MAD

PROJECT ID: 1400-01-70

WITH: 1400-01-73

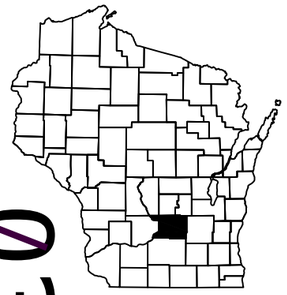
COUNTY: COLUMBIA

NOVEMBER 2021

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right of Way Plat~~
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
~~Section No.~~	~~7~~	~~Sign Plates~~
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 330



03

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PORTAGE - COLUMBUS

LINCOLN TO FALL RIVER-COLUMBUS RD

STH 16

COLUMBIA COUNTY

STATE PROJECT NUMBER
1400-01-70

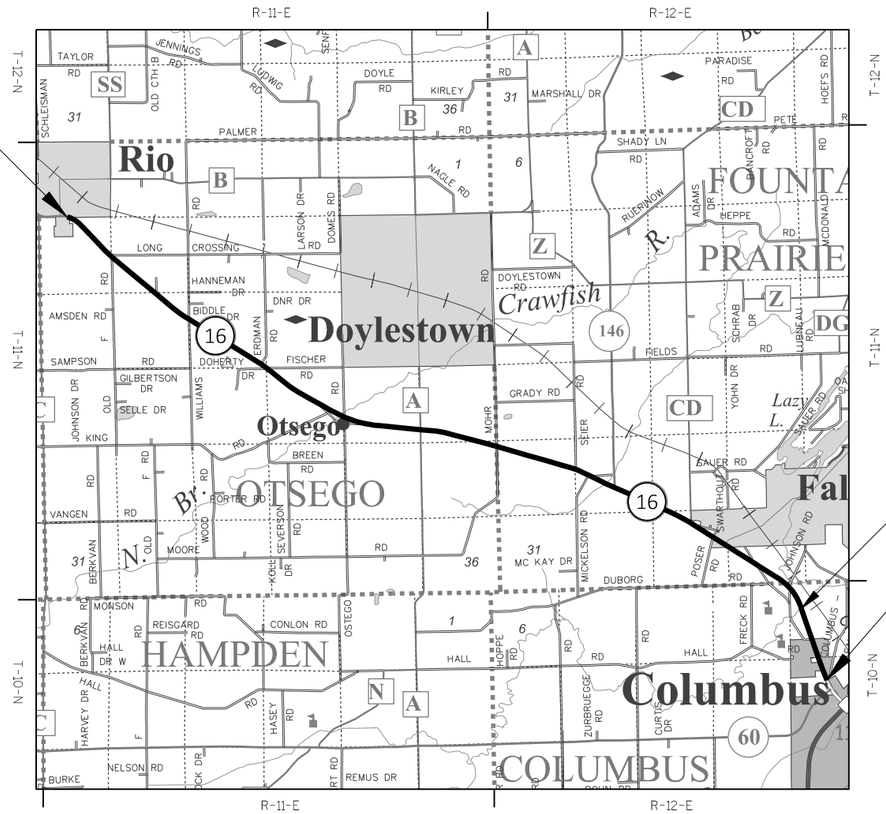
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1400-01-70	WISC 2022002	1
1400-01-73	WISC 2022003	1

N

BEGIN PROJECT 1400-01-70
STA 561+35
X = 596,544.27
Y = 358,716.93

1400-01-70

DESIGN DESIGNATION			WEST OF STH 146	EAST OF STH 146
A.A.D.T.	2022	=	4,100	11,700
A.A.D.T.	2042	=	4,600	14,100
D.H.V.		=	535	1,385
D.D.		=	65/35	60/40
T.		=	12.1%	15.0%
DESIGN SPEED		=	60 MPH	60 MPH
ESALS		=	1,200,000	3,700,000



STRUCTURE B-11-172 OVER CRAWFISH RIVER
STA 1156+16.41 - STA 1157+35.59

END PROJECT 1400-01-70
STA 1204+00

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 12.171 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), COLUMBIA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN ON THIS PLAN ARE IN REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'ER'	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	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

ORIGINAL PLANS DEVELOPED BY WISDOT SW REGION

WISCONSIN DEPARTMENT OF TRANSPORTATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES
Designer	JAMES RINZEL
Project Manager	MAHESH SHRESTHA, P.E.
Regional Examiner	SW REGION
Regional Supervisor	MARC SCHWEIGER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: Mahesh Shrestha Digitally signed by Mahesh Shrestha Date: 2021.07.19 15:05:55 -05'00'
(Signature)

E

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREAS. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

UTILITY LINES IN THE CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

CONTRACTOR TO VERIFY ELEVATIONS OF THE EXISTING PAVEMENT TO REMAIN IN PLACE, PRIOR TO STAKING.

D.O.T. BRIDGE BENCHMARK MONUMENT TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

CONTRACTORS SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

PRIOR TO THE PLACEMENT OF MGS GUARDRAILS, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN DRIVING, TURNING, BIKE OR PARKING LANE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF ASPHALT PAVEMENT AND TO MILLED SURFACES. THE APPLICATION RATE IS 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA PAVEMENT AND 0.07 GAL/SY PLACED ON EXISTING ASPHALT, MILLED SURFACES, CONCRETE PAVEMENT, REMOVING DISTRESSED MILLING LOCATIONS OR AS DIRECTED BY THE ENGINEER.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE QUALITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTURBED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

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

NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES, AS SHOWN IN THE PLANS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

EXISTING RIGHT OF WAY LINES SHOWN IN THE PLANS AND CROSS SECTIONS ARE APPROXIMATE.

DRIVEWAY AND ENTRANCE STATIONS AND OFFSETS IN THE PLANS REFER TO THE MATCH-IN LOCATION OF THE EXISTING DRIVEWAY/ENTRANCE.

MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE ALIGNMENT DIAGRAM FOR LOCATIONS.

CONTRACTOR TO PROTECT DH5548 GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM DH5548 GPS. SEE ALIGNMENT DIAGRAM FOR LOCATION.

ENSURE THAT DH5548 GPS IS/ARE NOT DISTURBED, BUMPED OR MOVED DURING THE DURATION OF THE PROJECT. NOTIFY JACOB ROCKWEILER IMMEDIATELY IF DH5548 GPS IS/ARE DISTURBED, BUMPED OR MOVED DURING CONSTRUCTION OPERATIONS. CONTACT INFO:

JACOB ROCKWEILER, P.E.
WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE
WISCONSIN DEPARTMENT OF TRANSPORTATION
PHONE: (608) 516-6362
EMAIL: JACOB.ROCKWEILER@DOT.WI.GOV

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

SECTION 2 ORDER OF SHEETS
GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN
PAVING GRADES
CROSS SECTION MATCHLINES
EROSION CONTROL DETAILS
EROSION CONTROL PLAN
MOVING SIGNS
TEMPORARY PAVEMENT MARKINGS
PAVEMENT MARKINGS
TRAFFIC CONTROL
DETOUR PLAN OVERVIEW
DETOUR PLAN
ALIGNMENT DIAGRAM
SUPERELEVATION TABLES

UTILITY CONTACTS

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JHAMMER@COLUMBUSWATERANDLIGHT.COM

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WE ENERGIES - GAS/PETROLEUM
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WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM

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BAMAXWELL@MSA-PS.COM

ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
AE, AEW	APRON ENDWALL
ASPH	ASPHALTIC
ADT	AVERAGE DAILY TRAFFIC
AADT	ANNUAL AVERAGE DAILY TRAFFIC
BAD	BASE AGGREGATE DENSE
BF	BACK FACE
BM	BENCHMARK
BTWN	BETWEEN
CTR	CENTER
C/L	CENTERLINE
Δ	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONST	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CMP	CORRUGATED METAL PIPE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAYS
CY	CUBIC YARD
CP	CONTROL POINT OR CULVERT PIPE
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DISCH	DISCHARGE
DMS	DYNAMIC MESSAGE SIGN
EA	EACH
E	EAST
EB	EASTBOUND
ELEC	ELECTRIC(AL), ELEC. CABLE
EL, ELEV	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EXIST	EXISTING
FF	FACE TO FACE
FERT	FERTILIZER
FE	FIELD ENTRANCE
F/L, FL	FLOW LINE
GALV	GALVANIZE
HS	HIGH STRENGTH
CWT	HUNDRED WEIGHT
INL	INLET
INTER	INTERSECTION
JT	JOINT
LT	LEFT
L	LENGTH OF CURVE
LF	LINEAR FOOT (FEET)
LC	LONG CHORD
LS	LUMP SUM
MP	MARKER POST
MGAL	1000 GALLONS
NC	NORMAL CROWN
N	NORTH
NB	NORTH BOUND
NOR	NORMAL
NO	NUMBER
PAV'T	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY

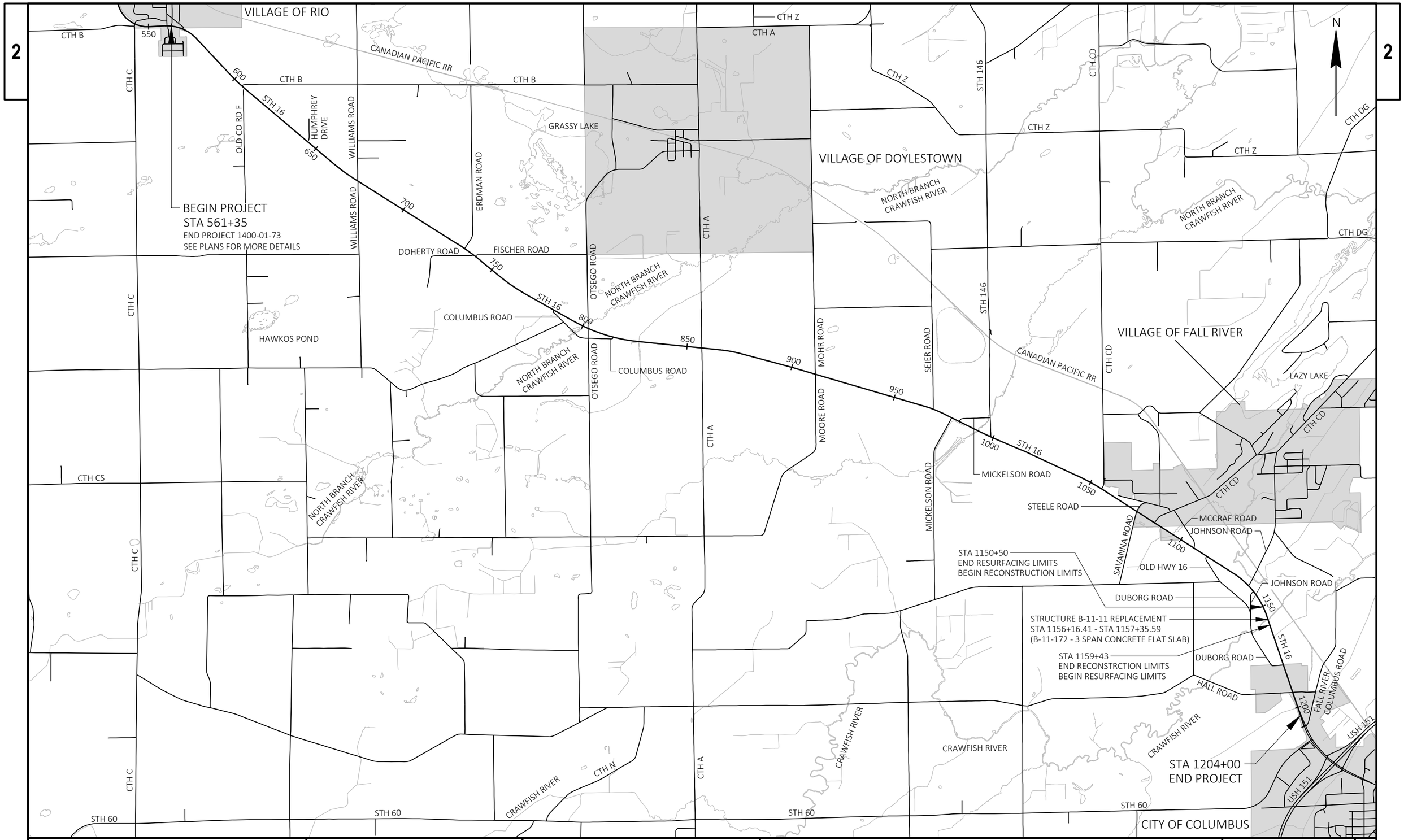
ABBREVIATIONS CONT'D

PCC	PORTLAND CEMENT CONCRETE
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PL	PROPERTY LINE
R	RADIUS OR RANGE
R/L	REFERENCE LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT OF WAY
RD	ROAD
SHLD	SHOULDER(S)
S	SOUTH
SB	SOUTHBOUND
SF	SQUARE FOOT (FEET)
SDD	STANDARD DETAIL DRAWING(S)
STH	STATE TRUNK HIGHWAYS
SS	STORM SEWER
SSD	STOPPING SIGHT DISTANCE
STA	STATION
SE	SUPERELEVATION
S/L	SURVEY LINE
SYM	SYMMETRICAL
T	TRUCKS (PERCENT OF)
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TOC	TOP OF CURB
TYP	TYPICAL
UNCL	UNCLASSIFIED
UG	UNDERGROUND
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WT	WEIGHT
W	WEST
WB	WEST BOUND

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = N/A
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.813 ACRES



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET 4 E

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PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:4000 FT
WISDOT/CADDS SHEET 42

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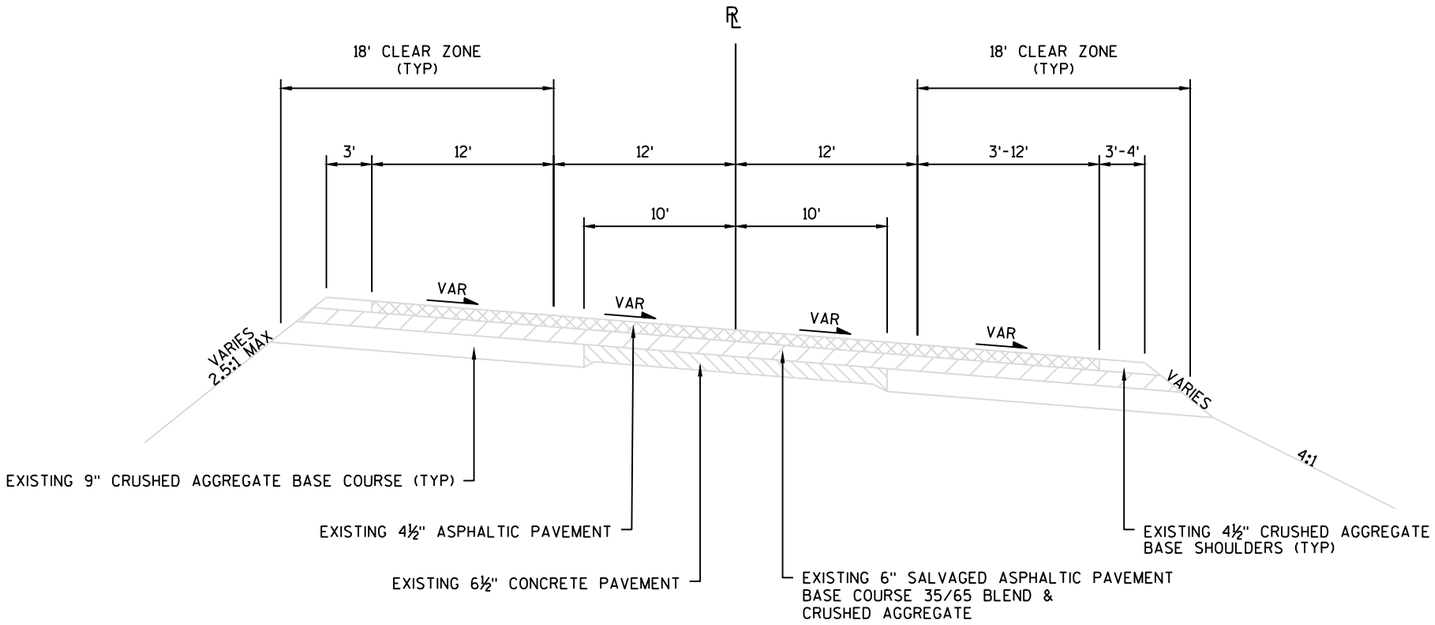
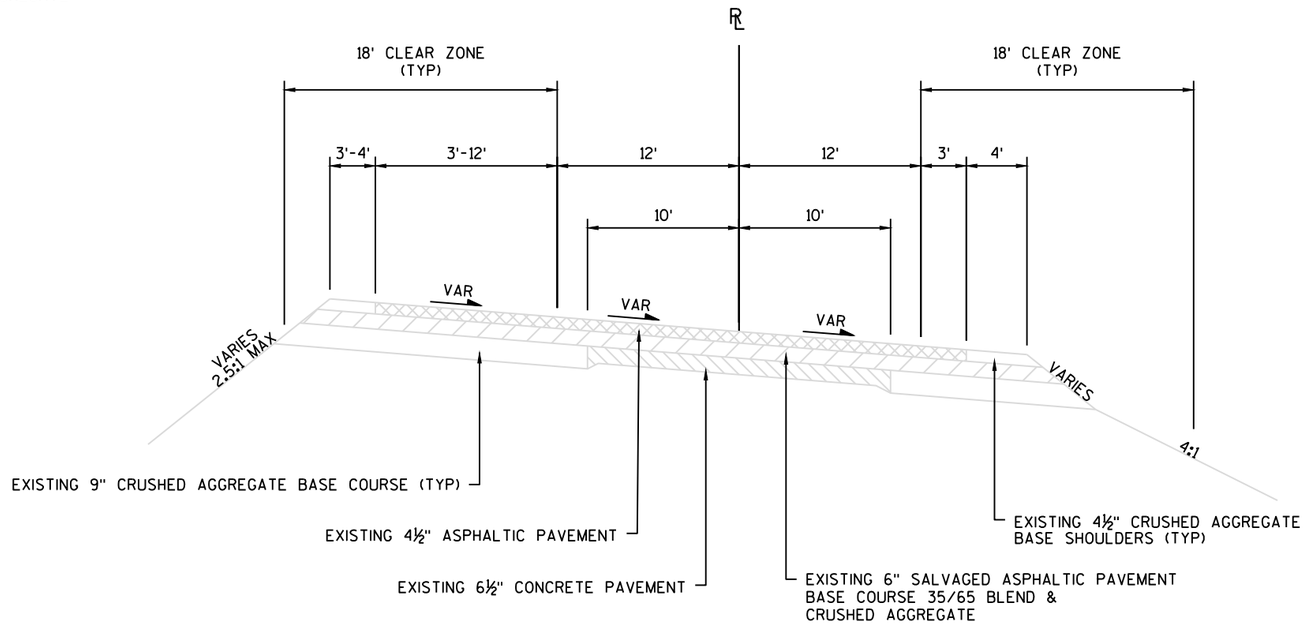


EXISTING TYPICAL SECTION STH 16

STA 561+35 TO STA 568+41

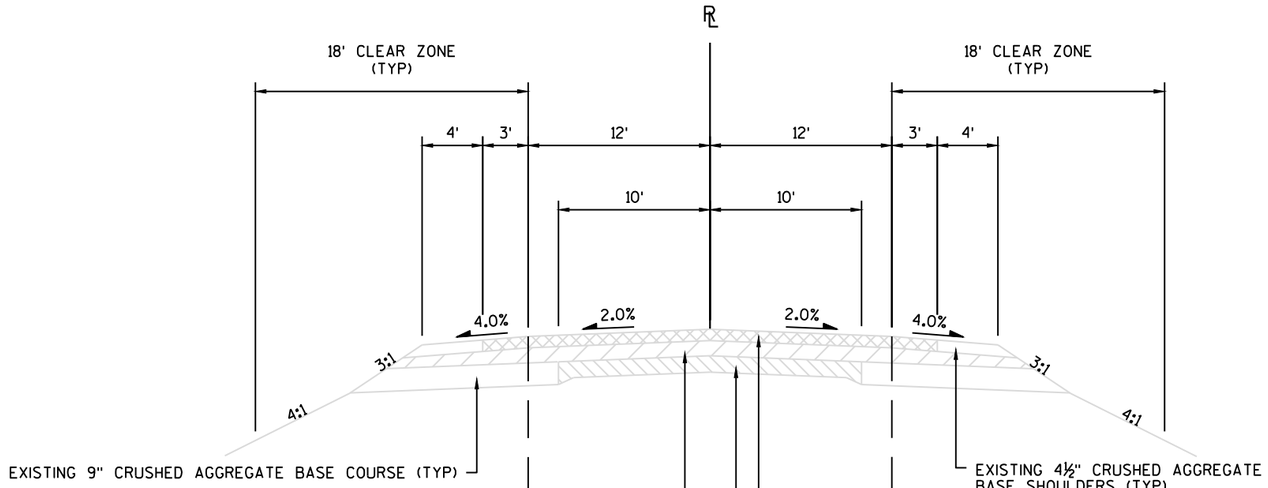


EXISTING TYPICAL SECTION STH 16

STA 568+41 TO STA 571+08

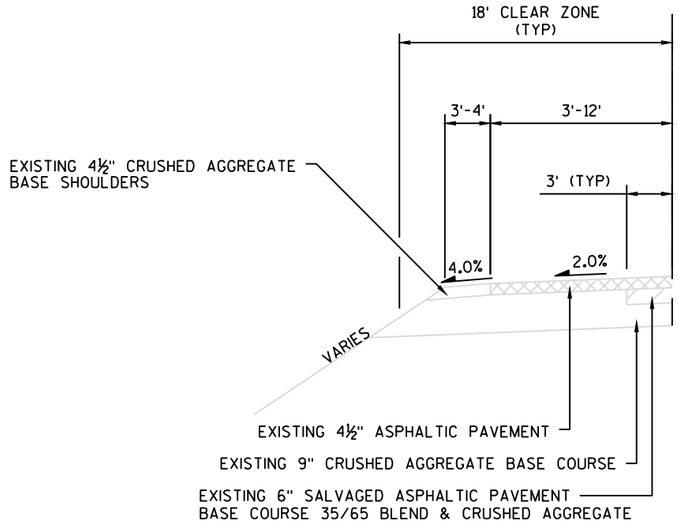
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 5	E

2

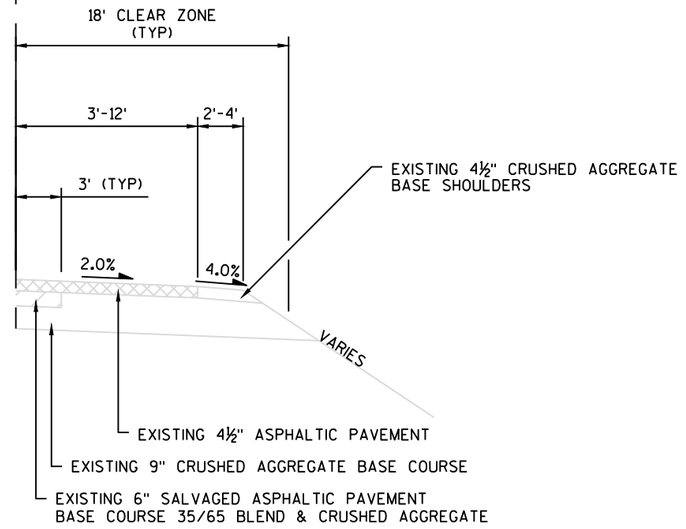


STA 571+08 TO STA 706+59
STA 710+70 TO STA 803+11

STA 571+08 TO STA 703+14
STA 709+29 TO STA 798+36



STA 706+59 TO STA 710+70



STA 703+14 TO STA 709+27
STA 798+36 TO STA 803+11

EXISTING TYPICAL SECTION STH 16

STA 571+08 TO STA 803+11

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 6	E

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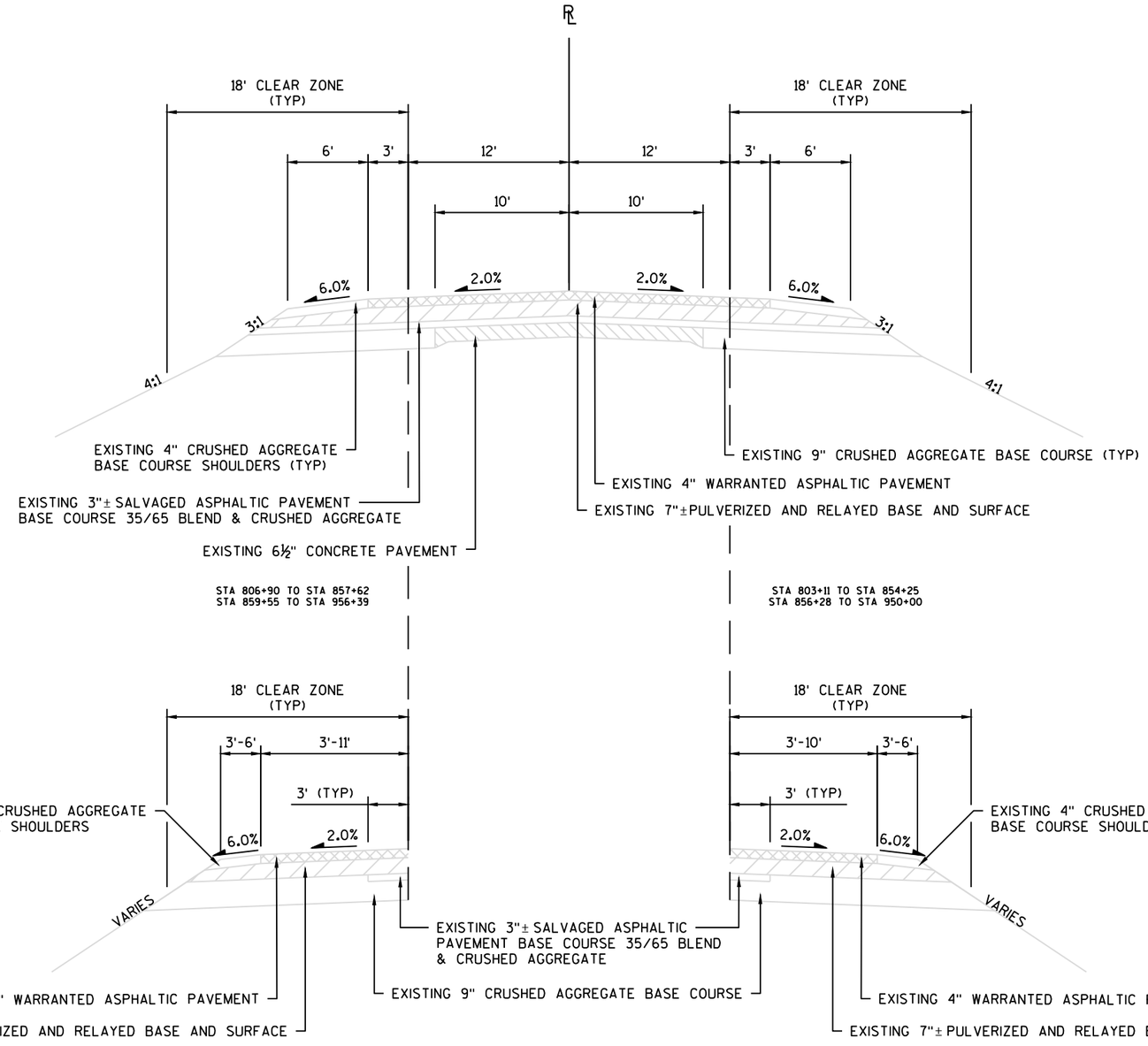

EXISTING TYPICAL SECTION STH 16

STA 803+11 TO STA 950+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 7	E

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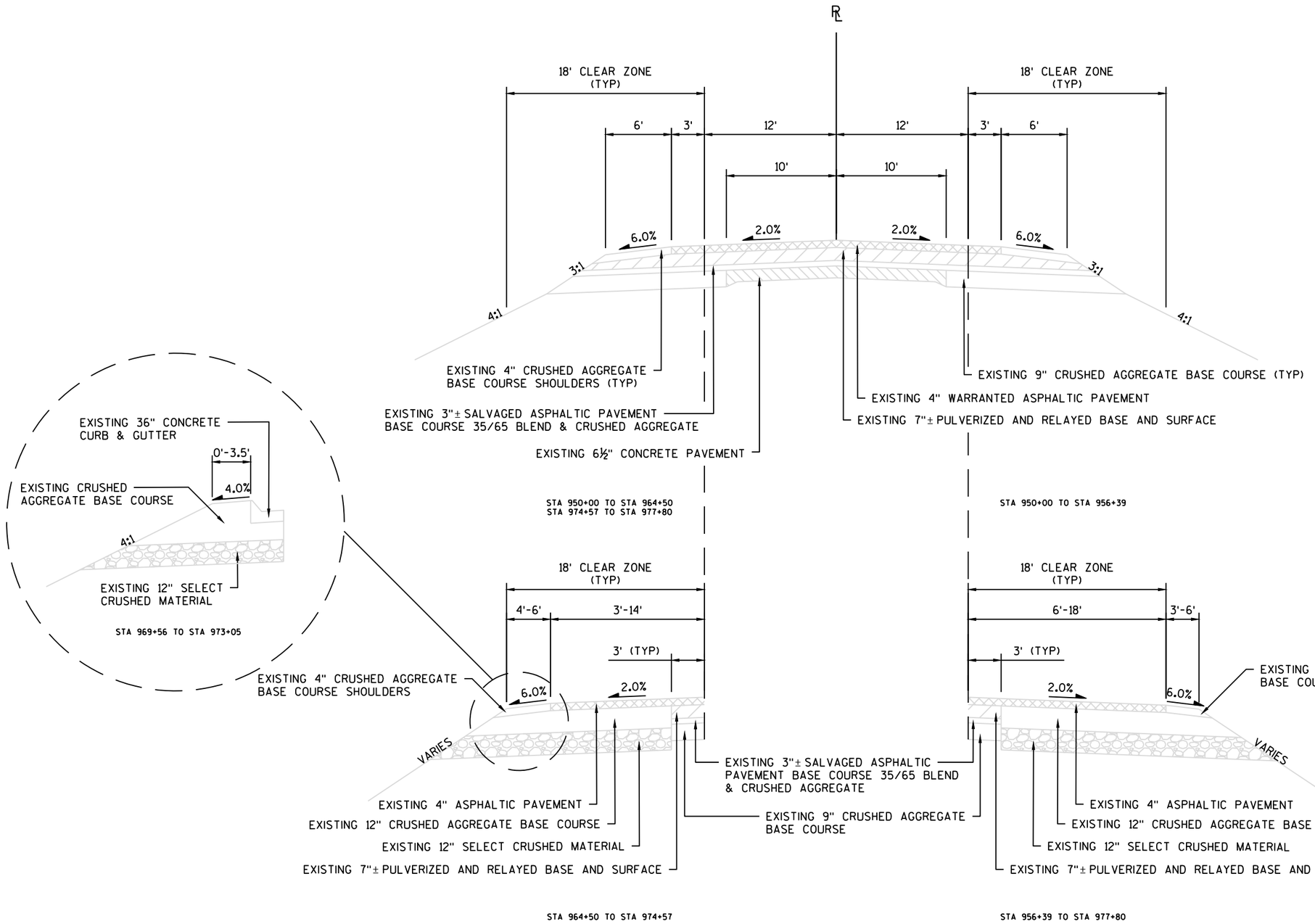
LAYOUT NAME - 03
PLOT DATE : 7/9/2021 11:51 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STH 16

STA 950+00 TO STA 977+80

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 8	E

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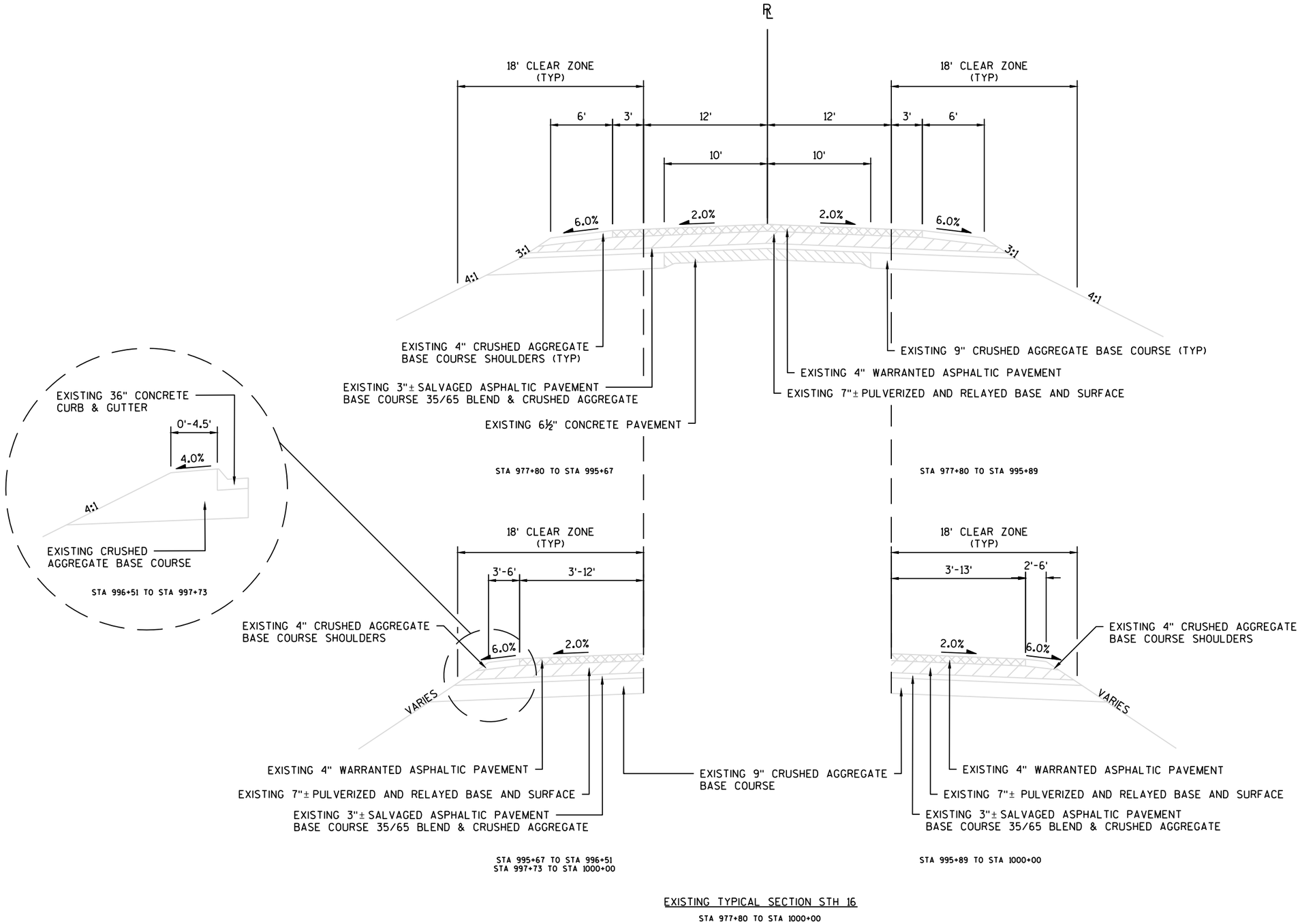
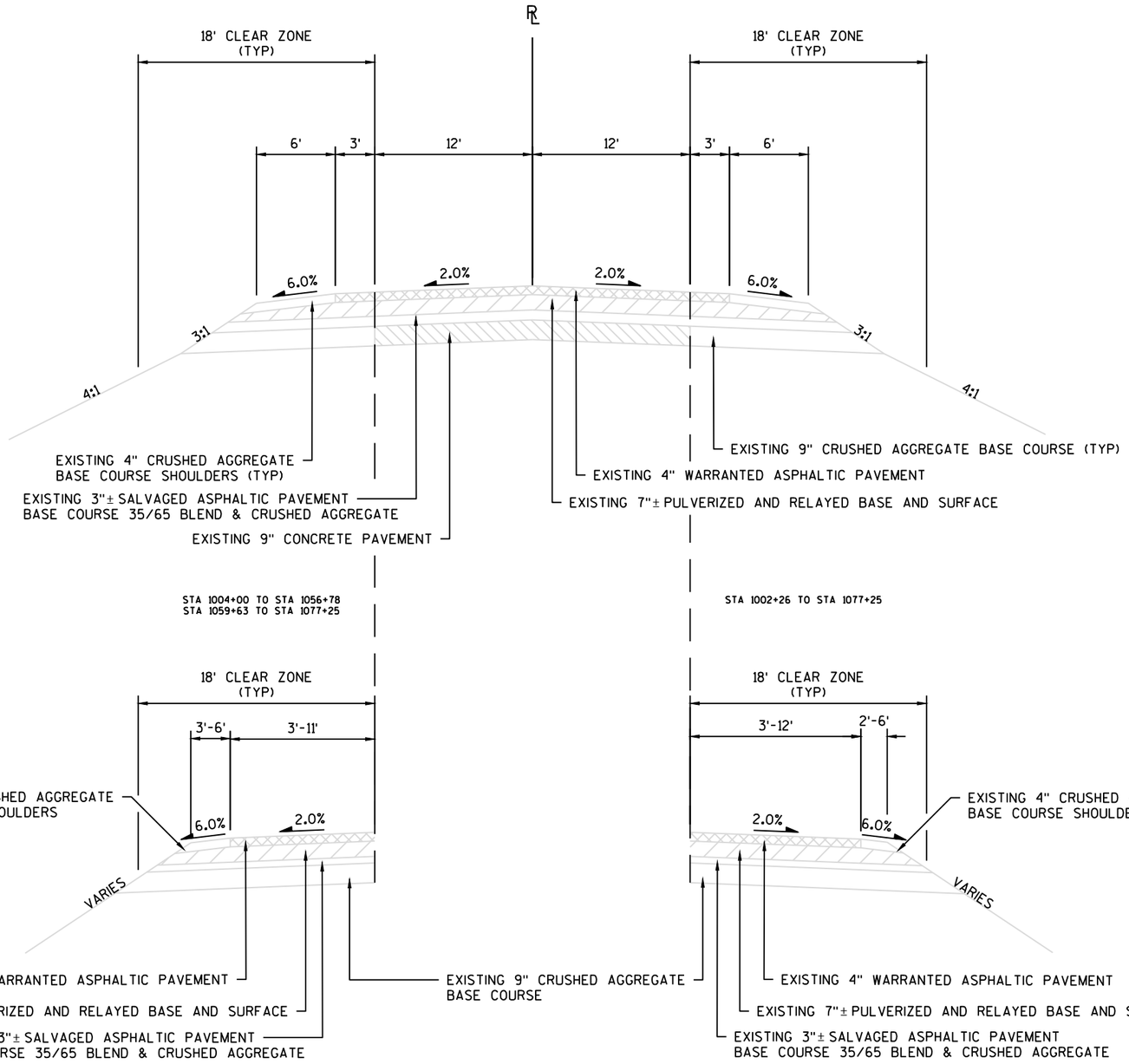


EXISTING TYPICAL SECTION STH 16

STA 977+80 TO STA 1000+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 9	E

2



EXISTING TYPICAL SECTION STH 16

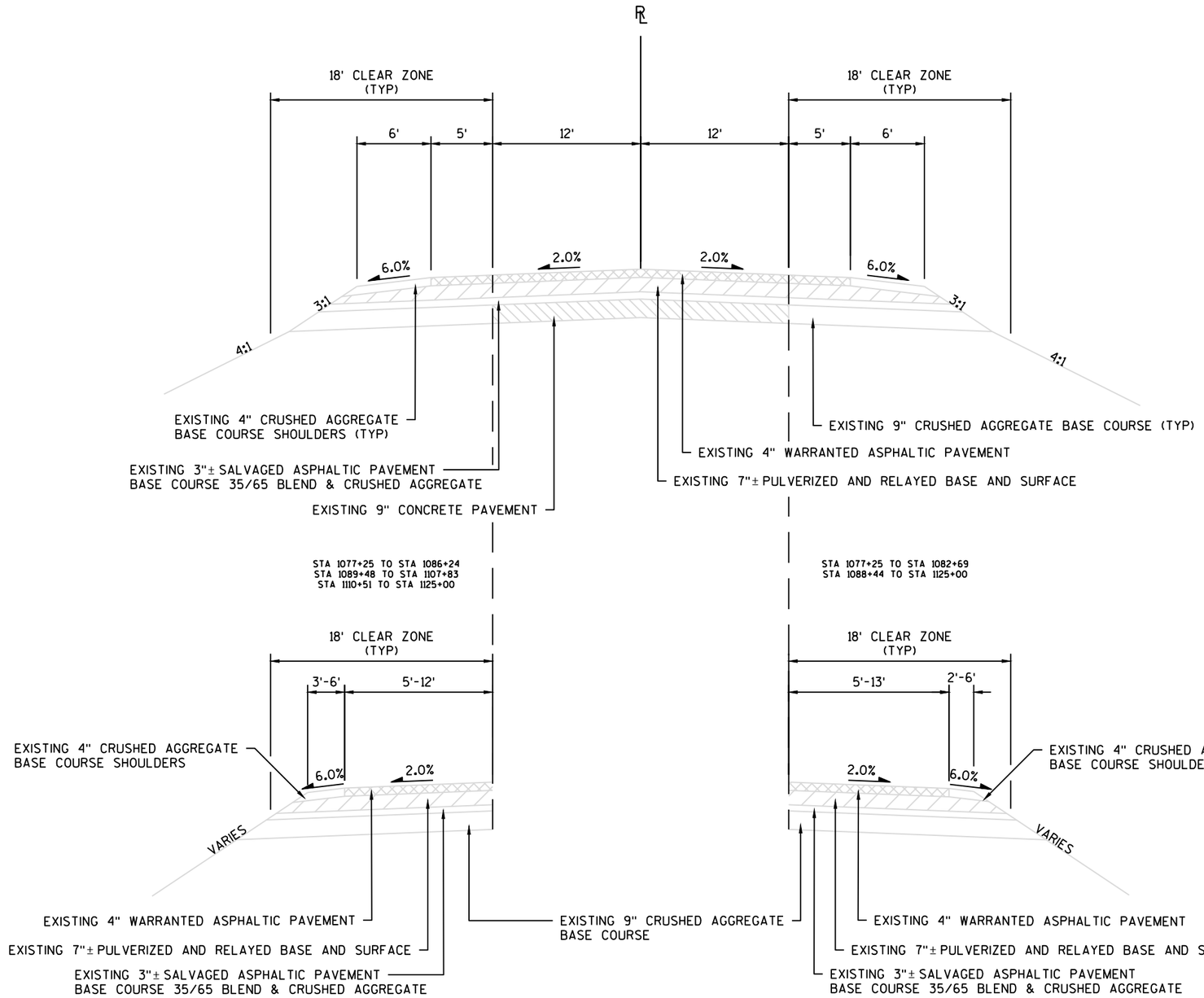
STA 1000+00 TO STA 1077+25

*NOTE - WIDTH OF EXISTING PULVERIZED AND RELAYED BASE AND EXISTING SALVAGED ASPHALTIC PAVEMENT BASE COURSE 35/65 BLEND & CRUSHED AGGREGATE VARIES.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 10	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 06
PLOT DATE : 7/9/2021 11:51 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

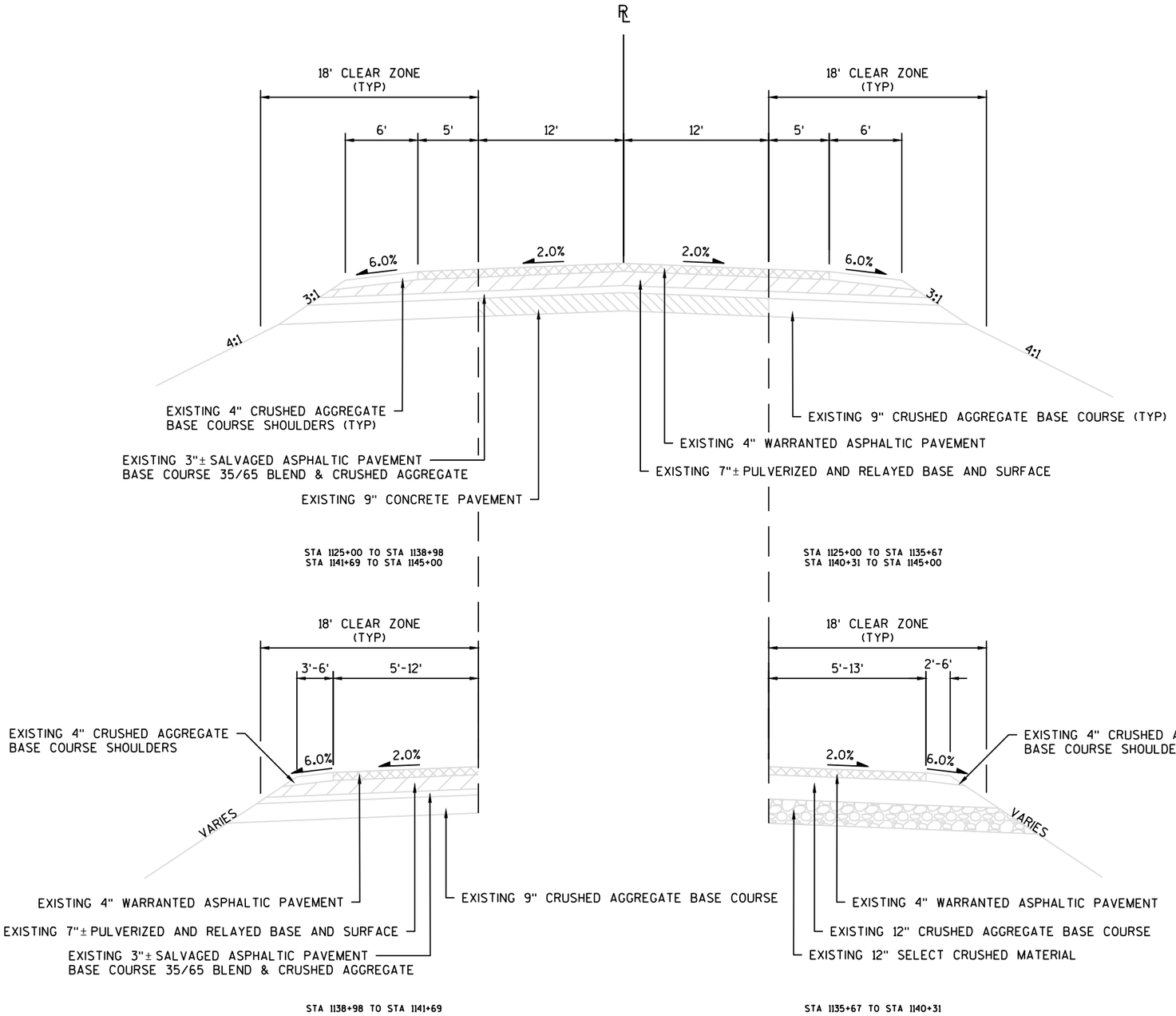


EXISTING TYPICAL SECTION STH 16

STA 1077+25 TO STA 1125+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 11	E

2

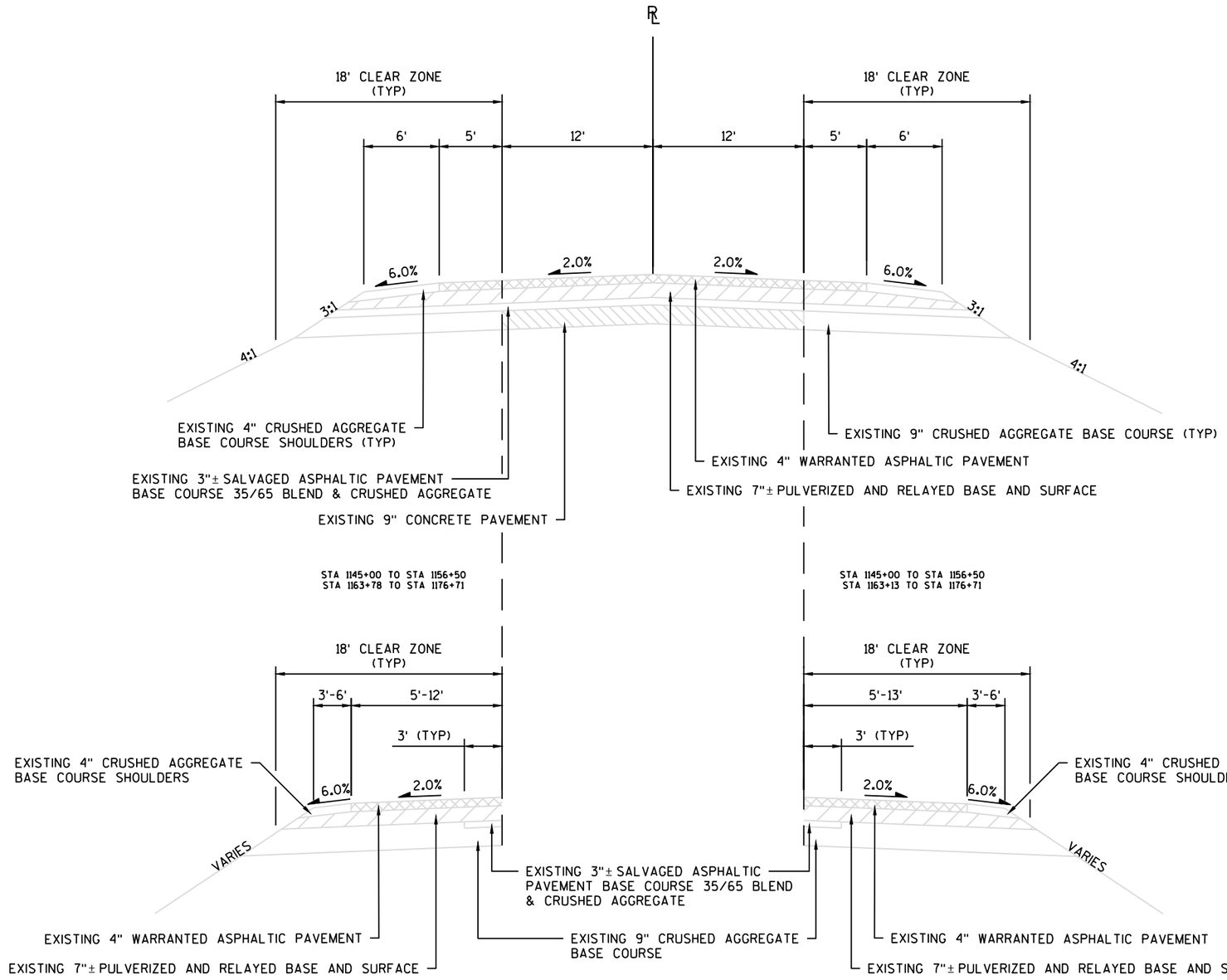


EXISTING TYPICAL SECTION STH 16

STA 1125+00 TO STA 1145+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 12	E

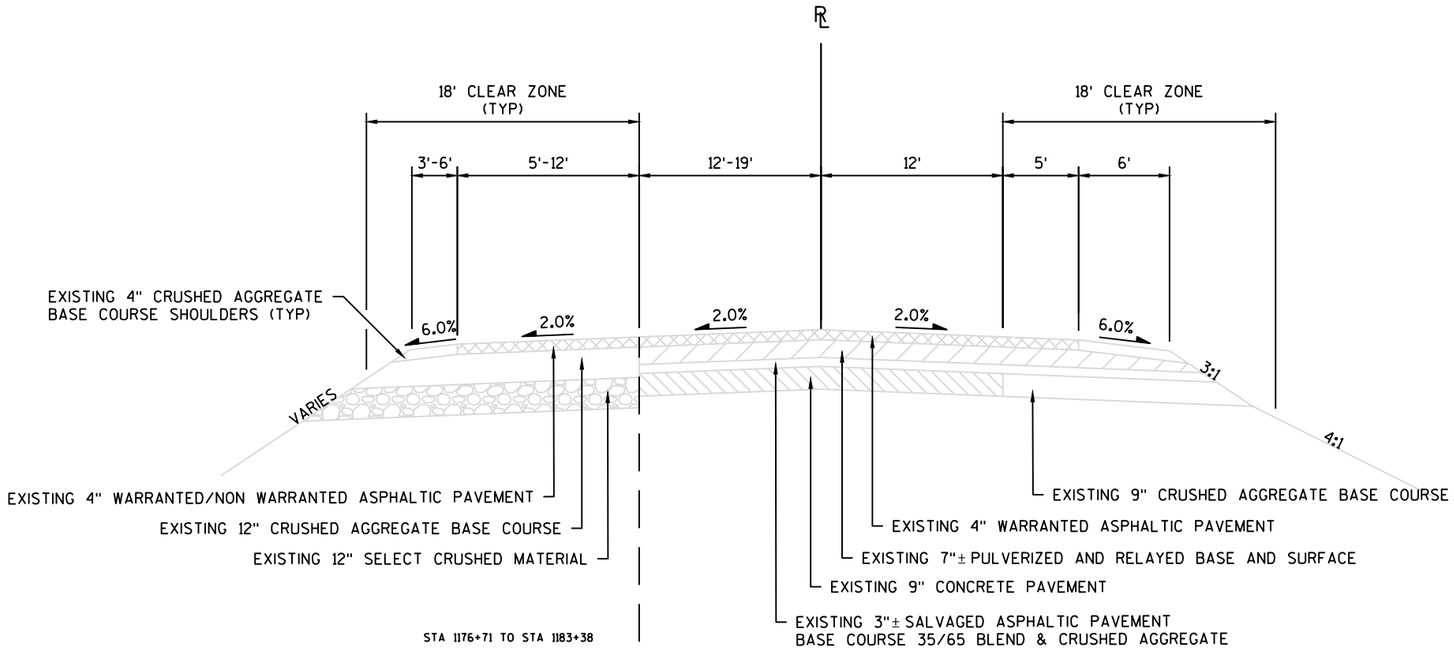
2

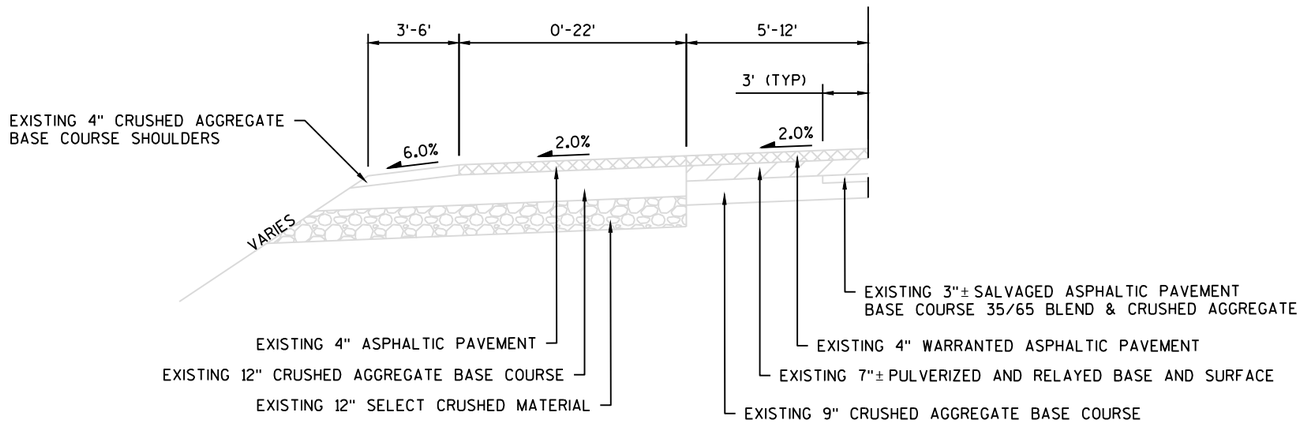


EXISTING TYPICAL SECTION STH 16

STA 1145+00 TO STA 1176+71
(STA 1156+50 TO STA 1156+93 - EXISTING STRUCTURE B-11-11)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 13	E





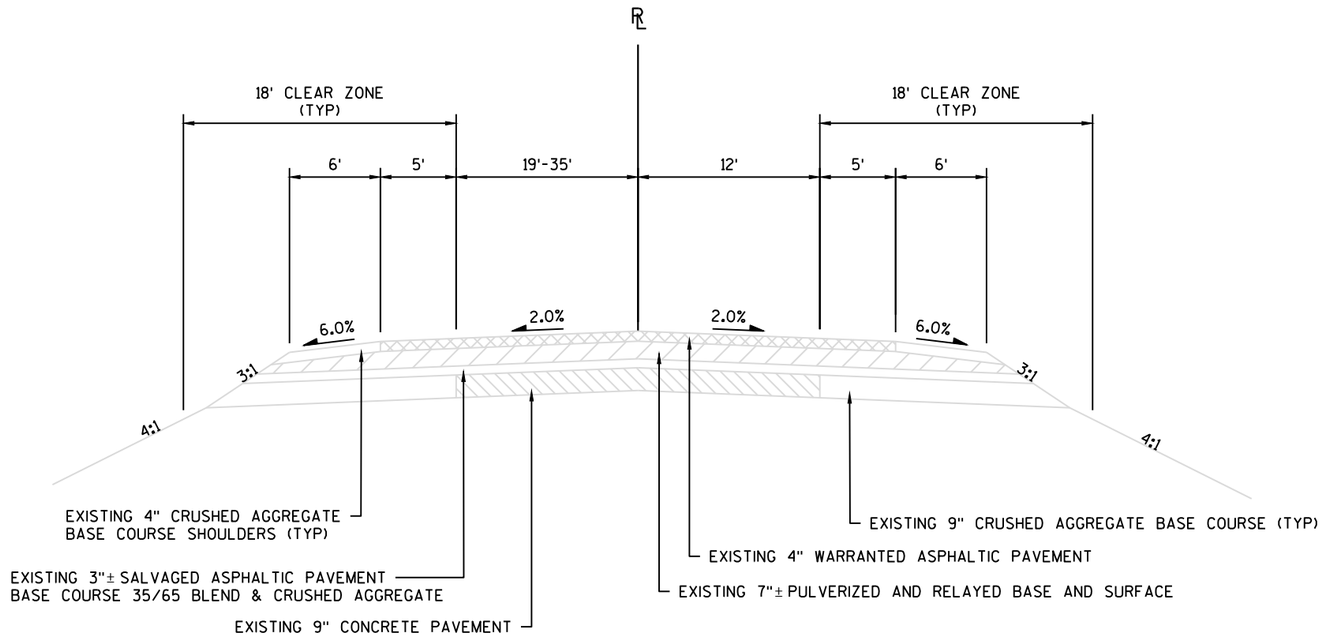
EXISTING TYPICAL SECTION STH 16

STA 1176+71 TO STA 1200+70

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 14	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 10
PLOT DATE : 7/9/2021 11:51 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

