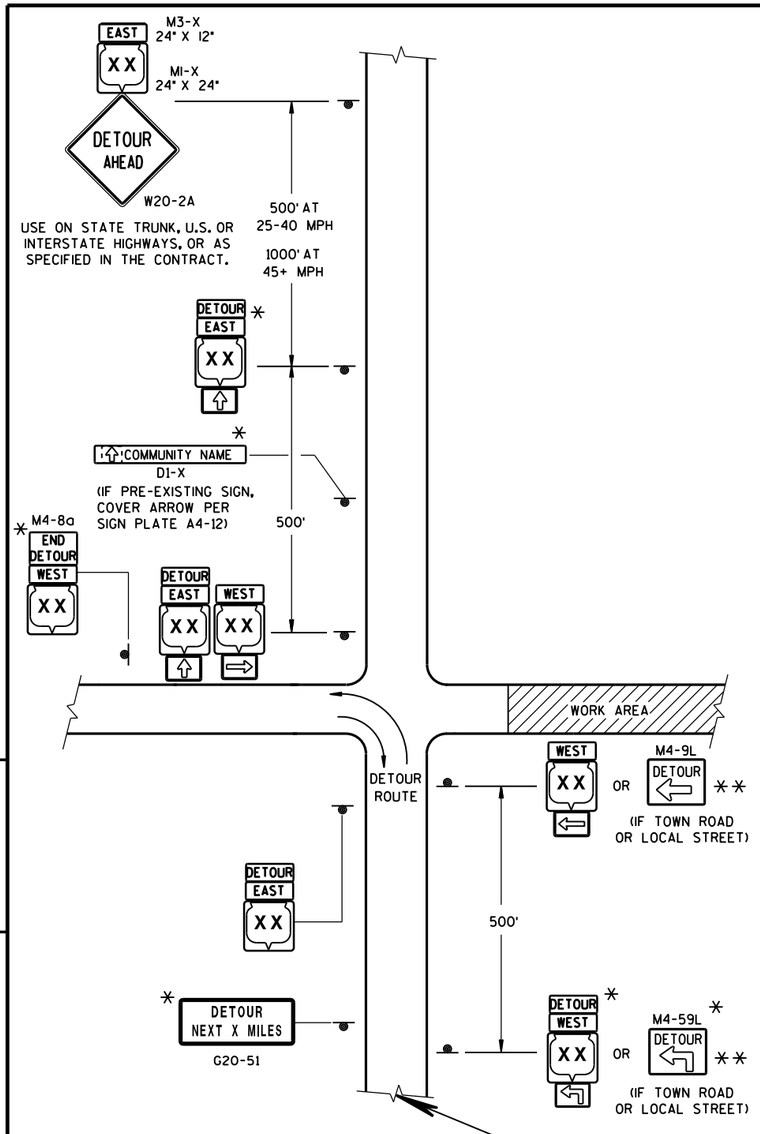
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

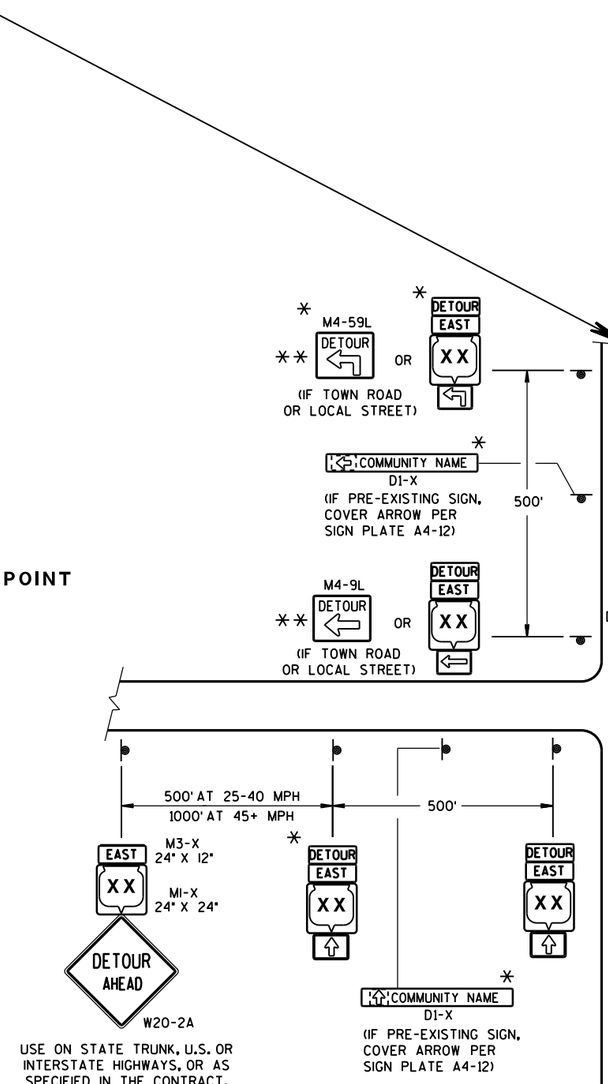
SIGN SIZES SHALL BE AS FOLLOWS:

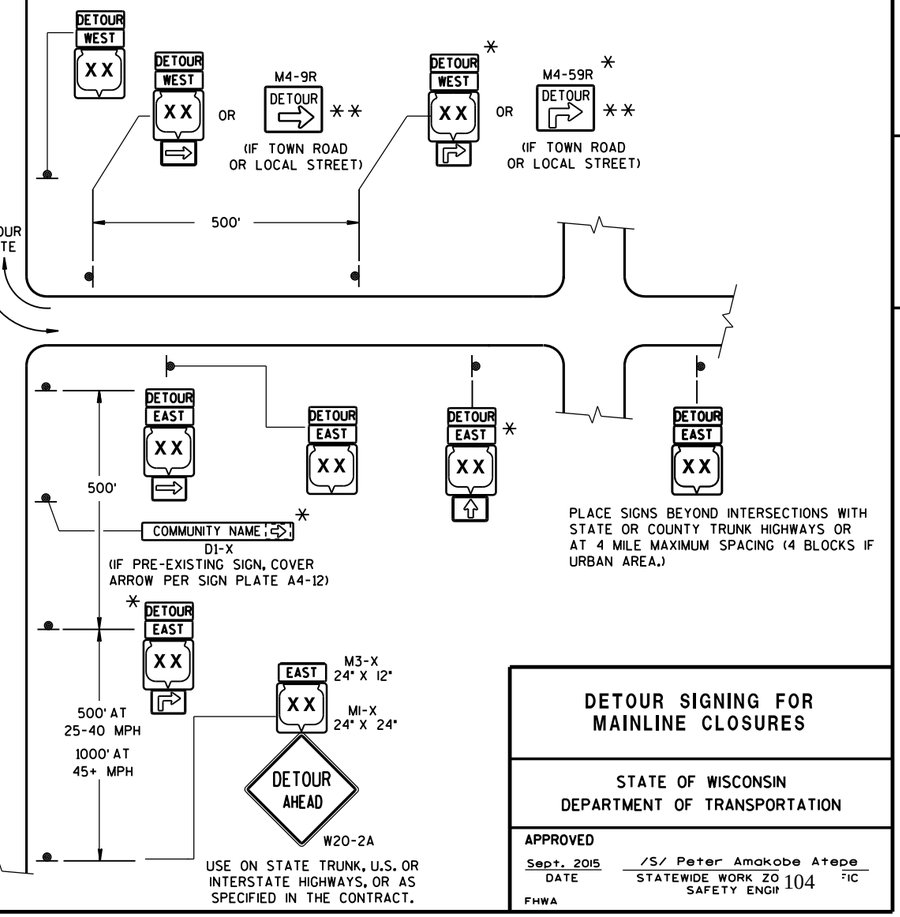
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.







LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- M05-1 OR M06-1 OR M06-1

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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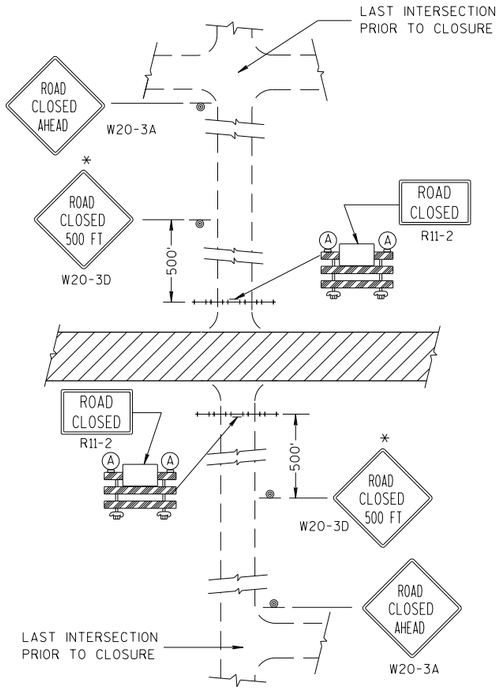
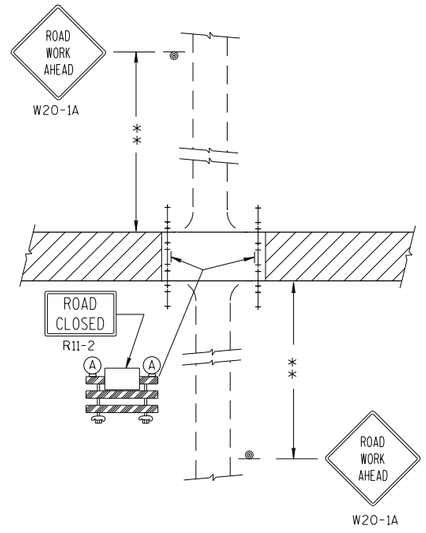
S.D.D. 15 C 2-6c



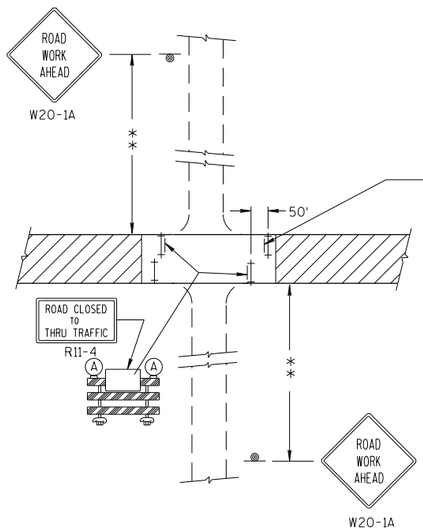
DETAIL 1

(NO ACCESS TO PROJECT)



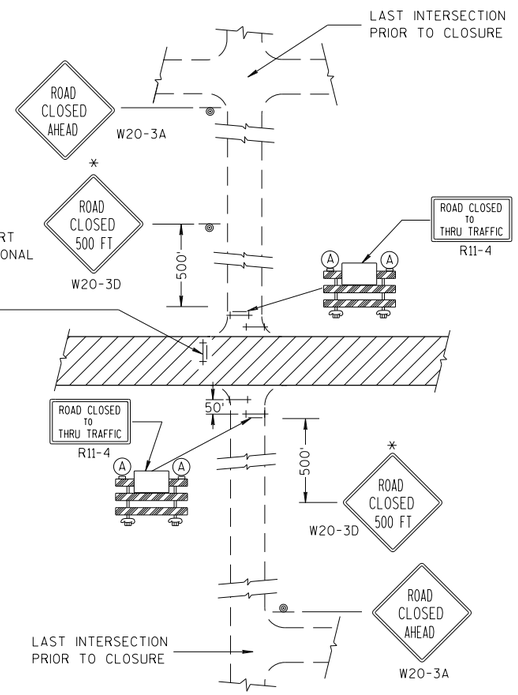
DETAIL 2

(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
7/2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGI
FHWA

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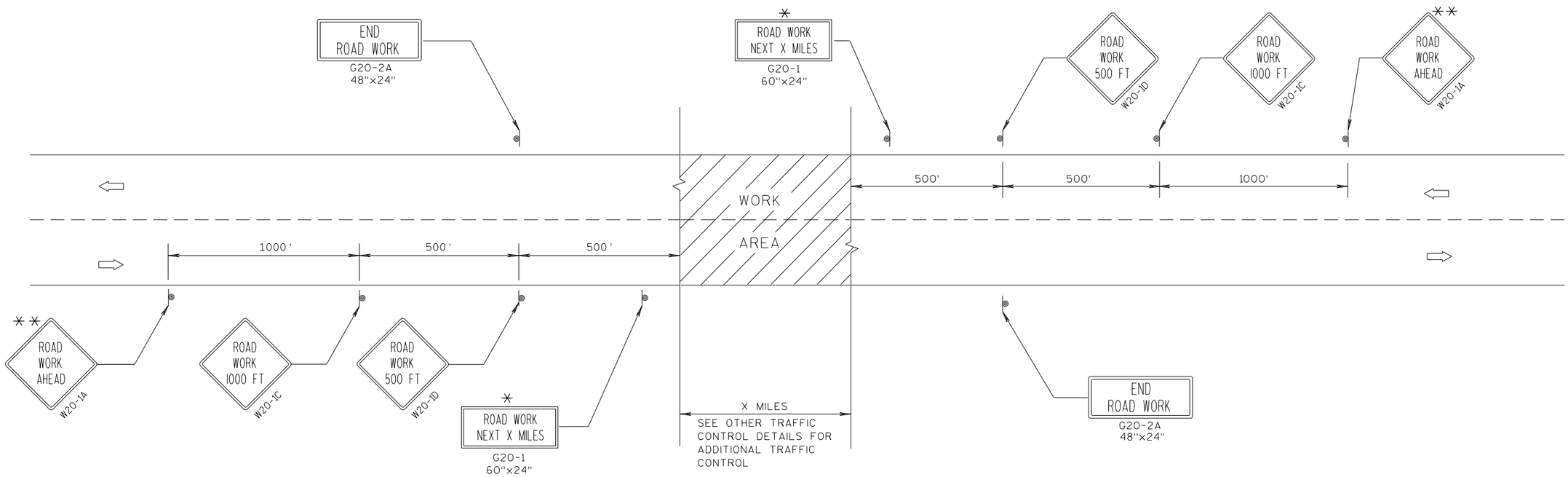
S.D.D. 15 C 3-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

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

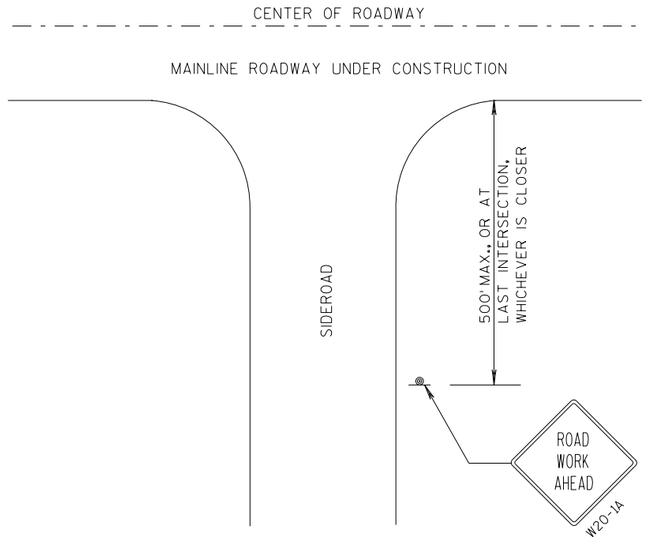
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

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

✳✳ PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGI
FHWA

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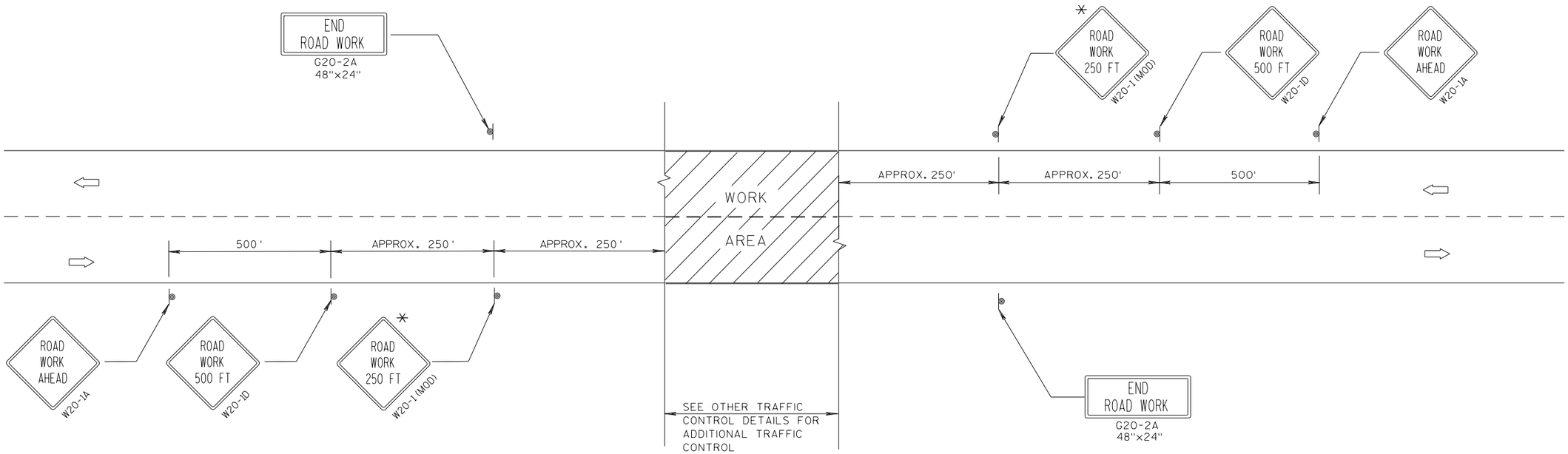
S.D.D. 15 C 4-5

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



GENERAL NOTES

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

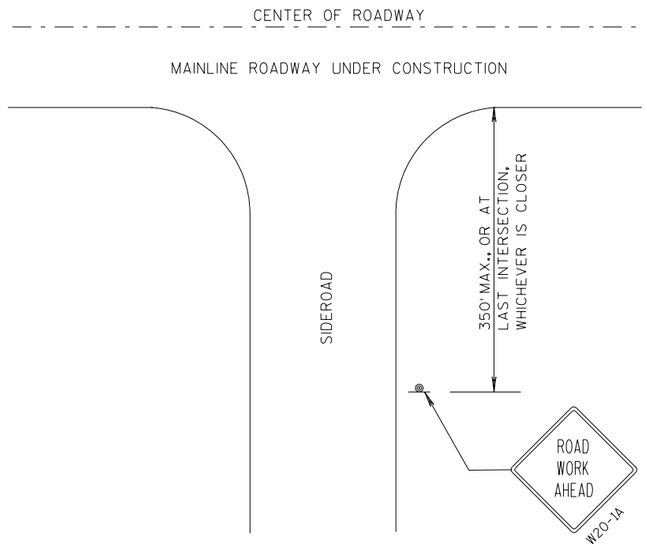
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

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WORK ZONE ENGI

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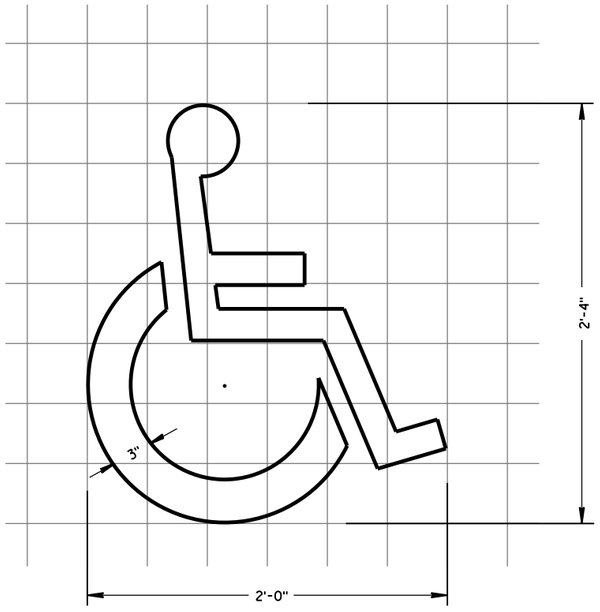
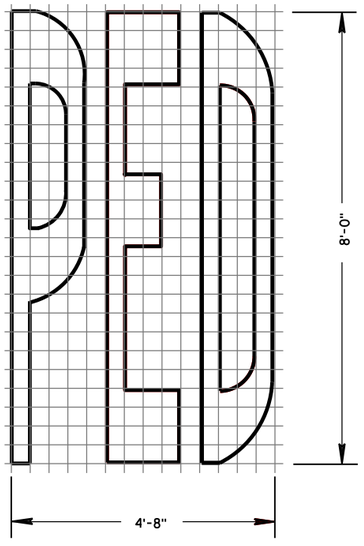
S.D.D. 15 C 5-5

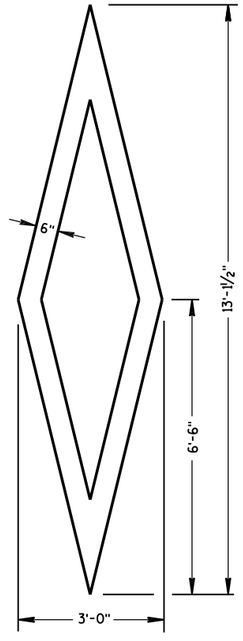
GENERAL NOTES

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



HANDICAP SYMBOL





PREFERENTIAL LANE SYMBOL

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S.D.D. 15 C 7-14a

S.D.D. 15 C 7-14a

PAVEMENT MARKING SYMBOLS

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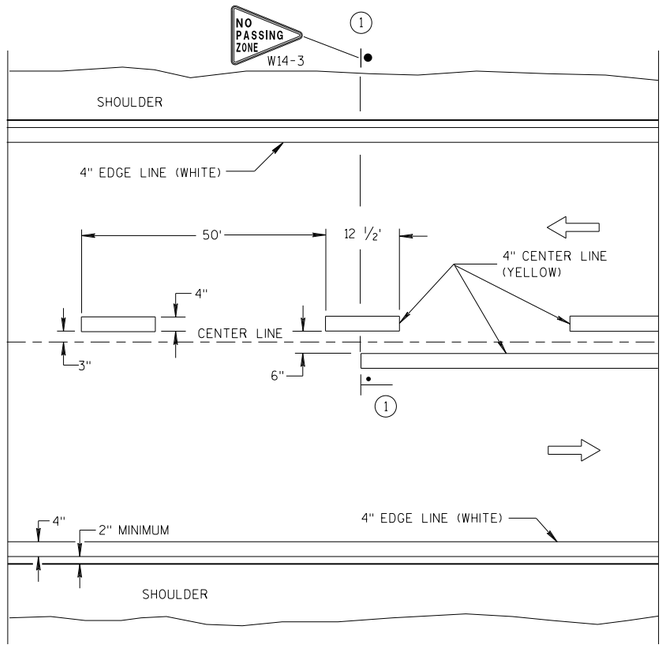
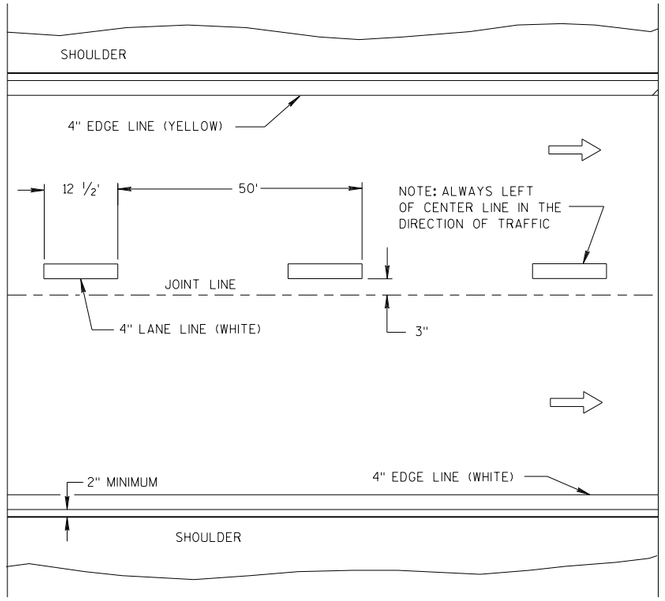


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

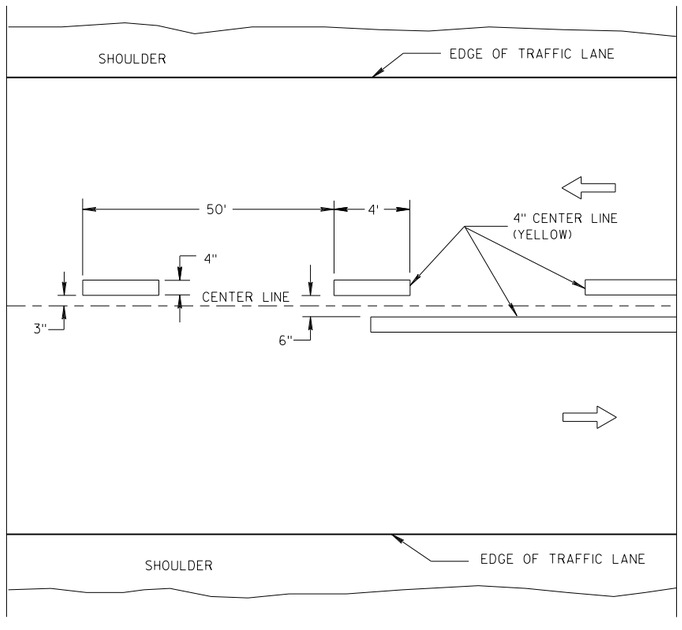
GENERAL NOTES

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

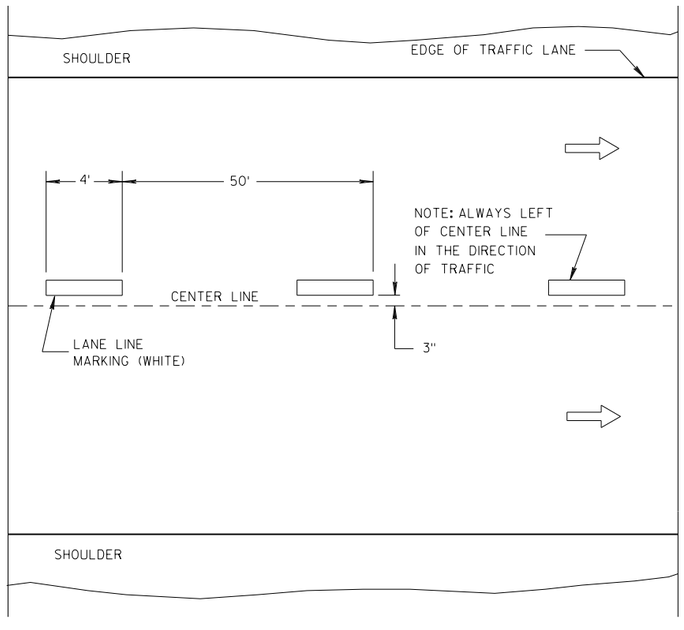
(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LEGEND

"T" MARKING

POST MOUNTED SIGN

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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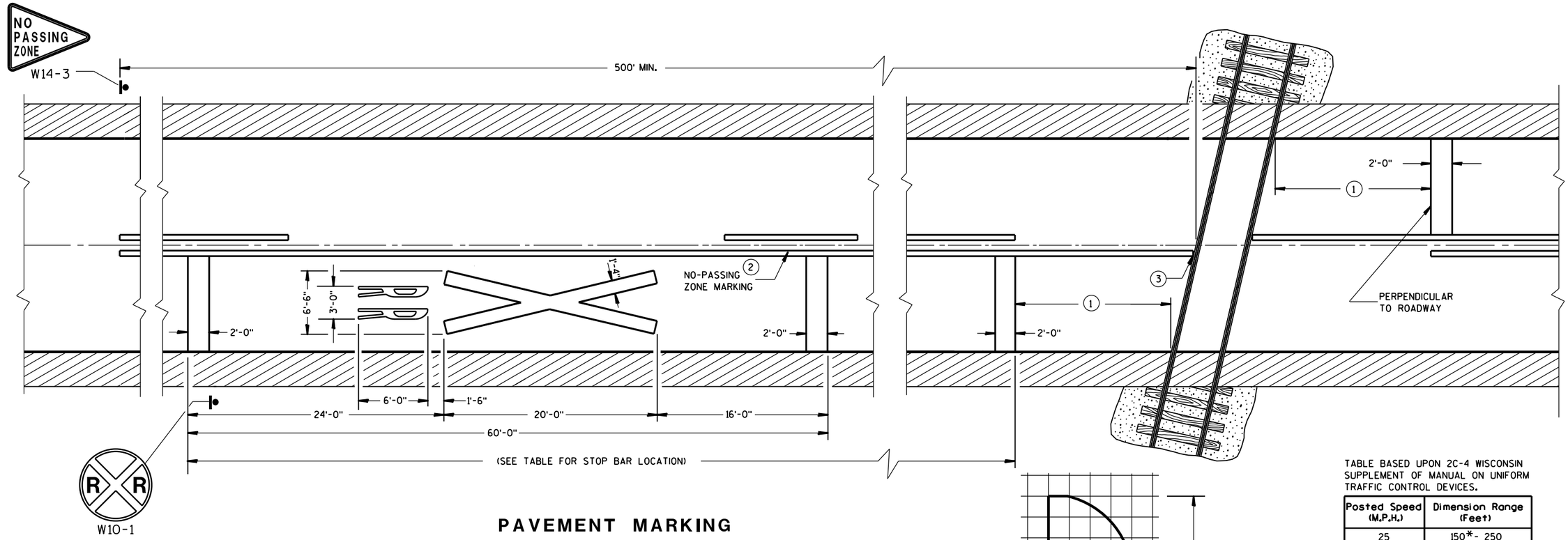
S.D.D. 15 C 8-19a



PAVEMENT MARKING

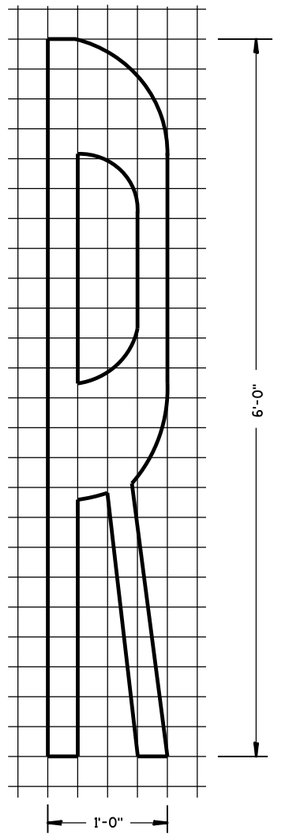


TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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Sept., 2017 — DATE

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S.D.D. 15 C 9-11a

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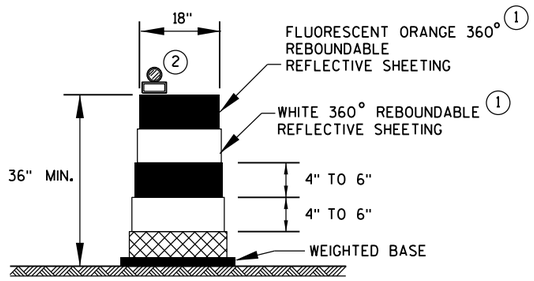
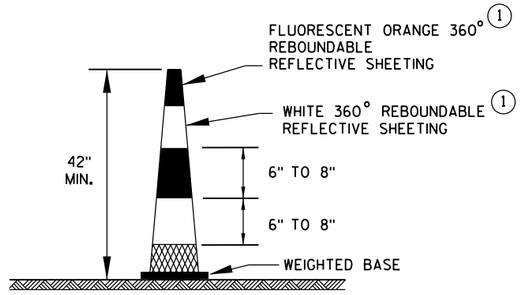
S.D.D. 15 C 9-11a



DRUM

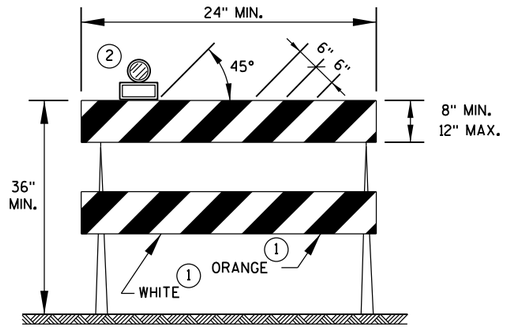


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

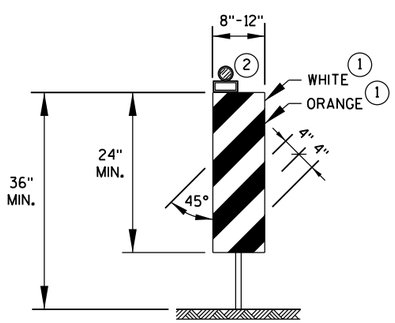
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



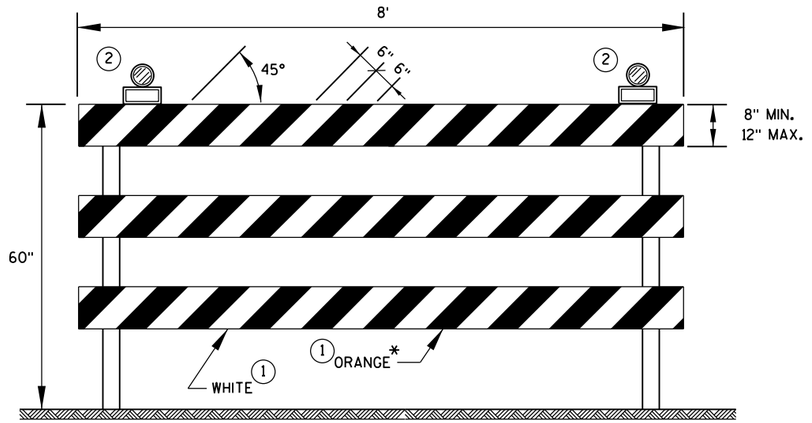
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
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June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENG
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S.D.D. 15 C 11-7b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

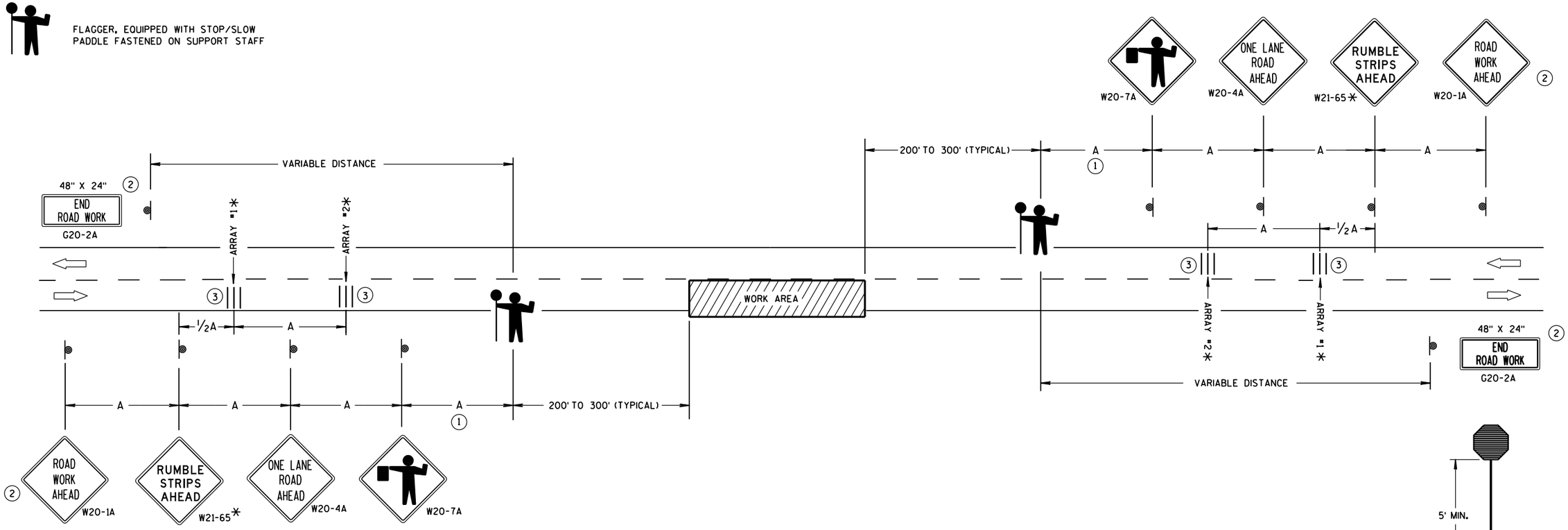
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

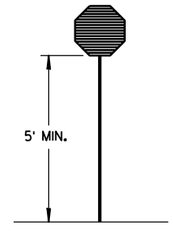
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

W03-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.





STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

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

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

(1) FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(3) EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June 2017 — DATE
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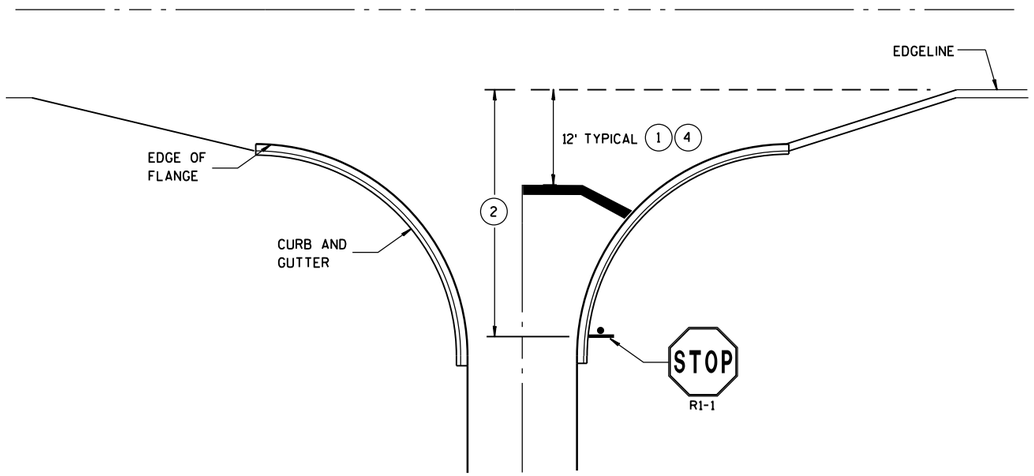
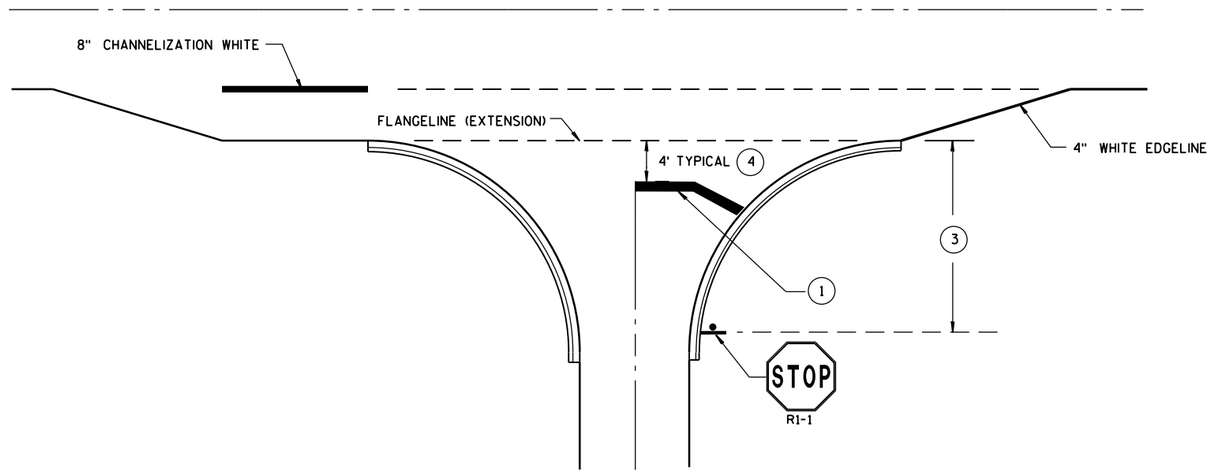
S.D.D. 15 C 12-6

6

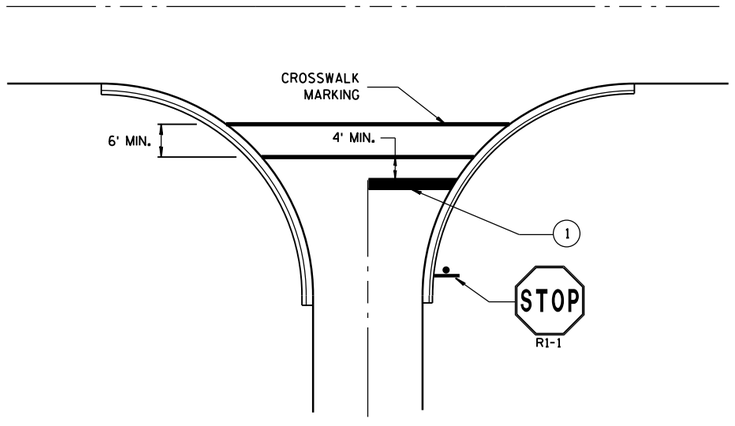
S.D.D. 15 C 12-6



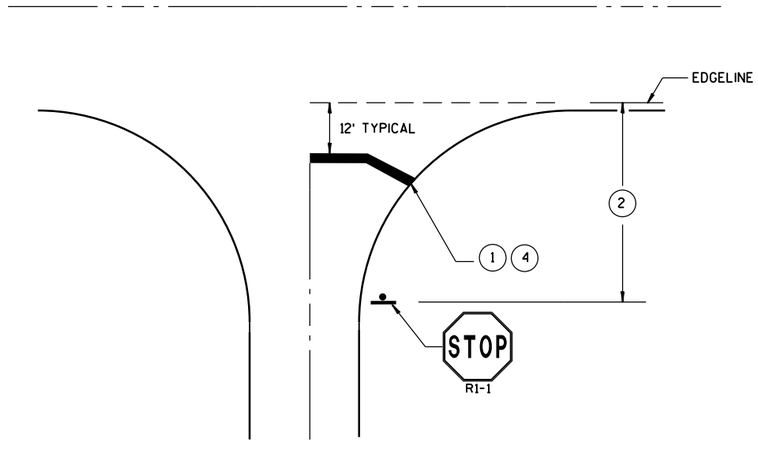
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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
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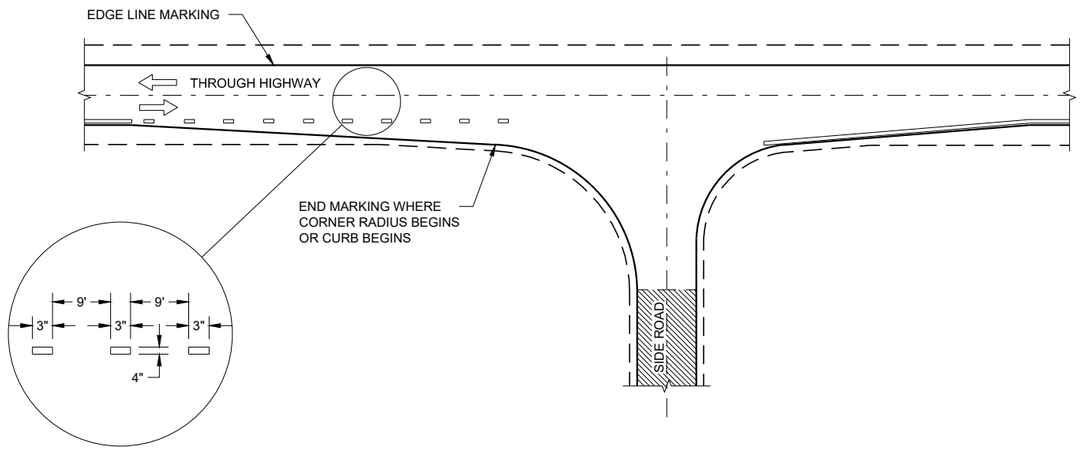
S.D.D. 15 C 33-3