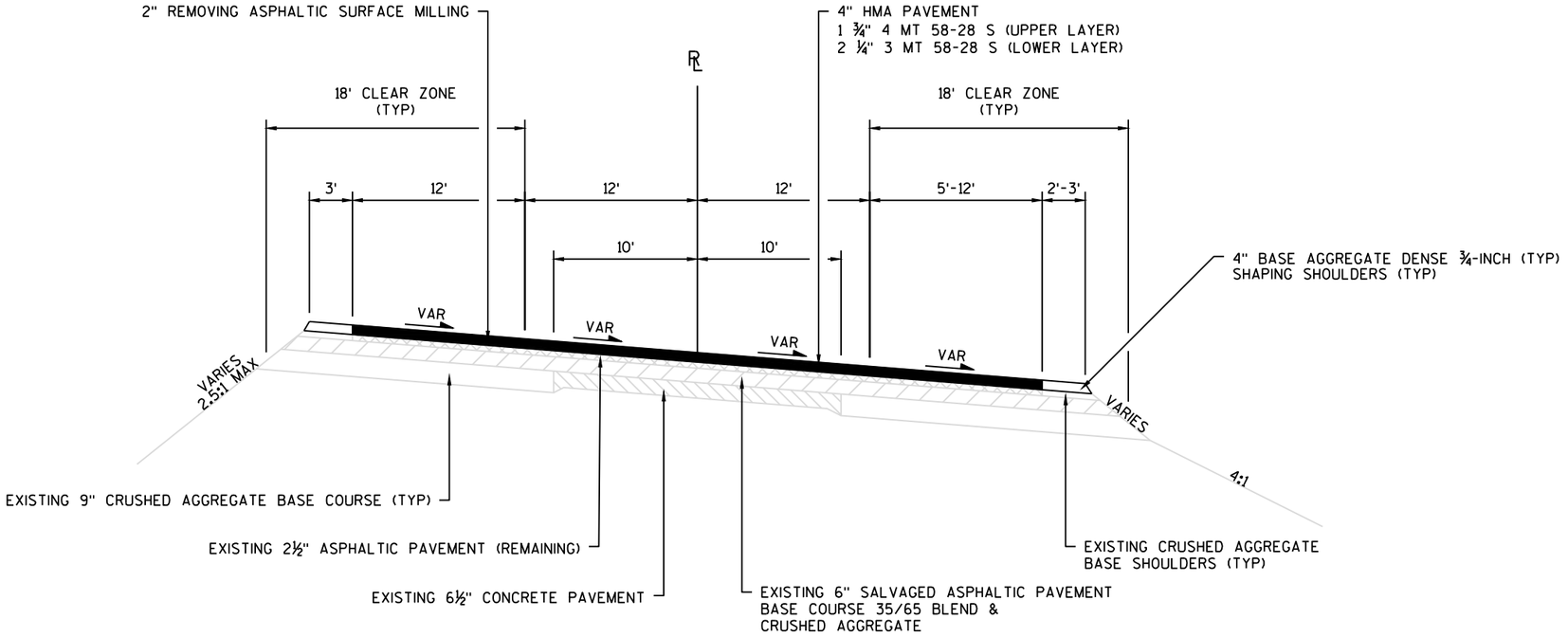
2



EXISTING TYPICAL SECTION STH 16

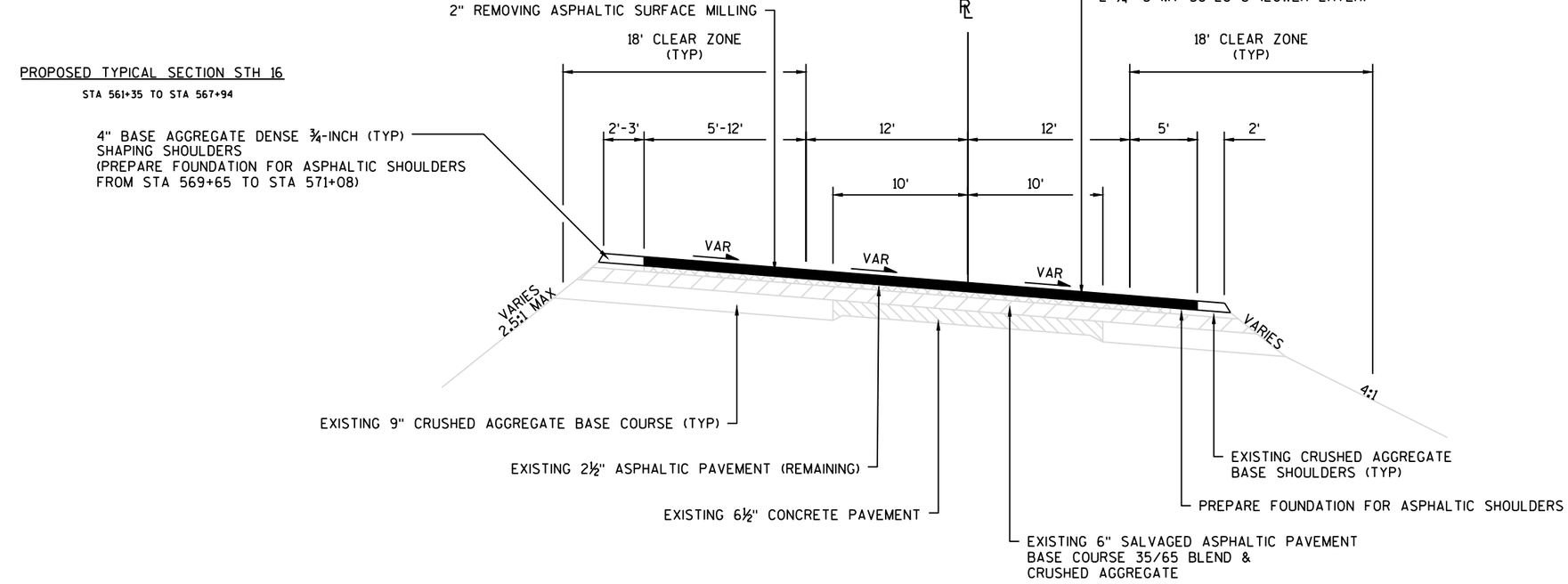
STA 1200+70 TO STA 1204+00

2



PROPOSED TYPICAL SECTION STH 16

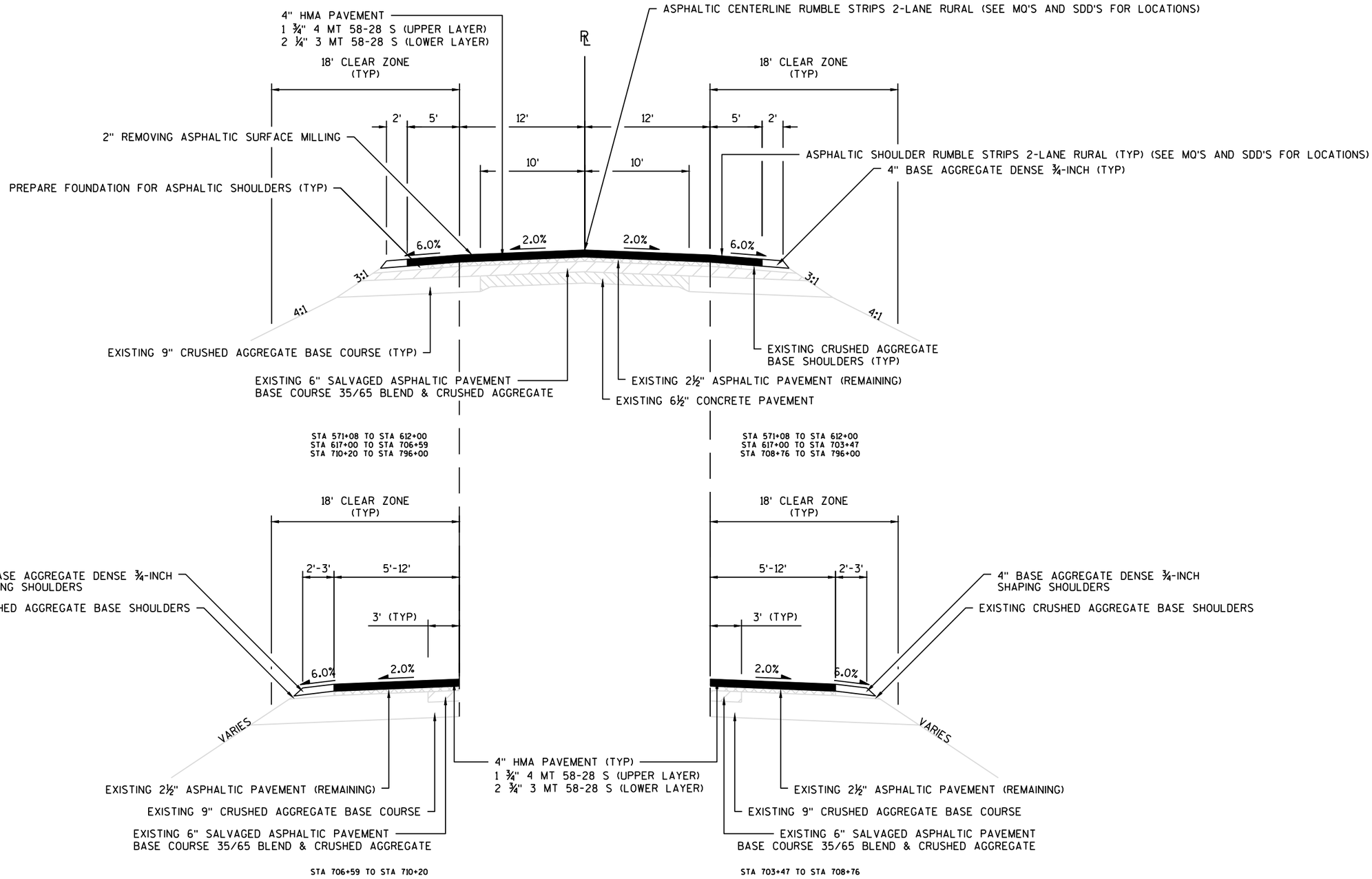
STA 561+35 TO STA 567+94



PROPOSED TYPICAL SECTION STH 16

STA 567+94 TO STA 571+08

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 16	E



PROPOSED TYPICAL SECTION STH 16

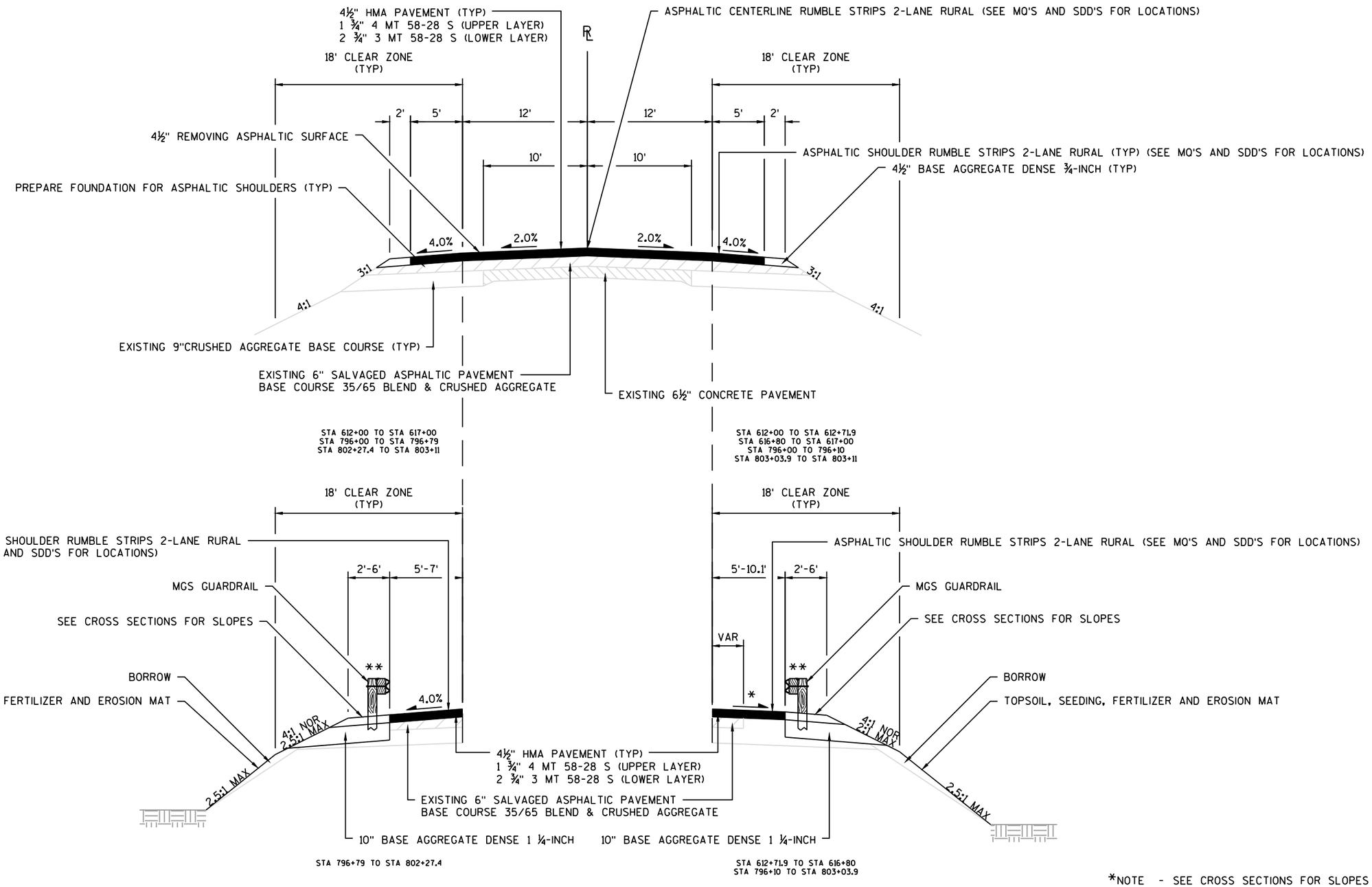
STA 571+08 TO STA 612+00
STA 617+00 TO STA 796+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 17	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/9/2021 11:51 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



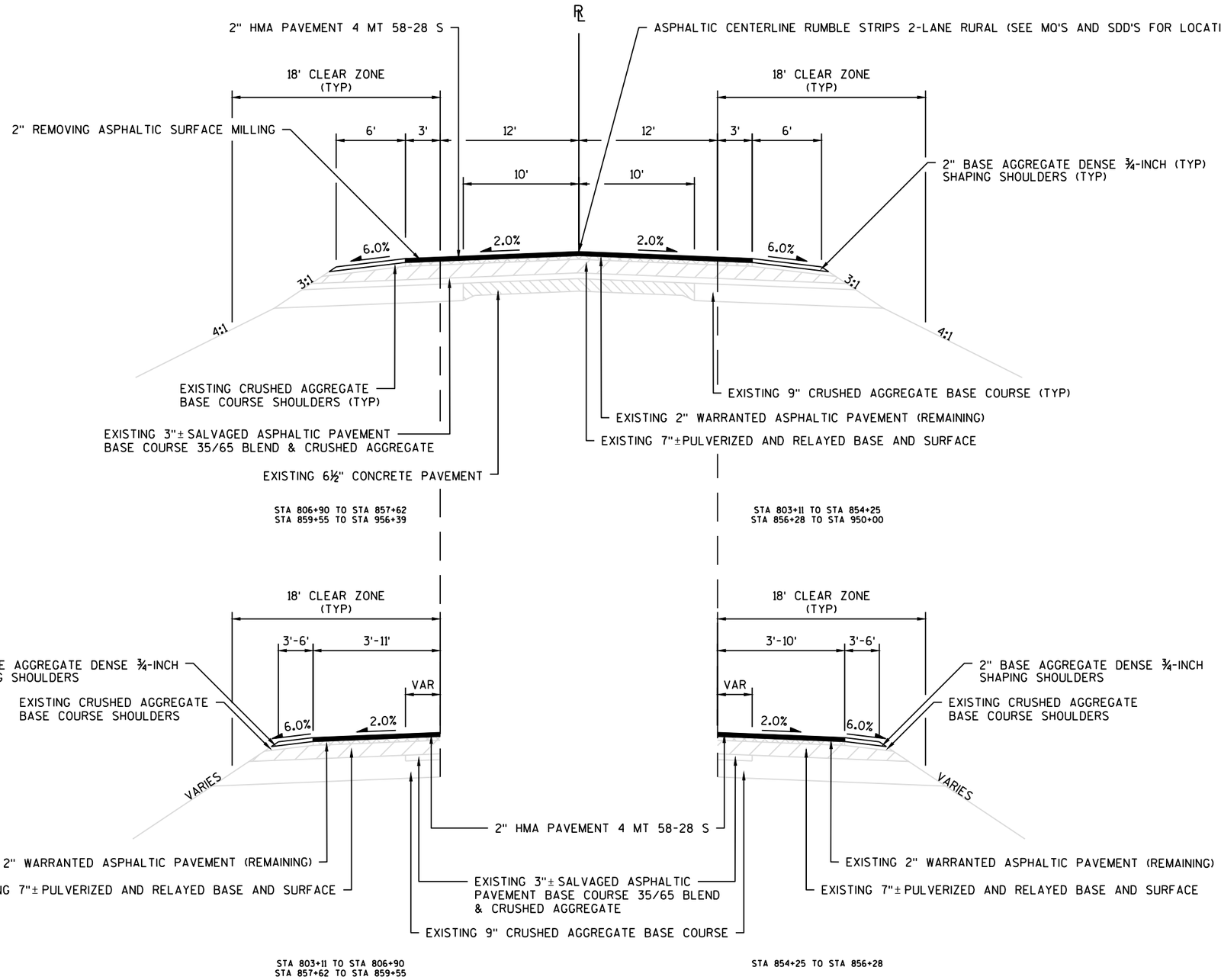
PROPOSED TYPICAL SECTION STH 16

STA 612+00 TO STA 617+00
STA 796+00 TO STA 803+11

*NOTE - SEE CROSS SECTIONS FOR SLOPES
**NOTE - STA 612+82.3 - STA 616+01.1 RT
STA 796+83.7 - STA 803+03.9 RT
STA 797+55.8 - STA 802+27.4 LT

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 18	E

2

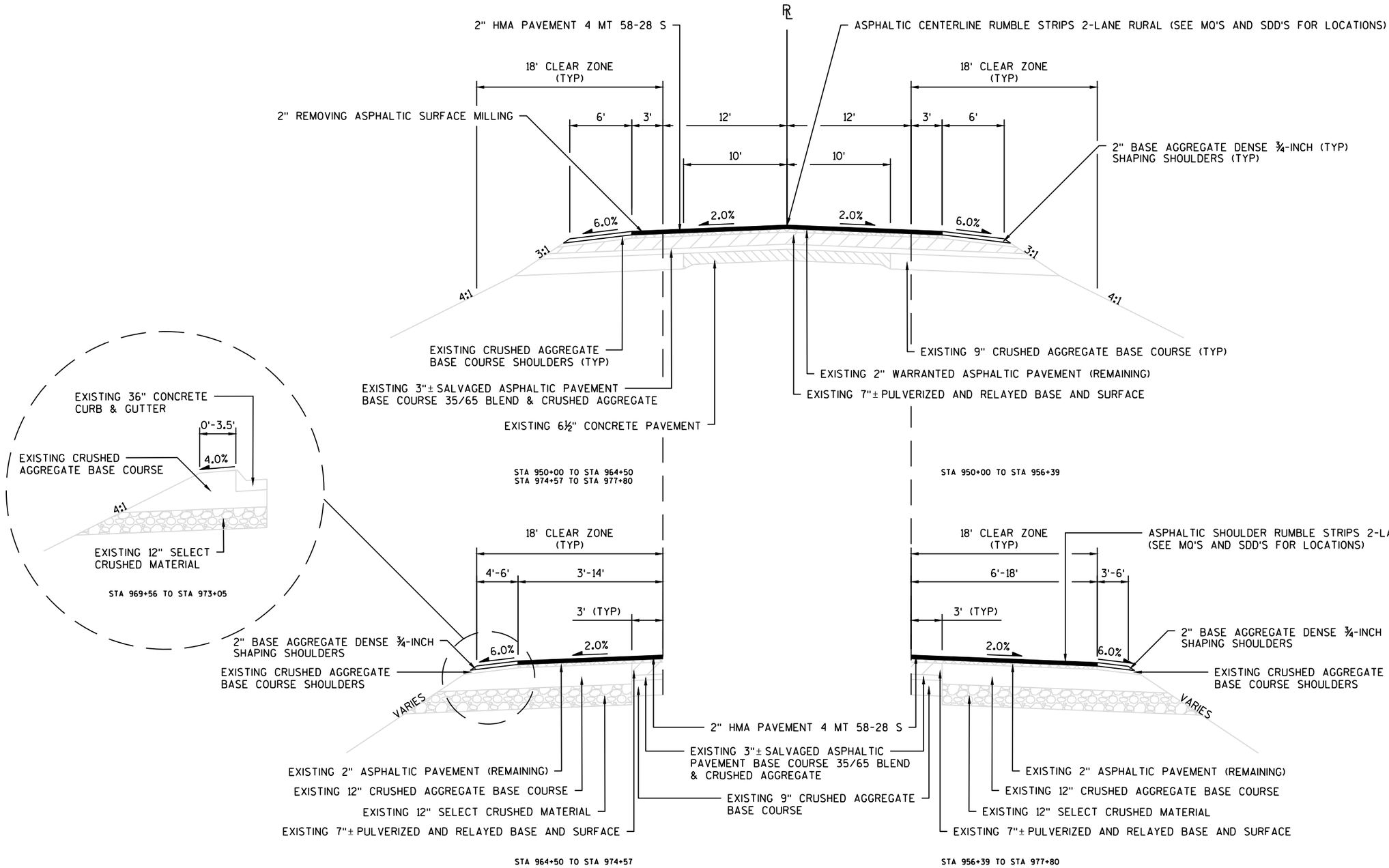


PROPOSED TYPICAL SECTION STH 16

STA 803+11 TO STA 950+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 19	E

2

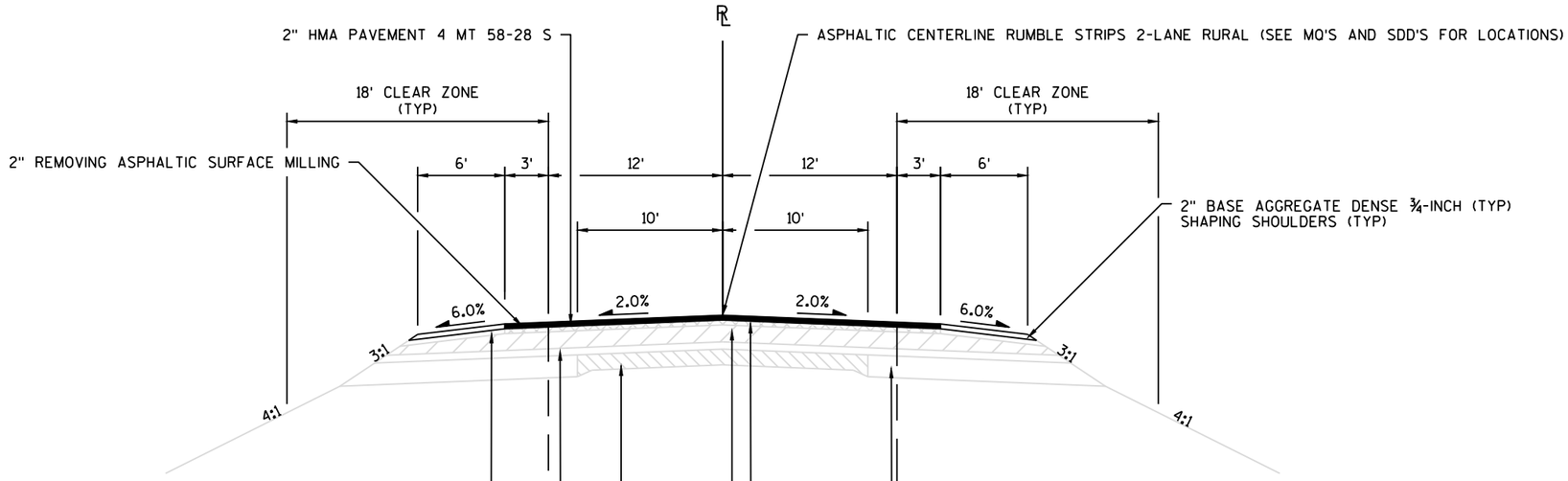


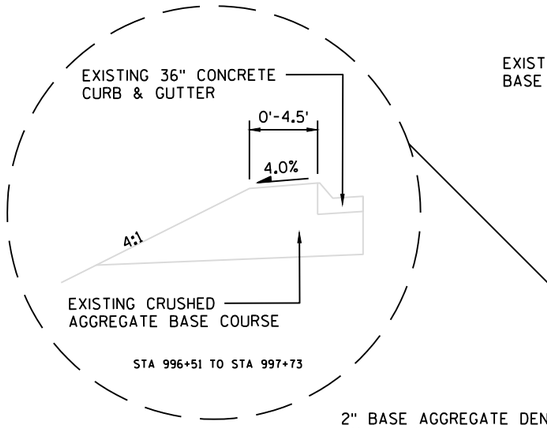
PROPOSED TYPICAL SECTION STH 16

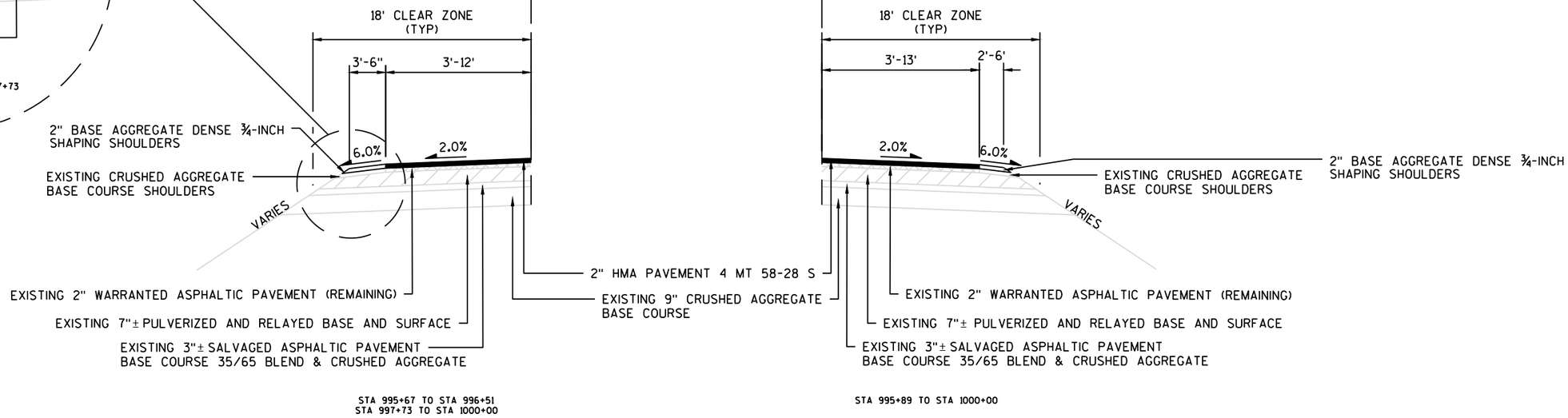
STA 950+00 TO STA 977+80

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 20	E

2



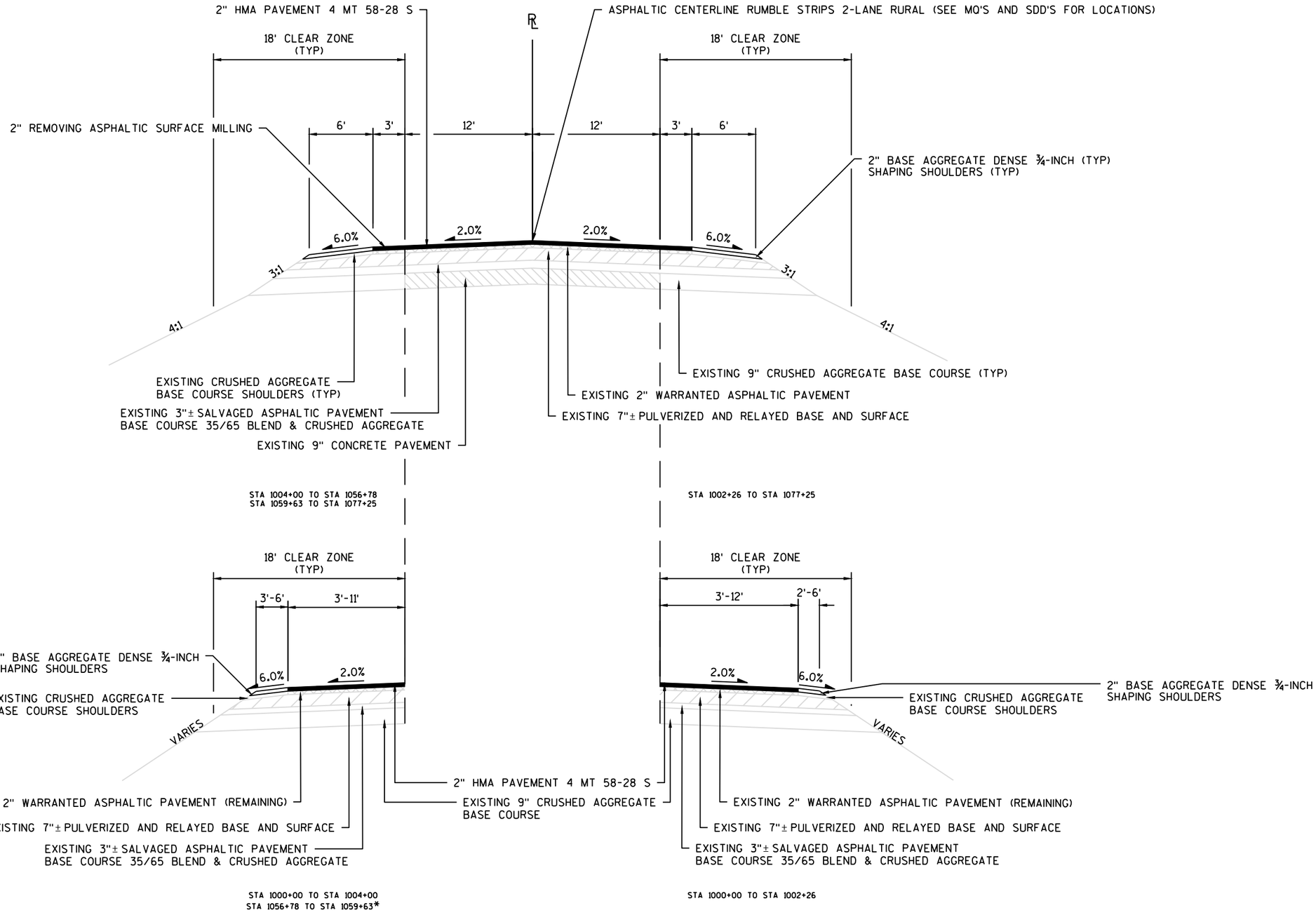




PROPOSED TYPICAL SECTION STH 16

STA 977+80 TO STA 1000+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 21	E

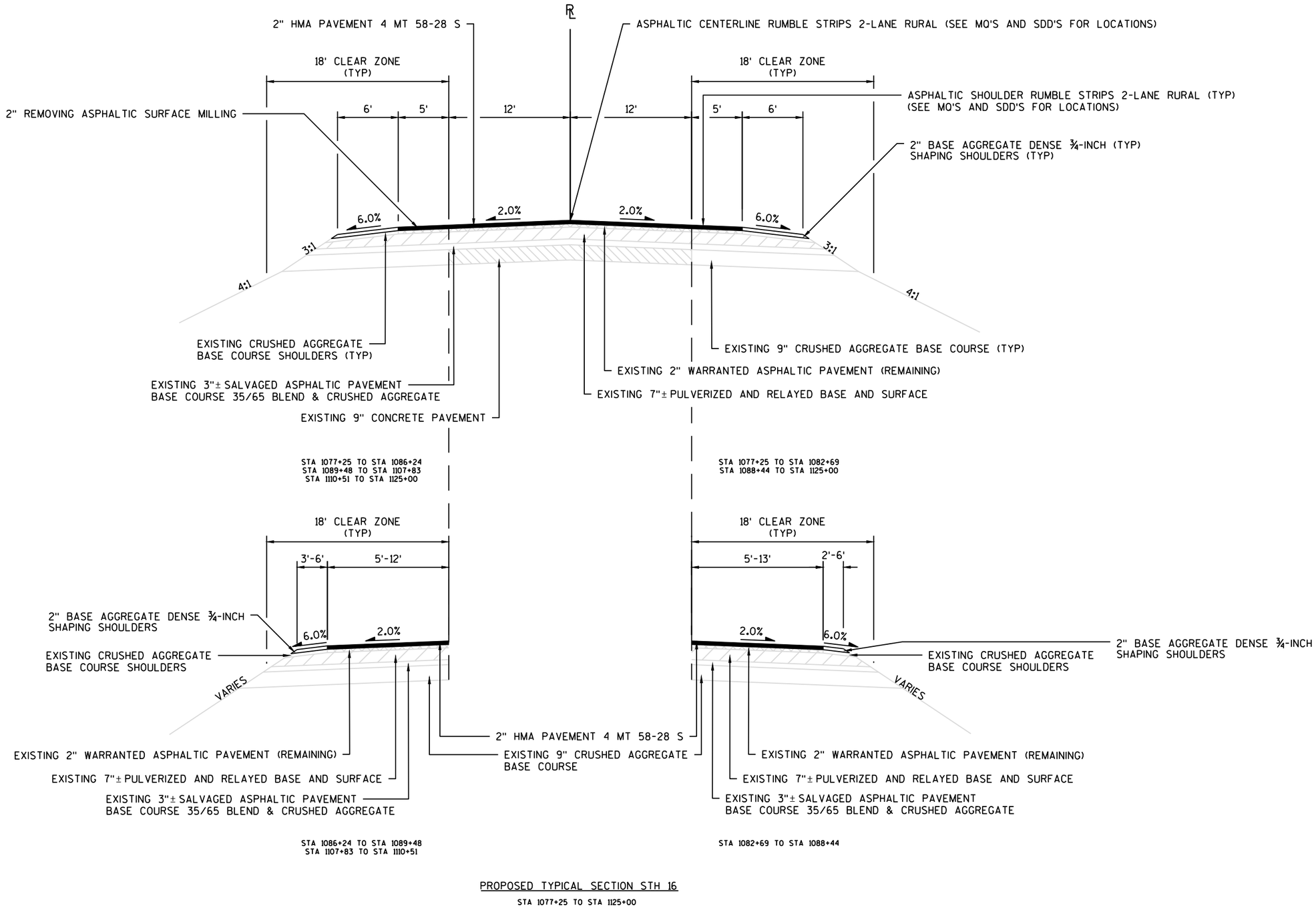


PROPOSED TYPICAL SECTION STH 16

STA 1000+00 TO STA 1077+25

*NOTE - WIDTH OF EXISTING PULVERIZED AND RELAYED BASE AND EXISTING SALVAGED ASPHALTIC PAVEMENT BASE COURSE 35/65 BLEND & CRUSHED AGGREGATE VARIES.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 22	E



PROPOSED TYPICAL SECTION STH 16

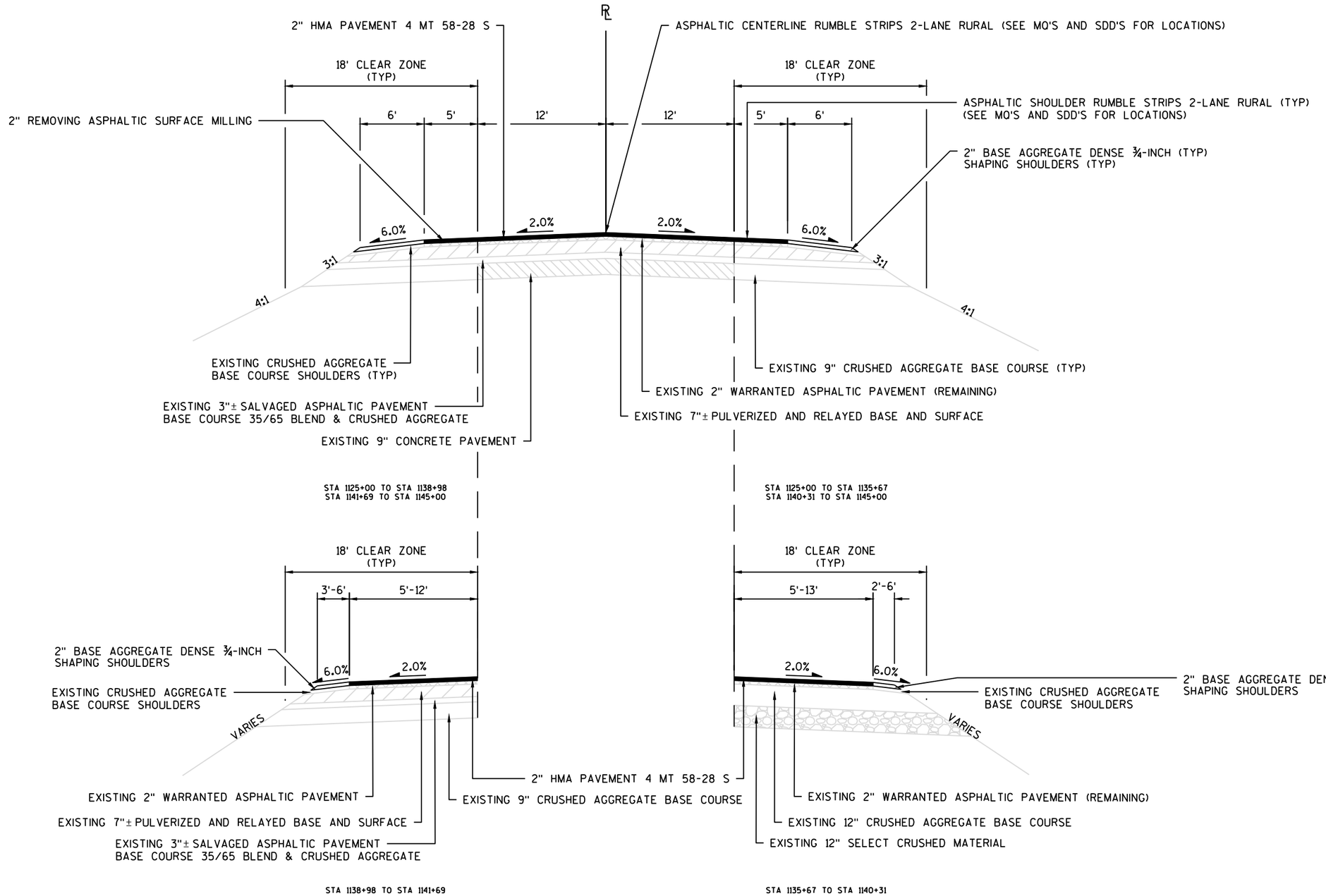
STA 1077+25 TO STA 1125+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 23	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/9/2021 11:51 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42



PROPOSED TYPICAL SECTION STH 16

STA 1125+00 TO STA 1145+00

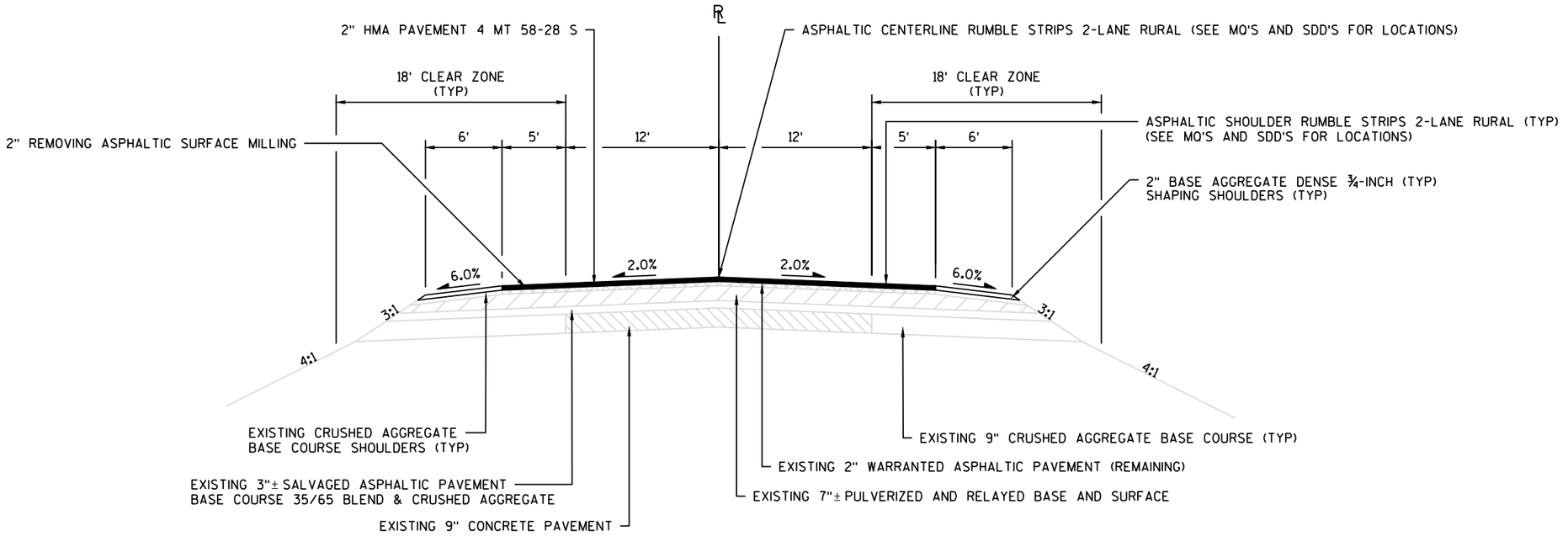
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 24	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 20

PLOT DATE : 7/9/2021 11:51 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2

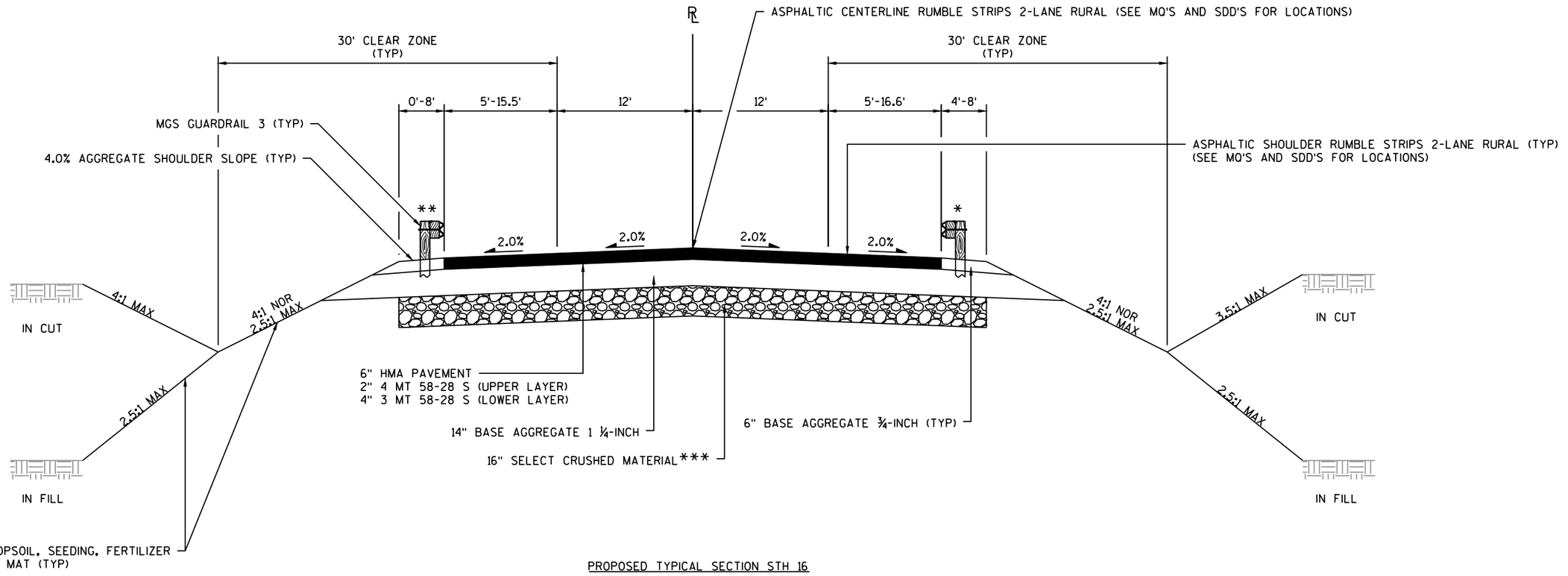


PROPOSED TYPICAL SECTION STH 16

STA 1145+00 TO STA 1150+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 25	E

2



PROPOSED TYPICAL SECTION STH 16

STA 1150+50 TO STA 1156+00.3
STA 1157+52.2 TO STA 1159+43

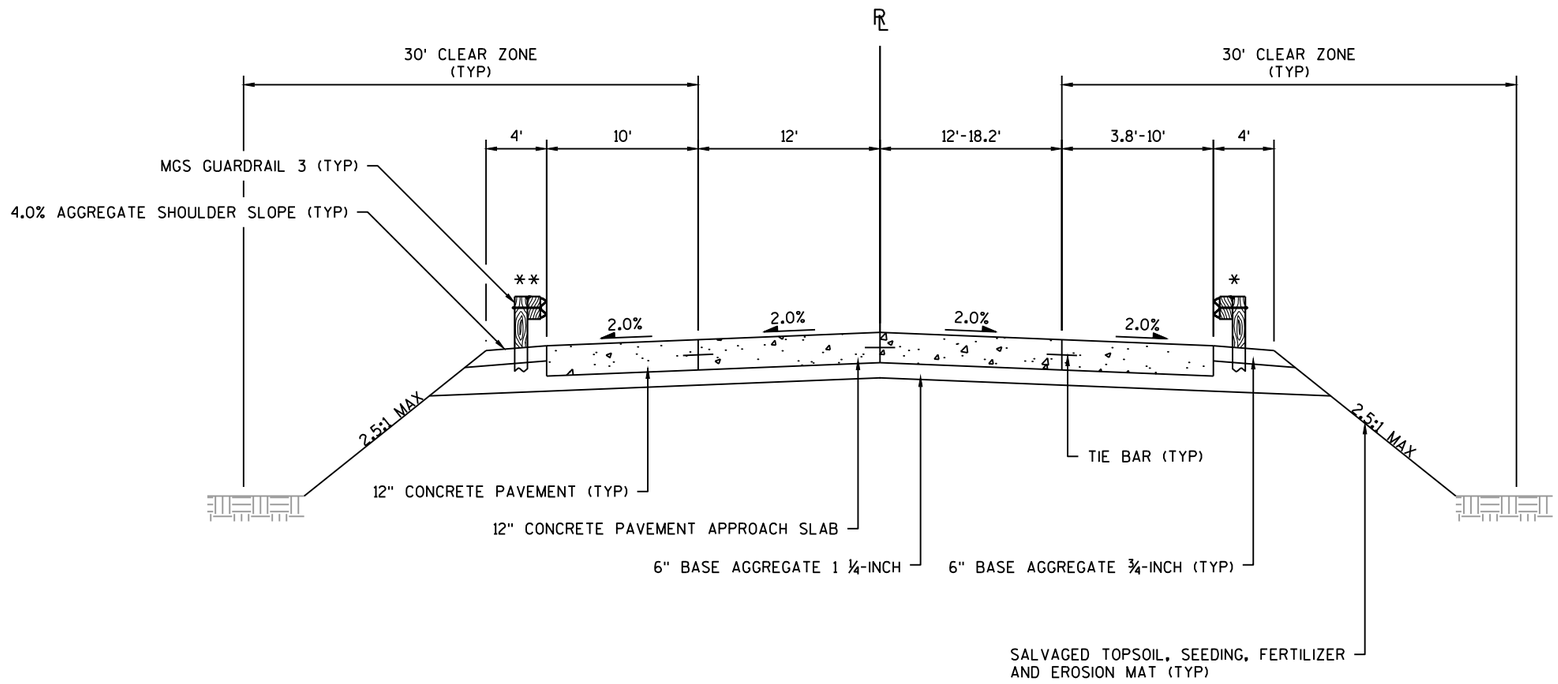
*NOTE - STA 1154+56.6 - STA 1156+00.3
STA 1157+52.2 - STA 1158+64.8

**NOTE - STA 1154+87 - STA 1156+00.3
STA 1157+52.2 - STA 1159+11.2

***NOTE - TRANSITION SELECT CRUSHED MATERIAL DEPTH FROM 16" AT STA 1158+55 TO 12" AT STA 1159+43 (SEE CROSS SECTIONS FOR MORE INFO)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 26	E

2



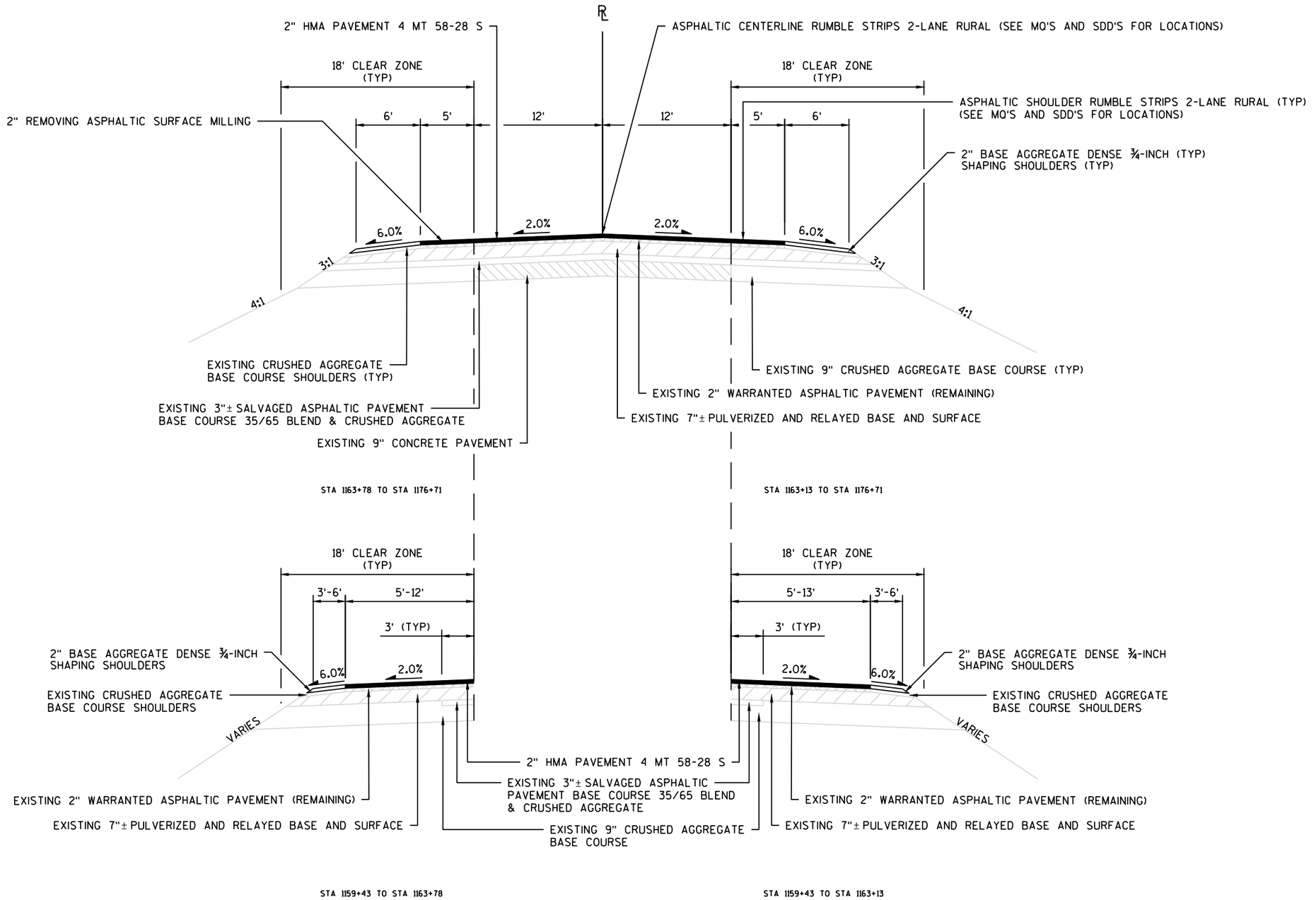
PROPOSED TYPICAL SECTION STH 16

STA 1156+00.3 TO STA 1156+16.41
STA 1157+35.59 TO STA 1157+52.2
(STA 1156+16.41 TO STA 1157+35.59 - SEE B-11-172 STRUCTURE PLANS)

*NOTE - STA 1156+00.3 - STA 1156+20.8
STA 1157+35 - STA 1157+52.2

**NOTE - STA 1156+00.3 - STA 1156+17
STA 1157+31.2 - STA 1157+52.2

2

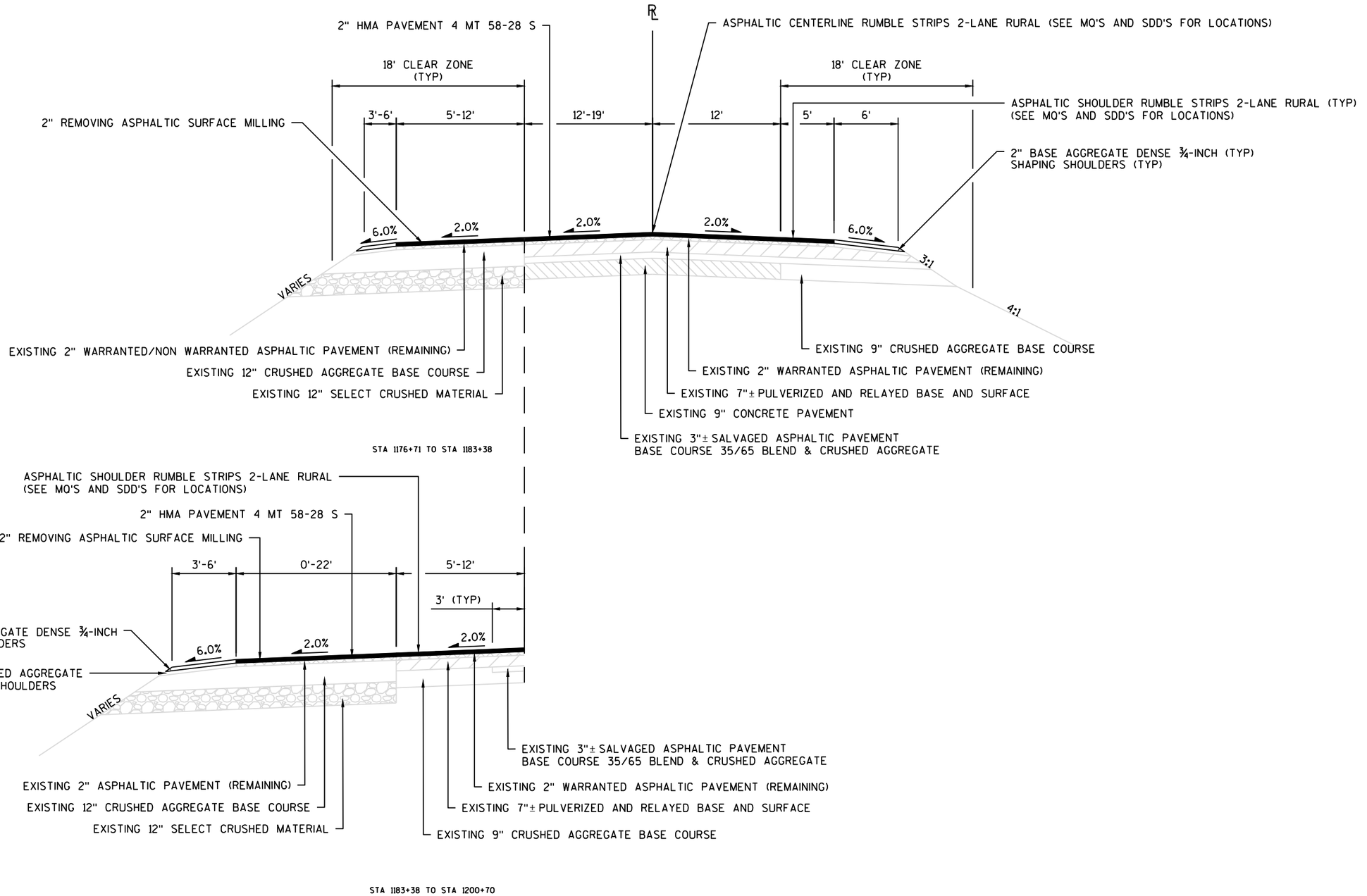


PROPOSED TYPICAL SECTION STH 16

STA 1159+43 TO STA 1176+71

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 28	E

2

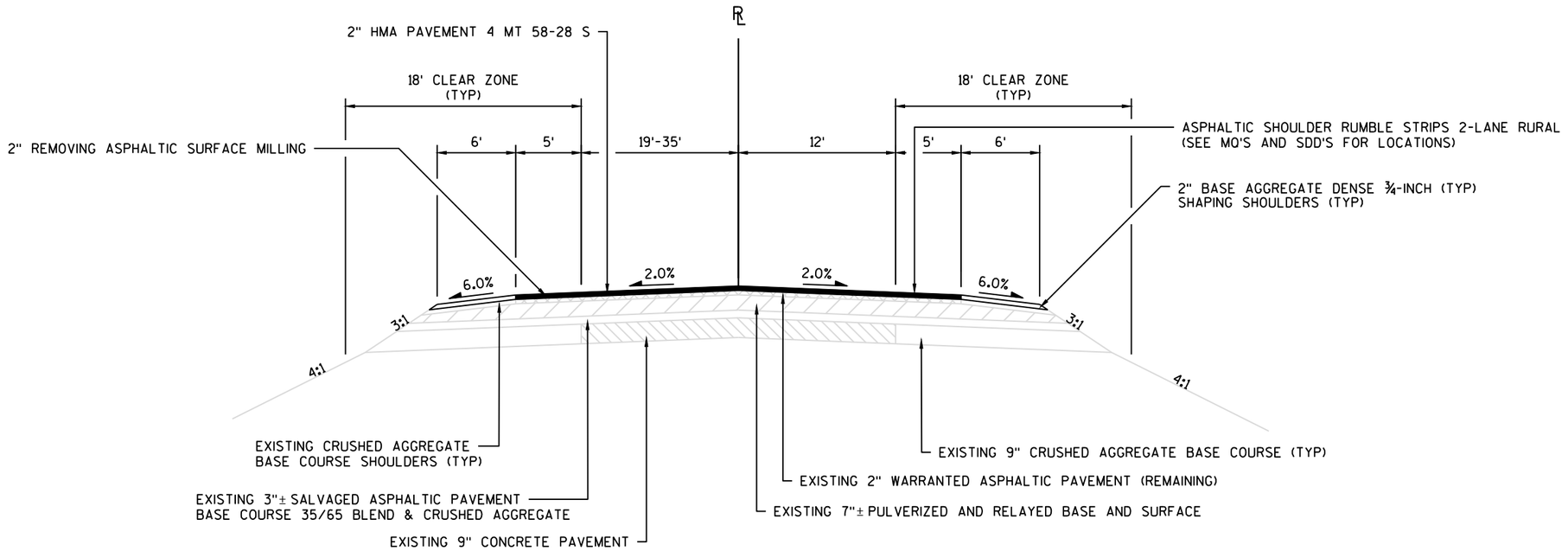


PROPOSED TYPICAL SECTION STH 16

STA 1176+71 TO STA 1200+70

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 29	E

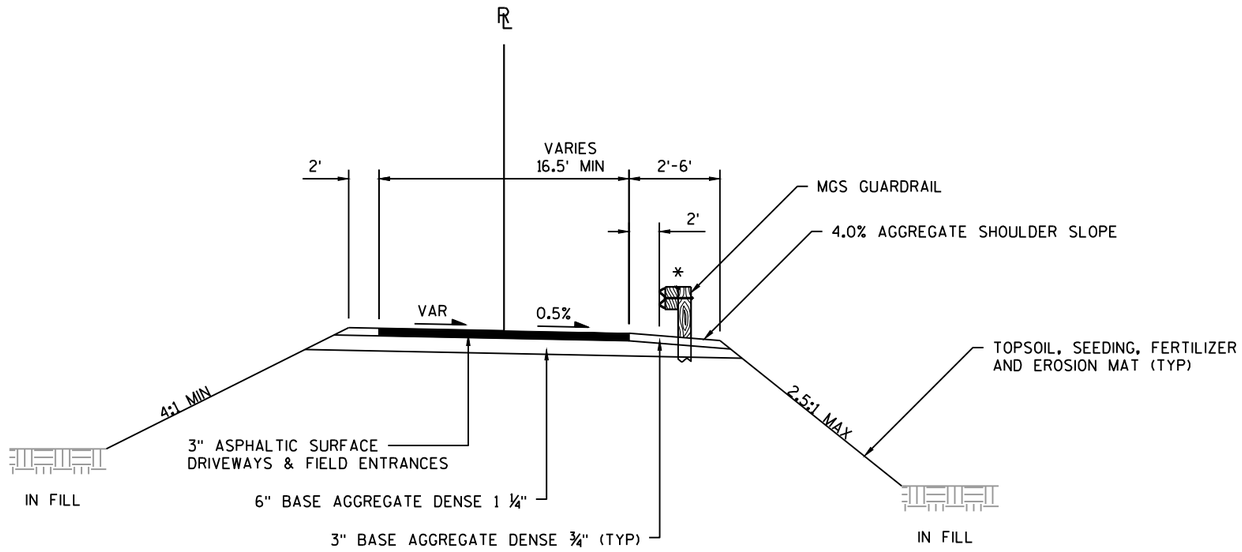
2



EXISTING TYPICAL SECTION STH 16

STA 1200+70 TO STA 1204+00

2



PROPOSED TYPICAL SECTION DRIVEWAY

STA 9+15 TO STA 10+00

*NOTE - SEE CONSTRUCTION DETAILS FOR MGS GUARDRAIL TYPE(S) AND LOCATIONS

2

2

N

612+00
613+00
614+00
615+00
616+00
617+00
STH 16

CAUTION

OH

ALLIANT ENERGY - UNDERGROUND GAS

STA 612+82.4 - STA 615+99.5
REMOVING GUARDRAIL

STA 613+16.3, C-11-1032
EXISTING 3.5' X 6' X 60' BOX CULVERT
(TO REMAIN)

ALLIANT ENERGY - OVERHEAD ELECTRIC

SLOPE INTERCEPT

EXISTING RW

LEGEND

REMOVING ASPHALTIC SURFACE

REMOVING ASPHALTIC SURFACE MILLING
(TRANSITION SECTION)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 32	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 11:59 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STA 797+54.5 - STA 802+24
REMOVING GUARDRAIL

SLOPE INTERCEPT

EXISTING RW

**EXISTING ROADWAY CENTERLINE

WETLANDS

N BRANCH CRAWFISH RIVER

WETLANDS

POST

OTSEGO ROAD

797+00

798+00

799+00

800+00

801+00

802+00

STH 16

ALLIANT ENERGY -
UNDERGROUND GAS

CAUTION

STA 796+88.9 - STA 802+82.6
REMOVING GUARDRAIL

ALLIANT ENERGY - OVERHEAD ELECTRIC

WETLANDS

SLOPE INTERCEPT

EXISTING RW

GUY

WETLANDS

STA 800+24.9, B-11-0133
EXISTING 8' X 8' X 73' BOX CULVERT
(TO REMAIN)

SLOPE INTERCEPT

ALLIANT ENERGY -
OVERHEAD ELECTRIC

EXISTING RW

WETLANDS

**EXISTING ROADWAY CENTERLINE

803+00

STH 16

804+00

N

EXISTING 24" CMCP
(TO REMAIN)

CAUTION

GUY

ALLIANT ENERGY - UNDERGROUND GAS

OTSEGO ROAD

ALLIANT ENERGY - OVERHEAD ELECTRIC

LEGEND

REMOVING ASPHALTIC SURFACE

REMOVING ASPHALTIC SURFACE MILLING

XXXXXXXXXXX SAWING ASPHALT

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1'-1.2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 33	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 11:59 AM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

CRAWFISH RIVER

WETLANDS

EXISTING RW

STA 1155+80.1 - STA 1156+52.8
REMOVING GUARDRAIL

STH 16

1150+00
1151+00
1152+00
1153+00
1154+00
1155+00
1156+00

STA 1154+65.9, 18.1' RT
(STA 9+80.7, AT R/L)

STA 1154+54.9, 46.8' RT
(STA 9+50, AT R/L)

STA 1150+50
END RESURFACING LIMITS
BEGIN RECONSTRUCTION LIMITS

SLOPE INTERCEPT (TYP)

GUY

OH

WETLANDS

STA 1155+80.1 - STA 1156+52.8
REMOVING GUARDRAIL

EXISTING RW

ALLIANT ENERGY - OVERHEAD ELECTRIC

LEGEND

- REMOVING PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE (INCIDENTAL TO EXCAVATION BID ITEMS)
- XXXXXXXXXXX SAWING CONCRETE/ASPHALT
- REMOVING ASPHALTIC SURFACE

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 34	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 03

PLOT DATE : 7/9/2021 12:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CRAWFISH RIVER

REMOVE EXISTING STRUCTURE B-11-11
(SEE STRUCTURE PLANS)

ALLIANT ENGERGY - OVERHEAD ELECTRIC
AT&T - OVERHEAD COMMUNICATIONS

EXISTING RW

STA 1159+43
END RECONSTRUCTION LIMITS
BEGIN RESURFACING LIMITS

SLOPE INTERCEPT (TYP.)

WETLANDS

STA 1156+90.2 - STA 1157+63.6
REMOVING GUARDRAIL

B-11-11

+00

1157+00

1158+00

1159+00

1160+00

STH 16

1161+00

1162+00

CAUTION

OH

STA 1156+90.2 - STA 1157+63.3
REMOVING GUARDRAIL

WETLANDS

ALLIANT ENERGY - OVERHEAD ELECTRIC

WE ENERGIES - UNDERGROUND GAS

EXISTING RW

CRAWFISH RIVER

LEGEND

- REMOVING PAVEMENT
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE (INCIDENTAL TO EXCAVATION BID ITEMS)
- XXXXXXXXXX — SAWING CONCRETE/ASPHALT
- REMOVING ASPHALTIC SURFACE (FULL DEPTH)

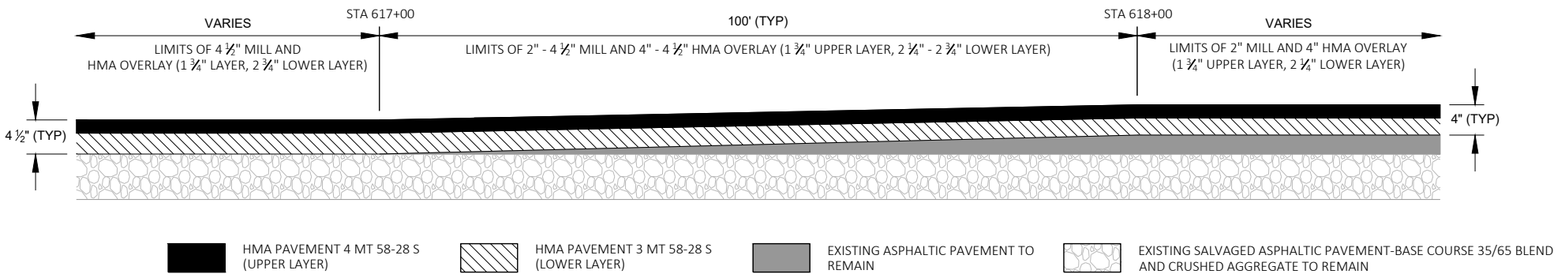
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 35	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 04

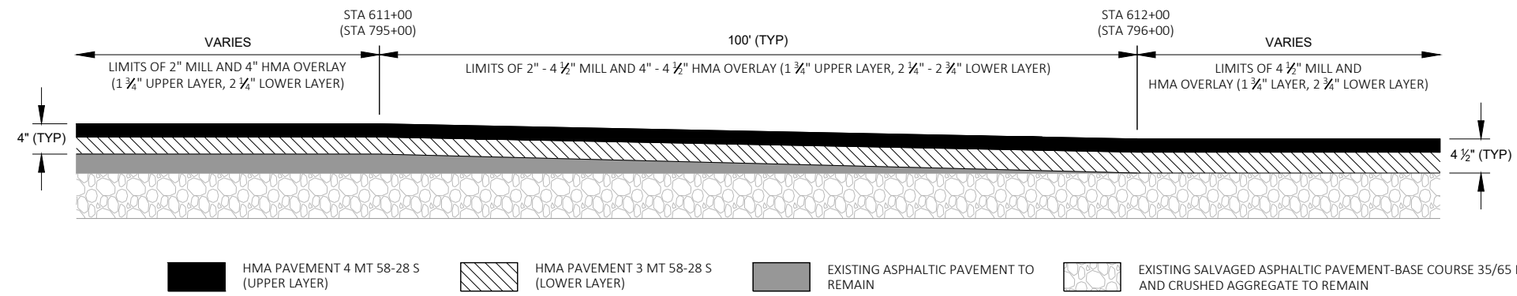
PLOT DATE : 7/9/2021 12:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

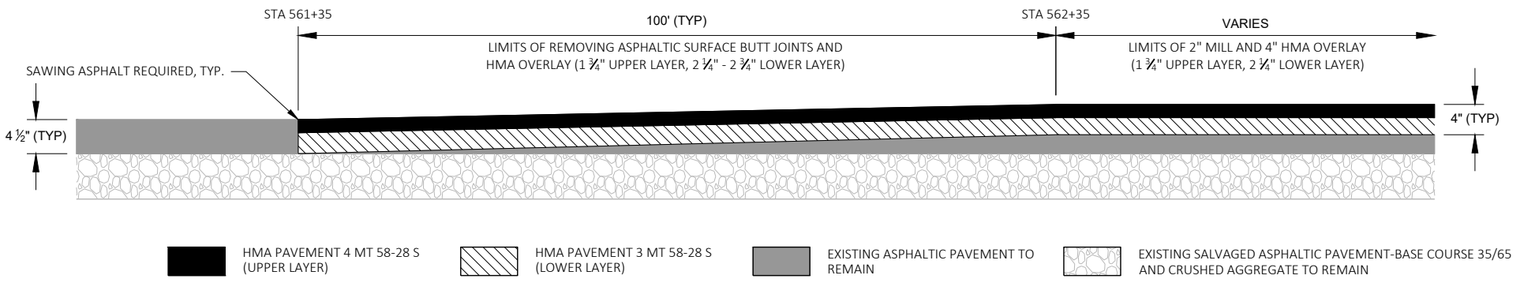
2



HMA OVERLAY DEPTH TRANSITION DETAIL
ELEVATION VIEW
STA 617+00 - STA 618+00



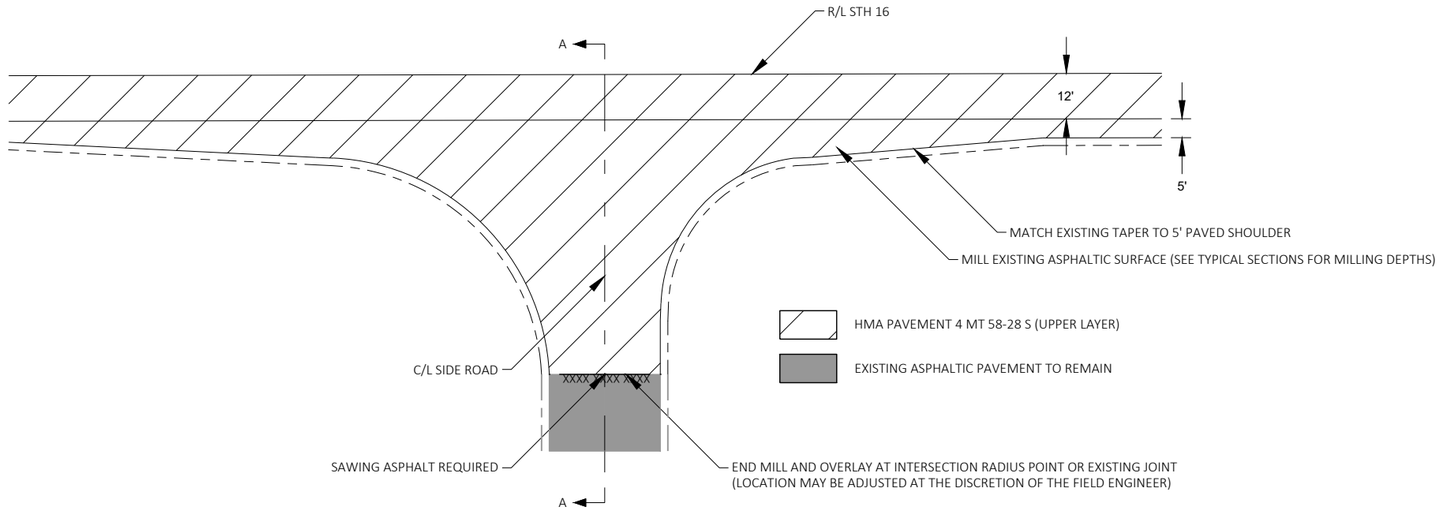
HMA OVERLAY DEPTH TRANSITION DETAIL
ELEVATION VIEW
STA 611+00 - STA 612+00
(STA 795+00 - STA 796+00)



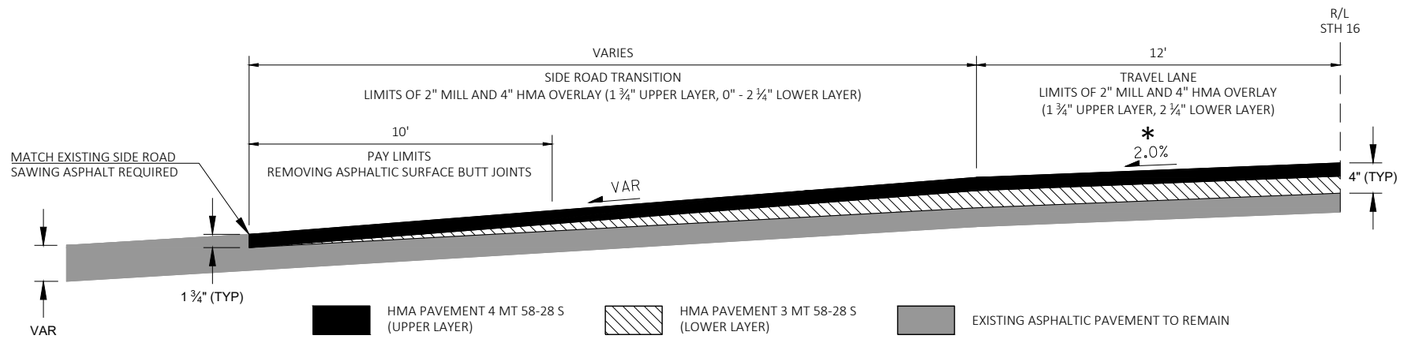
WEST END JOINT DETAIL
ELEVATION VIEW
STA 561+35 - STA 562+35

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MILLING TRANSITIONS AND BUTT JOINTS	SHEET 36	E

2



PLAN VIEW



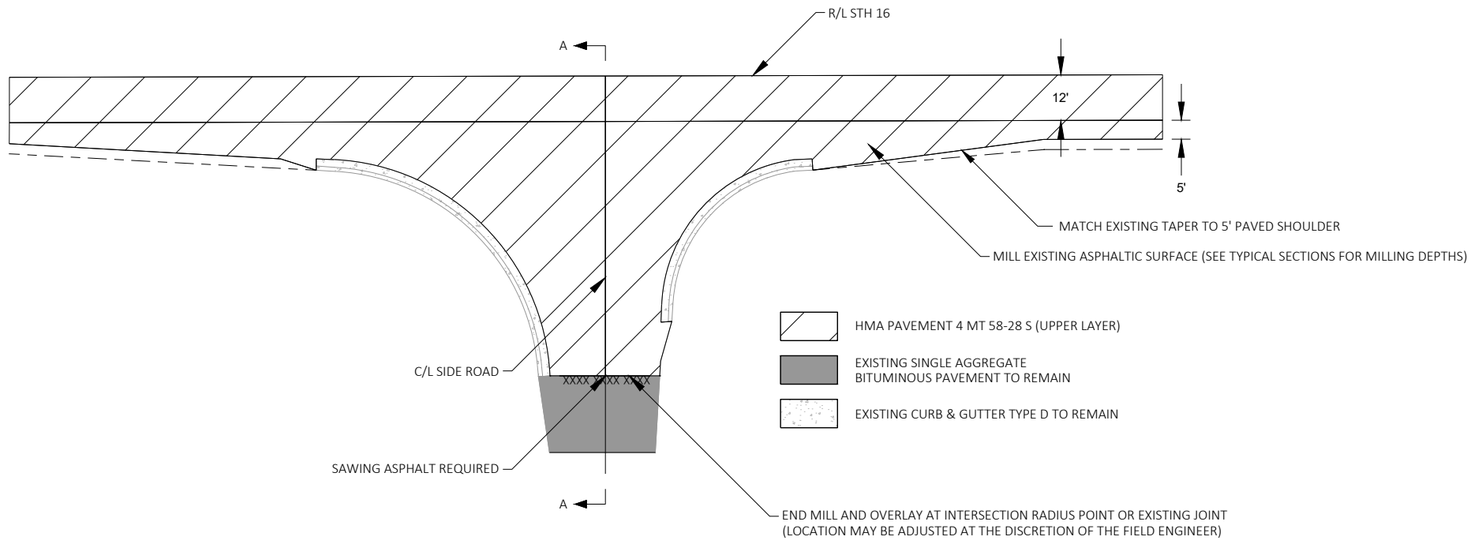
SECTION A-A

SIDE ROAD TRANSITION DETAIL

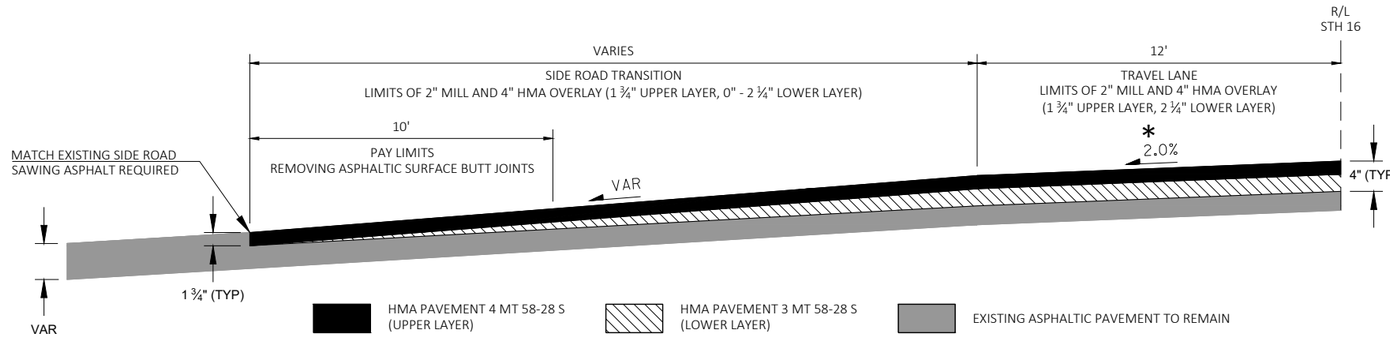
*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

CHURCH STREET
OLD COUNTY ROAD F
HUMPHREY DRIVE
WILLIAMS ROAD
ERDMAN ROAD
DOHERTY ROAD
FISCHER ROAD
COLUMBUS ROAD
OTSEGO ROAD

2



PLAN VIEW



SECTION A-A

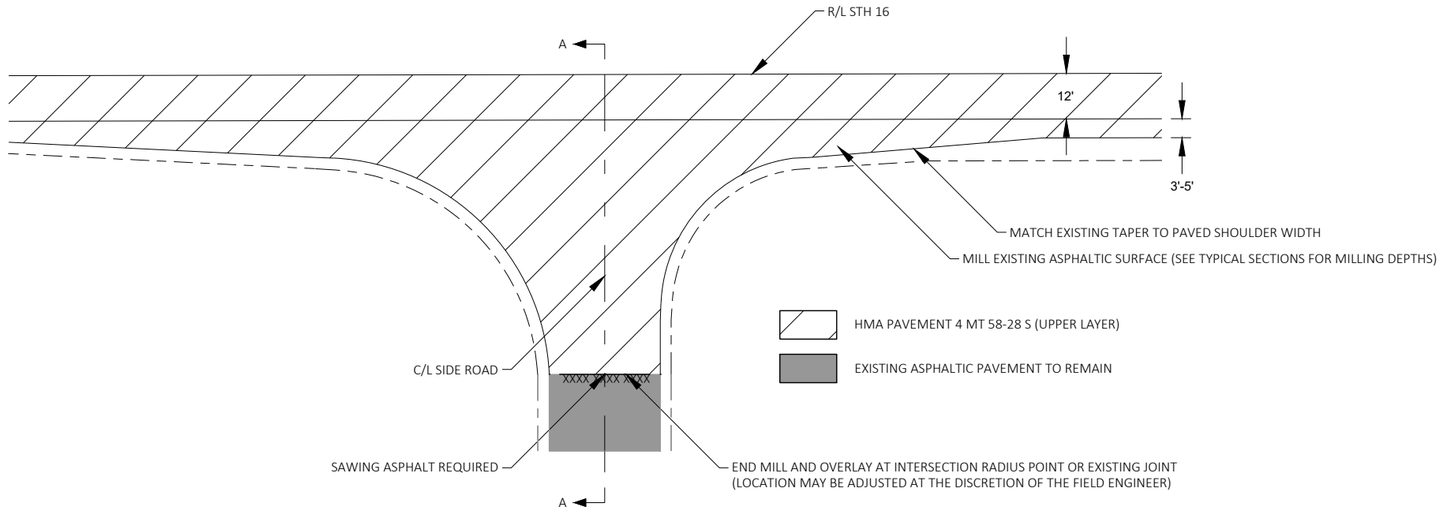
SIDE ROAD WITH CURB AND GUTTER TRANSITION DETAIL

*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES
CTH B/LONG CROSSING ROAD (INCLUDES ACCELERATION LANE/SHOULDER)
BADGER DISPOSAL ENTRANCE (INCLUDES RIGHT TURN LANE)

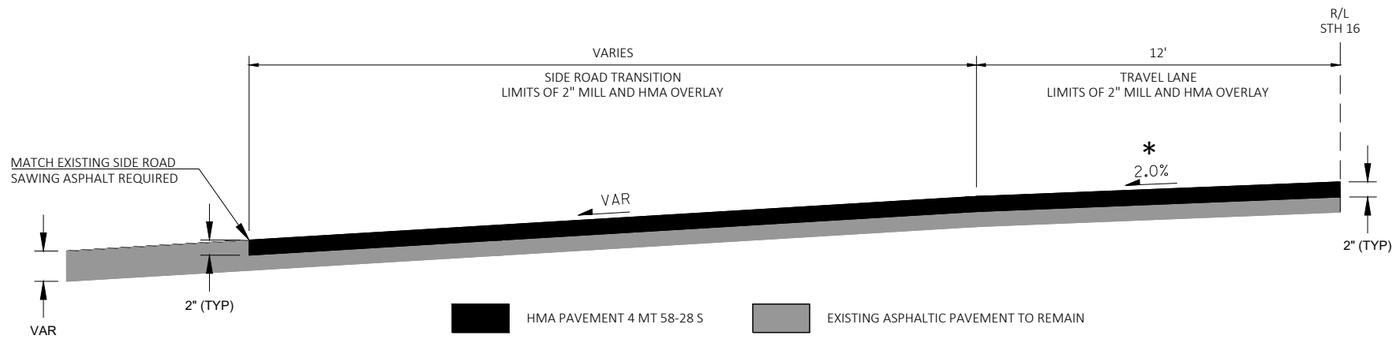
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MILLING TRANSITIONS AND BUTT JOINTS	SHEET 38	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 03
PLOT DATE : 8/20/2021 1:18 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



PLAN VIEW



SECTION A-A

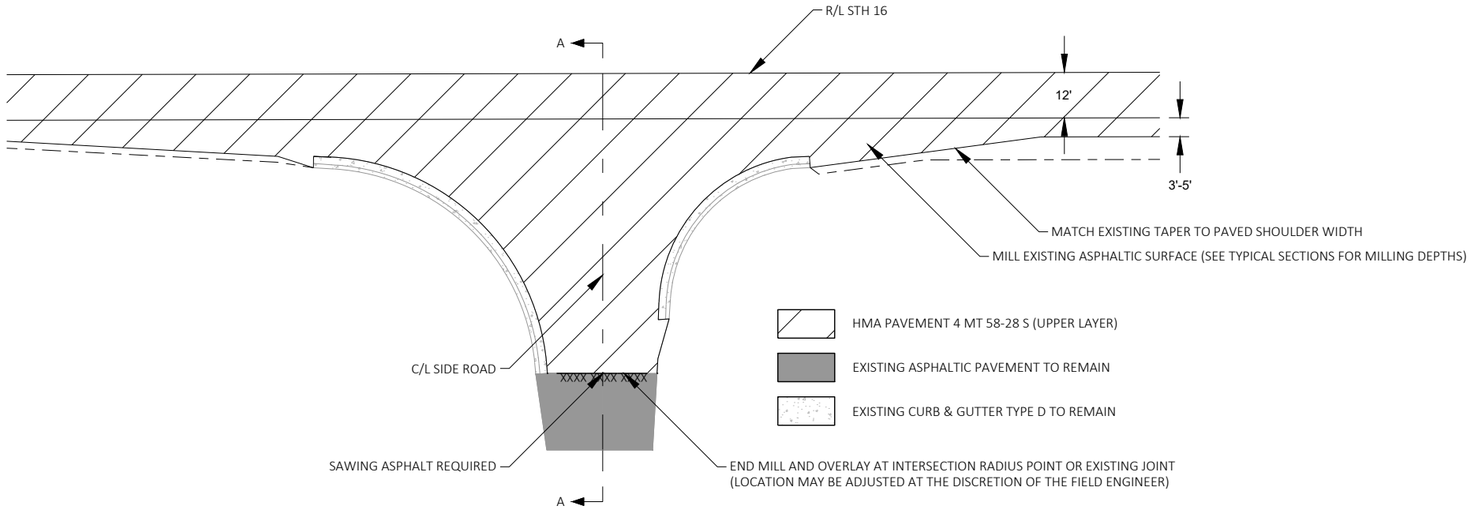
SIDE ROAD TRANSITION DETAIL

*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES
COLUMBUS ROAD
MICKELSON ROAD
JOHNSON ROAD

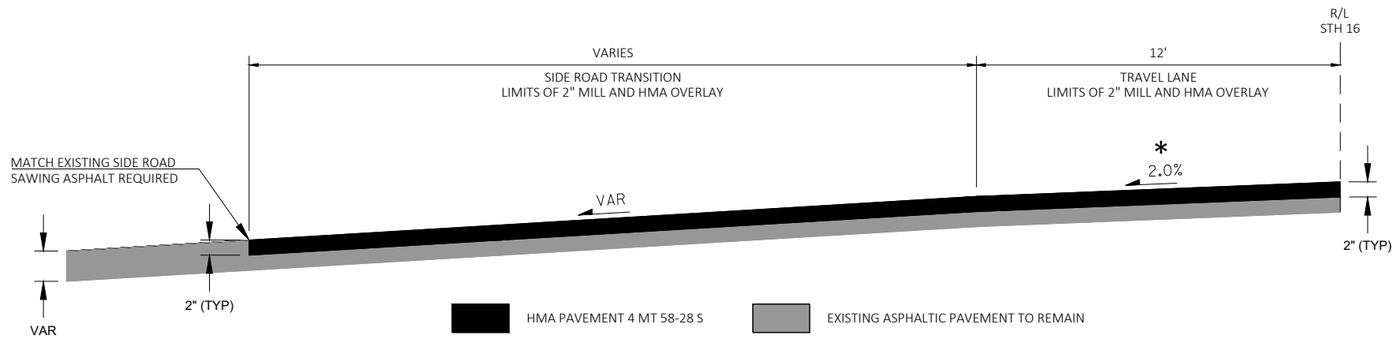
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MILLING TRANSITIONS AND BUTT JOINTS	SHEET 39	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 04
PLOT DATE : 8/20/2021 1:18 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



PLAN VIEW

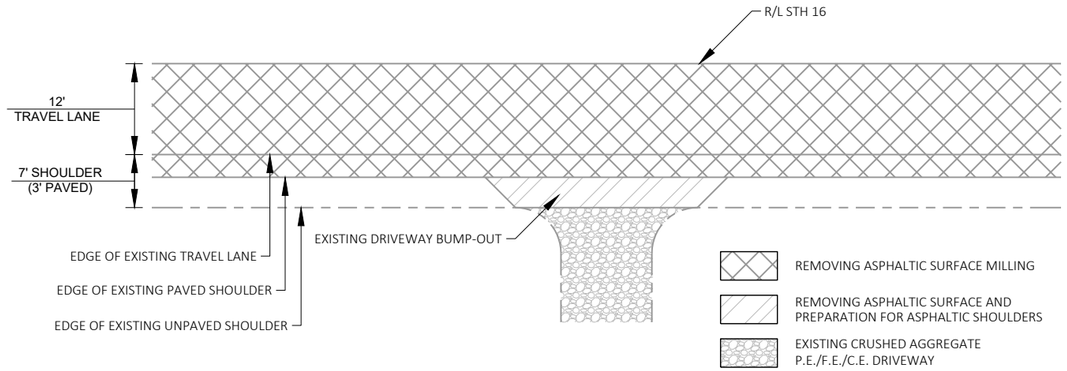


SECTION A-A

SIDE ROAD WITH CURB AND GUTTER TRANSITION DETAIL (STA 803+11 - STA 1204+00)

*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

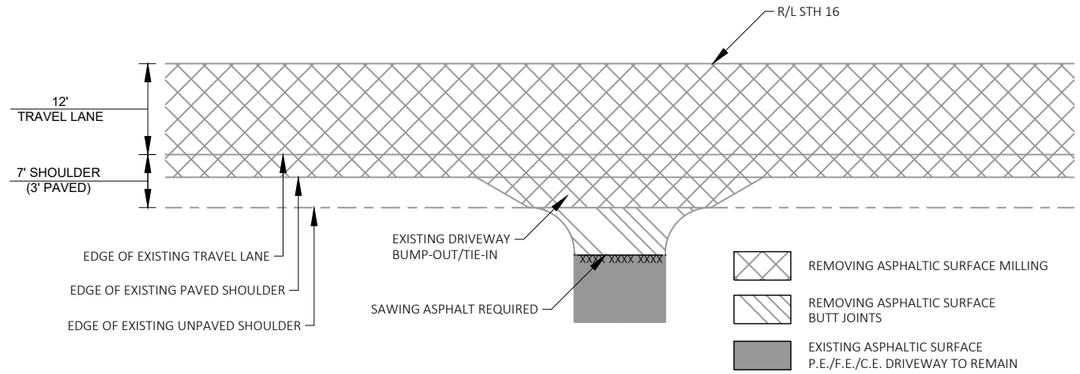
CTH A (WITH RIGHT TURN LANES)
MOORE ROAD/MOHR ROAD
SEIER ROAD (WITH RIGHT TURN LANE AND ACCELERATION LANE)
STH 146 (WITH SPLITTER ISLAND AND RIGHT TURN LANE)
CTH CD (WITH RIGHT TURN LANE)
SAVANNA ROAD/STEELE ROAD
CTH D (WITH RIGHT TURN LANE)
MCCRAE ROAD (WITH RIGHT TURN LANE)
DUBORG ROAD
JOHNSON ROAD (WITH RIGHT TURN LANE)
RHODES BAKE-N-SERV ENTRANCE
HALL ROAD
VITA PLUS ENTRANCE (WITH RIGHT TURN LANE)
DREXEL SUPPLY ENTRANCE (WITH RIGHT TURN LANE)



PLAN VIEW

REMOVING EXISTING PAVED DRIVEWAY BUMP-OUTS AT AGGREGATE ENTRANCES (STA 561+35 - STA 803+11)

EXISTING DRIVEWAY BUMP-OUT ASPHALT DEPTH VARIES BETWEEN 3"-4".

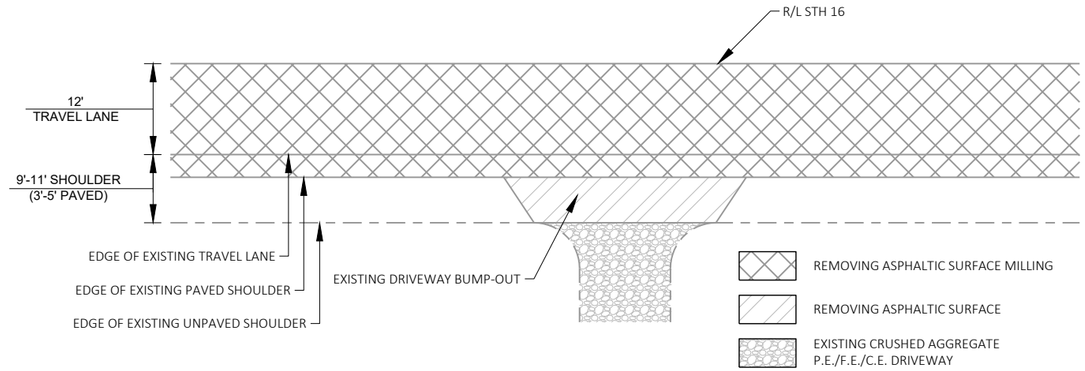


PLAN VIEW

MILLING EXISTING PAVED DRIVEWAY BUMP-OUTS AT PAVED ENTRANCES (STA 561+35 - STA 803+11)

EXISTING DRIVEWAY BUMP-OUT/TIE-IN ASPHALT DEPTH VARIES BETWEEN 3"-4".

2

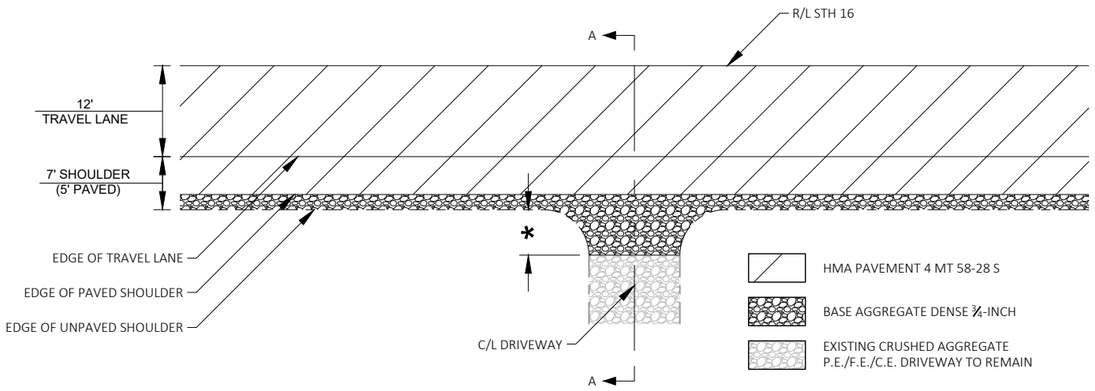


PLAN VIEW

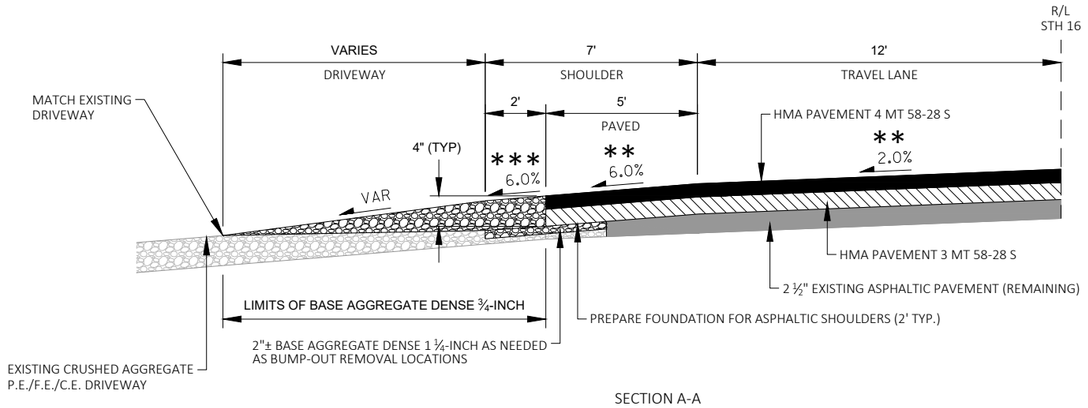
REMOVING EXISTING PAVED DRIVEWAY BUMP-OUTS AT AGGREGATE ENTRANCES (803+11 - STA 1204+00)

EXISTING DRIVEWAY BUMP-OUT ASPHALT DEPTH VARIES BETWEEN 3"-4".

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVING AND MILLING DRIVEWAY BUMP-OUT DETAILS	SHEET 42	E



PLAN VIEW



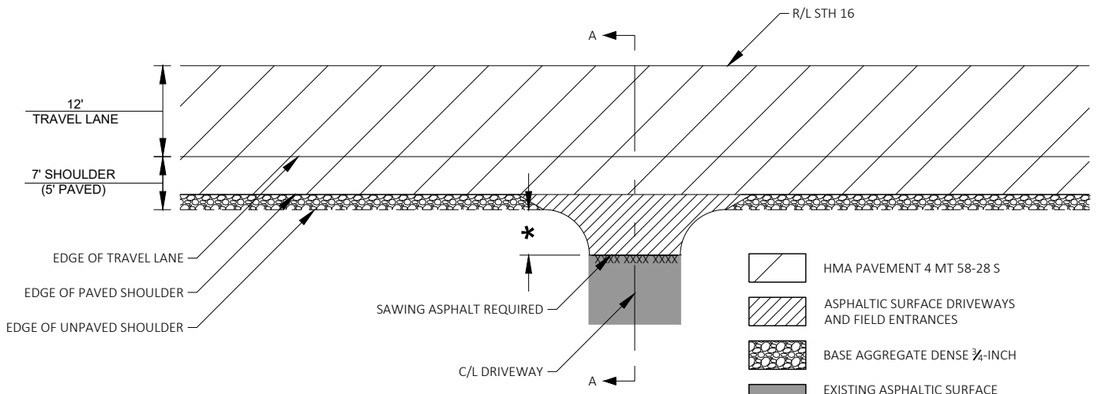
SECTION A-A

P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING CRUSHED AGGREGATE (STA 561+35 - STA 803+11)

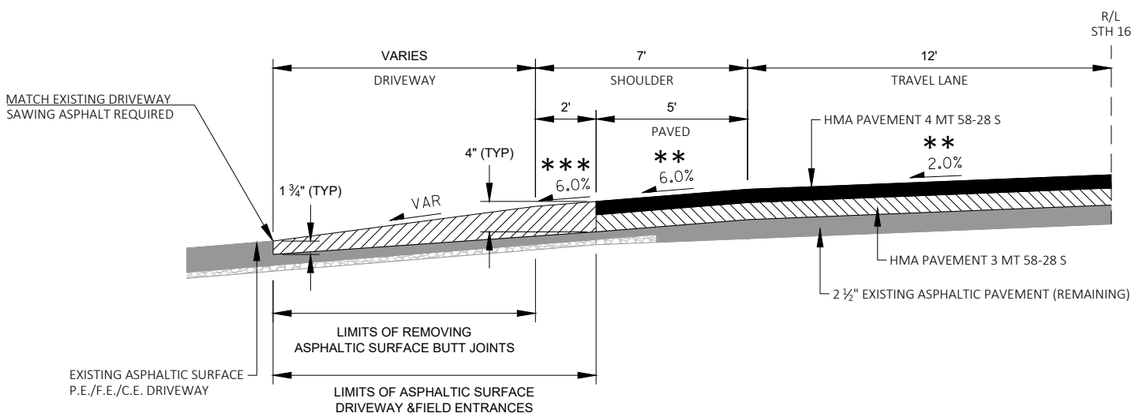
*REPLACE TO THE DRIVEWAY RADIUS POINTS OR AS DIRECTED BY THE FIELD ENGINEER

**2.0% TYPICAL ON DRIVING LANE; 6.0% TYPICAL ON PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

***6.0% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



PLAN VIEW



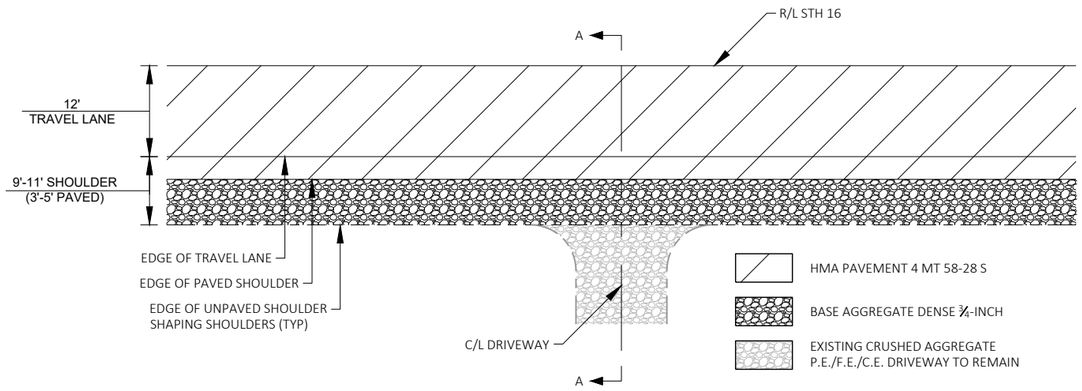
SECTION A-A

P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING ASPHALT (STA 561+35 - STA 803+11)

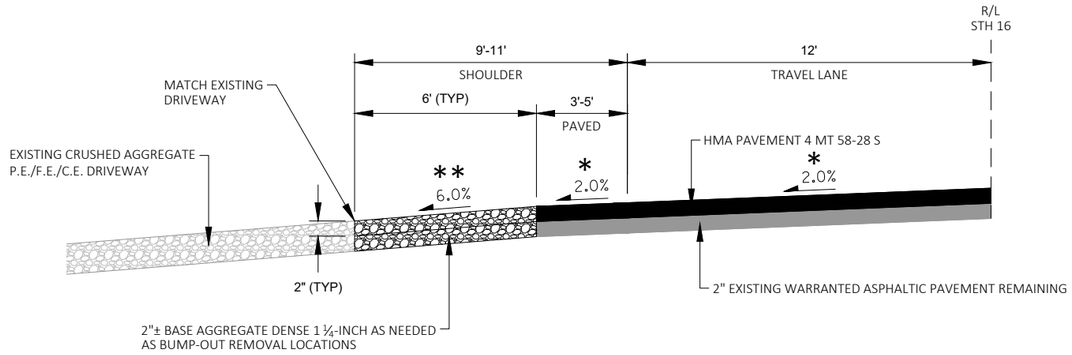
*REPLACE TO THE DRIVEWAY RADIUS POINTS OR AS DIRECTED BY THE FIELD ENGINEER

**2.0% TYPICAL ON DRIVING LANE; 6.0% TYPICAL ON PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

***6.0% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



PLAN VIEW

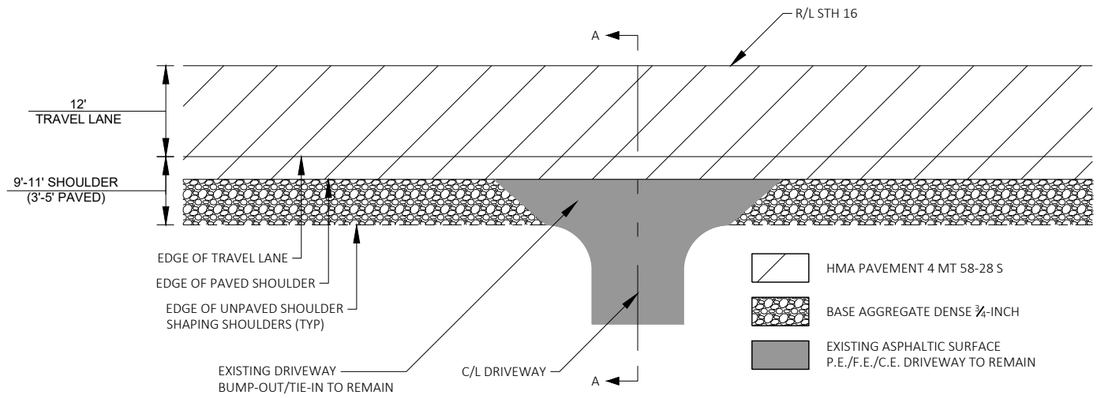


SECTION A-A

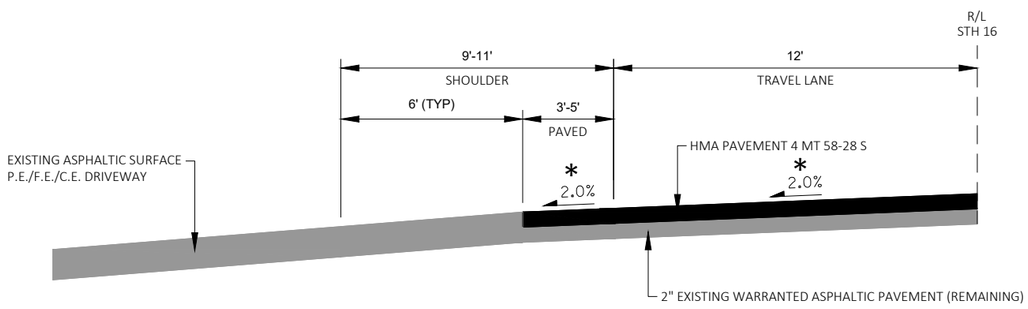
P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING CRUSHED AGGREGATE (STA 803+11 - STA 1204+00)

*2.0% TYPICAL ON DRIVING LANE AND PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

**6.0% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



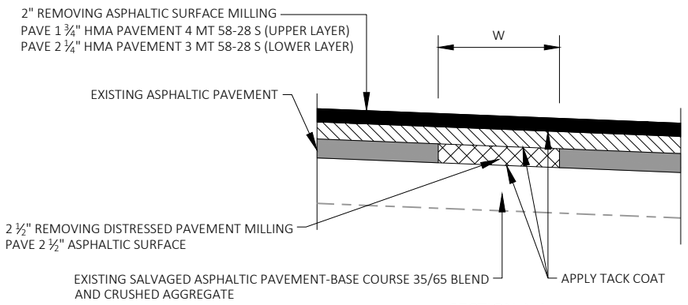
PLAN VIEW



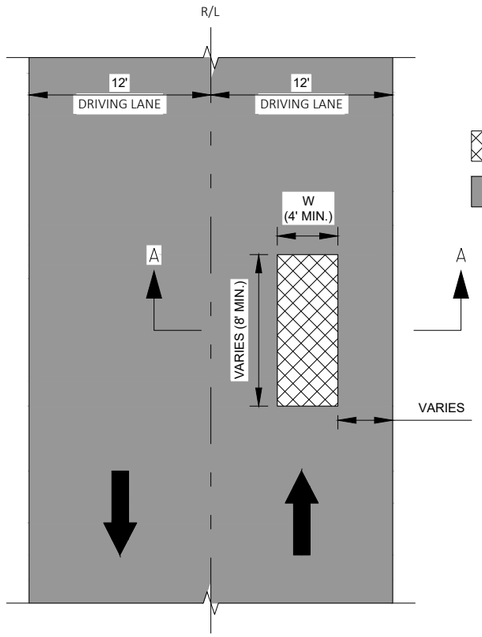
SECTION A-A

P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING ASPHALT (STA 803+11 - STA 1204+00)

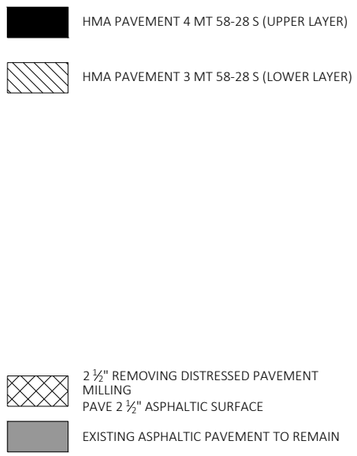
*2.0% TYPICAL ON DRIVING LANE AND PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES



SECTION A-A



PLAN VIEW - MILLED SURFACE



REMOVING DISTRESSED PAVEMENT MILLING DETAIL

SEE TABLES (RIGHT) FOR APPROXIMATE LOCATIONS AND WIDTHS.
EXACT LOCATIONS AND WIDTHS TO BE DETERMINED BY THE FIELD ENGINEER.

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
561+76	-	562+03	LT	5	LANE EDGE AT CENTERLINE (OUTSIDE LANE)
563+08	-	564+67	LT	4	LANE EDGE (OUTSIDE LANE)
565+20	-	565+99	LT	4	LANE EDGE AT CENTERLINE (OUTSIDE LANE)
565+99	-	566+52	LT	8	LANE EDGES (BOTH LANES)
567+04	-	571+80	LT	4	LANE EDGE (INSIDE LANE)
572+32	-	605+96	LT	12	LANE
613+08	-	613+35	LT	4	LANE EDGE
634+47	-	634+79	LT	4	LANE EDGE
656+17	-	656+70	LT	4	LANE EDGE
657+23	-	657+49	LT	4	LANE EDGE
665+94	-	666+47	LT	4	LANE EDGE
672+80	-	673+07	LT	4	LANE EDGE AT CENTERLINE
674+12	-	674+65	LT	4	LANE EDGE AT CENTERLINE
701+84	-	702+37	LT	4	LANE EDGE
714+67	-	716+26	LT	4	LANE EDGE
718+05	-	718+84	LT	4	LANE EDGE
730+09	-	731+15	LT	4	LANE EDGE
734+26	-	736+43	LT	4	LANE EDGE
736+43	-	736+95	LT	12	LANE
738+54	-	739+33	LT	4	LANE EDGE
749+63	-	749+89	LT	4	MIDDLE OF LANE
753+32	-	753+64	LT	4	MIDDLE OF LANE
755+49	-	756+81	LT	5	LANE EDGE
763+14	-	764+20	LT	4	MIDDLE OF LANE
782+73	-	783+26	LT	4	MIDDLE OF LANE
785+37	-	786+16	LT	4	MIDDLE OF LANE
789+65	-	790+18	LT	4	LANE EDGE
795+46	-	795+72	LT	4	LANE EDGE

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
561+35	-	562+14	RT	12	OUTSIDE LANE
562+14	-	564+25	RT	24	BOTH LANES
564+25	-	565+31	RT	10	OUTSIDE LANE (TAPER)
565+31	-	566+37	RT	4	LANE EDGE (INSIDE LANE)
566+37	-	568+21	RT	20	LANES
568+21	-	568+48	RT	4	LANE EDGE (INSIDE LANE)
568+74	-	605+65	RT	12	LANE
606+44	-	612+00	RT	12	LANE
617+00	-	628+99	RT	12	LANE
630+04	-	631+10	RT	4	LANE EDGE
632+42	-	632+68	RT	4	LANE EDGE
633+47	-	634+53	RT	4	LANE EDGE
635+32	-	643+56	RT	4	LANE EDGE
643+56	-	644+35	RT	12	LANE
644+35	-	647+04	RT	4	LANE EDGE
647+78	-	648+58	RT	4	LANE EDGE
649+63	-	653+38	RT	4	LANE EDGE
655+23	-	656+28	RT	4	LANE EDGE
657+08	-	658+66	RT	4	LANE EDGE
660+03	-	661+09	RT	4	LANE EDGE
662+41	-	662+94	RT	5	LANE EDGE
664+79	-	665+84	RT	6	LANE EDGE
667+16	-	668+22	RT	4	MIDDLE OF LANE/LANE EDGE
670+07	-	670+86	RT	5	LANE EDGE
672+18	-	672+71	RT	5	LANE EDGE
674+34	-	675+13	RT	4	MIDDLE OF LANE/LANE EDGE
675+66	-	676+19	RT	4	MIDDLE OF LANE/LANE EDGE
676+67	-	677+51	RT	4	LANE EDGE
678+51	-	681+15	RT	4	LANE EDGE
682+47	-	685+06	RT	4	LANE EDGE
686+38	-	686+91	RT	4	LANE EDGE
687+96	-	689+50	RT	4	LANE EDGE
690+29	-	691+08	RT	4	LANE EDGE
691+61	-	692+14	RT	4	LANE EDGE
693+19	-	693+46	RT	4	LANE EDGE
693+98	-	702+33	RT	4	LANE EDGE
703+38	-	711+72	RT	4	LANE EDGE
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740+03	-	740+55	RT	4	LANE EDGE
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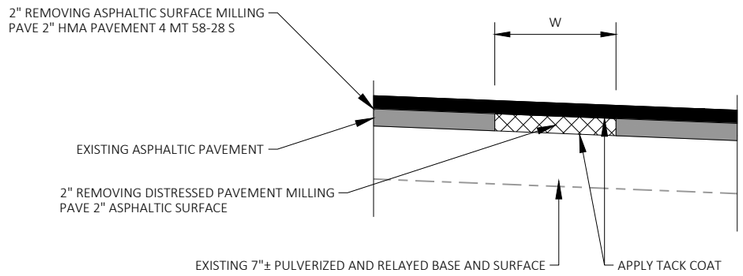
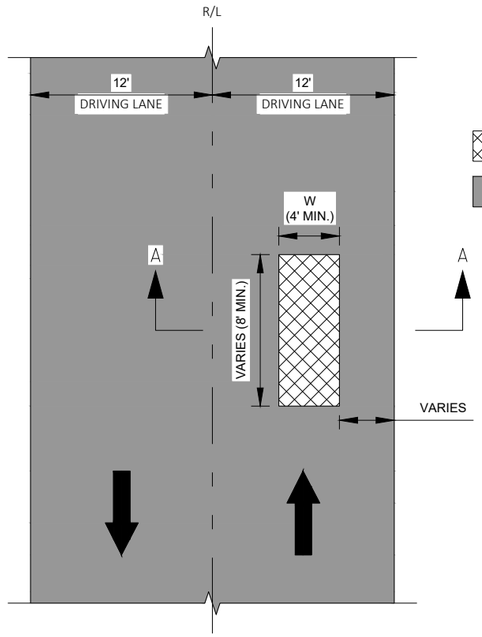
745+36	-	747+68	RT	4	LANE EDGE
752+17	-	754+81	RT	4	LANE EDGE
754+81	-	755+87	RT	5	LANE EDGE
757+19	-	757+71	RT	4	LANE EDGE
760+88	-	761+15	RT	4	LANE EDGE
762+47	-	762+73	RT	4	LANE EDGE
771+18	-	771+44	RT	4	LANE EDGE
774+08	-	778+83	RT	4	LANE EDGE
785+70	-	786+23	RT	4	LANE EDGE
788+60	-	789+13	RT	4	LANE EDGE
792+30	-	792+56	RT	4	MIDDLE OF LANE/LANE EDGE
793+62	-	796+00	RT	4	MIDDLE OF LANE/LANE EDGE



SECTION A-A



PLAN VIEW - MILLED SURFACE

HMA PAVEMENT 4 MT 58-28 S

2" REMOVING DISTRESSED PAVEMENT MILLING
PAVE 2" ASPHALTIC SURFACE

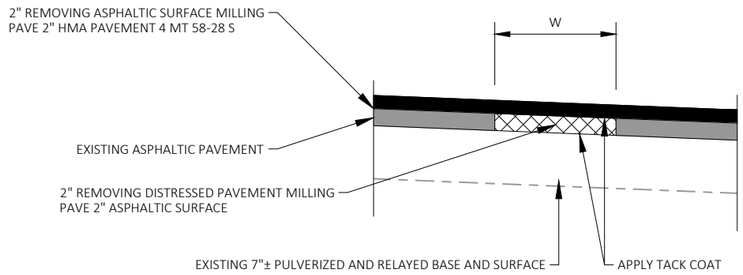
EXISTING ASPHALTIC PAVEMENT TO REMAIN

REMOVING DISTRESSED PAVEMENT MILLING DETAIL

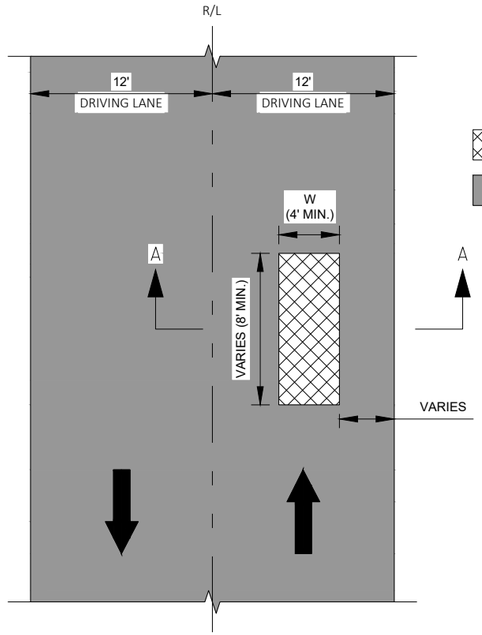
SEE TABLES (RIGHT) FOR APPROXIMATE LOCATIONS AND WIDTHS.
EXACT LOCATIONS AND WIDTHS TO BE DETERMINED BY THE FIELD ENGINEER.

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
803+99	-	805+47	LT	12	LANE
805+47	-	807+89	LT	4	LANE EDGE
807+89	-	808+90	LT	4	MIDDLE OF LANE
808+90	-	820+57	LT	4	LANE EDGE
820+57	-	821+09	LT	4	MIDDLE OF LANE
823+21	-	829+01	LT	4	LANE EDGE
829+01	-	829+54	LT	6	LANE EDGE
829+54	-	830+60	LT	4	LANE EDGE
832+97	-	833+24	LT	4	LANE EDGE
833+77	-	834+29	LT	4	LANE EDGE
837+25	-	837+78	LT	4	MIDDLE OF LANE
837+78	-	837+99	LT	4	LANE EDGE
838+52	-	840+95	LT	4	LANE EDGE
841+69	-	843+32	LT	4	LANE EDGE
843+32	-	843+59	LT	8	MIDDLE OF LANE/LANE EDGE
843+59	-	843+85	LT	4	LANE EDGE
844+38	-	845+70	LT	4	LANE EDGE
846+23	-	849+40	LT	4	LANE EDGE
849+92	-	850+45	LT	4	LANE EDGE
851+24	-	854+94	LT	4	LANE EDGE
857+58	-	859+16	LT	4	LANE EDGE
861+06	-	861+28	LT	4	LANE EDGE
862+07	-	862+38	LT	4	LANE EDGE
864+71	-	865+24	LT	8	MIDDLE OF LANE/LANE EDGE
866+08	-	866+29	LT	4	MIDDLE OF LANE
867+14	-	867+40	LT	8	MIDDLE OF LANE/LANE EDGE
867+40	-	868+67	LT	4	LANE EDGE
871+89	-	872+10	LT	4	LANE EDGE
872+94	-	874+00	LT	4	LANE EDGE
874+53	-	875+32	LT	4	LANE EDGE
876+11	-	876+59	LT	4	LANE EDGE
878+22	-	884+56	LT	4	LANE EDGE
885+62	-	885+88	LT	4	LANE EDGE
886+67	-	887+46	LT	4	LANE EDGE
889+58	-	889+84	LT	4	LANE EDGE
891+16	-	891+42	LT	4	LANE EDGE
891+95	-	892+74	LT	4	LANE EDGE
893+27	-	894+06	LT	4	LANE EDGE
894+59	-	900+66	LT	4	LANE EDGE
901+46	-	906+26	LT	4	LANE EDGE
906+74	-	910+70	LT	4	LANE EDGE
912+81	-	914+18	LT	4	LANE EDGE
915+18	-	917+03	LT	4	LANE EDGE
917+56	-	918+35	LT	4	LANE EDGE
920+46	-	923+05	LT	4	LANE EDGE
923+84	-	925+43	LT	4	LANE EDGE
926+22	-	926+48	LT	4	LANE EDGE
928+86	-	929+12	LT	4	LANE EDGE
933+82	-	934+09	LT	4	LANE EDGE
934+61	-	939+31	LT	4	LANE EDGE
939+84	-	941+69	LT	4	LANE EDGE
942+22	-	943+54	LT	4	LANE EDGE
944+33	-	949+03	LT	4	LANE EDGE
949+03	-	950+08	LT	8	MIDDLE OF LANE/LANE EDGE
950+08	-	962+18	LT	4	LANE EDGE
963+50	-	967+14	LT	4	LANE EDGE
969+25	-	969+52	LT	4	LANE EDGE
970+04	-	970+57	LT	4	LANE EDGE
970+84	-	971+36	LT	4	LANE EDGE
973+95	-	975+85	LT	4	LANE EDGE
976+33	-	977+38	LT	4	LANE EDGE
977+91	-	988+95	LT	4	LANE EDGE
989+47	-	990+21	LT	4	LANE EDGE
990+74	-	991+27	LT	4	LANE EDGE
993+38	-	993+64	LT	4	LANE EDGE

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
994+17	-	997+08	LT	4	LANE EDGE
998+13	-	1000+61	LT	4	LANE EDGE
1000+61	-	1004+57	LT	12	TURN LANE
1004+57	-	1005+37	LT	4	LANE EDGE/TURN LANE
1005+89	-	1006+42	LT	4	MIDDLE OF LANE
1006+42	-	1006+69	LT	8	MIDDLE OF LANE/LANE EDGE
1006+69	-	1007+69	LT	4	MIDDLE OF LANE
1008+53	-	1018+78	LT	4	LANE EDGE
1021+42	-	1022+47	LT	4	LANE EDGE
1025+11	-	1025+85	LT	4	LANE EDGE
1025+85	-	1026+38	LT	4	MIDDLE OF LANE
1026+38	-	1026+91	LT	8	MIDDLE OF LANE/LANE EDGE
1026+91	-	1027+23	LT	4	LANE EDGE
1028+81	-	1031+13	LT	4	LANE EDGE
1031+92	-	1032+45	LT	4	LANE EDGE
1034+04	-	1034+83	LT	4	MIDDLE OF LANE
1034+83	-	1035+36	LT	4	LANE EDGE
1037+20	-	1039+26	LT	4	LANE EDGE
1040+11	-	1040+32	LT	4	LANE EDGE
1042+75	-	1043+28	LT	4	LANE EDGE
1044+02	-	1044+54	LT	4	MIDDLE OF LANE
1046+66	-	1050+09	LT	4	LANE EDGE
1053+78	-	1054+31	LT	8	MIDDLE OF LANE/LANE EDGE
1054+31	-	1055+10	LT	4	LANE EDGE
1055+84	-	1062+18	LT	4	LANE EDGE/TURN LANE
1062+97	-	1064+56	LT	8	MIDDLE OF LANE/LANE EDGE
1064+56	-	1065+35	LT	4	LANE EDGE
1065+35	-	1065+88	LT	8	MIDDLE OF LANE/LANE EDGE
1065+88	-	1072+42	LT	4	LANE EDGE
1072+95	-	1074+48	LT	4	LANE EDGE
1074+48	-	1074+80	LT	8	MIDDLE OF LANE/LANE EDGE
1074+80	-	1078+44	LT	4	LANE EDGE
1081+61	-	1083+93	LT	4	LANE EDGE
1084+78	-	1085+25	LT	4	LANE EDGE
1085+25	-	1085+52	LT	8	MIDDLE OF LANE/LANE EDGE
1085+52	-	1087+36	LT	4	LANE EDGE
1087+36	-	1087+89	LT	4	LANE EDGE/TURN LANE
1087+89	-	1089+21	LT	12	TURN LANE
1089+21	-	1090+00	LT	4	LANE EDGE/TURN LANE
1090+00	-	1101+04	LT	4	LANE EDGE
1101+04	-	1102+04	LT	8	MIDDLE OF LANE/LANE EDGE
1102+04	-	1106+00	LT	4	LANE EDGE
1107+06	-	1109+96	LT	4	LANE EDGE/TURN LANE
1109+96	-	1110+17	LT	12	TURN LANE
1110+17	-	1111+02	LT	4	LANE EDGE/TURN LANE
1111+02	-	1111+28	LT	8	TURN LANE
1111+76	-	1113+61	LT	4	LANE EDGE
1115+98	-	1117+25	LT	4	LANE EDGE
1118+04	-	1118+36	LT	8	MIDDLE OF LANE/LANE EDGE
1118+36	-	1119+63	LT	4	LANE EDGE
1120+15	-	1122+27	LT	4	LANE EDGE
1123+59	-	1124+91	LT	4	LANE EDGE
1125+43	-	1125+96	LT	4	LANE EDGE
1127+55	-	1128+07	LT	4	LANE EDGE
1128+28	-	1130+13	LT	4	LANE EDGE
1130+66	-	1132+77	LT	4	LANE EDGE
1137+00	-	1137+52	LT	4	LANE EDGE
1138+26	-	1143+28	LT	4	LANE EDGE/TURN LANE
1146+13	-	1146+98	LT	4	LANE EDGE
1147+72	-	1148+03	LT	4	LANE EDGE
1149+30	-	1150+50	LT	4	LANE EDGE
1159+44	-	1164+03	LT	4	LANE EDGE/TURN LANE
1164+82	-	1165+61	LT	4	LANE EDGE
1167+99	-	1168+78	LT	4	LANE EDGE
1169+05	-	1169+52	LT	4	LANE EDGE



SECTION A-A



PLAN VIEW - MILLED SURFACE

HMA PAVEMENT 4 MT 58-28 S

2" REMOVING DISTRESSED PAVEMENT MILLING PAVE 2" ASPHALTIC SURFACE

EXISTING ASPHALTIC PAVEMENT TO REMAIN

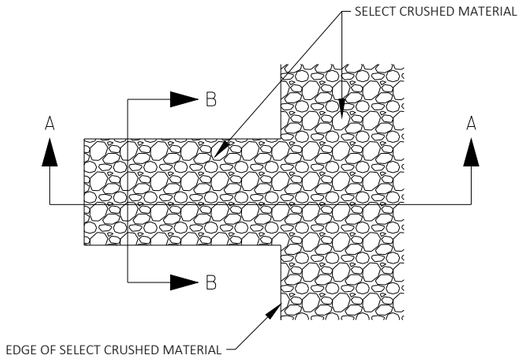
REMOVING DISTRESSED PAVEMENT MILLING DETAIL

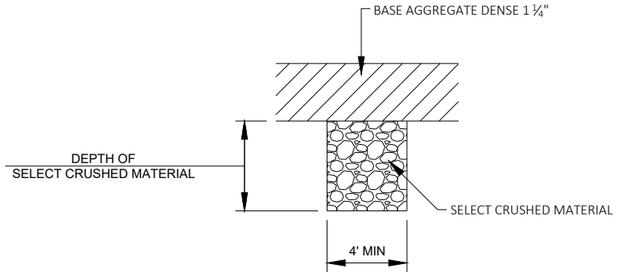
SEE TABLES (RIGHT) FOR APPROXIMATE LOCATIONS AND WIDTHS.
EXACT LOCATIONS AND WIDTHS TO BE DETERMINED BY THE FIELD ENGINEER.