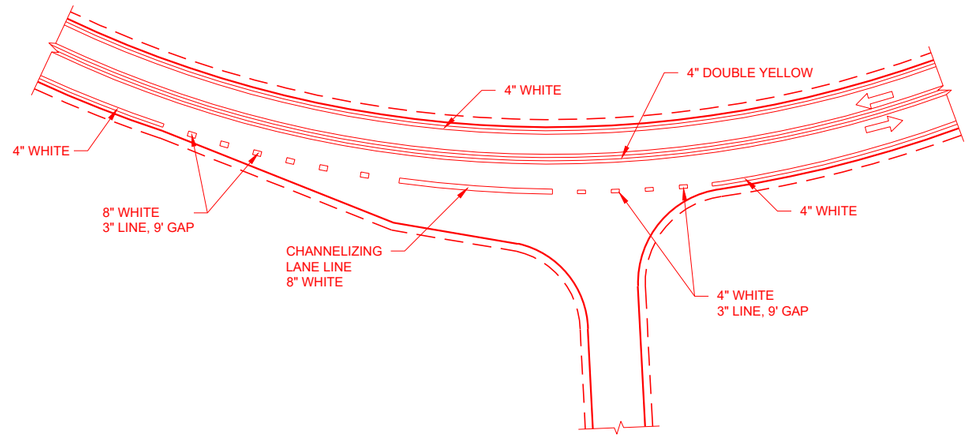
MINOR INTERSECTION

GENERAL NOTES

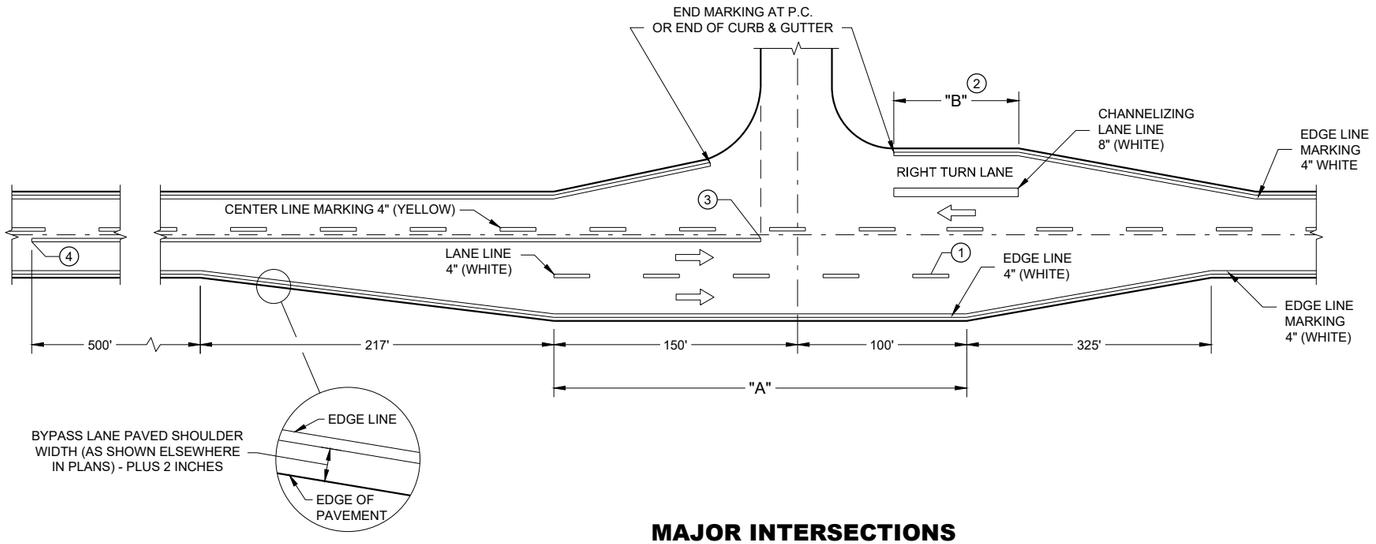
OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

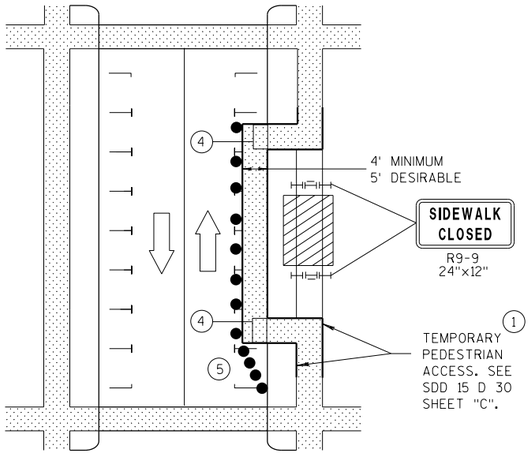


MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

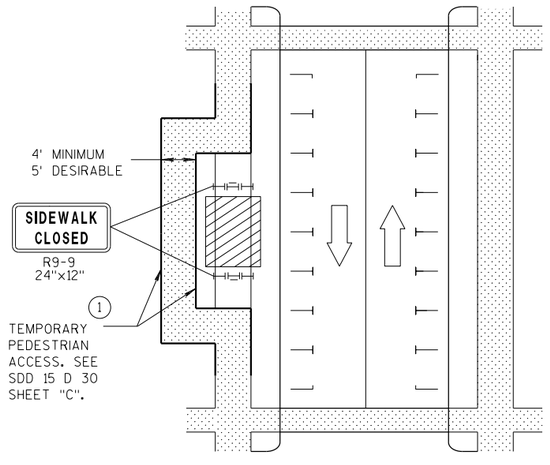
PAVEMENT MARKING (INTERSECTIONS)

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

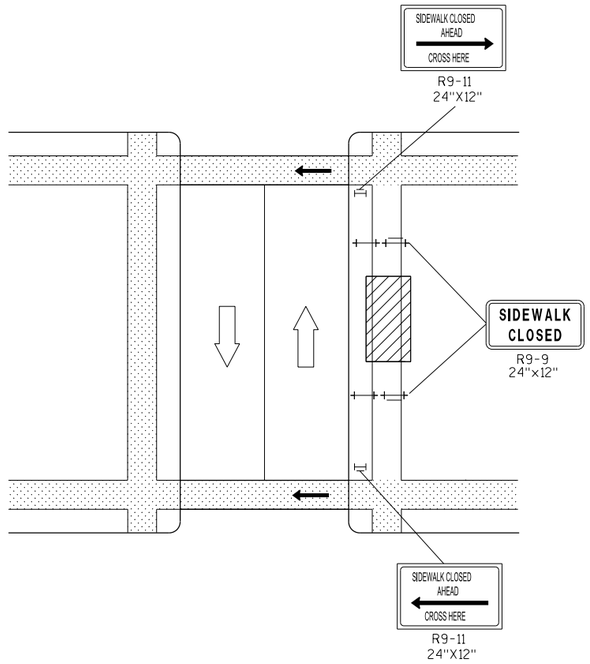


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

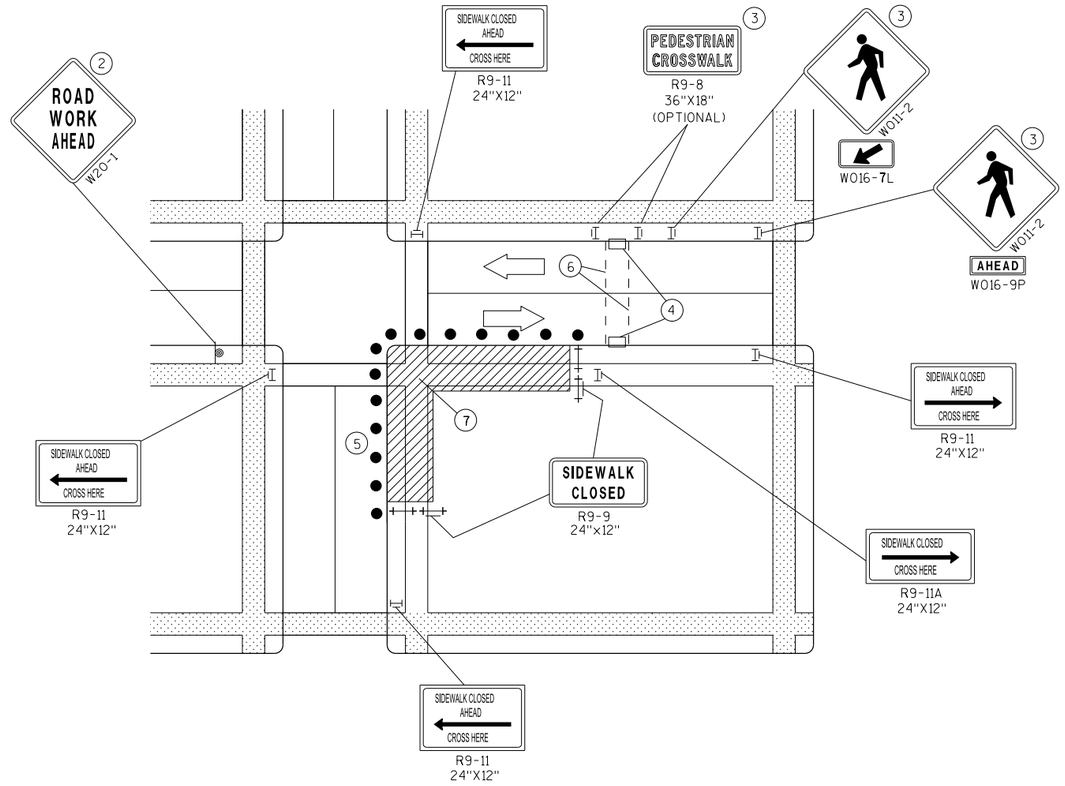
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

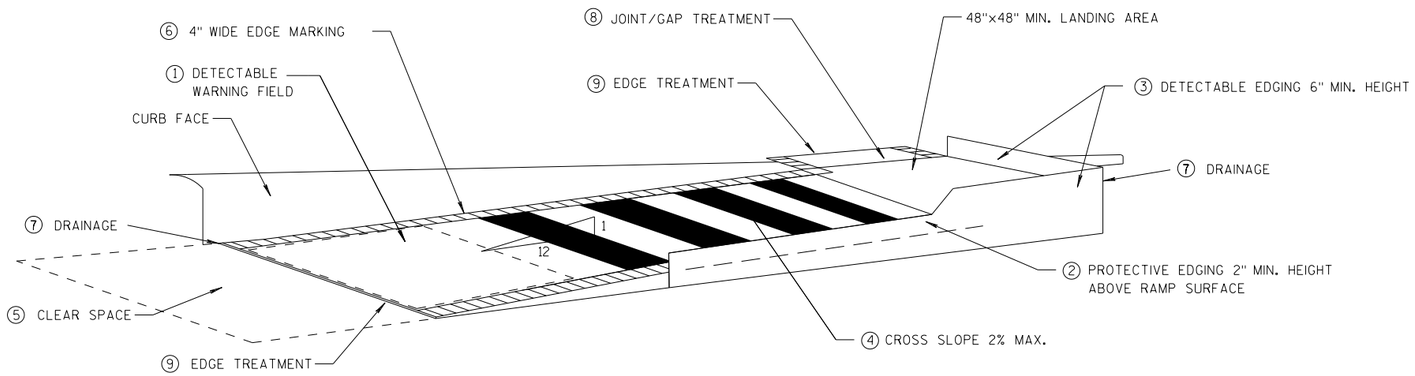
LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

S.D.D. 15 D 30-4a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

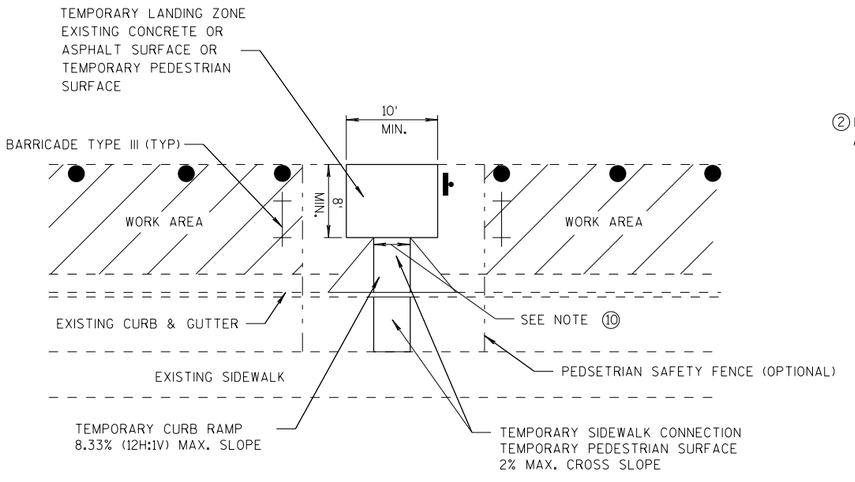
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

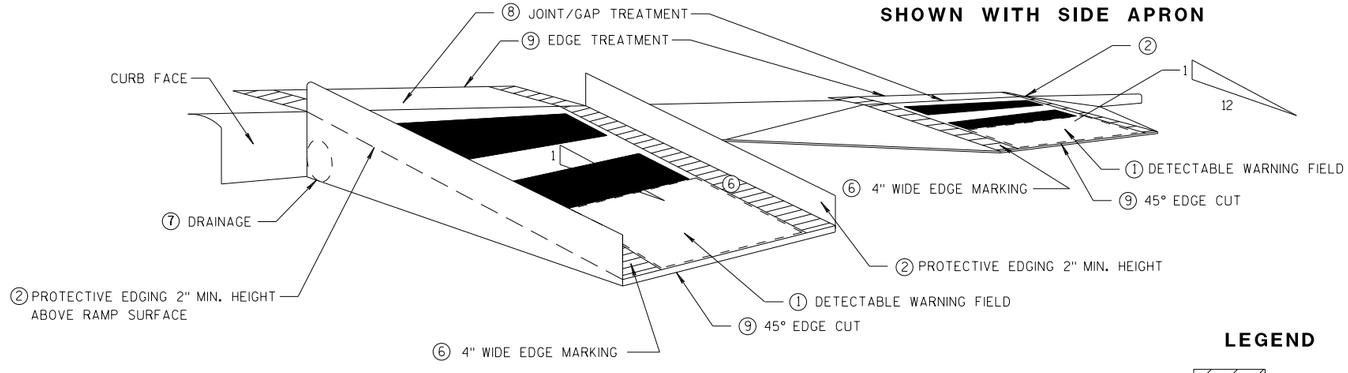
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH SIDE APRON

SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Andrew Heidtke
WORK ZONE ENG

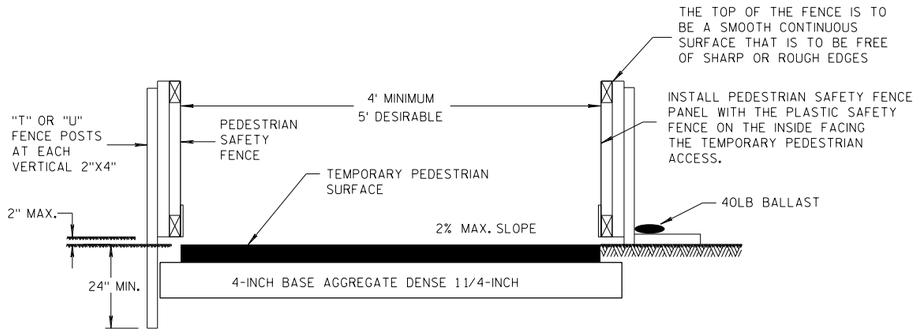
FHWA

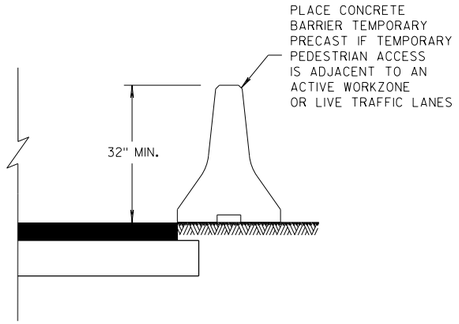
6

S.D.D. 15 D 30-4b

6

S.D.D. 15 D 30-4b

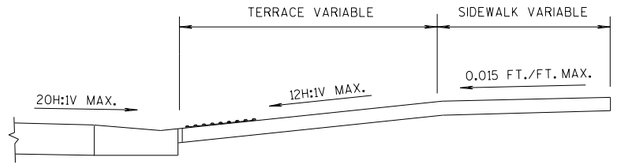




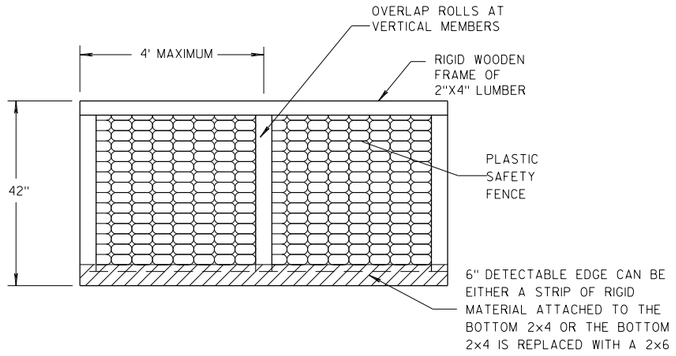
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

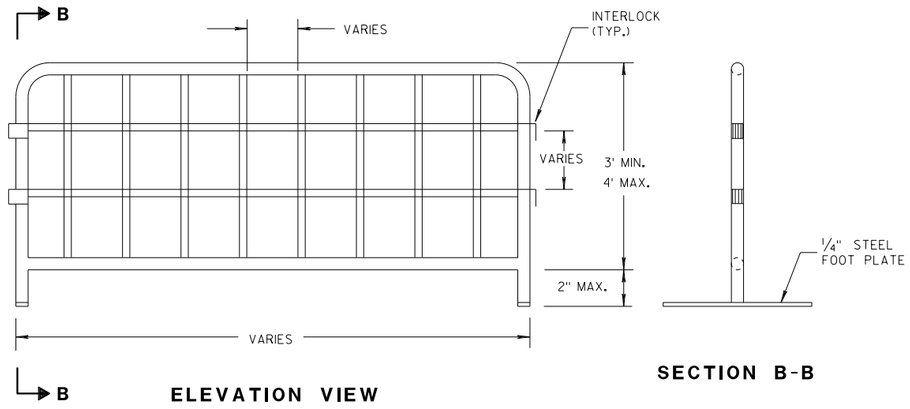
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



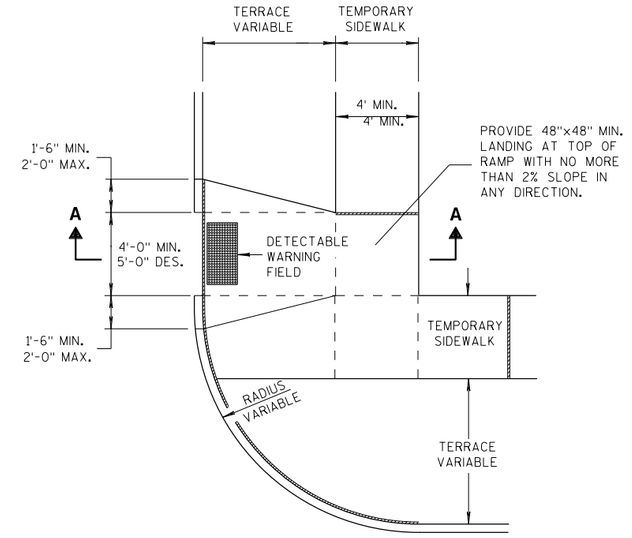
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

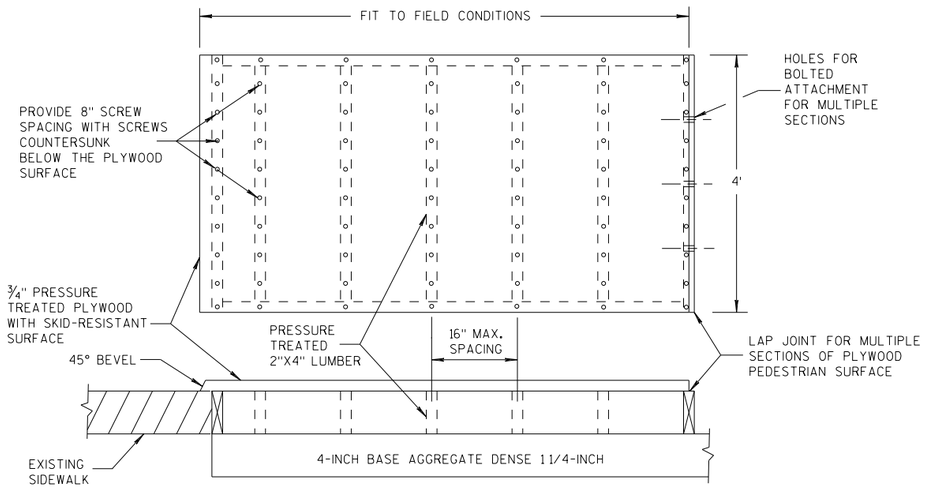
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



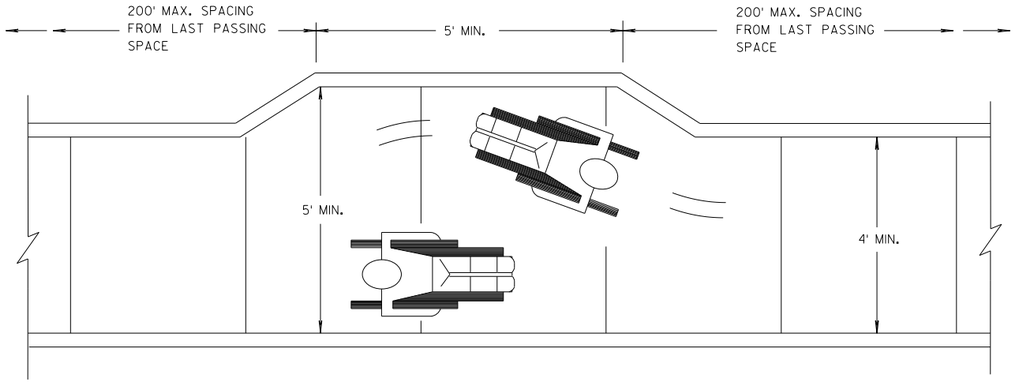
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

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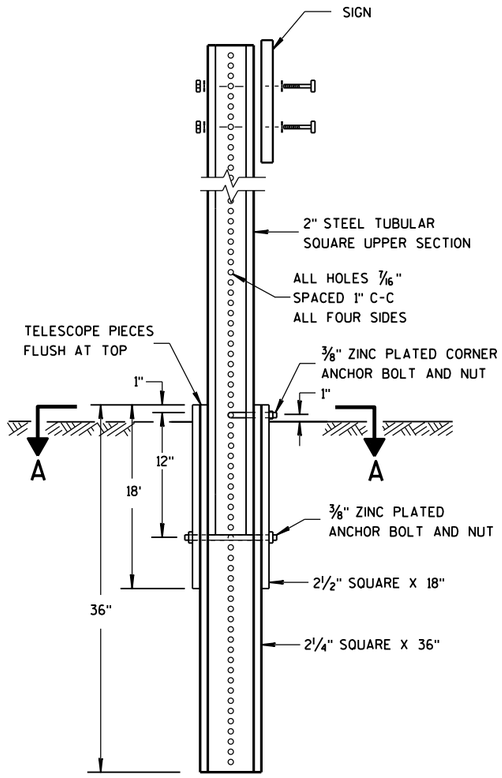
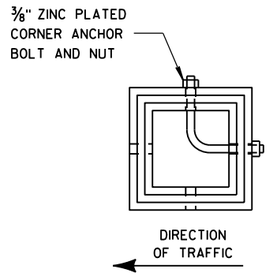
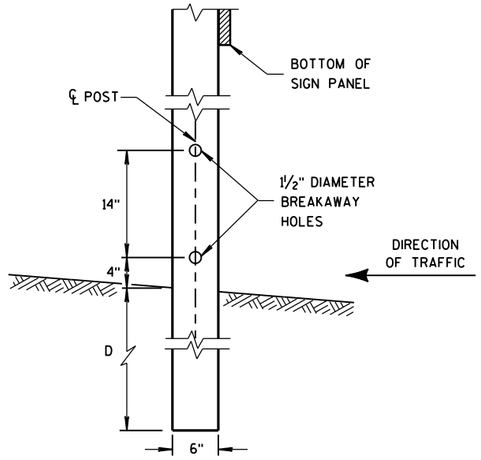
S.D.D. 15 D 30-4c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



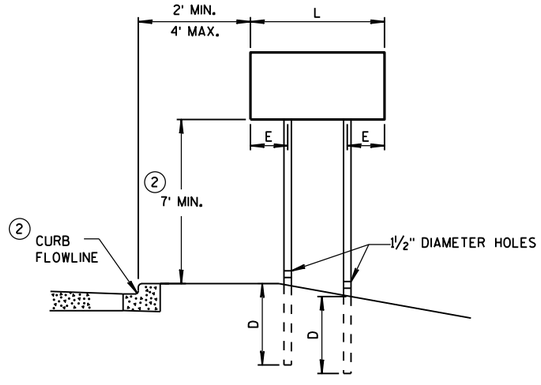
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

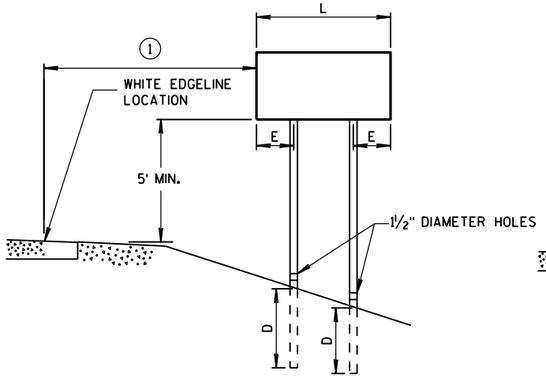
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

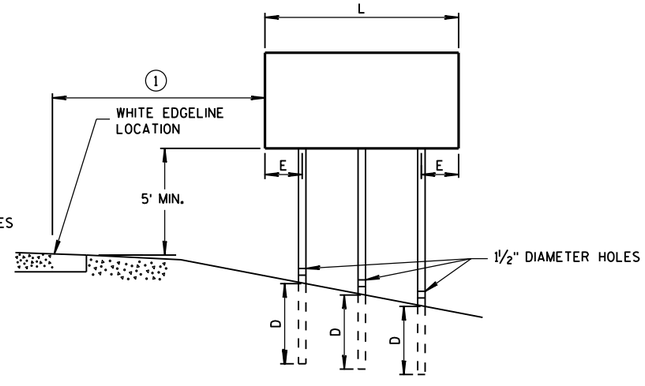
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

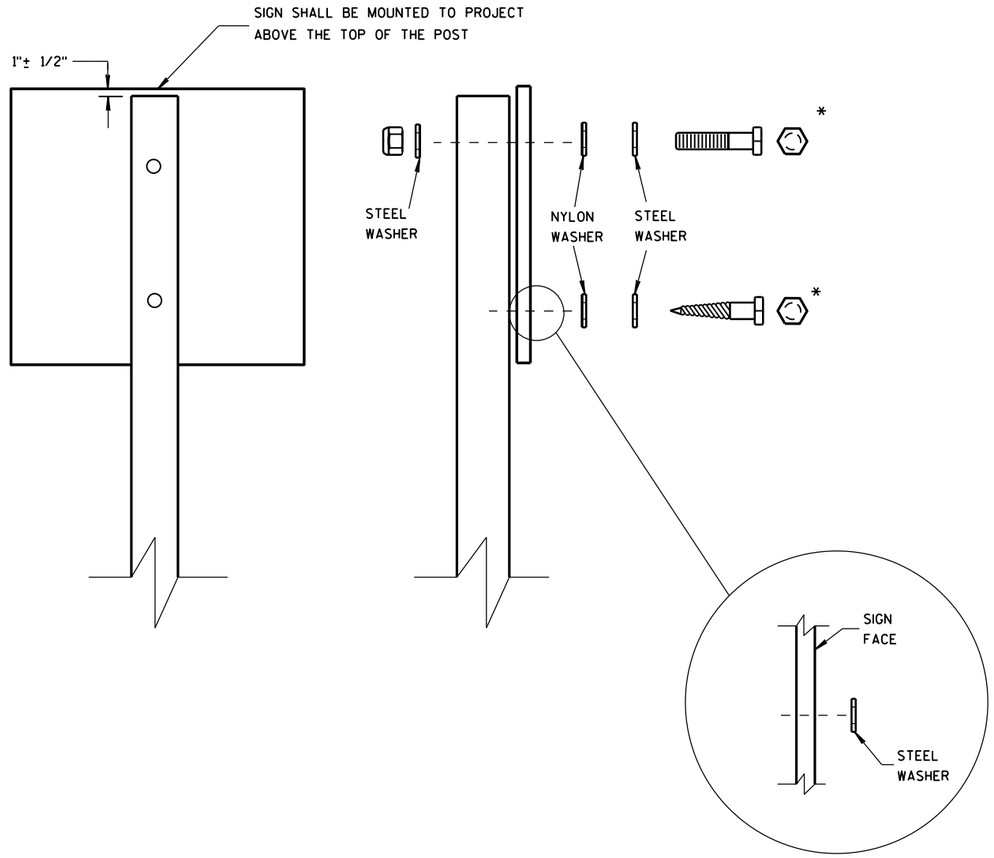
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

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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

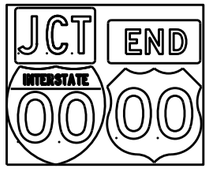
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

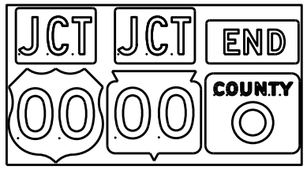
FHWA

TYPICAL ASSEMBLIES

J1-1

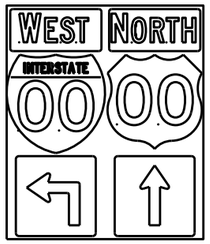


J1-2

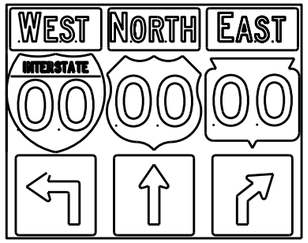


J1-3

J2-1



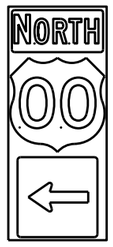
J2-2



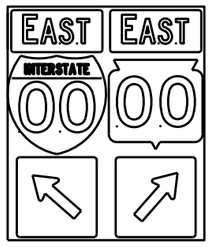
J2-3

JV

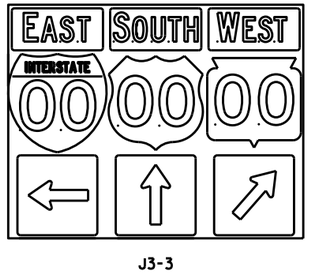
(Typical Vertical J-Assembly
See Note 10 and 11)



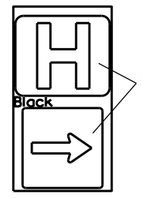
J3-1



J3-2



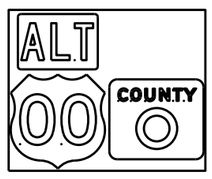
J3-3



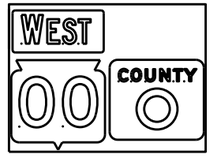
Blue Background

JH-1

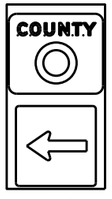
J4-1



J4-2



J4-2



J13-1

J12-1

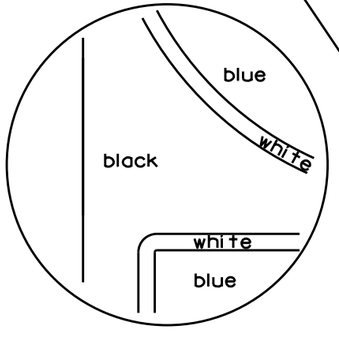
J32-1

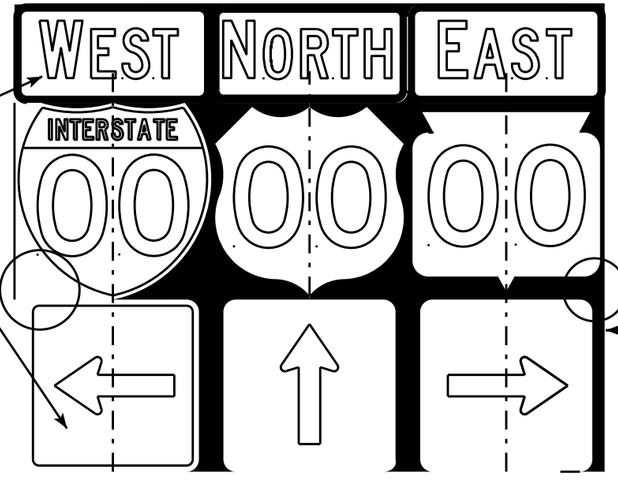
J33-1

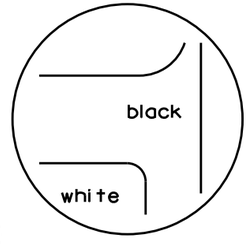
J23-1

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

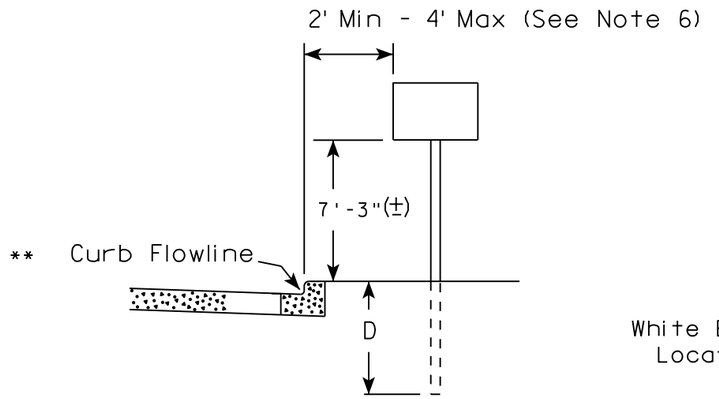
APPROVED Matthew R Rauch
for State Traffic Engineer

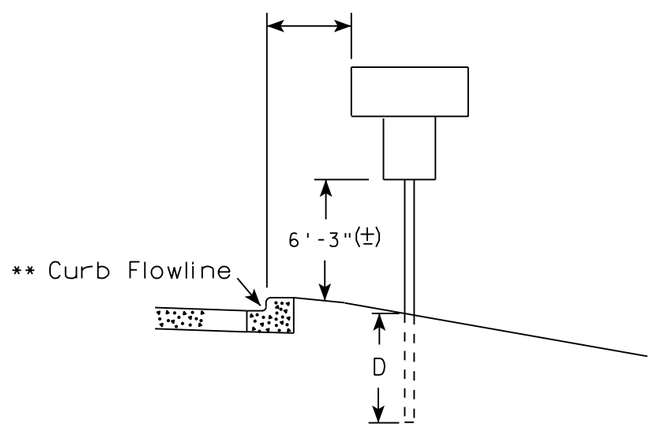
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: SHEET NO: E

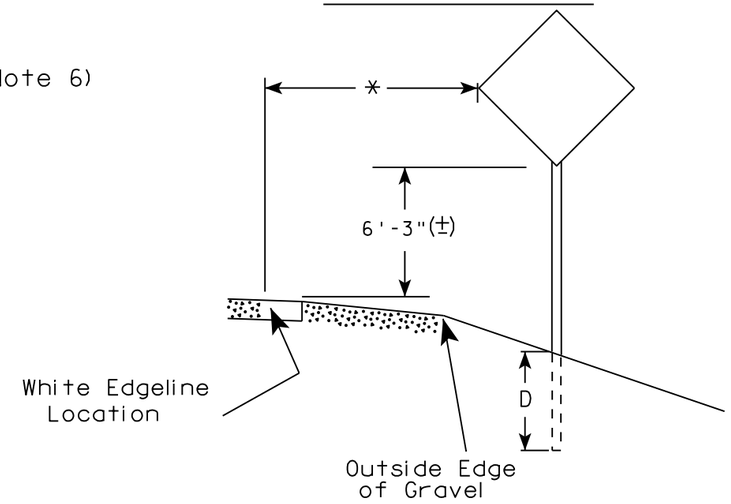
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

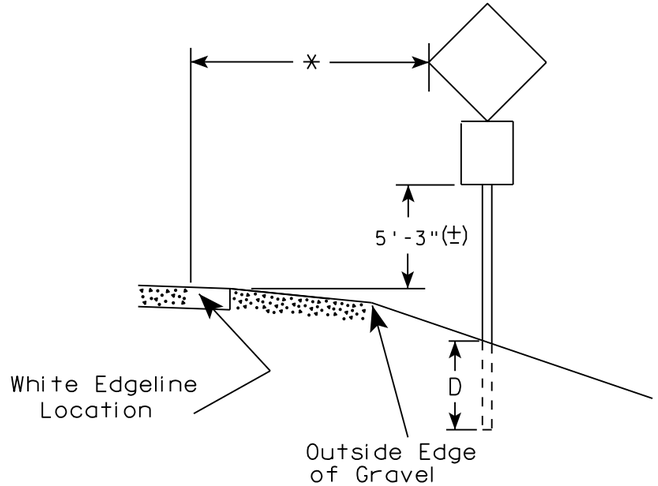
URBAN AREA





RURAL AREA (See Note 2)





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" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

** 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.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

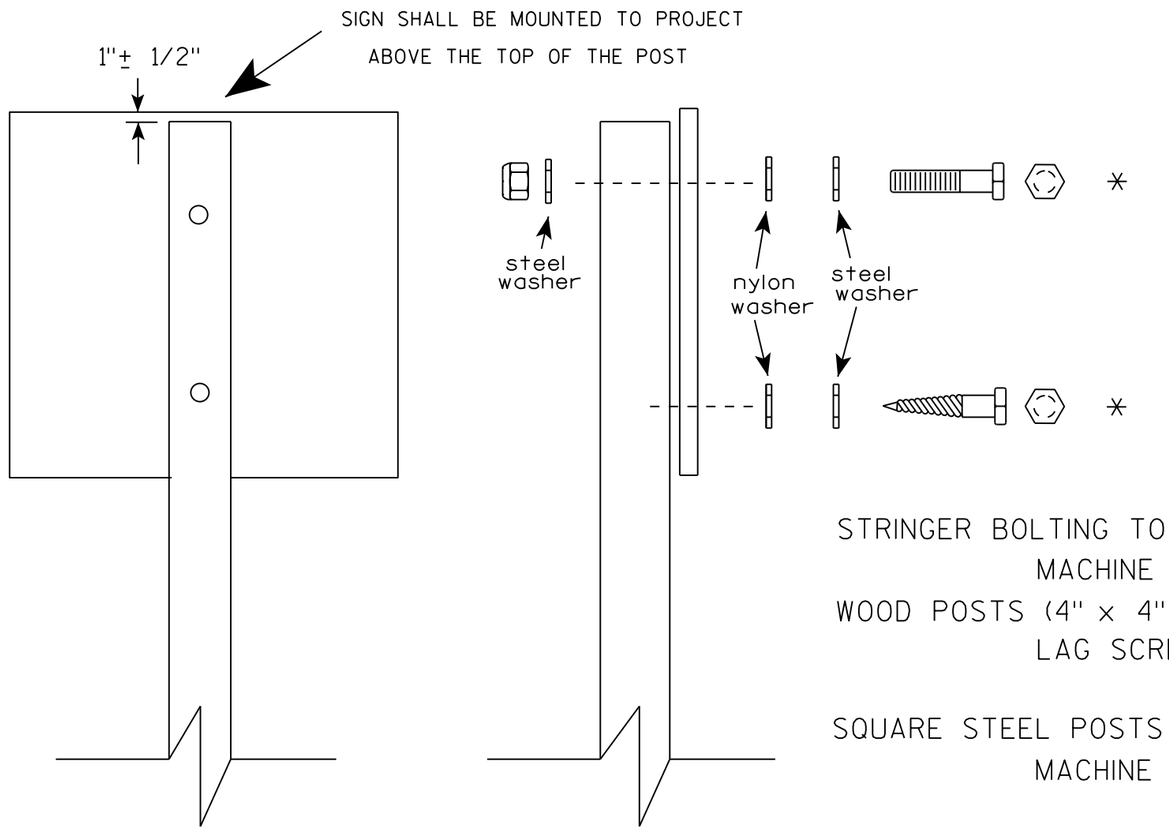
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-3.21

7

7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 121	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 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

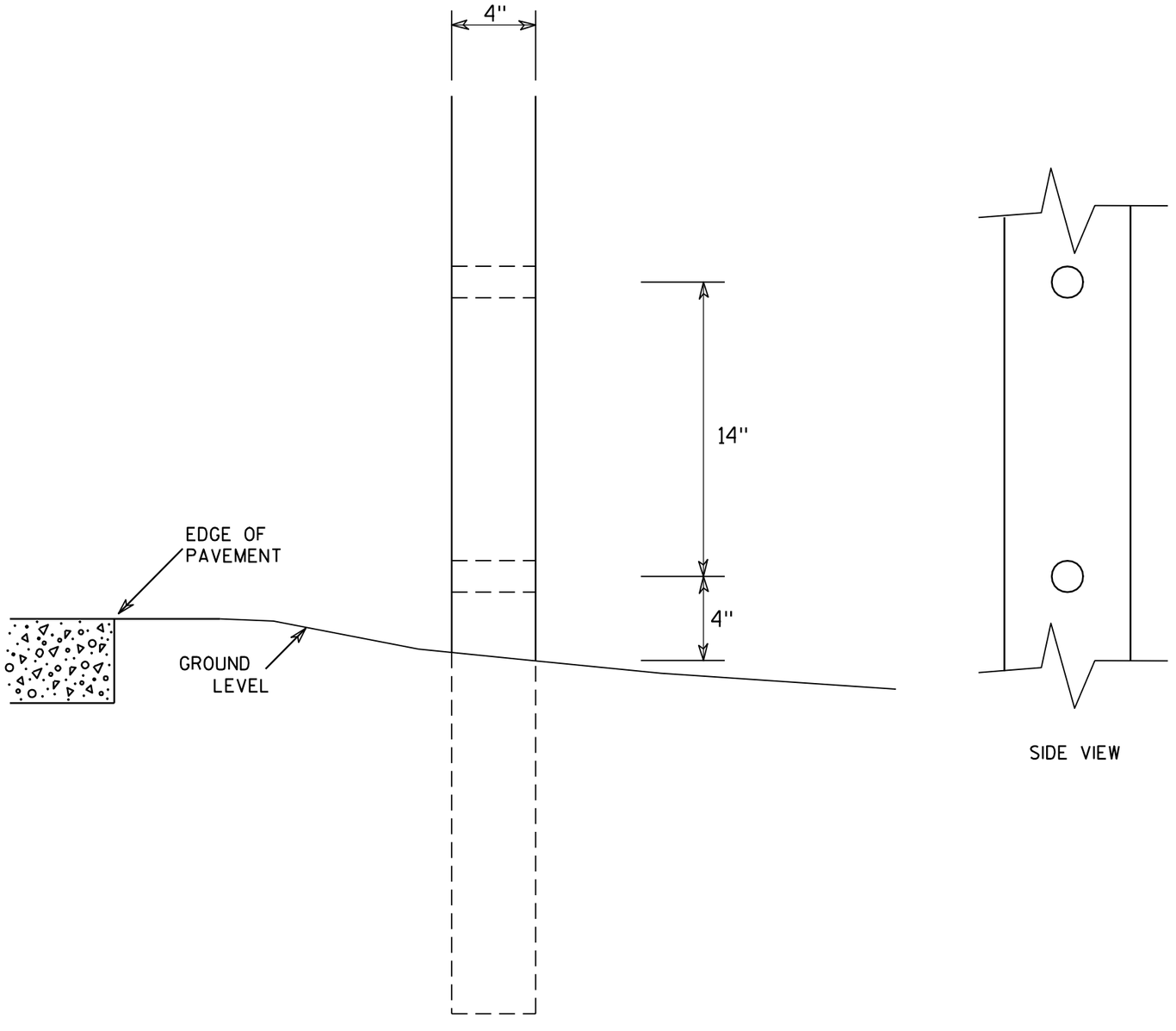
WISCONSIN DEPT OF TRANSPORTATION

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:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$



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

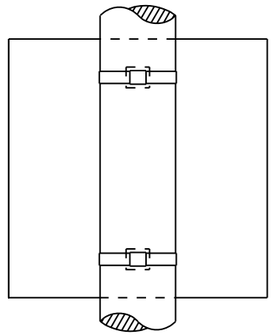
APPROVED Chester J Spang
for State Traffic Engineer

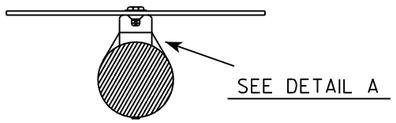
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 123	E

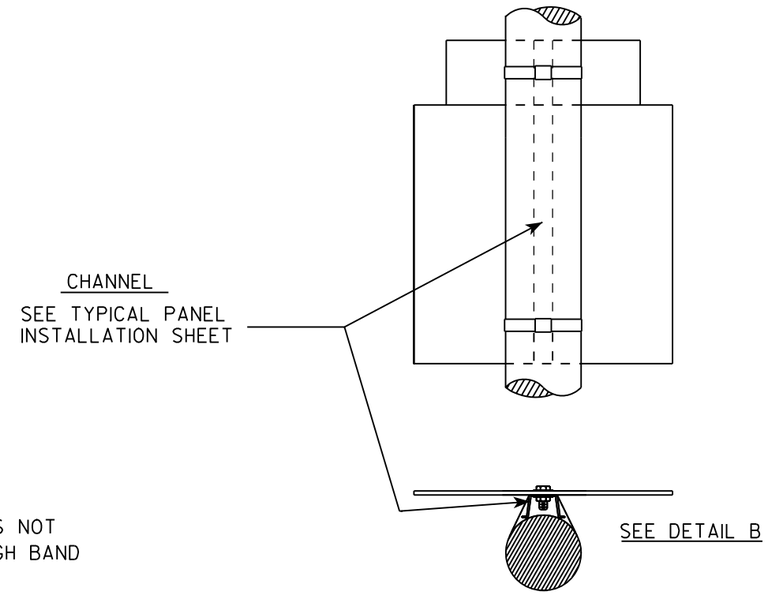
BANDING

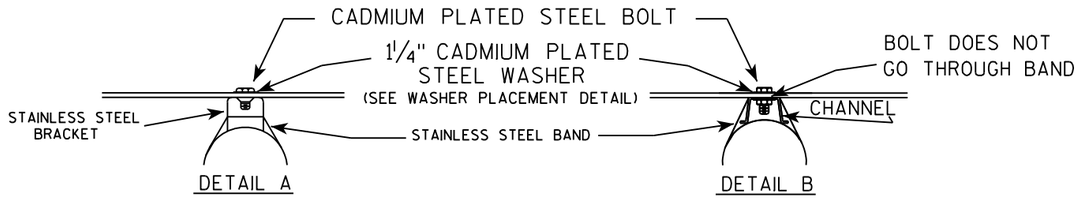
SINGLE SIGN



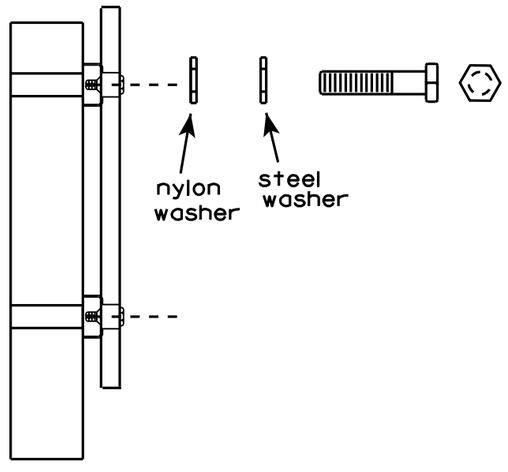


"J" ASSEMBLY





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.