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
1170+37	-	1170+58	LT	4	LANE EDGE
1176+65	-	1181+61	LT	4	LANE EDGE/TURN LANE
1184+04	-	1184+25	LT	10	MIDDLE OF LANE/LANE EDGE
1185+84	-	1186+89	LT	8	MIDDLE OF LANE/LANE EDGE
1190+59	-	1195+08	LT	4	LANE EDGE (CENTERLINE)
1195+08	-	1195+29	LT	8	MIDDLE OF LANE/LANE EDGE
1199+51	-	1202+15	LT	12	LANE
1202+15	-	1203+21	LT	24	LANE/MEDIAN

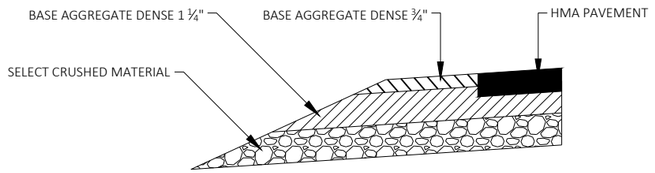
STATION	TO	STATION	OFFSET	W (FT)	LOCATION
803+11	-	803+90	RT	12	LANE
808+39	-	808+65	RT	4	LANE EDGE
813+41	-	813+67	RT	4	LANE EDGE
814+46	-	817+89	RT	4	LANE EDGE
823+70	-	825+29	RT	4	LANE EDGE
827+40	-	828+19	RT	4	LANE EDGE
828+98	-	831+36	RT	4	LANE EDGE
832+94	-	833+47	RT	4	LANE EDGE
835+32	-	835+85	RT	8	MIDDLE OF LANE/LANE EDGE
835+85	-	836+37	RT	4	MIDDLE OF LANE
837+17	-	837+69	RT	4	MIDDLE OF LANE
839+54	-	844+35	RT	4	LANE EDGE
848+83	-	851+42	RT	4	LANE EDGE
853+59	-	853+80	RT	4	LANE EDGE
854+64	-	857+81	RT	4	LANE EDGE/TURN LANE
861+24	-	861+51	RT	4	LANE EDGE
864+99	-	865+26	RT	4	LANE EDGE
865+78	-	866+84	RT	4	LANE EDGE
871+12	-	871+91	RT	4	LANE EDGE
872+44	-	872+96	RT	4	LANE EDGE
874+87	-	875+66	RT	4	LANE EDGE
877+77	-	879+62	RT	4	LANE EDGE
880+46	-	882+57	RT	4	LANE EDGE
891+34	-	891+87	RT	4	LANE EDGE
892+71	-	893+50	RT	4	LANE EDGE
894+30	-	894+56	RT	4	LANE EDGE
895+35	-	896+14	RT	4	LANE EDGE
899+10	-	899+36	RT	8	MIDDLE OF LANE/LANE EDGE
899+89	-	900+42	RT	4	LANE EDGE
903+85	-	908+92	RT	4	LANE EDGE
933+84	-	934+05	RT	8	MIDDLE OF LANE
936+43	-	941+66	RT	4	LANE EDGE
942+98	-	946+09	RT	4	LANE EDGE
947+68	-	947+94	RT	4	LANE EDGE
951+37	-	956+28	RT	4	LANE EDGE
958+13	-	958+92	RT	6	MIDDLE OF LANE
958+92	-	961+25	RT	6	MIDDLE OF LANE/MEDIAN EDGE
961+25	-	968+59	RT	4	TURN LANE/LANE EDGE
968+59	-	971+75	RT	4	MEDIAN/LANE EDGE
971+75	-	974+60	RT	6	MEDIAN/LANE EDGE/MIDDLE OF LANE
974+60	-	976+45	RT	5	LANE EDGE
976+45	-	985+06	RT	4	LANE EDGE
989+81	-	1000+27	RT	4	LANE/BYPASS LANE EDGE
1000+27	-	1006+81	RT	12	LANE
1006+81	-	1017+27	RT	6	MIDDLE OF LANE
1021+17	-	1024+08	RT	6	MIDDLE OF LANE
1027+25	-	1028+78	RT	6	MIDDLE OF LANE
1028+75	-	1031+68	RT	4	MIDDLE OF LANE/LANE EDGE
1031+68	-	1036+64	RT	6	MIDDLE OF LANE
1036+64	-	1038+23	RT	4	MIDDLE OF LANE/LANE EDGE
1038+23	-	1039+02	RT	4	LANE EDGE
1043+19	-	1043+98	RT	6	MIDDLE OF LANE
1044+78	-	1045+30	RT	4	MIDDLE OF LANE
1045+30	-	1046+36	RT	4	LANE EDGE
1046+89	-	1047+42	RT	6	MIDDLE OF LANE

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
1048+42	-	1049+79	RT	4	LANE EDGE
1051+59	-	1051+85	RT	6	MIDDLE OF LANE
1052+91	-	1053+43	RT	4	LANE EDGE
1053+96	-	1054+23	RT	4	LANE EDGE
1056+60	-	1057+13	RT	4	LANE EDGE
1059+45	-	1059+98	RT	4	MIDDLE OF LANE
1059+98	-	1060+83	RT	6	MIDDLE OF LANE
1060+83	-	1061+83	RT	4	MIDDLE OF LANE
1064+47	-	1065+26	RT	4	MIDDLE OF LANE
1067+64	-	1068+69	RT	6	MIDDLE OF LANE
1071+60	-	1072+34	RT	6	MIDDLE OF LANE
1073+39	-	1073+92	RT	4	MIDDLE OF LANE
1074+98	-	1078+41	RT	4	LANE EDGE
1081+31	-	1086+86	RT	4	LANE/BYPASS LANE EDGE
1086+86	-	1087+39	RT	4	MIDDLE OF LANE/LANE EDGE
1094+25	-	1095+52	RT	5	MIDDLE OF LANE
1095+52	-	1096+57	RT	4	LANE EDGE
1096+57	-	1100+53	RT	4	LANE EDGE
1101+32	-	1104+23	RT	4	LANE EDGE
1105+02	-	1106+60	RT	4	LANE EDGE
1106+60	-	1107+13	RT	4	MIDDLE OF LANE/LANE EDGE
1107+13	-	1108+19	RT	4	LANE EDGE
1108+93	-	1112+10	RT	4	LANE EDGE
1112+10	-	1112+89	RT	6	MIDDLE OF LANE
1112+89	-	1114+74	RT	4	LANE EDGE
1115+26	-	1120+28	RT	4	LANE EDGE
1120+28	-	1121+07	RT	6	MIDDLE OF LANE/LANE EDGE
1122+66	-	1123+92	RT	6	MIDDLE OF LANE/LANE EDGE
1124+45	-	1126+03	RT	4	LANE EDGE
1126+03	-	1127+41	RT	6	MIDDLE OF LANE/LANE EDGE
1127+41	-	1127+94	RT	4	LANE EDGE
1127+94	-	1129+73	RT	6	MIDDLE OF LANE/LANE EDGE
1131+58	-	1133+16	RT	4	LANE EDGE
1133+95	-	1134+54	RT	5	MIDDLE OF LANE
1134+54	-	1135+86	RT	4	LANE EDGE
1135+86	-	1137+97	RT	4	MIDDLE OF BYPASS LANE
1137+97	-	1140+08	RT	8	MIDDLE OF LANE/BYPASS LANE
1140+87	-	1142+51	RT	4	MIDDLE OF LANE
1143+56	-	1144+62	RT	5	MIDDLE OF LANE
1145+41	-	1147+58	RT	5	MIDDLE OF LANE
1149+43	-	1149+95	RT	6	MIDDLE OF LANE/LANE EDGE
1159+43	-	1161+15	RT	4	MIDDLE OF BYPASS LANE
1161+15	-	1161+67	RT	9	LANE EDGE/MIDDLE OF BYPASS LANE
1162+73	-	1163+79	RT	4	LANE EDGE
1170+70	-	1172+02	RT	4	LANE EDGE
1175+24	-	1176+30	RT	4	LANE EDGE
1178+15	-	1178+41	RT	4	LANE EDGE
1181+11	-	1182+43	RT	4	LANE EDGE
1183+75	-	1184+01	RT	4	LANE EDGE
1188+55	-	1188+81	RT	4	LANE EDGE
1192+56	-	1192+77	RT	4	LANE EDGE
1203+02	-	1203+12	RT	4	LANE EDGE





SECTION B-B



SECTION A-A

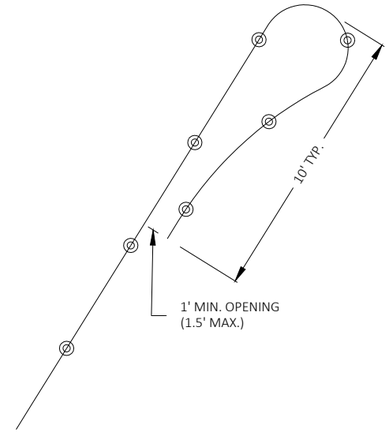
DETAIL FOR FRENCH DRAINS/WEEP

DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250'
OR AT ANY LOW POINT TO SUFFICENTLY DRAIN SELECT CRUSHED MATERIAL
(OR AS OTHERWISE DIRECTED BY THE FIELD ENGINEER)

EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS/WEEPS SHALL
BE CONSIDERED INCIDENTAL TO THE ITEM, SELECT CRUSHED MATERIAL.

DO NOT COVER FORESLOPE SELECT CRUSHED MATERIAL WITH TOPSOIL

APPROXIMATE FRENCH DRAIN/WEEP LOCATIONS:
STA 1153+00 LT & RT
STA 1155+98 LT & RT
STA 1158+55 LT & RT (LOW POINT FOR SELECT CRUSHED MATERIAL)



SILT FENCE TURN-AROUND ENDS DETAIL

PLAN VIEW

(SEE EROSION CONTROL PLAN FOR LOCATIONS)

2

GENERAL NOTES

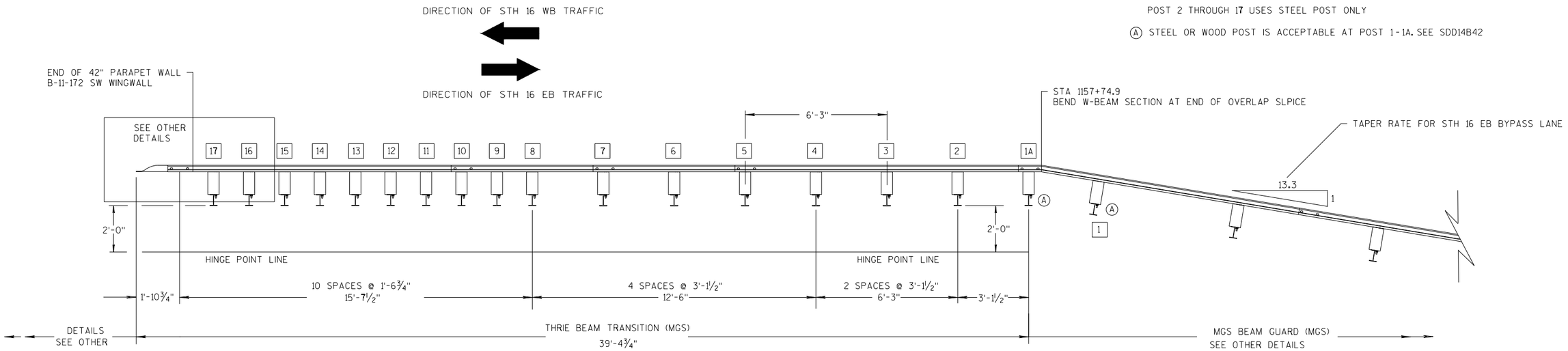
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

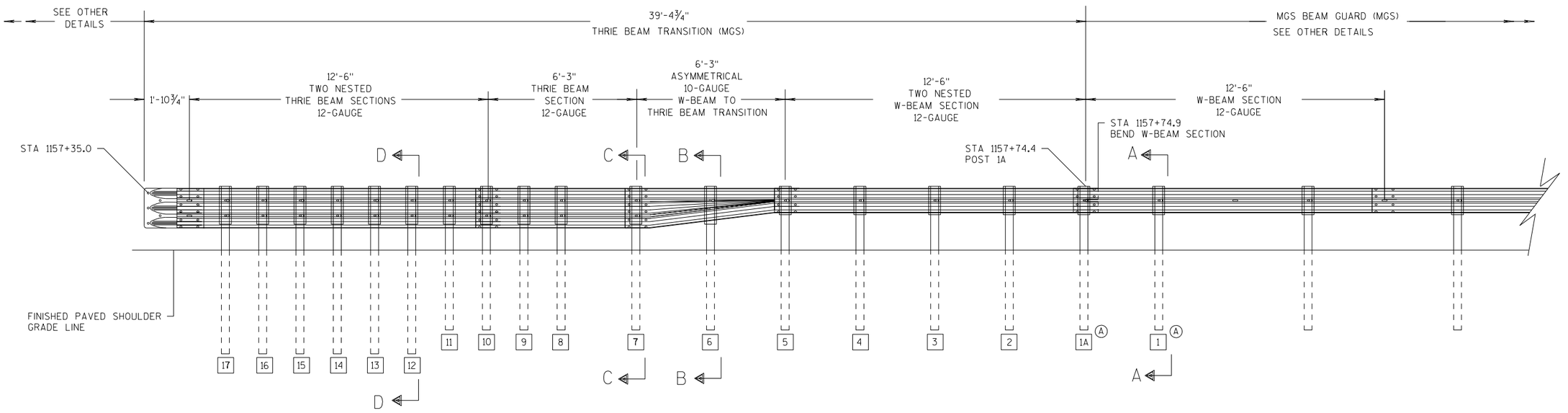
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

Ⓐ STEEL OR WOOD POST IS ACCEPTABLE AT POST 1-1A. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDEWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION WITH FLARE

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MGS THRIE BEAM TRANSITION WITH FLARE DETAILS	SHEET 49	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - 14
PLOT DATE : 8/20/2021 1:18 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2

N

612+00
613+00
614+00
615+00
616+00
617+00

10:1 TAPER
10:1 TAPER
15:1 TAPER

STH 16

12'
5'
7'
4'
12'
5'
7'
4'
12'
5'

+62.3
#1 +82.3 6'
#5 +07.3 4.33'
#9 +32.3 4'
#9 +51.1
#5 +76.1 4.33'
#1 +01.1 6'
+21.1 5'

CAUTION

OH

ALLIANT ENERGY - UNDERGROUND GAS

STA 612+82.3. 19' RT
MGS GUARDRAIL TERMINAL EAT

STA 613+16.3, C-11-1032
EXISTING 3.5' X 6' X 60' BOX CULVERT
(TO REMAIN)

STA 613+35.4, 19' RT
MGS GUARDRAIL 3

ALLIANT ENERGY - OVERHEAD ELECTRIC

SLOPE INTERCEPT

EXISTING RW

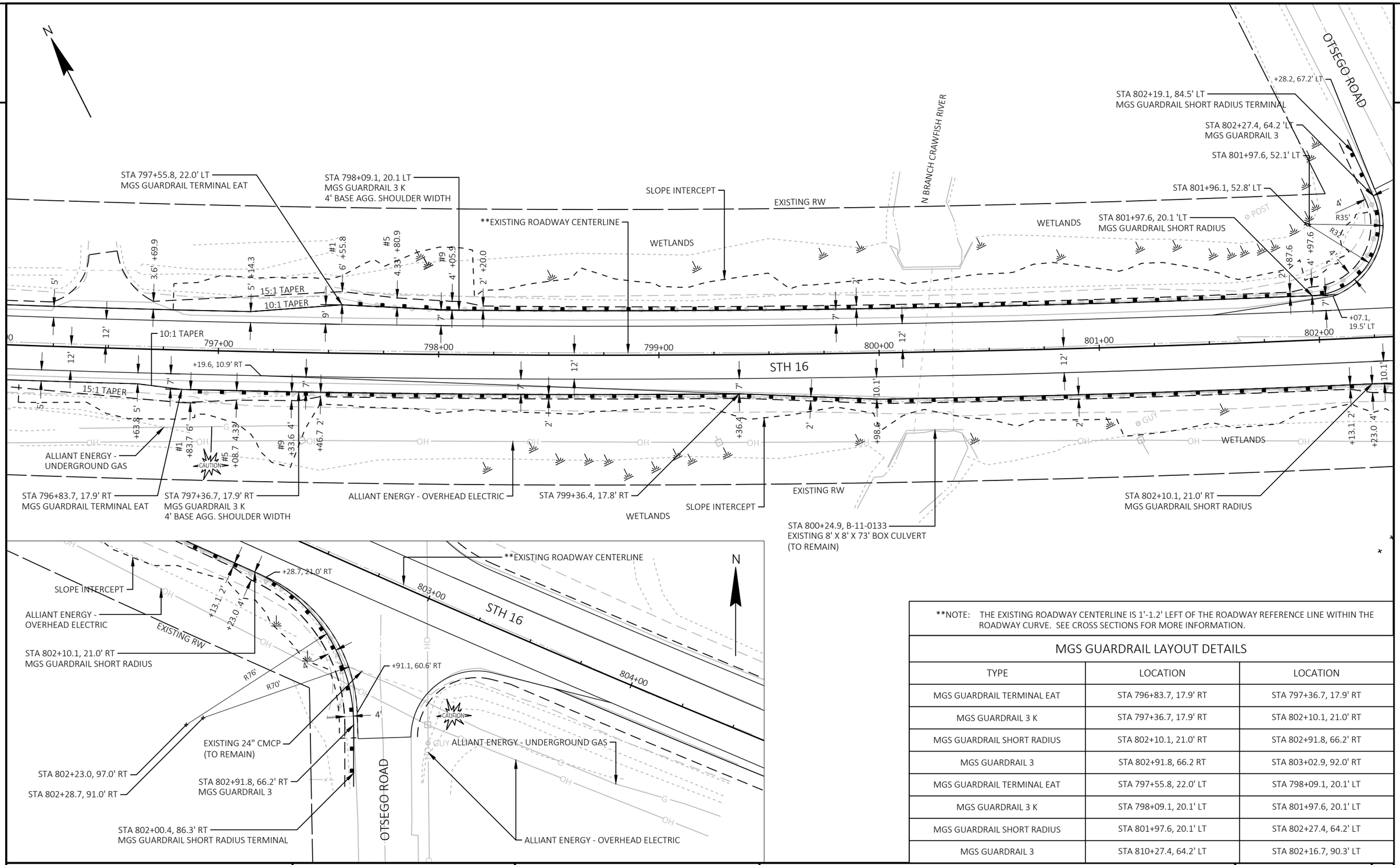
STA 615+47.9, 19' RT
MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL LAYOUT DETAILS

TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 612+82.3, 19' RT	STA 613+35.4, 19' RT
MGS GUARDRAIL 3	STA 613+35.4, 19' RT	STA 615+47.9, 19' RT
MGS GUARDRAIL TERMINAL EAT	STA 615+47.9, 19' RT	STA 616+01.1, 19' RT

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MGS GUARDRAIL DETAILS	SHEET 50	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021003-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2021 2:11 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1'-1.2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

MGS GUARDRAIL LAYOUT DETAILS

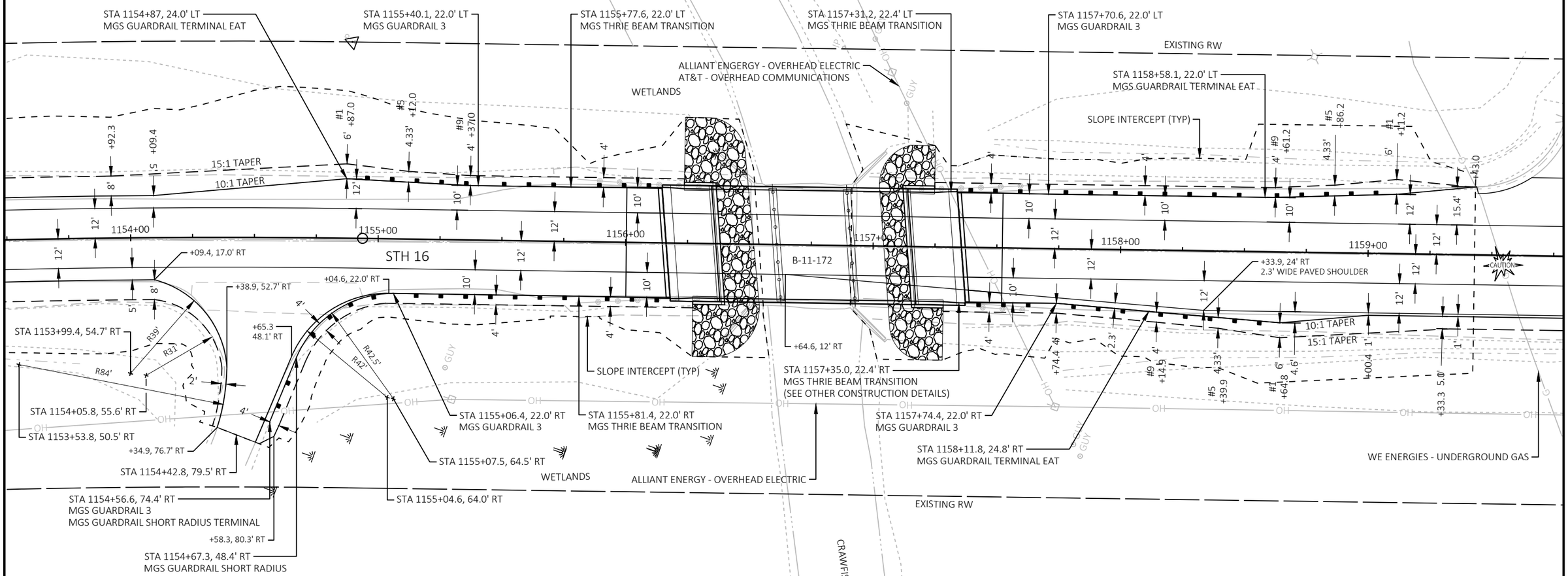
TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 796+83.7, 17.9' RT	STA 797+36.7, 17.9' RT
MGS GUARDRAIL 3 K	STA 797+36.7, 17.9' RT	STA 802+10.1, 21.0' RT
MGS GUARDRAIL SHORT RADIUS	STA 802+10.1, 21.0' RT	STA 802+91.8, 66.2' RT
MGS GUARDRAIL 3	STA 802+91.8, 66.2 RT	STA 803+02.9, 92.0' RT
MGS GUARDRAIL TERMINAL EAT	STA 797+55.8, 22.0' LT	STA 798+09.1, 20.1' LT
MGS GUARDRAIL 3 K	STA 798+09.1, 20.1' LT	STA 801+97.6, 20.1' LT
MGS GUARDRAIL SHORT RADIUS	STA 801+97.6, 20.1' LT	STA 802+27.4, 64.2' LT
MGS GUARDRAIL 3	STA 810+27.4, 64.2' LT	STA 802+16.7, 90.3' LT

2

MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 1154+87.0, 24.0' LT	STA 1155+40.1, 22.0' LT
MGS GUARDRAIL 3	STA 1155+40.1, 22.0' LT	STA 1155+77.6, 22.0' LT
MGS THRIE BEAM TRANSITION	STA 1155+77.6, 22.0' LT	STA 1156+17.0, 22.4' LT

MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS THRIE BEAM TRANSITION	STA 1157+31.2, 22.4' LT	STA 1157+70.6, 22.0' LT
MGS GUARDRAIL 3	STA 1157+70.6, 22.0' LT	STA 1158+58.1, 22.0' LT
MGS GUARDRAIL TERMINAL EAT	STA 1158+58.1, 22.0' LT	STA 1159+11.2, 24.0' LT

2



MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS GUARDRAIL 3	STA 1154+56.6, 74.4' RT	STA 1154+67.3, 48.4' RT
MGS GUARDRAIL SHORT RADIUS	STA 1154+67.3, 48.4' RT	STA 1155+6.4, 22.0' RT
MGS GUARDRAIL 3	STA 1155+06.4, 22.0' RT	STA 1155+81.4, 22.0' RT
MGS THRIE BEAM TRANSITION	STA 1155+81.4, 22.0' RT	STA 1156+20.8, 22.4' RT

MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS THRIE BEAM TRANSITION	STA 1157+35.0, 22.4' RT	STA 1157+74.4, 22.0' RT
MGS GUARDRAIL 3	STA 1157+74.4, 22.0' RT	STA 1158+11.8, 24.8' RT
MGS GUARDRAIL TERMINAL EAT	STA 1158+11.8, 24.8' RT	STA 1158+64.8, 28.6' RT

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MGS GUARDRAIL DETAILS	SHEET 52	E

2

CHURCH STREET

STH 16

560 562 564 566 568 570 572 574

CE REQ'D (ASPH)
STA 569+04, 50' LT

PE REQ'D (ASPH)
STA 570+66, 33' LT

PE REQ'D (BASE)
STA 566+65, 40' RT

FE REQ'D (BASE)
STA 569+73, 32' RT

ST JOSEPH'S CATHOLIC CEMETERY

STA 564+50 TO STA 568+50 RT
BURIAL SITE BCO-0073
(SEE SPECIAL PROVISIONS)

BEGIN PROJECT
STA 561+35
SAWCUT REQUIRED

PT STA 11.99

N

MATCHLINE: 574+75

MATCHLINE: 574+75

PE REQ'D (ASPH)
STA 575+53, 35' LT

PE REQ'D (BASE)
STA 586+28, 46' LT

PE REQ'D (BASE)
STA 588+91, 45' LT

576 578 580 582 584 586 588

STH 16

FE REQ'D (BASE)
STA 575+71, 35' RT

FE REQ'D (BASE)
STA 581+69, 29' RT

PE REQ'D (BASE)
STA 586+98, 38' RT

PE REQ'D (ASPH)
STA 589+29, 44' RT

MATCHLINE: 589+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 53	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:16 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 589+50

FE REQ'D (BASE)
STA 594+00, 35' LT

PC: 596+73.22

590 592 594 596 598 600 602 604

STH 16

PE REQ'D (ASPH)
STA 595+93, 36' RT

PE REQ'D (ASPH)
STA 597+28, 41' RT

FE REQ'D (BASE)
STA 599+31, 29' RT

MATCHLINE: 604+25

2

MATCHLINE: 604+25

CTH B
LONG CROSSING ROAD

PT: 607+76.21

PE REQ'D (BASE)
STA 613+37, 49' LT

PE REQ'D (BASE)
STA 615+63, 40' LT

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

606 608 610 612 614 616 618

STH 16

PE REQ'D (BASE)
STA 612+57, 47' RT

SLOPE INTERCEPT

FE REQ'D (BASE)
STA 618+27, 39' RT

EXISTING BOX CULVERT C-11-1032
(TO REMAIN)

OLD COUNTY ROAD F

MATCHLINE: 619+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 54	E

2

MATCHLINE: 619+00

620 622 624 626 628 630 632

STH 16

FE REQ'D (BASE)
STA 627+35, 34' RT

PE REQ'D (ASPH)
STA 631+44, 37' RT

MATCHLINE: 633+75

2

MATCHLINE: 633+75

HUMPHREY DRIVE

634 636 638 640 642 644 646 648

STH 16

FE REQ'D (BASE)
STA 634+01, 34' RT

MATCHLINE: 648+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 55	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 7/9/2021 12:16 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 648+50

PE REQ'D (ASPH)
STA 649+75, 40' LT

FE REQ'D (BASE)
STA 654+27, 34' LT

FE REQ'D (ASPH)
STA 656+35, 32' LT

PE REQ'D (ASPH)
STA 660+77, 29' LT

PE REQ'D (BASE)
STA 662+92, 38' LT

PC: 660+05.35

650 652 654 656 658 660 662

STH 16

FE REQ'D (BASE)
STA 654+37, 36' RT

FE REQ'D (BASE)
STA 663+14, 34' RT

MATCHLINE: 663+25

N

MATCHLINE: 663+25

WILLIAMS ROAD

PT: 672+28.52

664 666 668 670 672 674 676

STH 16

WILLIAMS ROAD

MATCHLINE: 678+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 56	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 7/9/2021 12:17 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 678+00

MATCHLINE: 692+75

MATCHLINE: 692+75

MATCHLINE: 707+50

2

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 57	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 05

PLOT DATE : 7/9/2021 12:17 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCHLINE: 707+50

CE REQ'D (BASE)
STA 713+16, 44' LT

PE REQ'D (BASE)
STA 716+68, 33' LT

708 710 712 714 716 718 720 722

STH 16

FE REQ'D (BASE)
STA. 716+68, RT

MATCHLINE: 722+25

2

MATCHLINE: 722+25

PE REQ'D (BASE)
STA 723+11, 38' LT

PE REQ'D (ASPH)
STA 726+87, 36' LT

PC: 729+45.43

ERDMAN ROAD

724 726 728 730 732 734 736

STH 16

FE REQ'D (BASE)
STA 728+85, 34' RT

PE REQ'D (BASE)
STA 724+84, 37' RT

MATCHLINE: 737+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 58	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 7/9/2021 12:17 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 737+00

FISCHER ROAD

PE REQ'D (BASE)
STA 737+87, 48' LT

PT: 743+34.78

FE REQ'D (BASE)
STA 743+61, 38' LT

PE REQ'D (BASE)
STA 746+33, 44' LT

N

738 740 742 744 746 748 750

STH 16

FE REQ'D (BASE)
STA 737+82, 40' RT

DOHERTY ROAD

PE REQ'D (BASE)
STA 743+67, 41' RT

PE REQ'D (BASE)
STA 748+49, 48' RT

MATCHLINE: 751+75

2

MATCHLINE: 751+75

PC: 755+93.40

PE REQ'D (BASE)
STA 765+67, 41' LT

N

752 754 756 758 760 762 764 766

STH 16

FE REQ'D (BASE)
STA 755+16, 34' RT

PE REQ'D (BASE)
STA 760+54, 39' RT

FE REQ'D (BASE)
STA 763+19, 29' RT

MATCHLINE: 766+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 59	E

2

MATCHLINE: 766+50

PE REQ'D (BASE)
STA 766+65, 34' LT

PT: 769+08.81

PE REQ'D (ASPH)
STA 771+48, 37' LT

PE REQ'D (ASPH)
STA 772+99, 34' LT

PE REQ'D (ASPH)
STA 775+78, 33' LT

PE REQ'D (BASE)
STA 776+90, 38' LT

PE REQ'D (ASPH)
STA 778+34, 41' LT

CE REQ'D (BASE)
STA 780+85, 35' LT

768 770 772 774 776 778 780

STH 16

PE REQ'D (BASE)
STA 770+21, 41' RT

STA 780+00 TO STA 797+00
BURIAL SITE 47CO169/BCo-0016
(SEE SPECIAL PROVISIONS)

MATCHLINE: 781+25

2

MATCHLINE: 781+25

CE REQ'D (BASE)
STA 782+64, 39' LT

CE REQ'D (BASE)
STA 784+61, 35' LT

CE REQ'D (BASE)
STA 786+25, 34' LT

PE REQ'D (ASPH)
STA 788+47, 37' LT

PE REQ'D (BASE)
STA 790+45, 37' LT

PE REQ'D (ASPH)
STA 792+54, 35' LT

PC: 795+27.51

782 784 786 788 790 792 794

STH 16

STA 780+00 TO STA 797+00
BURIAL SITE 47CO169/BCo-0016
(SEE SPECIAL PROVISIONS)

PE REQ'D (BASE)
STA 795+89, 29' RT

COLUMBUS ROAD

MATCHLINE: 796+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 60	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 08

PLOT DATE : 7/9/2021 12:17 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 796+00

PE REQ'D (BASE)
STA 796+46, 43' LT

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

SLOPE INTERCEPT

WETLANDS

NORTH BRANCH CRAWFISH RIVER

OTSEGO ROAD

WETLANDS

798

800

802

804

STH 16

806

808

810

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

WETLANDS

WETLANDS

SLOPE INTERCEPT

STA 780+00 TO STA 797+00
BURIAL SITE 47CO169/BCo-0016
(SEE SPECIAL PROVISIONS)

NORTH BRANCH CRAWFISH RIVER

EXISTING BOX CULVERT B-11-0133
(TO REMAIN)

OTSEGO ROAD

MATCHLINE: 810+75

MATCHLINE: 810+75

812

814

816

818

STH 16

820

822

824

COLUMBUS ROAD

PE REQ'D (ASPH)
STA 817+18, 44' RT

MATCHLINE: 825+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 61	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 09

PLOT DATE : 7/9/2021 12:17 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 825+50

PT: 826+65.35

826 828 830 832 834 836 838 840

STH 16

N

MATCHLINE: 840+25

MATCHLINE: 840+25

842 844 846 848 850 852 854

STH 16

N

MATCHLINE: 855+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 62	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 10

PLOT DATE : 7/9/2021 12:18 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 63	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 11
PLOT DATE : 7/9/2021 12:18 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 884+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 64	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 12

PLOT DATE : 7/9/2021 12:18 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 914+00

MATCHLINE: 928+75

MATCHLINE: 928+75

MATCHLINE: 943+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 65	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 13

PLOT DATE : 7/9/2021 12:18 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 943+50

MATCHLINE: 958+25

MATCHLINE: 973+00

2

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 66	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 14

PLOT DATE : 7/9/2021 12:18 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 973+00

PT: 974+66.31

MICKELSON ROAD

POST

N

974 976 978 980 982 984 986

STH 16

MICKELSON ROAD

MATCHLINE: 987+75

2

MATCHLINE: 987+75

UNNAMED TRIBUTARY

PC: 993+42.33

STH 146

PI: 1000+21.32

PE REQ'D (ASPH)
STA 1001+98, 30' LT

N

988 990 992 994 996 998 1000 1002

STH 16

UNNAMED TRIBUTARY

EXISTING BOX CULVERT C-587-36
(TO REMAIN)

MATCHLINE: 1002+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 67	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 15

PLOT DATE : 7/9/2021 12:18 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 1002+50

PC: 1015+32.36

1004 1006 1008 1010 STH 16 1012 1014 1016

MATCHLINE: 1017+25

MATCHLINE: 1017+25

PT: 1019+06.73

1018 1020 1022 1024 STH 16 1026 1028 1030

MATCHLINE: 1032+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 68	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 16

PLOT DATE : 7/9/2021 12:19 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 1032+00

32 1034 1036 1038 1040 1042 1044 1046

STH 16

PC: 1042+89.41

N

MATCHLINE: 1046+75

MATCHLINE: 1046+75

1048 1050 1052 1054 1056 1058 1060

STH 16

CTH CD

PT: 1058+25.73

N

MATCHLINE: 1061+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 69	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 17

PLOT DATE : 7/9/2021 12:19 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCHLINE: 1061+50

2

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 70	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 18

PLOT DATE : 7/9/2021 12:19 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 1091+00

1092 1094 1096 1098 1100 1102 1104

STH 16

N

MATCHLINE: 1105+75

MATCHLINE: 1105+75

MCCRAE ROAD

1106 1108 1110 1112 1114 1116 1118 1120

STH 16

OLD HWY 16

N

MATCHLINE: 1120+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 71	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 19

PLOT DATE : 7/9/2021 12:19 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 1120+50

PC: 1129+22.31

STH 16

1122 1124 1126 1128 1130 1132 1134

N

MATCHLINE: 1135+25

2

MATCHLINE: 1135+25

JOHNSON ROAD

STH 16

1136 1138 1140 1142 1144 1146 1148

JOHNSON ROAD

N

MATCHLINE: 1150+00

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 72	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 20

PLOT DATE : 7/9/2021 12:19 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

STA 1150+50
END RESURFACING LIMITS
BEGIN RECONSTRUCTION LIMITS

MATCHLINE: 1150+00

CRAWFISH RIVER

PT: 1154+93.68

SLOPE INTERCEPT

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

WETLANDS

BRIDGE STRUCTURE B-11-172
(SEE STRUCTURE PLANS)

CE REQ'D (ASPH)
STA 1160+05, 32' RT

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

1150 1152 1154 1156 1158 1160 1162 1164

STH 16

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

SLOPE INTERCEPT

WETLANDS

WETLANDS

MGS GUARDRAIL
(SEE CONSTRUCTION DETAILS)

CE REQ'D (ASPH)
STA 1154+43, 80' RT

CRAWFISH RIVER

STA 1159+43
END RECONSTRUCTION LIMITS
BEGIN RESURFACING LIMITS

MATCHLINE: 1164+75

2

MATCHLINE: 1164+75

1166 1168 1170 1172 1174 1176 1178

STH 16

DUBORG ROAD

MATCHLINE: 1179+50

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 73	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 21

PLOT DATE : 7/9/2021 12:20 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 1179+50

1180 1182 1184 1186 1188 1190 1192 1194

STH 16

HALL ROAD

N

MATCHLINE: 1194+25

2

MATCHLINE: 1194+25

1196 1198 1200 1202 1204 1206 1208

STH 16

END PROJECT
STA 1204+00
SAWCUT REQUIRED

EP: 1209+46.73

N

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 74	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 22

PLOT DATE : 7/9/2021 12:20 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

EXISTING RW

CRAWFISH RIVER

GUY

OH

ALLIANT ENGERGY - OVERHEAD ELECTRIC
AT&T - OVERHEAD COMMUNICATIONS

SLOPE INTERCEPT (TYP)

WETLANDS

STH 16

1156+00

1157+00

1158+00

B-11-172

+34.5 850.26 850.08 850.03 849.98

+14.5 850.41 850.28 850.23 850.18

+15.4 +35.4 850.51 850.47 850.41

+00.3 +16.4 +25 +36.4 850.59 850.27 850.23 850.17

+17.5 +37.5 850.35 850.06 850.03 849.96

+18.3 +38.3 850.15

849.59 849.49 849.41

+13.7 849.53 +33.7 849.40

849.73 849.68 849.61

849.78 +14.5 +34.5 849.60

849.97 849.92 849.85 +52.2

+15.6 +25 +35.6 +50 849.84

850.02 +16.6 +36.6

849.77 849.73 849.67 849.61 849.60

17.1' RT +37.1 849.49 +18.2' RT

849.57 849.53 849.57 849.47

+37.5 849.47 849.41 849.40

18.1' RT

+17.5

10' 12' 12' 10'

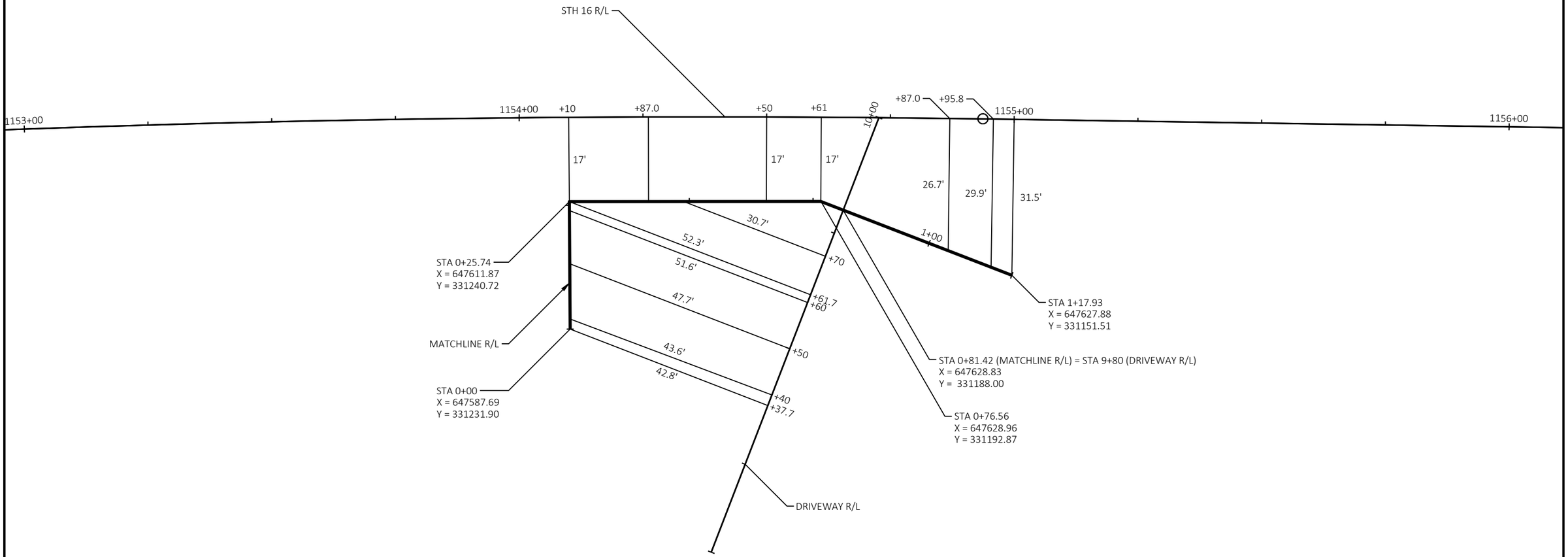
10' 12' 12' 10'

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVING GRADES	SHEET 75	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021301-PG.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:22 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:20 FT

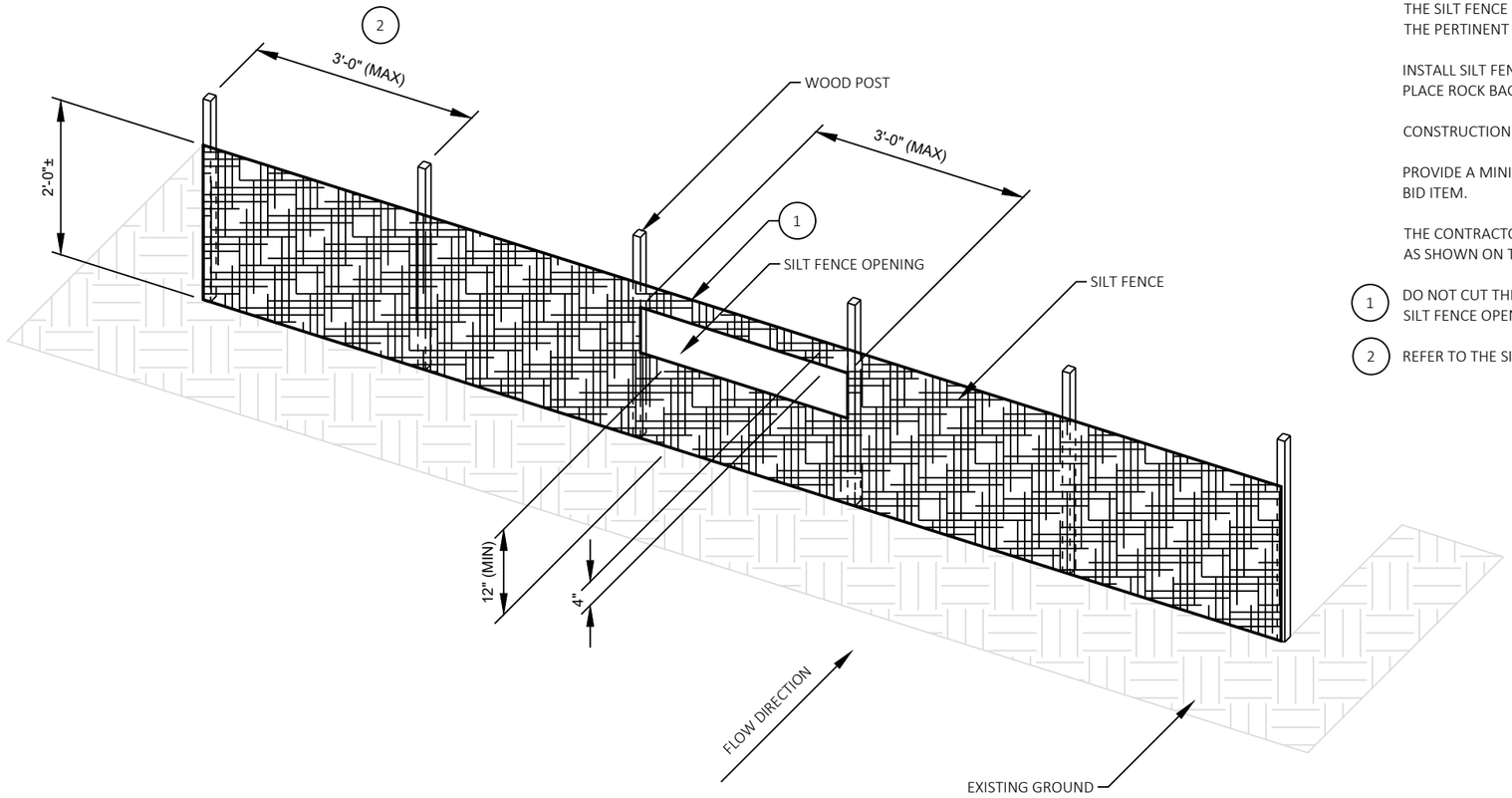
2



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTION MATCHLINES - STA 1154+10 TO STA 1155+00	SHEET 76	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\021701-XM.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:24 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:20 FT



GENERAL NOTES

THE SILT FENCE RELIEF DETAIL IS A SUPPLEMENTAL DETAIL TO THE SILT FENCE STANDARD DETAILS AND SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

INSTALL SILT FENCE PRIOR TO CONSTRUCTING THE SILT FENCE OPENING. PRIOR TO CONSTRUCTING THE SILT FENCE OPENING, PLACE ROCK BAGS AT THE SILT FENCE OPENING AS SHOWN IN THIS DETAIL.

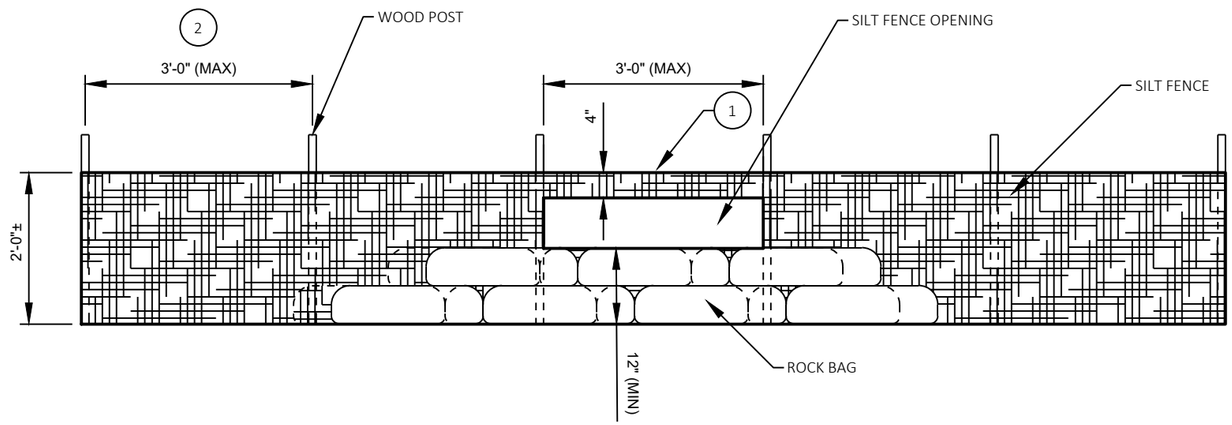
CONSTRUCTION OF THE SILT FENCE OPENING SHALL BE INCIDENTAL TO THE COST OF THE SILT FENCE BID ITEM.

PROVIDE A MINIMUM OF 22 ROCK BAGS MINIMUM PER 3 FOOT OPENING. ROCK BAGS SHALL BE PAID UNDER THE ROCK BAGS BID ITEM.

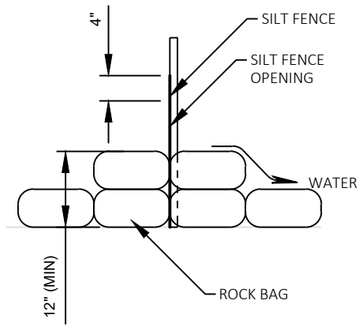
THE CONTRACTOR SHALL ADJUST THE SILT FENCE RELIEF OPENINGS WITHIN THE SILT FENCE AS NECESSARY TO PROVIDE RELIEF: AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE FIELD ENGINEER.

(1) DO NOT CUT THE SUPPORT CORD OR TENSION TAPE WHEN CONSTRUCTING THE SILT FENCE OPENING. KEEP THE TOP OF THE SILT FENCE OPENING 1"± BELOW THE 3" FOLD AT THE SUPPORT CORD OR TENSION TAPE.

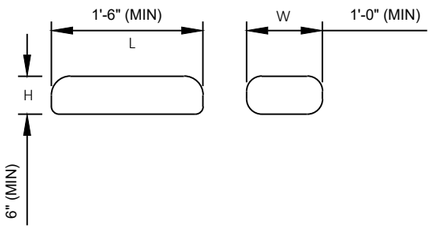
(2) REFER TO THE SILT FENCE STANDARD DETAILS FOR ALLOWABLE ADJUSTMENTS TO POST SPACING.



SECTION VIEW



ROCK BAG DETAIL



SILT FENCE RELIEF DETAIL

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL DETAILS	SHEET 77	E

2

2

N

612+00 613+00 614+00 615+00 616+00 617+00

STH 16

CAUTION

OH

ALLIANT ENERGY - UNDERGROUND GAS

STA 613+16.3, C-11-1032
EXISTING 3.5' X 6' X 60' BOX CULVERT

ALLIANT ENERGY - OVERHEAD ELECTRIC

SLOPE INTERCEPT

EXISTING RW

LEGEND

SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B

SILT FENCE

SILT FENCE WITH ROCK BAG RELIEF

SURFACE FLOW PATH DIRECTION

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 78	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:26 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

SLOPE INTERCEPT

EXISTING RW

**EXISTING ROADWAY CENTERLINE

WETLANDS

N BRANCH CRAWFISH RIVER

WETLANDS

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

OTSEGO ROAD

POST

797+00 798+00 799+00 800+00 801+00 802+00

STH 16

ALLIANT ENERGY -
UNDERGROUND GAS

CAUTION

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

ALLIANT ENERGY - OVERHEAD ELECTRIC

WETLANDS

SLOPE INTERCEPT

EXISTING RW

STA 800+24.9, B-11-0133
EXISTING 8' X 8' X 73' BOX CULVERT

WETLANDS

**EXISTING ROADWAY CENTERLINE

N

803+00

STH 16

804+00

SLOPE INTERCEPT

ALLIANT ENERGY -
OVERHEAD ELECTRIC

EXISTING RW

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

EXISTING 24" CMCP

CAUTION

GUY

ALLIANT ENERGY - UNDERGROUND GAS

OTSEGO ROAD

ALLIANT ENERGY - OVERHEAD ELECTRIC

LEGEND

- SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B
- SILT FENCE
- SILT FENCE WITH ROCK BAG RELIEF
- TEMPORARY DITCH CHECK
- SURFACE FLOW PATH DIRECTION

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 79	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 4/22/2021 2:27 PM PLOT BY : RINZEL, JAMES M PLOT NAME :

WISDOT/CADDS SHEET 42

2

N

CRAWFISH RIVER

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

STA 1153+00
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

STA 1155+98
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

WETLANDS

EXISTING RW

STH 16

1150+00 1151+00 1152+00 1153+00 1154+00 1155+00 1156

SLOPE INTERCEPT (TYP)

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

STA 1153+00
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

EXISTING RW

ALLIANT ENERGY - OVERHEAD ELECTRIC

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

STA 1155+98
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

WETLANDS

GUY

OH

LEGEND

SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B

SILT FENCE

SILT FENCE WITH ROCK BAG RELIEF

TEMPORARY DITCH CHECK

SURFACE FLOW PATH DIRECTION

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 80	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 4/22/2021 2:27 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

CRAWFISH RIVER

ALLIANT ENGERGY - OVERHEAD ELECTRIC
AT&T - OVERHEAD COMMUNICATIONS

STA 1158+55
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

EXISTING RW

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

SLOPE INTERCEPT (TYP.)

WETLANDS

B-11-172

1157+00

1158+00

1159+00

1160+00

1161+00

1162+00

STH 16

CAUTION

WETLANDS

SILT FENCE TURN-A-ROUND
(SEE CONSTRUCTION DETAILS)

ALLIANT ENERGY - OVERHEAD ELECTRIC

WE ENERGIES - UNDERGROUND GAS

EXISTING RW

STA 1158+55
FRENCH DRAIN LOCATION
(SEE CONSTRUCTION DETAILS)

CRAWFISH RIVER

LEGEND

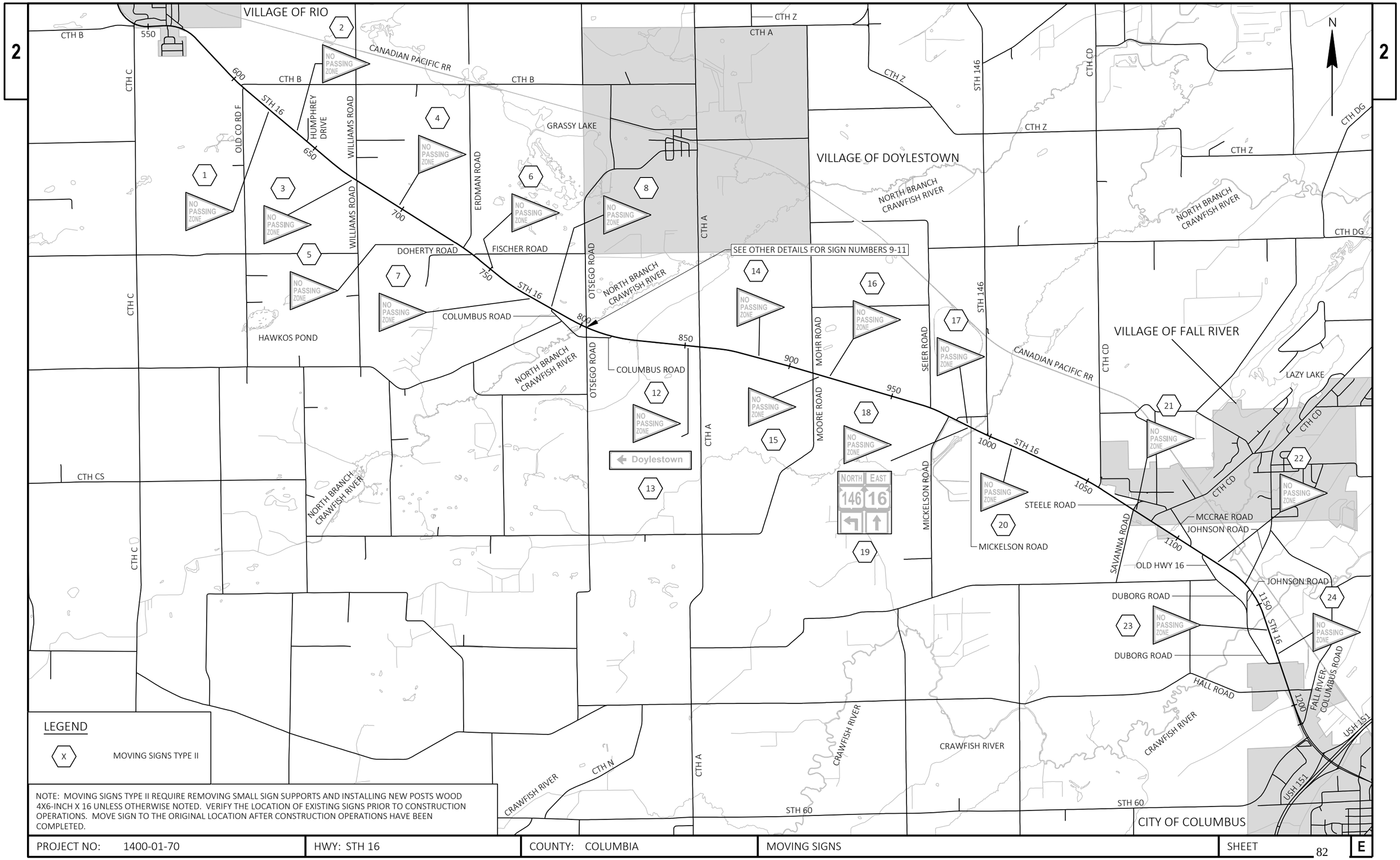
- SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B
- TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT URBAN CLASS I TYPE B
- SILT FENCE
- SILT FENCE WITH ROCK BAG RELIEF
- TURBIDITY BARRIERS
- TEMPORARY DITCH CHECK
- SURFACE FLOW PATH DIRECTION

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 81	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 4/22/2021 2:27 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42


2
2
N
VILLAGE OF RIO
CTH B
550
CTH C
600
STH 16
CANADIAN PACIFIC RR
CTH B
CTH B
OLD CO RD F
HUMPHREY DRIVE
WILLIAMS ROAD
650
GRASSY LAKE
ERDMAN ROAD
700
WILLIAMS ROAD
DOHERTY ROAD
FISCHER ROAD
750
STH 16
OTSEGO ROAD
NORTH BRANCH CRAWFISH RIVER
CTH A
CTH Z
CTH A
CTH Z
STH 146
CTH CD
VILLAGE OF DOYLESTOWN
CTH Z
CTH DG
NORTH BRANCH CRAWFISH RIVER
NORTH BRANCH CRAWFISH RIVER
CTH DG
SEE OTHER DETAILS FOR SIGN NUMBERS 9-11
CTH C
HAWKOS POND
COLUMBUS ROAD
800
850
900
MOHR ROAD
SEIER ROAD
STH 146
CANADIAN PACIFIC RR
VILLAGE OF FALL RIVER
LAZY LAKE
CTH CD
NORTH BRANCH CRAWFISH RIVER
OTSEGO ROAD
COLUMBUS ROAD
950
MOORE ROAD
1000
STH 16
CTH CS
Doylestown
CTH A
NORTH EAST
146 16
MICKELSON ROAD
1050
STEELE ROAD
MCCRAE ROAD
JOHNSON ROAD
CTH CD
NORTH BRANCH CRAWFISH RIVER
CTH C
MICKELSON ROAD
SAVANNA ROAD
1100
OLD HWY 16
JOHNSON ROAD
DUBORG ROAD
1150
STH 16
DUBORG ROAD
HALL ROAD
FALL RIVER COLUMBUS ROAD
1200
USH 151
CRAWFISH RIVER
CRAWFISH RIVER
CRAWFISH RIVER
CTH N
CTH A
CRAWFISH RIVER
STH 60
STH 60
USH 151
CITY OF COLUMBUS
NO PASSING ZONE
1
2
3
4
5
6
7
8
12
13
14
15
16
17
18
19
20
21
22
23
24
LEGEND
X
MOVING SIGNS TYPE II
NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.
PROJECT NO: 1400-01-70
HWY: STH 16
COUNTY: COLUMBIA
MOVING SIGNS
SHEET 82
E
FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2021 2:29 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:4000 FT
WISDOT/CADDS SHEET 42

2

2

N

STOP

10

OTSEGO ROAD

N BRANCH CRAWFISH RIVER

SLOPE INTERCEPT

EXISTING RW

EXISTING ROADWAY CENTERLINE

WETLANDS

POST

797+00

798+00

799+00

800+00

801+00

802+00

STH 16

2 POST REQ'D WHEN MOVING SIGN

ALLIANT ENERGY - UNDERGROUND GAS

CAUTION

ALLIANT ENERGY - OVERHEAD ELECTRIC

WETLANDS

SLOPE INTERCEPT

EXISTING RW

GUY

STA 800+24.9, B-11-133
EXISTING 8' X 8' X 73' BOX CULVERT
(TO REMAIN)

Otsego
UNINCORPORATED

9

SLOPE INTERCEPT

ALLIANT ENERGY - OVERHEAD ELECTRIC

EXISTING RW

EXISTING ROADWAY CENTERLINE

803+00

STH 16

804+00

N

EXISTING 24" CMCP
(TO REMAIN)

STOP

11

OTSEGO ROAD

ALLIANT ENERGY - UNDERGROUND GAS

ALLIANT ENERGY - OVERHEAD ELECTRIC

LEGEND

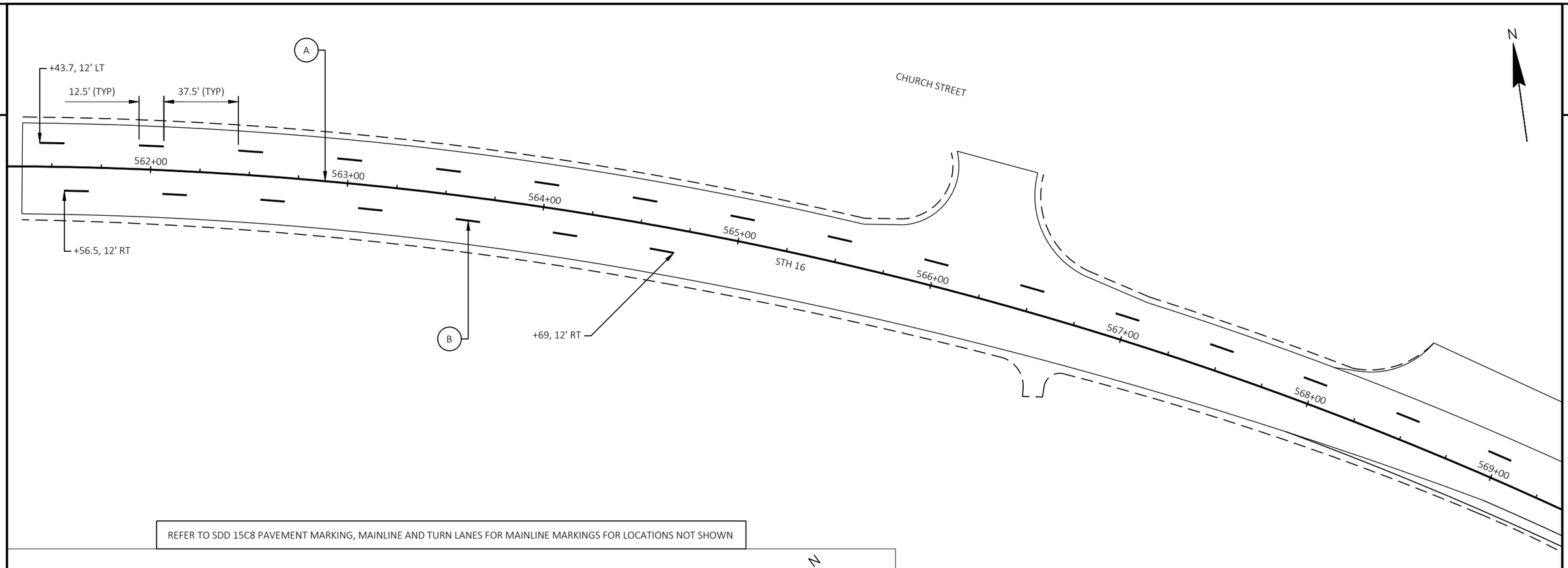
X — MOVING SIGNS TYPE II

NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

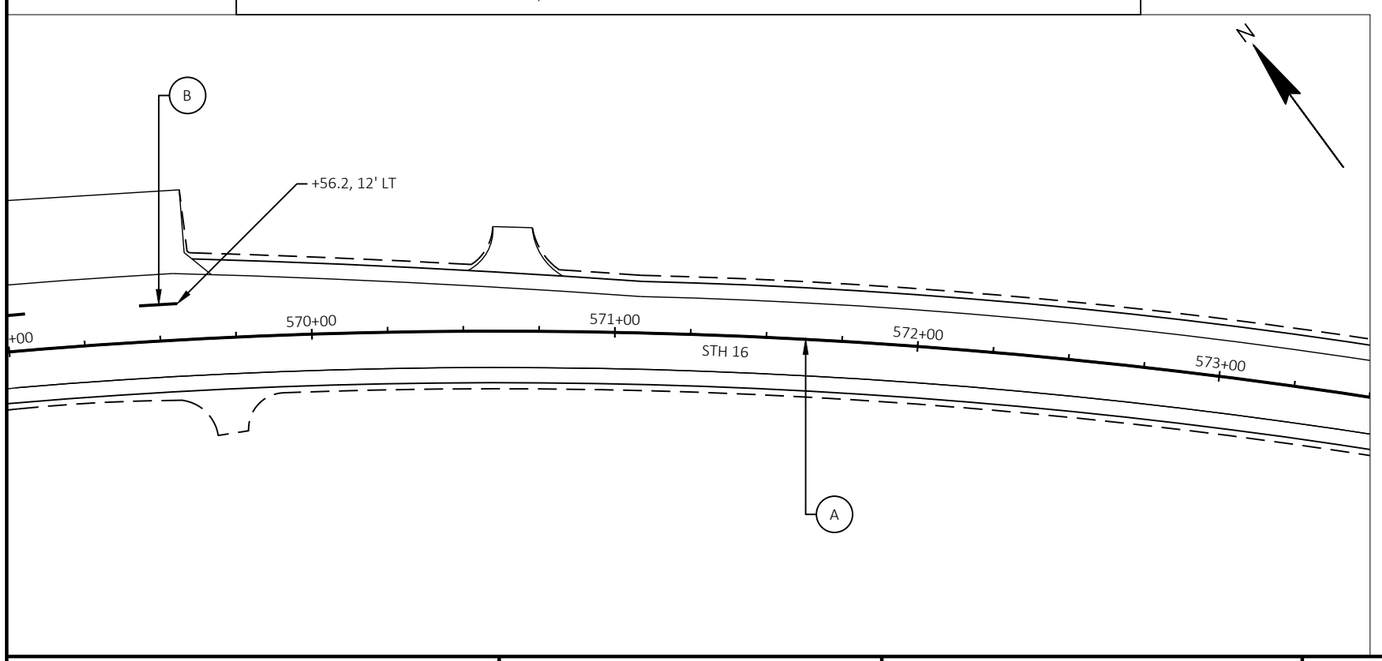
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	MOVING SIGNS	SHEET 83	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:30 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS FOR LOCATIONS NOT SHOWN



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

LEGEND

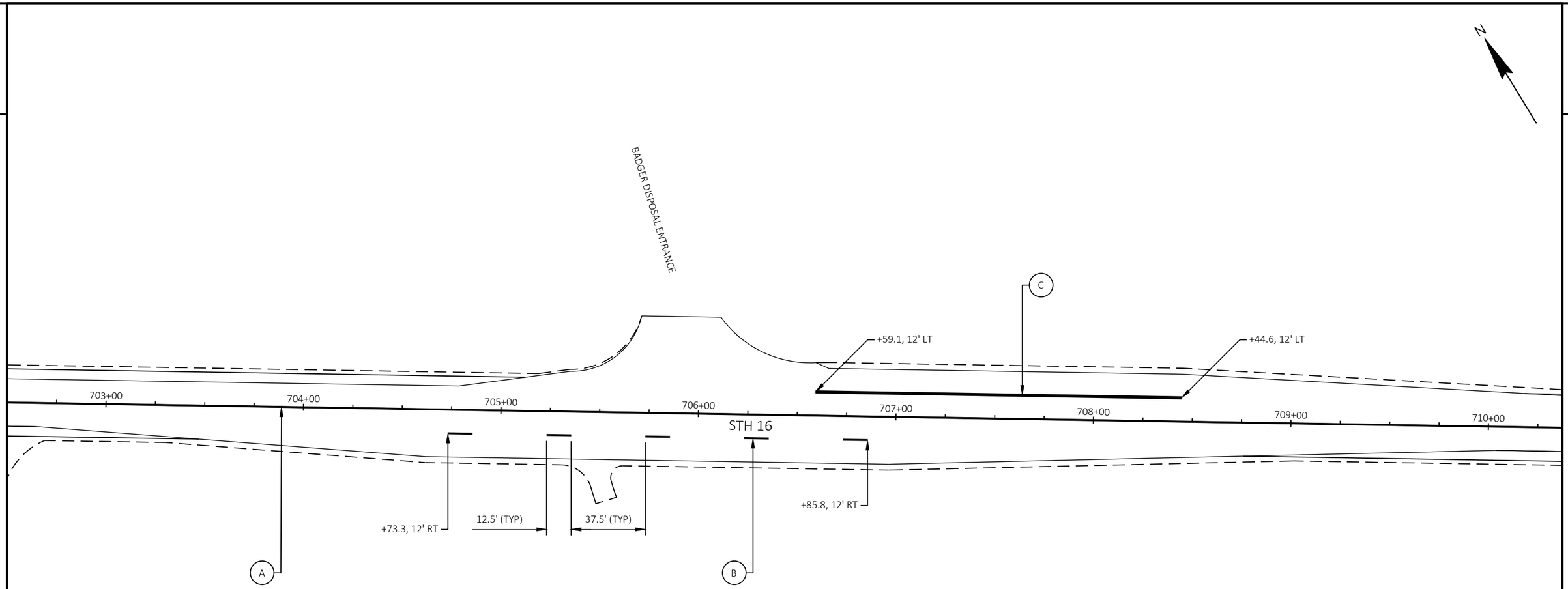
A	TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
B	TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 84	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024501-TM.DWG
LAYOUT NAME - 01
PLOT DATE : 7/9/2021 12:28 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2



LEGEND

A	TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
B	TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
C	TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

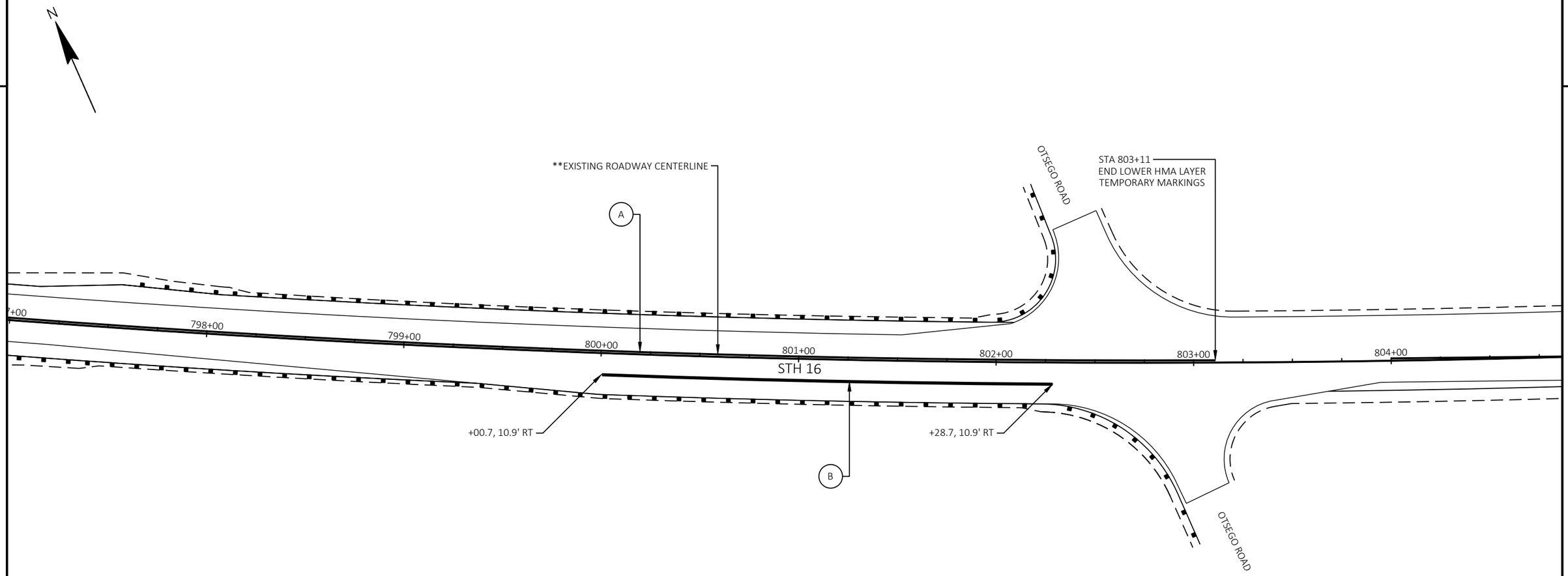
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 85	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024501-TM.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 12:28 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



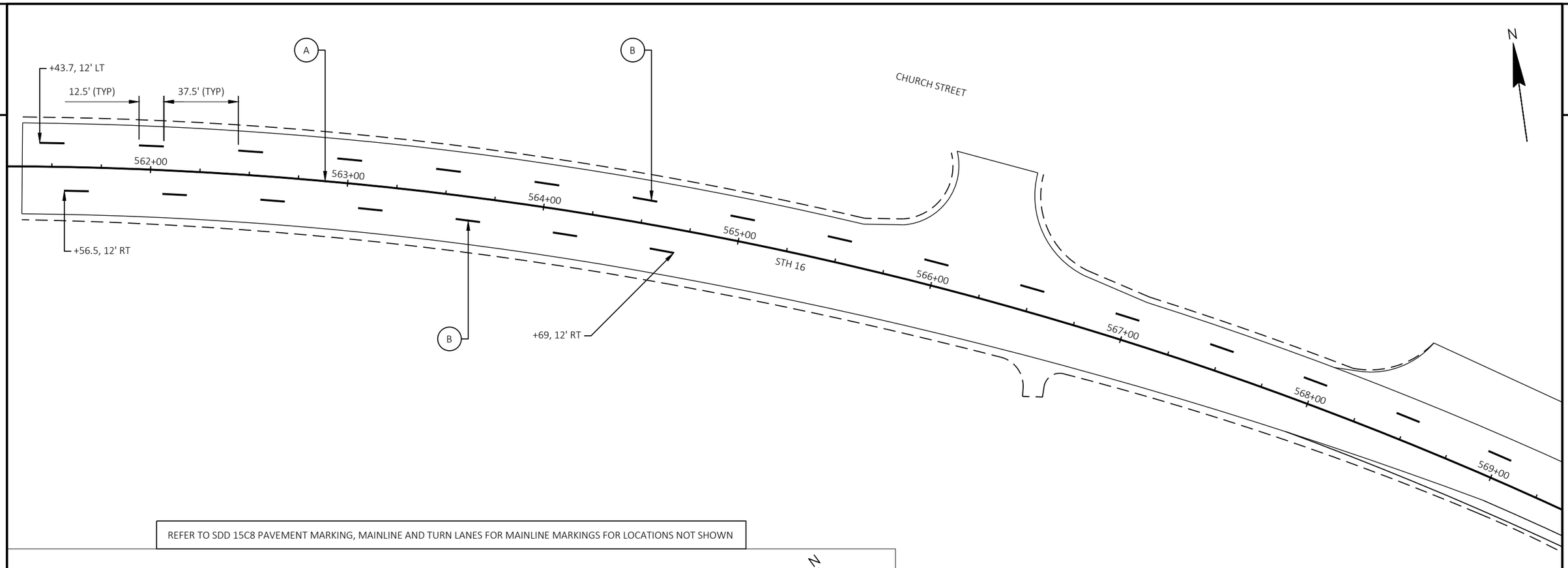
**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1'-1.2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

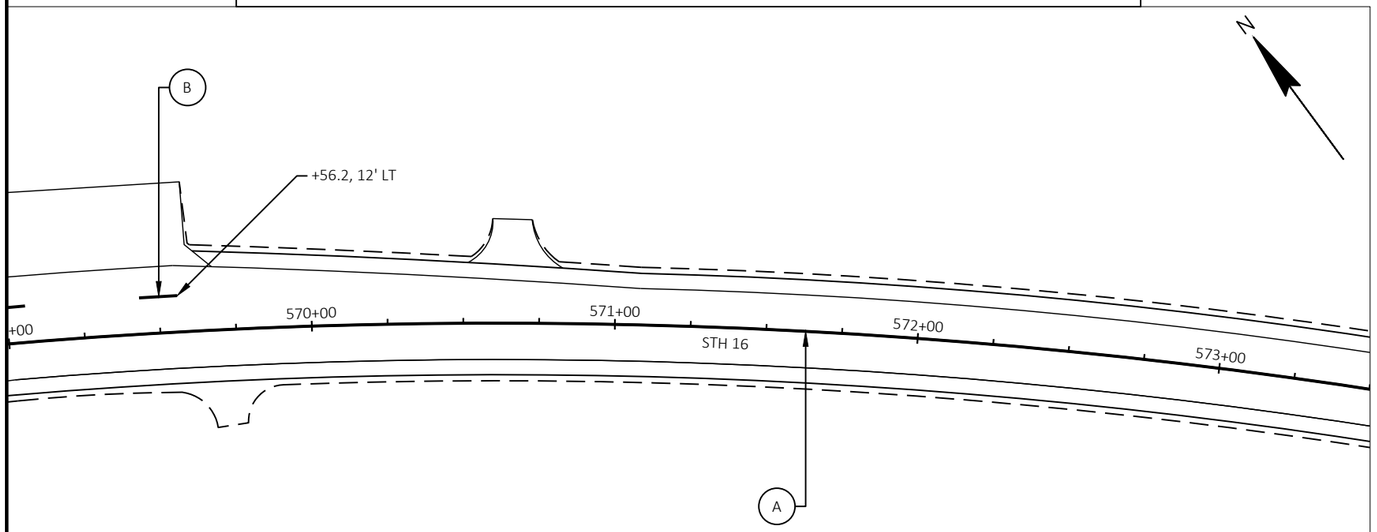
LEGEND

A	TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
B	TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 86	E



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS FOR LOCATIONS NOT SHOWN



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 87	E

2

2

N

BADGER DISPOSAL ENTRANCE

SOLID YELLOW RIGHT/DASHED YELLOWLEFT

A

B

+59.1, 12' LT

+44.6, 12' LT

703+00 704+00 705+00 706+00 707+00 708+00 709+00 710+00

STH 16

+62.3, 24' RT

+73.3, 12' RT

12.5' (TYP)

37.5' (TYP)

+85.8, 12' RT

A

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

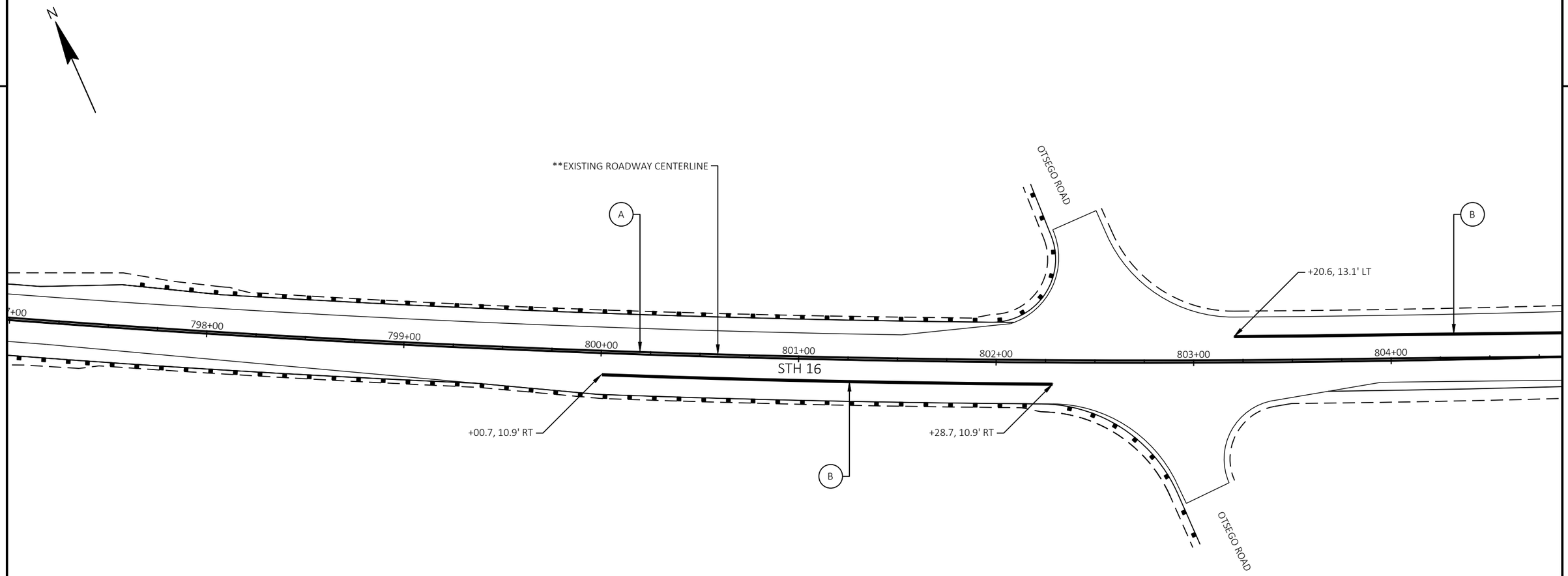
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 88	E

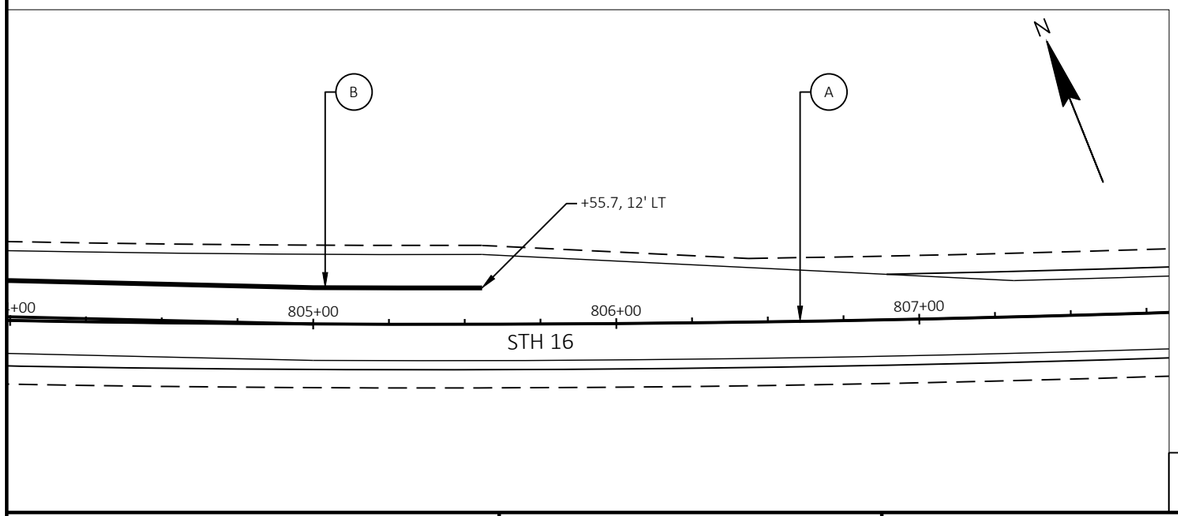
FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 12:30 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2





**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1'-1.2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 89	E

2

N

+74.6, 149.6' LT

A

CTH A

A

B

+88.1, 28.2' LT

+62.2, 12' LT

+56.1, 12' LT

+00

854+00

855+00

856+00

857+00

STH 16

858+00

859+00

860+00

+20.9, 12' RT

+28.2, 12' RT

+98.7, 30.1' RT

B

CTH A

A

+14, 153.9' RT

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 90	E

2

N

+38.6, AT R/L

+00 956+00 957+00 958+00 959+00 960+00 961+00 962+00

STH 16

A

A

+67.1, 90.8' LT

A

SEIER ROAD

+76.1, 66.7' LT

+16.5, AT R/L

+55.9, 12' LT

B

A

963+00 964+00 965+00 966+00 967+00 968+00 969+00 970+00

+64.3, AT R/L

+54.3, AT R/L

STH 16

+89.3, 12' RT

+54.3, 12' RT

+02.8, 12' RT

B

A

+41.5, AT R/L

+16.5, 12' RT

N

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 91 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 05
PLOT DATE : 7/9/2021 12:30 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

N

D

+17.5, 12' RT

+05.2, 12' LT

+91.5, AT R/L

+54.4, AT R/L

971+00

972+00

973+00

974+00

975+00

976+00

977+00

978+00

STH 16

+36.2, 5.8' RT

END DOUBLE YELLOW CENTERLINE
BEGIN SOLID YELLOW LEFT/DASHED YELLOW RIGHT

A

MICKELSON ROAD

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

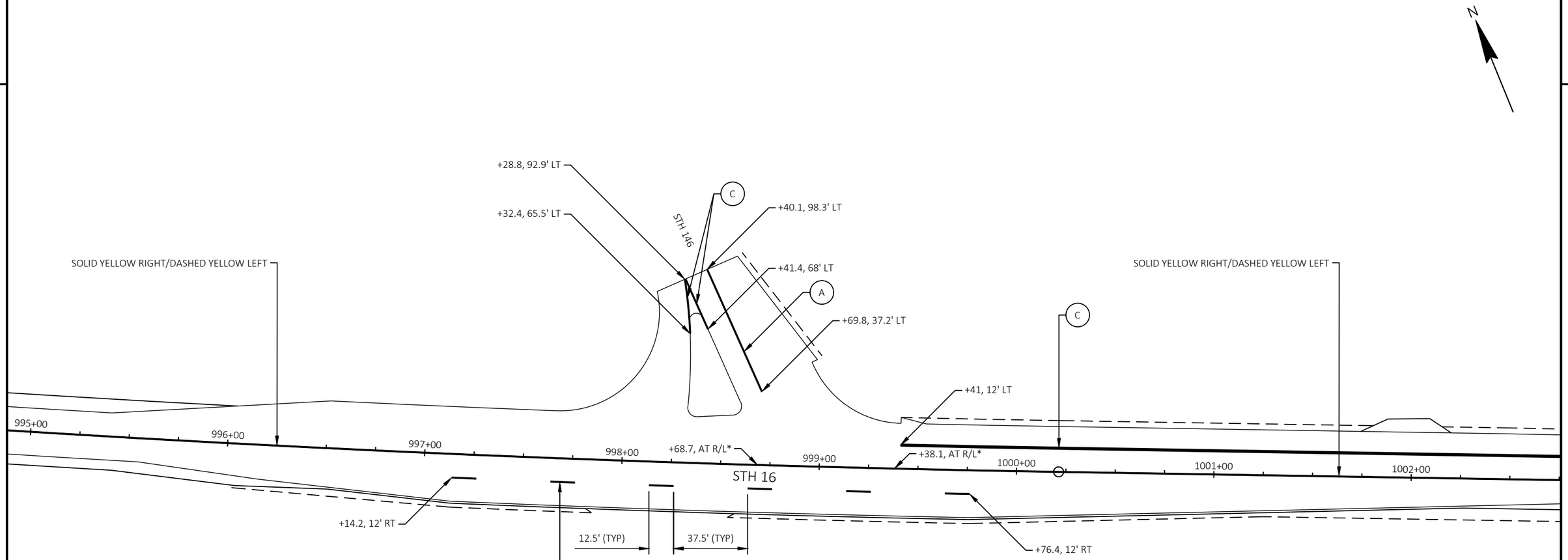
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 92	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 06

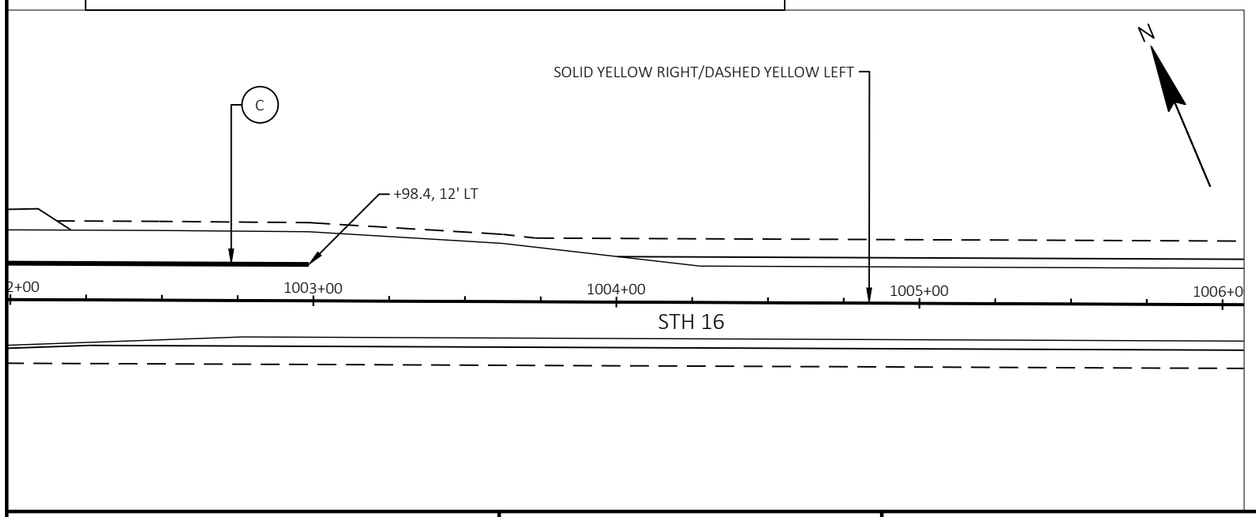
PLOT DATE : 7/9/2021 12:30 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS



*NOTE: END CENTERLINE LANE MARKINGS AT STA 998+68.7
BEGIN CENTERLINE LANE MARKINGS AT STA 999+38.1

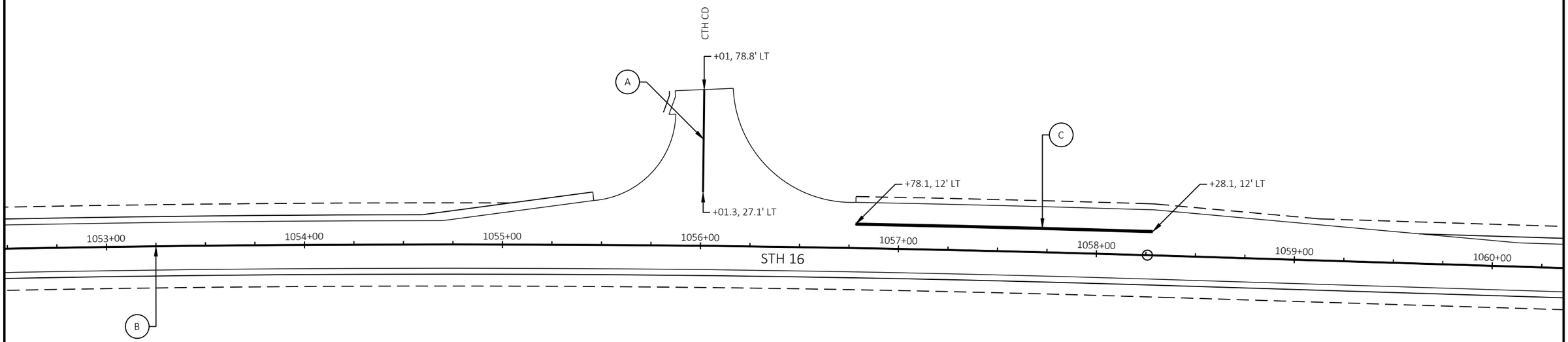
LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 93	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 07
PLOT DATE : 7/9/2021 12:31 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

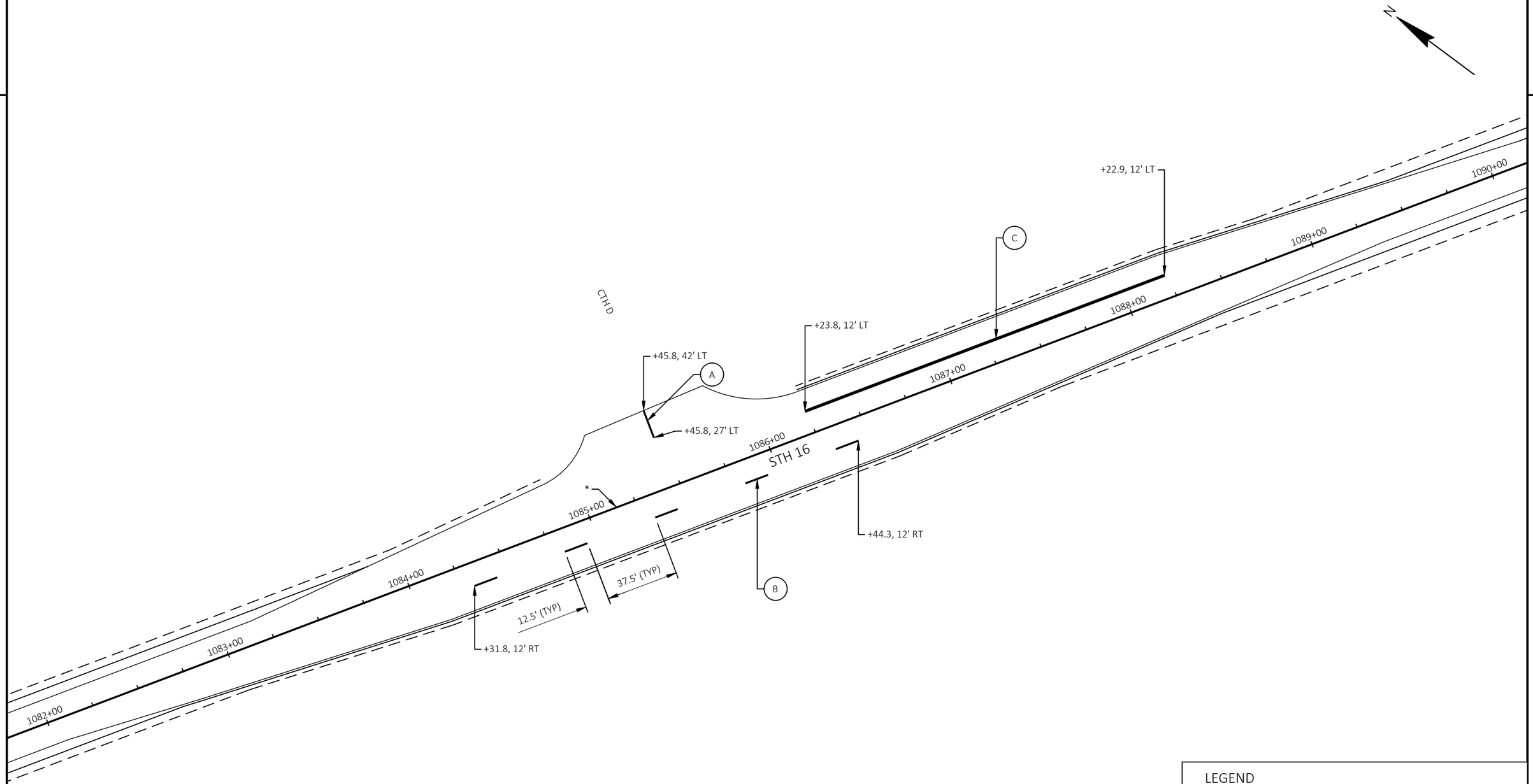
A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 94	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 08
PLOT DATE : 7/9/2021 12:31 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

*NOTE: STA 1085+15 - END DASHED YELLOW LEFT/SOLID YELLOW RIGHT CENTERLINE; BEGIN DASHED YELLOW CENTERLINE.

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 95	E

2

2

N

MCCRAE ROAD

A

B

+83.3, 12' LT

+89, 12' LT

1104+00 1105+00 1106+00 1107+00 1108+00 1109+00 1110+00 1111+00

STH 16

LEGEND

A — MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)

B — MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

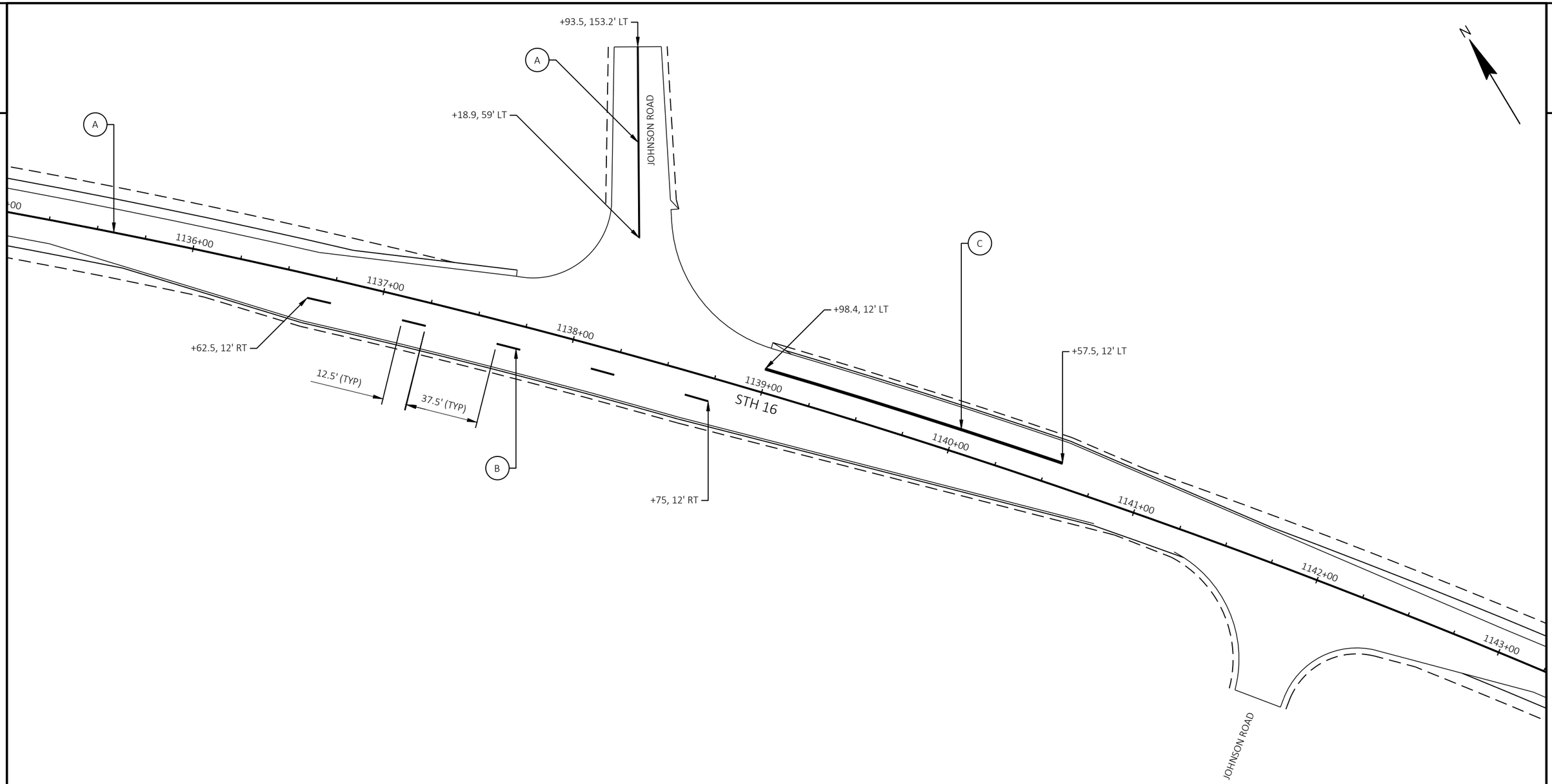
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 96	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 10

PLOT DATE : 7/9/2021 12:31 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

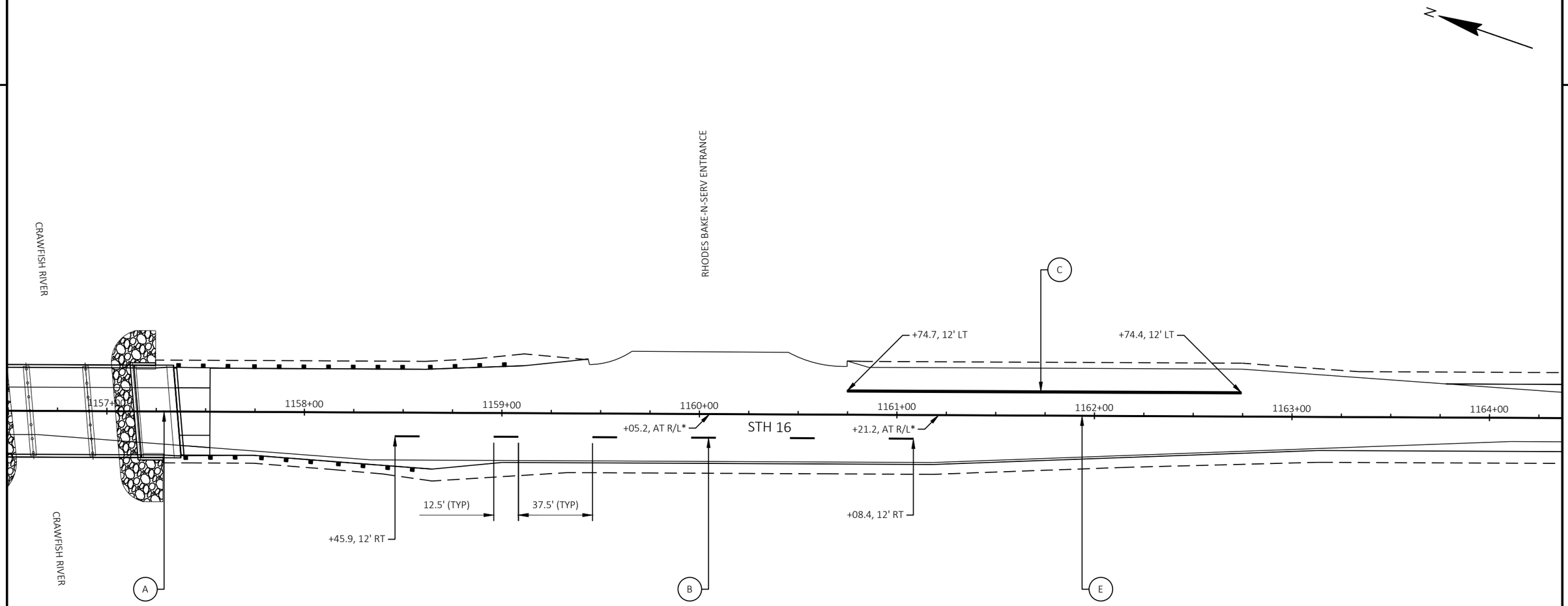
A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 97	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 11
PLOT DATE : 7/9/2021 12:31 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



*NOTE: STA 1160+05.2 - END DOUBLE YELLOW CENTERLINE LANE MARKINGS;
BEGIN SOLID LEFT/RIGHT DASHED CENTERLINE MARKINGS
STA 1161+21.2 - END SOLID LEFT/RIGHT DASHED CENTERLINE MARKINGS;
BEGIN DASHED CENTERLINE MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)
E	MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 98	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 12
PLOT DATE : 7/9/2021 12:31 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

SOLID YELLOW RIGHT/DASHED YELLOW LEFT

VITA PLUS ENTRANCE

B

A

+87.8, 12' LT

+87.8, 12' LT

1177+00

1178+00

1179+00

STH 16

1180+00

1181+00

1182+00

1183+00

1184+00

+22.3, AT R/L

+37.9, AT R/L

A

DUBORG ROAD

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

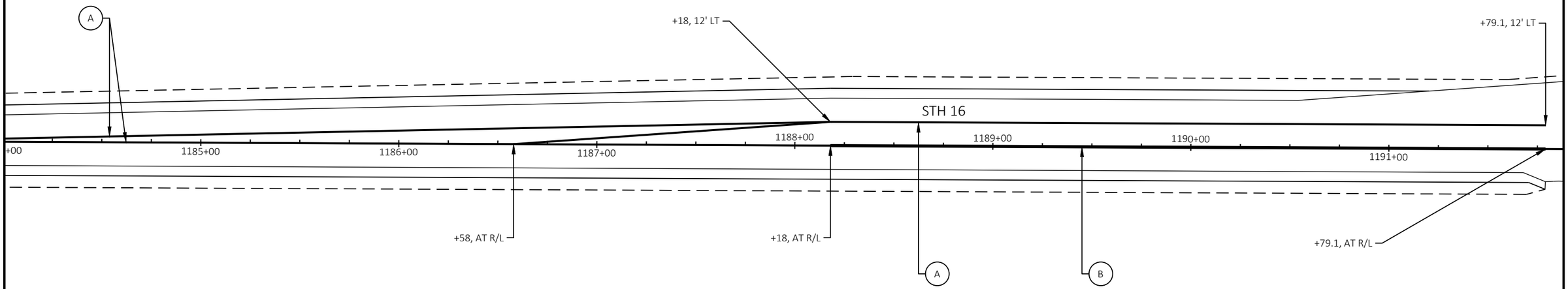
A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 99	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 13

PLOT DATE : 7/9/2021 12:31 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 100	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 14

PLOT DATE : 7/9/2021 12:31 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

DREXEL SUPPLY ENTRANCE

+84.5, 107.3' LT

A

+72.6, 60.7' LT

B

+56.2, 24' LT

+56.2, 12' LT

+56.2, AT R/L

STH 16

+01.2, 24' LT

+01.2, 12' LT

A

+51.2, 12' LT

1192+00 1193+00 1194+00 1195+00 1196+00 1197+00 1198+00 1199+00

A

+01.2, AT R/L

HALL ROAD

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 101	E

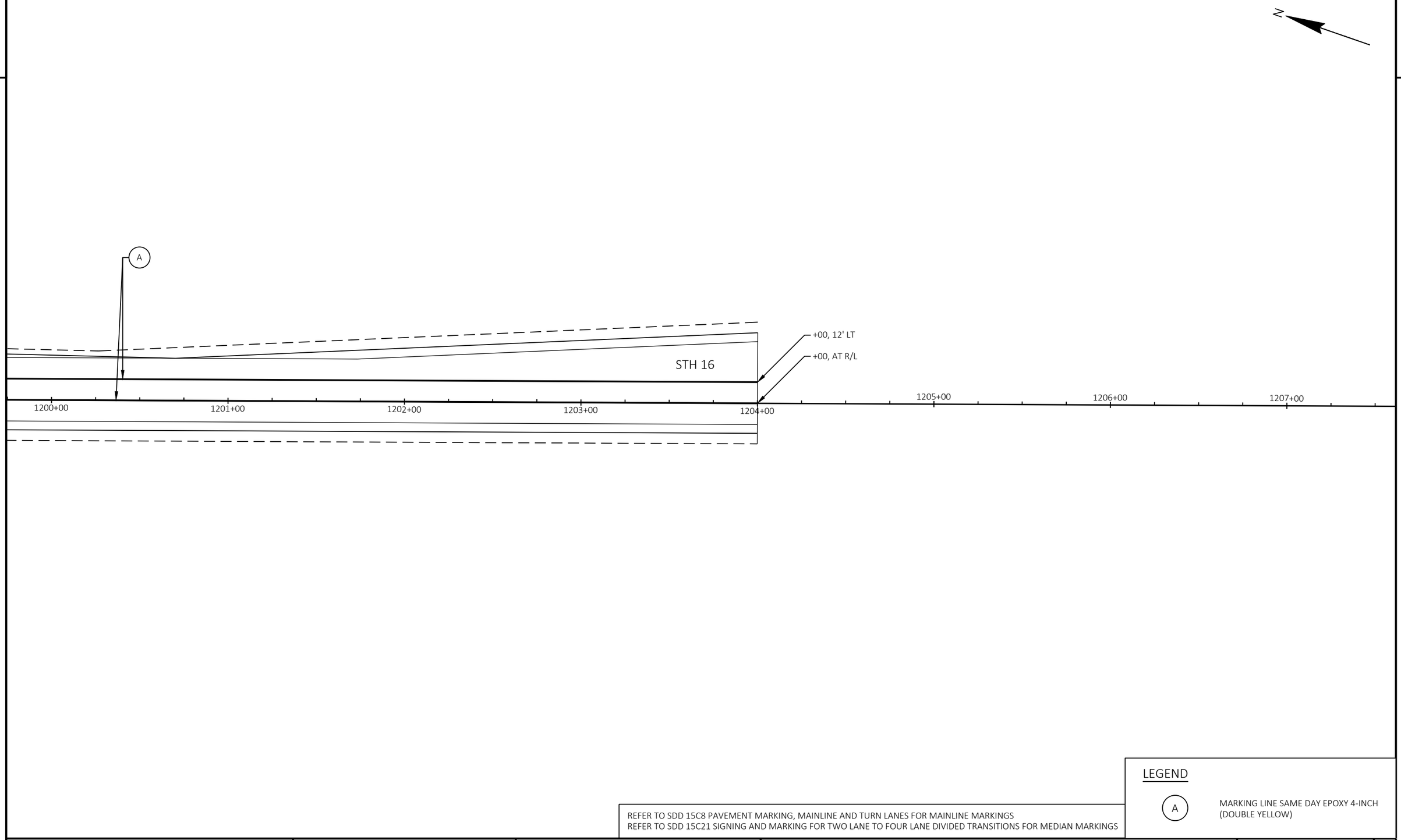
FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 15

PLOT DATE : 7/9/2021 12:31 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C21 SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS FOR MEDIAN MARKINGS

LEGEND

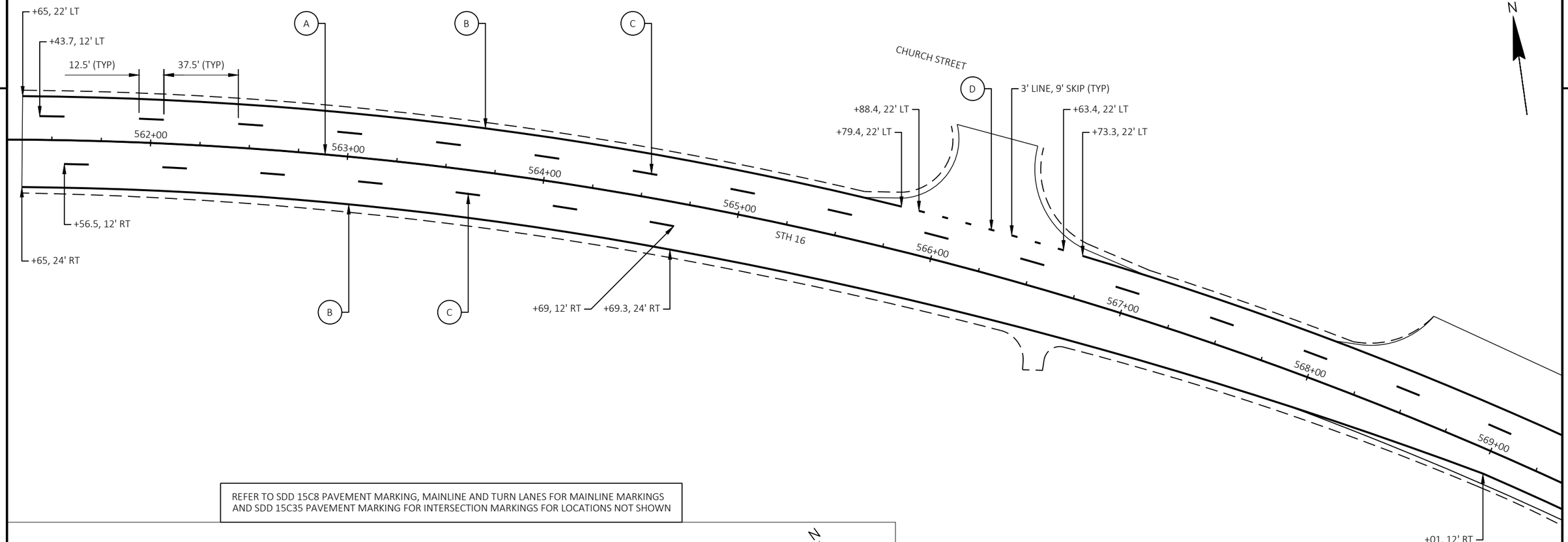
(A) MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPERHMA LAYER	SHEET 102	E

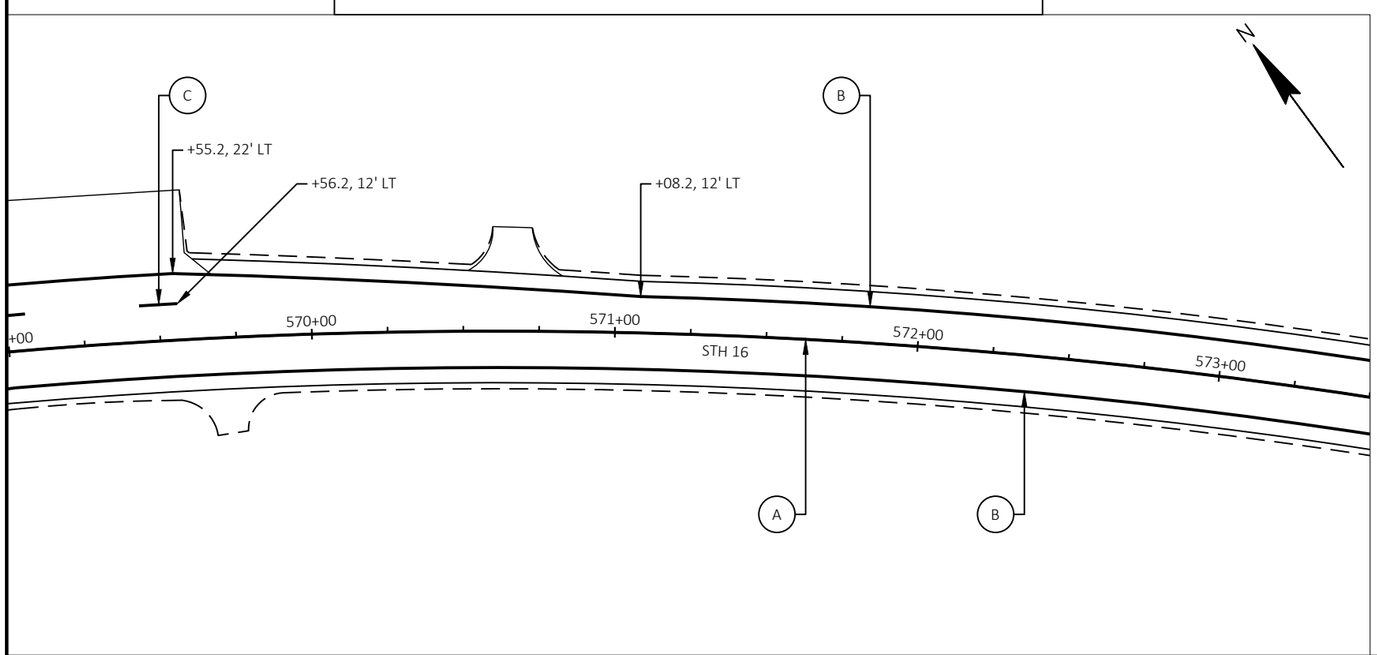
FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 16

PLOT DATE : 7/9/2021 12:31 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS AND SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS FOR LOCATIONS NOT SHOWN



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)		
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)		

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 103	E

2

2

N

CTH B / LONG CROSSING ROAD

A
B
+18.8, 12' LT
+05.1, 23' LT
+51.6, 12' LT
C
3' LINE, 9' SKIP (TYP)
+98.8, 12' LT
+01.8, 12' LT
A
B

601+00
602+00
603+00
604+00
STH 16
605+00
606+00
607+00
608+00

B
+78, 12' RT
+81, 12' RT
C
+32, 12' RT
3' LINE, 9' SKIP (TYP)
+91.8, 19.6' RT
+49, 12' RT
B

OLD COUNTY ROAD F

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

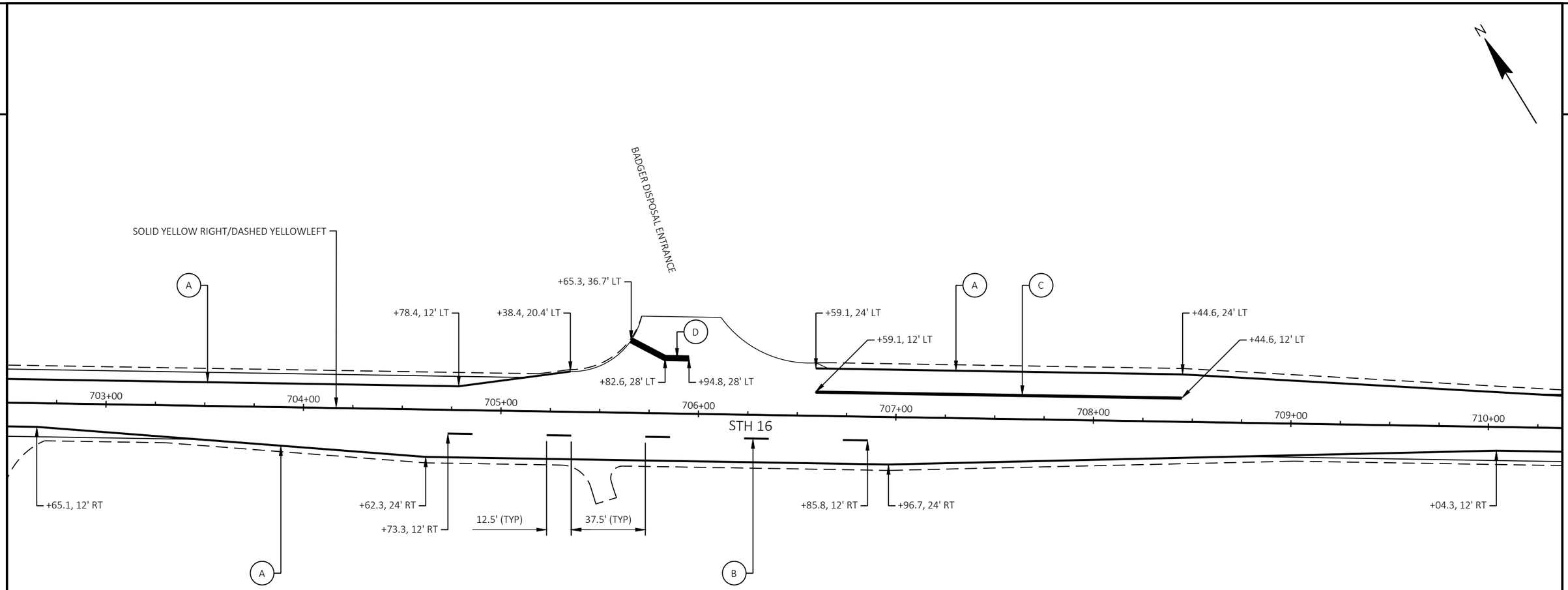
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 104	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 12:34 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



NOTE: BEGIN RIGHT TURN BAY TAPER LANE MARKING AT STA 711+44.6, 12' LT FOR BADGER DISPOSAL RIGHT TURN LANE

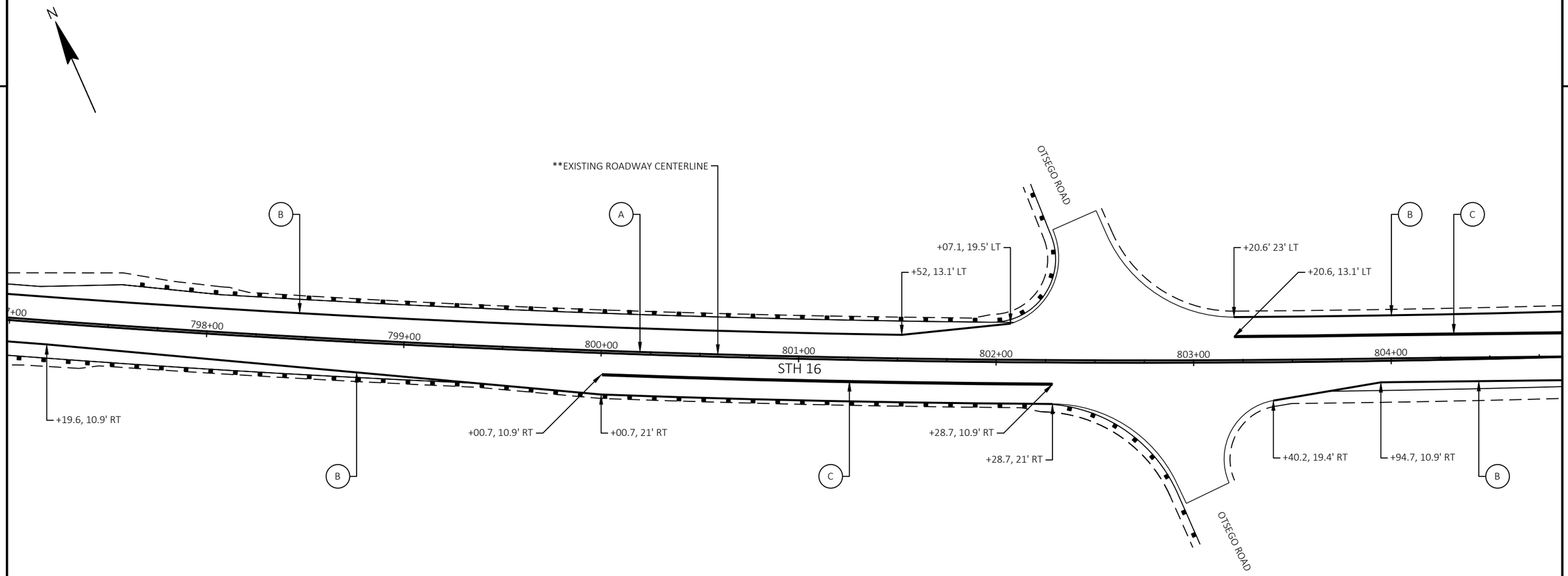
LEGEND

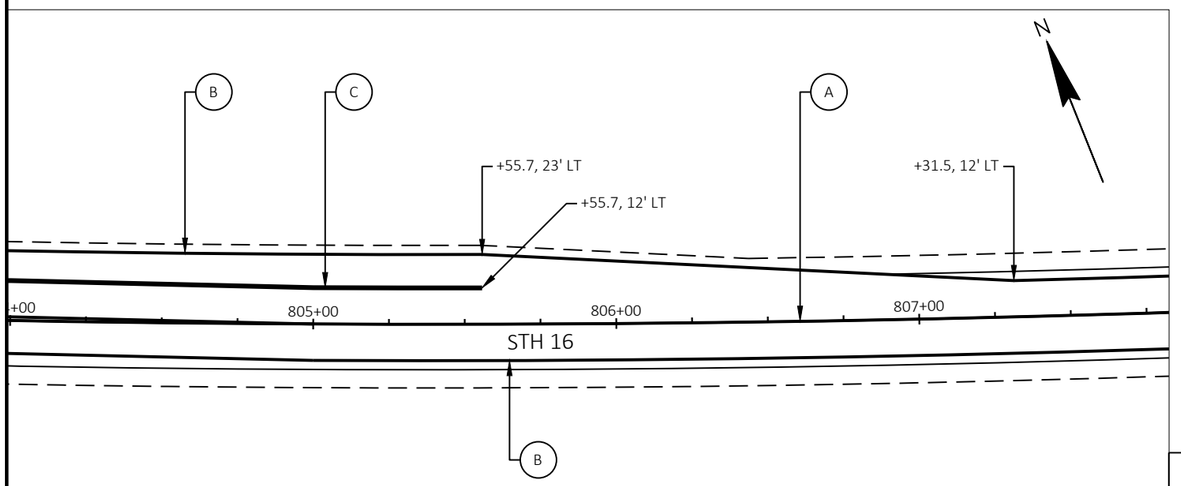
- (A) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- (B) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
- (C) MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
- (D) MARKING STOP LINE EPOXY 18-INCH

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 105	E

2





**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1'-1.2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 106	E

2

N

+63.3, 148.7' LT
+74.6, 149.6' LT
+85.9, 150.6' LT
F
F
A
CTH A
+71.5, 62.2' LT
+00.2, 73.1' LT
+61.9, 37.6' LT
+32.9, 23.8' LT
+73.8, 12' LT
B
C
D
B
E
+77.1, 27' LT
+88.1, 28.2' LT
+62.2, 23' LT
+56.1, 23' LT
+92, 12' LT
+62.2, 12' LT
+56.1, 12' LT
+00
854+00
855+00
856+00
857+00
858+00
859+00
860+00
STH 16
+84.2, 12' RT
+20.9, 12' RT
+20.9, 22' RT
+28.2, 12' RT
+28.2, 22' RT
+98.7, 30.1' RT
+09.6, 29' RT
E
+59, 23.2' RT
+37.6, 12' RT
+27.9, 35.9' RT
B
D
B
+89.1, 70.4' RT
+17.5, 67.8' RT
CTH A
A
+02.4, 154.9' RT
+25.6, 152.9' RT
+14, 153.9' RT

LEGEND

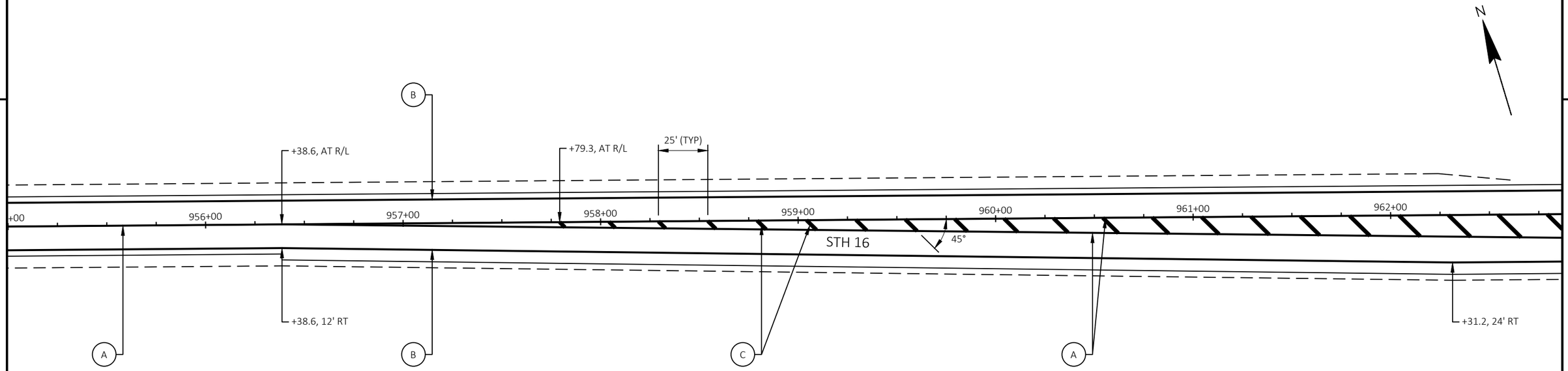
A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING STOP LINE EPOXY 18-INCH
C	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)	F	MARKING LINE EPOXY 4-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 107	E