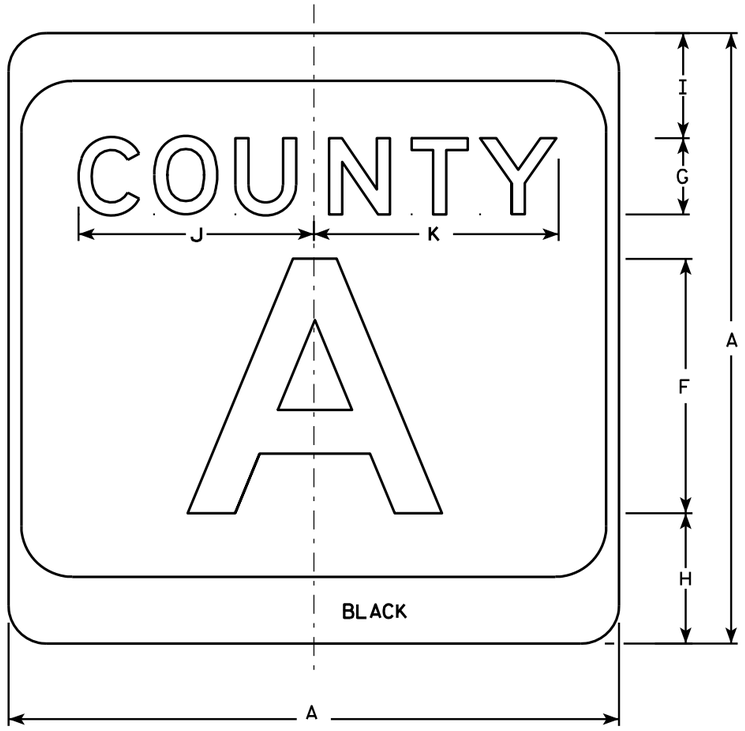
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

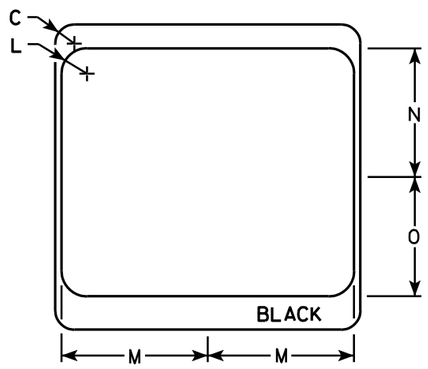
APPROVED Matthew R Rauch
for State Traffic Engineer

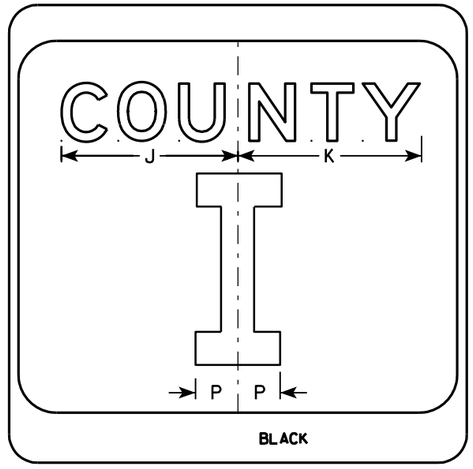
DATE 8/16/13 PLATE NO. A5-9.3

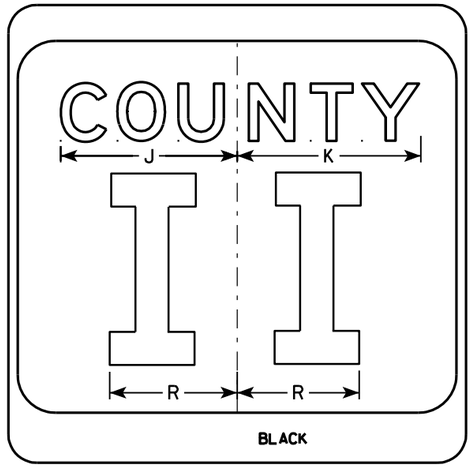
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 124	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

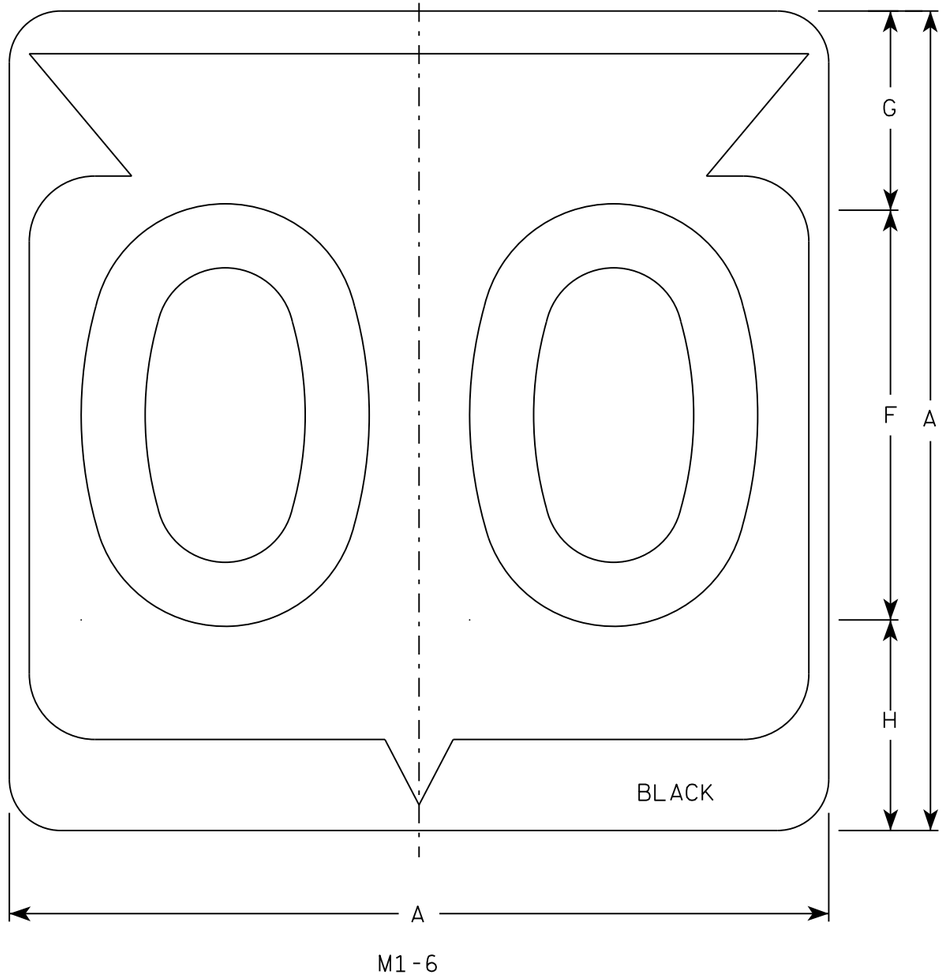
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

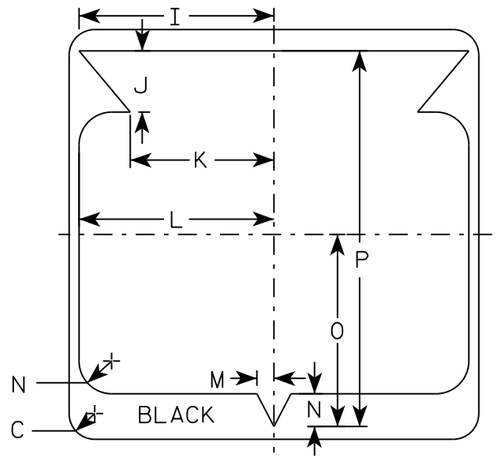
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 125	E



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

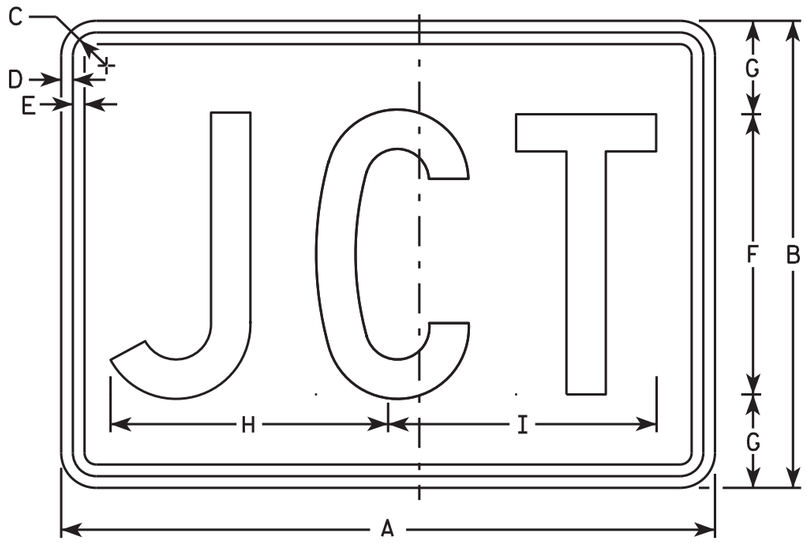
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

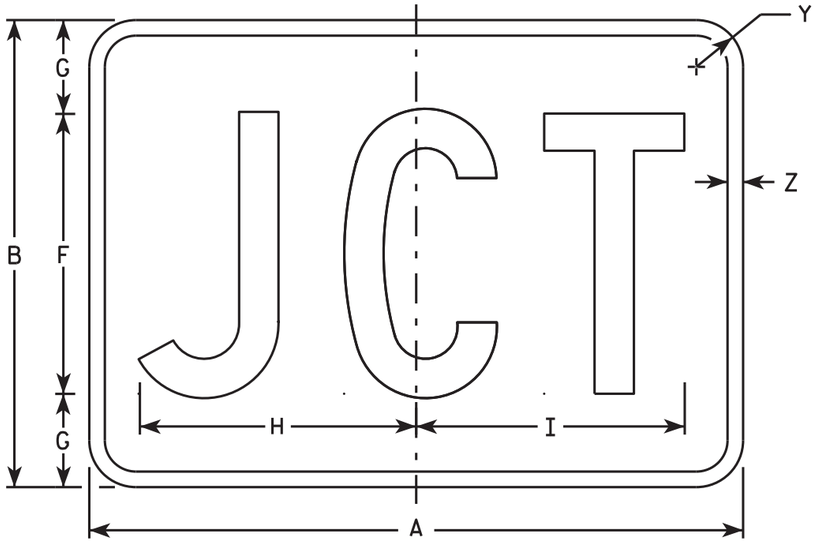
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 126 | 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

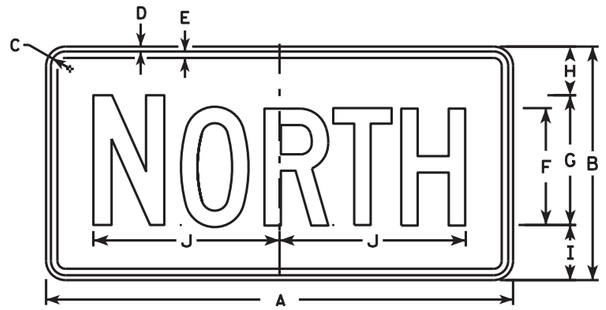
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

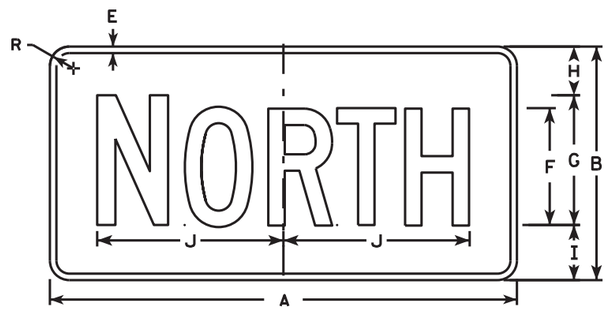
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M2-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



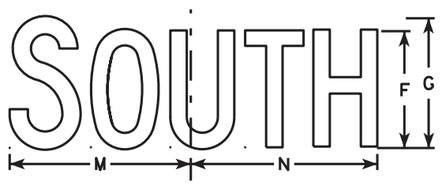
M3-1
MM3-1
MP3-1



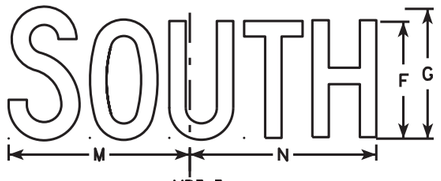
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

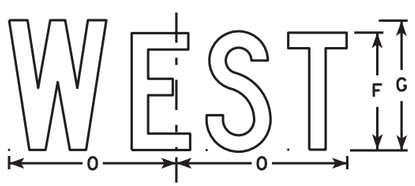
MB3-2
MK3-2
MN3-2



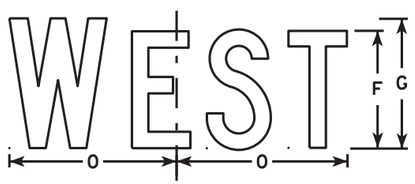
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

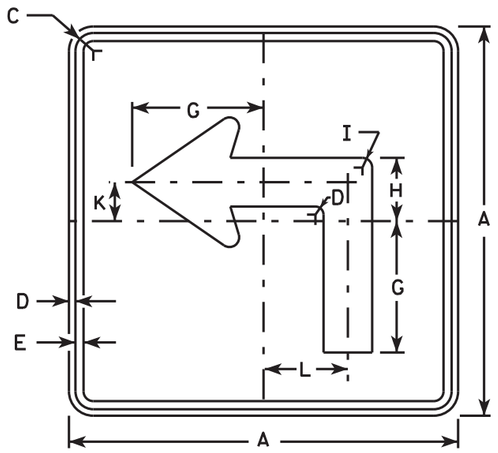
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

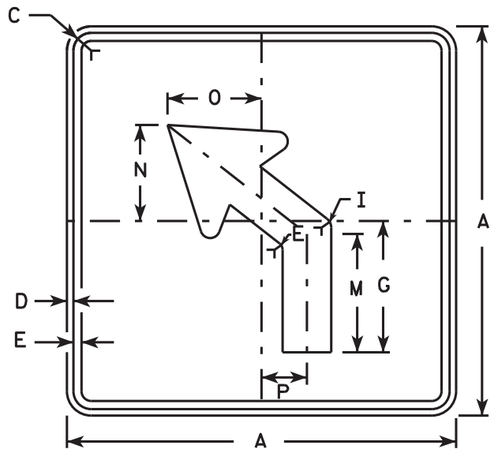
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

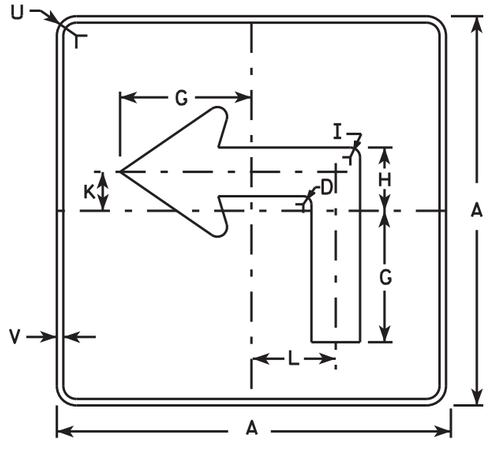
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



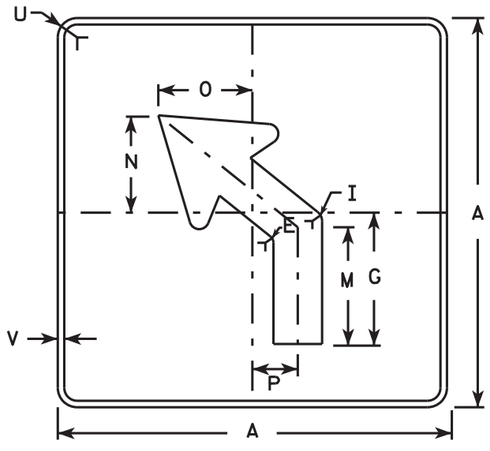
M5-1L
MM5-1L
MO5-1L
MP5-1L



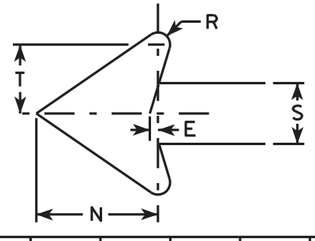
M5-2L
MM5-2L
MO5-2L
MP5-2L



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

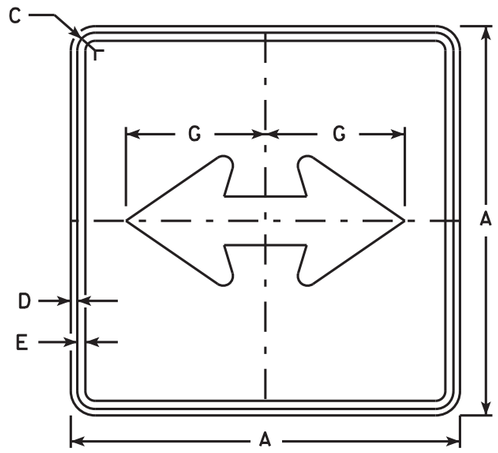
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

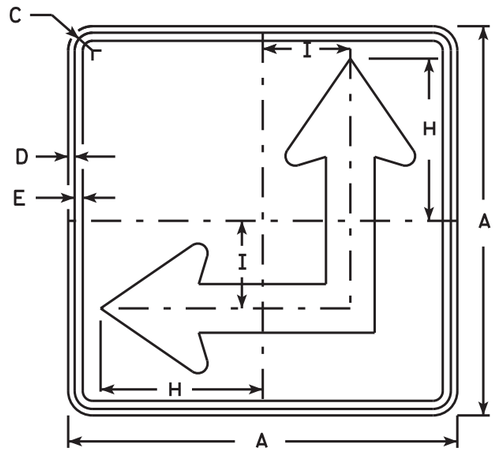
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

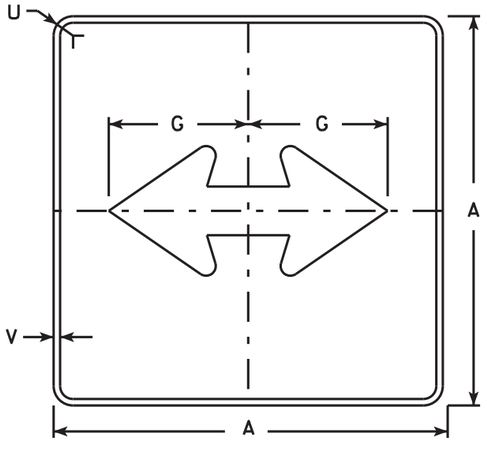
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



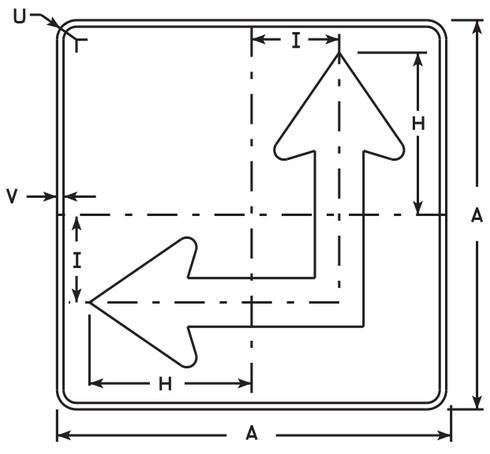
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



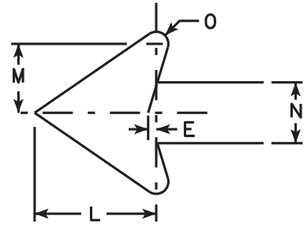
MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

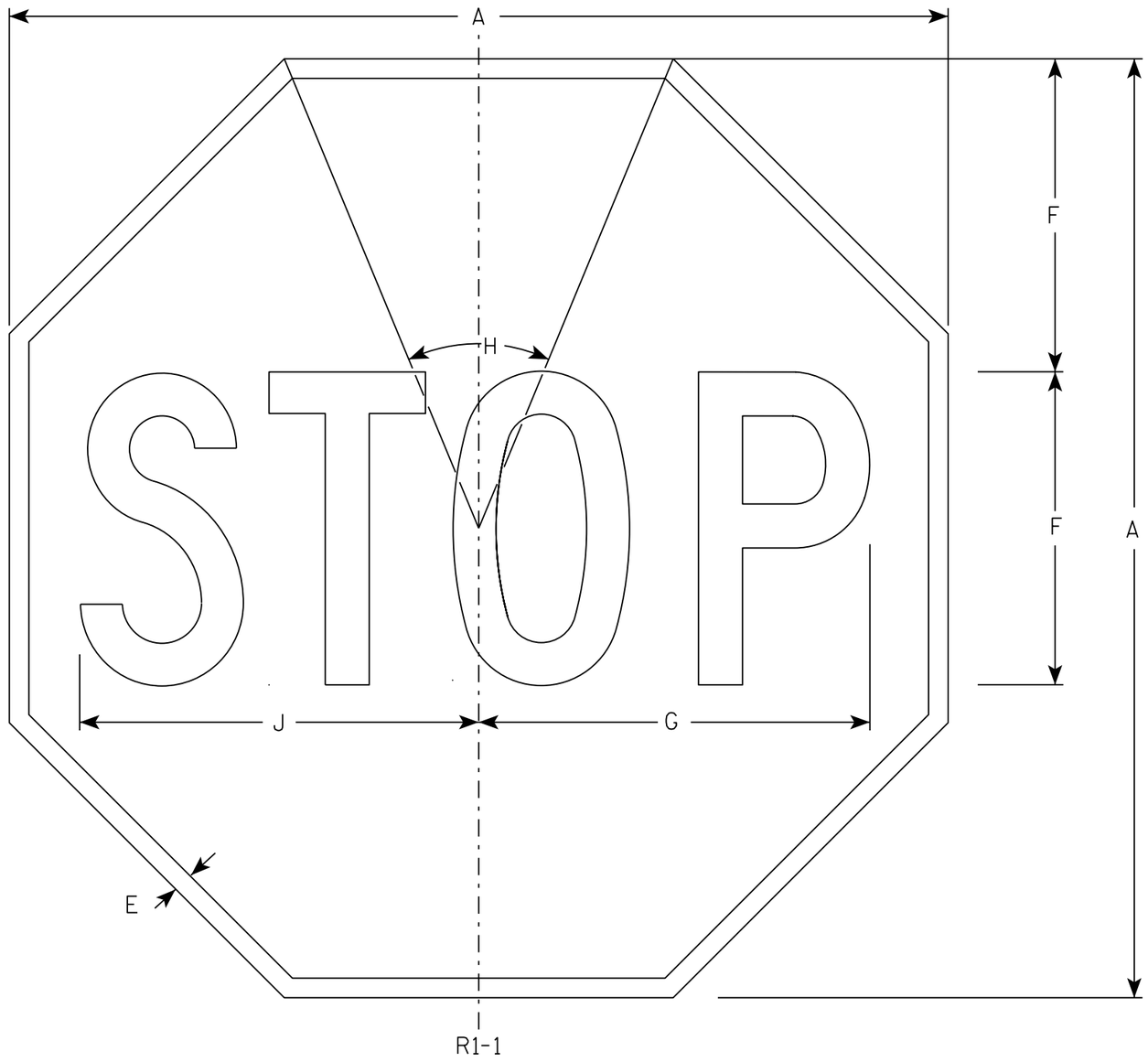
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-4.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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

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

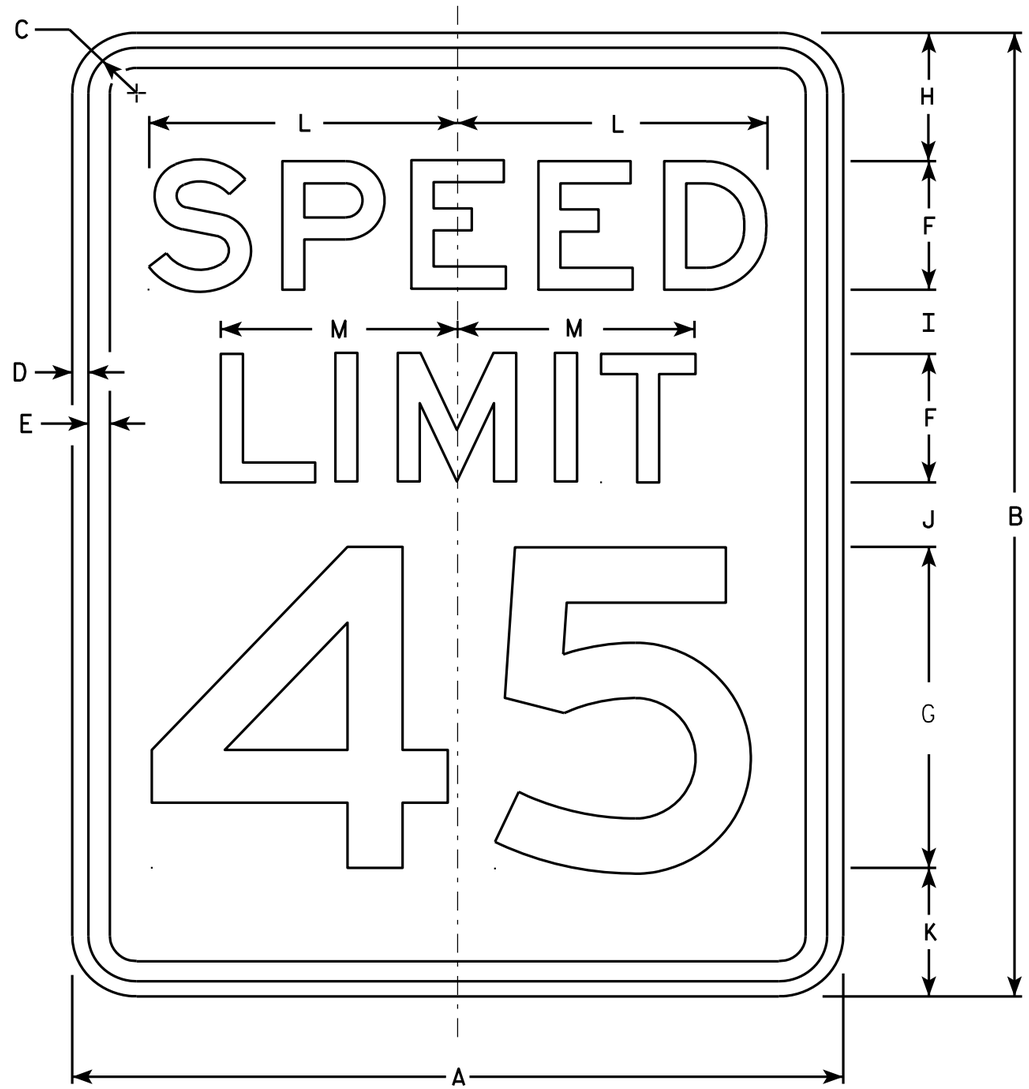
STANDARD SIGN
R1-1

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: 131	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

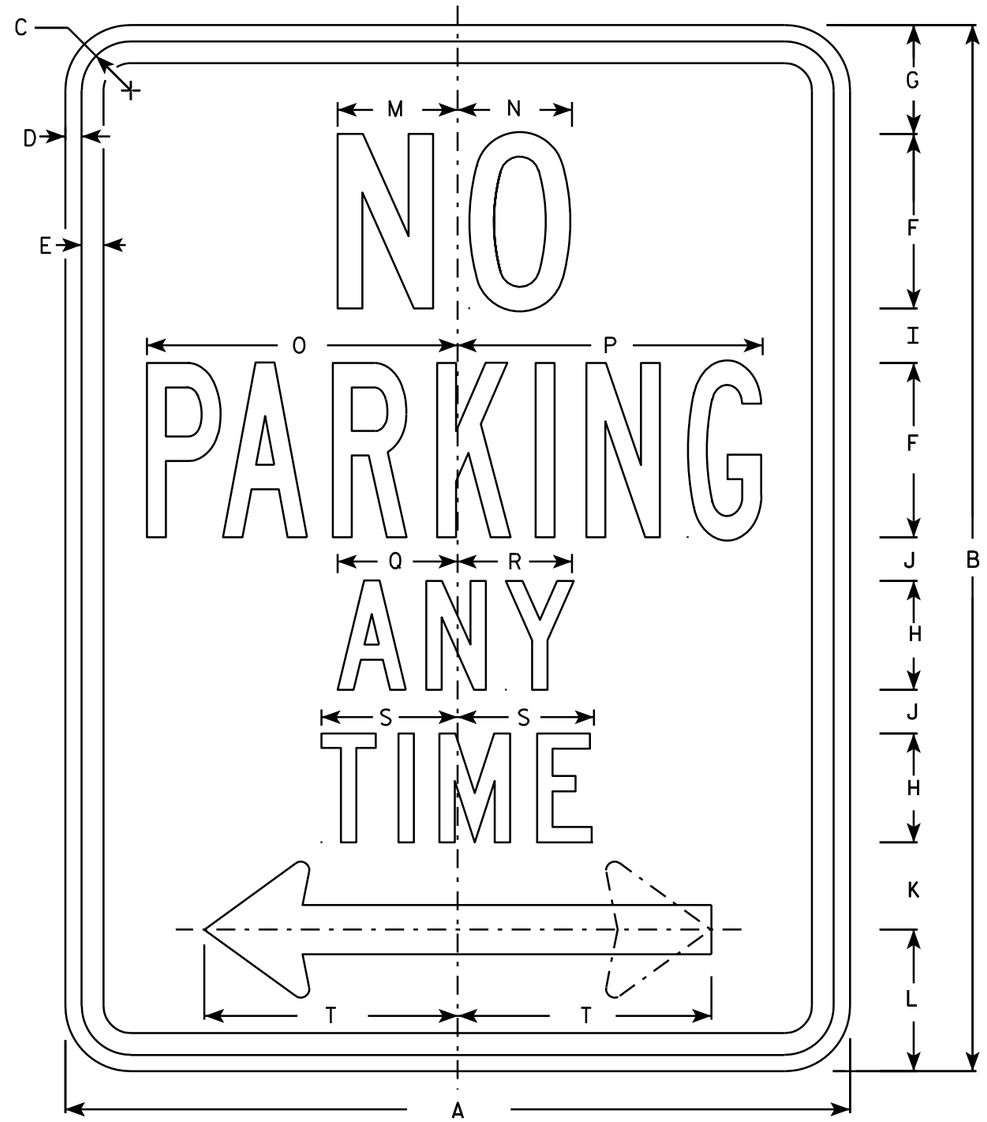
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 132 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

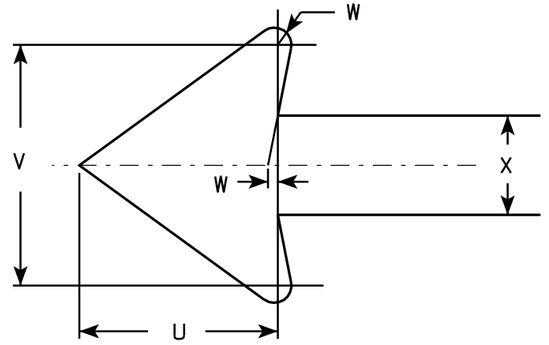
WISDOT/CADDS SHEET 42



R7-1

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 - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

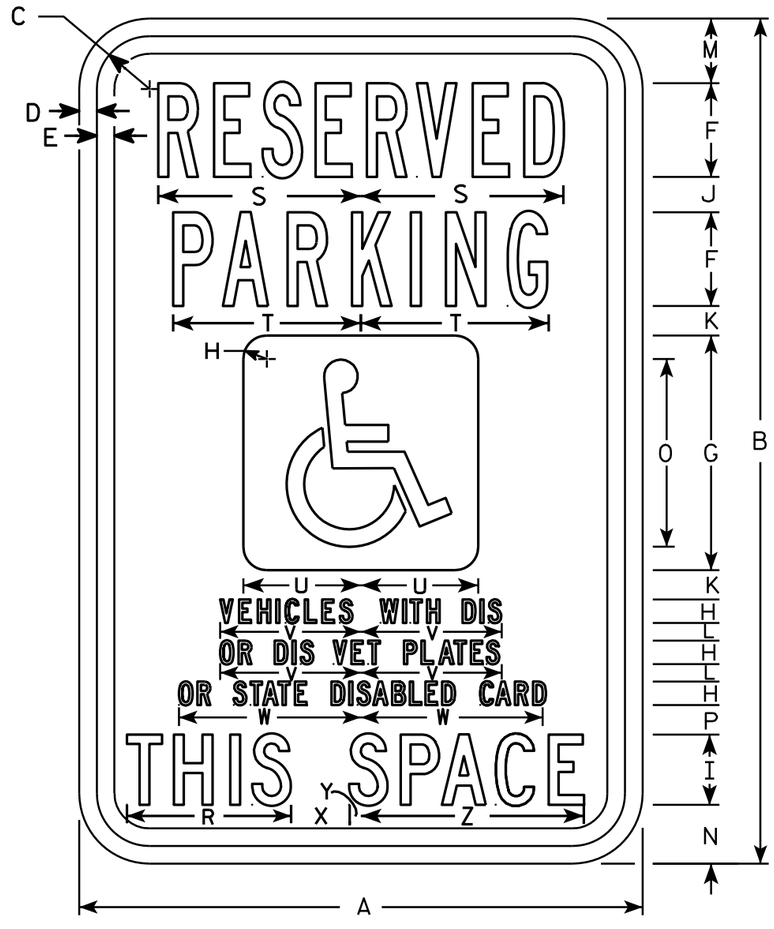
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 133	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

WISDOT/CADDS SHEET 42



R7-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are 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	12	18	1 1/8	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

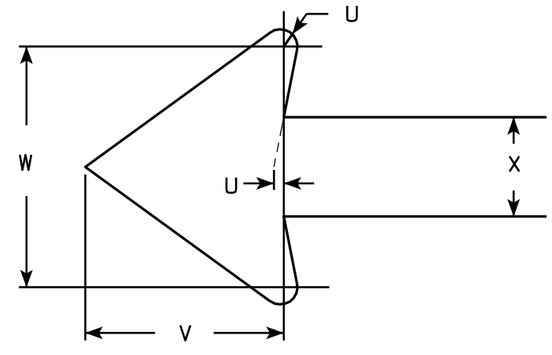
DATE 4/25/2011 PLATE NO. R7-8A.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 134 | E

R7-52

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 - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-52D (double arrow)
   R7-52L (left arrow)
   R7-52R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	1 1/2	7/8	7/8	2	2 1/2	2	2	4 7/8	4 7/8	5 1/8	5	3 1/8	3 7/8	1/8	1 1/2	1 3/4	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	6 3/8	6 1/4	3 7/8	5 7/8	1/4	2 1/4	2 5/8	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 5/8	7 5/8	4 3/4	7 3/4	1/4	3	3 1/2	1 1/2			5.0
4																											
5																											

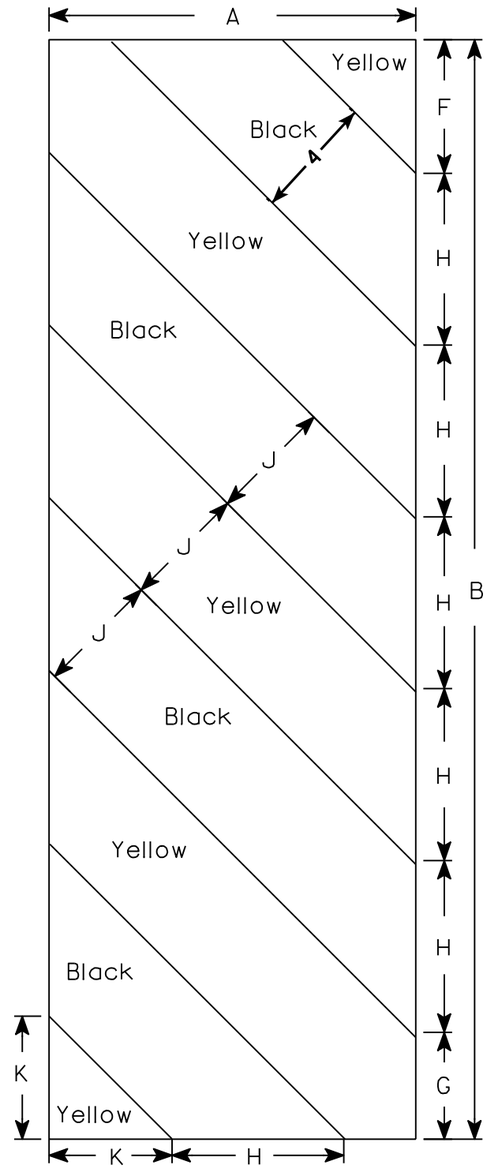
STANDARD SIGN
R7-52

WISCONSIN DEPT OF TRANSPORTATION

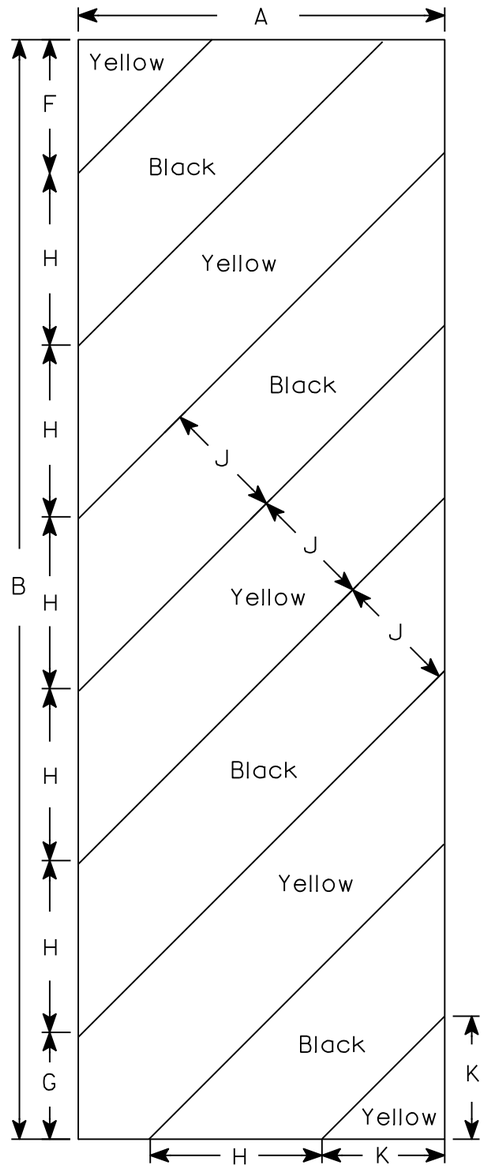
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-52.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 135	E



W5-52L



W5-52R

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. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

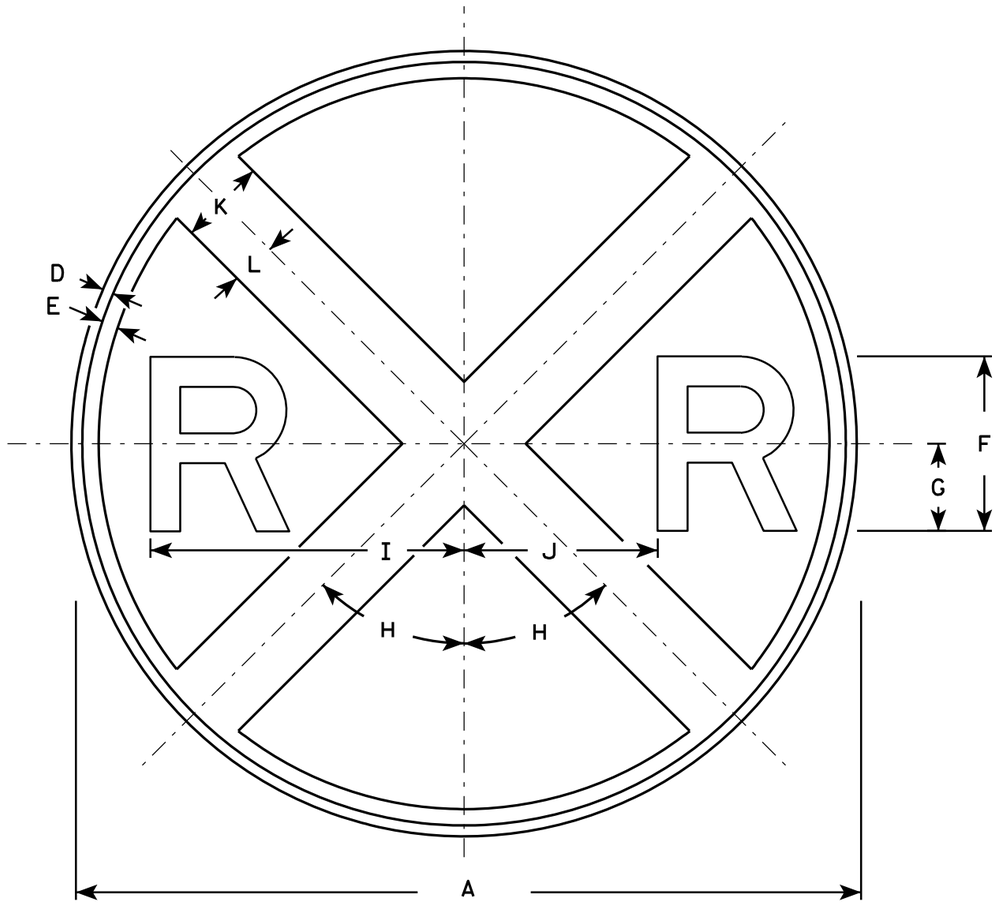
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 136	E



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

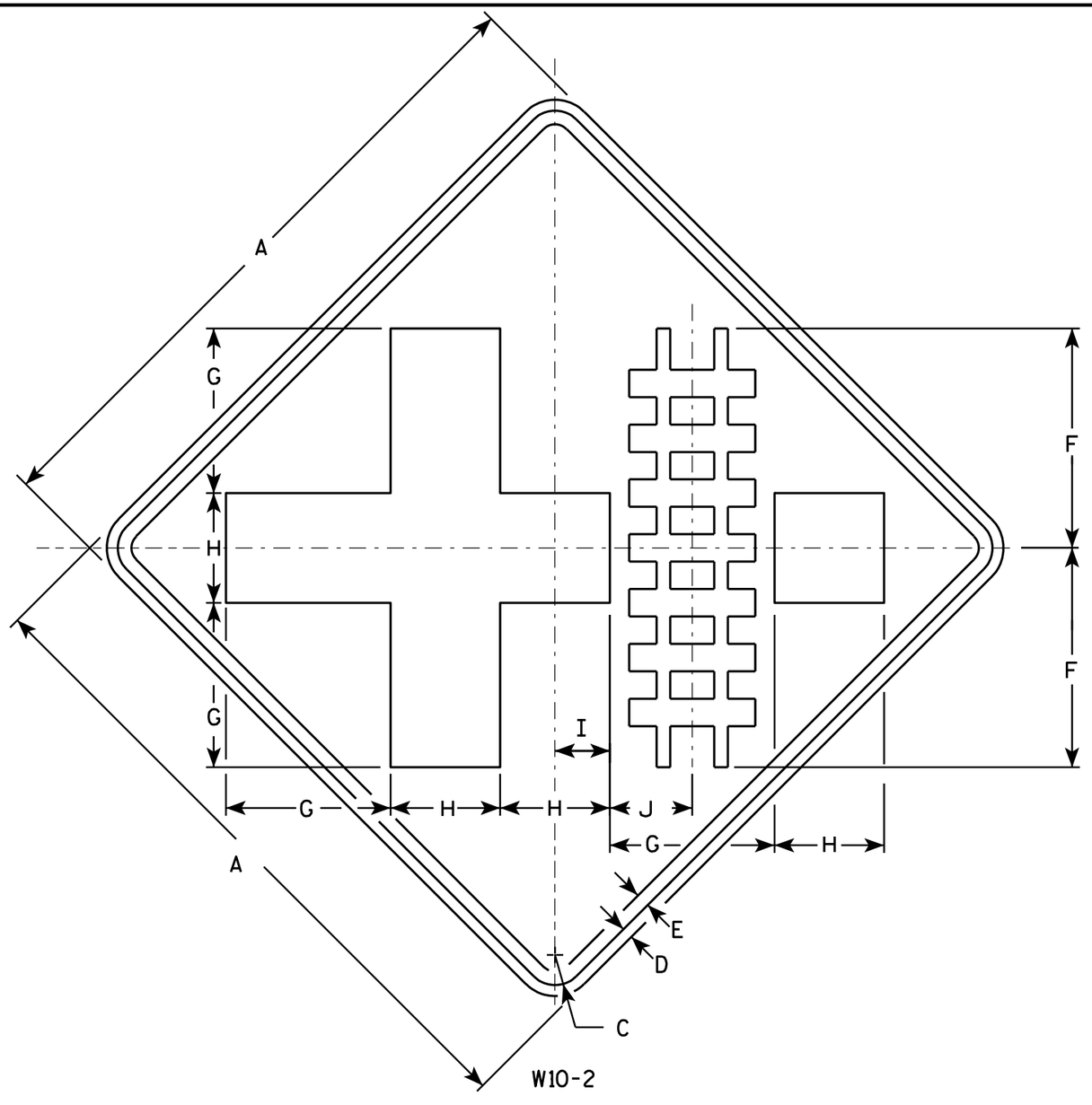
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 137	E

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

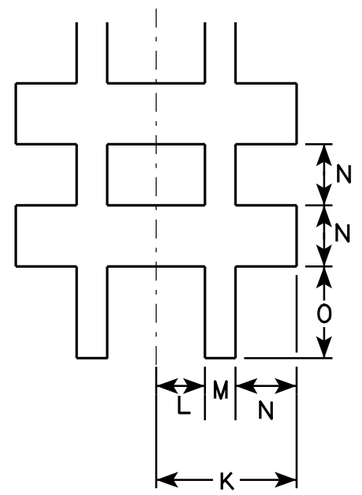
7

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.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	7 1/2	5	2 1/2	3 3/4	2 7/8	1	5/8	1 1/4	1 7/8												6.25
2S	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
2M	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
3	36		1 5/8	5/8	3/4	12	9	6	3	4 1/2	3 3/8	1 1/8	3/4	1 1/2	2 1/4												9.0
4	48		2 1/4	3/4	1	16	12	8	4	6	4 1/2	1 1/2	1	2	3												16.0
5																											

STANDARD SIGN
W10-2

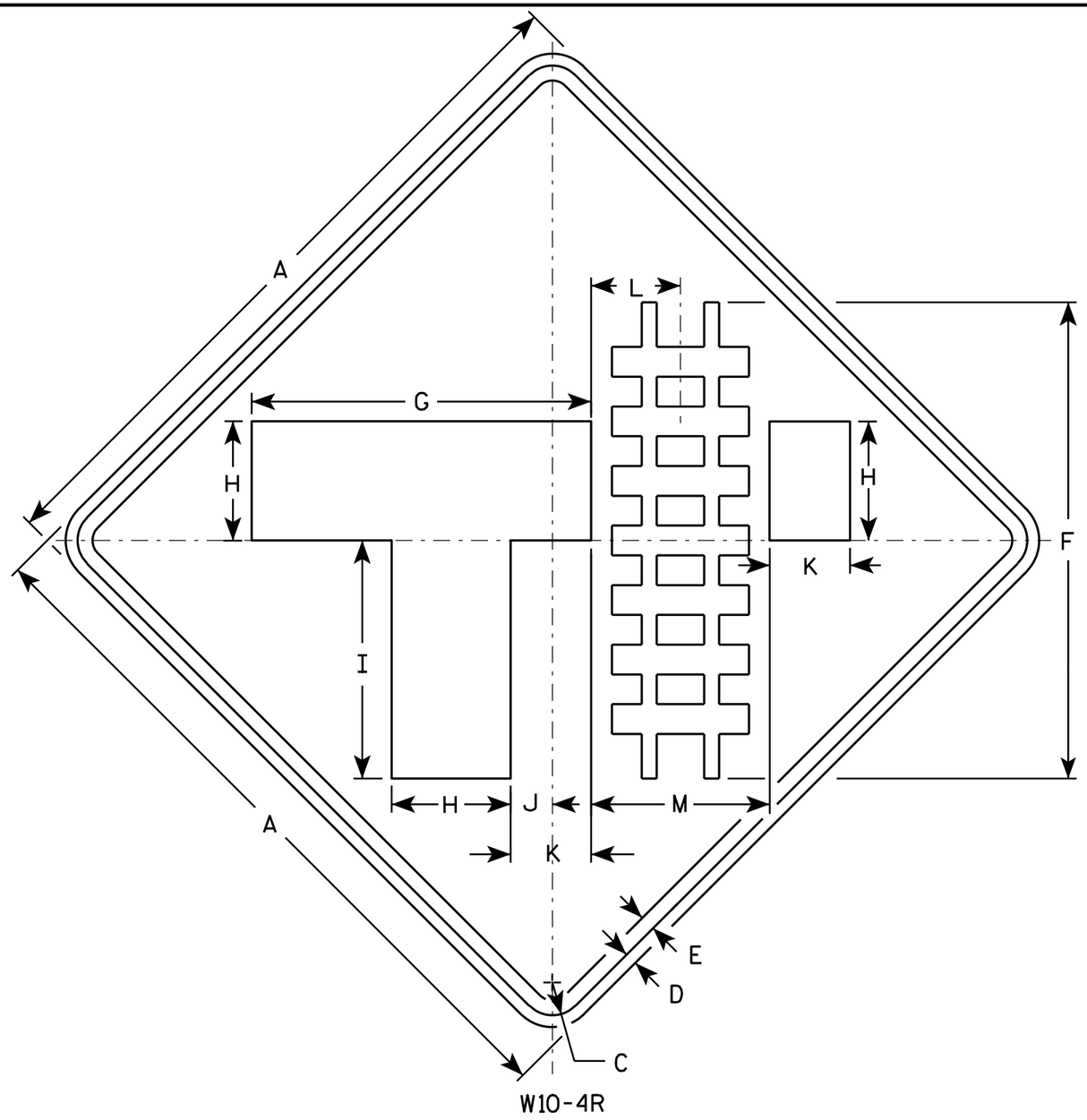
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

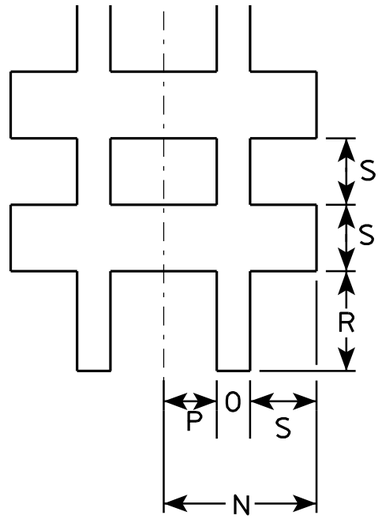
DATE 3/13/13 PLATE NO. W10-2.8

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: 138 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W102.DGN PLOT DATE : 13-MAR-2013 11:13 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.202372:1.000000
WISDOT/CADDS SHEET 42



W10-4R



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. W10-4L same as W10-4R except symbol is reversed.