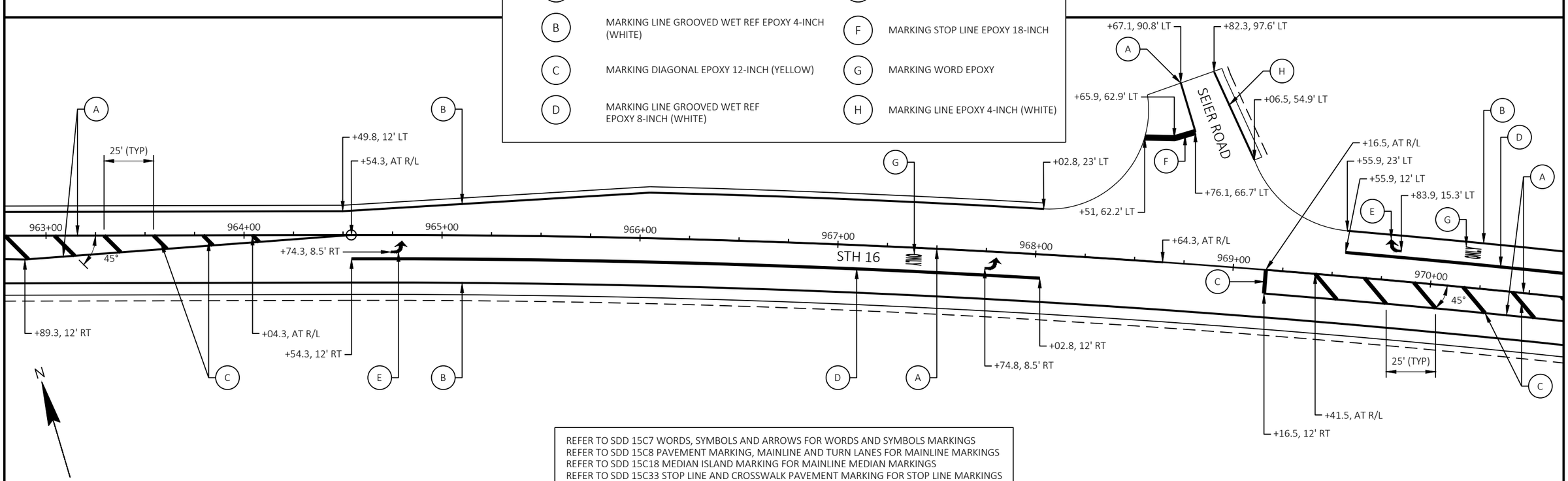
FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 05
PLOT DATE : 7/9/2021 12:34 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

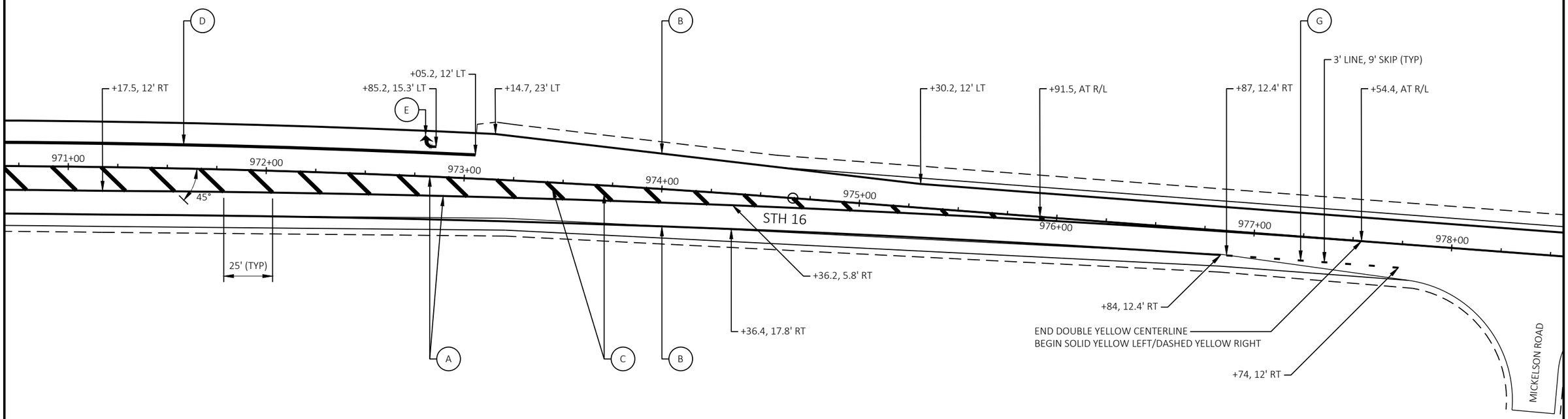
A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	E	MARKING ARROW EPOXY
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	F	MARKING STOP LINE EPOXY 18-INCH
C	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	G	MARKING WORD EPOXY
D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)	H	MARKING LINE EPOXY 4-INCH (WHITE)



REFER TO SDD 15C7 WORDS, SYMBOLS AND ARROWS FOR WORDS AND SYMBOLS MARKINGS
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 108	E

2



LEGEND

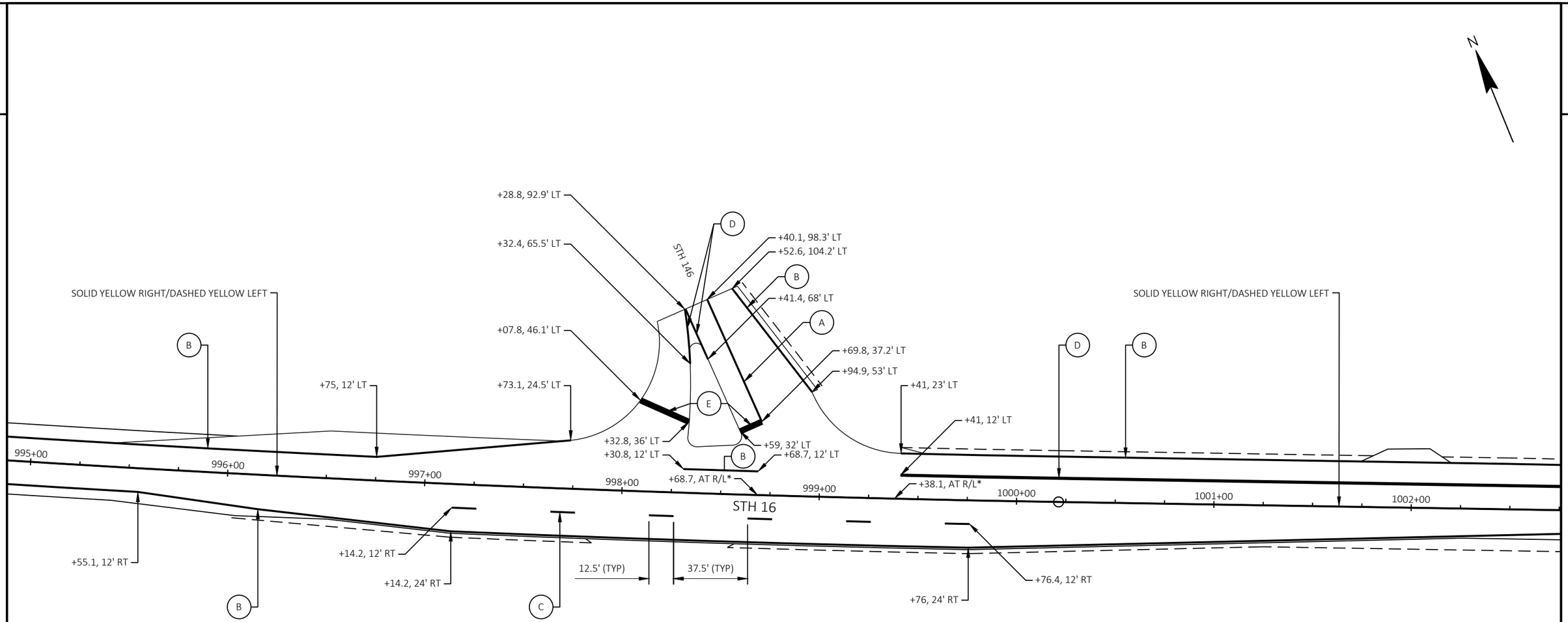
A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING ARROW EPOXY
C	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	F	MARKING STOP LINE EPOXY 18-INCH
G	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)		

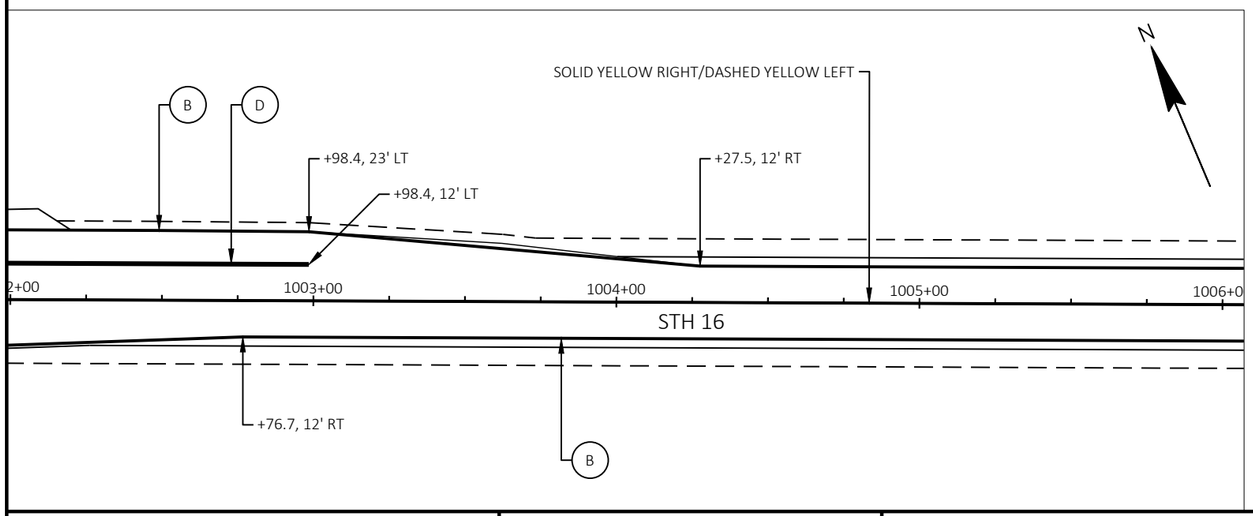
REFER TO SDD 15C7 WORDS, SYMBOLS AND ARROWS FOR WORDS AND SYMBOLS MARKINGS
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 109	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 07
PLOT DATE : 7/9/2021 12:34 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2





*NOTE: END CENTERLINE LANE MARKINGS AT STA 998+68.7
BEGIN CENTERLINE LANE MARKINGS AT STA 999+38.1

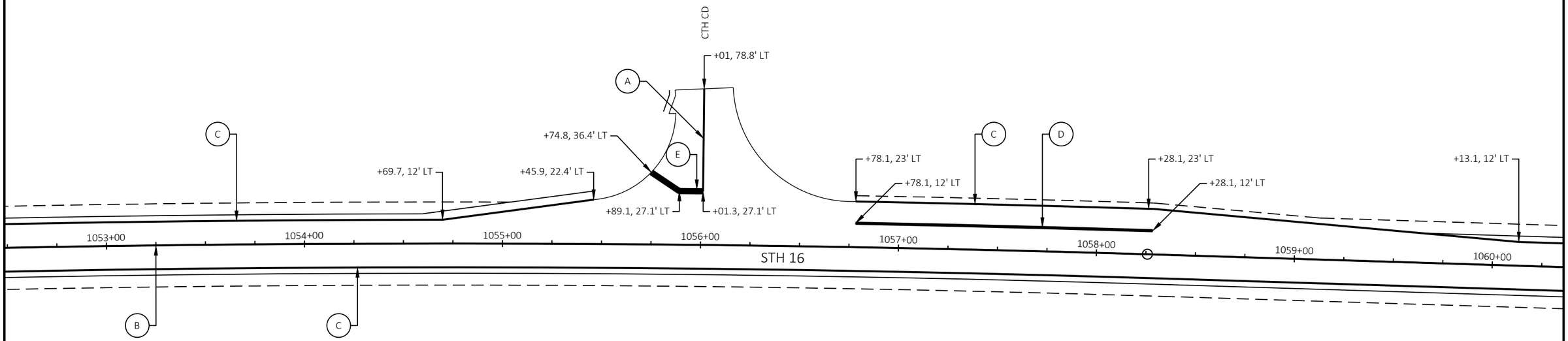
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING STOP LINE EPOXY 18-INCH
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)		

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 110	E

2



LEGEND

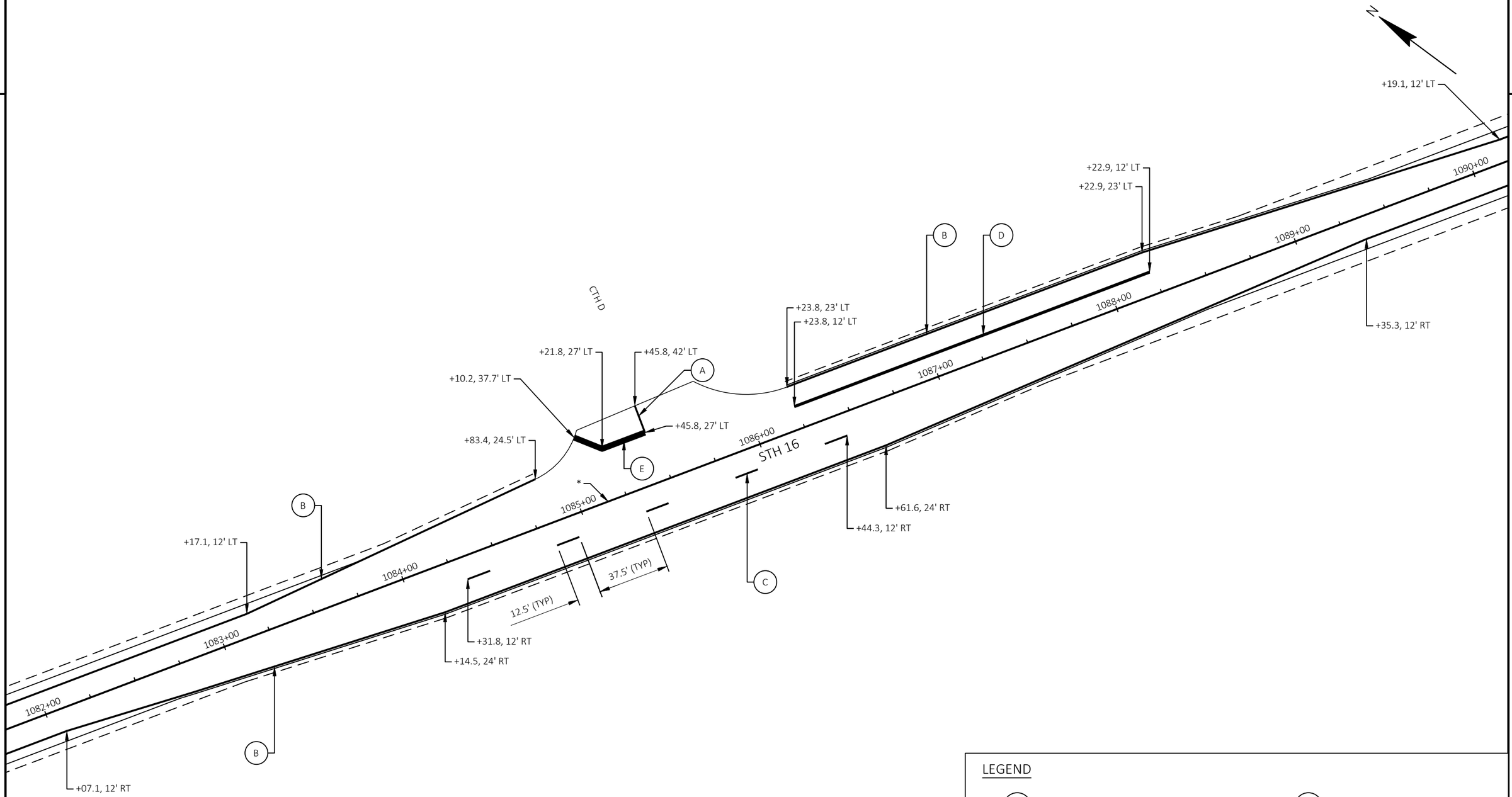
A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)	E	MARKING STOP LINE EPOXY 18-INCH
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)		

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 111	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 09
PLOT DATE : 7/9/2021 12:35 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



*NOTE: STA 1085+15 - END DASHED YELLOW LEFT/SOLID YELLOW RIGHT CENTERLINE; BEGIN DASHED YELLOW CENTERLINE.

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING STOP LINE EPOXY 18-INCH
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)		

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 112	E

2

N

MCCRAE ROAD

A

B

+62.2, 12' LT

+47.2, 18.2' LT

B

C

+83.3, 23' LT

+83.3, 12' LT

+89, 12' LT

+89, 12' LT

+86, 12' LT

1104+00 1105+00 1106+00 1107+00 1108+00 1109+00 1110+00 1111+00

STH 16

B

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)

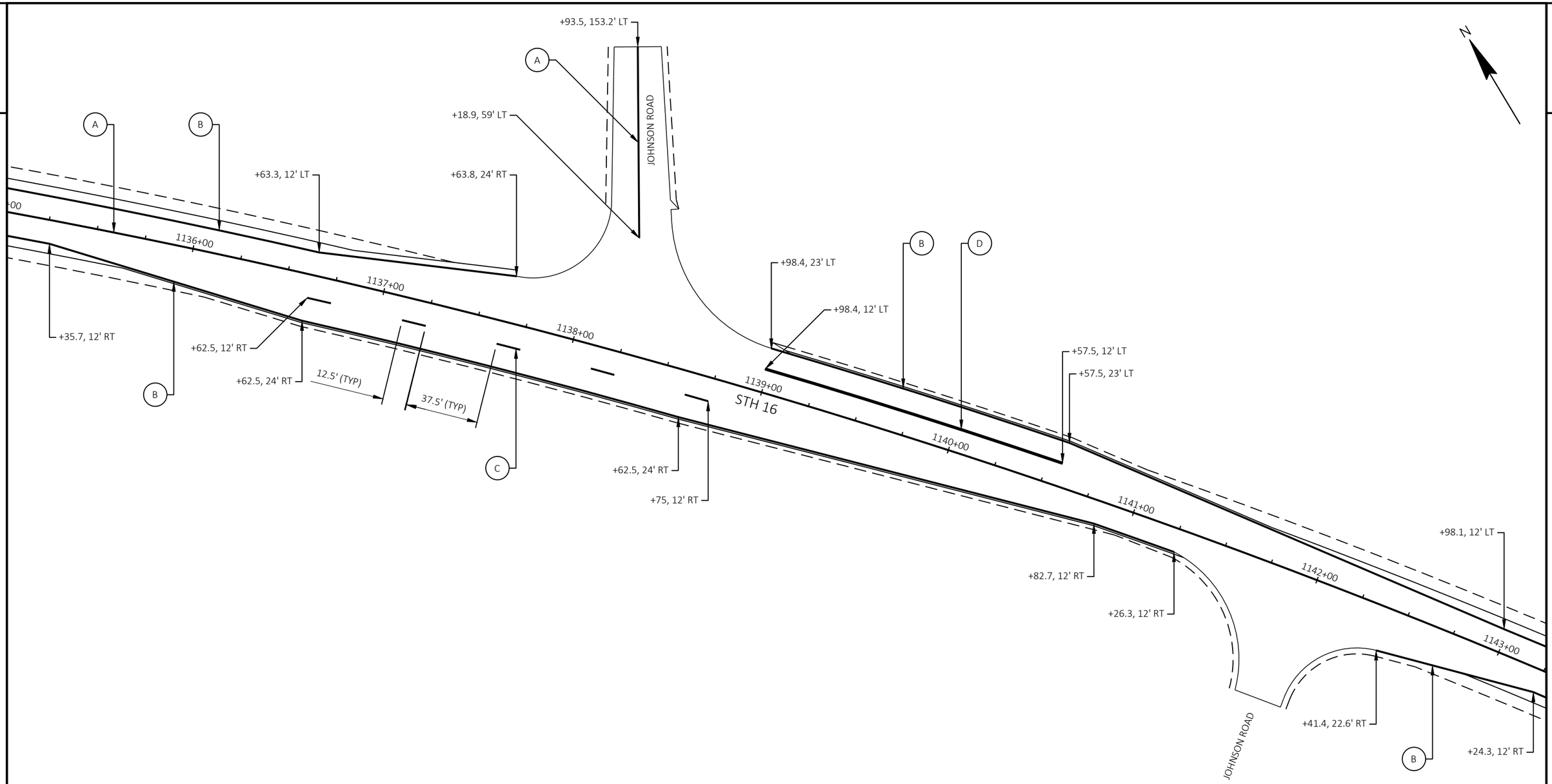
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 113	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 11

PLOT DATE : 7/9/2021 12:35 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



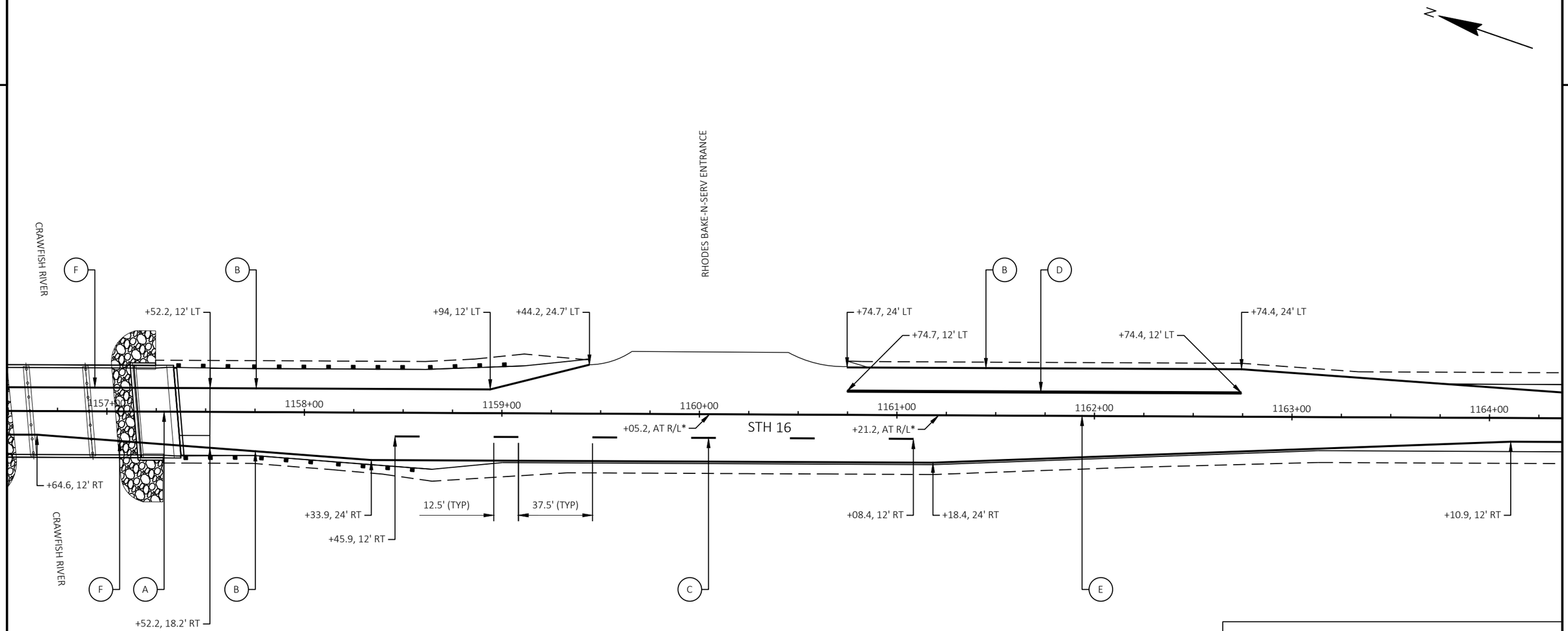
LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)		
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)		

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 114	E

2



NOTE: BEGIN RIGHT TURN BAY TAPER LANE MARKING AT STA 1164+51.7, 12' LT FOR RHODES BAKE-N-SERV RIGHT TURN LANE

NO GROOVED MARKINGS BETWEEN STA 1156+00.4 AND STA 1157+52.1 (CONCRETE APPROACHES AND BRIDGE DECK)

*NOTE: STA 1160+05.2 - END DOUBLE YELLOW CENTERLINE LANE MARKINGS; BEGIN SOLID LEFT/RIGHT DASHED CENTERLINE MARKINGS
STA 1161+21.2 - END SOLID LEFT/RIGHT DASHED CENTERLINE MARKINGS; BEGIN DASHED CENTERLINE MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)	F	MARKING LINE EPOXY 4-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 115	E

2

2

N

SOLID YELLOW RIGHT/DASHED YELLOW LEFT

VITA PLUS ENTRANCE

B

+82.4, 12' LT

+62.4, 24' LT

B

C

+87.8, 24' LT

+87.8, 12' LT

+87.8, 24' LT

+87.8, 12' LT

A

D

+37.8, 12' LT

1177+00

1178+00

1179+00

STH 16

1180+00

1181+00

1182+00

1183+00

1184+00

+22.3, AT R/L

+58.3, 12' RT

+55.3, 12' RT

+29.3, 12' RT

+66, 17.9' RT

+96.3, 12' RT

+37.9, AT R/L

+09.6, AT R/L

B

E

3' LINE, 9' SKIP (TYP)

DUBORG ROAD

A

B

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)		

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

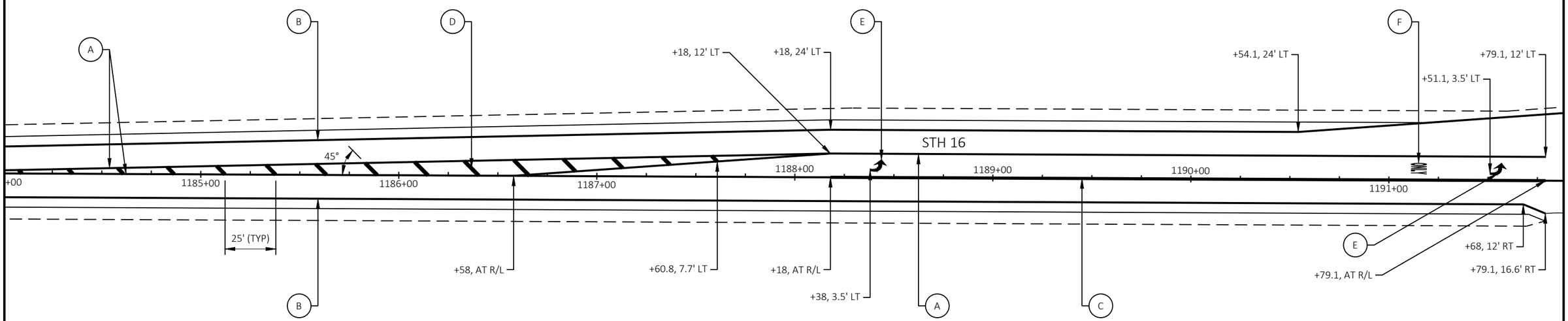
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 116	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 14

PLOT DATE : 7/9/2021 12:35 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



REFER TO SDD 15C7 WORDS, SYMBOLS AND ARROWS FOR WORDS AND SYMBOLS MARKINGS
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	D	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING ARROW EPOXY
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)	F	MARKING WORD EPOXY

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 117	E

2

N

DREXEL SUPPLY ENTRANCE

+71.6, 101.2' LT

+84.5, 107.3' LT

+69.4, 92.5' LT

+12.6, 36' LT

+62, 63.4' LT

+72.6, 60.7' LT

+56.2, 36' LT

+84.2 15.5' LT

+56.2, 24' LT

+56.2, 12' LT

+56.2, AT R/L

STH 16

+81.2, 27.5' LT

+01.2, 36' LT

+01.2, 24' LT

+01.2, 12' LT

+51.2, 24' LT

+51.2, 12' LT

45°

1192+00

1193+00

1194+00

1195+00

1196+00

1197+00

1198+00

1199+00

+84.2, 8.5' LT

+01.2, AT R/L

+81.2, 8.5' LT

+59.1, AT R/L

25' (TYP)

+20.8, 17.4' RT

+45.2, 12' RT

HALL ROAD

A B C D E F G H

LEGEND

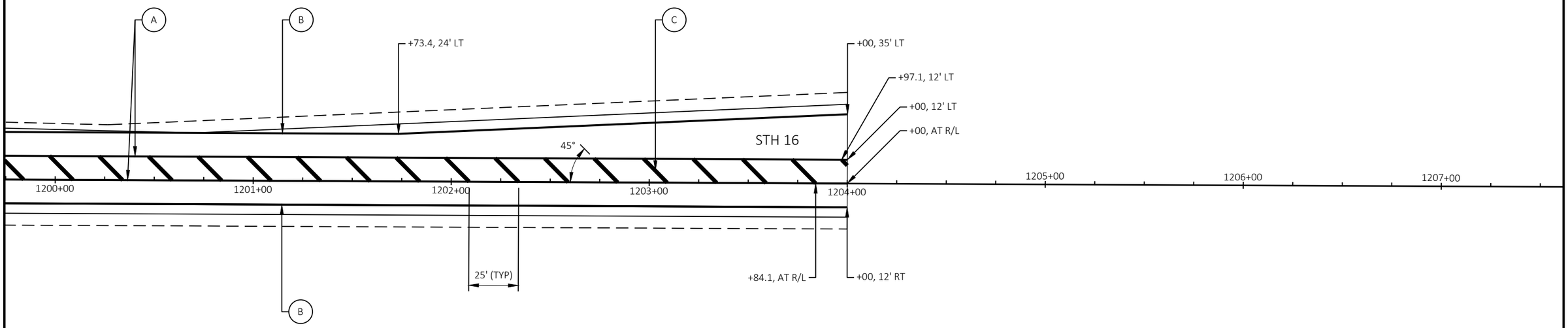
A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)	E	MARKING ARROW EPOXY
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	F	MARKING WORD EPOXY
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)	G	MARKING LINE EPOXY 8-INCH (WHITE)
D	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	H	MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)

REFER TO SDD 15C7 WORDS, SYMBOLS AND ARROWS FOR WORDS AND SYMBOLS MARKINGS
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C18 MEDIAN ISLAND MARKING FOR MAINLINE MEDIAN MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 118	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 16
PLOT DATE : 7/9/2021 12:35 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C21 SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS FOR MEDIAN MARKINGS

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 119	E

SEE SDD15C04 TRAFFIC CONTROL , ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC FOR ROAD WORK AHEAD SIGN PLACEMENT

COORDINATE TRAFFIC CONTROL SIGNING AND PLACEMENT WITH PROJECT 1400-01-73 TO AVOID WORK ZONE OVERLAPS DUE TO CONTRACTOR WORKING OPERATIONS

SEE SDD15C04 TRAFFIC CONTROL , ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC FOR ROAD WORK AHEAD SIGN PLACEMENT

FRAME 1	FRAME 2
ROAD WORK TO BEGIN	XX/XX/XX

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

WORK ZONE

A

CENTER OF ROADWAY

MAINLINE ROADWAY UNDER CONSTRUCTION

200' MIN.

500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSEST

GROOVED PAVEMENT

WO8-52

ROAD WORK AHEAD

W20-1A

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STAGE 1	SHEET 120	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\025001-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:41 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 42

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

ADJUST ADVANCED WIDTH SIGNING TO FIT FIELD CONDITIONS, WITHIN THE DETOUR ROUTE SIGNING AND IN ACCORDANCE WITH SDD15C02 BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTION.

LEGEND

WORK ZONE

DETOUR ROUTE (SEE DETOUR OVERVIEW PLAN AND DETOUR PLAN)

A

LAST INTERSECTION PRIOR TO CLOSURE

ROAD WORK AHEAD W20-1A

ROAD CLOSED 500 FT W20-3D

R11-4 60"X 30" ROAD CLOSED TO THRU TRAFFIC

TYPE III BARRICADE

500'

BRIDGE OUT XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3B 60"X30"

SEE DETOUR PLAN OVERVIEW FOR LOCATIONS

ROAD CLOSED 500 FT W20-3D

ROAD WORK AHEAD W20-1A

LAST INTERSECTION PRIOR TO CLOSURE

* GROOVED PAVEMENT WO8-52

PLACE SIGN A MIN. OF 200' IN ADVANCE OF INTERSECTION AND A MIN. OF 200' AFTER SIGN W20-3D

SEE SDD15C03 BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

SOUTH COUNTY A M3-3 24"X12" M1-5A 24"X24"

MAX. 11' WIDTH W12-52 48"X48"

6 MILES AHEAD WO57-52 36"X24"

3 MILES AHEAD WO57-52 36"X24"

2 1/2 MILES AHEAD WO57-52 36"X24"

1 1/2 MILES AHEAD WO57-52 36"X24"

1/2 MILES AHEAD WO57-52 36"X24"

NORTH COUNTY A M3-1 24"X12" M1-5A 24"X24"

SEE DETOUR PLANS FOR MESSAGE BOARD ADVANCED WARNING

PLACE IN STH 16 WB MEDIAN WITHIN LEFT TURN BAY TO STH 60 WB

5 1/2 MILES AHEAD WO57-52 36"X24"

Rio · Doylestown · Otsego · Fountain Prairie · Crawfish · Lazy L. · Fall R · OTSEGO · COLUMBUS · Columbus

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING - STAGE 2	SHEET 121 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\025002-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:42 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 42

FULL DEPTH MILLING AND PAVING LOCATION (STA 611+00 - STA 618+00)
LOWER LIFT OF HMA MUST BE PLACED BY THE END OF THE WORKING DAY PRIOR TO OPENING TO TRAFFIC

SEE OTHER TRAFFIC CONTROL DETAILS
FOR NON-WORKING HOURS SHOULDER CLOSURE

FULL DEPTH MILLING AND PAVING LOCATION (STA 795+00 - STA 803+11)
LOWER LIFT OF HMA MUST BE PLACED BY THE END OF THE WORKING DAY PRIOR TO OPENING TO TRAFFIC

SEE OTHER TRAFFIC CONTROL DETAILS
FOR NON-WORKING HOURS SHOULDER CLOSURE

LEGEND

WORK ZONE

(A) SEE SDD 15C12 TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

(B) SEE SDD 15C19 MOVING PAVEMENT MARKING OPERATIONS

(C) SEE SDD 15D39 TRAFFIC CONTROL, DROP OFF SIGNING

(D) SEE SDD 15D44 TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

LIMIT MILLING AND PAVING WORK ZONES TO 2 MILES IN LENGTH. A SECOND MILLING AND PAVING OPERATION MAY OCCUR WITH A 5 MILE BUFFER SPACE BETWEEN THEM.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - RESURFACING AND LANE MARKING OPERATIONS - STAGE 1	SHEET 122	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:42 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 42

LEGEND

- WORK ZONE
- DETOUR ROUTE (SEE DETOUR OVERVIEW PLAN AND DETOUR PLAN)
- (A) SEE SDD 15C12 TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
- (B) SEE SDD 15C19 MOVING PAVEMENT MARKING OPERATIONS
- (C) SEE SDD 15D39 TRAFFIC CONTROL, DROP OFF SIGNING
- (D) SEE SDD 15D44 TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - RESURFACING AND LANE MARKING OPERATIONS - STAGE 2	SHEET 123 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\025004-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2021 2:43 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

2

2

N

LONG CROSSING ROAD/CTH B

500'

500'

127' TAPER LENGTH

335' BUFFER SPACE

100' (TYP)

606 608 610 612 STH 16 614 616 618 620

PI F 607+76.21

5 DRUMS SPACED AT 25' MAX

MAINTAIN ACCESS FOR PRIVATE ENTRANCE

RIGHT SHOULDER CLOSED AHEAD W21-5B

RIGHT SHOULDER CLOSED W21-5A

OLD F ROAD

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

WORK ZONE

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

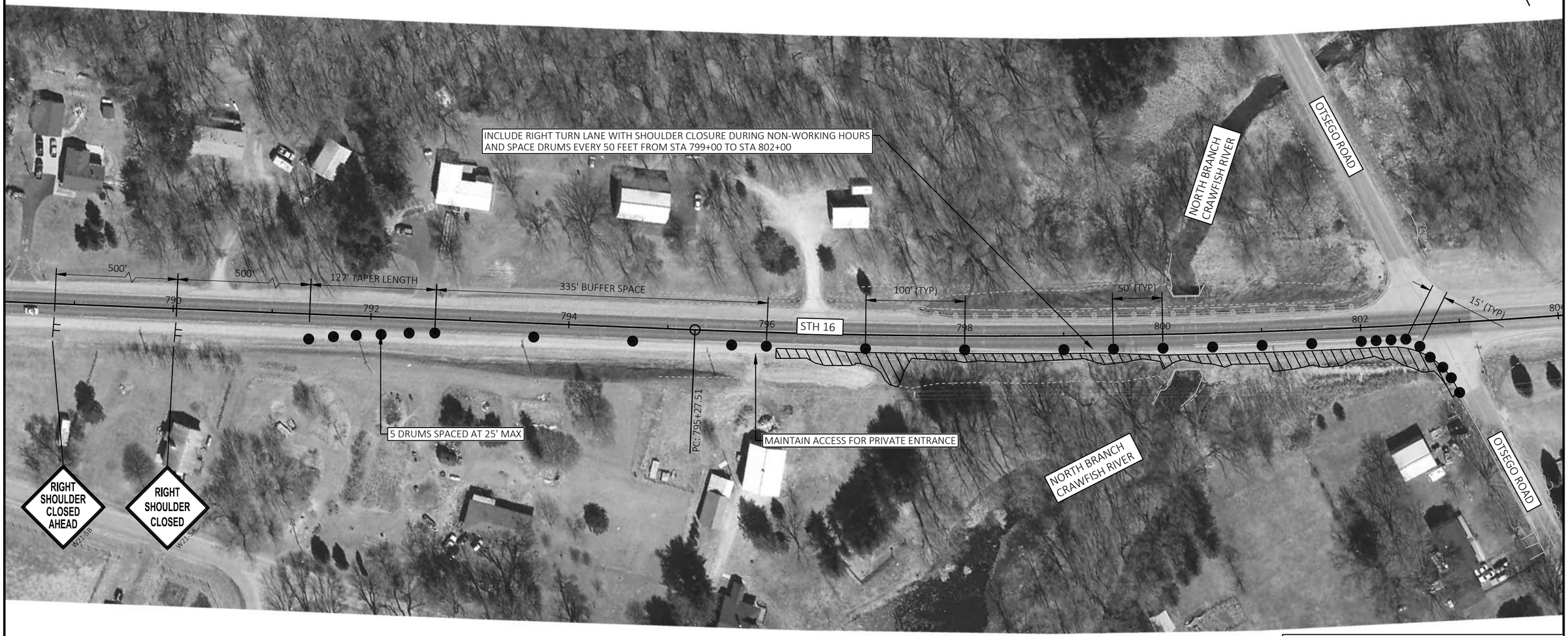
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 124	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 2:45 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

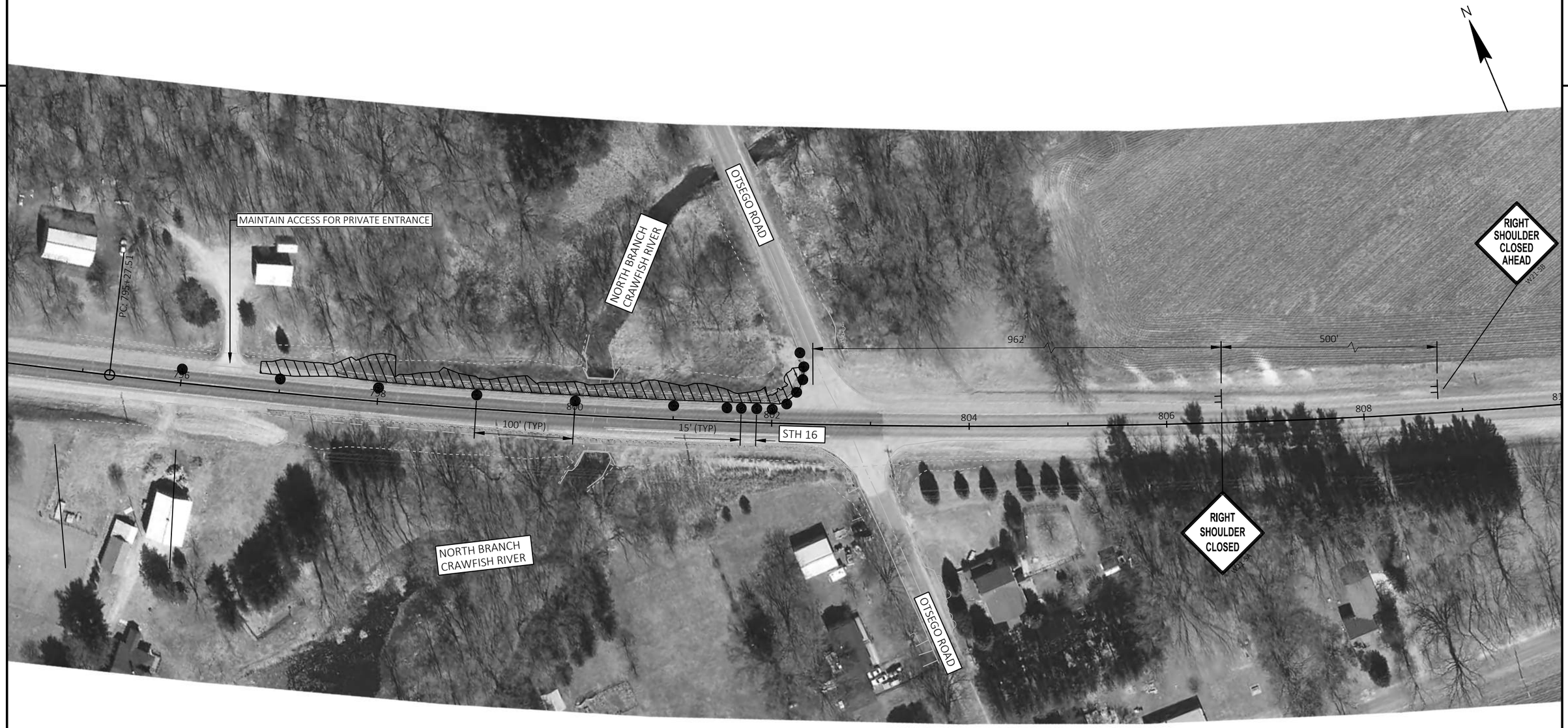
- WORK ZONE
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 125	E

2



ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

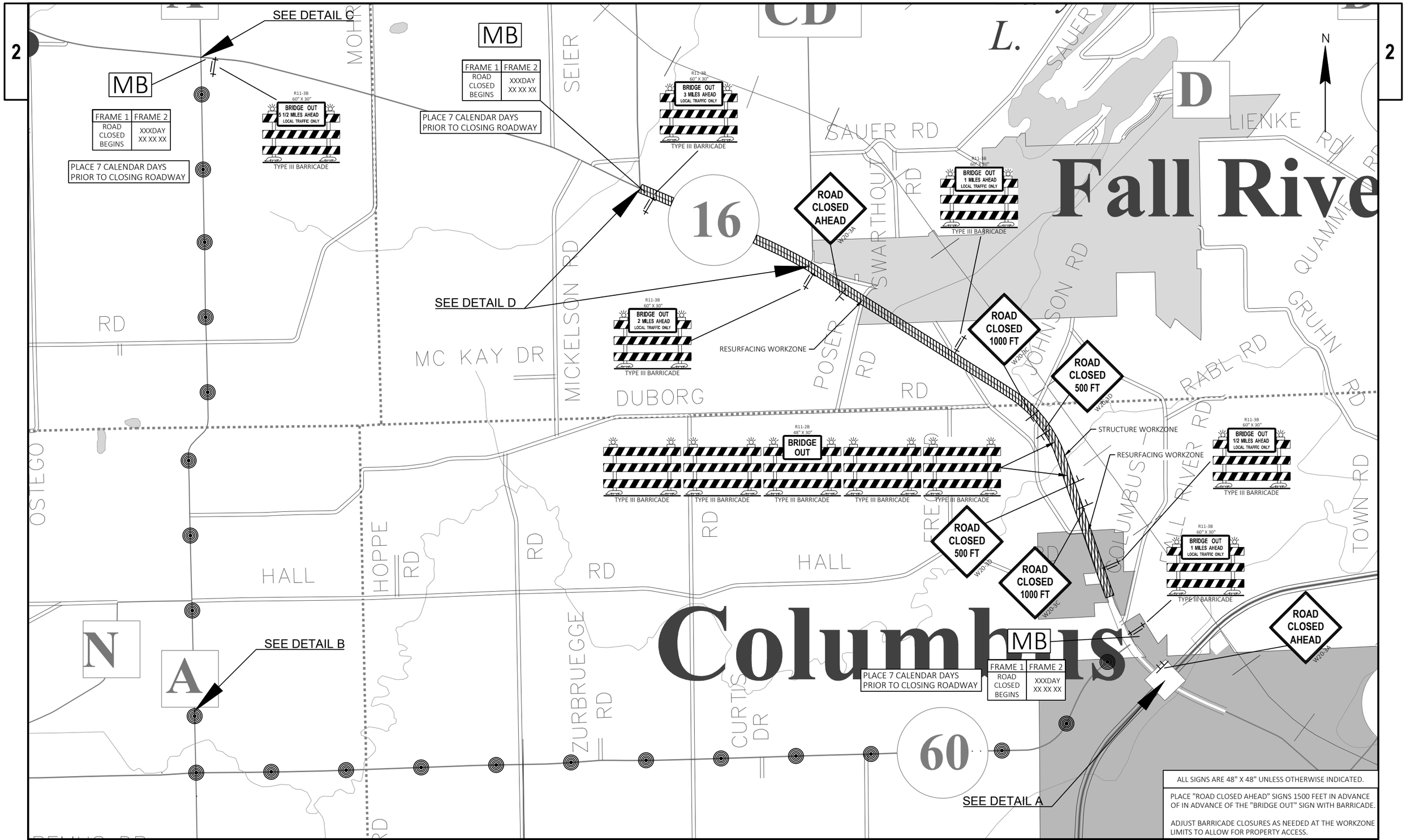
LEGEND

- WORK ZONE
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 126	E

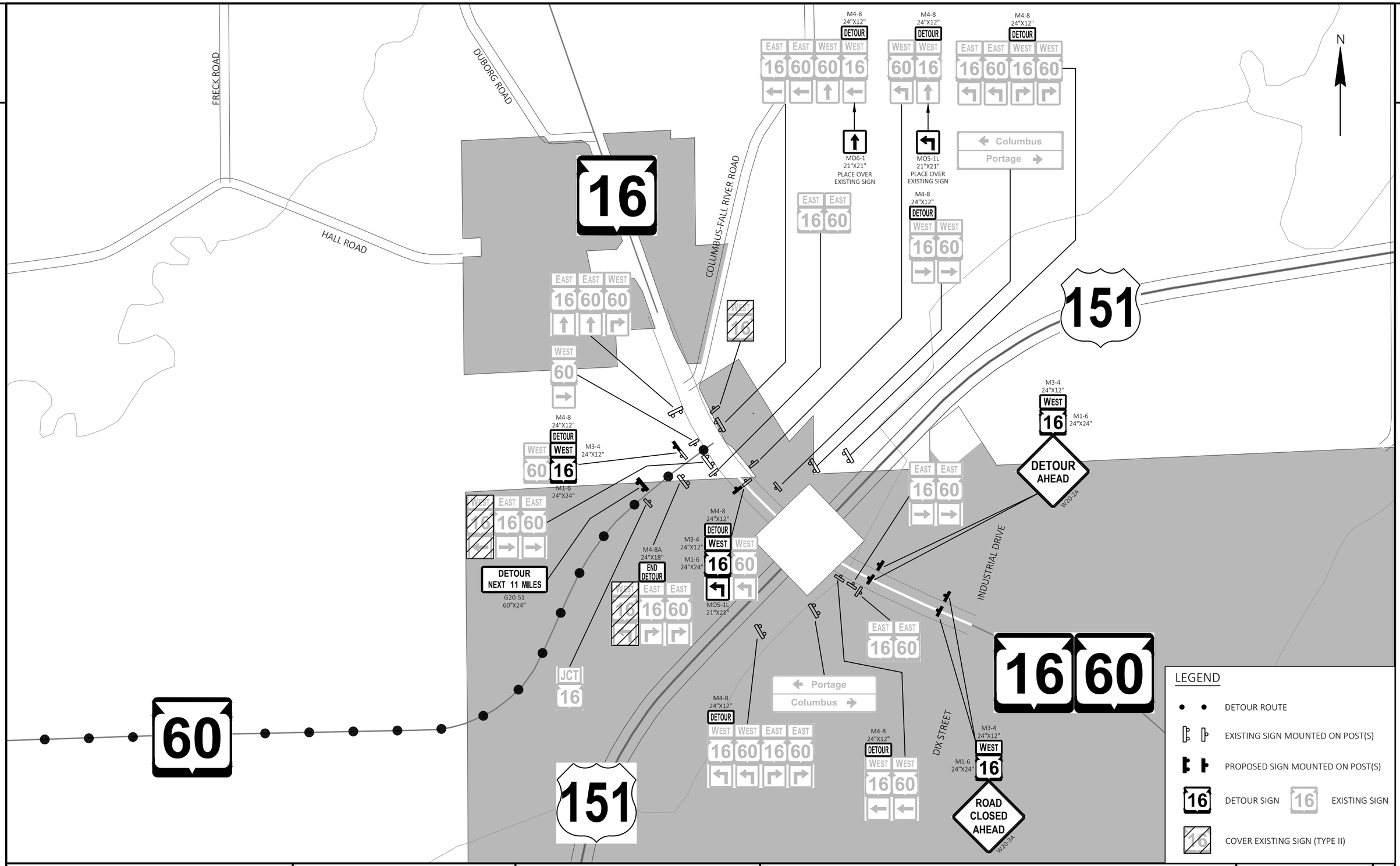


PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN OVERVIEW	SHEET 127	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:44 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

WISDOT/CADDS SHEET 42



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - DETAIL A	SHEET 128	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:45 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

2

N

OTSEGO ROAD

HALL ROAD

HALL ROAD

HALL ROAD

COUNTY N

COUNTY A

60

PARPART ROAD

COUNTY A

JCT COUNTY N

COUNTY N

COUNTY A

COUNTY N

M4-8 24"X12" DETOUR WEST M3-4 24"X12" 16 M1-6 24"X24"

SEE OTHER DETOUR PLAN DETAILS FOR MORE INFORMATION

M4-8 24"X12" DETOUR EAST M3-2 24"X12" 16 M1-6 24"X24"

JCT COUNTY N

SEE OTHER DETOUR PLAN DETAILS FOR MORE INFORMATION

M4-8 24"X12" DETOUR WEST M3-4 24"X12" 16 M1-6 24"X24"

M4-8 24"X12" DETOUR EAST M3-2 24"X12" JCT 60 16 M1-6 24"X24" MO5-1L 21"X21"

M4-8 24"X12" DETOUR WEST M3-4 24"X12" COUNTY A 16 M1-6 24"X24" MO6-1 21"X21"

M4-8 24"X12" DETOUR WEST M3-4 24"X12" JCT COUNTY A 16 M1-6 24"X24" MO5-1R 21"X21"

M3-2 24"X12" EAST 16 M1-6 24"X24"

DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR EAST M3-2 24"X12" 60 16 M1-6 24"X24" MO6-1 21"X21"

JCT COUNTY A

WEST 60

JCT 60

M4-8 24"X12" DETOUR EAST M3-2 24"X12" EAST 60 16 M1-6 24"X24"

M3-2 24"X12" EAST 16 M1-6 24"X24"

DETOUR AHEAD W20-2A

M4-8 24"X12" DETOUR EAST M3-2 24"X12" 60 16 M1-6 24"X24" MO6-1 21"X21"

M4-8 24"X12" DETOUR EAST M3-2 24"X12" COUNTY A 16 M1-6 24"X24" MO6-1 21"X21"

60

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 16 DETOUR SIGN
- 16 EXISTING SIGN
- COVER EXISTING SIGN (TYPE II)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - DETAIL B	SHEET 129	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 12:45 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

2

FISCHER ROAD

OTSEGO ROAD

KING ROAD

COLUMBUS ROAD

COLUMBUS ROAD

BREEN ROAD

OTSEGO ROAD

GRADY ROAD

MOHR ROAD

MOORE ROAD

N

M3-2
24"X12"
EAST
16
M1-6
24"X24"
ROAD CLOSED AHEAD
W20-3A

M3-2
24"X12"
EAST
16
M1-6
24"X24"
ROAD CLOSED AHEAD
W20-3A

16

COUNTY
A

M3-4
24"X12"
WEST
M4-8
24"X12"
DETOUR
M3-2
24"X12"
EAST
16
M1-6
24"X24"
16
MO6-1
21"X21"
MO6-1
21"X21"
PLACE OVER
EXISTING SIGN

WEST
16

M3-2
24"X12"
EAST
16
M1-6
24"X24"
JCT
16
DETOUR AHEAD
W20-2A

M4-8
24"X12"
DETOUR
M3-2
24"X12"
EAST
COUNTY
A
16
M1-6
24"X24"
MO6-1
21"X21"

M4-8
24"X12"
DETOUR
M3-2
24"X12"
EAST
JCT
COUNTY
A
16
M1-6
24"X24"
MO5-1L
21"X21"

M3-2
24"X12"
EAST
16
M1-6
24"X24"
JCT
COUNTY
A
DETOUR AHEAD
W20-2A

M4-8
24"X12"
DETOUR
M3-2
24"X12"
EAST
COUNTY
A
16
M1-6
24"X24"
MO6-1
21"X21"

C16
16

M4-8A
24"X18"
END
DETOUR
WEST
M3-4
24"X12"
16
MO6-1
21"X21"
PLACE OVER
EXISTING SIGN

M4-8
24"X12"
DETOUR
EAST
M3-2
24"X12"
16
M1-6
24"X24"

DETOUR
NEXT 11 MILES
G20-51
60"X24"

16

COUNTY
A

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 16 DETOUR SIGN
- 16 EXISTING SIGN
- 16 COVER EXISTING SIGN (TYPE II)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - DETAIL C	SHEET 130	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 03

PLOT DATE : 7/9/2021 12:46 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

N

M4-8
24"X12"
DETOUR
EAST WEST
16 16

M5-1R
21"X21"
PLACE OVER
EXISTING SIGN

SEIRER ROAD

M3-2
24"X12"
EAST
16

M1-6
24"X24"

DETOUR
AHEAD
W20-2A

END JCT
146 16

146

PLACE OVER EXISTING ARROW
(PAID AS TRAFFIC CONTROL COVERING SIGNS TYPE II)

M3-2
24"X12"
EAST
16

M1-6
24"X24"

ROAD
CLOSED
AHEAD
W20-3A

A4-12
14"X14"

Columbus
Portage

M4-8
24"X12"
DETOUR
EAST WEST
16 16

M6-1
21"X21"
PLACE OVER
EXISTING SIGN

16

Portage 23

MICKELSON ROAD

NORTH EAST
146 16

NORTH
146

Cambria 11

Portage
Cambria

Columbus
Cambria

EAST
16

Columbus 2

16

M4-8
24"X12"
M3-2
24"X12"
DETOUR
EAST
WEST
16 16

M1-6
24"X24"

NORTH
146

MICKELSON ROAD

COUNTY
CD

SAUER ROAD

JCT
16

16

WEST
16

COUNTY
CD

COUNTY
CD

EAST
16

LEGEND

- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- 16 DETOUR SIGN
- 16 EXISTING SIGN
- 16 COVER EXISTING SIGN (TYPE II)

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - DETAIL D	SHEET 131	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027002-DT.DWG
LAYOUT NAME - 04

PLOT DATE : 7/9/2021 12:46 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1000 FT

2

N

2

WO8-57
48"X48"
NARROW SHOULDER

STOP AHEAD

CRAWFISH RIVER

MAINTAIN AN OPENING FOR ACCESS AT FIELD ENTRANCE ON SOUTHBOUND LANE

WO8-57
48"X48"
NARROW SHOULDER

3' (TYP)

CTH A

22' (TYP)

750'

15' (TYP)

22' (TYP)

CTH A

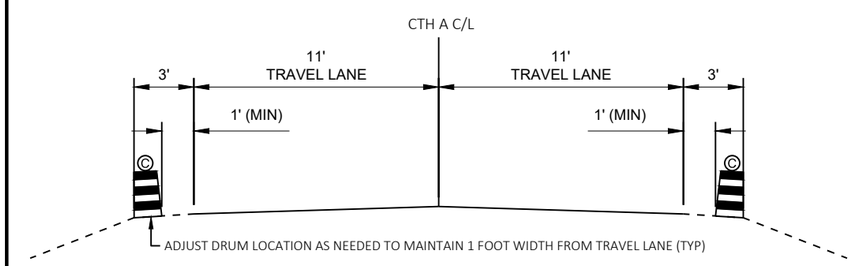
3' (TYP)

750'

CRAWFISH RIVER

PROVIDE 15 TRAFFIC DRUMS SPACED 15 FEET APART WITH TYPE C LIGHTS PRIOR TO OBJECT WARNING SIGNS IN ALL QUADRANTS AND A MINIMUM OF TWO (2) IN EACH DIRECTION OVER THE EXISTING BOX CULVERT (TYP)

EXISTING BOX CULVERT



CTH A ROADWAY SECTION

LEGEND

- DIRECTION OF TRAFFIC
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NARROW SHOULDER (WO8-57) — PROPOSED SIGN
- STOP AHEAD — EXISTING SIGN
- TRAFFIC DRUM WITH TYPE C LIGHT

NOTE: ADJUST SPACING OF DRUMS AND SIGNS AS NEEDED TO FIT FIELD CONDITIONS WITH WRITTEN APPROVAL FROM THE FIELD ENGINEER.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - CTH A AT CRAWFISH RIVER	SHEET 132	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\027003-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 12:55 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

WO8-57
48"X48"
NARROW SHOULDER

POND/OPEN WATER

ADJUST SIGN AS NEEDED AT CTH N/HALL ROAD INTERSECTION
TO AVOID CONFLICTS WITH EXISTING SIGNING

WO8-57
48"X48"
NARROW SHOULDER

W5-52L
12"X36"

W5-52R
12"X36"

3' (TYP)

CTH A

22' (TYP)

750'

15' (TYP)

750'

22' (TYP)

CTH A

3' (TYP)

JCT
COUNTY
N

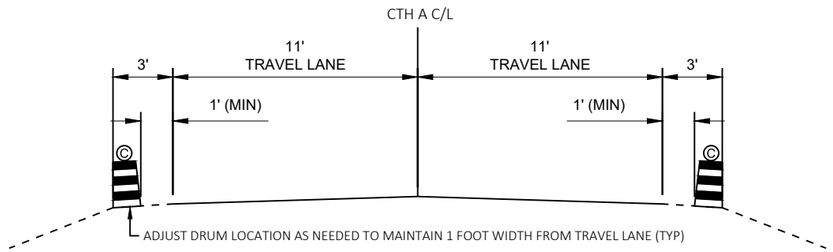
W5-52R
12"X36"

W5-52L
12"X36"

PROVIDE 15 TRAFFIC DRUMS SPACED 15 FEET APART WITH TYPE C LIGHTS PRIOR TO THE EXISTING CULVERT PIPE
IN ALL QUADRANTS AND A MINIMUM OF ONE (1) IN EACH DIRECTION OVER THE EXISTING CULVERT (TYP)

EXISTING CROSS CULVERT

WETLAND/OPEN WATER



CTH A ROADWAY SECTION

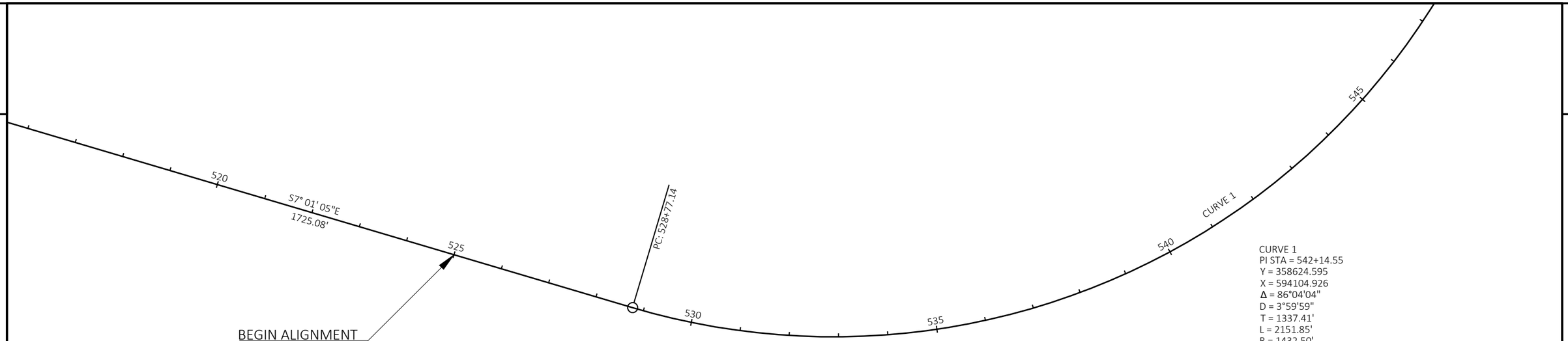
LEGEND

- DIRECTION OF TRAFFIC
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- NARROW SHOULDER (WO8-57) — PROPOSED SIGN
- COUNTY N — EXISTING SIGN
- TRAFFIC DRUM WITH TYPE C LIGHT

NOTE: ADJUST SPACING OF DRUMS AND SIGNS AS NEEDED TO FIT FIELD CONDITIONS WITH WRITTEN APPROVAL FROM THE FIELD ENGINEER. INSTALL W5-52R/L SIGNS PRIOR TO ESTABLISHING THE DETOUR ROUTE AND REMOVE SIGNS AFTER DETOUR IS NO LONGER IN USE. W5-52R/L SIGNS PAID AS TRAFFIC CONTROL SIGNS.

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	DETOUR PLAN - CTH A SOUTH OF CTH N/HALL ROAD INTERSECTION	SHEET 133	E

2



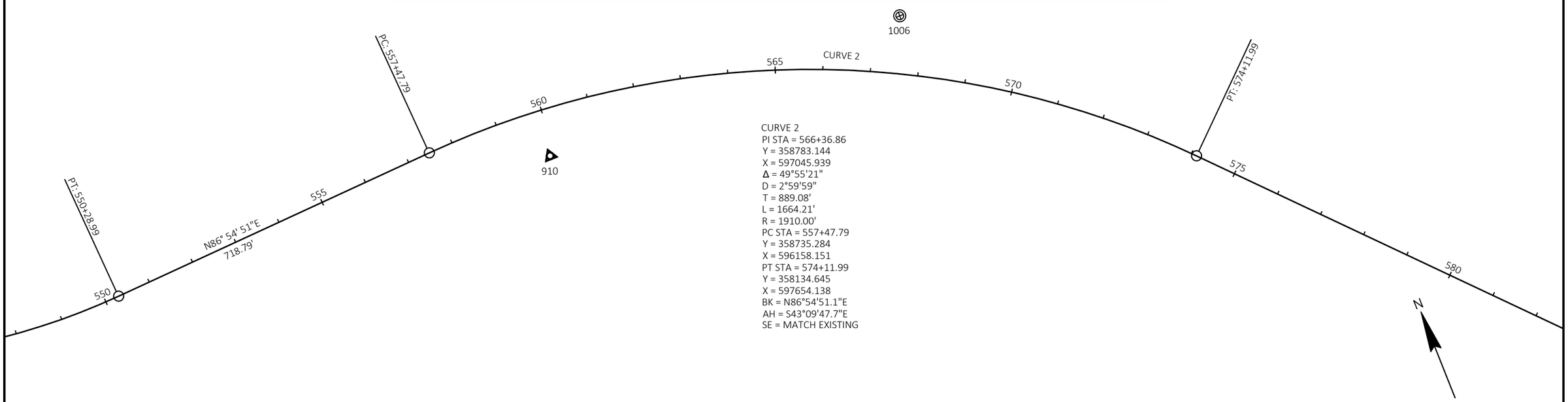
BEGIN ALIGNMENT
STA 525+00
X = 593895.44
Y = 360326.30

CURVE 1
PI STA = 542+14.55
Y = 358624.595
X = 594104.926
Δ = 86°04'04"
D = 3°59'59"
T = 1337.41'
L = 2151.85'
R = 1432.50'
PC STA = 528+77.14
Y = 359951.988
X = 593941.519
PT STA = 550+28.99
Y = 358696.590
X = 595440.400
BK = S07°01'04.9"E
AH = N86°54'51.1"E
SE = MATCH EXISTING

NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

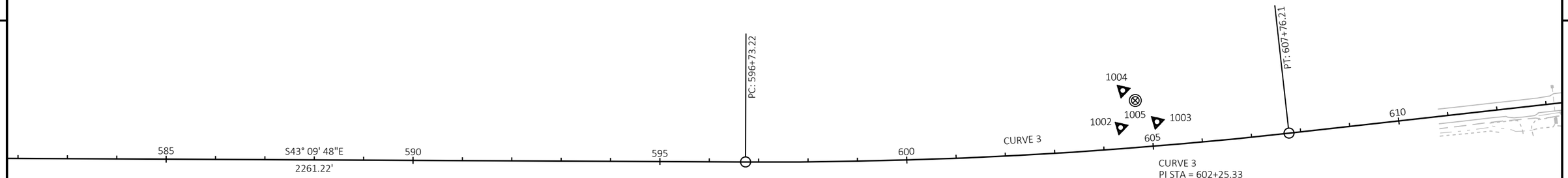
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
910	FENO MONUMENT	STA 559+87.73	97.16' RT	597182.927	358637.907	943.52
1006	COLUMBIA COUNTY SECTION MONUMENT	STA 567+50.54	121.15' LT	596390.962	358636.232	948.47



CURVE 2
PI STA = 566+36.86
Y = 358783.144
X = 597045.939
Δ = 49°55'21"
D = 2°59'59"
T = 889.08'
L = 1664.21'
R = 1910.00'
PC STA = 557+47.79
Y = 358735.284
X = 596158.151
PT STA = 574+11.99
Y = 358134.645
X = 597654.138
BK = N86°54'51.1"E
AH = S43°09'47.7"E
SE = MATCH EXISTING

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 134	E

2

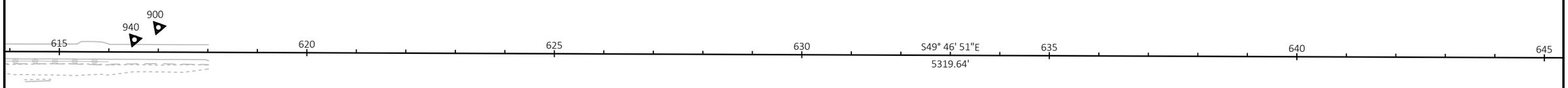


CURVE 3
PI STA = 602+25.33
Y = 356082.579
X = 599578.681
Δ = 6°37'03"
D = 0°36'00"
T = 552.11'
L = 1102.99'
R = 9550.00'
PC STA = 596+73.22
Y = 356485.291
X = 599200.994
PT STA = 607+76.21
Y = 355726.073
X = 600000.259
BK = S43°09'47.7"E
AH = S49°46'50.5"E
SE = MATCH EXISTING

NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

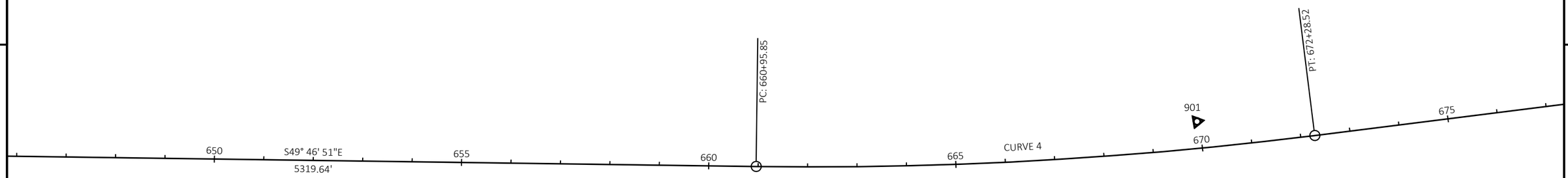
CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
1002	COLUMBIA COUNTY ALUMINUM TIE MONUMENT	STA 604+36.19	42.73' LT	599773.326	355981.823	1014.27
1003	COLUMBIA COUNTY ALUMINUM TIE MONUMENT	STA 605+10.70	48.36' LT	599832.173	355936.356	1013.39
1004	COLUMBIA COUNTY ALUMINUM TIE MONUMENT	STA 604+46.11	117.10' LT	599830.592	356030.285	1011.67
1005	COLUMBIA COUNTY SECTION MONUMENT	STA 604+70.76	95.22' LT	599834.001	355997.709	1012.17
900	FENO MONUMENT	STA 616+98.81	49.27' LT	600736.551	355167.958	973.76
940	IRON ROD CAP	STA 616+50.59	24.32' LT	600683.619	355180.039	979.13

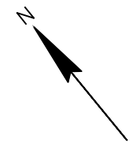


PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 135	E

2

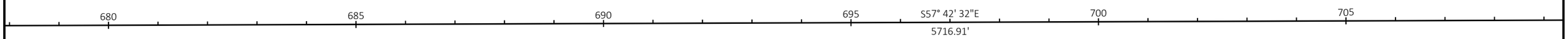


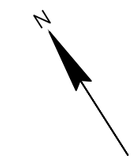
CURVE 4
PI STA = 666+63.09
Y = 351924.827
X = 604495.355
Δ = 7°55'41"
D = 0°42'00"
T = 567.24'
L = 1132.67'
R = 8185.70'
PC STA = 660+95.85
Y = 352291.103
X = 604062.222
PT STA = 672+28.52
Y = 351621.794
X = 604974.870
BK = S49°46'50.5"E
AH = S57°42'31.8"E
SE = MATCH EXISTING



CONTROL POINT AND MONUMENT DATA

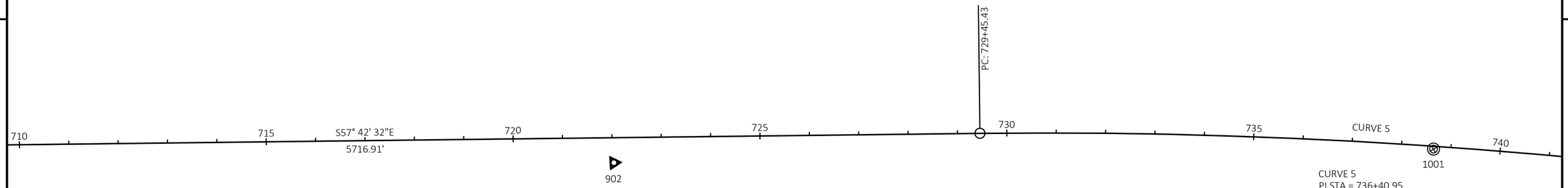
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
901	FENO MONUMENT	STA 669+93.05	54.21' LT	604807.919	351795.411	1009.94





PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 136	E

2



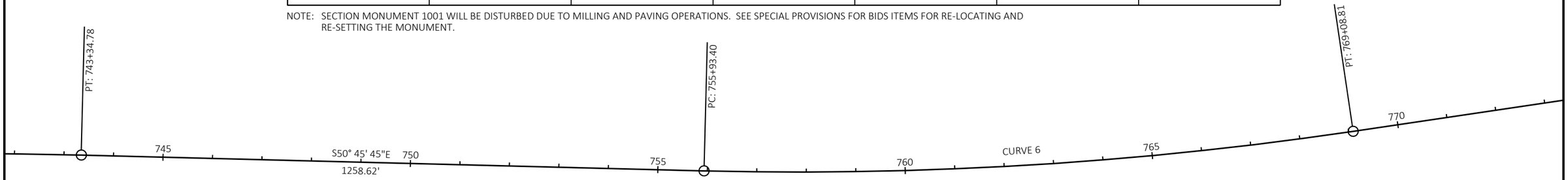
CURVE 5
PI STA = 736+40.95
Y = 348196.131
X = 610395.585
Δ = 6°56'46"
D = 0°30'00"
T = 695.53'
L = 1389.35'
R = 11460.00'
PC STA = 729+45.43
Y = 348567.696
X = 609807.626
PT STA = 743+34.78
Y = 347756.187
X = 610934.291
BK = S57°42'31.8"E
AH = S50°45'45.4"E
SE = MATCH EXISTING

NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
902	FENO MONUMENT	STA 722+02.53	51.12' RT	609152.308	348921.357	987.29
1001	COLUMBIA COUNTY SECTION MONUMENT	STA 738+64.96	6.08' RT	610560.762	348040.957	977.29

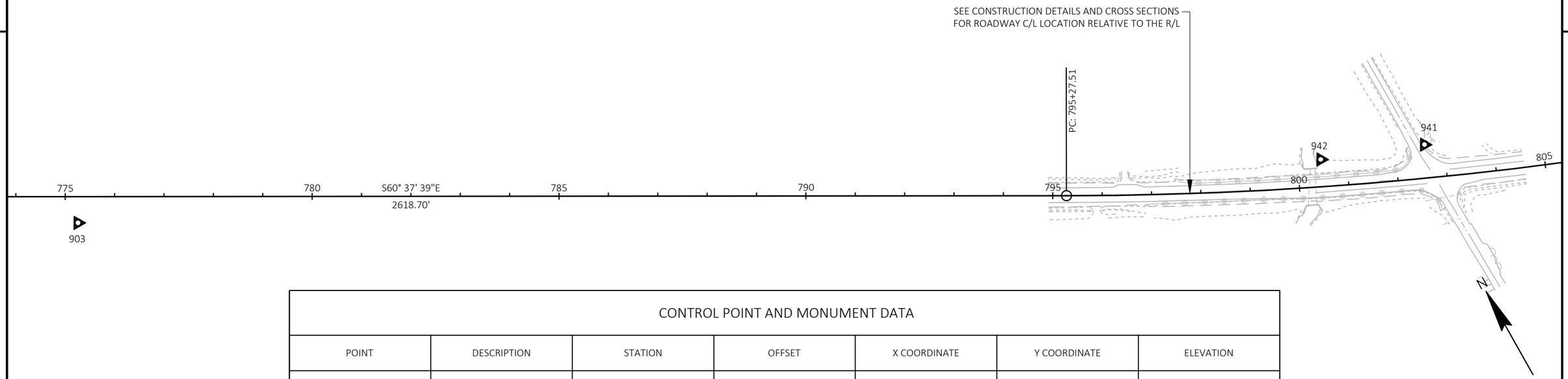
NOTE: SECTION MONUMENT 1001 WILL BE DISTURBED DUE TO MILLING AND PAVING OPERATIONS. SEE SPECIAL PROVISIONS FOR BIDS ITEMS FOR RE-LOCATING AND RE-SETTING THE MONUMENT.



CURVE 6
PI STA = 762+52.73
Y = 346543.013
X = 612419.810
Δ = 9°51'54"
D = 0°45'00"
T = 659.34'
L = 1315.41'
R = 7640.00'
PC STA = 755+93.40
Y = 346960.066
X = 611909.133
PT STA = 769+08.81
Y = 346219.618
X = 612994.388
BK = S50°45'45.4"E
AH = S60°37'39.0"E
SE = MATCH EXISTING

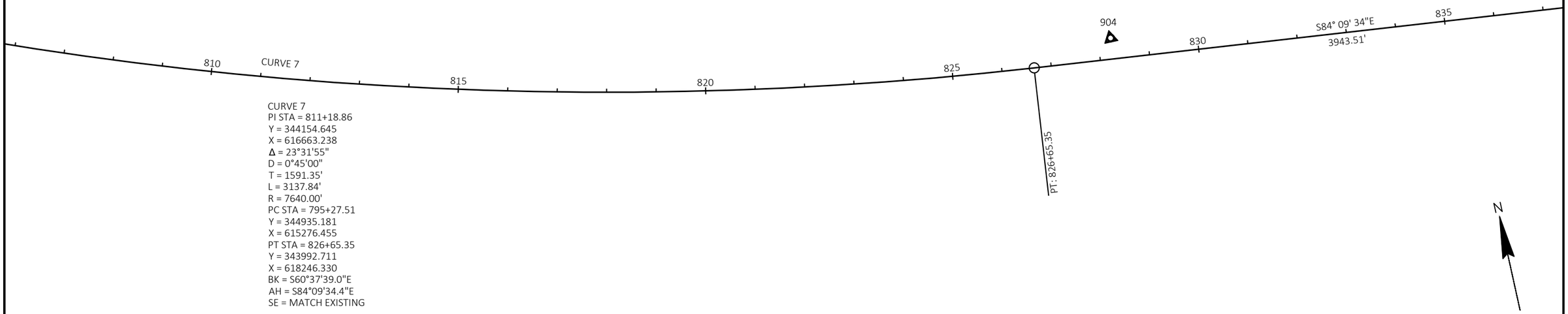
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 137	E

2



CONTROL POINT AND MONUMENT DATA

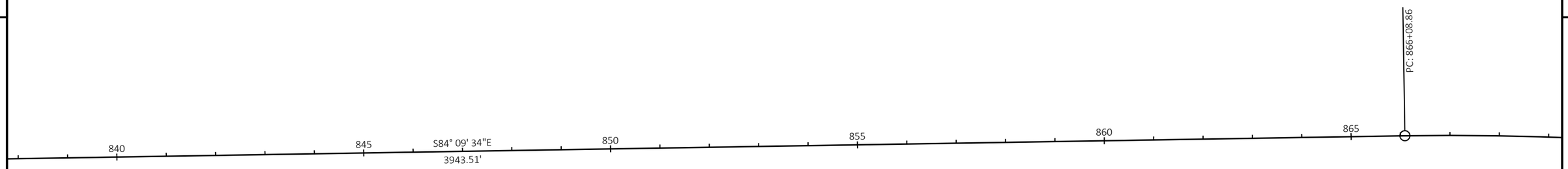
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
903	FENO MONUMENT	STA 775+24.52	53.42' RT	613504.753	345871.068	964.40
941	IRON ROD CAP	STA 802+59.22	68.03' LT	615957.842	344669.549	936.38
942	SPIKE NAIL	STA 800+45.89	55.30' LT	615760.268	344746.359	928.15
904	FENO MONUMENT	STA 828+24.58	42.73' LT	618409.076	344019.017	930.70



CURVE 7
PI STA = 811+18.86
Y = 344154.645
X = 616663.238
Δ = 23°31'55"
D = 0°45'00"
T = 1591.35'
L = 3137.84'
R = 7640.00'
PC STA = 795+27.51
Y = 344935.181
X = 615276.455
PT STA = 826+65.35
Y = 343992.711
X = 618246.330
BK = S60°37'39.0"E
AH = S84°09'34.4"E
SE = MATCH EXISTING

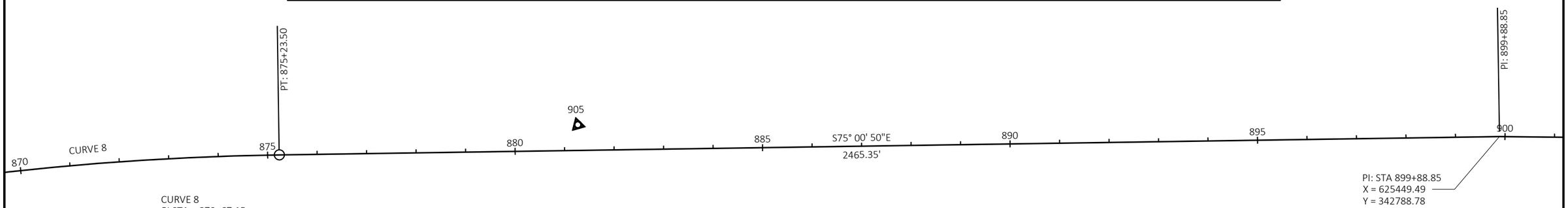
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 138	E

2



CONTROL POINT AND MONUMENT DATA

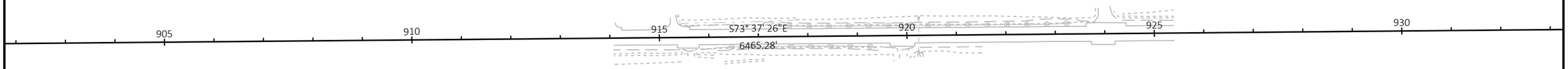
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
905	FENO MONUMENT	STA 881+26.42	51.67' LT	623663.767	343320.286	931.98



CURVE 8
PI STA = 870+67.15
Y = 343544.790
X = 622625.281
Δ = 9°08'44"
D = 1°00'00"
T = 458.29'
L = 914.63'
R = 5730.00'
PC STA = 866+08.86
Y = 343591.425
X = 622169.370
PT STA = 875+23.50
Y = 343426.283
X = 623067.984
BK = S84°09'34.4"E
AH = S75°00'50.0"E
SE = MATCH EXISTING

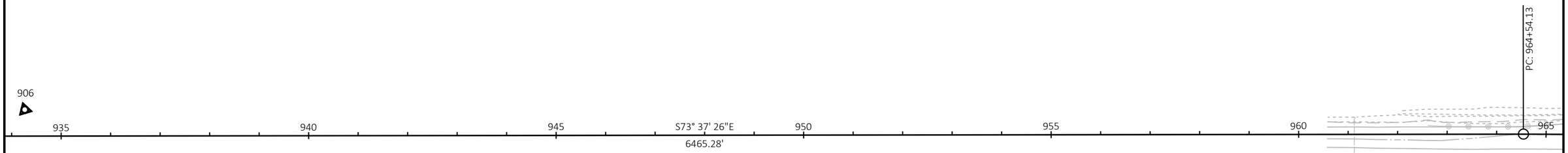
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 139	E

2



CONTROL POINT AND MONUMENT DATA

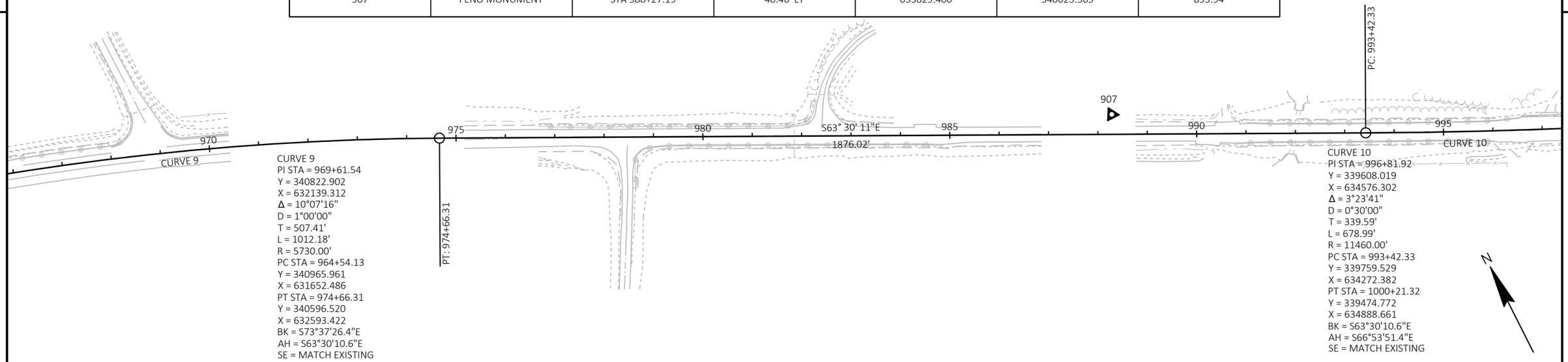
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
906	FENO MONUMENT	STA 934+25.72	53.20' LT	628761.928	341870.834	933.76



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 140	E

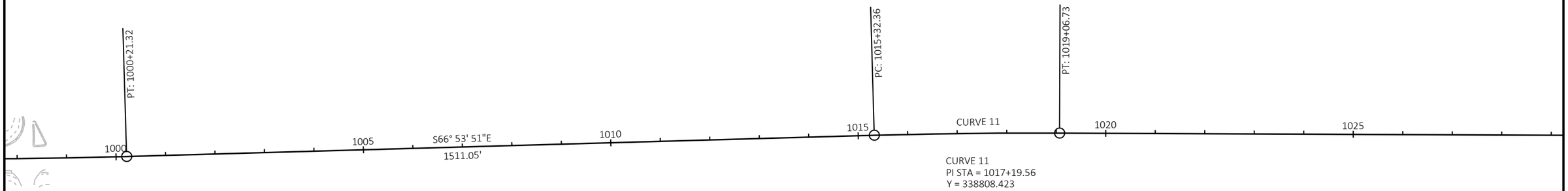
CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
907	FENO MONUMENT	STA 988+27.19	40.46' LT	633829.400	340025.569	893.94



CURVE 9
PI STA = 969+61.54
Y = 340822.902
X = 632139.312
Δ = 10°07'16"
D = 1°00'00"
T = 507.41'
L = 1012.18'
R = 5730.00'
PC STA = 964+54.13
Y = 340965.961
X = 631652.486
PT STA = 974+66.31
Y = 340596.520
X = 632593.422
BK = S73°37'26.4"E
AH = S63°30'10.6"E
SE = MATCH EXISTING

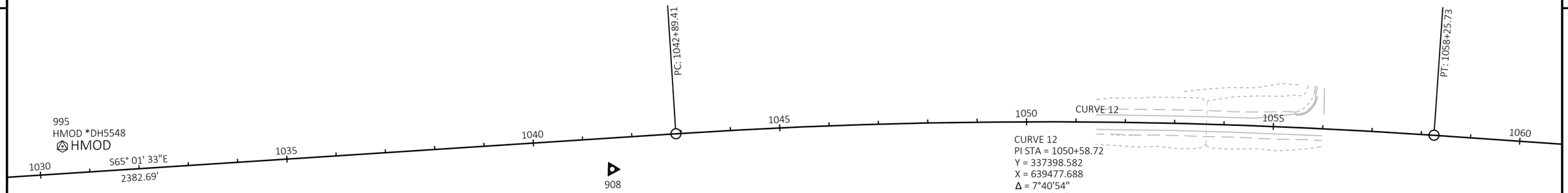
CURVE 10
PI STA = 996+81.92
Y = 339608.019
X = 634576.302
Δ = 3°23'41"
D = 0°30'00"
T = 339.59'
L = 678.99'
R = 11460.00'
PC STA = 993+42.33
Y = 339759.529
X = 634272.382
PT STA = 1000+21.32
Y = 339474.772
X = 634888.661
BK = S63°30'10.6"E
AH = S66°53'51.4"E
SE = MATCH EXISTING



CURVE 11
PI STA = 1017+19.56
Y = 338808.423
X = 636450.714
Δ = 1°52'19"
D = 0°30'00"
T = 187.20'
L = 374.36'
R = 11459.19'
PC STA = 1015+32.36
Y = 338881.875
X = 636278.529
PT STA = 1019+06.73
Y = 338729.386
X = 636620.409
BK = S66°53'51.4"E
AH = S65°01'32.9"E
SE = MATCH EXISTING

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 141	E

2



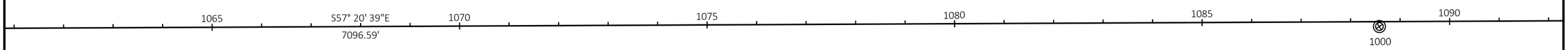
CURVE 12
PI STA = 1050+58.72
Y = 337398.582
X = 639477.688
Δ = 7°40'54"
D = 0°30'00"
T = 769.31'
L = 1536.31'
R = 11459.19'
PC STA = 1042+89.41
Y = 337723.392
X = 638780.311
PT STA = 1058+25.73
Y = 336983.471
X = 640125.390
BK = S65°01'32.9"E
AH = S57°20'39.4"E
SE = MATCH EXISTING

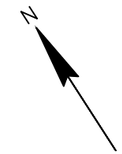
NOTE: DO NOT DISTURB DH5548 GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM DH5548 GPS. SEE GENERAL NOTES.
MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
908	FENO MONUMENT	STA 1041+55.15	63.17' RT	638631.928	337722.821	926.59
995	HMOD DH5548	STA 1030+47.77	54.99' LT	637677.980	338297.472	926.92
1000	COLUMBIA COUNTY SECTION MONUMENT	STA 1088+57.87	9.69' RT	642673.012	335339.198	871.07

NOTE: SECTION MONUMENT 1000 WILL BE DISTURBED DUE TO MILLING AND PAVING OPERATIONS. SEE SPECIAL PROVISIONS FOR BIDS ITEMS FOR RE-LOCATING AND RE-SETTING THE MONUMENT.





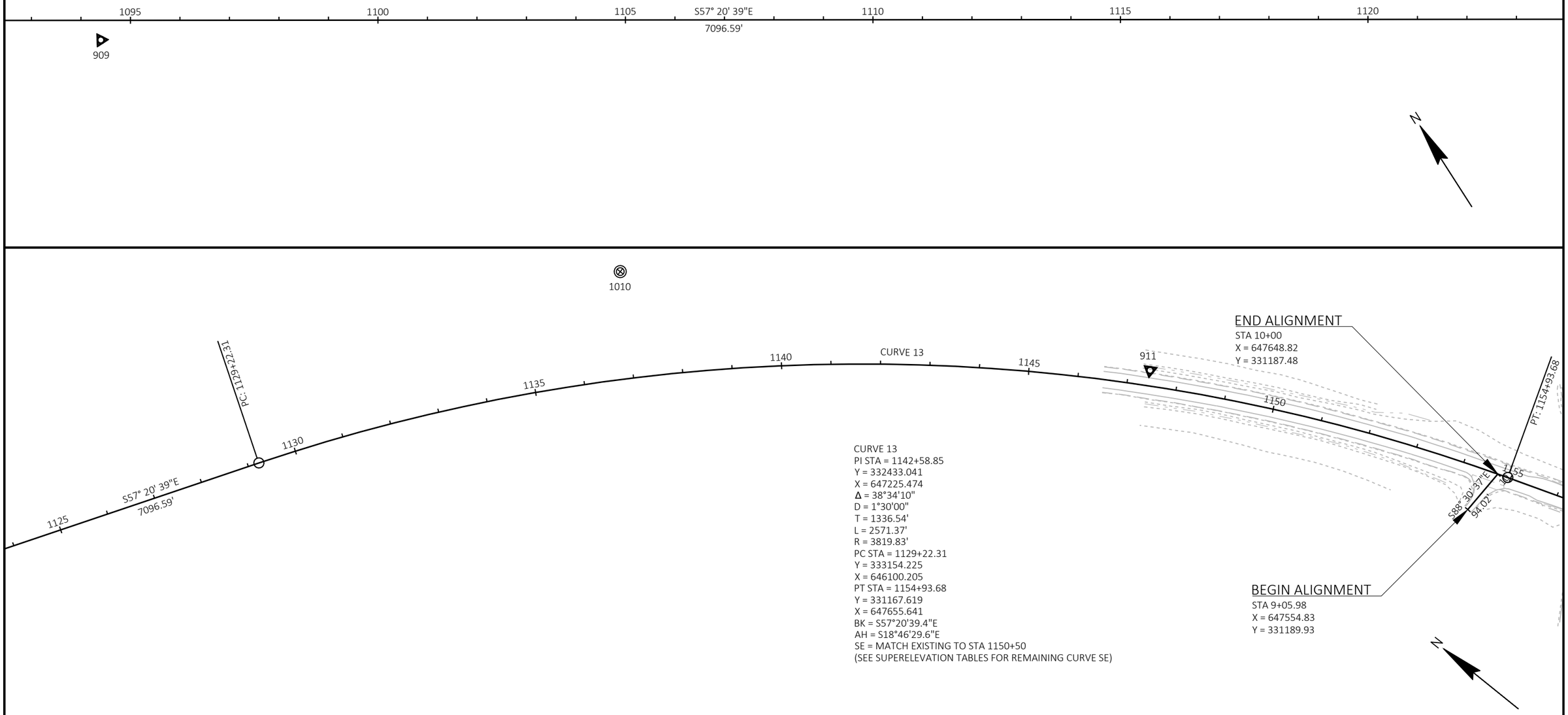
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 142	E

2

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
909	FENO MONUMENT	STA 1094+39.08	40.00' RT	643145.991	335000.066	867.53
1010	COLUMBIA COUNTY SECTION MONUMENT	STA 1136+99.30	216.18' LT	646858.386	332826.241	840.14
911	FENO MONUMENT	STA 1147+41.27	30.83' LT	647371.787	331867.066	849.37

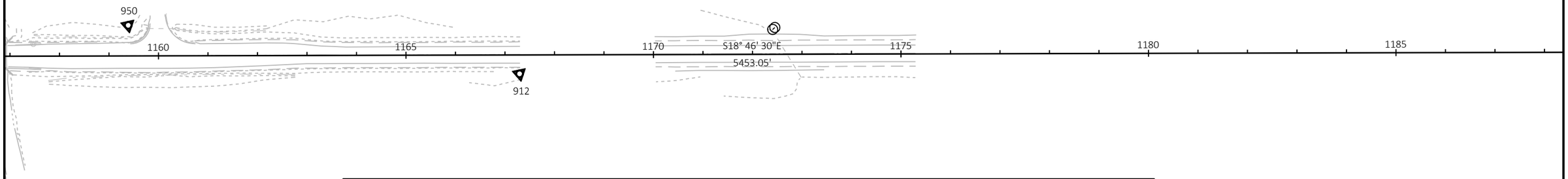
NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.



CURVE 13
PI STA = 1142+58.85
Y = 332433.041
X = 647225.474
Δ = 38°34'10"
D = 1°30'00"
T = 1336.54'
L = 2571.37'
R = 3819.83'
PC STA = 1129+22.31
Y = 333154.225
X = 646100.205
PT STA = 1154+93.68
Y = 331167.619
X = 647655.641
BK = S57°20'39.4"E
AH = S18°46'29.6"E
SE = MATCH EXISTING TO STA 1150+50
(SEE SUPERELEVATION TABLES FOR REMAINING CURVE SE)

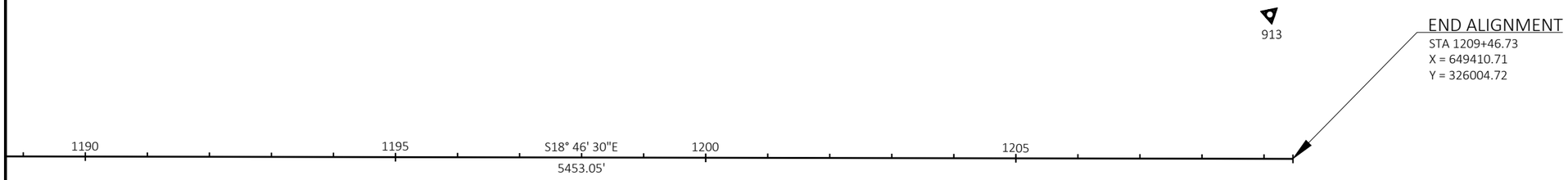
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 143	E

2



CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
912	FENO MONUMENT	STA 1167+28.73	38.80' LT	648016.404	329985.794	844.37
950	IRON ROD	STA 1159+38.18	61.11' LT	647856.559	330766.433	850.05
911	FENO MONUMENT	STA 1209+08.45	231.95' LT	649618.000	326115.620	850.20



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 144	E

STH 16 SUPERELEVATION TABLE (CURVE 13 & STA 1154+93.68 - STA 1159+43)								
STATION	LT AGG SHOULDER	LT PAVED SHOULDER	LEFT LANE	RIGHT LANE	RIGHT BYPASS LANE	RT PAVED SHOULDER	RT AGG SHOULDER	REMARKS
1150+50	-4.0%	2.2%	2.2%	-3.4%	---	-3.4%	-4.0%	MATCH EXISTING LANES AND PAVED SHOULDERS SUPERELEVATION
1150+60.5	-4.0%	2.5%	2.5%	-3.7%	---	-3.7%	-4.0%	RIGHT LANE AND PAVED SHOULDER AT FULL SUPERELEVATION
1154+60.68	-4.0%	3.7%	3.7%	-3.7%	---	-3.7%	-4.0%	LANES AND PAVED SHOULDERS AT FULL SUPERELEVATION
1155+06.17	-4.0%	2.0%	2.0%	-2.0%	---	-2.0%	-4.0%	REVERSE CROWN
1155+59.68	-4.0%	0.0%	0.0%	-2.0%	---	-2.0%	-4.0%	ZERO CROWN
1156+13.20	-4.0%	-2.0%	-2.0%	-2.0%	---	-2.0%	-4.0%	NORMAL CROWN
1158+55	-4.0%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-4.0%	BEGIN LEFT PAVED SHOULDER TRANSITION
1159+43	-4.0%	-4.0%	-2.0%	-2.0%	-2.0%	-2.0%	-4.0%	END LEFT PAVED SHOULDER TRANSITION

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Line	Item	Item Description	Unit	Total	Qty
0002	203.0211.S	Abatement of Asbestos Containing Material (structure) 01. B-11-11	EACH	1.000	1.000
0004	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-11-11	EACH	1.000	1.000
0006	204.0100	Removing Concrete Pavement	SY	2,267.000	2,267.000
0008	204.0110	Removing Asphaltic Surface	SY	7,992.000	7,992.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,559.000	2,559.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	241,810.000	241,810.000
0018	204.0165	Removing Guardrail	LF	1,717.000	1,717.000
0020	205.0100	Excavation Common	CY	3,962.000	3,962.000
0022	206.1000	Excavation for Structures Bridges (structure) 01. B-11-172	LS	1.000	1.000
0024	208.0100	Borrow	CY	144.000	144.000
0026	210.1500	Backfill Structure Type A	TON	154.000	154.000
0028	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1400-01-70	LS	1.000	1.000
0032	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	434.000	434.000
0034	213.0100	Finishing Roadway (project) 01. 1400-01-70	EACH	1.000	1.000
0038	305.0110	Base Aggregate Dense 3/4-Inch	TON	8,658.000	8,658.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,559.000	5,559.000
0042	305.0500	Shaping Shoulders	STA	766.000	766.000
0044	312.0110	Select Crushed Material	TON	3,720.000	3,720.000
0046	415.0120	Concrete Pavement 12-Inch	SY	63.000	63.000
0048	415.0410	Concrete Pavement Approach Slab	SY	97.000	97.000
0050	450.4000	HMA Cold Weather Paving	TON	7,650.000	7,650.000
0052	455.0605	Tack Coat	GAL	25,084.000	25,084.000
0054	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0056	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0058	460.2000	Incentive Density HMA Pavement	DOL	1,610.000	1,610.000
0060	460.2005	Incentive Density PWL HMA Pavement	DOL	25,880.000	25,880.000
0062	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	32,060.000	32,060.000
0064	460.2010	Incentive Air Voids HMA Pavement	DOL	37,890.000	37,890.000
0066	460.6223	HMA Pavement 3 MT 58-28 S	TON	12,867.000	12,867.000
0068	460.6224	HMA Pavement 4 MT 58-28 S	TON	27,501.000	27,501.000
0070	465.0105	Asphaltic Surface	TON	5,804.000	5,804.000
0072	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	332.000	332.000
0074	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	50,158.000	50,158.000
0076	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	44,479.000	44,479.000
0078	502.0100	Concrete Masonry Bridges	CY	464.000	464.000
0080	502.3200	Protective Surface Treatment	SY	599.000	599.000
0082	502.3210	Pigmented Surface Sealer	SY	119.000	119.000
0084	505.0400	Bar Steel Reinforcement HS Structures	LB	15,420.000	15,420.000
0086	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	62,570.000	62,570.000
0088	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	430.000	430.000
0090	516.0500	Rubberized Membrane Waterproofing	SY	24.000	24.000
0092	550.0020	Pre-Boring Rock or Consolidated Materials	LF	42.000	42.000
0094	550.0500	Pile Points	EACH	14.000	14.000
0096	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	308.000	308.000
0098	550.2148	Piling CIP Concrete 14 X 0.50-Inch	LF	364.000	364.000
0106	606.0300	Riprap Heavy	CY	241.000	241.000
0108	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	220.000	220.000
0110	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0112	614.2300	MGS Guardrail 3	LF	534.380	534.380

1400-01-70

Line	Item	Item Description	Unit	Total	Qty
0114	614.2330	MGS Guardrail 3 K	LF	875.000	875.000
0116	614.2350	MGS Guardrail Short Radius	LF	200.000	200.000
0118	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0120	614.2610	MGS Guardrail Terminal EAT	EACH	7.000	7.000
0122	614.2630	MGS Guardrail Short Radius Terminal	EACH	3.000	3.000
0124	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1400-01-70	EACH	1.000	1.000
0128	619.1000	Mobilization	EACH	0.550	0.550
0130	624.0100	Water	MGAL	56.000	56.000
0132	625.0100	Topsoil	SY	203.000	203.000
0134	625.0500	Salvaged Topsoil	SY	3,730.000	3,730.000
0138	628.1504	Silt Fence	LF	3,333.000	3,333.000
0140	628.1520	Silt Fence Maintenance	LF	3,333.000	3,333.000
0142	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0144	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0146	628.2004	Erosion Mat Class I Type B	SY	3,730.000	3,730.000
0148	628.2008	Erosion Mat Urban Class I Type B	SY	203.000	203.000
0150	628.6005	Turbidity Barriers	SY	155.000	155.000
0156	628.7504	Temporary Ditch Checks	LF	248.000	248.000
0158	628.7570	Rock Bags	EACH	83.000	83.000
0160	629.0210	Fertilizer Type B	CWT	2.500	2.500
0162	630.0120	Seeding Mixture No. 20	LB	104.000	104.000
0164	630.0170	Seeding Mixture No. 70	LB	1.000	1.000
0166	630.0200	Seeding Temporary	LB	109.000	109.000
0168	630.0500	Seed Water	MGAL	132.000	132.000
0170	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	24.000	24.000
0172	638.2102	Moving Signs Type II	EACH	24.000	24.000
0174	638.3000	Removing Small Sign Supports	EACH	23.000	23.000
0176	642.5201	Field Office Type C	EACH	0.500	0.500
0178	643.0300	Traffic Control Drums	DAY	15,361.000	15,361.000
0180	643.0420	Traffic Control Barricades Type III	DAY	2,924.000	2,924.000
0182	643.0705	Traffic Control Warning Lights Type A	DAY	4,300.000	4,300.000
0184	643.0715	Traffic Control Warning Lights Type C	DAY	10,836.000	10,836.000
0186	643.0900	Traffic Control Signs	DAY	25,304.000	25,304.000
0188	643.0920	Traffic Control Covering Signs Type II	EACH	10.000	10.000
0190	643.1050	Traffic Control Signs PCMS	DAY	35.000	35.000
0192	643.5000	Traffic Control	EACH	0.740	0.740
0200	645.0111	Geotextile Type DF Schedule A	SY	96.000	96.000
0202	645.0120	Geotextile Type HR	SY	385.000	385.000
0204	646.1020	Marking Line Epoxy 4-Inch	LF	80,780.000	80,780.000
0206	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	123,702.500	123,702.500
0208	646.3020	Marking Line Epoxy 8-Inch	LF	33.000	33.000
0210	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	4,127.000	4,127.000
0212	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	77,131.500	77,131.500
0214	646.4620	Marking Line Same Day Epoxy 8-Inch	LF	4,127.000	4,127.000
0216	646.5020	Marking Arrow Epoxy	EACH	10.000	10.000
0218	646.5120	Marking Word Epoxy	EACH	5.000	5.000
0220	646.6120	Marking Stop Line Epoxy 18-Inch	LF	226.000	226.000
0222	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,137.000	1,137.000
0224	648.0100	Locating No-Passing Zones	MI	12.170	12.170

1400-01-70

Line	Item	Item Description	Unit	Total	Qty
0226	649.0105	Temporary Marking Line Paint 4-Inch	LF	48,715.000	48,715.000
0230	649.0205	Temporary Marking Line Paint 8-Inch	LF	413.000	413.000
0232	650.4500	Construction Staking Subgrade	LF	1,660.000	1,660.000
0234	650.5000	Construction Staking Base	LF	1,628.000	1,628.000
0238	650.6500	Construction Staking Structure Layout (structure) 01. B-11-0172	LS	1.000	1.000
0240	650.7000	Construction Staking Concrete Pavement	LF	32.000	32.000
0242	650.8000	Construction Staking Resurfacing Reference	LF	63,372.000	63,372.000
0246	650.9910	Construction Staking Supplemental Control (project) 01. 1400-01-70	LS	1.000	1.000
0250	650.9920	Construction Staking Slope Stakes	LF	1,660.000	1,660.000
0252	690.0150	Sawing Asphalt	LF	1,663.000	1,663.000
0254	690.0250	Sawing Concrete	LF	48.000	48.000
0256	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0258	715.0502	Incentive Strength Concrete Structures	DOL	2,784.000	2,784.000
0260	740.0440	Incentive IRI Ride	DOL	24,340.000	24,340.000
0262	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,320.000	1,320.000
0264	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,185.000	1,185.000
0266	SPV.0060	Special 01. Verify Landmark Reference Monuments	EACH	3.000	3.000
0268	SPV.0060	Special 02. Landmark Reference Monument Special	EACH	2.000	2.000
0270	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	44,519.000	44,519.000

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PAVEMENT REMOVAL ITEMS

CAT	LOCATION	STA	TO	STA	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING SY	COMMENTS
0010	STH 16	561+35	-	668+00	---	2,150	1,507	36,070	14,672	
0010	STH 16	668+00	-	773+50	---	600	807	37,621	3,054	
0010	STH 16	773+50	-	879+00	---	3,941	245	35,671	4,051	
0010	STH 16	879+00	-	994+50	---	673	---	44,466	6,487	
0010	STH 16	994+50	-	1150+50	---	419	---	62,402	11,210	
0010	STH 16	1150+50	-	1159+43	2,267	154	---	---	---	
0010	STH 16	1159+43	-	1204+00	---	55	---	22,870	1,885	
0010	STH 16	PROJECT			---	---	---	---	3,160	
0010	CTH A	STH 60 TO STH 16			---	---	---	2,710	---	MILL 2" ON CTH A AS NEEDED
				TOTAL	**2,267**	**7,992**	**2,559**	**241,810**	**44,519**	

GUARDRAIL REMOVAL ITEMS

CAT	LOCATION	LT/RT	STA	TO	STA	204.0165 REMOVING GUARDRAIL LF	COMMENTS
0010	STH 16	RT	612+84	-	616+00	316	
0010	STH 16	RT	796+89	-	802+83	616	
0010	STH 16	LT	797+55	-	802+54	503	
0010	STH 16	LT	1155+80	-	1157+64	141	
0010	STH 16	RT	1155+80	-	1157+63	141	
					TOTAL	**1,717**	

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DIVISION	FROM - TO STATION	LOCATION	205.0100 COMMON EXCAVATION CUT (2)	205.0100 COMMON EXCAVATION EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0500 MARSH EXCAVATION	205.0200 ROCK EXCAVATION	REDUCED MARSH IN FILL FACTOR 0.60	REDUCED EBS IN FILL FACTOR 0.80	EXPANDED MARSH BACKFILL FACTOR 1.50	EXPANDED EBS BACKFILL FACTOR 1.30	EXPANDED ROCK FACTOR 1.10	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1																			
STH 16	612+71.92 - 616+80	STH 16 RT SHOULDER	94	0	94	0	0	0	0	0	0	0	0	35	44	-44	0	44	
	796+10 - 802+28.65	STH 16 LT & RT SHOULDERS	208	0	208	0	0	0	0	0	0	0	0	80	100	-100	0	100	
	1150+50 - 1156+14.37	STH 16 NORTH OF B-11-172	2,301	0	1,418	883	0	0	0	0	0	0	0	503	629	254	254	0	
	1157+37.64 - 1159+43	STH 16 SOUTH OF B-11-172	1,167	0	560	607	0	0	0	0	0	0	0	34	43	565	565	0	
	1150+50 - 1159+43	STH 16 EBS	0	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DIVISION 1 SUBTOTAL			3,770	167	2,280	1,490	0	0	0	0	0	0	0	652	815	675	819	144	
DIVISION 2																			
DRIVEWAT AT STA 1154+72.67	9+15 - 9+80	DRIVEWAY	25	0	8	17	0	0	0	0	0	0	0	17	21	-4	0	0	USE AVAILABLE MATERIAL FROM ROADWAY EXCAVATION
DIVISION 2 SUBTOTAL			25	0	8	17	0	0	0	0	0	0	0	17	21	-4	0	0	
GRAND TOTAL			3,795	167	2,288	1,507	0	0	0	0	0	0	0	669	836	671	815	144	
	TOTAL COMMON EXC		3,962																

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED BASE AGGREGATE DENSE 1 1/4-INCH.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR = X.6X

DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR**

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

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AGGREGATE ITEMS

CAT	LOCATION	STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.01200* BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	COMMENTS
0010	STH 16	561+35	-	668+00	1,310	182	13	---	6	
0010	STH 16	668+00	-	773+50	1,380	67	9	---	6	
0010	STH 16	773+50	-	879+00	1,538	498	146	---	8	
0010	STH 16	879+00	-	994+50	1,415	75	201	---	6	
0010	STH 16	994+50	-	1150+50	2,004	47	292	---	8	
0010	STH 16	1150+50	-	1159+43	358	4,379	---	3,720	19	
0010	STH 16	1159+43	-	1204+00	570	7	83	---	2	
0010	CTH A	STH 60 TO STH 16			83	---	22	---	1	BASE AGGREGATE ON CTH A AS NEEDED
				TOTAL	**8,658**	**5,255**	**766**	**3,720**	**56**	

***ADDITIONAL QUANTITIES ELSWHERE IN THE PLAN**

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HMA ITEMS

						211.0400		450.4000	455.0605	460.6223	460.6224	465.0105	465.0120	465.0425		465.0475	
						PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS		HMA COLD WEATHER PAVING	TACK COAT	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	ASPHALTIC SURFACE	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1)		ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL	
						EB	WB							EB	WB		
CAT	LOCATION	STA	TO	STA		STA	STA	TON	GAL	TON	TON	TON	TON	LF	LF	LF	COMMENTS
0010	STH 16	561+35	-	668+00		---	---	---	5,616	4,817	3,764	2,055	140	---	---	8,253	BEGIN RUMBLE STRIPS AT STA 581+00 - VILLAGE OF RIO LIMITS
0010	STH 16	668+00	-	773+50		---	---	---	4,621	4,610	3,692	428	102	---	---	8,478	
0010	STH 16	773+50	-	879+00		---	---	---	3,371	1,507	4,220	468	45	---	---	8,550	
0010	STH 16	879+00	-	994+50		---	---	---	3,568	---	4,981	727	---	2,041	---	8,119	EB SHOULDER RUMBLE STRIPS FROM STA 956+39 - STA 976+80
0010	STH 16	994+50	-	1150+50		---	---	---	5,154	---	6,987	1,256	3	2,693	3,277	8,219	NO RUMBLE STRIPS BETWEEN STA 1052+61 - STA 1110+86 - VILLAGE OF FALL RIVER LIMITS
0010	STH 16	1150+50	-	1159+43		---	---	---	164	728	364	---	42	375	642	553	
0010	STH 16	1159+43	-	1204+00		---	---	---	1,733	---	2,562	212	---	3,091	1,847	2,307	END CENTERLINE RUMBLE STRIPS AT STA 1183+12 / END WB SHOULDER RUMBLE STRIPS AT STA 1190+04
0010	STH 16	PROJECT				---	---	7,115	222	---	---	354	---	---	---	---	
0010	CTH A	STH 60 TO STH 16				---	---	---	136	---	---	304	---	---	---	---	PAVE ASPHALTIC SURFACE ON CTH A AS NEEDED
		SUBTOTAL				**0**	**0**	**7,115**	**24,585**	**11,662**	**26,570**	**5,804**	**332**	**8,200**	**5,766**	**44,479**	
0030	STH 16	561+35	-	668+00		98	95	---	219	535	412	---	---	8,038	7,584	---	BEGIN RUMBLE STRIPS AT STA 581+00 - VILLAGE OF RIO LIMITS
0030	STH 16	668+00	-	773+50		98	97	---	225	540	420	---	---	8,587	8,168	---	
0030	STH 16	773+50	-	879+00		22	24	---	55	130	99	---	--	2,013	1,802	---	
0030	STH 16	879+00	-	994+50		---	---	---	---	---	---	---	---	---	---	---	
0030	STH 16	994+50	-	1150+50		---	---	---	---	---	---	---	---	---	---	---	
0030	STH 16	1150+50	-	1159+43		---	---	---	---	---	---	---	---	---	---	---	
0030	STH 16	1159+43	-	1204+00		---	---	---	---	---	---	---	---	---	---	---	
0030	STH 16	PROJECT				---	---	535	---	---	---	---	---	---	---	---	
		SUBTOTAL				**218**	**216**	**535**	**499**	**1,205**	**931**	**0**	**0**	**18,638**	**17,554**	**0**	
		TOTAL				**434**		**7,650**	**25,084**	**12,867**	**27,501**	**5,804**	**332**	**50,158**		**44,479**	

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HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
10 FT AND 12 FT DRIVING LANES	STA 561+35 TO STA 612+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1,510	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
10 FT AND 12 FT DRIVING LANES	STA 561+35 TO STA 612+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	1,950	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 612+00 TO STA 617+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	131	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 612+00 TO STA 617+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	206	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 617+00 TO STA 796+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	4,680	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 617+00 TO STA 796+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	6,024	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 796+00 TO STA 803+11	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	186	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 796+00 TO STA 803+11	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	292	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 803+11 TO STA 1150+50	UPPER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 4 MT 58-28 S	10,376	2"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 1150+50 TO STA 1159+43	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	222	2"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 1150+50 TO STA 1159+43	LOWER LAYER	BASE AGGREGATE DENSE 1 1/4-INCH	HMA PAVEMENT 3 MT 58-28 S	443	4"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 1159+43 TO STA 1204+00	UPPER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 4 MT 58-28 S	1,332	2"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
DISTRESSED MILLING LOCATIONS	VARIOUS	UPPER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	ASPHALTIC SURFACE	2,549	2.5"	QMP AS PER STANDARD SPEC 465	ACCEPTANCE BY ORDINARY COMPACTION
DISTRESSED MILLING LOCATIONS	VARIOUS	UPPER LAYER	PULVERIZED AND RELAYED BASE	ASPHALTIC SURFACE	2,951	2"	QMP AS PER STANDARD SPEC 465	ACCEPTANCE BY ORDINARY COMPACTION
11 FT DRIVING LANES	CTH A	UPPER LAYER	MILLED ASPHALTIC SURFACE	ASPHALTIC SURFACE	304	2"	QMP AS PER STANDARD SPEC 465	ACCEPTANCE BY ORDINARY COMPACTION

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HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
3 FT SHOULDER,TURN LANES AND INTERSECTIONS	STA 561+35 TO STA 612+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	410	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDER,TURN LANES AND INTERSECTIONS	STA 561+35 TO STA 612+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	439	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS	STA 612+00 TO STA 617+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	48	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS	STA 612+00 TO STA 617+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 LT 58-28 S	75	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS, PASSING LANES, TURN LANES AND INTERSECTIONS	STA 617+00 TO STA 796+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1,440	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS, PASSING LANES, TURN LANES AND INTERSECTIONS	STA 617+00 TO STA 796+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	1,698	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS, TURN LANES, AND INTERSECTIONS	STA 796+00 TO STA 803+11	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	159	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS, TURN LANES, AND INTERSECTIONS	STA 796+00 TO STA 803+11	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	250	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT AND 5 FT SHOULDERS, PASSING LANES, TURN LANES AND INTERSECTIONS	STA 803+11 TO STA 1150+50	UPPER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 4 MT 58-28 S	4,704	2"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
5 FT AND 8 FT SHOULDERS AND PASSING LANES	STA 1150+50 TO STA 1159+43	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	142	2"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
5 FT AND 8 FT SHOULDERS AND PASSING LANES	STA 1150+50 TO STA 1159+43	LOWER LAYER	BASE AGGREGATE DENSE 1 1/4-INCH	HMA PAVEMENT 3 MT 58-28 S	285	4"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
5 FT SHOULDERS, PASSING LANES, TURN LANES AND INTERSECTIONS	STA 1159+43 TO STA 1204+00	UPPER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 4 MT 58-28 S	1,230	2"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

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

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HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
2 FT PAVED SHOULDER WIDENING	STA 561+35 TO STA 612+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	176	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 561+35 TO STA 612+00	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	227	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 612+00 TO STA 617+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	14	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 612+00 TO STA 617+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	22	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 617+00 TO STA 796+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	737	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 617+00 TO STA 796+00	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	949	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 796+00 TO STA 803+11	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	4	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 796+00 TO STA 803+11	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	7	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT

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GUARDRAIL ITEMS

CAT	LOCATION	LT/RT	STA	TO	STA	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS SHORT RADIUS GUARDRAIL LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	COMMENTS
0010	STH 16	RT	612+82	-	616+01	212.5	---	---	---	2	---	
0010	STH 16	RT	796+84	-	803+03	28.13	487.5	87.5	---	1	1	
0010	STH 16	LT	797+56	-	802+17	28.13	387.5	62.5	---	1	1	
0010	STH 16	RT	1154+57	-	1156+21	103.13	---	50	39.4	---	1	
0010	STH 16	LT	1154+87	-	1156+17	37.5	---	---	39.4	1	---	
0010	STH 16	LT	1157+31	-	1159+12	87.5	---	---	39.4	1	---	
0010	STH 16	RT	1157+35	-	1158+65	37.5	---	---	39.4	1	---	
					TOTAL	**534.38**	**875**	**200**	**157.6**	**7**	**3**	

CONCRETE ITEMS

CAT	LOCATION	STA	TO	STA	415.0120 CONCRETE PAVEMENT 12-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	COMMENTS
0010	STH 16	1156+00	-	1157+52	63	97	
				TOTAL	**63**	**97**	

3

EROSION CONTROL AND LANDSCAPING ITEMS

						625.0500	625.0100	628.1504	628.1520	628.1905	628.1910	628.2004	628.2008	628.6005	628.7504	628.7570	629.0210	630.0120	630.0175	630.0200	630.0500	
CAT	LOCATION	LT/RT	STA	TO	STA	SALVAGED TOPSOIL SY	TOPSOIL SY	SILT FENCE LF	SILT FENCE MAINTENANCE LF	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	EROSION MAT CLASS I TYPE B SY	EROSION MAT URBAN CLASS I TYPE B SY	TURBIDITY BARRIERS SY	TEMPORARY DITCH CHECKS LF	ROCK BAGS EACH	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEEDING MIXTURE NO. 70 LB	SEEDING TEMPORARY LB	SEED WATER MGAL	COMMENTS
0010	STH 16	RT	612+67	-	616+85	338	---	443	443	---	---	338	---	---	---	22	0.22	9	---	9	11	
0010	STH 16	RT	796+10	-	802+76	402	---	674	674	---	---	402	---	---	18	22	0.26	11	---	11	14	
0010	STH 16	LT	796+90	-	802+22	455	---	535	535	---	---	455	---	---	18	---	0.29	13	---	13	15	
0010	STH 16	RT	1150+50	-	1156+70	453	23	346	346	---	---	453	23	32	54	---	0.30	13	0.09	13	16	
0010	STH 16	LT	1150+50	-	1156+70	914	12	470	470	---	---	914	12	32	36	22	0.59	25	0.04	25	31	
0010	STH 16	RT	1156+82	-	1159+43	242	60	113	113	---	---	242	60	30	36	---	0.19	7	0.22	9	10	
0010	STH 16	LT	1156+82	-	1159+43	180	67	85	85	---	---	180	67	30	36	---	0.16	5	0.24	7	8	
					SUBTOTAL	**2,984**	**162**	**2,666**	**2,666**	**0**	**0**	**2,984**	**162**	**124**	**198**	**66**	**2.01**	**83**	**0.59**	**87**	**106**	
0010	STH 16	LT/RT	UNDISTRIBUTED			746	41	667	667	5	2	746	41	31	50	17	0.47	21	0.41	22	26	
					SUBTOTAL	**746**	**41**	**667**	**667**	**5**	**2**	**746**	**41**	**31**	**50**	**17**	**0.47**	**21**	**0.41**	**22**	**26**	
					TOTAL	**3,730**	**203**	**3,333**	**3,333**	**5**	**2**	**3,730**	**203**	**155**	**248**	**83**	**2.5**	**104**	**1**	**109**	**132**	

3

TRAFFIC CONTROL ITEMS

CAT	LOCATION	SEQUENCE	DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS		643.04200 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0900 TRAFFIC CONTROL SIGNS		643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	643.1050 TRAFFIC CONTROL SIGNS PCMS	
				EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	UNITS	DAY
	STAGE 1															
0010	STH 16 & STH 146	PROJECT ADVANCED WARNING	7	15	105	---	---	---	---	---	---	---	---	---	3	21
0010	PROJECT	SIDEROAD ADVANCED WARNING	59	---	---	---	---	---	---	---	---	50	2,950	---	---	---
0010	STH 16	MOVING OPERATIONS ADVANCED WARNING	59	---	---	---	---	---	---	---	---	10	590	---	---	---
0010	STA 561+35 TO STA 994+50	MILLED SURFACE SIGNING ON STH 16	46	---	---	---	---	---	---	---	---	10	460	---	---	---
0010	STA 561+35 TO STA 994+50	DROP OFF SIGNING	49	54	2,646	---	---	---	---	---	---	8	392	---	---	---
0010	STA 608+00 TO STA 618+00 EB	MGS GUARDRAIL WORK	10	15	150	---	---	---	---	---	---	10	100	---	---	---
0010	STA 791+25 TO STA 803+00 EB	MGS GUARDRAIL WORK	10	27	270	---	---	---	---	---	---	10	100	---	---	---
0010	STA 796+00 TO STA 802+05 WB	MGS GUARDRAIL WORK	10	15	150	---	---	---	---	---	---	10	100	---	---	---
		SUBTOTAL			3,321		0		0		0		4,692	0		21
	STAGE 2															
0010	STH 16	ADVANCED ROAD CLOSURE WARNING	7	10	70	---		---		---		---	---	---	2	14
0010	STH 60 & CTH A	DETOUR	86	126	10,836	16	1,376	32	2,752	126	10,836	143	12,298	10	---	---
0010	PROJECT	SIDEROAD AND RESTRICTED WIDTH ADVANCED WARNING	86	---	---	18	1,548	18	1,548	---	---	90	7,740	---	---	---
0010	STH 16	MOVING OPERATIONS ADVANCED WARNING	22	---	---	---	---	---	---	---	---	8	176	---	---	---
0010	STA 994+50 TO STA 1204+00	MILLED SURFACE SIGNING ON STH 16	18	---	---	---	---	---	---	---	---	10	180	---	---	---
0010	STA 994+50 TO STA 1204+00	DROP OFF SIGNING	21	54	1134	---	---	---	---	---	---	8	168	---	---	---
0010	CTH A REPAIRS	MOVING OPERATIONS ADVANCED WARNING	5	---	---	---	---	---	---	---	---	10	50	---	---	---
		SUBTOTAL			12,040		2,924		4,300		10,836		20,612	10		14
		TOTAL			**15,361**		**2,924**		**4,300**		**10,836**		**25,304**	**10**		**35**

TRAFFIC CONTROL COVERING SIGNS TYPE II UNDER STAGE 2 ARE FOR ONE (1) CYCLE.