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	20	14 1/4	5	10	1 3/4	3 3/8	3 3/4	7 1/2	2 7/8	5/8	1		1 7/8	1 1/4								6.25
2	36		1 5/8	5/8	3/4	24	17	6	12	2	4	4 1/2	9	3 3/8	3/4	1 1/8		2 1/4	1 1/2								9.0
2	36		1 5/8	5/8	3/4	24	17	6	12	2	4	4 1/2	9	3 3/8	3/4	1 1/8		2 1/4	1 1/2								9.0
3	36		1 5/8	5/8	3/4	24	17	6	12	2	4	4 1/2	9	3 3/8	3/4	1 1/8		2 1/4	1 1/2								9.0
4	48		2 1/4	3/4	1	32	22 5/8	8	16	2 5/8	5 3/8	6	12	4 1/2	1	1 1/2		3	2								16.0
5																											

STANDARD SIGN
W10-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

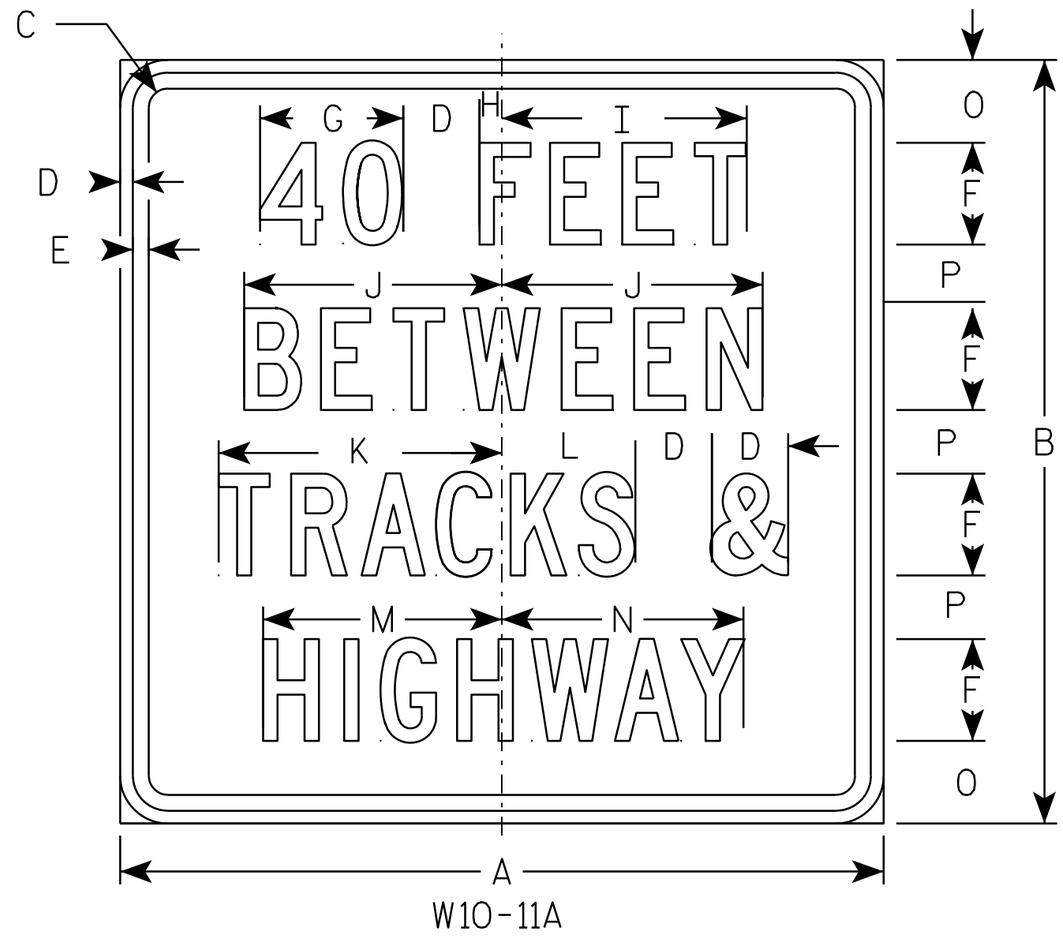
DATE 3/13/13 PLATE NO. W10-4.9

PROJECT NO:

SHEET NO: 139 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W104.DGN PLOT DATE : 13-MAR-2013 11:15 PLOT BY : mscj9h

WISDOT/CADDS SHEET 42



W10-11A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
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																											
2S	30	30	1 3/8	1/2	5/8	4	5 5/8	7/8	9 5/8	10 1/4	11 1/8	5 1/4	9 3/8	9 1/2	3 1/4	2 1/2											7.5
2M	30	30	1 3/8	1/2	5/8	4	5 5/8	7/8	9 5/8	10 1/4	11 1/8	5 1/4	9 3/8	9 1/2	3 1/4	2 1/2											7.5
3																											
4																											
5																											

STANDARD SIGN
W10-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-11A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 140 | E

W10-11B

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
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																											
2S	30	36	1 3/8	1/2	5/8	4	5 5/8	7/8	9 5/8	10 1/4	12 3/8	6 1/2	8 1/4	12 5/8	2 5/8	2	8	3	2 1/2								7.5
2M	30	36	1 3/8	1/2	5/8	4	5 5/8	7/8	9 5/8	10 1/4	12 3/8	6 1/2	8 1/4	12 5/8	2 5/8	2	8	3	2 1/2								7.5
3																											
4																											
5																											

STANDARD SIGN
W10-11B

WISCONSIN DEPT OF TRANSPORTATION

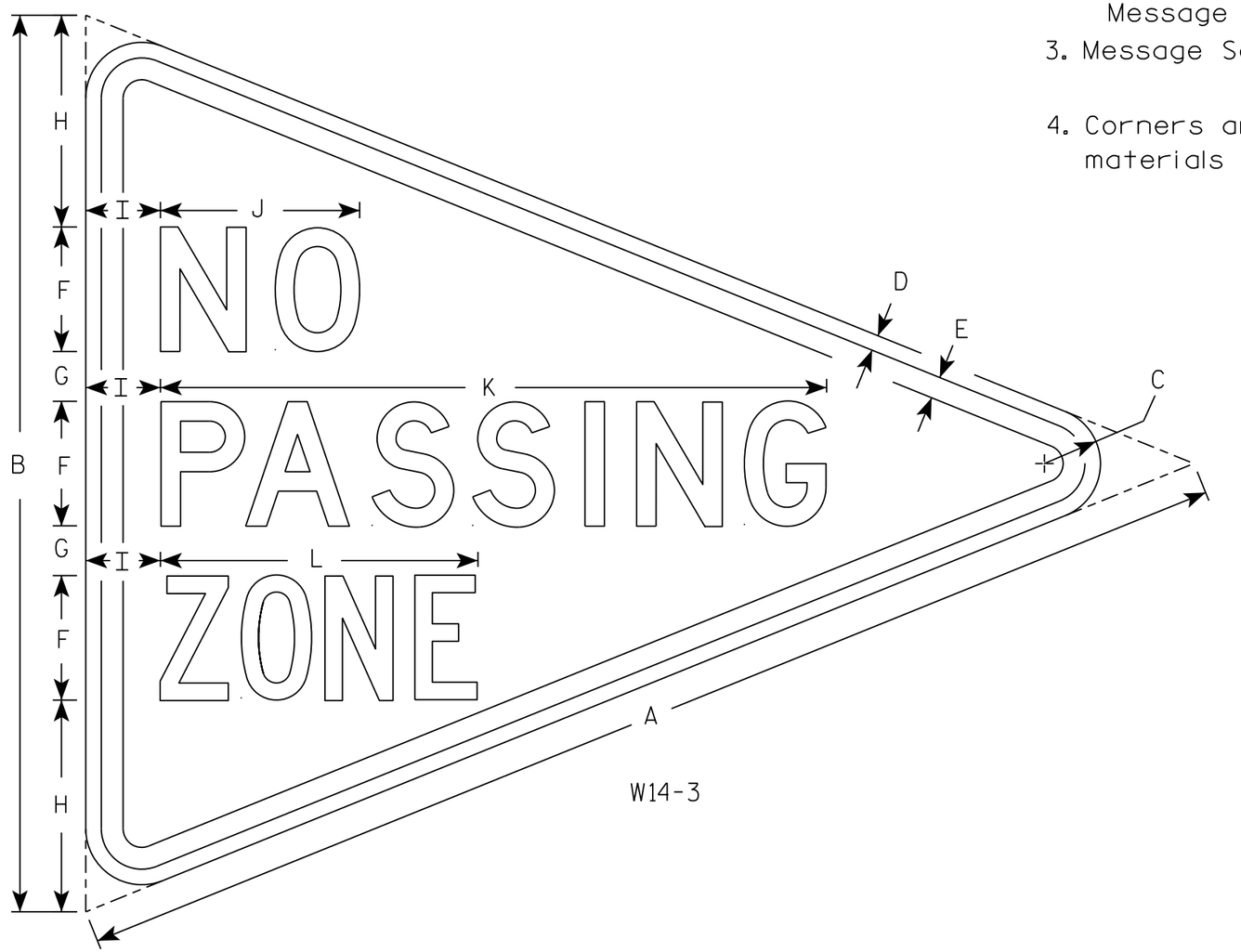
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-11B.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 141	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

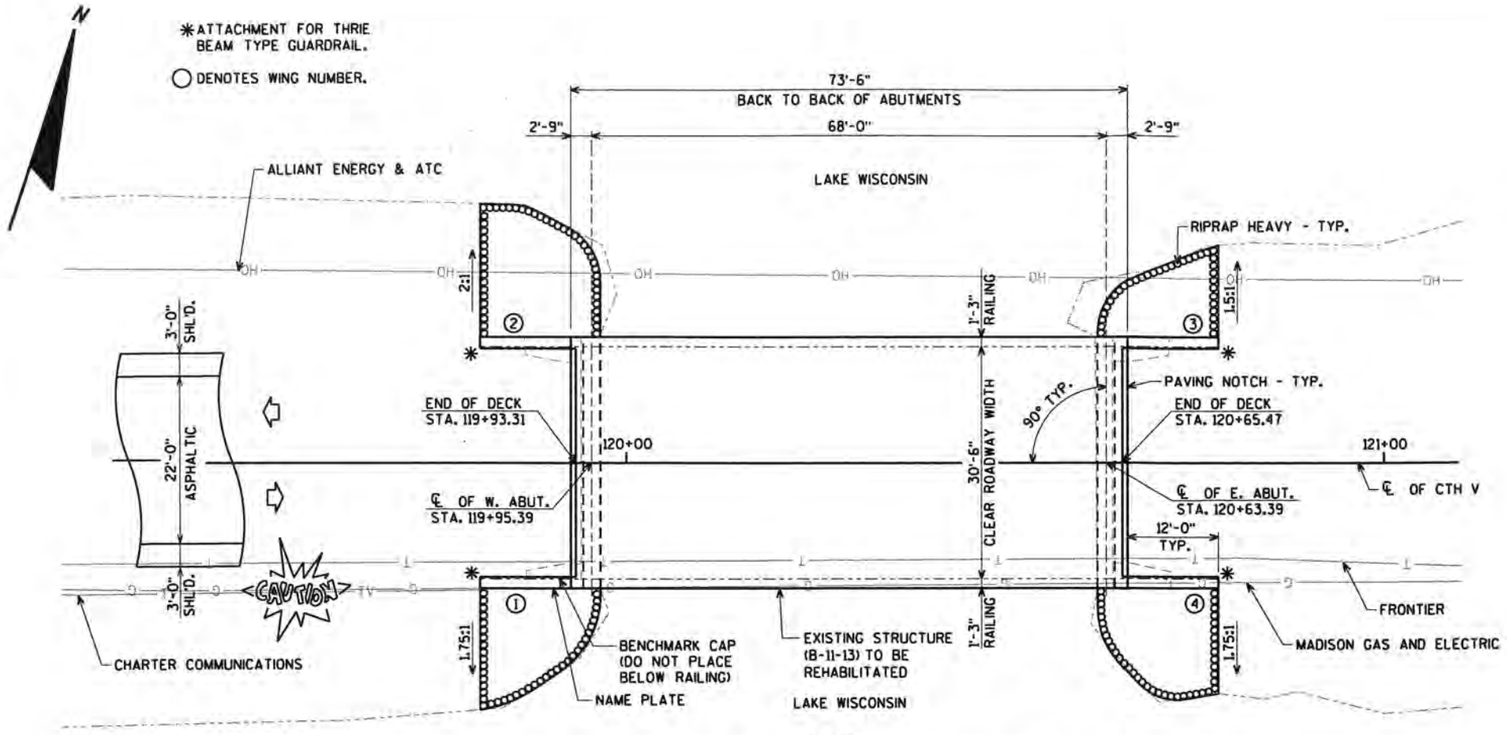
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 142 | E

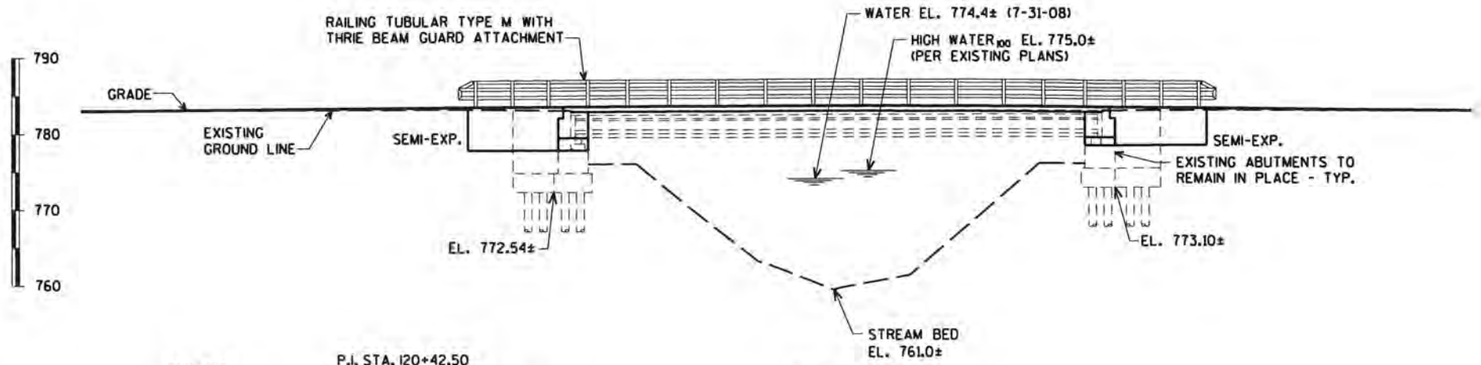
STATE PROJECT NUMBER

5843-00-73

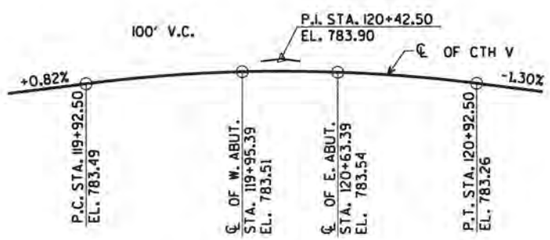


PLAN

SINGLE-SPAN 36" PRESTRESSED CONCRETE GIRDER BRIDGE
(REDECK)



ELEVATION



PROFILE GRADE LINE

(CTH V)

BENCH MARK:
NW WING WALL - SURVEY POINT #11439
STA. 119+86.9, 14.1' LT.
EL. 783.69

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-17
OPERATING RATING: HS-29
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY { SUPERSTRUCTURE ——— f'c = 4,000 p.s.i.
ALL OTHER ——— f'c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) ——— fy = 60,000 p.s.i.

TRAFFIC DATA:

A.D.T. = 1,400 (2019)
A.D.T. = 1,500 (2039)
R.D.S. = 30 M.P.H.

LIST OF DRAWINGS

FOR TYPICAL SECTION AND GENERAL NOTES, SEE SHEET 2

DANIEL N. SYDOW E-38363 WI
WISCONSIN PROFESSIONAL ENGINEER
10/10/2018

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR 11/01/18
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-11-13

CTH V OVER SPRING CREEK (LAKE WISCONSIN)

COUNTY	TOWN ~~CITY/VILLAGE~~
COLOMBIA	LODI

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY ZSS/CJM	DESIGN CK'D.CJM/AEB	DRAWN BY CJM/CLS	PLANS CK'D. BNS

GENERAL PLAN

SHEET 143 OF 12

8

8

$PRFNAME$
U:\41-0520.00 - Columbia Co. CTH V, WI River\BRIDGE\B-11-13\410520 gp.dgn

DATE:
DATE:
DATE:
CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

10/8/2018 PENTABLE:BReau_shd_util.tbl I.D. DATE:

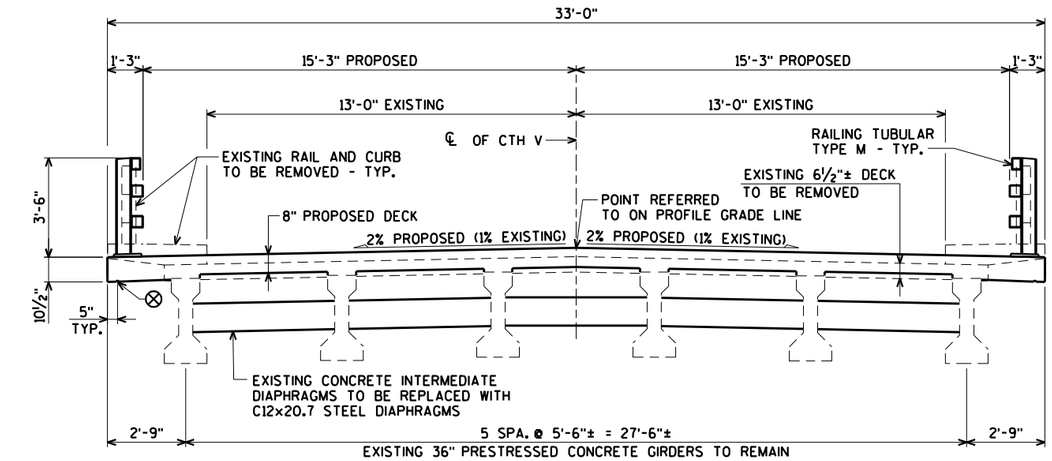
STATE PROJECT NUMBER

5843-00-73

TOTAL ESTIMATED QUANTITIES

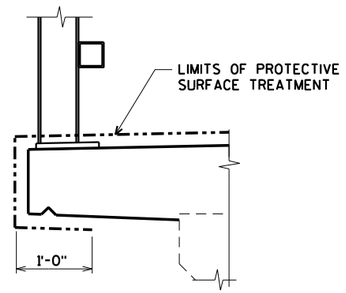
BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	E. ABUT.	SUPER.	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 120+29.14	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-13	LS	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	55	40	-----	95
502.0100	CONCRETE MASONRY BRIDGES	CY	6	5	98	109
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	295	295
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	36	36	-----	72
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	36	36	-----	72
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,260	1,130	16,740	19,130
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	6	6	-----	12
506.4000	STEEL DIAPHRAGMS B-11-13	EACH	-----	-----	5	5
506.7050.S.01	REMOVING BEARINGS B-11-13	EACH	6	6	-----	12
◑ 509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	45
513.4061	RAILING TUBULAR TYPE M	LF	26	26	148	200
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	-----	18
606.0300	RIPRAP HEAVY	CY	45	40	-----	85
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	80	80	-----	160
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	30	30	-----	60
645.0120	GEOTEXTILE TYPE HR	SY	95	80	-----	175
	NON-BID ITEMS					
	FILLER	SIZE				1/2"
	NAME PLATE					

◑ UNDISTRIBUTED FOR ABUTMENTS AS DIRECTED BY THE ENGINEER IN THE FIELD.

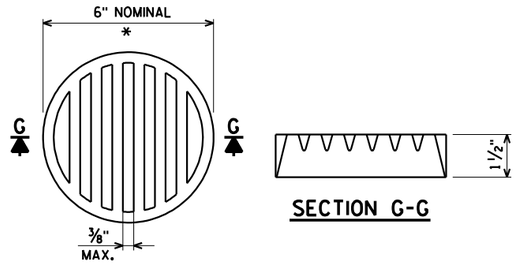


⊗ ¾" V - GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENTS - TYP.

TYPICAL SECTION THRU BRIDGE



PROTECTIVE SURFACE TREATMENT DETAIL



SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE 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 EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. OR THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET.

AT THE BACKFACE OF ABUTMENTS ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

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 CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR OF 1958.

VARIATIONS TO THE NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

REMOVE EXISTING FLOOR DRAINS AND DOWN SPOUTS, INCLUDED IN BID ITEM "REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS".

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON SHEET 11.

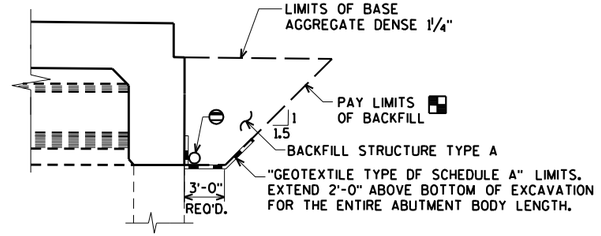
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS NOTED OTHERWISE.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENT WINGWALLS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF EXCAVATION.



BACKFILL STRUCTURE LIMITS

AT ABUTMENT BACKWALLS

▪ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CJM/CLS | PLANS CK'D. CJM

QUANTITIES, TYPICAL SECTION, AND NOTES

SHEET 2 OF 12
144

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8

8

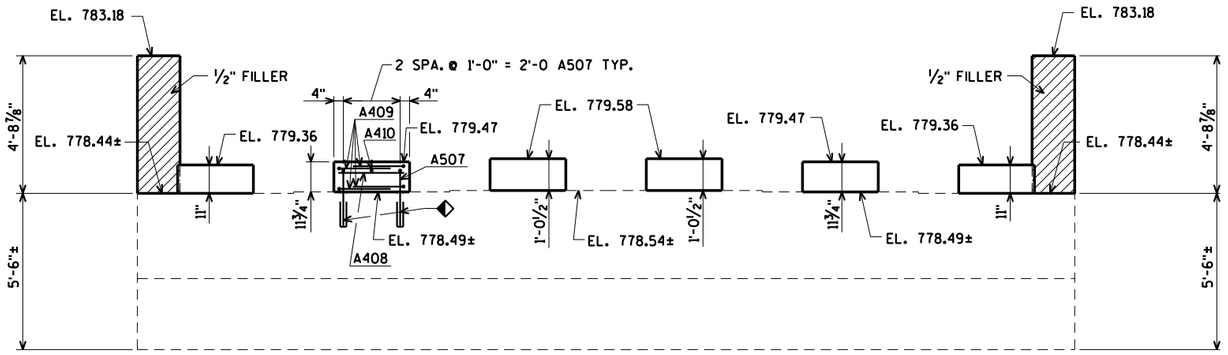
$PRFNAME$
U:\41-0520.00 - Columbia Co, CTH V, WI River\BRIDGE\B-11-13\410520 gp.dgn

8/23/2018

PENTABLE:BReau_shd_util.tbl

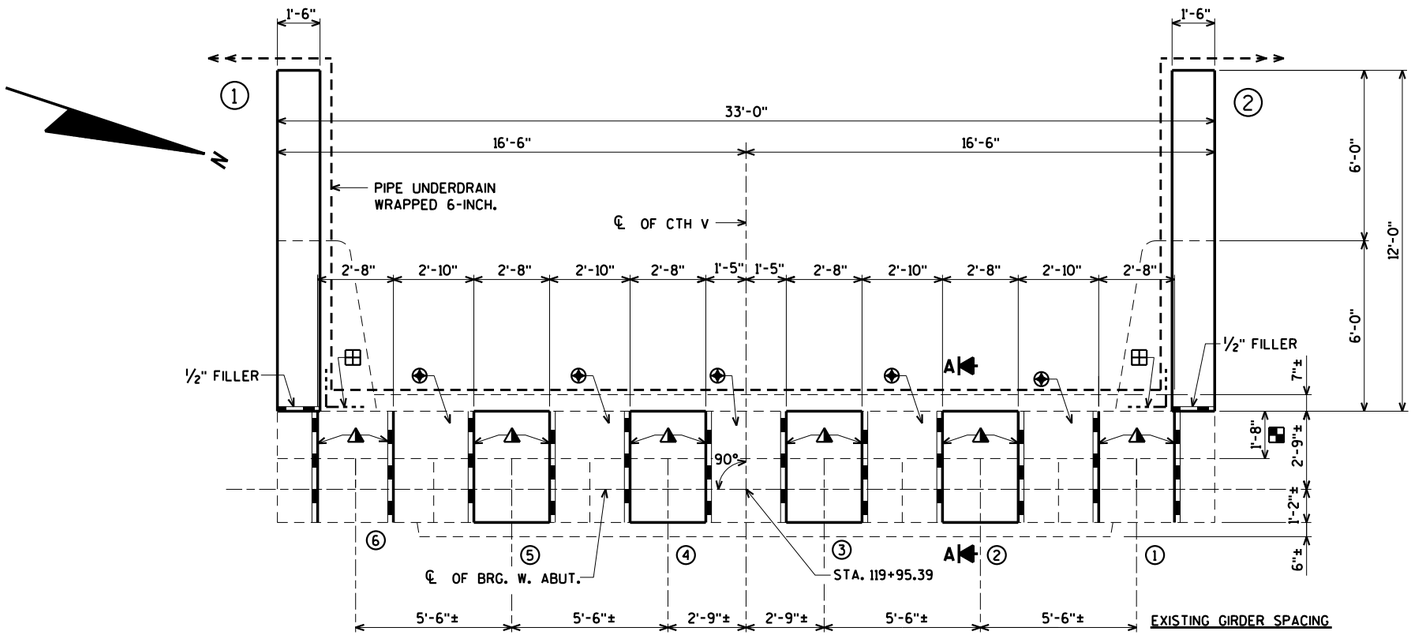
STATE PROJECT NUMBER

5843-00-73

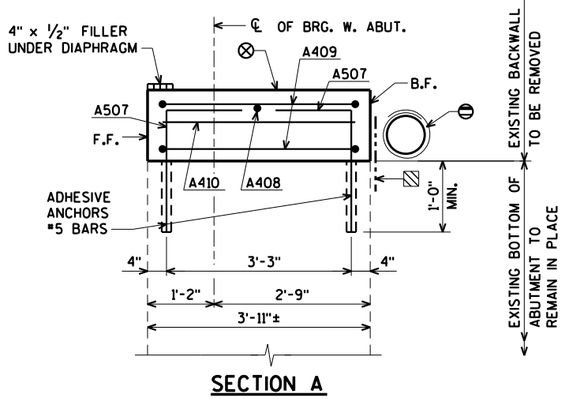


◆ ADHESIVE ANCHORS
NO. 5 BAR - TYP.

ELEVATION
(LOOKING WEST)



PLAN



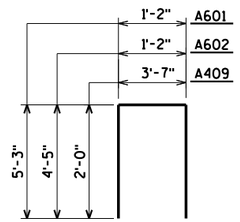
SECTION A

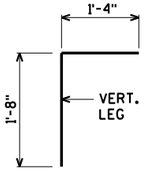
⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP AFTER PLACING CONCRETE BEARING BLOCKS, AND PRIOR TO PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1.260" COATED LOCATION
A601	X	18	11-4	X		WINGS 1 & 2 VERT.
A602	X	16	9-8	X		WINGS 1 & 2 VERT.
A603	X	32	3-11			WINGS 1 & 2 VERT. DOWELS E.F.
A404	X	22	11-8			WINGS 1 & 2 HORIZ. E.F.
A605	X	4	7-1			WINGS 1 & 2 HORIZ. E.F.
A606	X	4	11-8			WINGS 1 & 2 HORIZ. E.F.
A507	X	36	2-11	X		BODY AT SEMI-EXP. BLOCK VERT.
A408	X	6	2-4			BODY AT SEMI-EXP. BLOCK HORIZ.
A409	X	24	7-5	X		BODY AT SEMI-EXP. BLOCK HORIZ.
A410	X	6	3-7			BODY AT SEMI-EXP. BLOCK HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.





A507

NOTE:
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

■ EXISTING BACKWALL TO BE REMOVED

⊕ GRIND SMOOTH TOP OF ABUTMENT AFTER REMOVING BACKWALL.

◭ ¾" CORK FILLER ON VERTICAL FACES THAT RUN PARALLEL WITH GIRDER.

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 2.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

WEST ABUTMENT

SHEET 3 OF 12
145

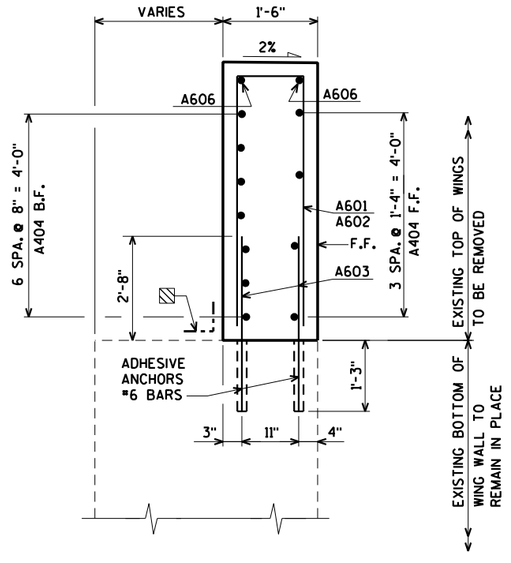
ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8

8

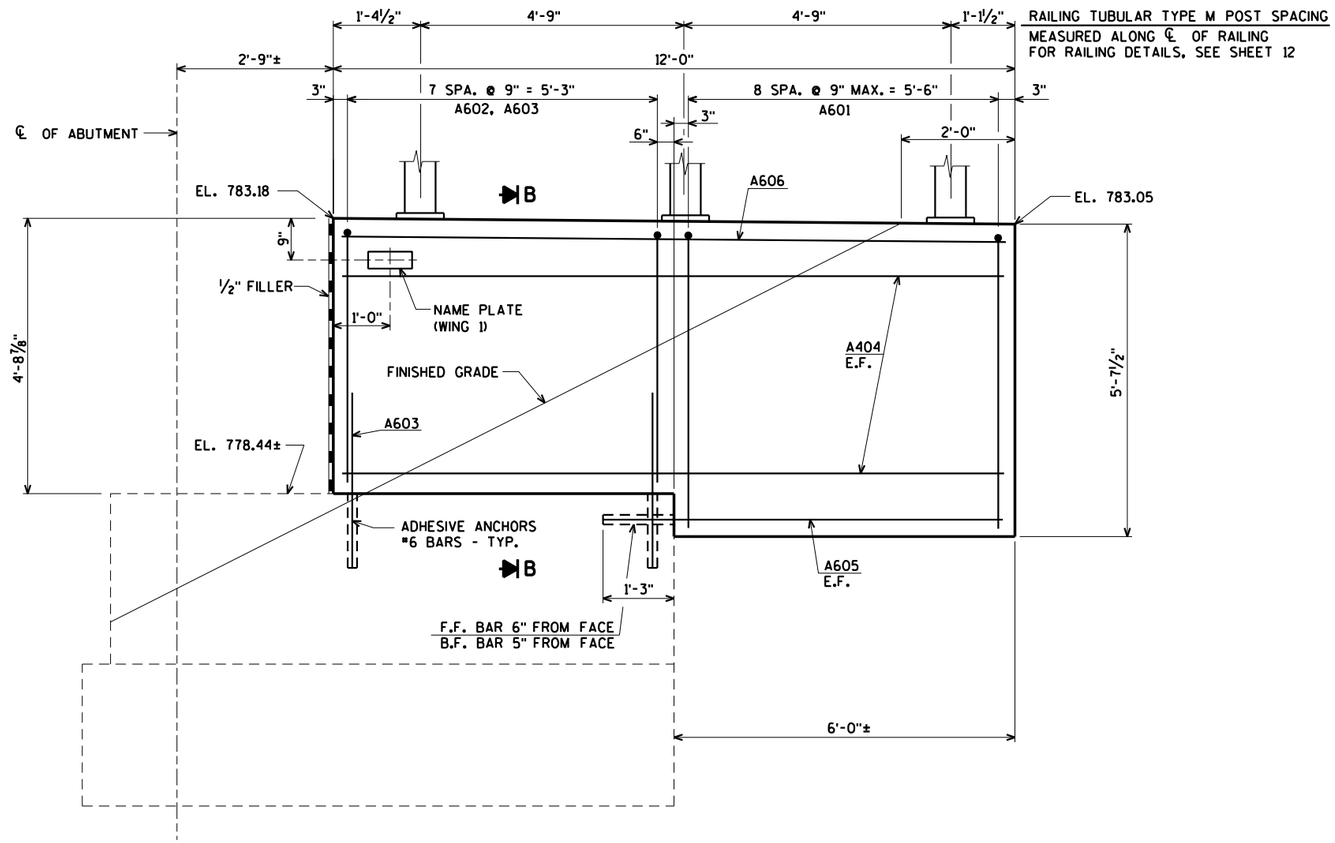
STATE PROJECT NUMBER

5843-00-73



SECTION B

(WING 2 SHOWN, WING 1 SIMILAR)



ELEVATION

(WING 2, WING 1 SIMILAR)

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZONTAL AND VERTICAL JOINTS
ON BACK FACE OF ABUTMENT.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

WEST ABUTMENT DETAILS

SHEET 4 OF 12
146

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Eau Claire, WI 54701
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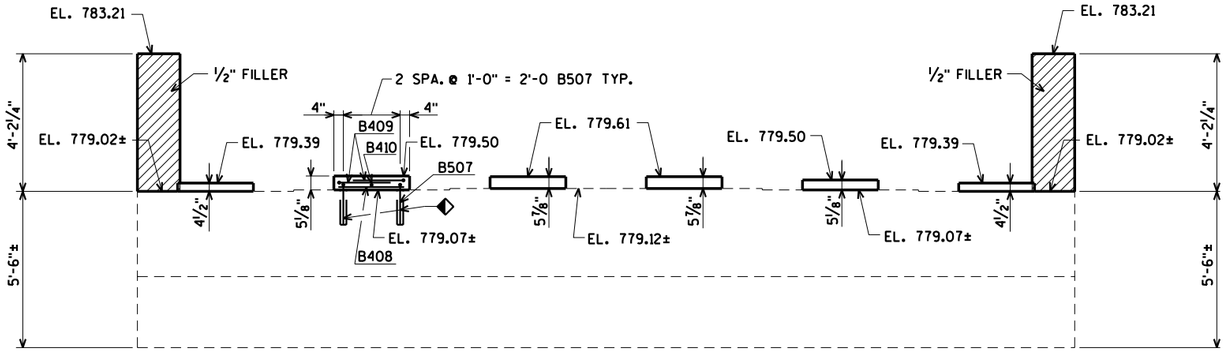
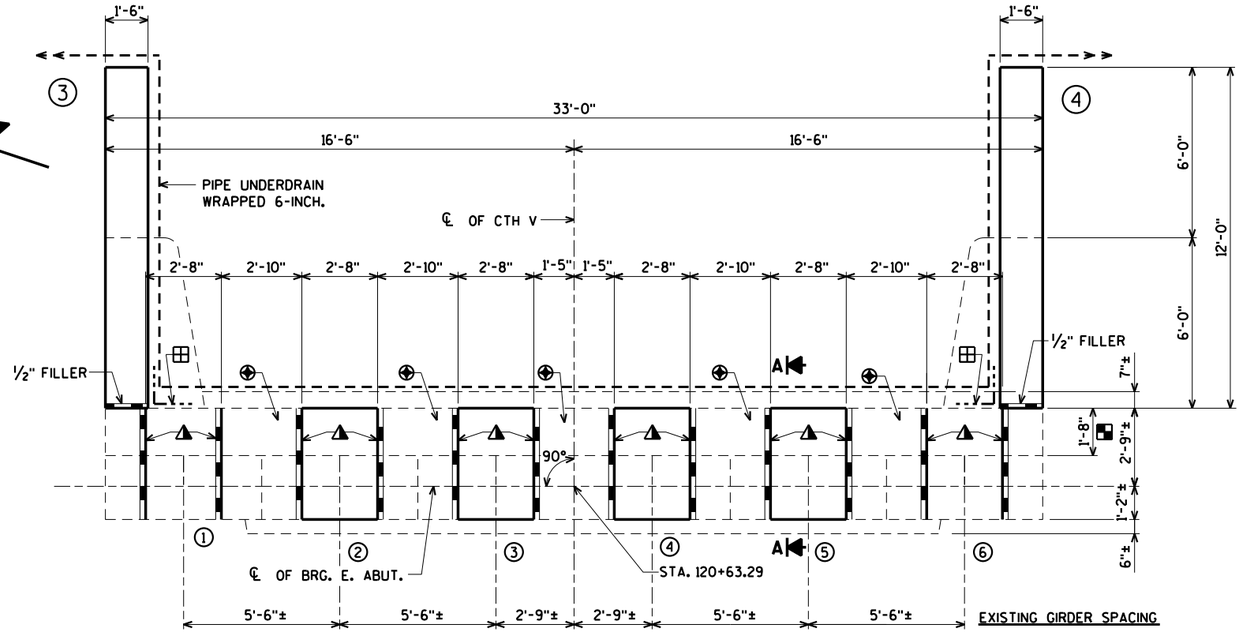
STATE PROJECT NUMBER
5843-00-73

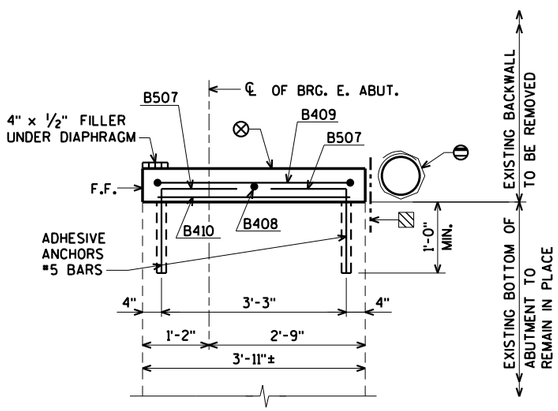


◆ ADHESIVE ANCHORS NO. 5 BAR - TYP.

ELEVATION
(LOOKING EAST)



PLAN



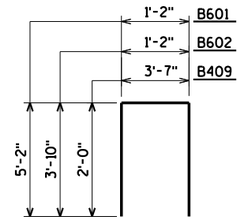
SECTION A

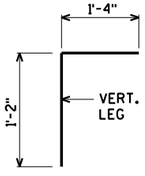
⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP AFTER PLACING CONCRETE BEARING BLOCKS, AND PRIOR TO PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1.130" COATED LOCATION
B601	X	18	11-2	X		WINGS 3 & 4 VERT.
B602	X	16	8-6	X		WINGS 3 & 4 VERT.
B603	X	32	3-11			WINGS 3 & 4 VERT. DOWELS E.F.
B404	X	20	11-8			WINGS 3 & 4 HORIZ. E.F.
B605	X	4	7-1			WINGS 3 & 4 HORIZ. E.F.
B606	X	4	11-8			WINGS 3 & 4 HORIZ. E.F.
B507	X	36	2-4	X		BODY AT SEMI-EXP. BLOCK VERT.
B408	X	6	2-4			BODY AT SEMI-EXP. BLOCK HORIZ.
B409	X	12	7-5	X		BODY AT SEMI-EXP. BLOCK HORIZ.
B410	X	6	3-7			BODY AT SEMI-EXP. BLOCK HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.





B507

NOTE:
SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

■ EXISTING BACKWALL TO BE REMOVED

⊕ GRIND SMOOTH TOP OF ABUTMENT AFTER REMOVING BACKWALL.

◭ ¾" CORK FILLER ON VERTICAL FACES THAT RUN PARALLEL WITH GIRDER.

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE DETAIL ON SHEET 2.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

EAST ABUTMENT

SHEET 5 OF 12
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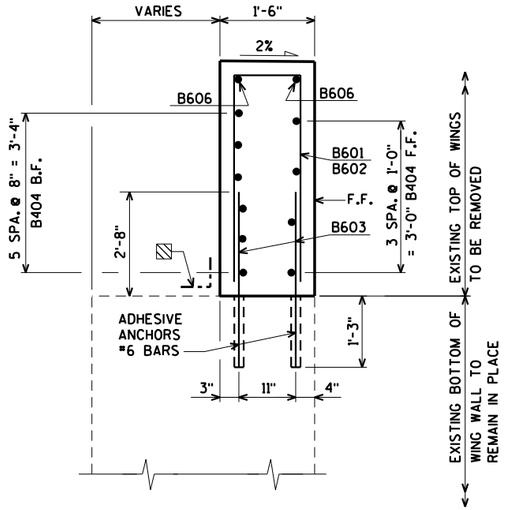
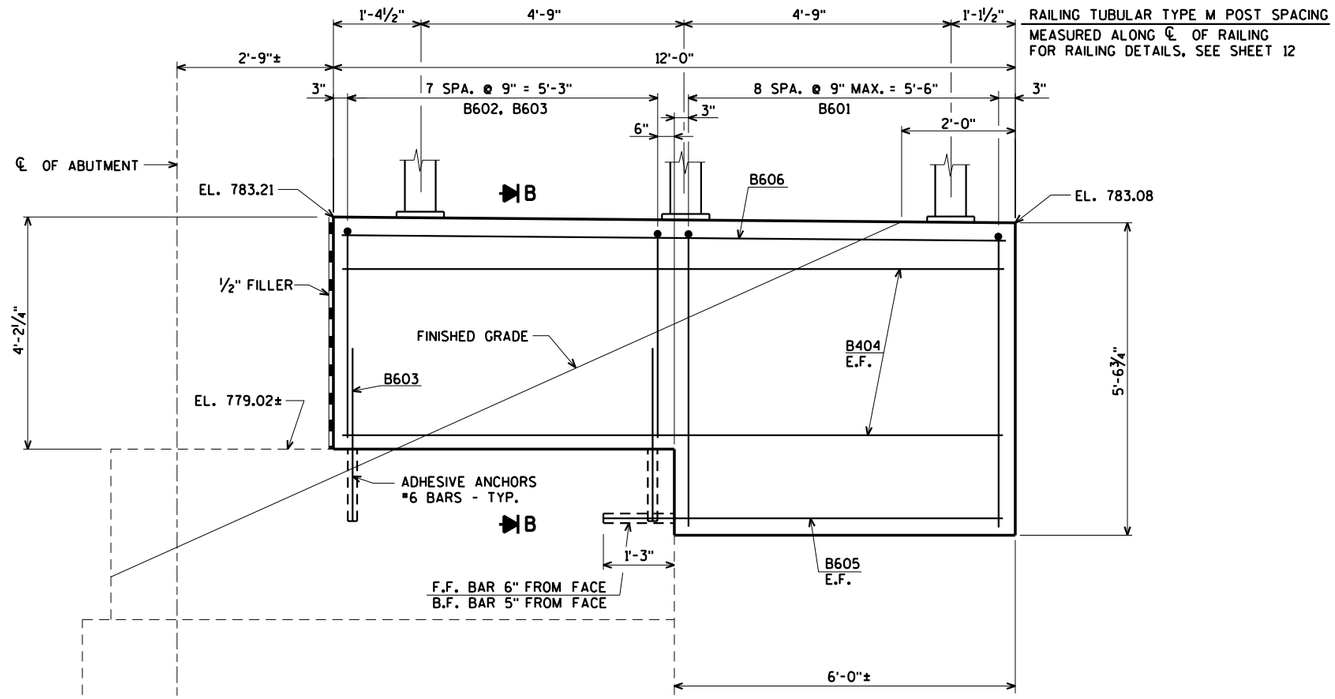


SECTION B

(WING 4 SHOWN, WING 3 SIMILAR)



ELEVATION

(WING 4, WING 3 SIMILAR)

▨ 18" RUBBERIZED MEMBRANE WATERPROOFING
SEAL ALL HORIZONTAL AND VERTICAL JOINTS
ON BACK FACE OF ABUTMENT.

B.F. DENOTES BACK FACE

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

EAST ABUTMENT DETAILS

SHEET 6 OF 12

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$PRFNAME$
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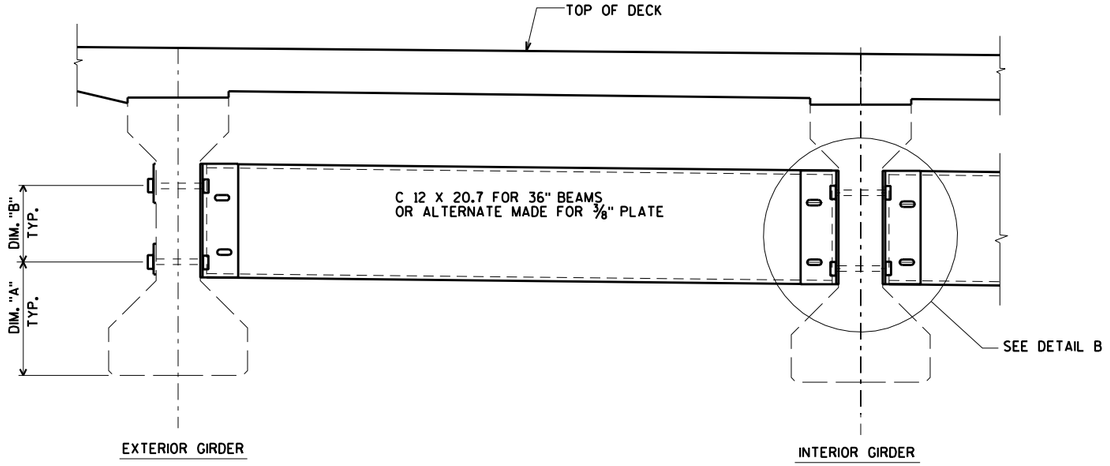
8/22/2018

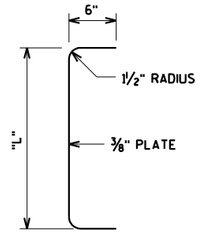
PENTABLE:BReau_shd_util.tbl

TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
36"	1'-2 7/8"	9 7/8"	1'-1 1/2"	3 1/4"



PART TRANSVERSE SECTION AT DIAPHRAGM



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-11-13", EACH.

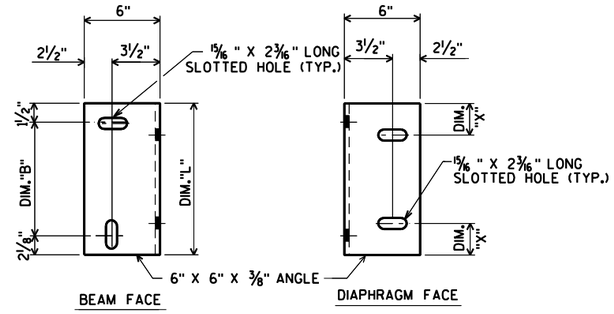
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

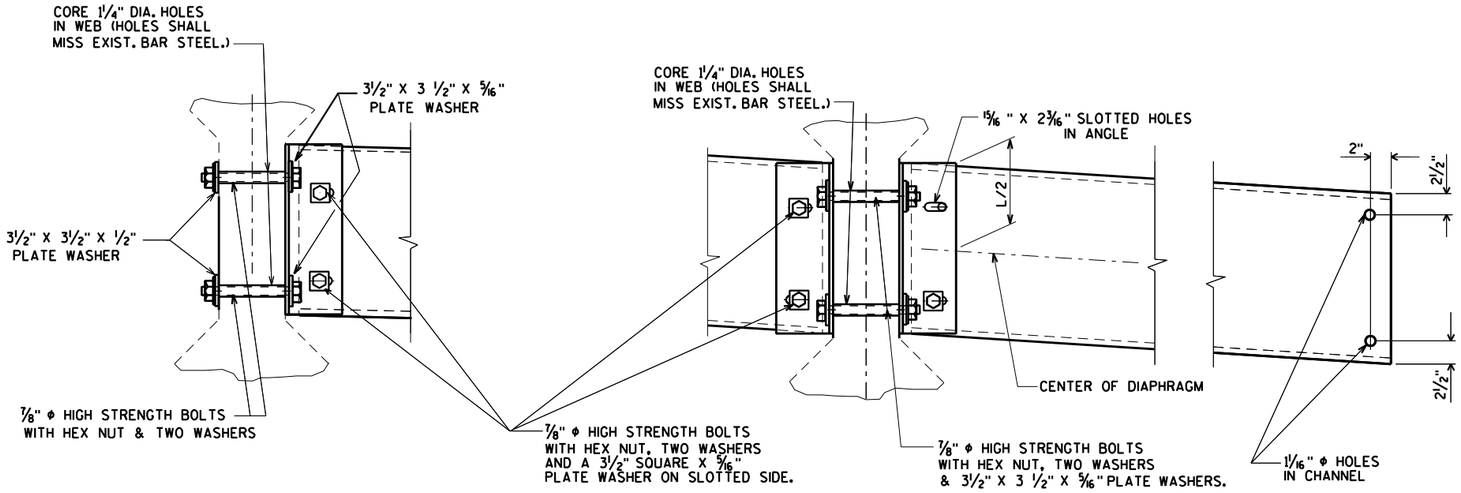
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

CORING HOLES IN EXISTING GIRDERS SHALL BE CONSIDERED INCIDENTAL TO "STEEL DIAPHRAGMS B-11-13".



DIAPHRAGM SUPPORT



DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

INTERM. STEEL DIAPH. DETAILS

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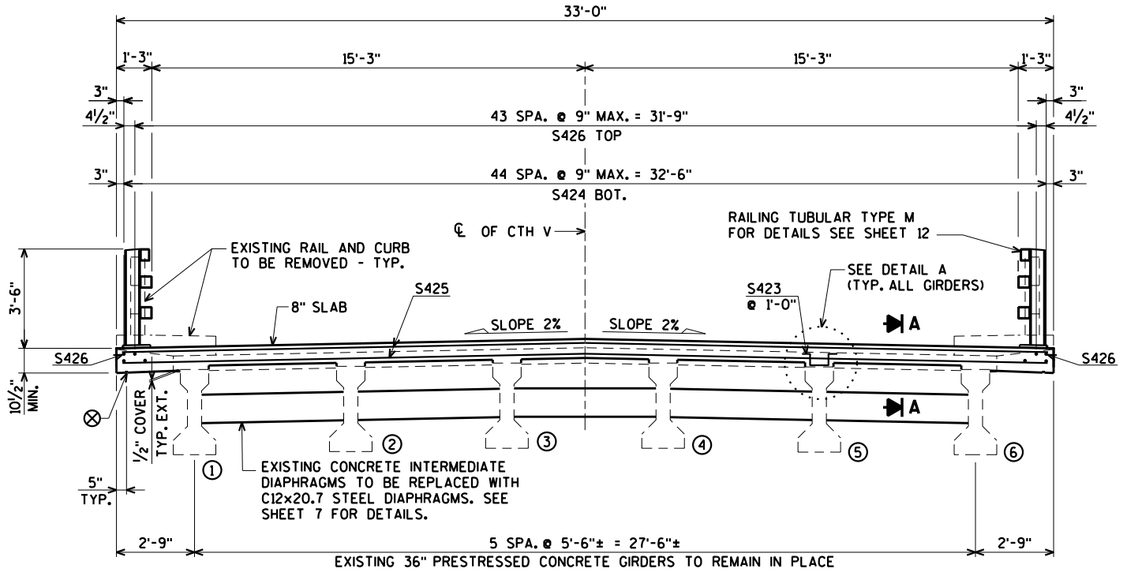
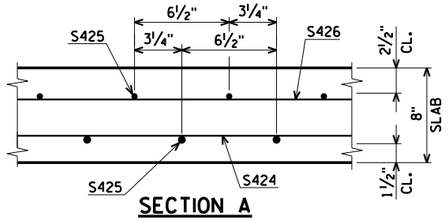


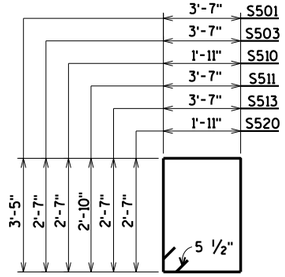
⊗ ¾" V - GROOVE. EXTEND V-GROOVE TO 6" FROM FRONT FACE OF ABUTMENT DIAPHRAGMS - TYP.

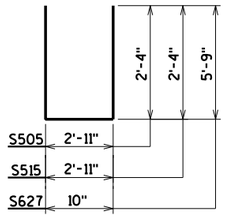
TYPICAL SECTION THRU ROADWAY

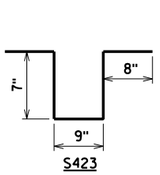
(LOOKING EAST)

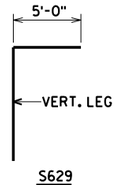


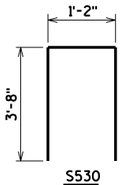
SECTION A







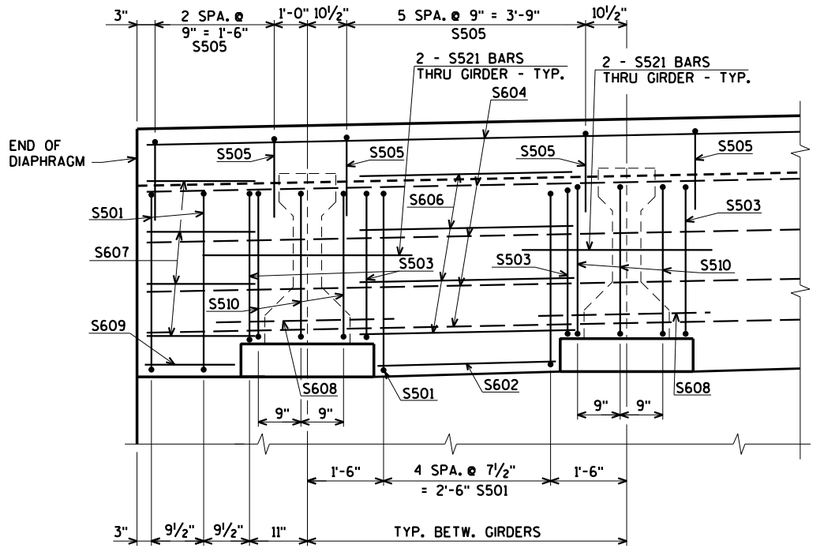




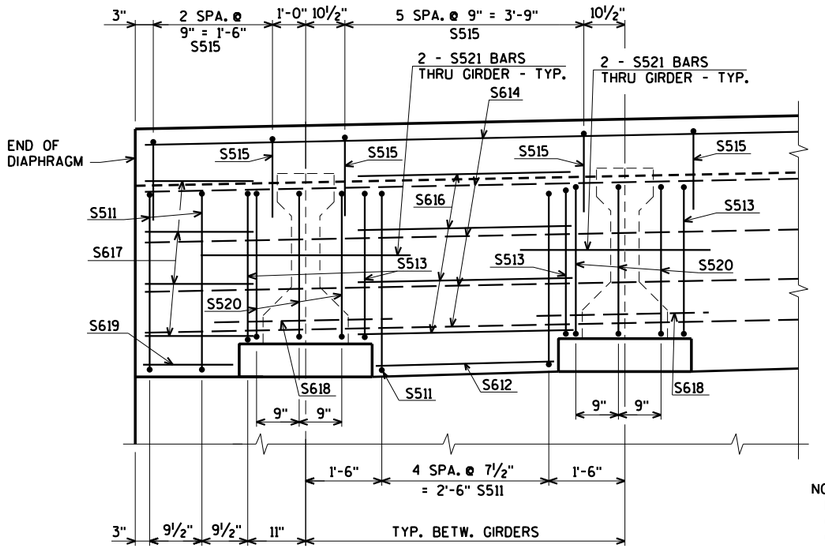
BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	16,740# COATED LOCATION
S501	X	29	14-8	X		DIAPH. @ W. ABUT. VERT.
S602	X	10	2-6			DIAPH. @ W. ABUT. HORIZ. BETW. GRD.
S503	X	12	12-11	X		DIAPH. @ W. ABUT. VERT. AT GRD.
S604	X	6	32-8			DIAPH. @ W. ABUT. HORIZ.
S505	X	36	7-4	X		DIAPH. @ W. ABUT. VERT. BETW. GRD.
S606	X	20	3-8			DIAPH. @ W. ABUT. HORIZ. F.F. INT.
S607	X	8	1-8			DIAPH. @ W. ABUT. HORIZ. F.F. ENDS
S608	X	24	2-4			DIAPH. @ W. ABUT. HORIZ.
S609	X	4	1-1			DIAPH. @ W. ABUT. HORIZ. F.F. ENDS
S510	X	18	9-7	X		DIAPH. @ W. ABUT. VERT. AT GRD.
S511	X	29	13-5	X		DIAPH. @ E. ABUT. VERT.
S612	X	10	2-6			DIAPH. @ E. ABUT. HORIZ. BETW. GRD.
S513	X	12	12-11	X		DIAPH. @ E. ABUT. VERT. AT GRD.
S614	X	6	32-8			DIAPH. @ E. ABUT. HORIZ.
S515	X	36	7-4	X		DIAPH. @ E. ABUT. VERT. BETW. GRD.
S616	X	20	3-8			DIAPH. @ E. ABUT. HORIZ. F.F. INT.
S617	X	8	1-8			DIAPH. @ E. ABUT. HORIZ. F.F. ENDS
S618	X	24	2-4			DIAPH. @ E. ABUT. HORIZ.
S619	X	4	1-1			DIAPH. @ E. ABUT. HORIZ. F.F. ENDS
S520	X	18	9-7	X		DIAPH. @ E. ABUT. VERT. AT GRD.
S521	X	24	6-0			DIAPH. @ ABUT. HORIZ. THRU GDRS.
S422	X	24	35-4			SLAB LONG. BOT. @ HAUNCHES
S423	X	420	2-11	X		SLAB @ GIRDER HAUNCHES
S424	X	90	36-9			SLAB LONG. BOT.
S425	X	265	32-8			SLAB TRANS. TOP & BOT.
S426	X	92	36-9			SLAB LONG. TOP
S627	X	48	12-0	X		SLAB @ RAIL POSTS
S628	X	80	6-0			SLAB @ INT. RAIL POSTS
S629	X	16	6-0	X		SLAB @ END RAIL POSTS
S530	X	4	8-3	X		CORNER RAIL VERT.

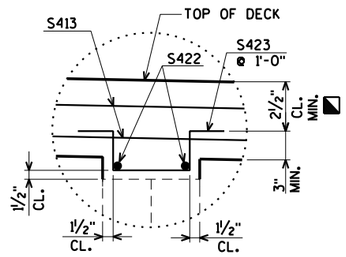
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PART ELEVATION AT WEST ABUTMENT



PART ELEVATION AT EAST ABUTMENT



DETAIL A

◥ TILT S423 BARS AS REQ'D. TO MAINTAIN 2½" CLEAR

NOTE:
DAMAGE TO THE EXISTING GIRDERS CAUSED DURING DECK REMOVAL OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

SUPERSTRUCTURE

SHEET 8 OF 12
150

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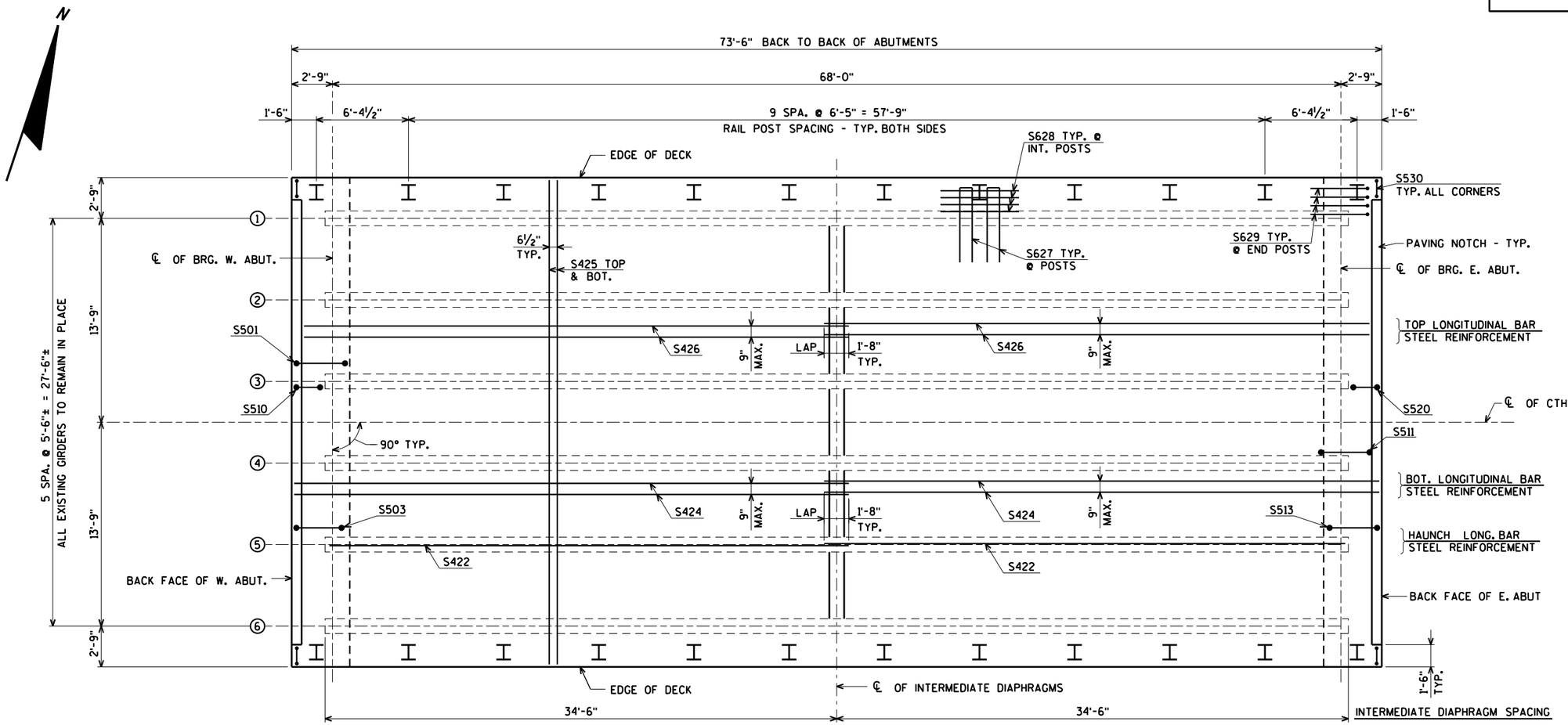
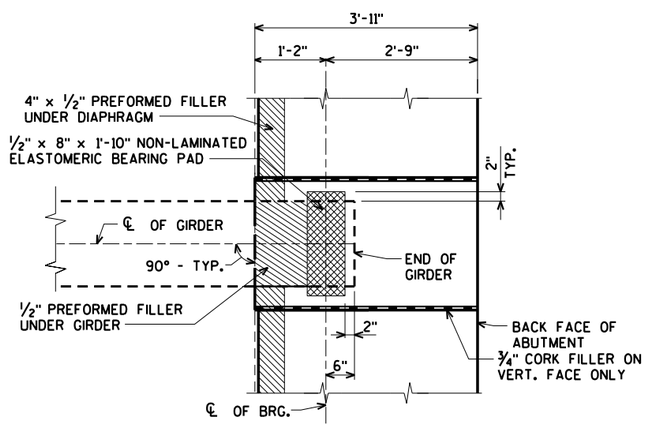


PLAN



BEARING PAD DETAILS AT ABUTMENTS

NOTES:

BURN EXISTING ANCHOR BOLTS OFF FLUSH WITH BEAM SEAT.

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SUPERSTRUCTURE PLAN

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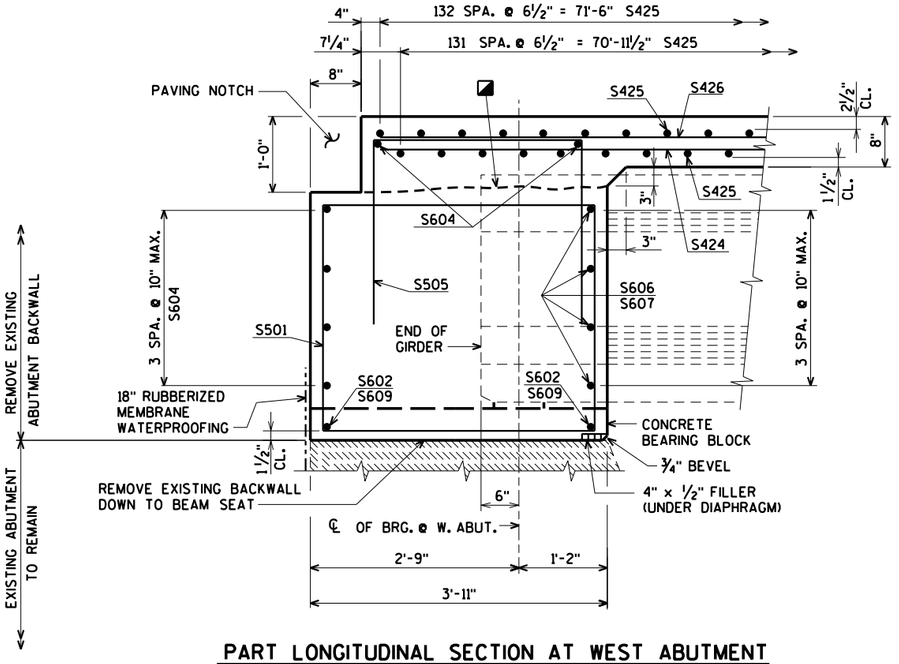
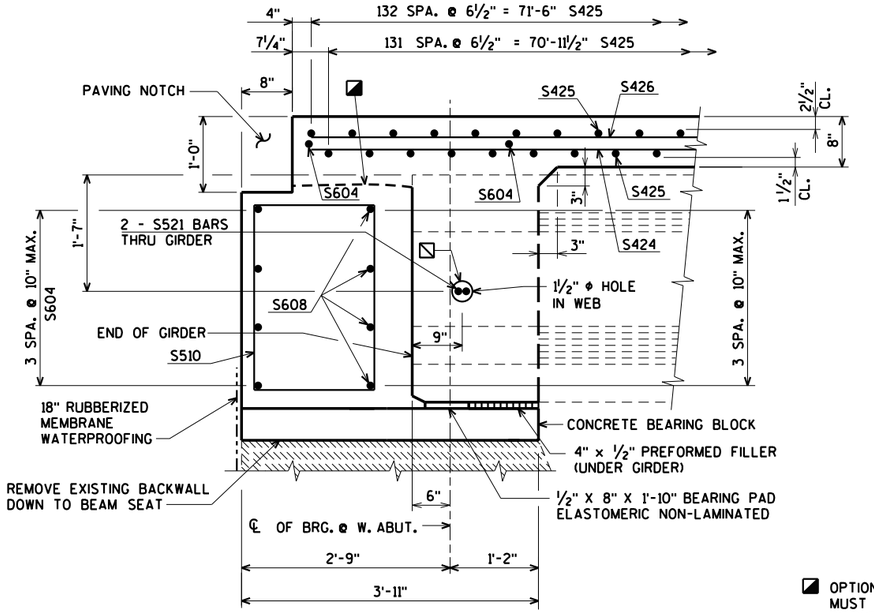


PART LONGITUDINAL SECTION AT WEST ABUTMENT

(TYP. BETWEEN GIRDERS)

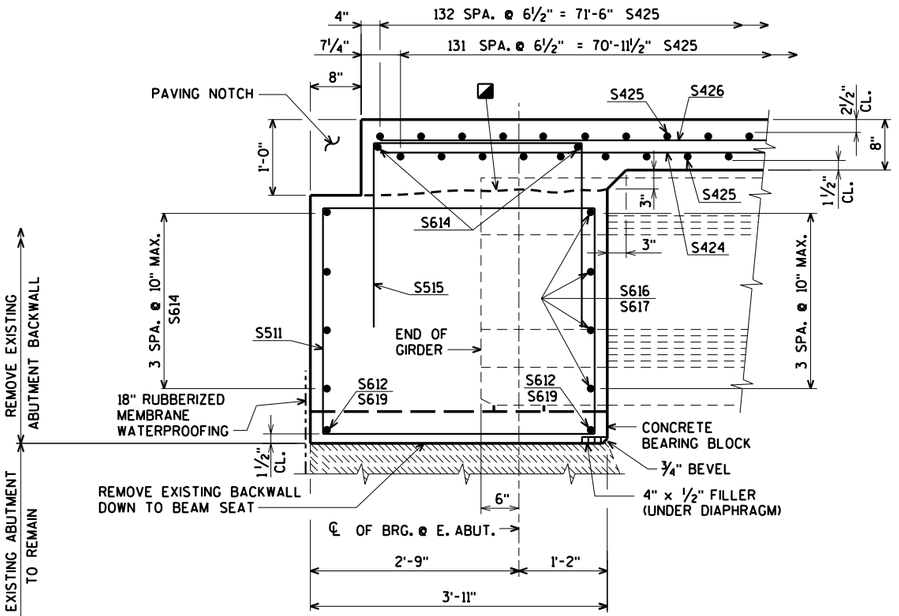


PART LONGITUDINAL SECTION AT WEST ABUTMENT

(TYP. AT GIRDERS)

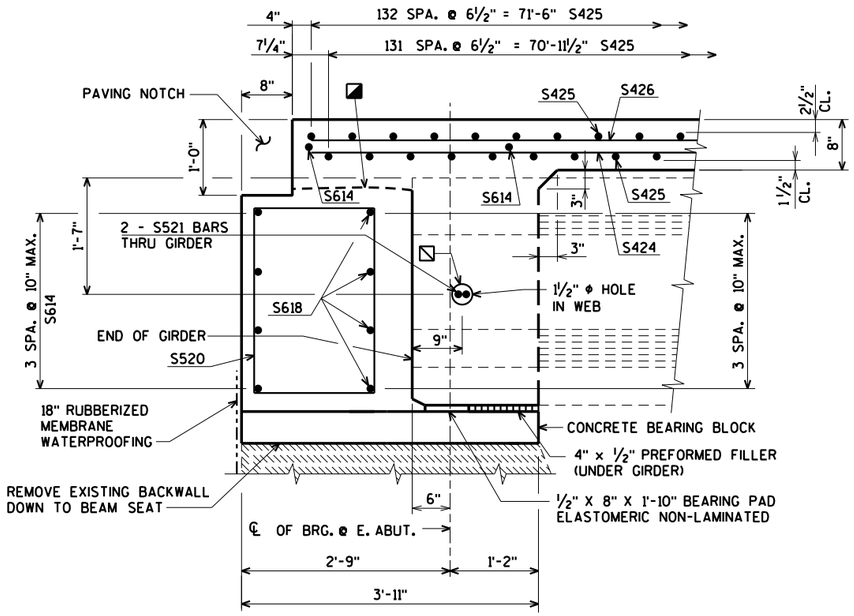
◪ OPTIONAL CONSTRUCTION JOINT. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

◪ FIELD DRILL 1½" ϕ HOLE IN WEB OF EXISTING GIRDERS FOR 2 S521 BARS. FIELD DRILLING INCLUDED IN BID ITEM "CONCRETE MASONRY BRIDGES".



PART LONGITUDINAL SECTION AT EAST ABUTMENT

(TYP. BETWEEN GIRDERS)



PART LONGITUDINAL SECTION AT EAST ABUTMENT

(TYP. AT GIRDERS)

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STRUCTURE B-11-13

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SUPERSTRUCTURE DETAILS

SHEET 10 OF 12
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10/8/2018

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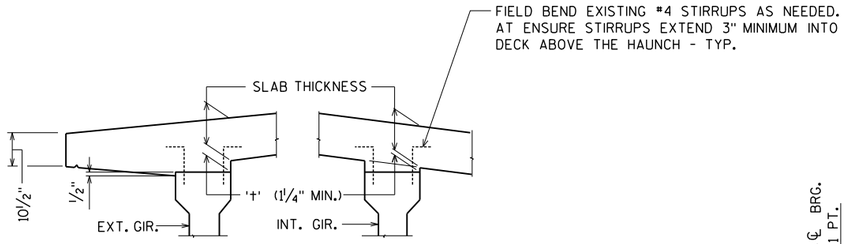
TOP OF DECK ELEVATIONS

	℄ OF BRG. WEST ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF BRG. EAST ABUT.
NORTH EDGE OF DECK	783.18	783.23	783.27	783.29	783.31	783.32	783.32	783.30	783.28	783.25	783.21
GIRDER 1	783.24	783.28	783.32	783.35	783.37	783.37	783.37	783.36	783.34	783.31	783.26
GIRDER 2	783.35	783.39	783.43	783.46	783.48	783.48	783.48	783.47	783.45	783.42	783.37
GIRDER 3	783.46	783.50	783.54	783.57	783.59	783.59	783.59	783.58	783.56	783.53	783.48
℄ OF CTH V	783.51	783.56	783.60	783.62	783.64	783.65	783.65	783.63	783.61	783.58	783.54
GIRDER 4	783.46	783.50	783.54	783.57	783.59	783.59	783.59	783.58	783.56	783.53	783.48
GIRDER 5	783.35	783.39	783.43	783.46	783.48	783.48	783.48	783.47	783.45	783.42	783.37
GIRDER 6	783.24	783.28	783.32	783.35	783.37	783.37	783.37	783.36	783.34	783.31	783.26
SOUTH EDGE OF DECK	783.18	783.23	783.27	783.29	783.31	783.32	783.32	783.30	783.28	783.25	783.21

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION.



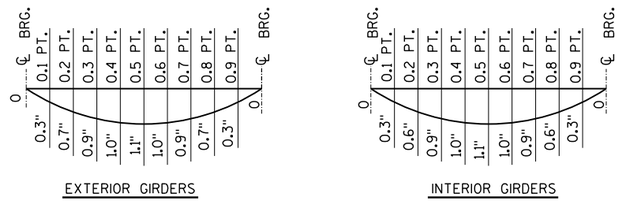
SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN AND PROFILE BY MORE THAN ½".

TO DETERMINE 'T', ELEV. OF TOP OF GIRDERS AT ℄ OF SUBSTRUCTURE UNITS AND AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
-TOP OF GIRDER ELEVATION
+ DEADLOAD DEFLECTION
-SLAB THICKNESS
=HAUNCH HEIGHT '+'

NOTE:
AN AVERAGE HAUNCH ('T') OF 3½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES"



ESTIMATED BEAM DEAD LOAD DEFLECTION DIAGRAMS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CJM | PLANS CK'D. CJM

DECK ELEVATIONS

SHEET 11 OF 12
153

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

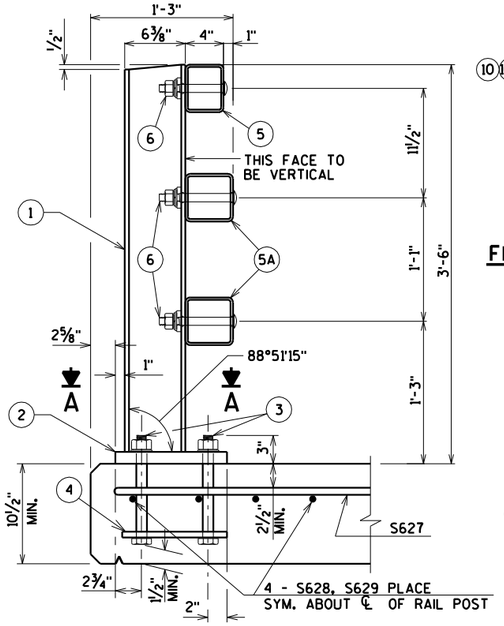
$PRFNAME$
U:\41-0520.00 - Columbia Co, CTH V, WI River\BRIDGE\B-11-13\410520 deck elev.dgn

8

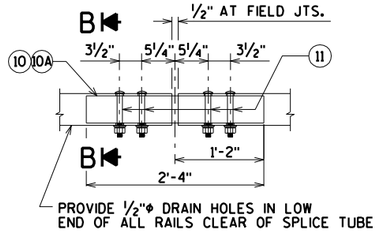
8

10/8/2018

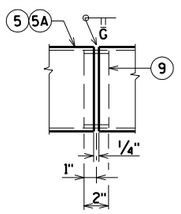
PENTABLE:BReau_shd_util.tbl



SECTION THRU RAILING ON DECK

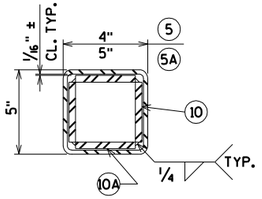


FIELD ERECTION JOINT DETAIL

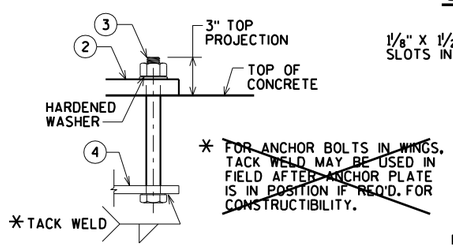


SHOP RAIL SPLICE DETAIL

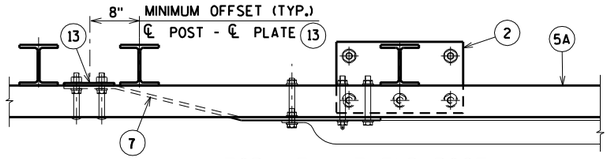
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



SECTION B

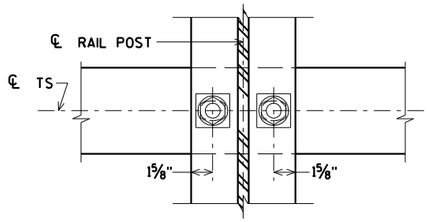


ANCHOR BOLTS

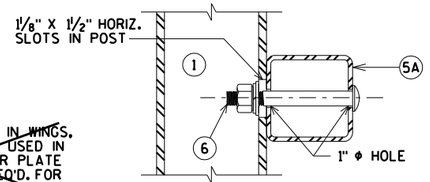


TOP VIEW AT END POST

(THRIE BEAM RAIL ATTACHMENT)



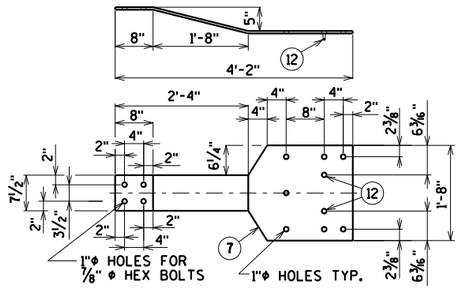
SECTION THRU POST WEB



SECTION THRU RAIL

NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS

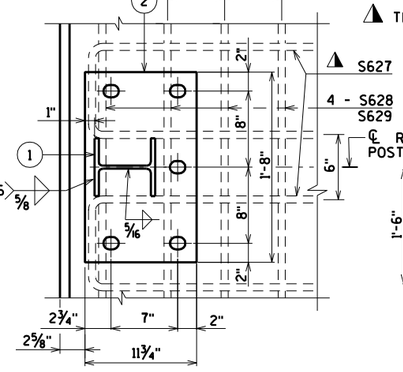


BACK-UP PLATE DETAIL

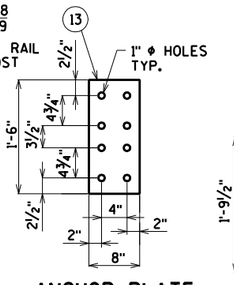
(AT BEAM GUARD ATTACHMENT)

LEGEND

1. W6 x 25 WITH 1⅛" X 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1¼" x 11¾" x 1'-8" WITH 1⅝" X 1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. USE 10¾" LONG AT ALL OTHER LOCATIONS. (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)
4. ⅝" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, 3/16" X 1⅝" X 1⅝" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
7. ½" THK. BACK-UP PLATE WITH 2 - ⅞" X 1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
8. 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
9. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
10. ⅜" X 3⅝" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
10A. ⅜" X 2⅝" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3⅝" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
11. ⅞" φ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1⅝" X 1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS ~~AND 1⅝" X 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS~~ IN PLATE NO. 10A.
12. ⅞" DIA. X 1½" LONG THREADED SHOP WELDED STUDS (2 REQ'D).
13. ⅜" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
14. ⅞" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
15. 1" φ HOLES IN TUBES NO. 5A FOR ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

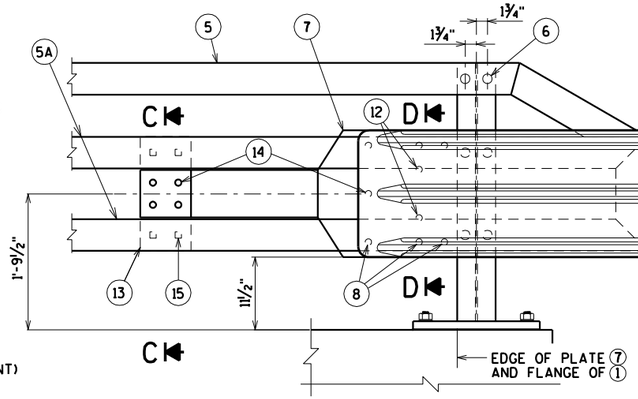


SECTION A



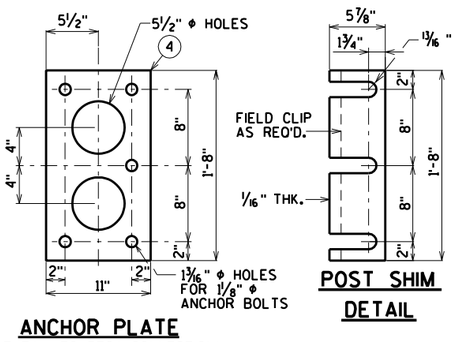
ANCHOR PLATE

(AT BEAM GUARD ATTACHMENT)



DETAIL AT END POST

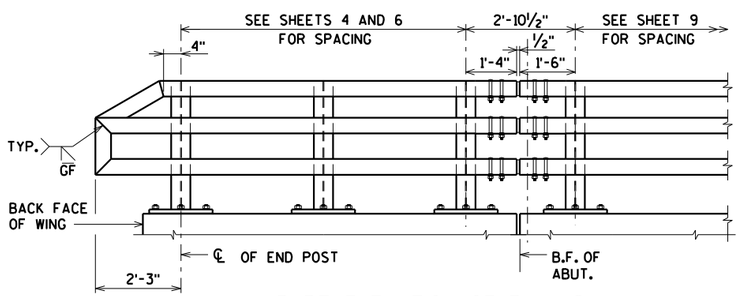
(THRIE BEAM RAIL ATTACHMENT)



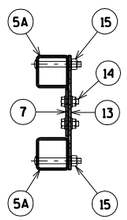
ANCHOR PLATE

(AT RAIL TO DECK CONNECTION)

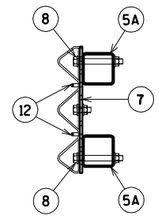
POST SHIM DETAIL



PART ELEVATION OF RAILING



SECTION C



SECTION D

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-11-13" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛ TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. ~~RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.~~
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.
10. ~~WHEN PAINTING IS REQUIRED, ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 3 & 4) SHALL BE PAINTED OVER GALVANIZING WITH APPROVED TIE COAT AND TOP COAT.~~

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-11-13

DRAWN BY CLS | PLANS CK'D. CJM

RAILING TUBULAR TYPE M

SHEET 12 OF 12
154

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

EARTHWORK DATA - CTH V

STATION	AREA (SF) CUT	AREA (SF) FILL	INCR. VOL (CY) CUT	INCR. VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXP. FILL 1.25	MASS ORDINATE
98+00.000	75.48	30.96	0.00	0.00	0.00	0.00	0.00
98+50.000	42.99	0.78	109.70	29.39	109.70	36.74	72.96
98+75.000	31.70	0.00	34.58	0.36	144.27	37.19	107.08
99+00.000	0.00	16.21	14.67	7.50	158.95	46.56	112.39
99+25.000	21.63	71.91	10.01	40.80	168.96	97.56	71.40
99+50.000	36.70	75.70	25.59	69.92	194.55	184.96	9.59
99+75.000	46.68	45.55	36.00	58.47	230.55	258.05	-27.50
100+00.000	20.58	52.63	31.14	45.46	261.68	314.88	-53.20
100+50.000	0.00	120.29	19.05	160.11	280.74	515.01	-234.27
101+00.000	146.72	20.19	135.85	130.08	416.59	677.61	-261.02
101+50.000	349.11	5.91	459.10	24.17	875.69	707.83	167.87
102+00.000	53.40	90.50	372.69	89.26	1248.38	819.40	428.98
102+50.000	38.94	65.36	88.14	134.95	1336.52	988.09	348.43
103+00.000	65.16	20.25	100.56	71.47	1437.08	1077.43	359.66
103+50.000	49.58	9.63	108.49	25.54	1545.57	1109.35	436.22
103+76.000	66.19	4.73	55.74	6.92	1601.31	1118.00	483.31
104+00.000	46.55	6.80	50.11	5.13	1651.42	1124.41	527.01
104+50.000	44.42	10.51	84.24	16.03	1735.66	1144.45	591.21
104+78.000	70.93	10.97	59.81	11.14	1795.47	1158.38	637.10
105+00.000	27.72	12.72	40.19	9.65	1835.66	1170.44	665.22
105+29.000	27.49	1.71	29.65	7.75	1865.31	1180.13	685.19
105+50.000	32.02	9.40	23.14	4.32	1888.45	1185.53	702.93
105+58.000	30.53	9.16	9.27	2.75	1897.72	1188.96	708.76
105+88.000	21.48	3.20	28.89	6.86	1926.61	1197.54	729.07
106+00.000	17.10	11.71	8.57	3.31	1935.18	1201.68	733.51
106+50.000	50.57	15.73	62.65	25.40	1997.84	1233.43	764.42
107+00.000	32.71	2.79	77.11	17.15	2074.95	1254.86	820.09
107+50.000	24.60	5.25	53.07	7.45	2128.02	1264.18	863.85
107+82.000	44.60	9.59	41.01	8.79	2169.02	1275.16	893.86
108+00.000	32.30	0.93	25.63	3.50	2194.66	1279.54	915.12
108+35.000	64.74	9.09	63.29	6.37	2257.95	1287.50	970.45
108+50.000	55.00	7.94	34.51	4.28	2292.46	1292.85	999.61
109+00.000	79.00	4.85	127.53	10.73	2419.99	1306.26	1113.73
109+50.000	79.21	0.00	149.37	4.07	2569.36	1311.35	1258.01
109+59.000	80.77	0.00	26.97	0.00	2596.33	1311.35	1284.98
110+00.000	71.92	5.69	116.02	4.23	2712.35	1316.64	1395.71
110+50.000	75.23	1.01	136.25	6.20	2848.60	1324.39	1524.21
110+68.000	90.14	0.38	55.12	0.46	2903.72	1324.96	1578.76

EARTHWORK DATA - CTH V

STATION	AREA (SF) CUT	AREA (SF) FILL	INCR. VOL (CY) CUT	INCR. VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXP. FILL 1.25	MASS ORDINATE
111+00.000	86.90	0.05	104.91	0.25	3008.63	1325.28	1683.36
111+44.000	89.15	0.27	143.45	0.26	3152.09	1325.60	1826.49
111+50.000	78.00	0.75	18.57	0.11	3170.66	1325.74	1844.92
111+70.000	97.63	0.00	65.05	0.28	3235.71	1326.09	1909.62
112+00.000	96.00	0.53	107.57	0.29	3343.28	1326.45	2016.83
112+50.000	108.74	2.09	189.58	2.42	3532.86	1329.48	2203.39
112+75.000	119.44	0.00	105.64	0.97	3638.50	1330.69	2307.81
112+92.000	118.62	0.00	74.94	0.00	3713.44	1330.69	2382.75
113+00.000	107.68	0.00	33.53	0.00	3746.97	1330.69	2416.28
113+11.000	128.58	0.00	48.13	0.00	3795.10	1330.69	2464.41
113+50.000	114.13	0.76	175.29	0.55	3970.39	1331.38	2639.02
113+72.000	121.44	1.35	95.97	0.86	4066.36	1332.45	2733.91
114+00.000	118.36	0.78	124.34	1.11	4190.70	1333.84	2856.86
114+25.000	120.35	1.02	110.52	0.83	4301.22	1334.88	2966.35
114+50.000	113.04	0.00	108.05	0.47	4409.27	1335.46	3073.81
114+80.000	108.51	0.00	123.08	0.00	4532.35	1335.46	3196.89
115+00.000	101.41	0.00	77.75	0.00	4610.10	1335.46	3274.64
115+21.000	91.94	0.00	74.76	0.00	4684.86	1335.46	3349.40
115+50.000	82.36	0.50	93.60	0.27	4778.46	1335.80	3442.66
115+65.000	96.35	0.28	49.64	0.22	4828.10	1336.08	3492.03
115+80.000	104.21	0.32	55.71	0.17	4883.81	1336.29	3547.52
116+00.000	91.57	0.64	72.51	0.36	4956.32	1336.74	3619.58
116+50.000	99.19	0.00	176.63	0.59	5132.95	1337.48	3795.48
116+75.000	115.68	0.00	99.48	0.00	5232.43	1337.48	3894.96
117+00.000	99.38	0.99	99.56	0.46	5331.99	1338.05	3993.94
117+50.000	125.76	0.00	208.46	0.92	5540.45	1339.20	4201.25
118+00.000	130.03	0.00	236.84	0.00	5777.30	1339.20	4438.10
118+46.300	87.74	0.00	186.72	0.00	5964.01	1339.20	4624.81
118+50.000	86.47	0.00	11.94	0.00	5975.95	1339.20	4636.75
118+80.300	77.13	3.82	91.80	2.14	6067.75	1341.88	4725.88
119+00.000	69.23	2.17	53.39	2.19	6121.14	1344.61	4776.53
119+05.300	67.15	5.32	13.39	0.74	6134.53	1345.54	4788.99
119+30.300	57.78	8.08	57.63	6.28	6192.16	1353.39	4838.77
119+50.000	48.36	20.42	38.72	10.40	6230.88	1366.39	4864.49
119+80.300	1.51	0.25	27.99	11.60	6258.87	1380.89	4877.98

EARTHWORK DATA - CTH V

STATION	AREA (SF) CUT	AREA (SF) FILL	INCR. VOL (CY) CUT	INCR. VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXP. FILL 1.25	MASS ORDINATE
120+78.300	32.74	196.11	62.17	356.36	6321.04	1826.34	4494.70
121+00.000	40.02	96.27	29.24	117.49	6350.28	1973.20	4377.08
121+28.300	53.55	2.42	49.04	51.72	6399.31	2037.85	4361.46
121+53.300	57.89	38.67	51.59	19.02	6450.91	2061.63	4389.29
121+78.300	58.28	47.06	53.79	39.69	6504.69	2111.24	4393.45
122+00.000	58.66	35.66	47.00	33.24	6551.69	2152.79	4398.90
122+12.300	58.77	19.41	26.75	12.54	6578.44	2168.46	4409.98
122+50.000	61.89	14.90	84.23	23.96	6662.67	2198.41	4464.26
123+00.000	58.56	12.33	111.52	25.22	6774.19	2229.94	4544.25
123+50.000	56.96	0.01	106.97	11.42	6881.16	2244.21	4636.95
124+00.000	48.26	0.00	97.43	0.01	6978.59	2244.23	4734.37
124+50.000	55.42	0.00	96.00	0.00	7074.58	2244.23	4830.36

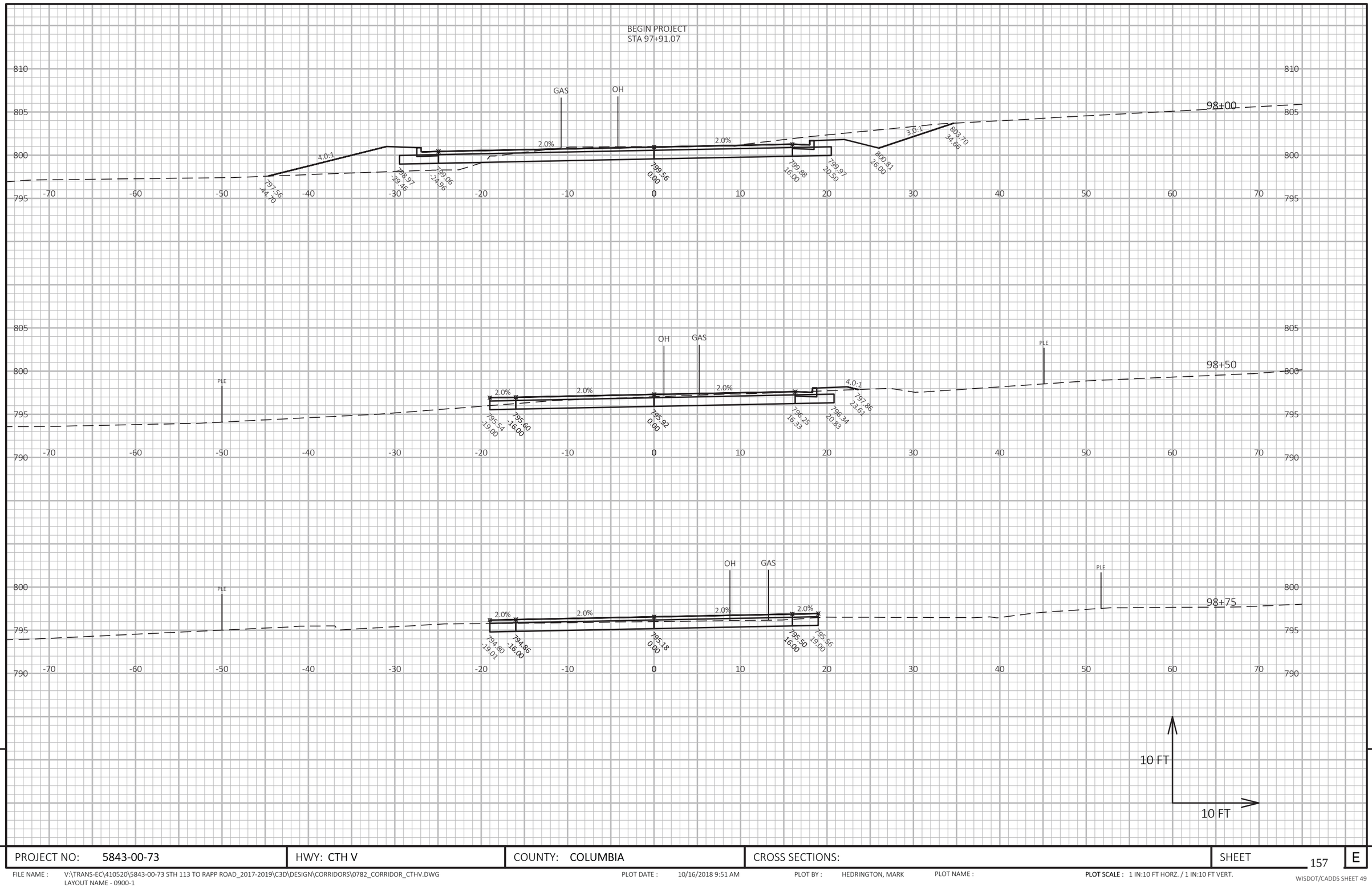
EARTHWORK DATA - SHAMROCK ROAD

STATION	AREA (SF) CUT	AREA (SF) FILL	INCR. VOL (CY) CUT	INCR. VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXP. FILL 1.25	MASS ORDINATE
10+50.000	24.48	10.04	0.00	0.00	0.00	0.00	0.00
11+00.000	30.02	0.03	50.47	9.32	50.47	11.65	38.82
11+50.000	30.03	10.78	55.60	10.01	106.07	24.16	81.91
12+00.000	31.75	4.55	57.20	14.20	163.28	41.91	121.37
12+31.000	51.93	0.66	48.04	2.99	211.31	45.65	165.66
12+50.000	36.92	3.63	31.26	1.51	242.58	47.54	195.04
13+00.000	39.76	2.11	71.01	5.32	313.58	54.19	259.39
13+36.000	53.25	0.37	62.01	1.65	375.59	56.25	319.34
13+50.000	56.41	0.30	28.43	0.17	404.02	56.46	347.56
13+66.000	65.71	0.00	36.18	0.09	440.20	56.58	383.63
13+83.000	81.00	0.00	46.19	0.00	486.38	56.58	429.81
14+00.000	73.70	0.16	48.70	0.05	535.09	56.64	478.45
14+25.000	76.29	0.04	70.27	0.09	605.35	56.75	548.60
14+50.000	98.07	0.16	81.71	0.09	687.07	56.86	630.21
14+75.000	99.66	0.00	92.59	0.07	779.66	56.95	722.71
15+00.000	104.26	0.66	94.23	0.33	873.88	57.36	816.52
15+25.000	130.26	15.49	104.78	8.19	978.66	67.60	911.06
15+50.000	244.65	68.62	170.71	40.33	1149.37	118.01	1031.36

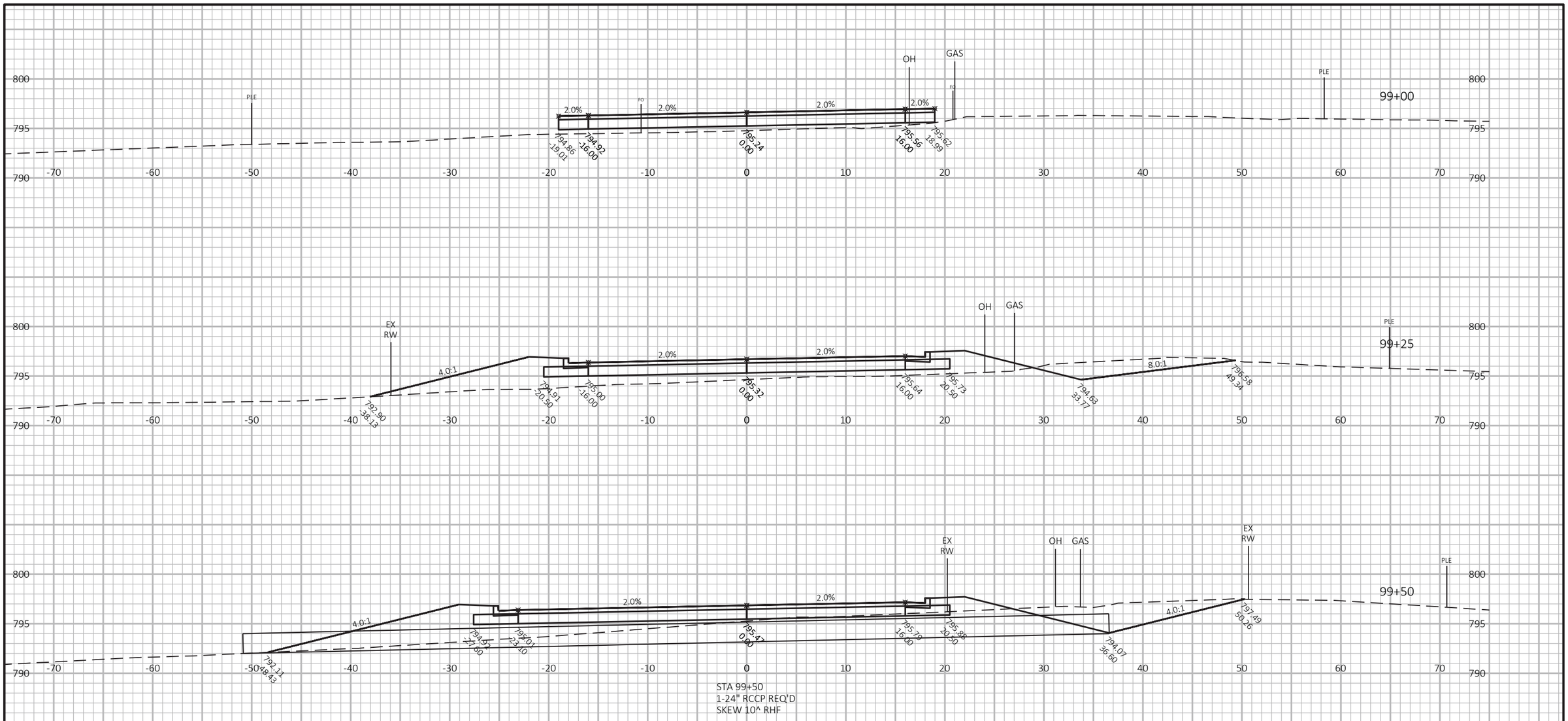
EARTHWORK DATA - OLD SAUK ROAD

STATION	AREA (SF) CUT	AREA (SF) FILL	INCR. VOL (CY) CUT	INCR. VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXP. FILL 1.25	MASS ORDINATE
20+50.000	0.00	197.11	0.00	0.00	0.00	0.00	0.00
20+75.000	0.00	159.36	0.00	164.55	0.00	205.69	-205.69
21+00.000	3.52	186.15	2.10	162.27	2.10	408.53	-406.43
21+50.000	0.00	116.66	3.84	283.79	5.94	763.26	-757.32
22+00.000	0.00	66.81	0.00	169.88	5.94	975.61	-969.67
22+50.000	0.00	16.13	0.00	76.80	5.94	1071.61	-1065.67
23+00.000	30.35	0.00	28.10	14.94	34.04	1090.29	-1056.25
23+50.000	40.45	5.89	65.55	5.45	99.59	1097.10	-997.51
24+00.000	26.65	5.39	62.13	10.45	161.72	1110.16	-948.44
24+50.000	28.51	3.75	51.07	8.46	212.79	1120.74	-907.95

BEGIN PROJECT
STA 97+91.07



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 157	E



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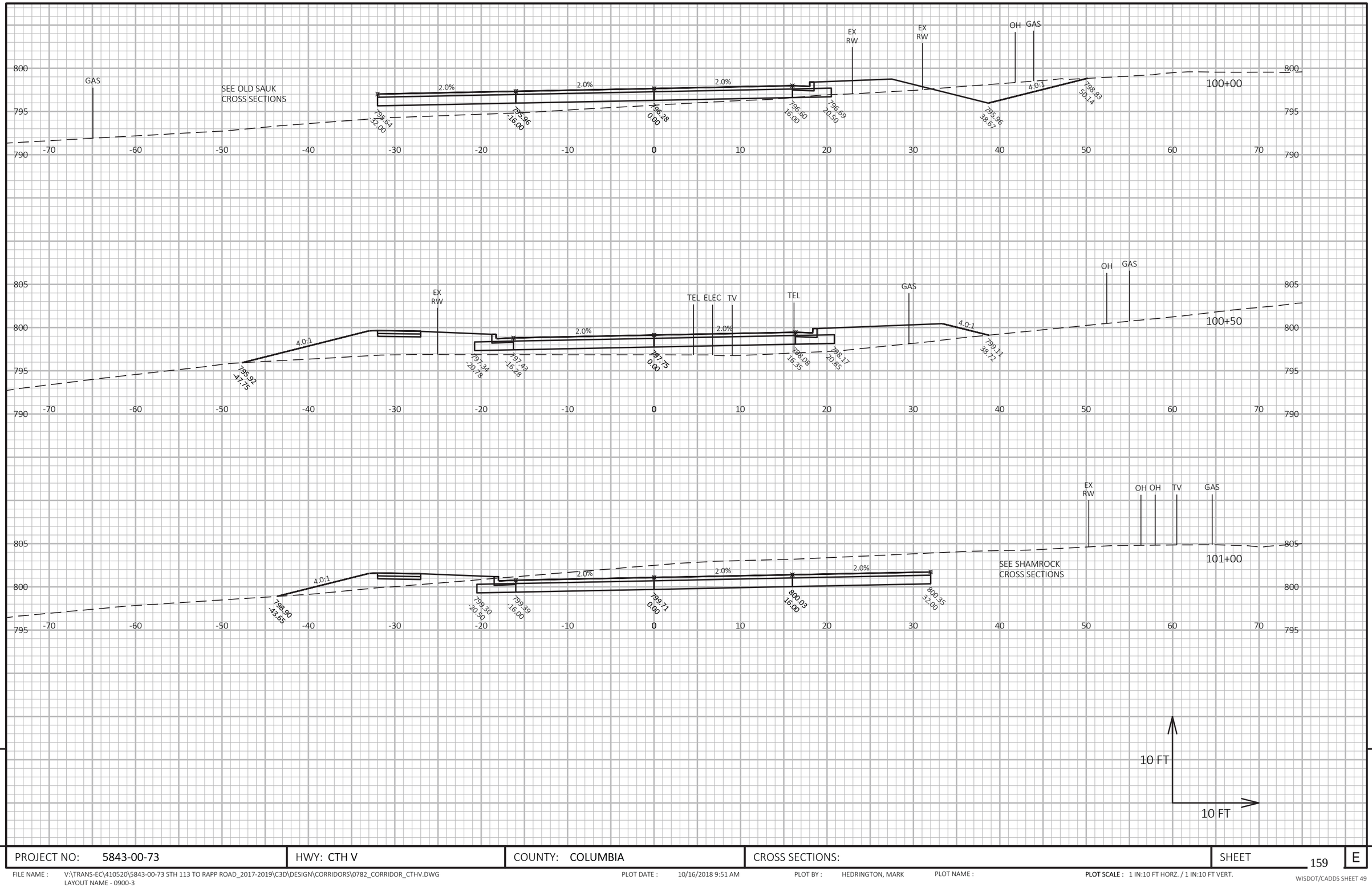
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 158	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-2

PLOT DATE : 10/16/2018 9:51 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

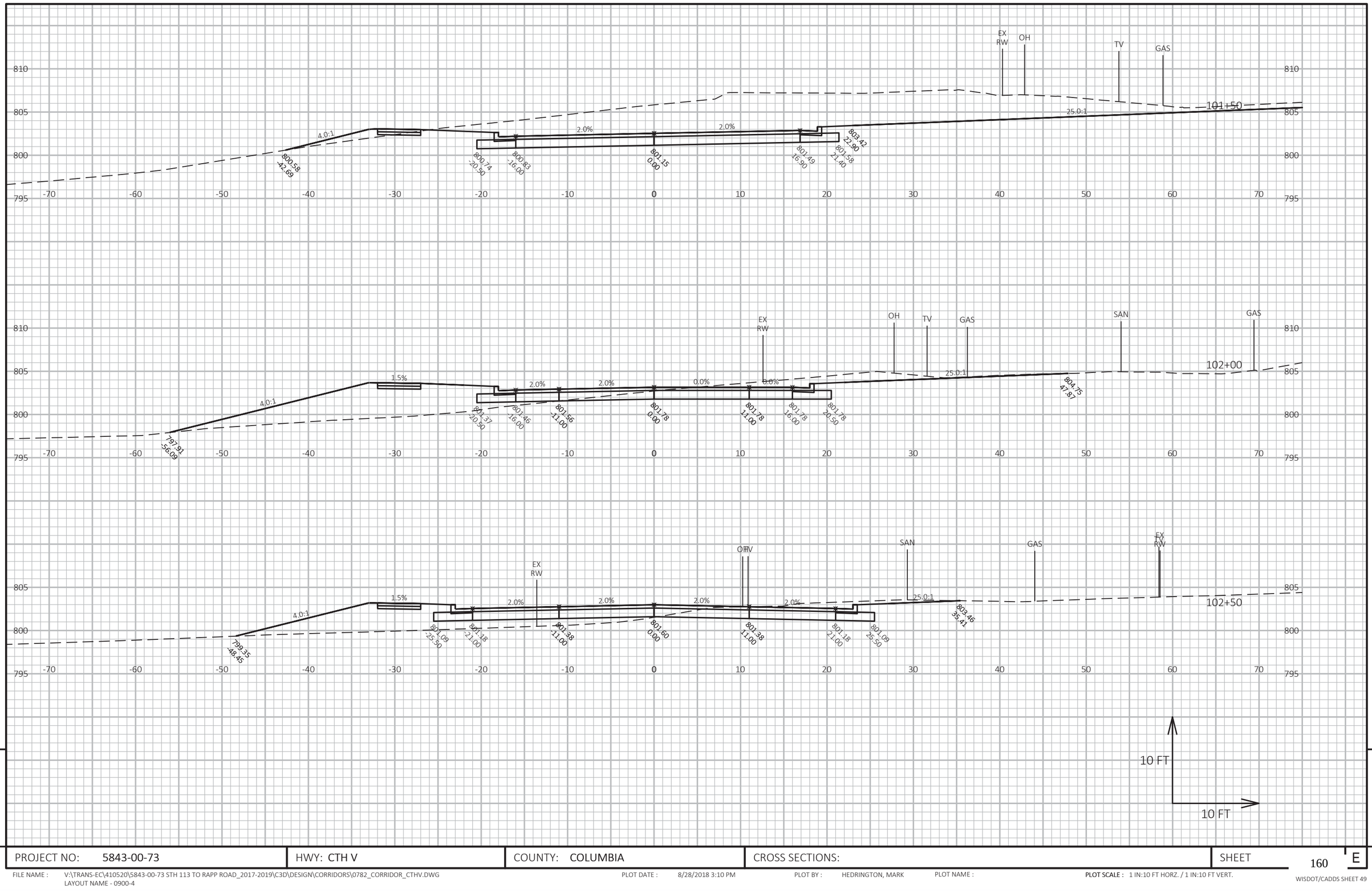


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 159	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-3

PLOT DATE : 10/16/2018 9:51 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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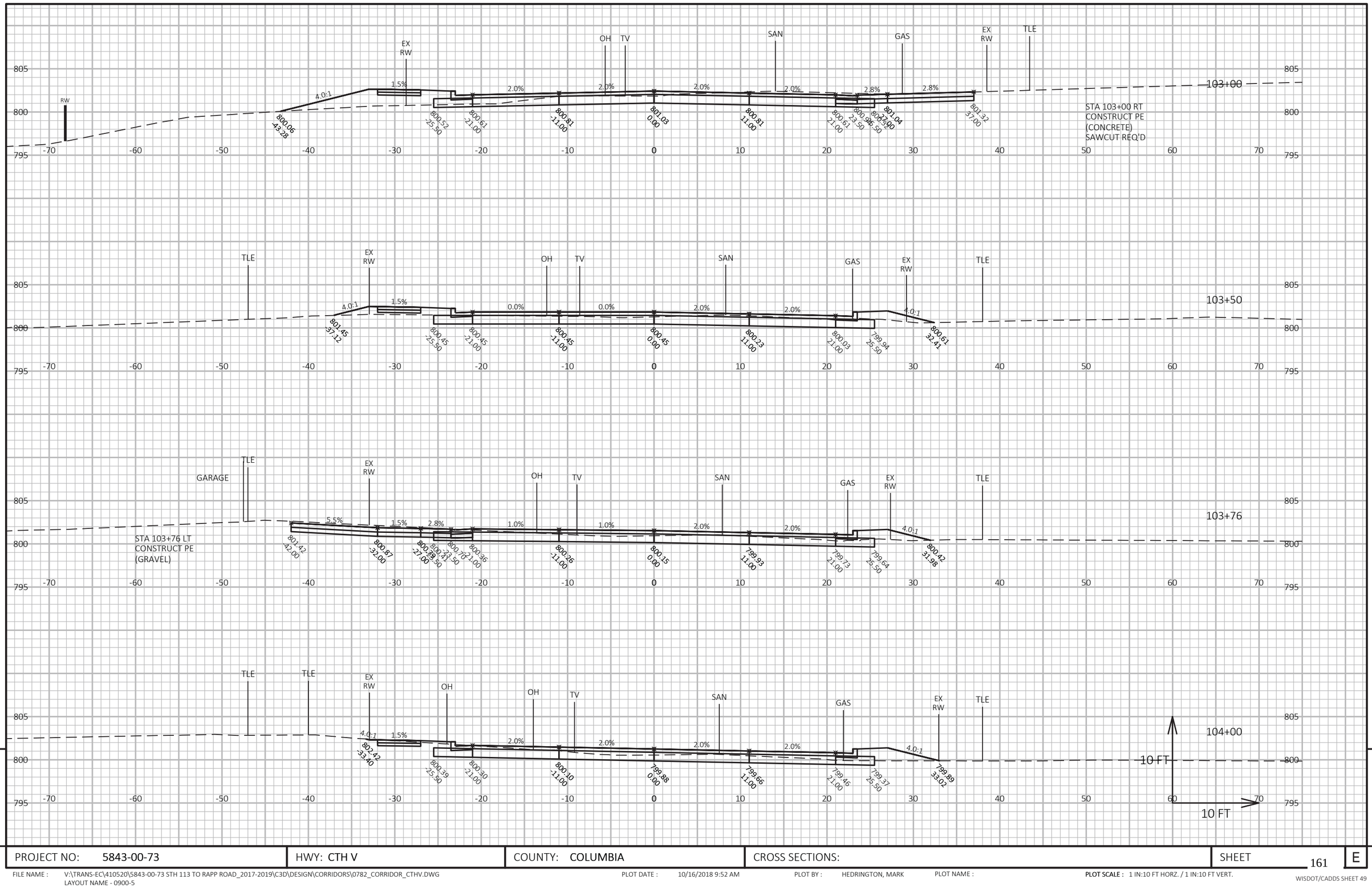
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 160	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-4

PLOT DATE : 8/28/2018 3:10 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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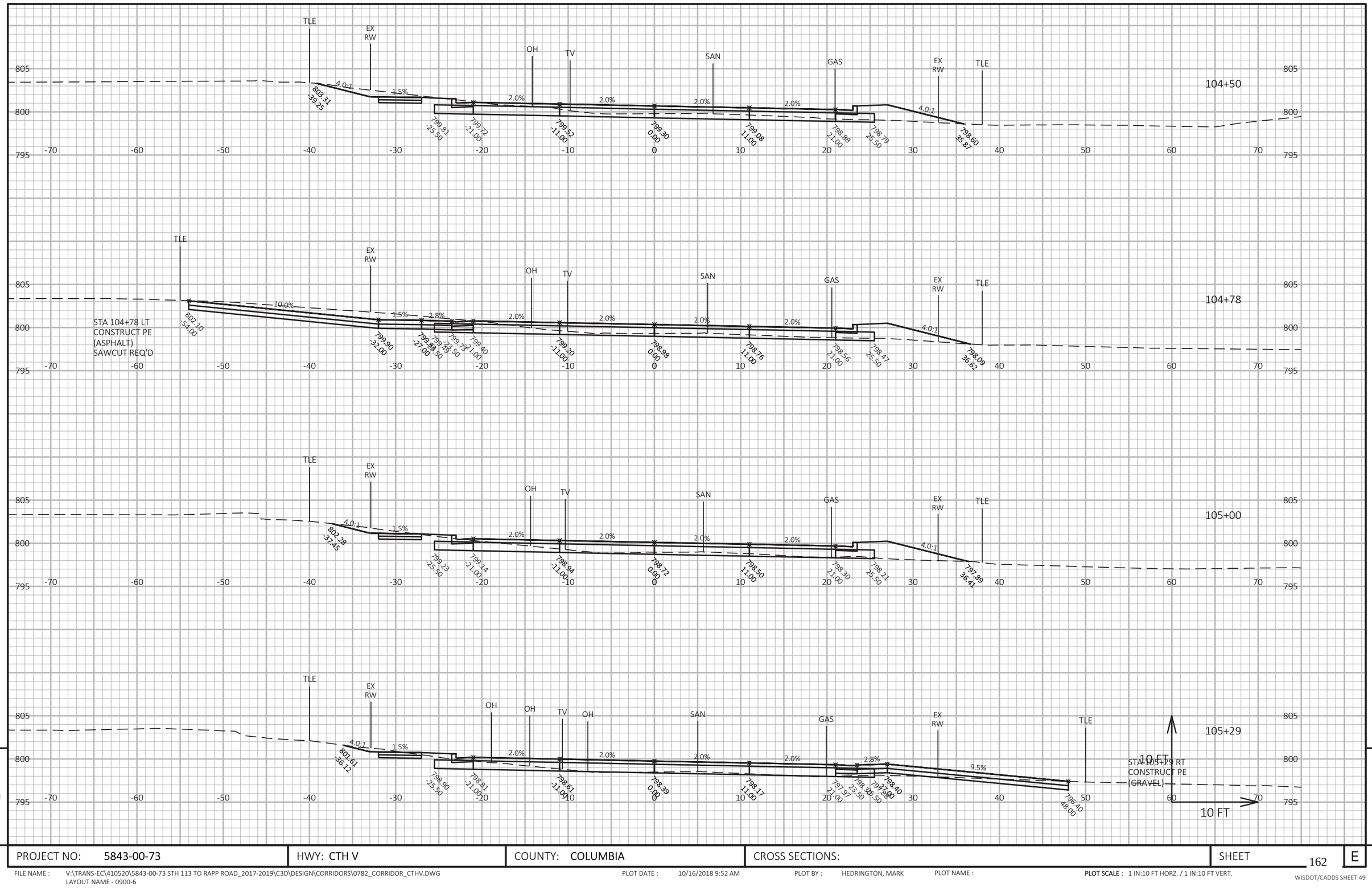
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 161	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-5

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

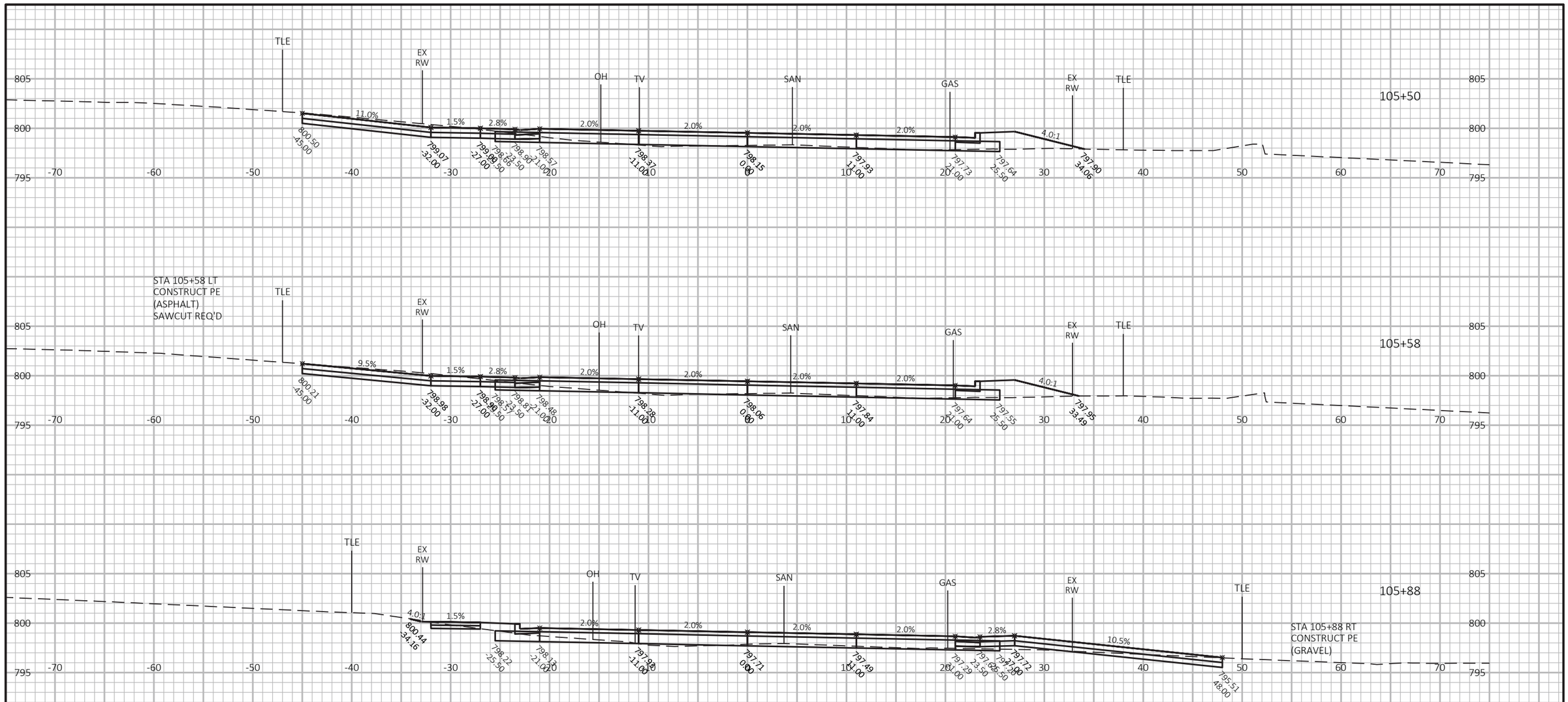


9 9

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 162	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-6

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



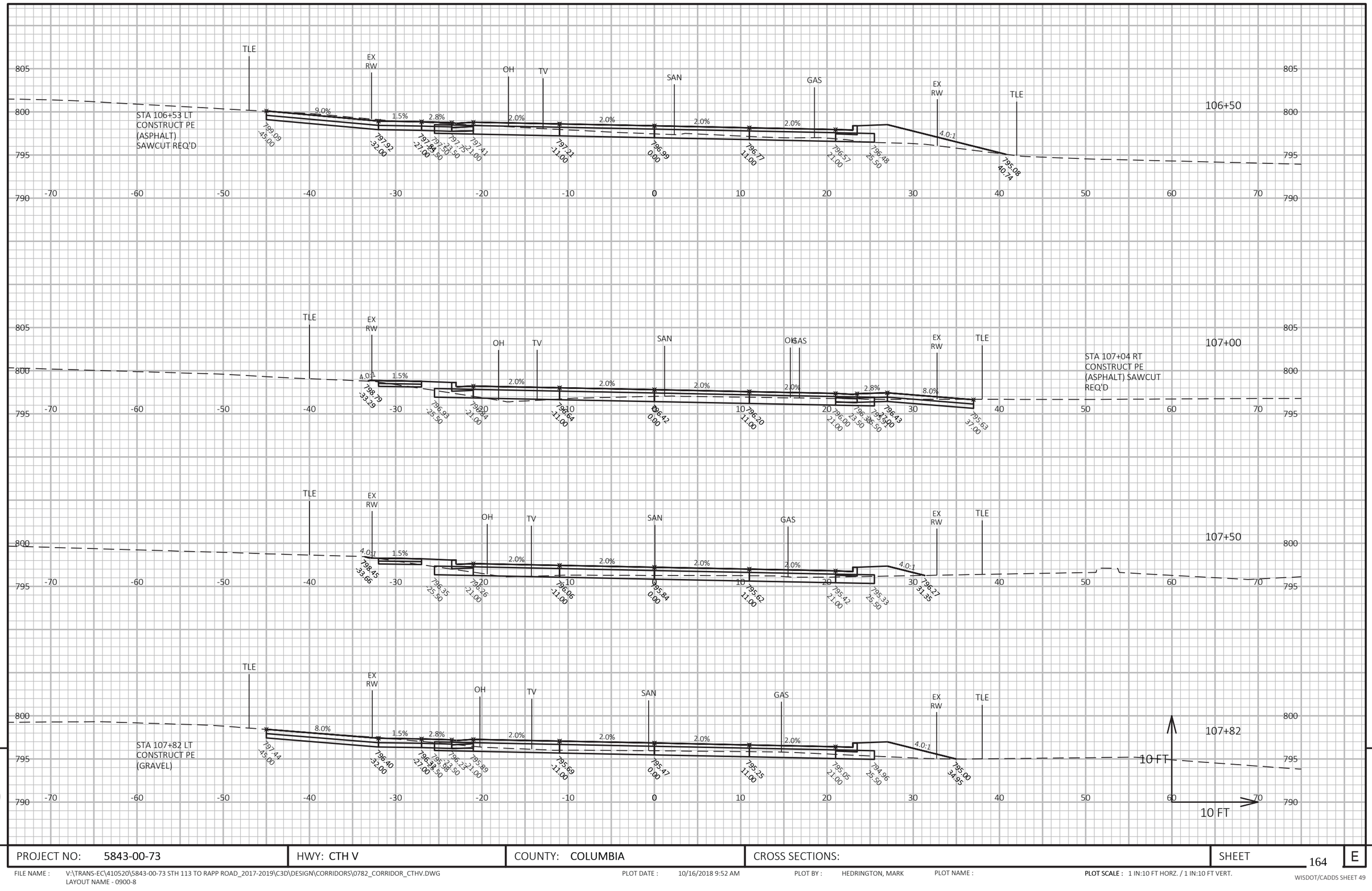
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 163	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-7

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9 9



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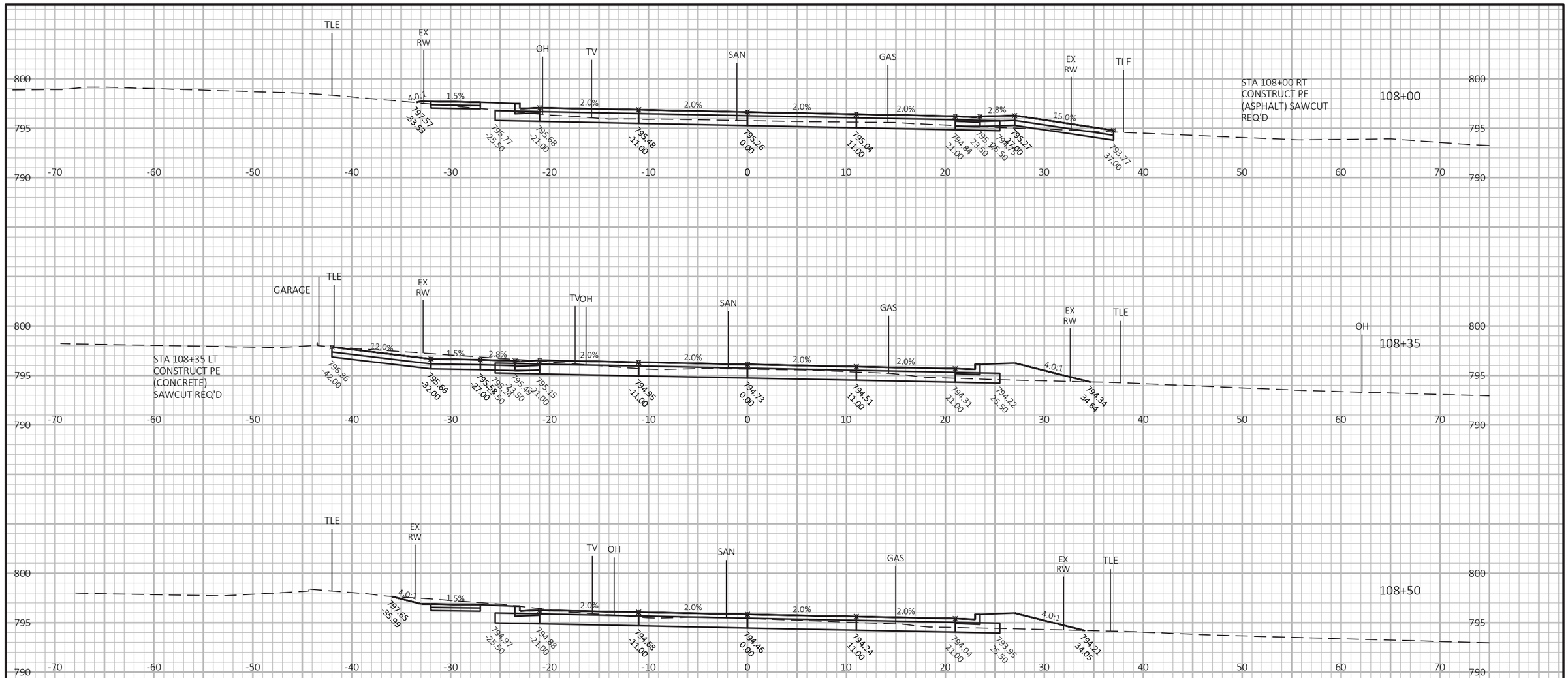
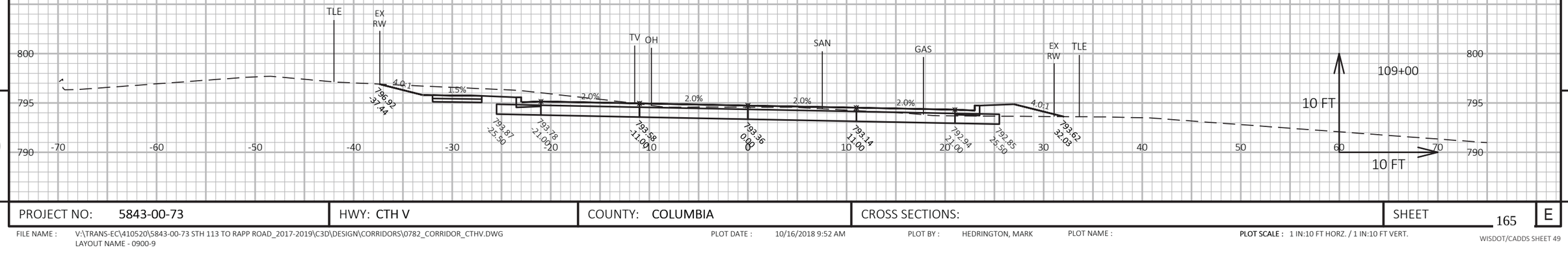
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 164	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-8

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.





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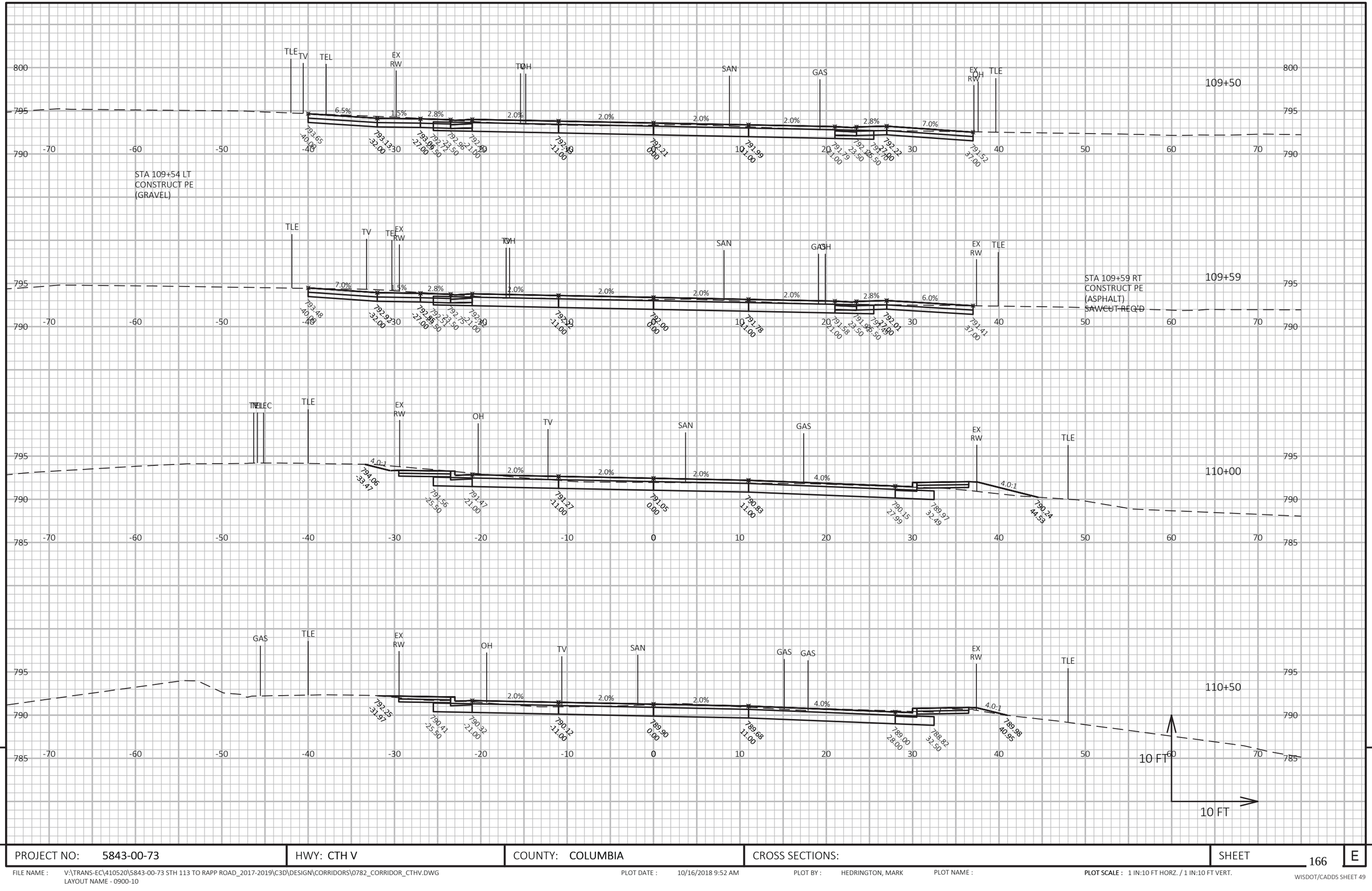
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 165	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-9

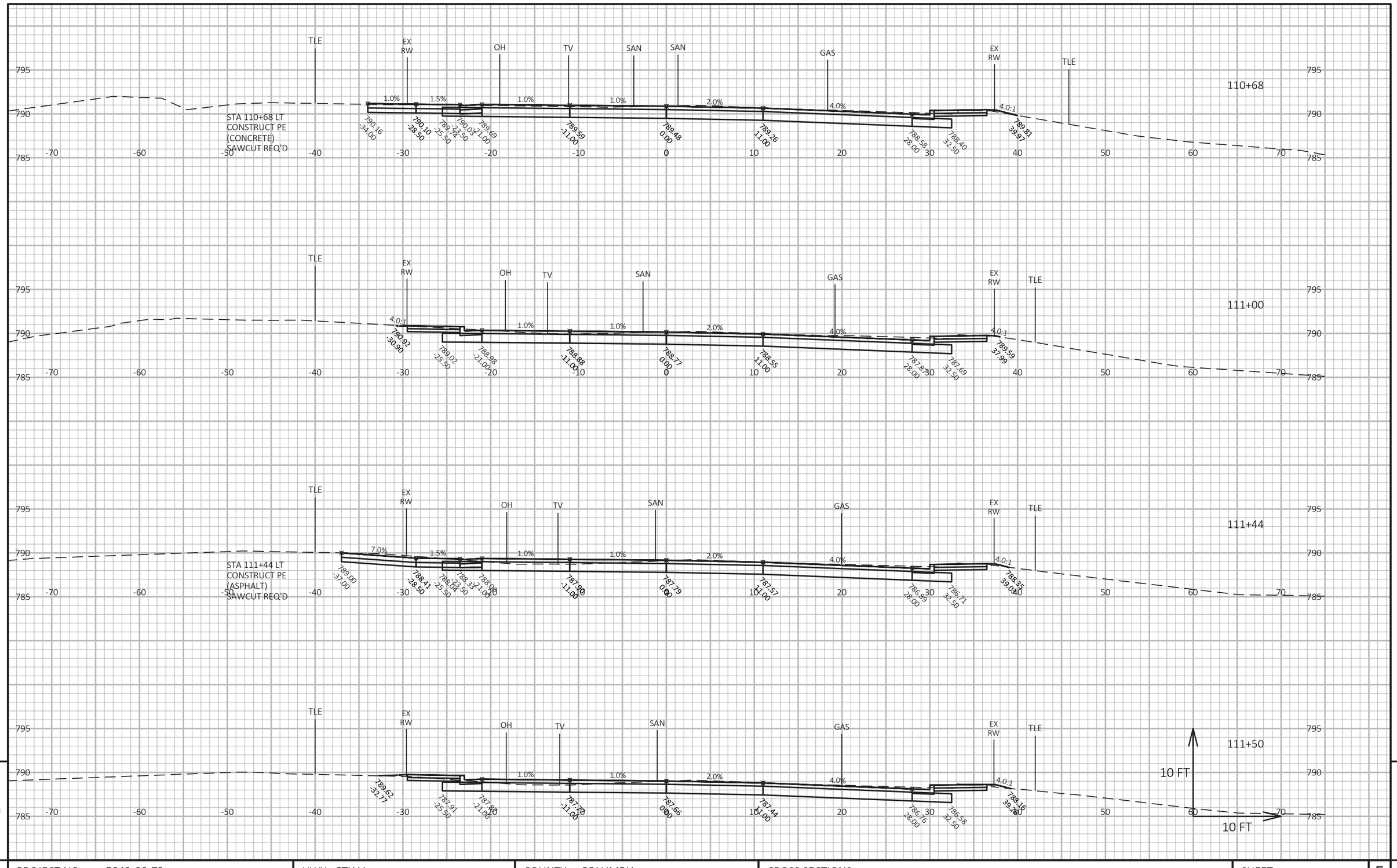
PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 166	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-10
PLOT DATE : 10/16/2018 9:52 AM
PLOT BY : HEDRINGTON, MARK
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 167	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-11

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

9

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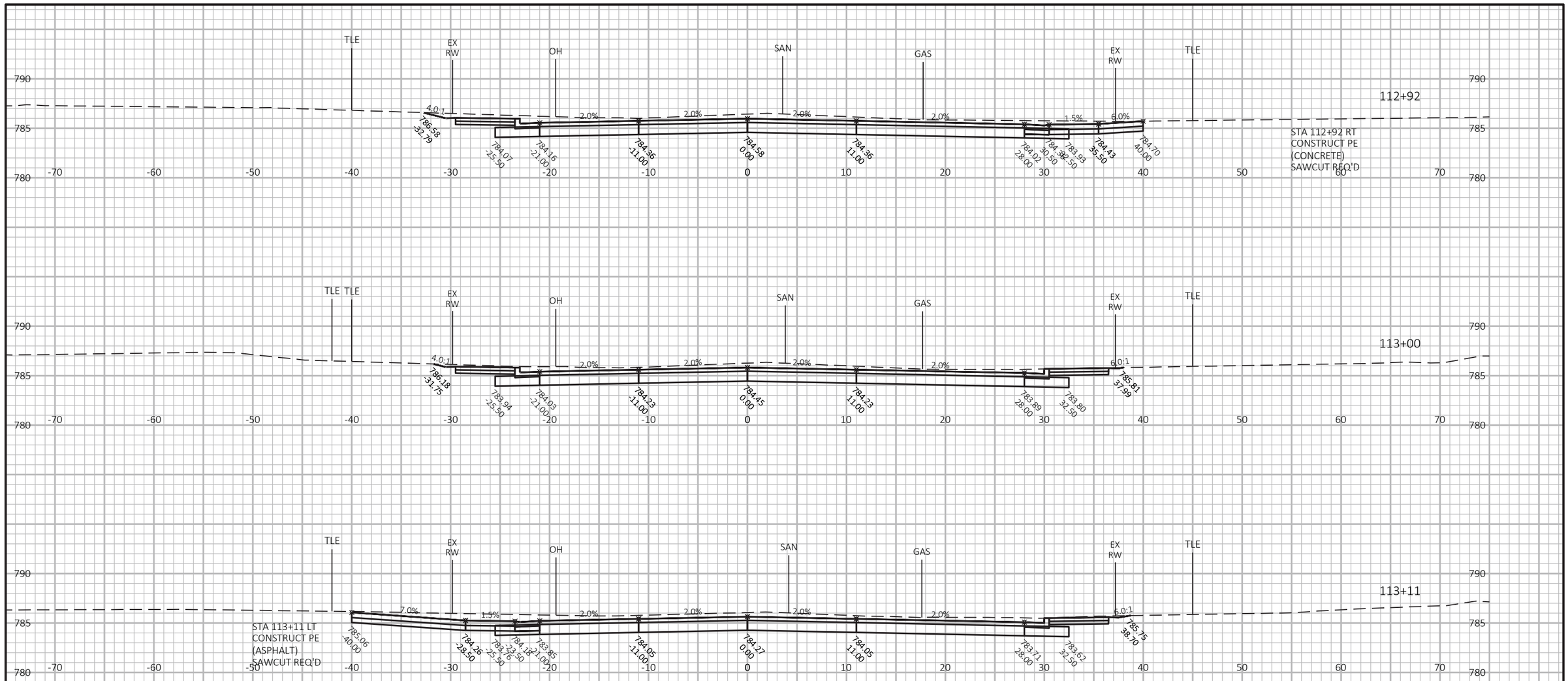
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 168	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-12
PLOT DATE : 10/16/2018 9:52 AM
PLOT BY : HEDRINGTON, MARK
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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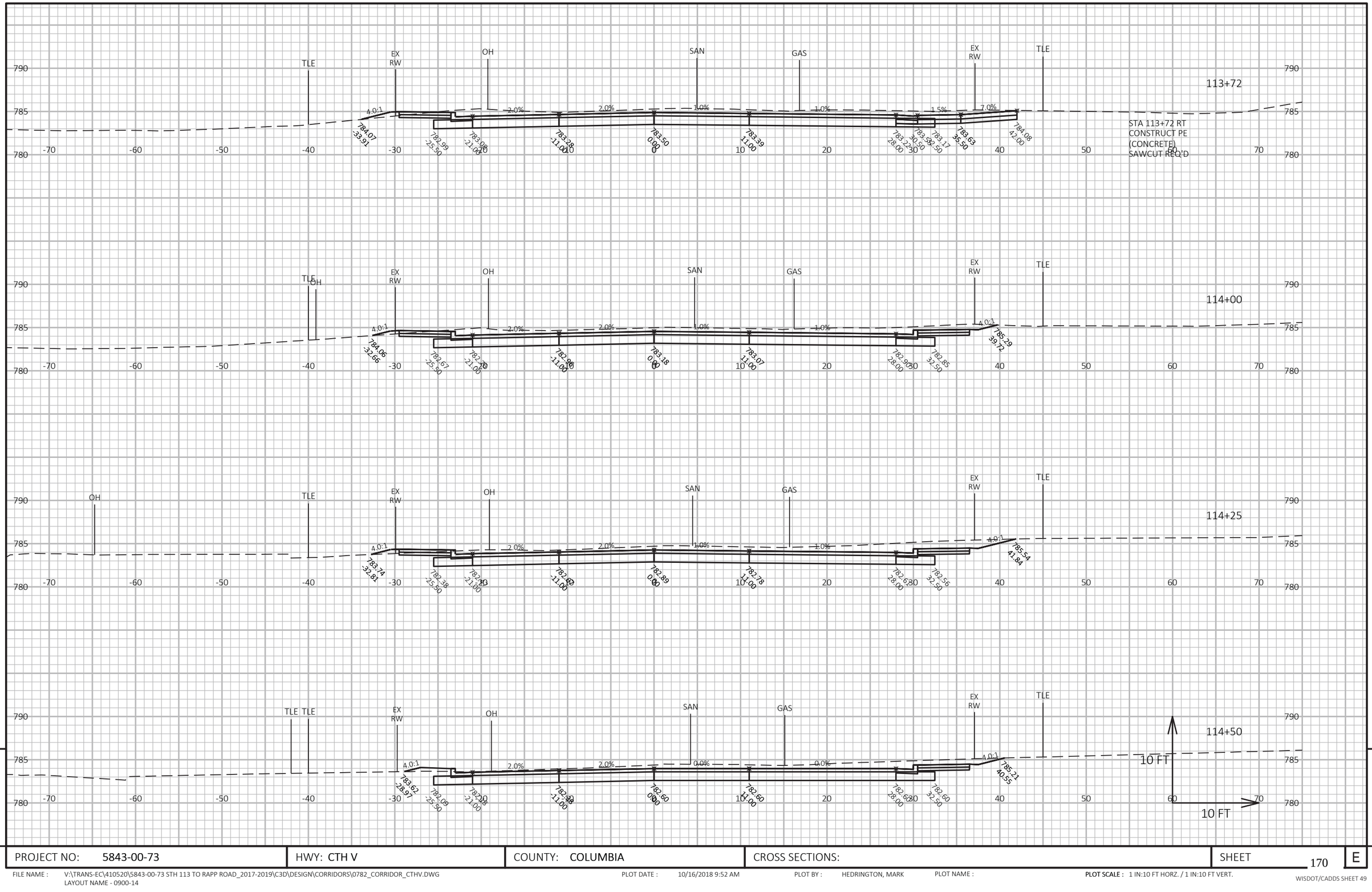
9

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 169	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-13

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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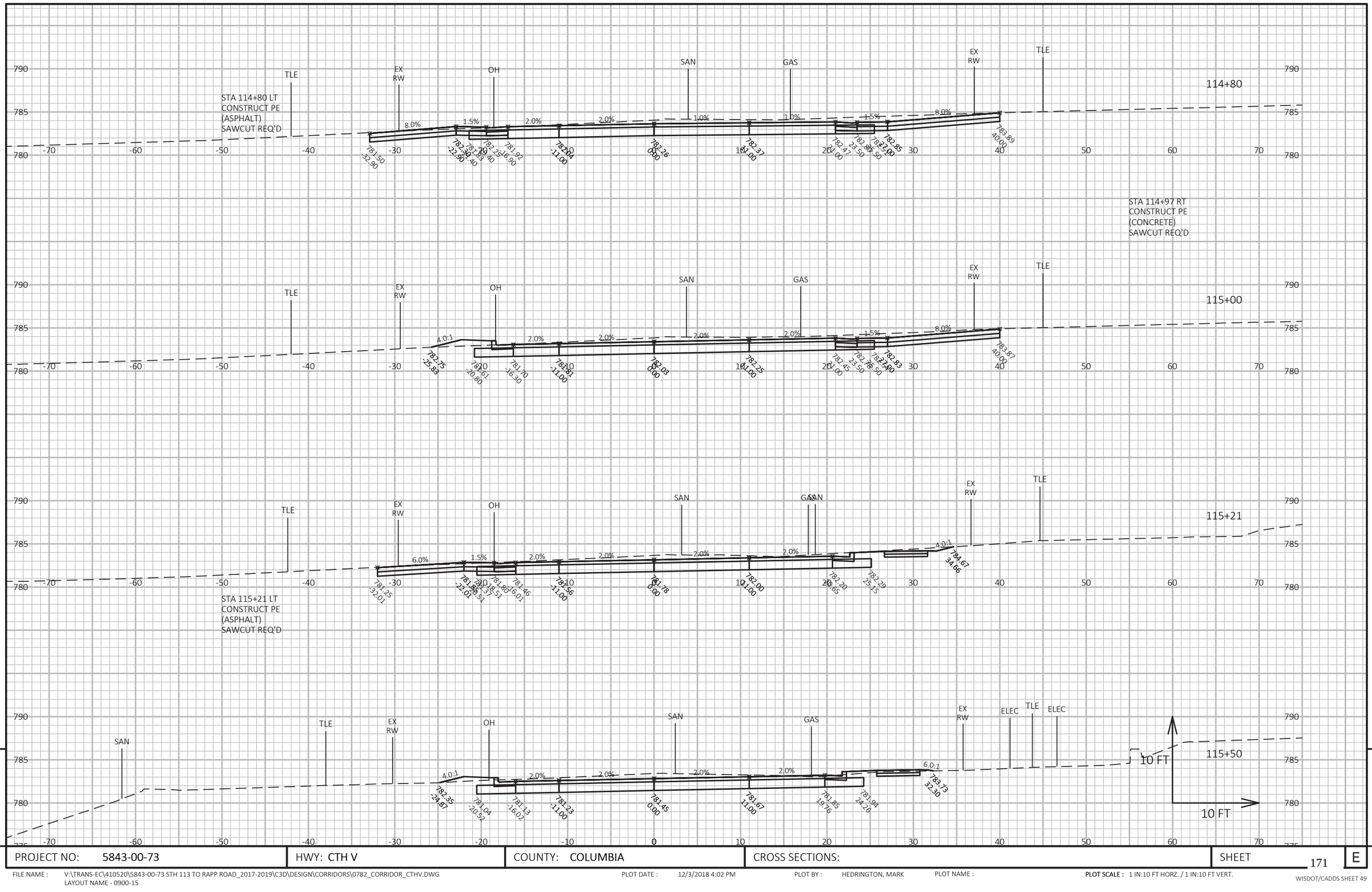
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 170	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-14

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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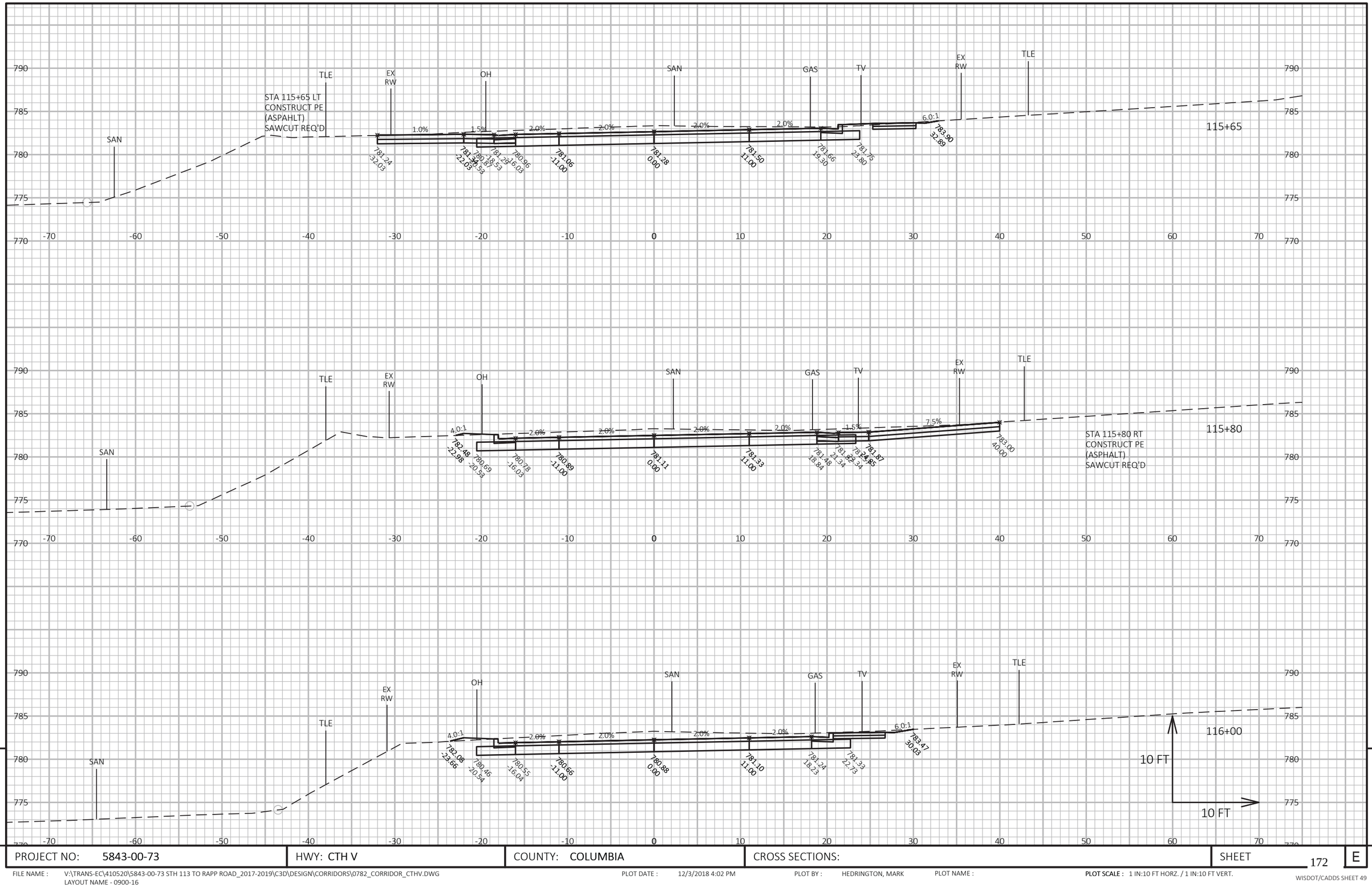
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 171	E

9

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-15

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

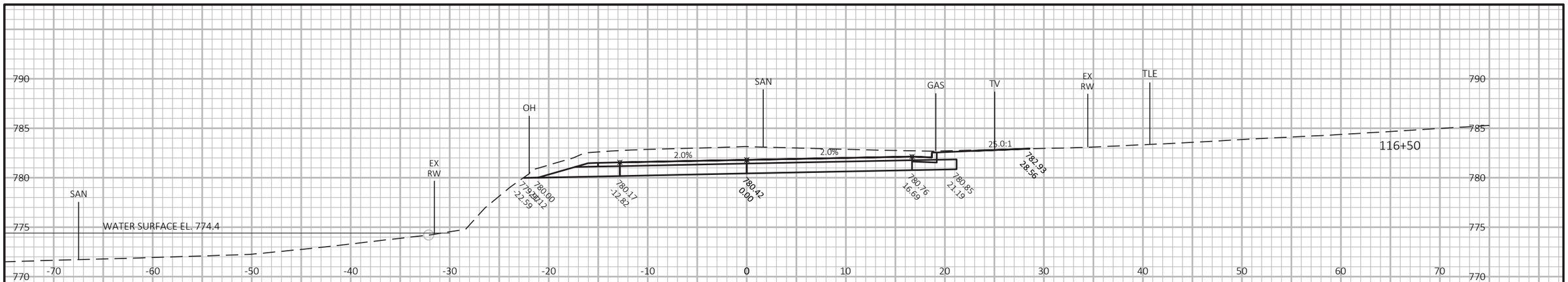


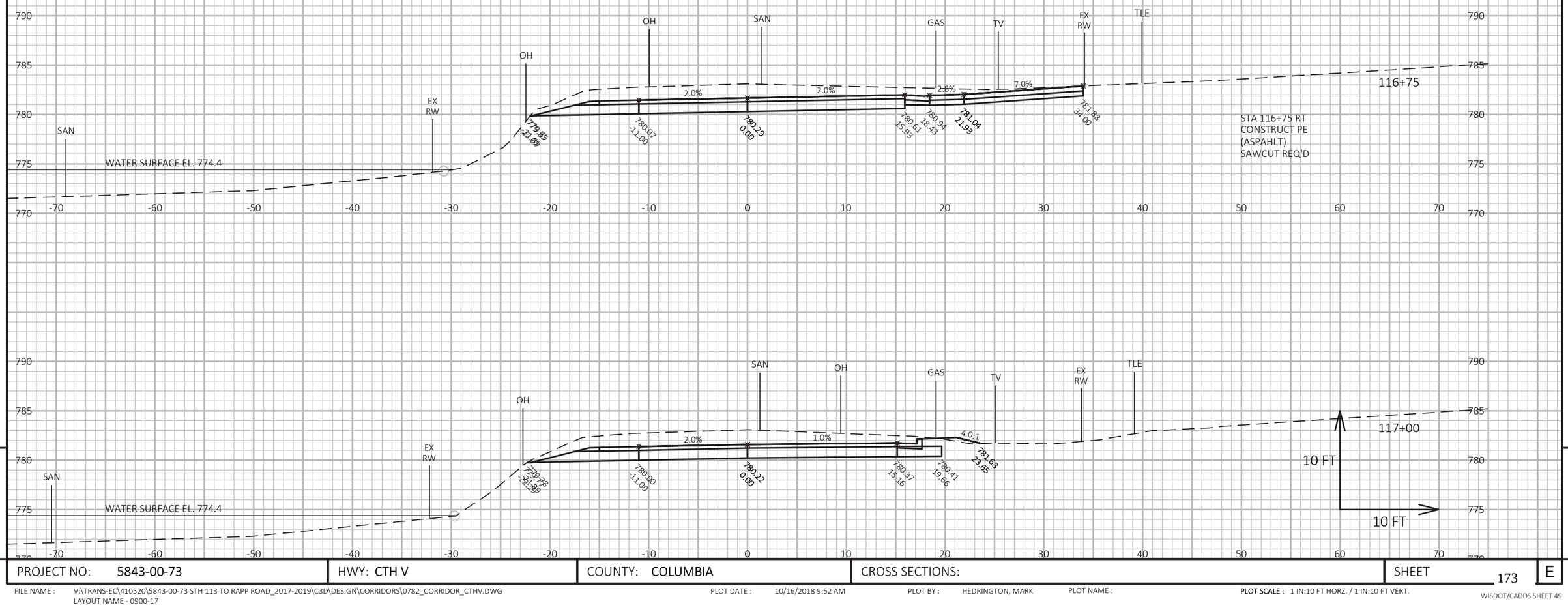
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 172	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-16

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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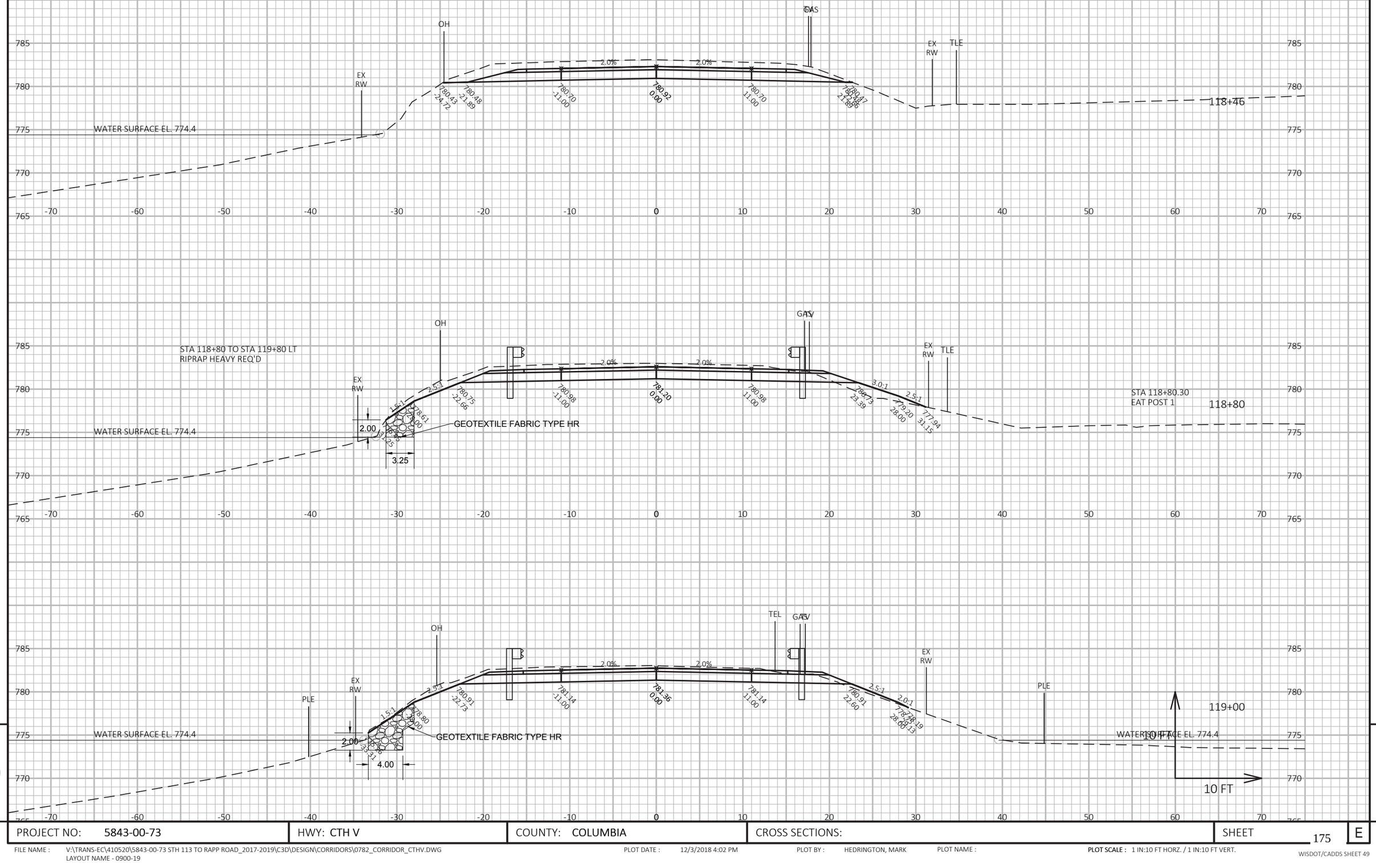
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 173	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-17

PLOT DATE : 10/16/2018 9:52 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 174	E



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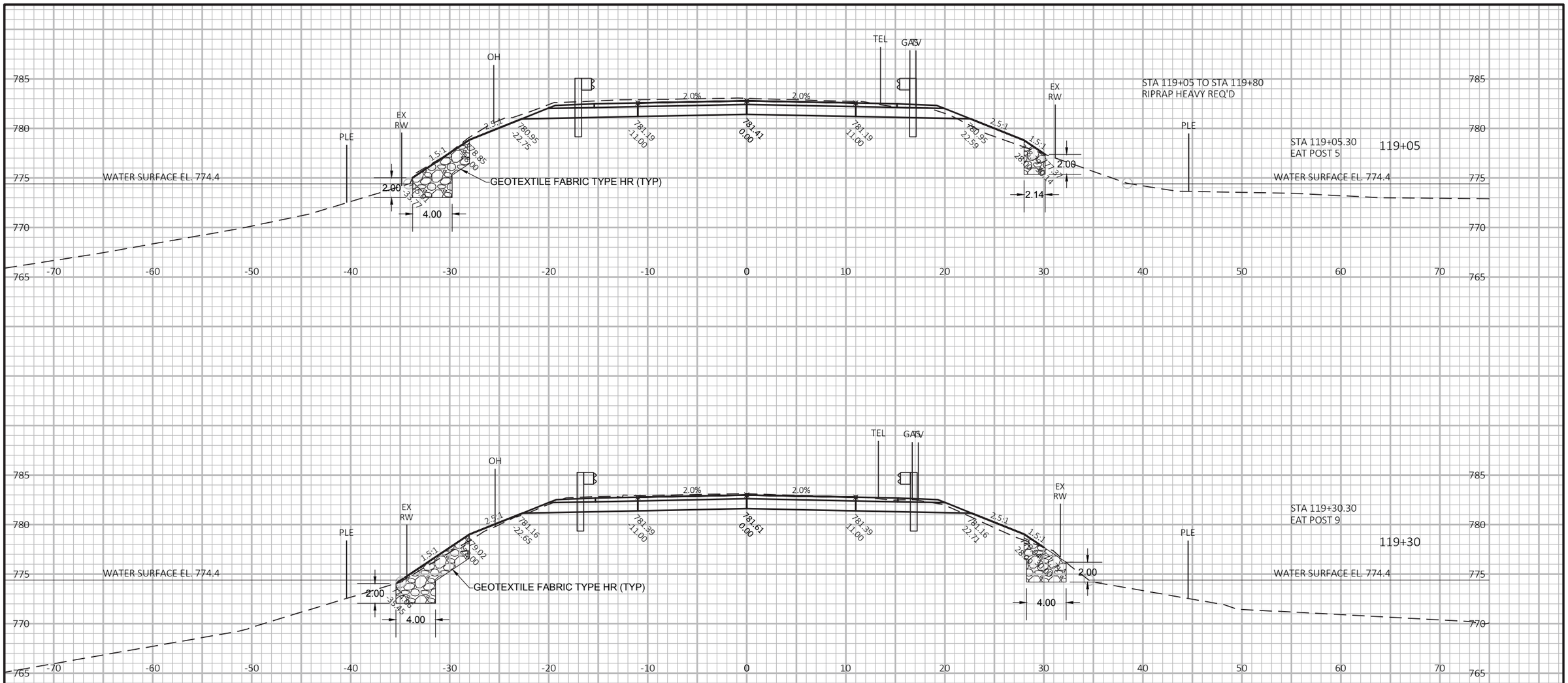
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 175	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-19

PLOT DATE : 12/3/2018 4:02 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

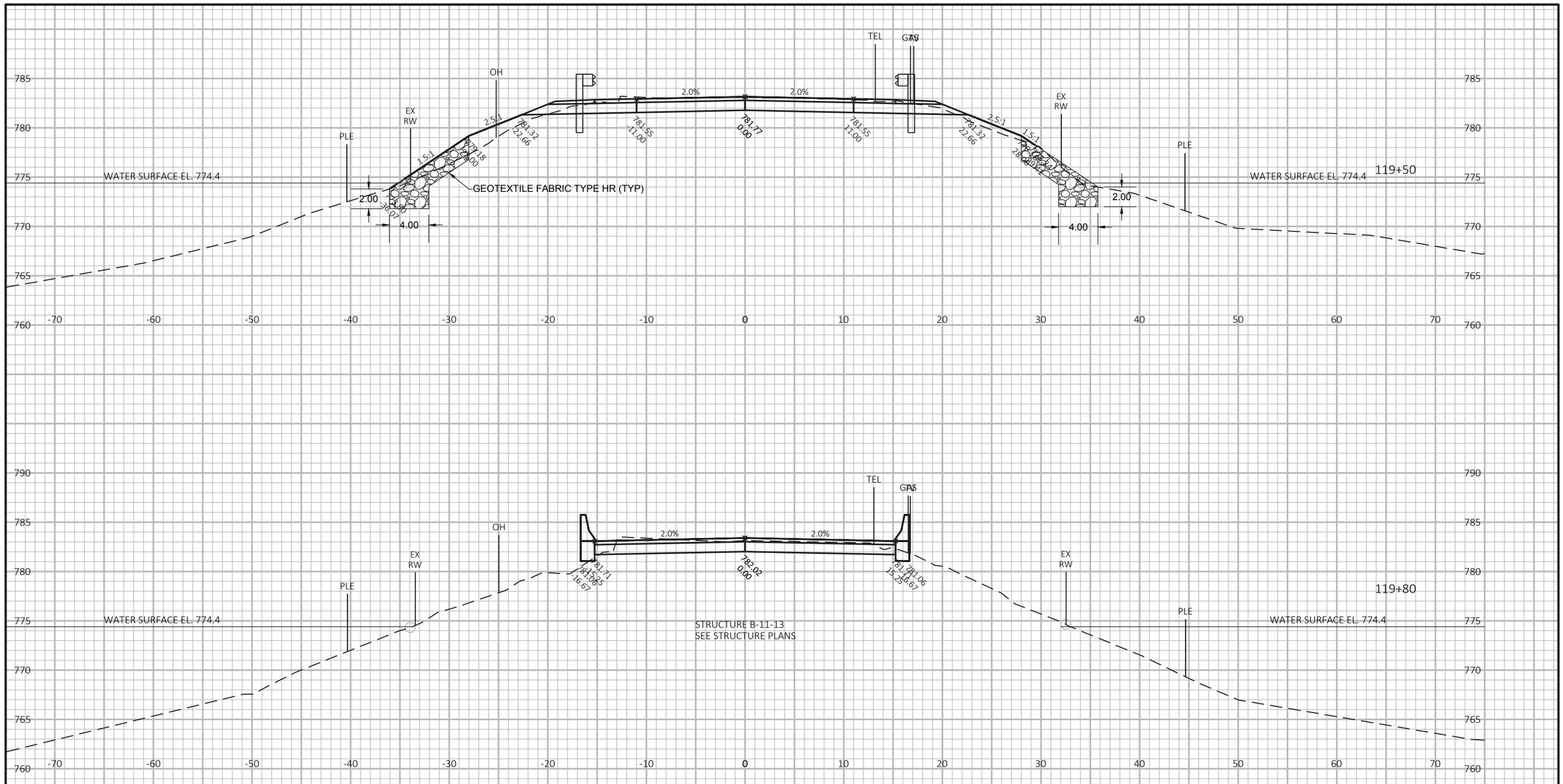
9

PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 176	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-20

PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

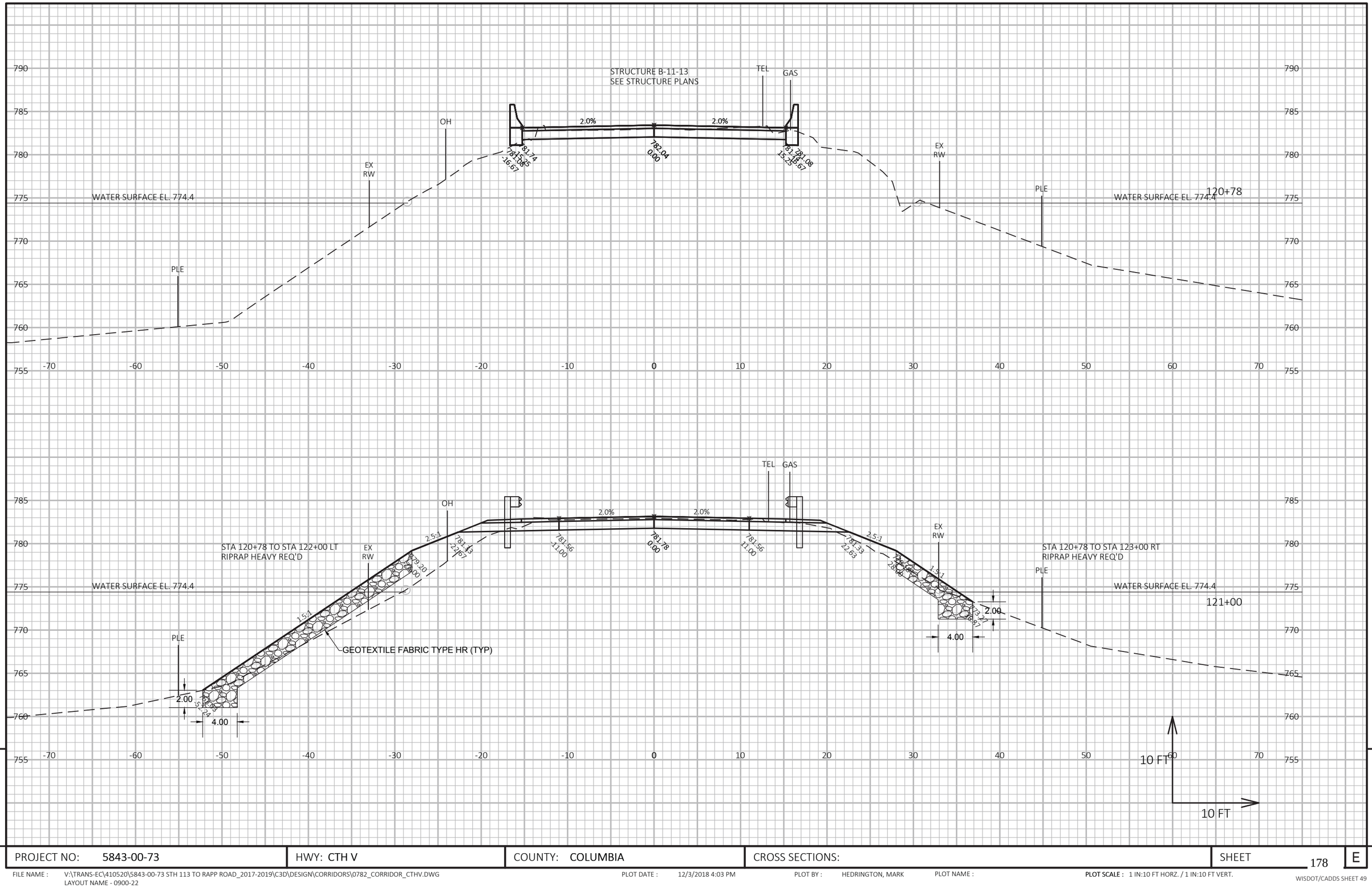


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 177	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-21

PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

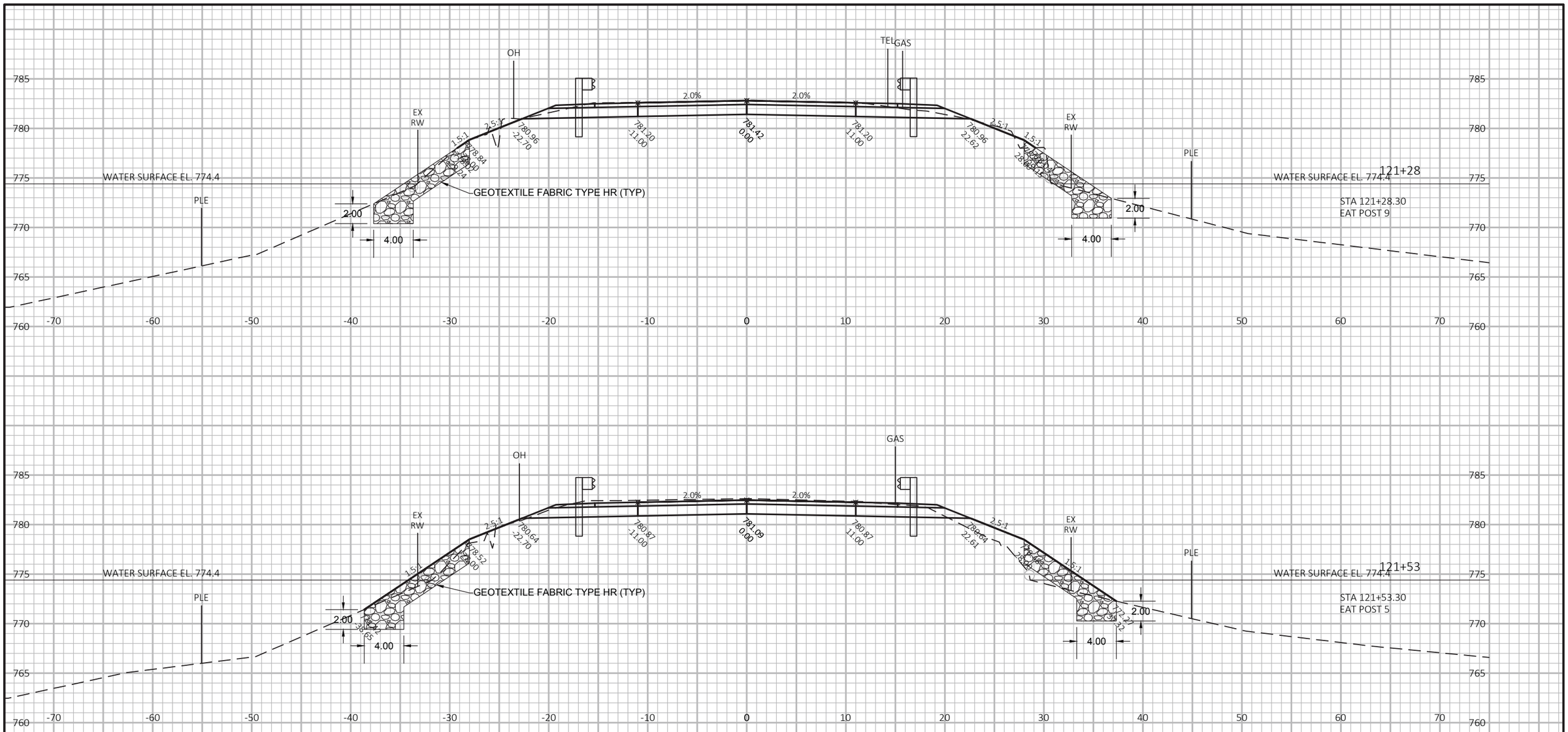


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 178	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-22

PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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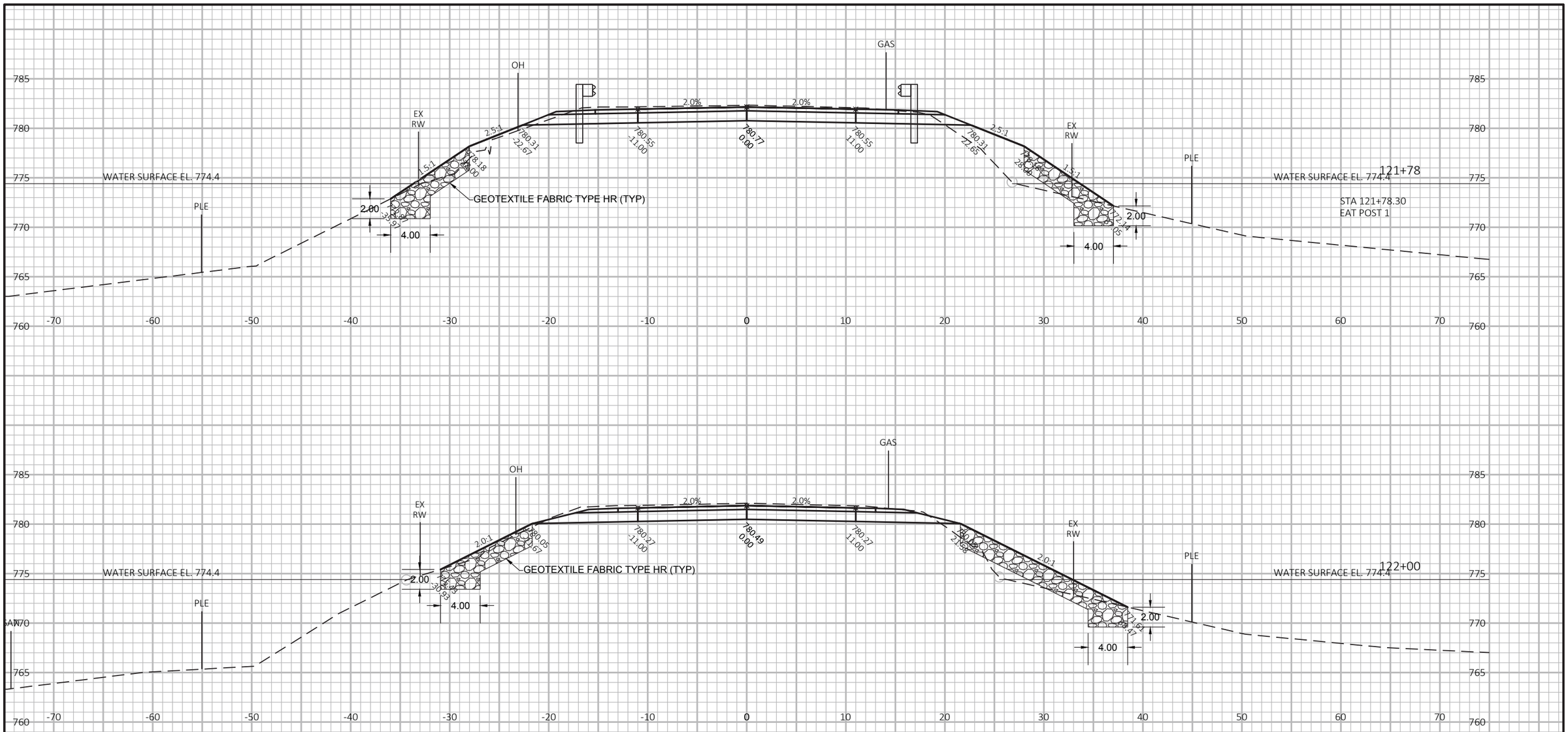
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 179	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-23

PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

10 FT

9

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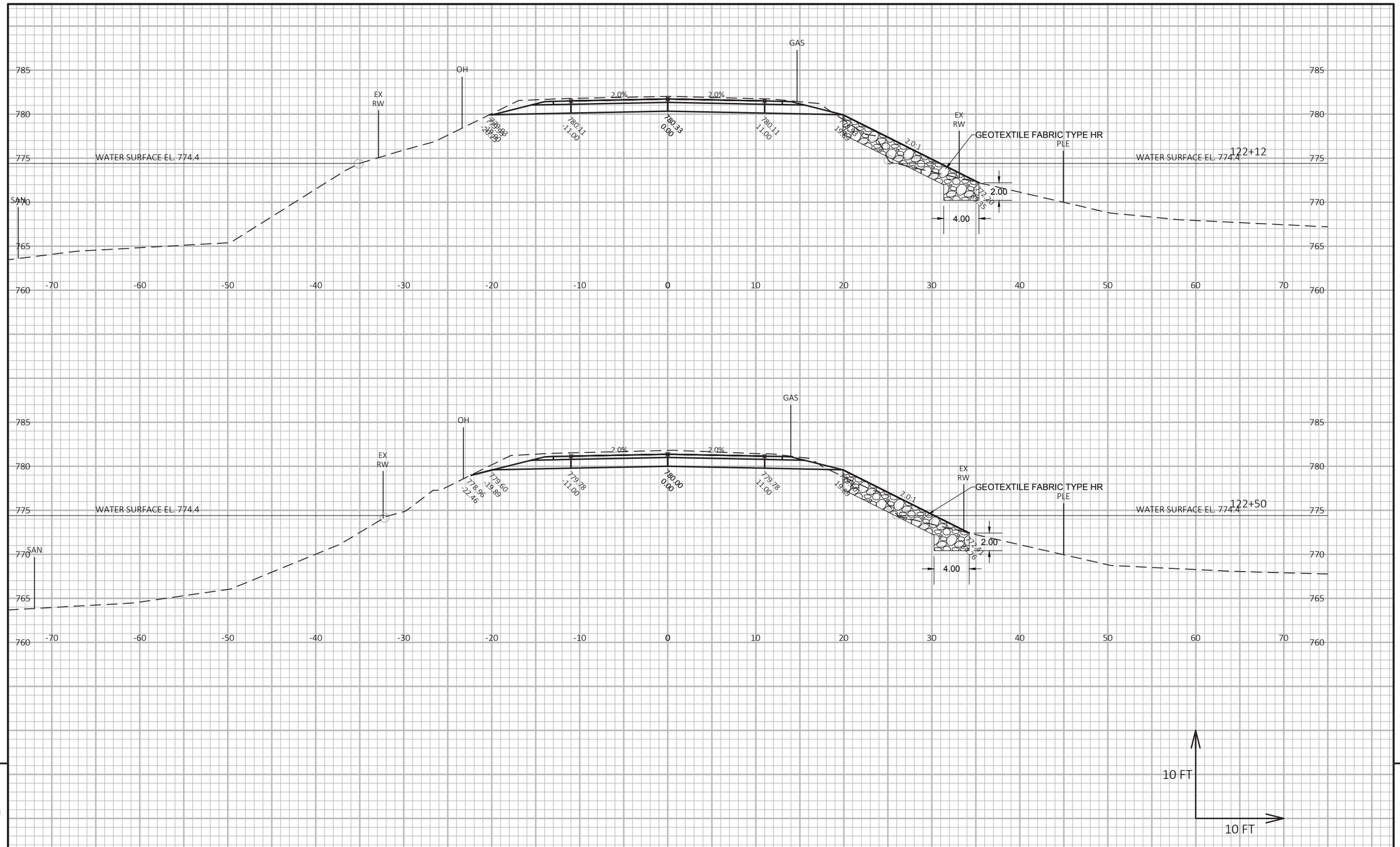
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 180	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-24

PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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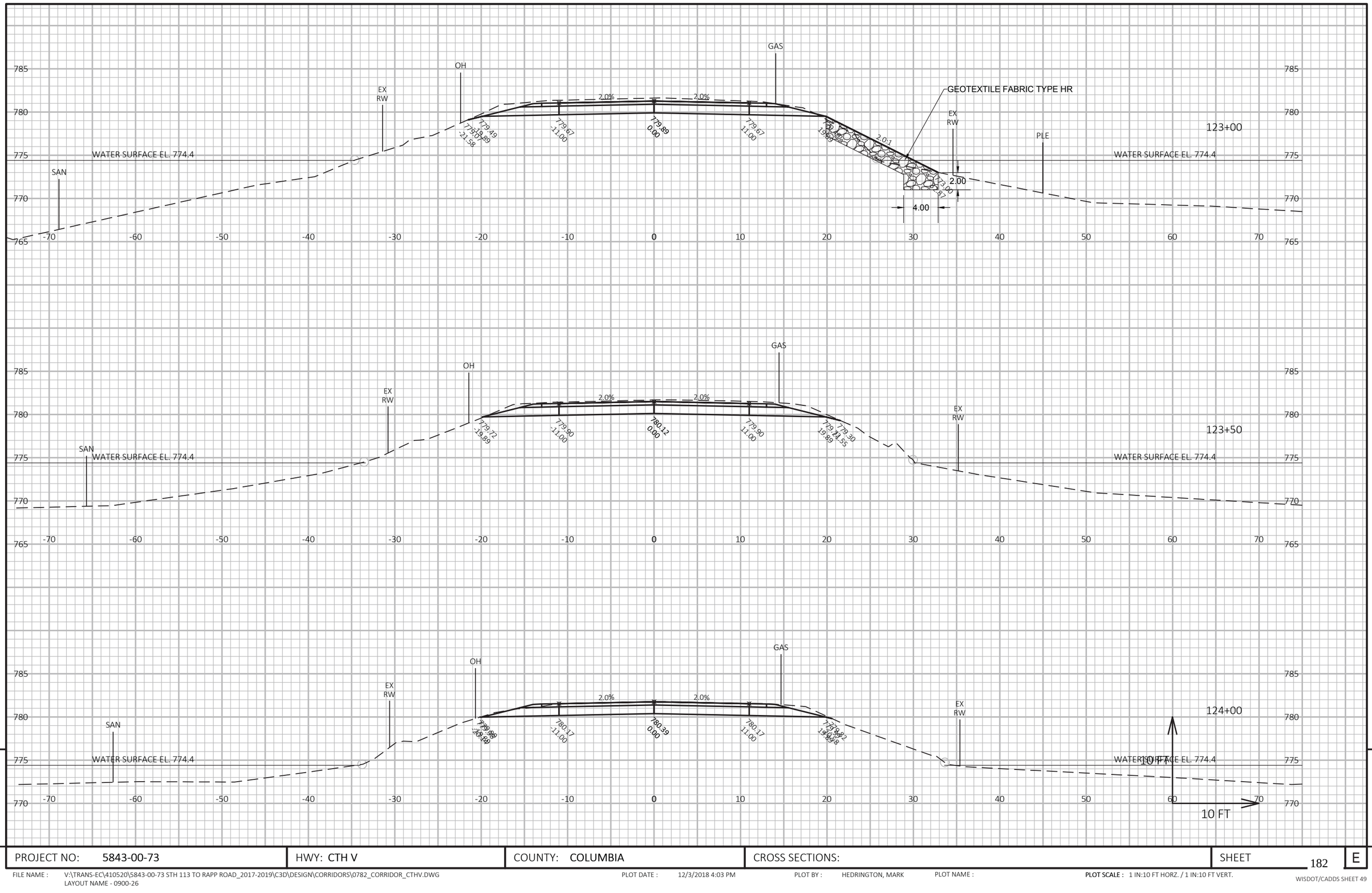
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 181	E

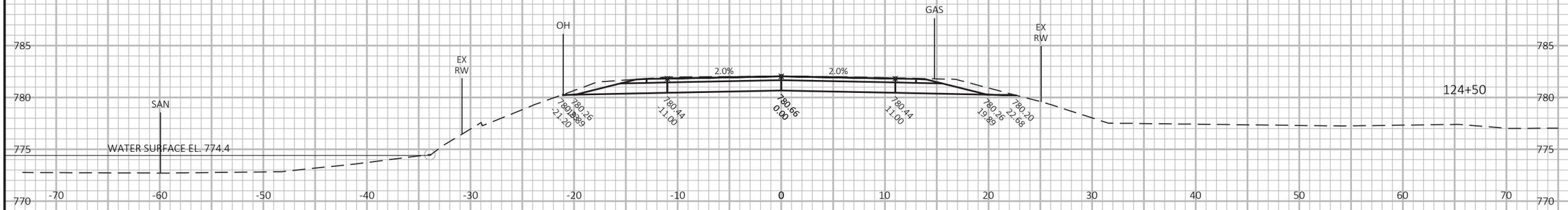
FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-25

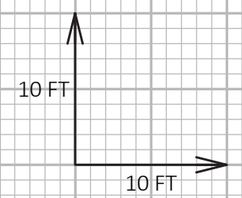
PLOT DATE : 12/3/2018 4:03 PM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 182	E





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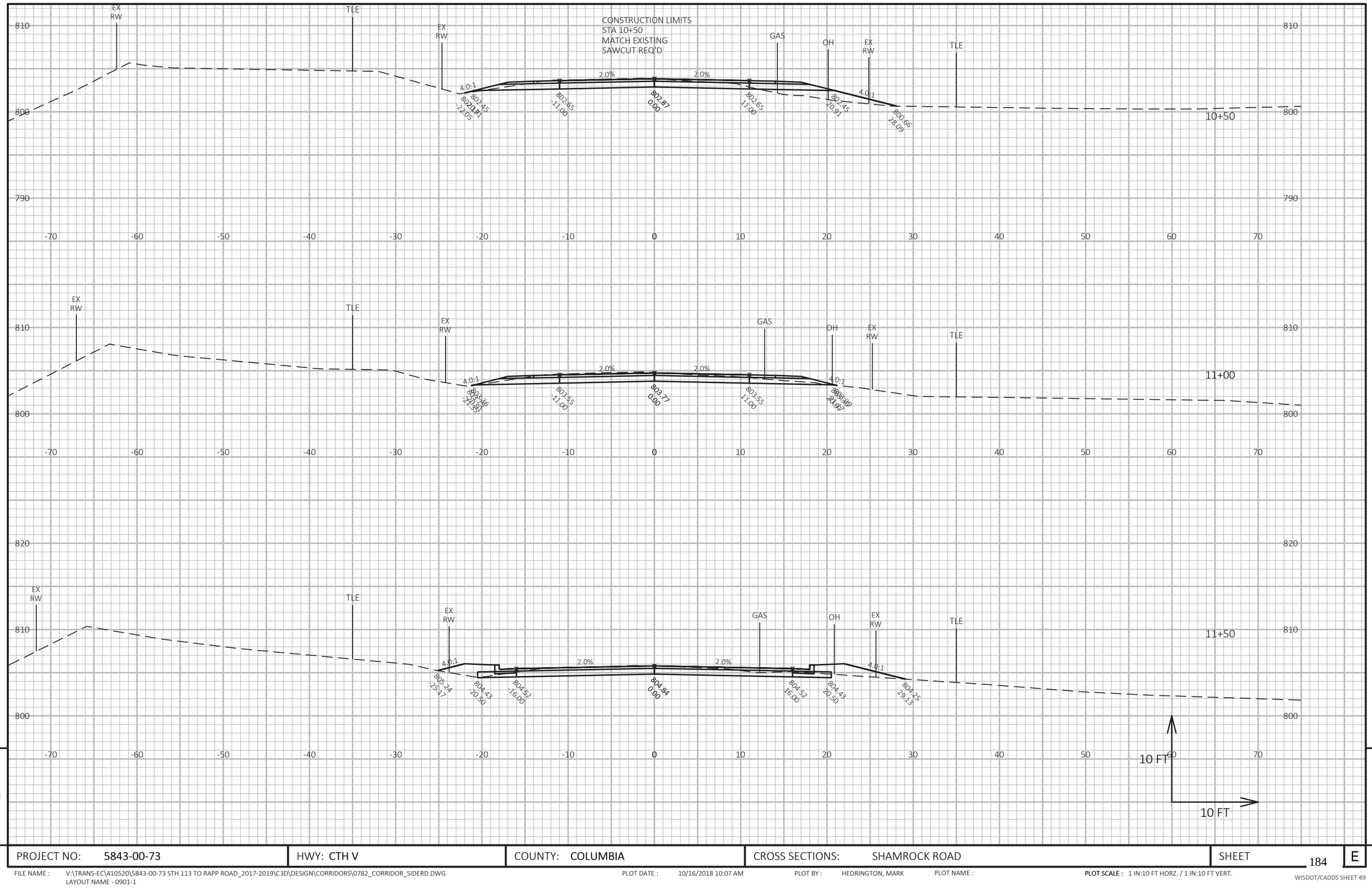
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS:	SHEET 183	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_CTHV.DWG
LAYOUT NAME - 0900-27

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 184	E

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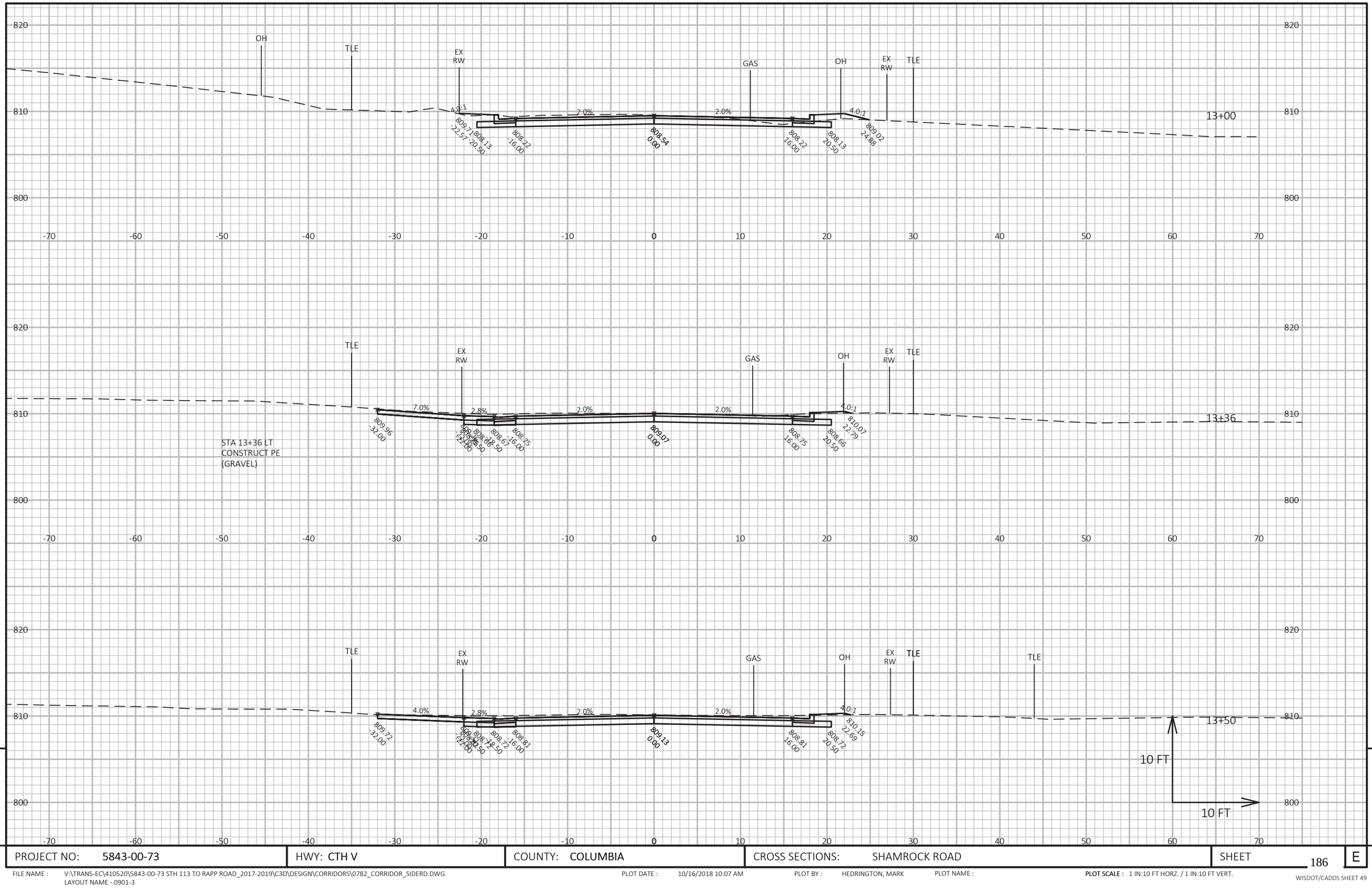
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 185	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0901-2

PLOT DATE : 10/16/2018 10:07 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

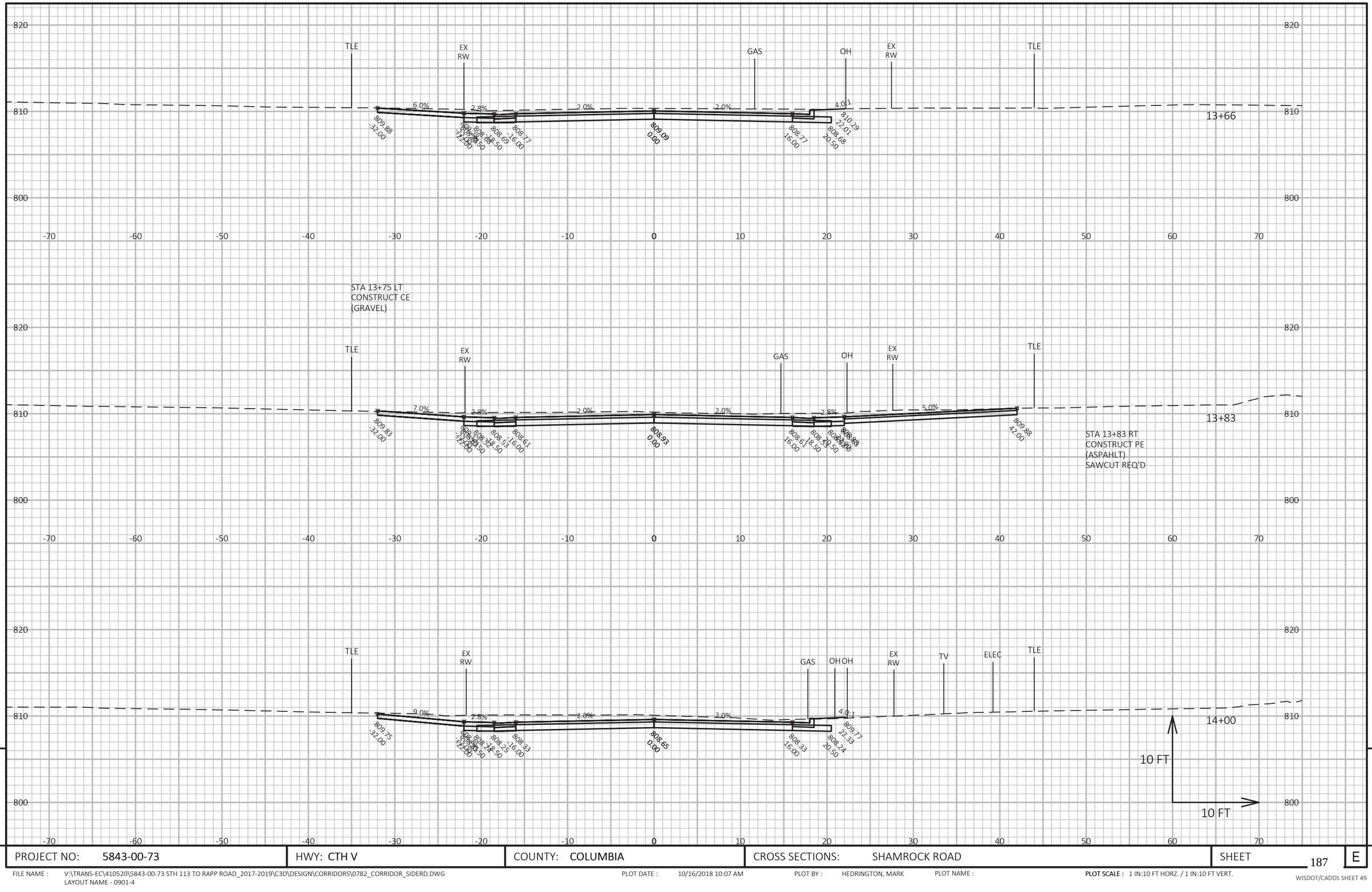


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 186	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0901-3

PLOT DATE : 10/16/2018 10:07 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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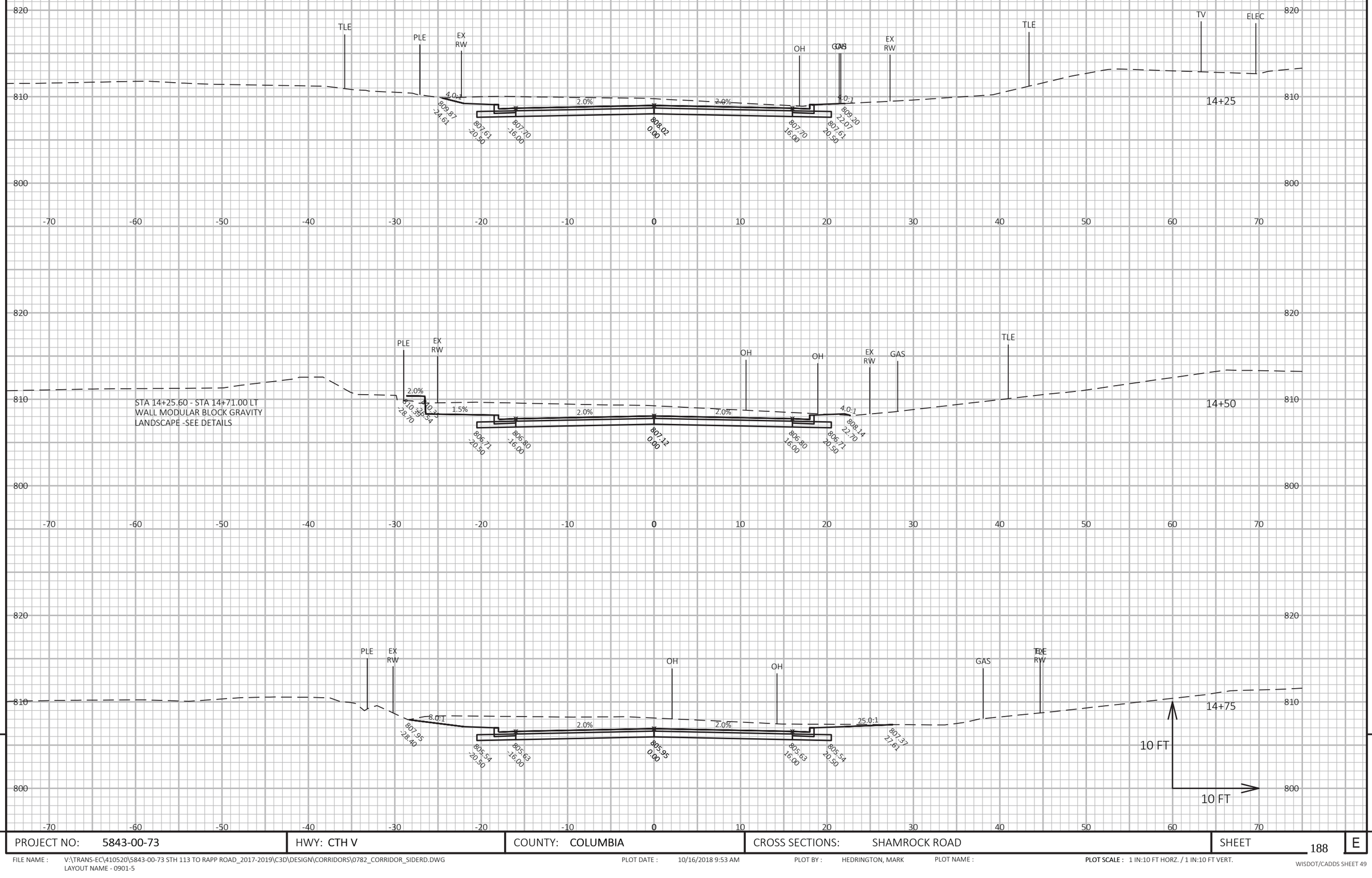
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 187	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0901-4

PLOT DATE : 10/16/2018 10:07 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

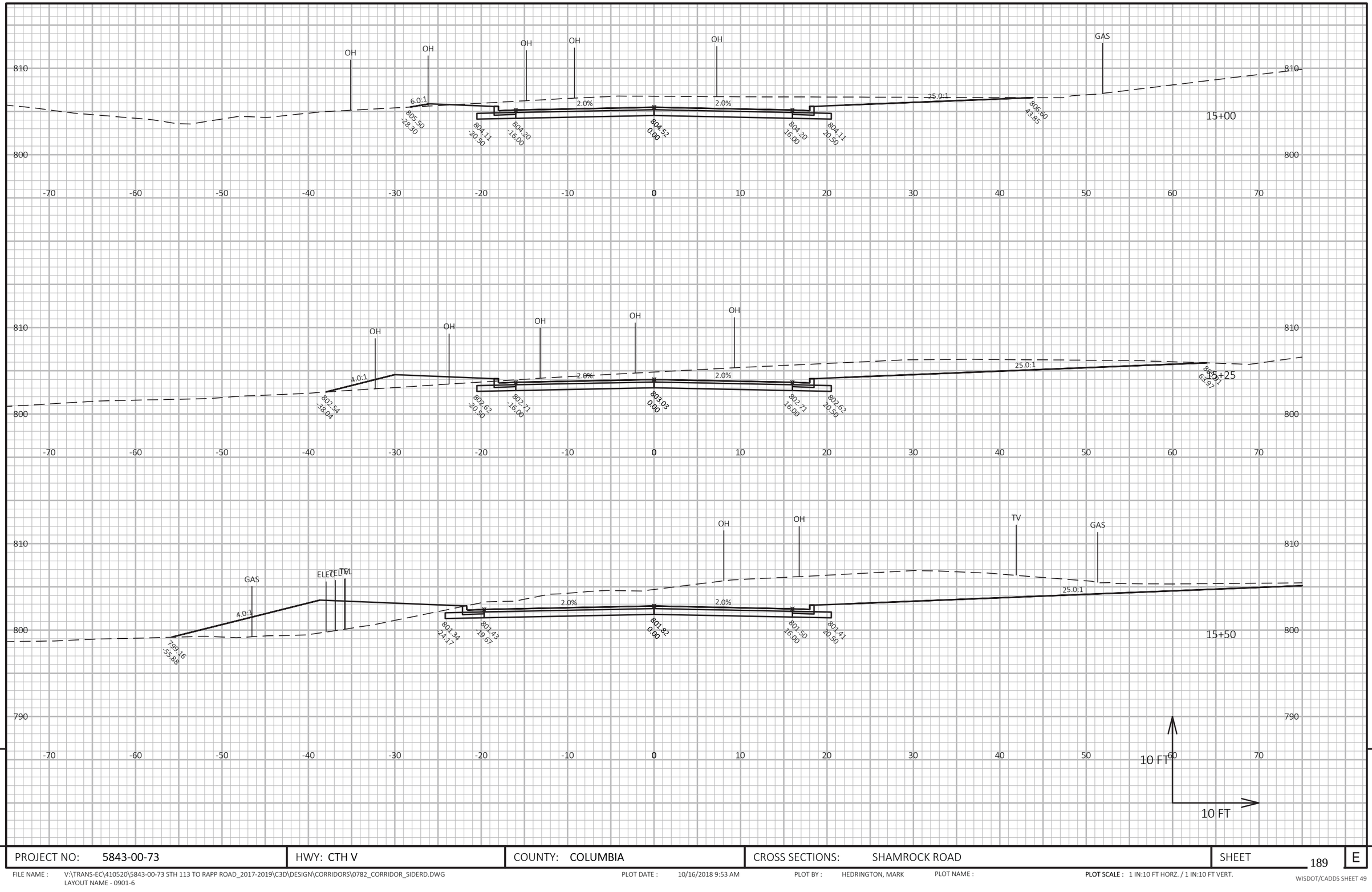


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 188	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0901-5

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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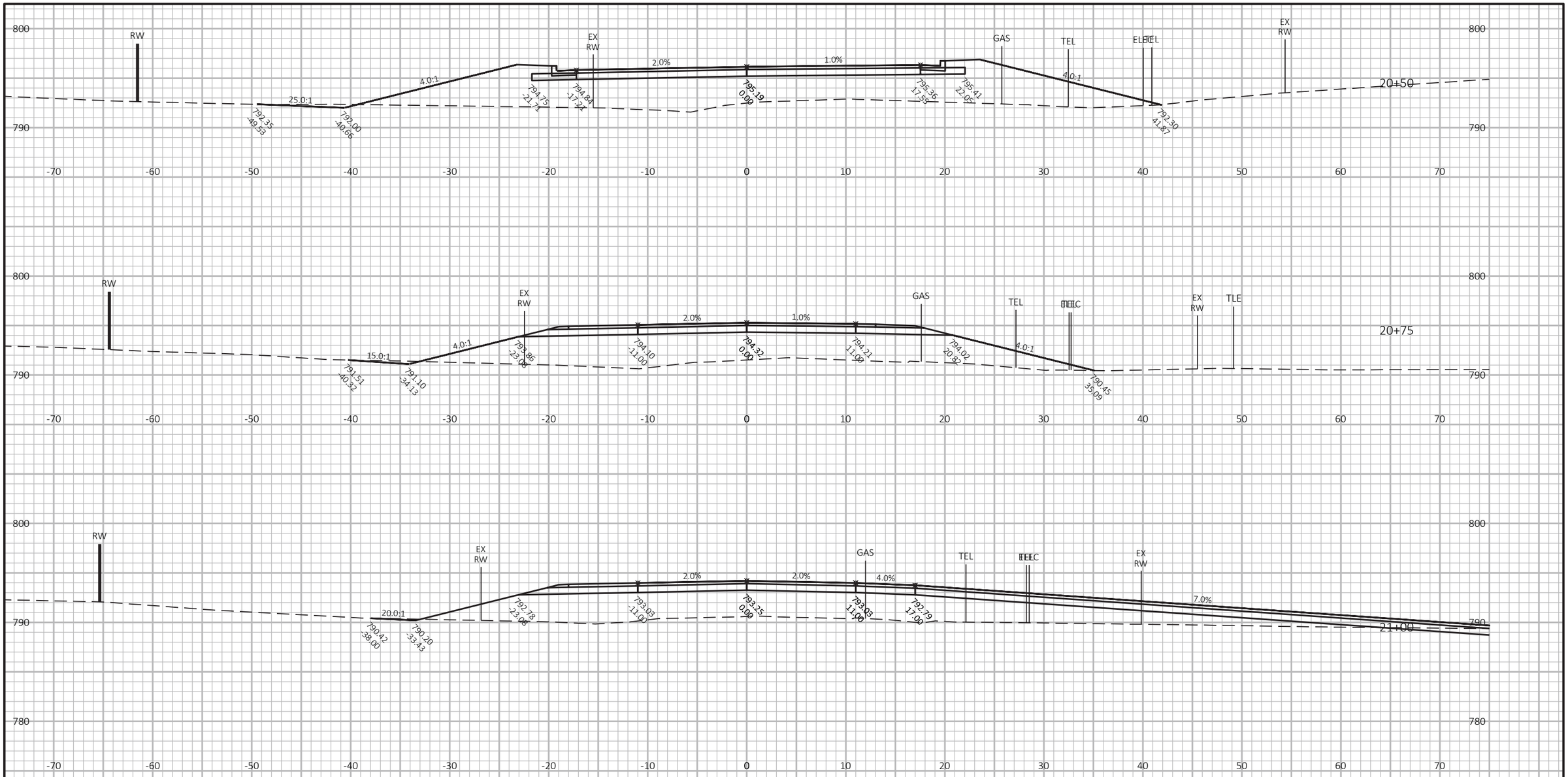
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: SHAMROCK ROAD	SHEET 189	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0901-6

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

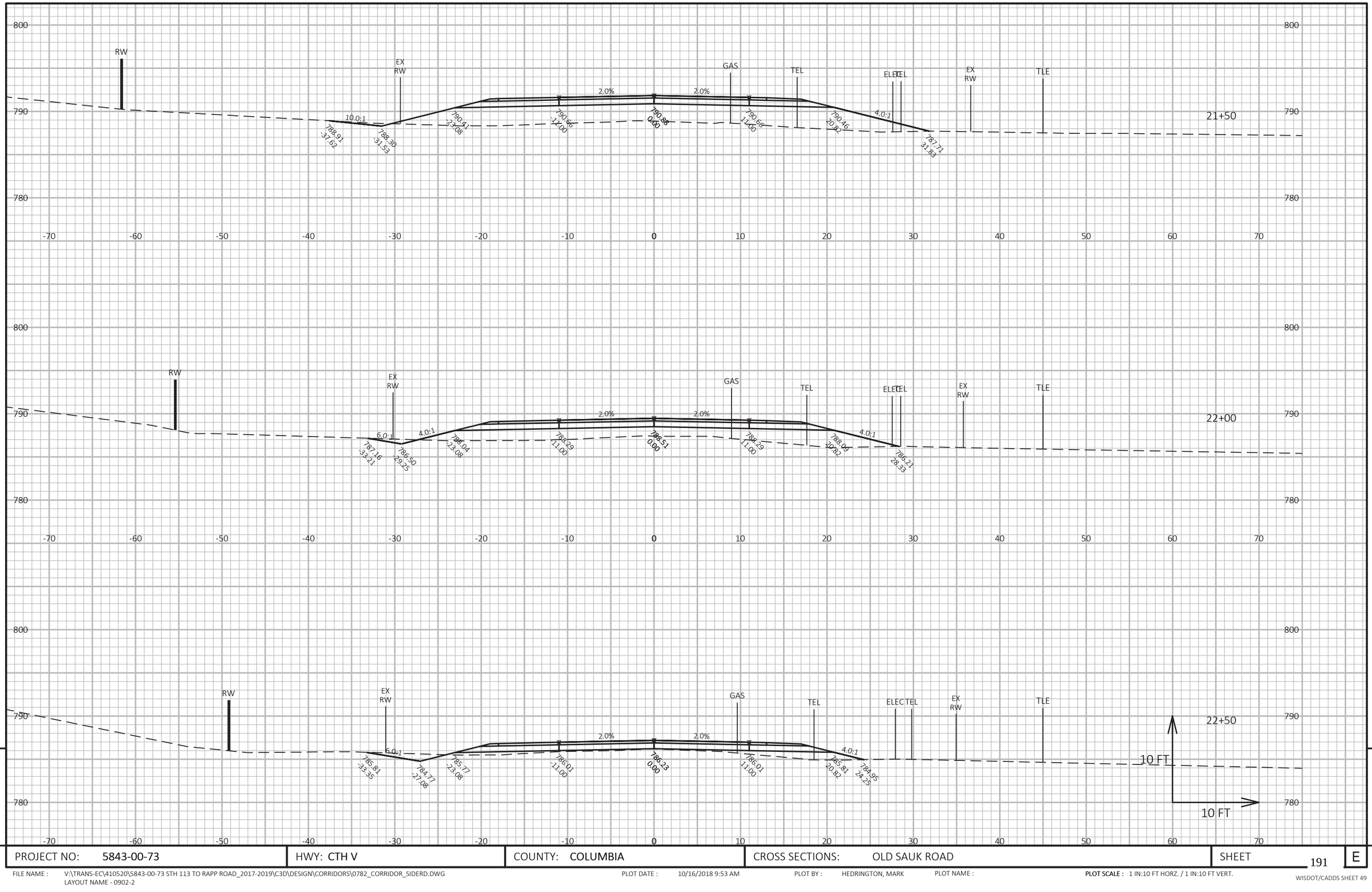


PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: OLD SAUK ROAD	SHEET 190	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0902-1

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

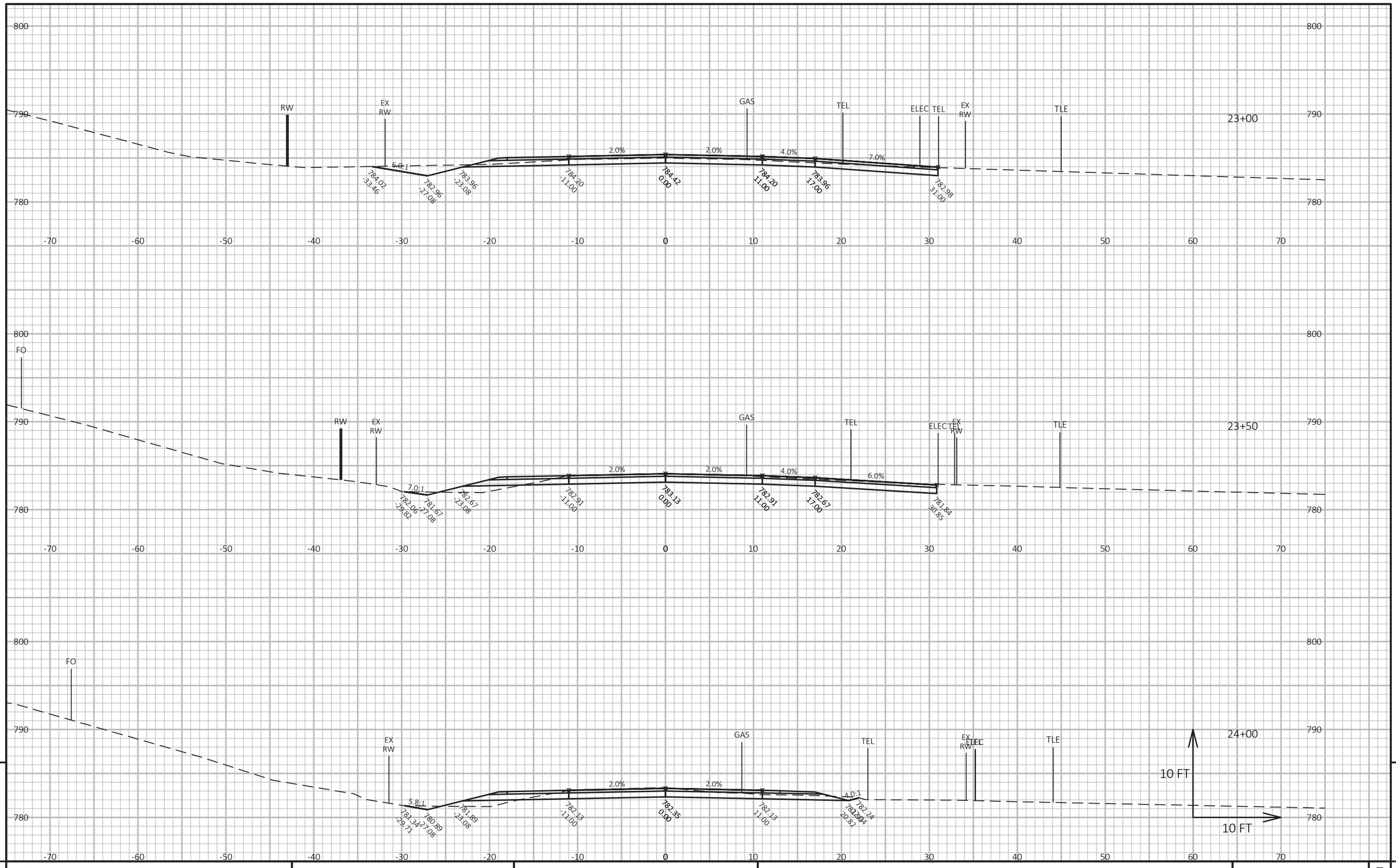
WISDOT/CADDS SHEET 49



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: OLD SAUK ROAD	SHEET 191	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0902-2

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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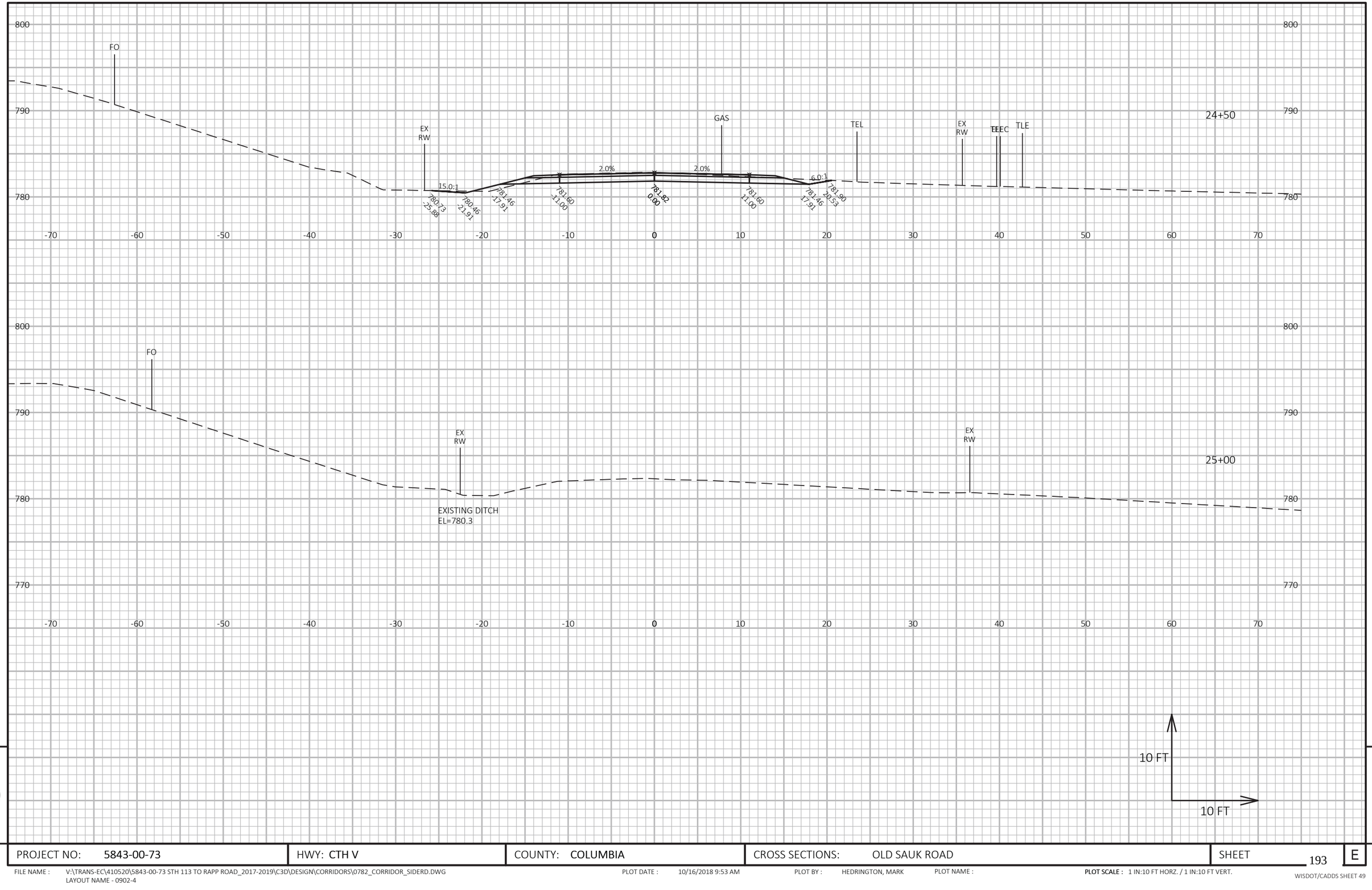
PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: OLD SAUK ROAD	SHEET 192	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0902-3

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5843-00-73	HWY: CTH V	COUNTY: COLUMBIA	CROSS SECTIONS: OLD SAUK ROAD	SHEET 193	E

FILE NAME : V:\TRANS-EC\410520\5843-00-73 STH 113 TO RAPP ROAD_2017-2019\C3D\DESIGN\CORRIDORS\0782_CORRIDOR_SIDERD.DWG
LAYOUT NAME - 0902-4

PLOT DATE : 10/16/2018 9:53 AM PLOT BY : HEDRINGTON, MARK PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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