TEMPORARY PAVEMENT MARKING ITEMS

					646.4520			646.4620	649.0105			649.0205	
					MARKING LINE SAME DAY EPOXY 4-INCH			MARKING LINE SAME DAY EPOXY 8-INCH	TEMPORARY MARKING LINE PAINT 4-INCH			TEMPORARY MARKING LINE PAINT 8-INCH	
					12.5' LINE, 37.5' SKIP (WHITE)	12.5' LINE, 37.5' SKIP (YELLOW)	SOLID (YELLOW)	(WHITE)	12.5' LINE, 37.5' SKIP (WHITE)	SOLID (WHITE)	SOLID (YELLOW)	(WHITE)	
CAT	LOCATION	STA	TO	STA	LF	LF	LF	LF	LF	LF	LF	LF	COMMENTS
0010	STH 16	561+35	-	668+00	---	---	---	---	300	---	21,330	---	HMA LOWER LAYER
0010	STH 16	561+35	-	668+00	300	1,200	14,754	---	---	---	---	---	HMA UPPER LAYER
0010	STH 16	668+00	-	773+50	---	---	---	---	62.5	---	21,100	185	HMA LOWER LAYER
0010	STH 16	668+00	-	773+50	62.5	2,537.5	5,436	185	---	---	---	---	HMA UPPER LAYER
0010	STH 16	773+50	-	879+00	---	---	---	---	---	---	5,922	228	HMA LOWER LAYER - ENDS AT STA 803+11
0010	STH 16	773+50	-	879+00	---	1,575	11,293	665	---	---	---	---	HMA UPPER LAYER
0010	STH 16	879+00	-	994+50	---	1,612.5	18,355	698	---	---	---	---	HMA UPPER LAYER
0010	STH 16	994+50	-	1150+50	200	3,475	7,228	1,128	---	---	---	---	HMA UPPER LAYER
0010	STH 16	1150+50	-	1159+43	25	---	893	---	---	---	---	---	HMA UPPER LAYER
0010	STH 16	1159+43	-	1204+00	50	475	7,660	1,451	---	---	---	---	HMA UPPER LAYER
				TOTAL		**77,131.5**		**4,127**		**48,715**		**413**	

NO TEMPORARY MARKINGS ON MILLED SURFACES UNLESS DIRECTED BY ENGINEER IN THE FIELD

DOUBLE YELLOW CENTERLINE MARKINGS ON LOWER HMA LAYER

PAVEMENT MARKING ITEMS

					646.1020			646.1040			646.3020		646.3040	646.5020	646.5120	646.6120	646.7120	648.0100	
					MARKING LINE EPOXY 4-INCH			MARKING LINE GROOVED WET REF EPOXY 4-INCH			MARKING LINE EPOXY 8-INCH		MARKING LINE GROOVED WET REF EPOXY 8-INCH	MARKING ARROW EPOXY	MARKING WORD EPOXY	MARKING LINE STOP LINE EPOXY 18-INCH	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)	LOCATING NO PASSING ZONES	
					SOLID (WHITE)	SOLID (YELLOW)	12.5' LINE 37.5' SKIP (YELLOW)	SOLID (WHITE)	12.5' LINE, 37.5' SKIP (WHITE)	3' LINE, 9' SKIP (WHITE)	SOLID (WHITE)	3' LINE, 9' SKIP (WHITE)	(WHITE)	EACH	EACH	LF	LF	(MI)	
CAT	LOCATION	STA	TO	STA	LF	LF	LF	LF	LF	LF	LF	LF	LF	EACH	EACH	LF	LF	(MI)	COMMENTS
0010	STH 16	561+35	-	668+00	---	14,754	1,200	20,727	300	75	---	---	---	---	---	---	---	---	
0010	STH 16	668+00	-	773+50	---	5,436	2,537.5	19,982	62.5	114	---	---	185	---	---	32	---	---	
0010	STH 16	773+50	-	879+00	331	11,293	1,575	20,251	---	54	---	---	665	---	---	60	---	---	
0010	STH 16	879+00	-	994+50	49	18,355	1,612.5	22,260	---	57	---	---	698	4	2	26	617	---	
0010	STH 16	994+50	-	1150+50	---	7,228	3,475	29,896	200	51	---	---	1,128	---	---	108	---	---	
0010	STH 16	1150+50	-	1159+43	304	893	---	1,486	25	---	---	---	---	---	---	---	---	---	NO GROOVED MARKINGS ON CONCRETE
0010	STH 16	1159+43	-	1204+00	---	7,660	475	8,067	50	45	3	30	1,451	6	3	---	520	---	
0010	CTH A	STH 60 TO STH 16			2,218	1,109	275	---	---	---	---	---	---	---	---	---	---	---	MARKING LINE ON CTH A AS NEEDED
				SUBTOTAL		**80,780**			**123,702.5**			**33**	**4,127**	**10**	**5**	**226**	**1,137**	**0**	
0010	STH 16	PROJECT			---	---	---	---	---	---	---	---	---	---	---	---	---	12.17	
				SUBTOTAL		**0**			**0**			**0**	**0**	**0**	**0**	**0**	**0**	**12.17**	
				TOTAL		**80,780**			**123,702.5**			**33**	**4,127**	**10**	**5**	**226**	**1,137**	**12.17**	

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CONSTRUCTION STAKING ITEMS

CAT	LOCATION	STA	TO	STA	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-11-172) LS	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1400-01-70) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	COMMENTS
0010	STH 16	561+35	-	668+00	408	408	---	---	---	---	408	
0010	STH 16	668+00	-	773+50	---	---	---	---	---	---	---	
0010	STH 16	773+50	-	879+00	686	686	---	---	---	---	686	
0010	STH 16	879+00	-	994+50	---	---	---	---	---	---	---	
0010	STH 16	994+50	-	1150+50	---	---	---	---	---	---	---	
0010	STH 16	1150+50	-	1159+43	566	534	1	32	---	---	566	
0010	STH 16	1159+43	-	1204+00	---	---	---	---	---	---	---	
				SUBTOTAL	**1,660**	**1,628**	**1**	**32**	**0**	**0**	**1,660**	
0010	STH 16	PROJECT			---	---	---	---	63,372	1	---	
				SUBTOTAL	**0**	**0**	**0**	**0**	**63,372**	**1**	**0**	
				TOTAL	**1,660**	**1,628**	**1**	**32**	**63,372**	**1**	**1,660**	

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SIGNING ITEMS

CAT	LOCATION	STA	OFFSET	SIGN NO.	SIGN CODE	W x H	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
0010	STH 16	622+36	30' RT	1	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	638+18	30' LT	2	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	672+68	30' RT	3	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	697+79	30 LT	4	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	729+12	30' RT	5	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	750+59	30' LT	6	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	773+00	30' RT	7	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	783+69	30' LT	8	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	797+21	30' RT	9	I2-3	N/A	2	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	802+23	47' LT	10	R1-1	30" X 30"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	803+20	56' RT	11	R1-1	30" X 30"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	851+51	30' RT	12	W14-3	36" X 48"	2	1	2	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION / ON BACK SIDE OF SIGN NO. 13
0010	STH 16	851+51	30' RT	13	D1-61	N/A	---	1	---	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	884+91	30' LT	14	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	914+61	30' RT	15	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	919+55	30' LT	16	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	987+61	30' LT	17	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	988+74	30' RT	18	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION / ON BACK SIDE OF SIGN NO. 19
0010	STH 16	988+74	30' RT	19	J2-2	48" X 57"	---	1	---	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	1011+23	30' RT	20	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	1076+63	30' LT	21	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	1122+04	30' LT	22	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	1162+61	30' RT	23	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	1174+78	30' LT	24	W14-3	36" X 48"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
					TOTAL		**24**	**24**	**23**	

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SAWING ITEMS

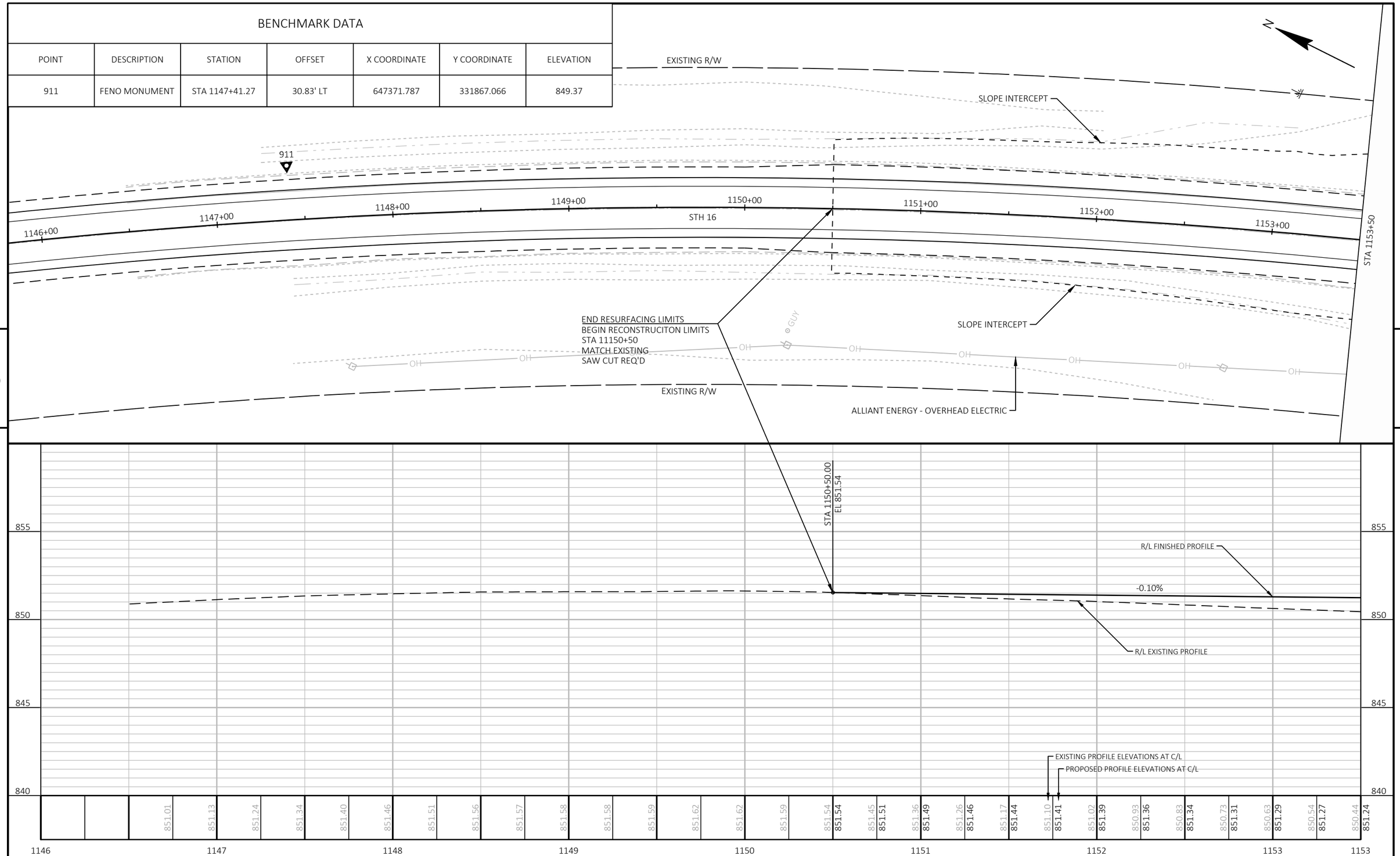
CAT	LOCATION	STA	TO	STA	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
0010	STH 16	561+35	-	668+00	401	---	
0010	STH 16	668+00	-	773+50	259	---	
0010	STH 16	773+50	-	879+00	220	---	
0010	STH 16	879+00	-	994+50	136	---	
0010	STH 16	994+50	-	1150+50	331	24	
0010	STH 16	1150+50	-	1159+43	45	24	
0010	STH 16	1159+43	-	1204+00	271	---	
				TOTAL	**1,663**	**48**	

LANDMARK REFERENCE ITEMS

CAT	LOCATION	STA	TO	STA	SPV.0060.01 VERIFY LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.02 LANDMARK REFERENCE MONUMENTS SPECIAL EACH	COMMENTS
0010	STH 16	561+35	-	668+00	1	---	POINT 1005 / SEE ALIGNMENT DIAGRAM
0010	STH 16	668+00	-	773+50	---	1	POINT 1001 / SEE ALIGNMENT DIAGRAM
0010	STH 16	773+50	-	879+00	---	---	
0010	STH 16	879+00	-	994+50	---	---	
0010	STH 16	994+50	-	1150+50	2	1	POINT 995, 1000 AND 1010 / SEE ALIGNMENT DIAGRAM
0010	STH 16	1150+50	-	1159+43	---	---	
0010	STH 16	1159+43	-	1204+00	---	---	
				TOTAL	**3**	**2**	

BENCHMARK DATA

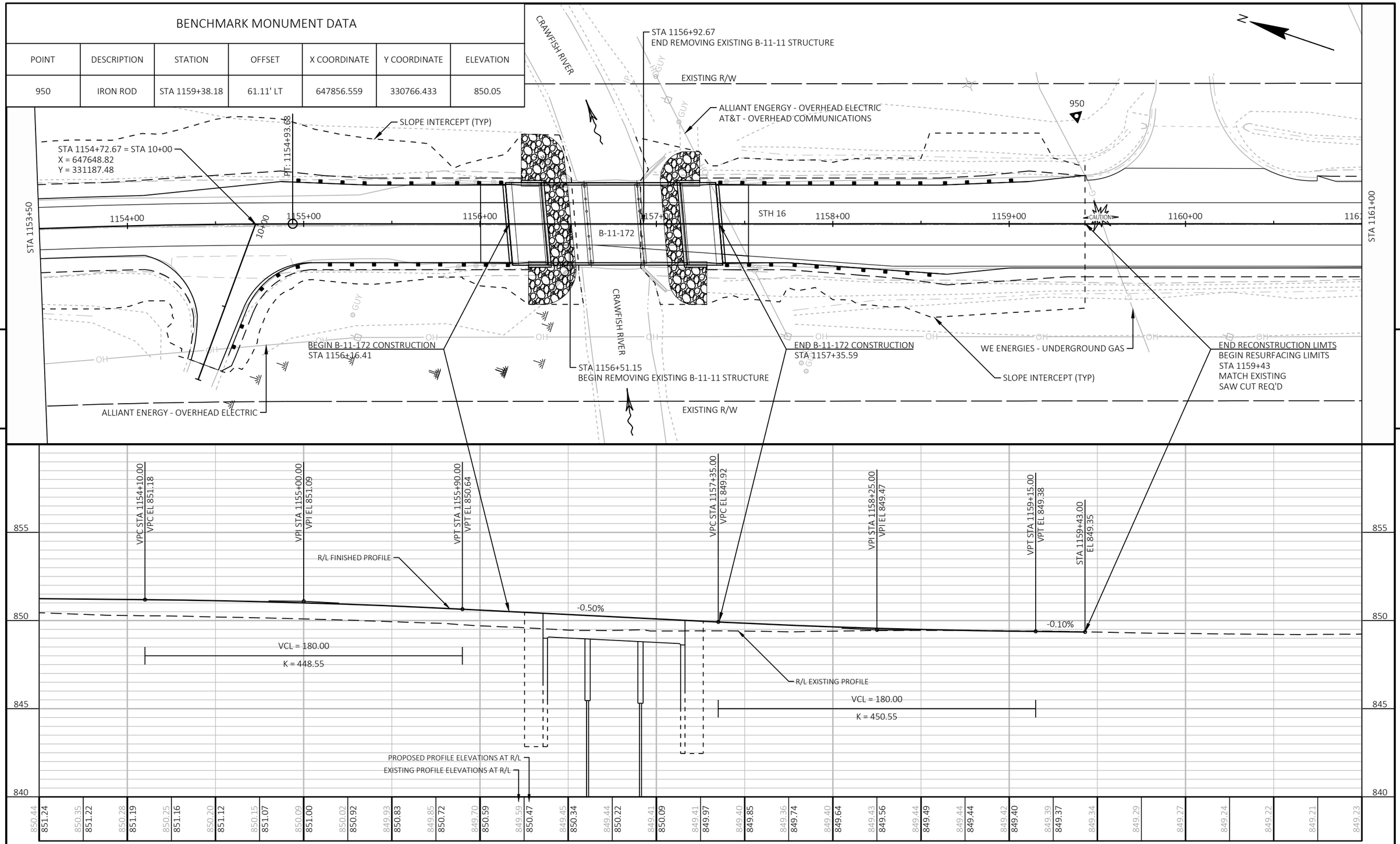
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
911	FENO MONUMENT	STA 1147+41.27	30.83' LT	647371.787	331867.066	849.37



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 163	E

BENCHMARK MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
950	IRON ROD	STA 1159+38.18	61.11' LT	647856.559	330766.433	850.05

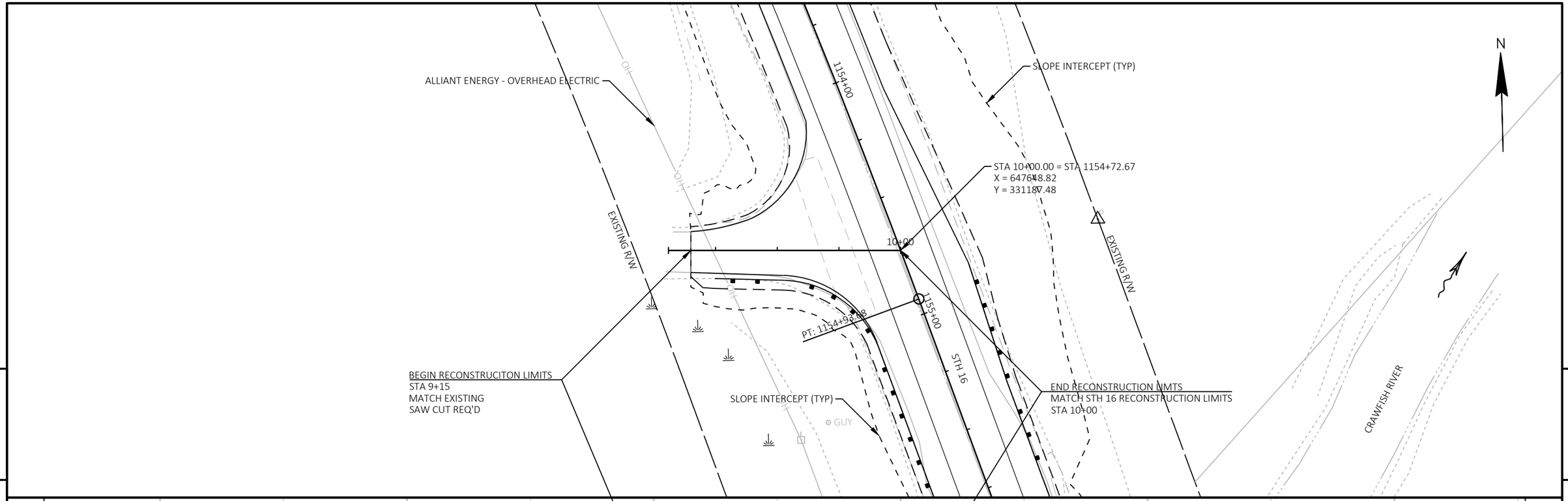


PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: STH 16	SHEET 164 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 02

PLOT DATE : 8/20/2021 12:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	PLAN AND PROFILE: DRIVEWAY 1154+72.67 RT	SHEET 165	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 01
PLOT DATE : 4/22/2021 3:05 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

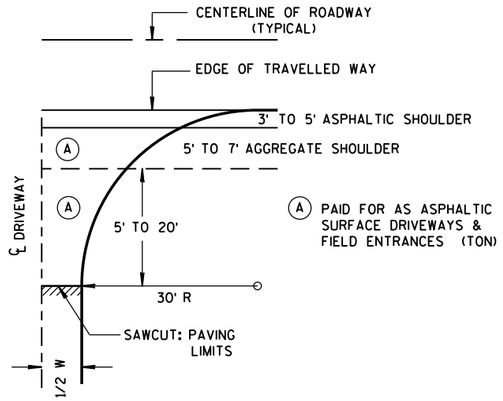
Standard Detail Drawing List

08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
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)
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
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
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDABOUT ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-05	MEDIAN ISLAND MARKING
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

6

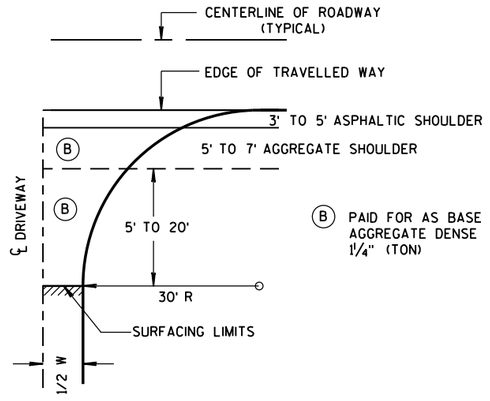
Standard Detail Drawing List

15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-10	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15C35-04B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-04C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



PLAN VIEW
HALF SECTION

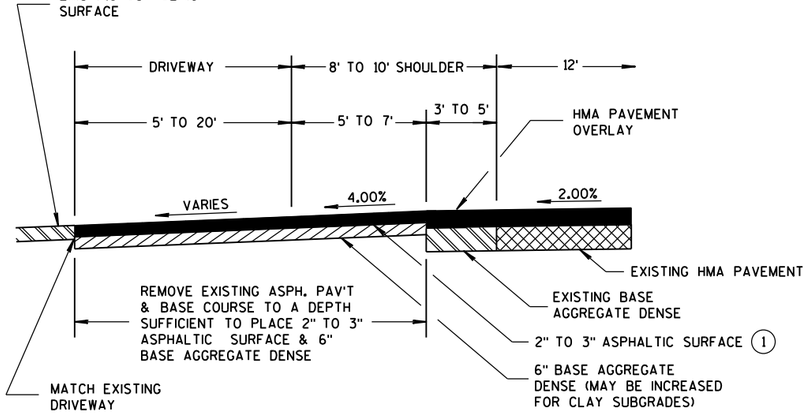
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

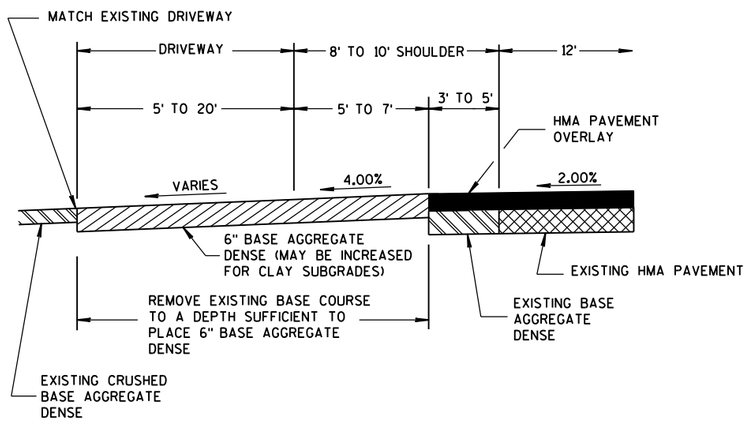
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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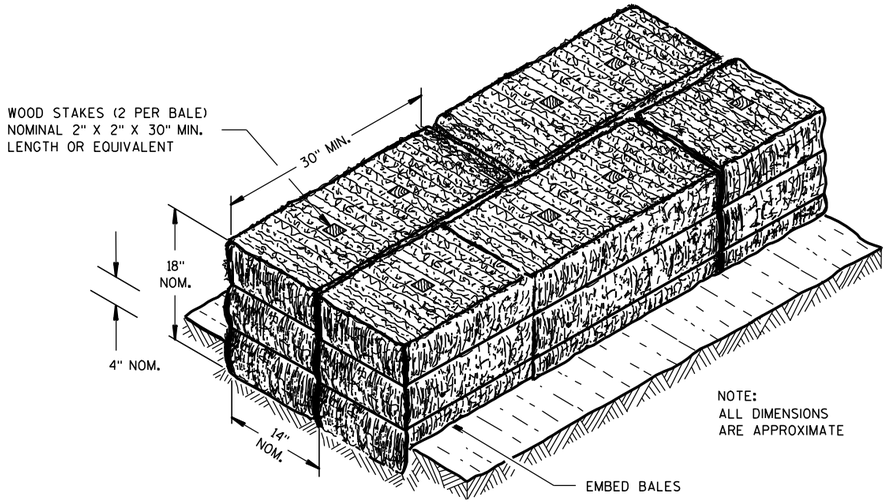
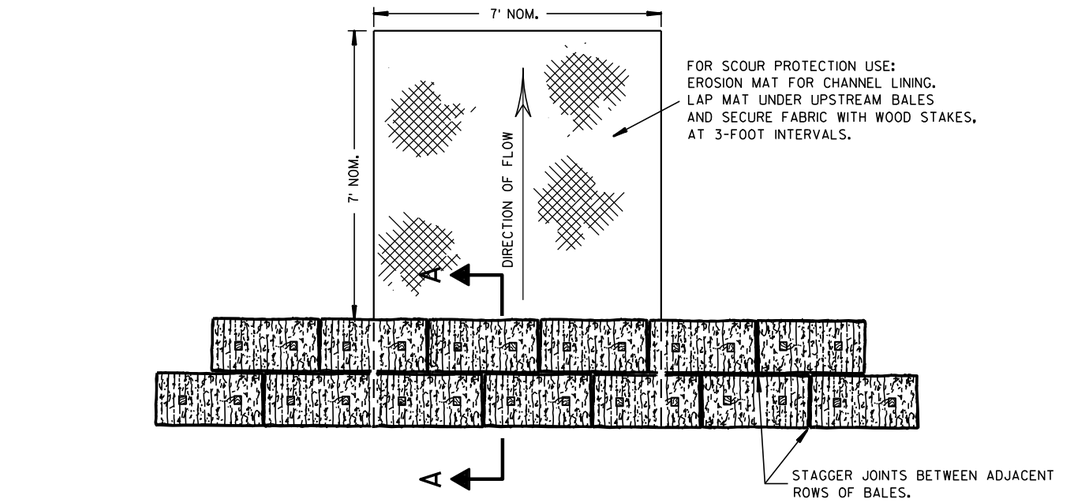
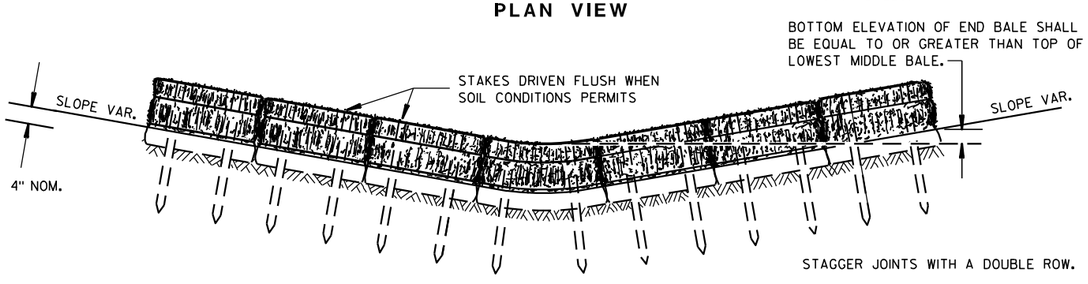
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



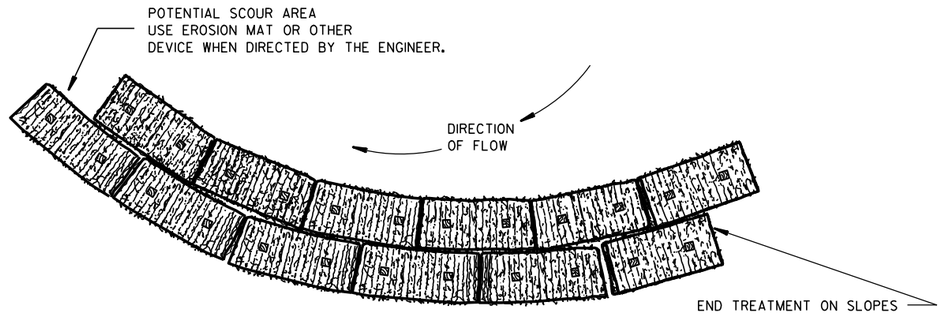
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

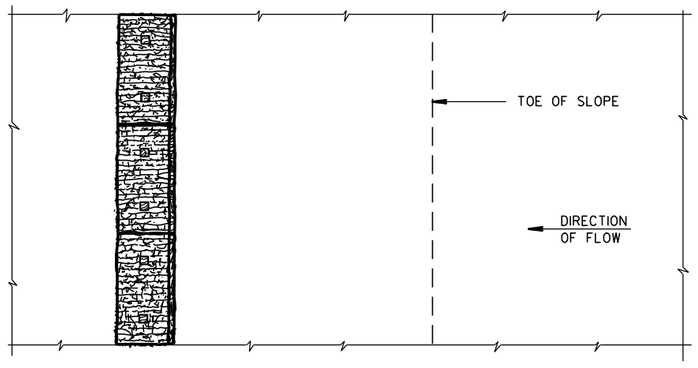
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

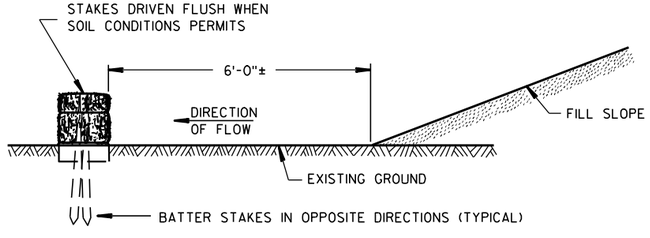


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

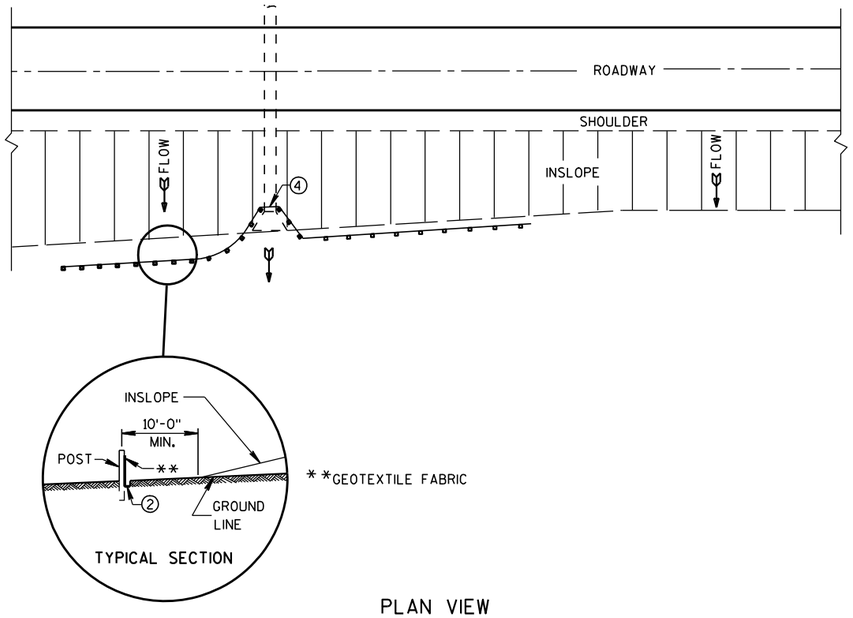
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

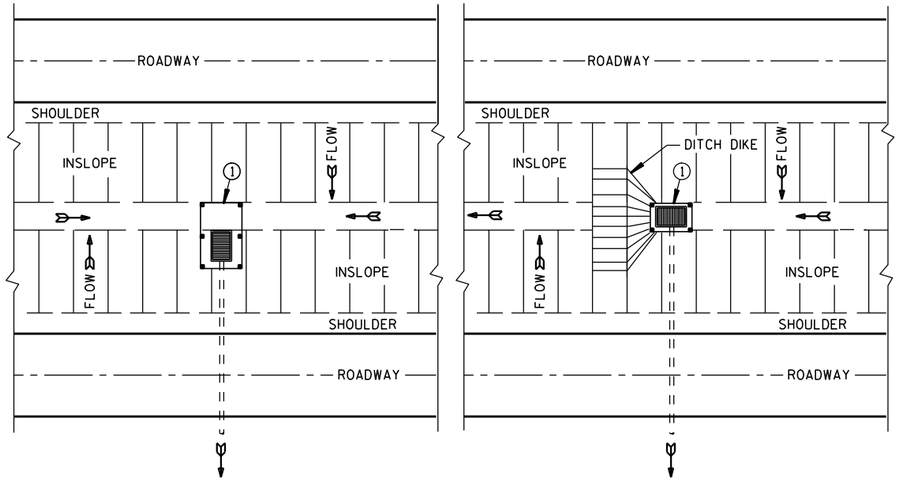
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



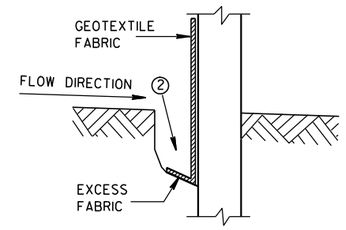
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

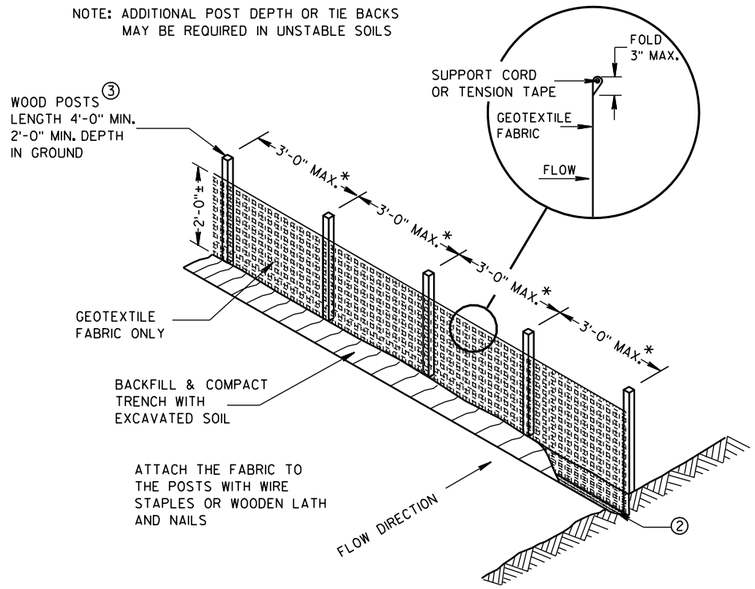
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

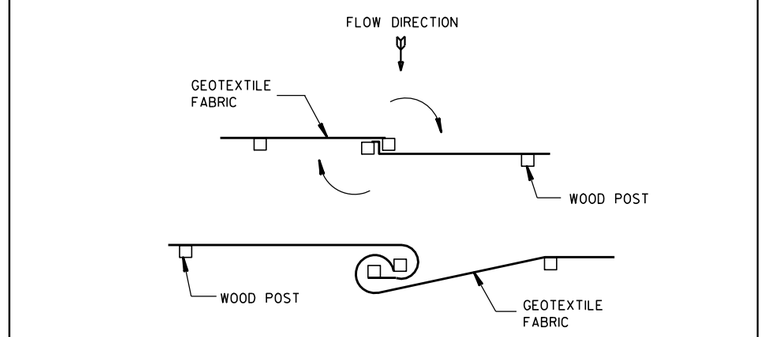


TRENCH DETAIL

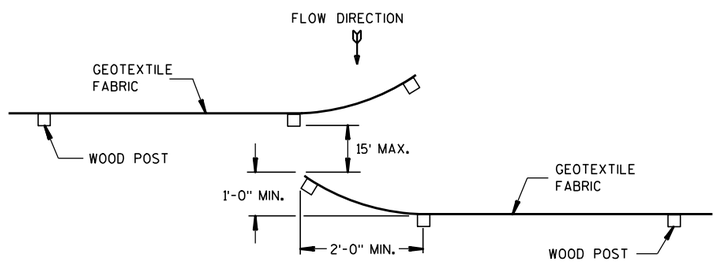


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

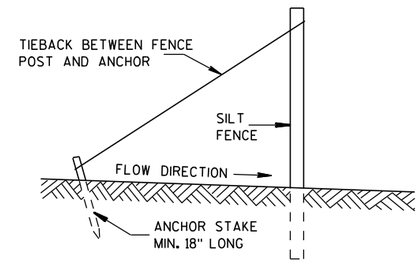


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

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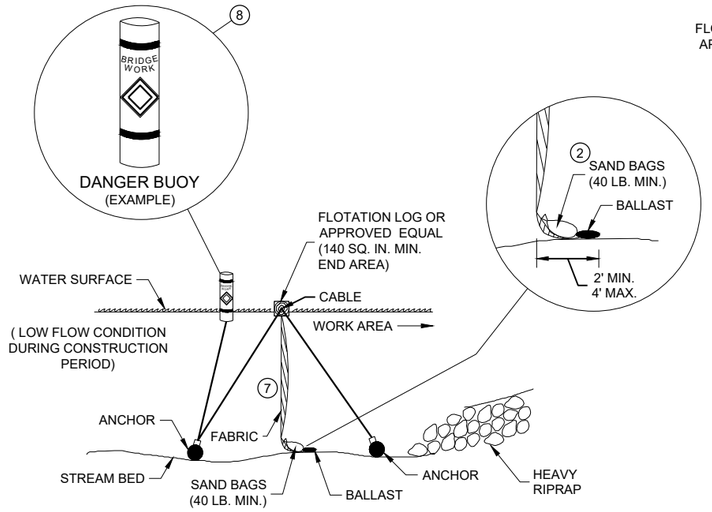
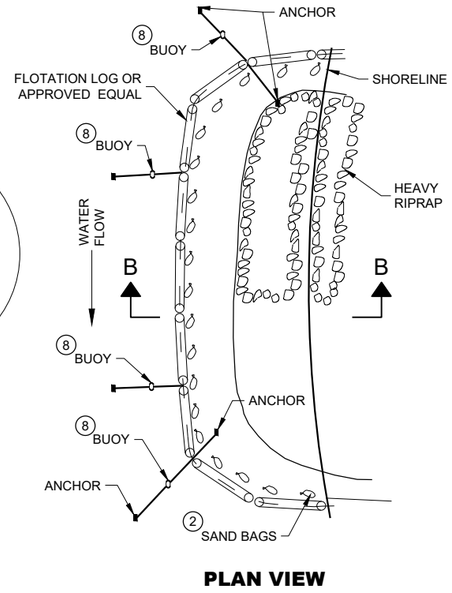
S.D.D. 8 E 9-6

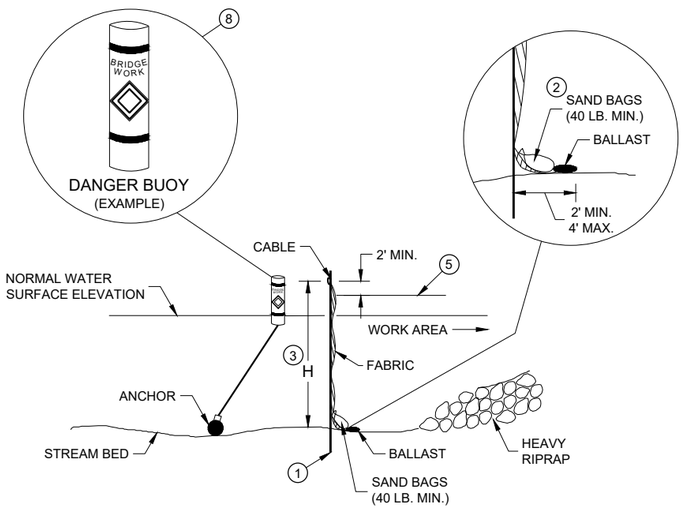


SECTION B - B

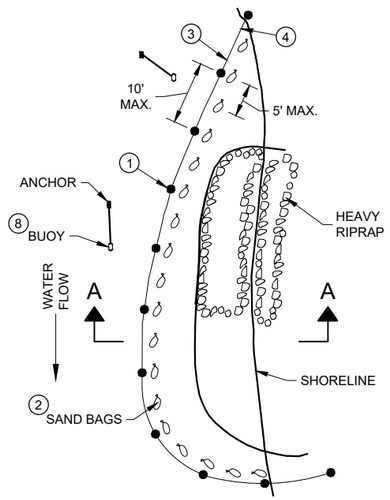


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

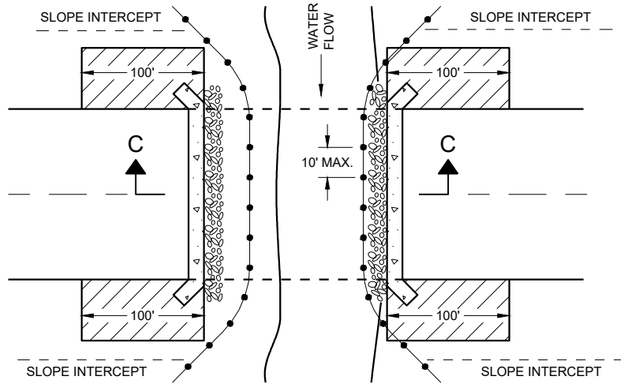
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

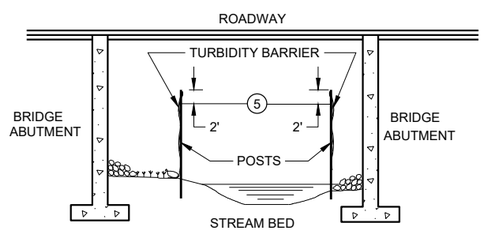
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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. SAND BAGS 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 FEET, 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. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
6. FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK 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

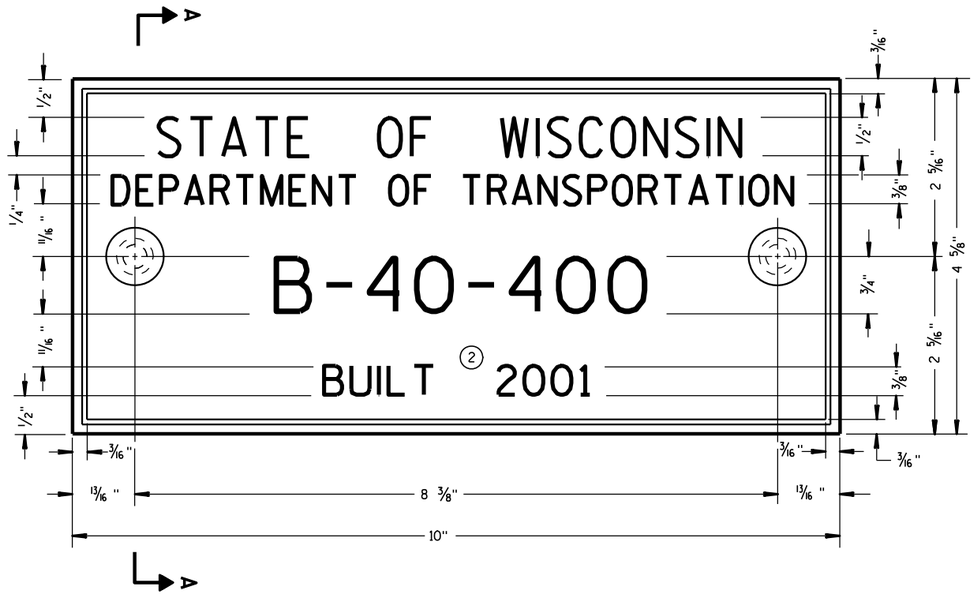
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

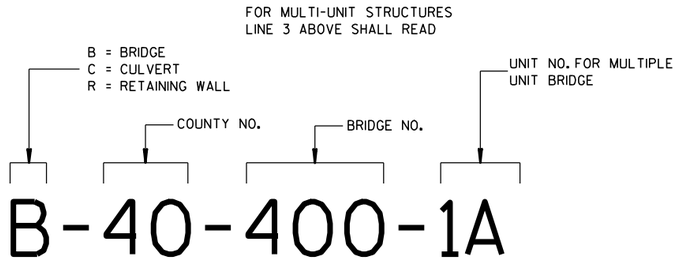
APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOI
ENGINEER

FHWA

6
SDD 08E11 - 02



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

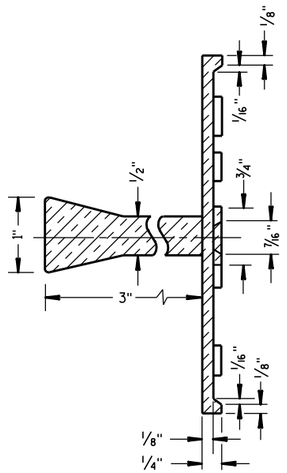
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

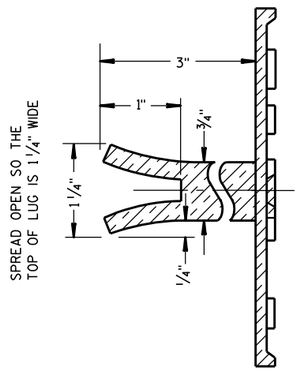
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

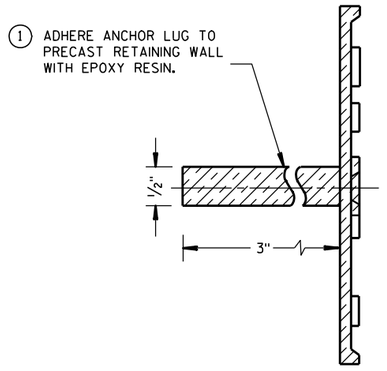
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

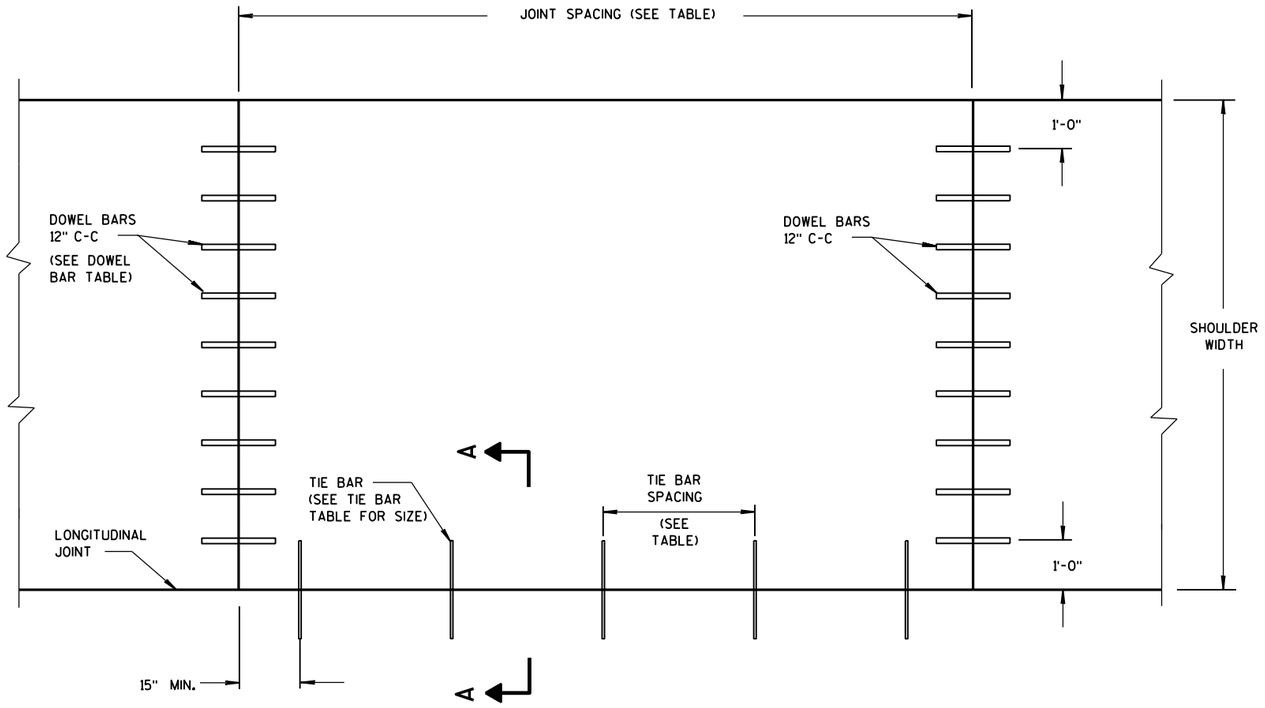
APPROVED

3/26/10 DATE — /S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

6

S.D.D. 12 A 3-10



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

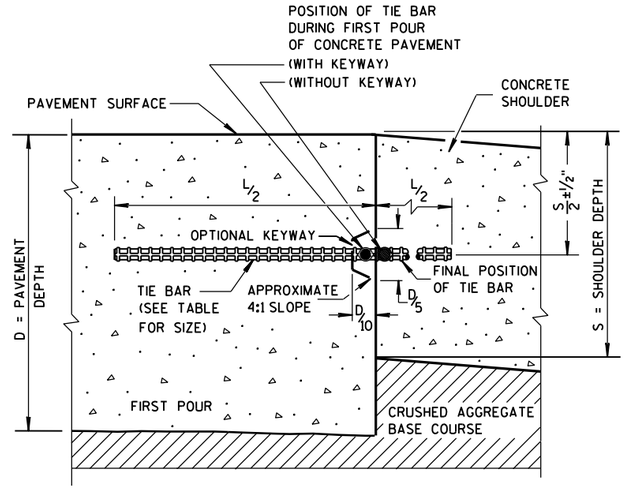
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

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

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

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

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEF
FHWA

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S.D.D. 13 A 3-6

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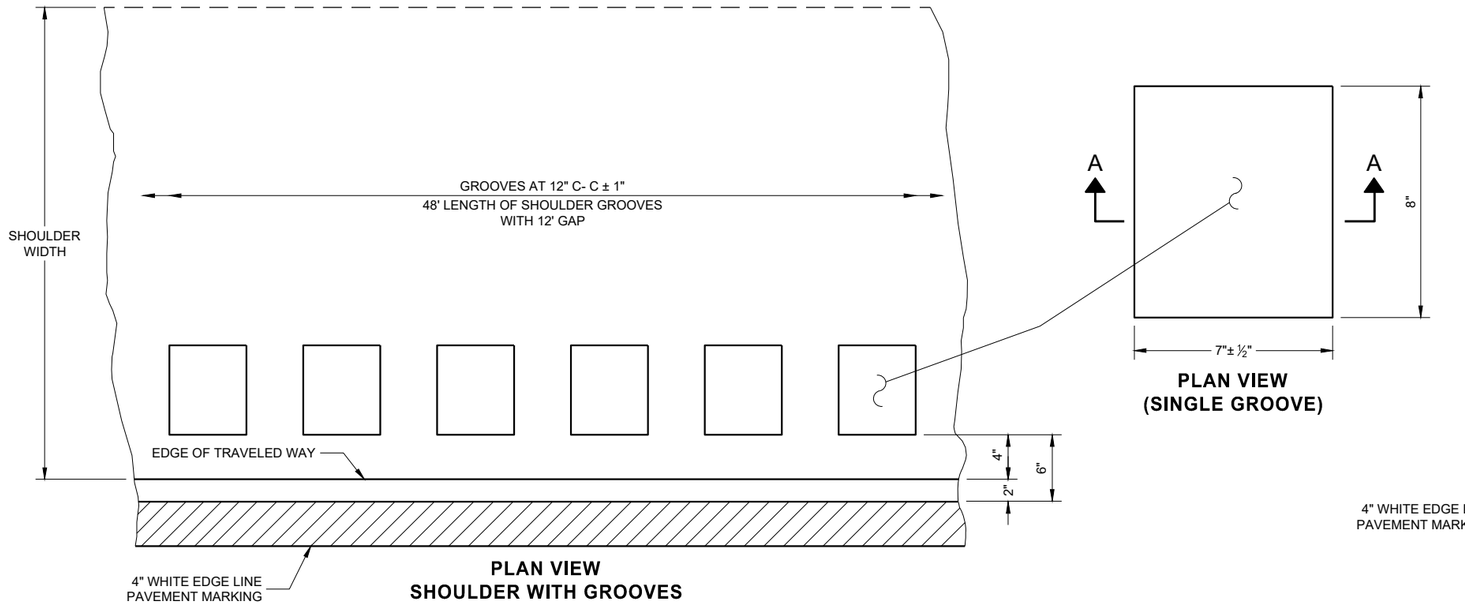
S.D.D. 13 A 3-6



PLAN VIEW
SHOULDER WITH GROOVES

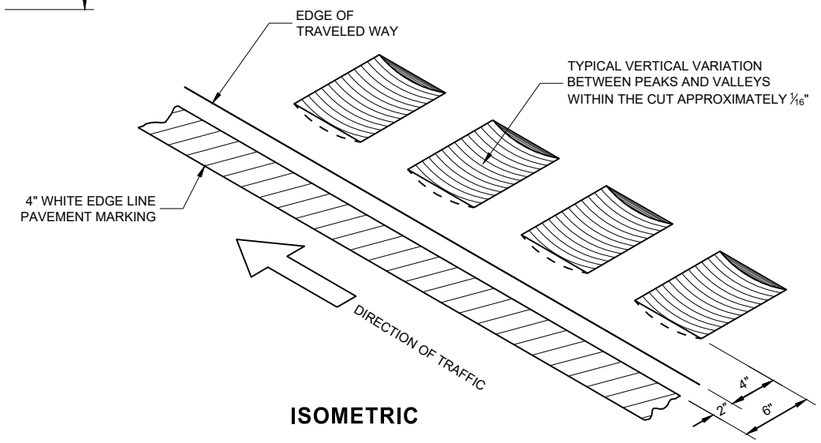
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

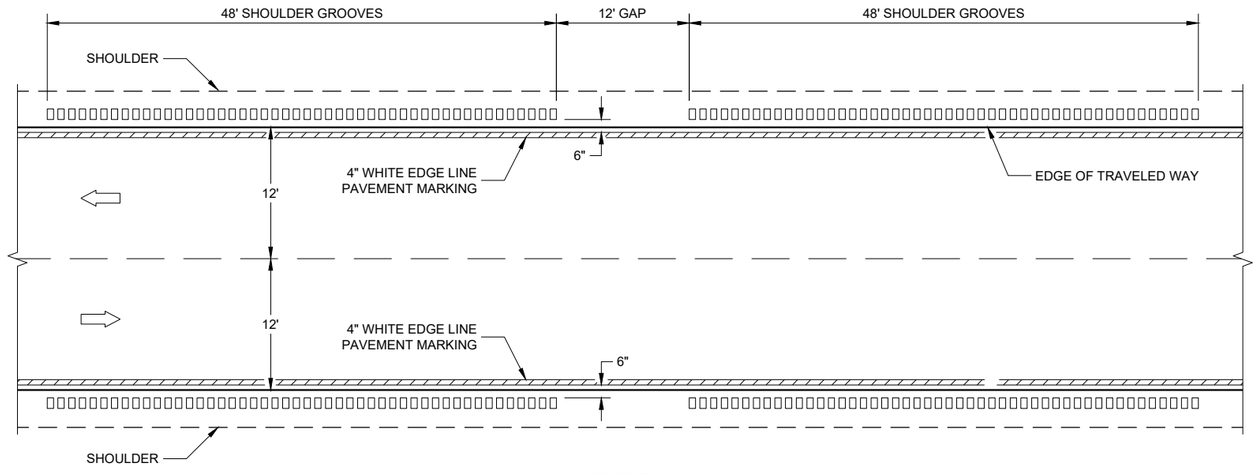
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

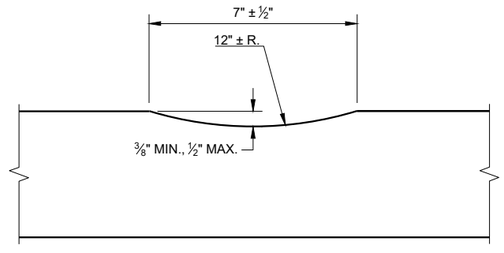


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

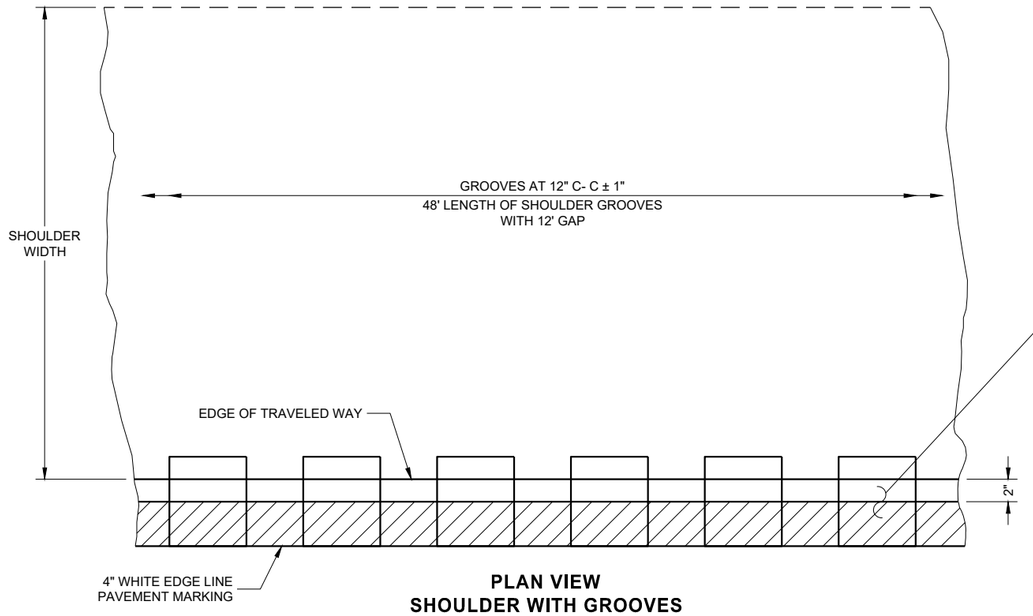


TYPE 1
2 - LANE SHOULDER RUMBLE STRIP

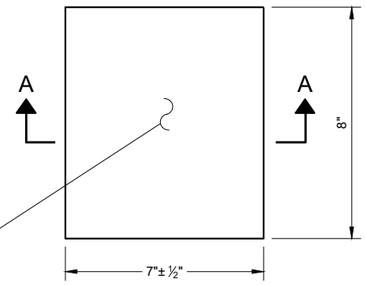


SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING



PLAN VIEW
SHOULDER WITH GROOVES



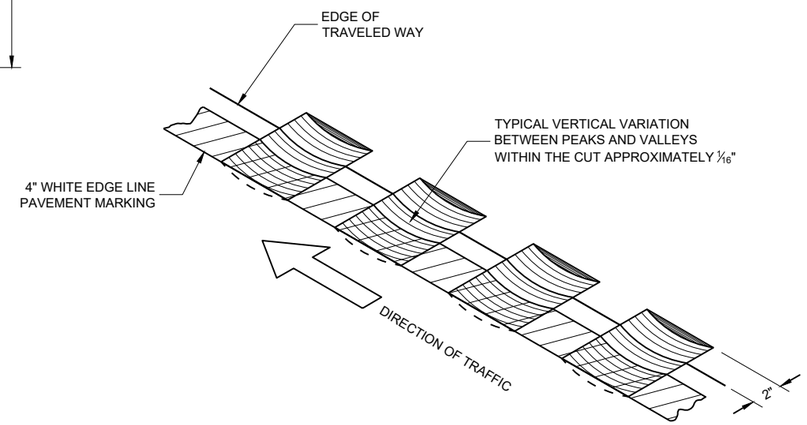
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

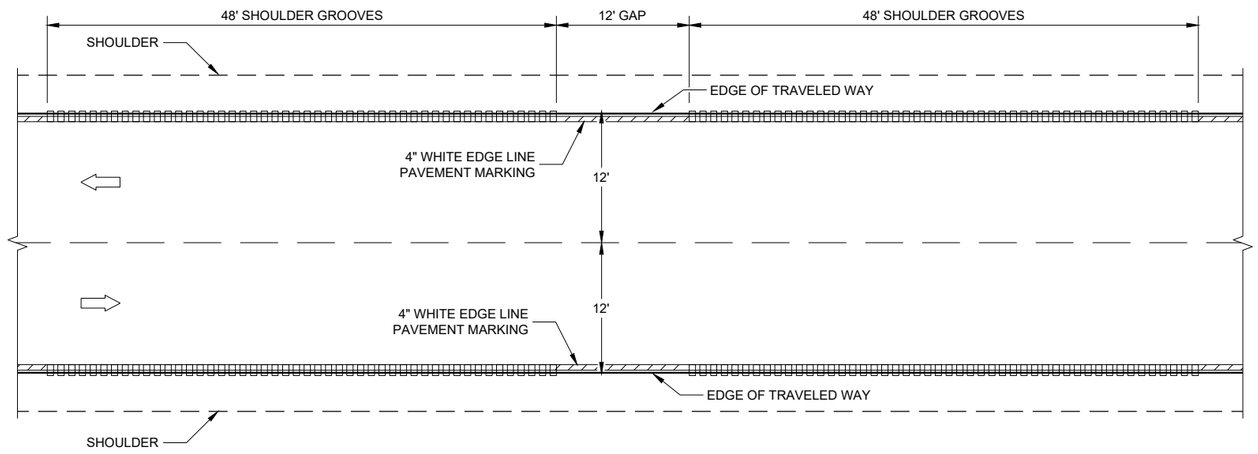
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

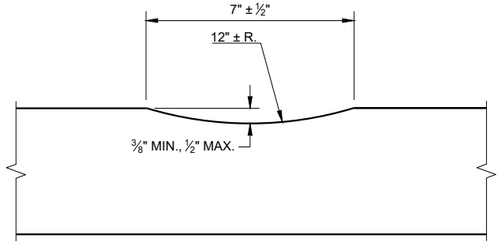


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



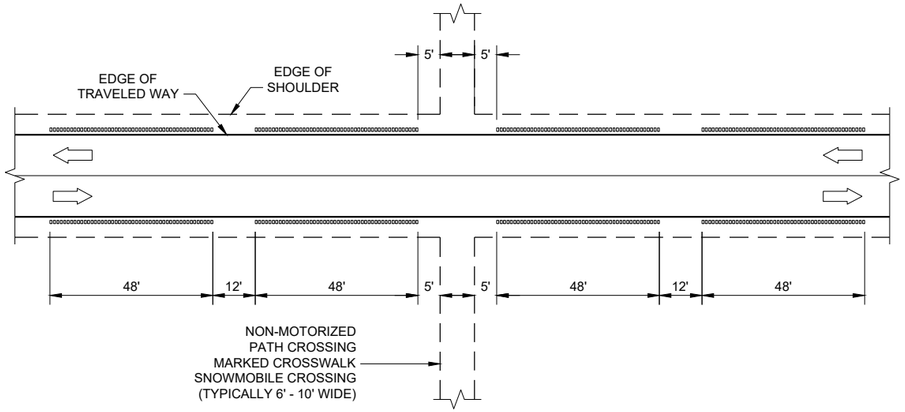
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

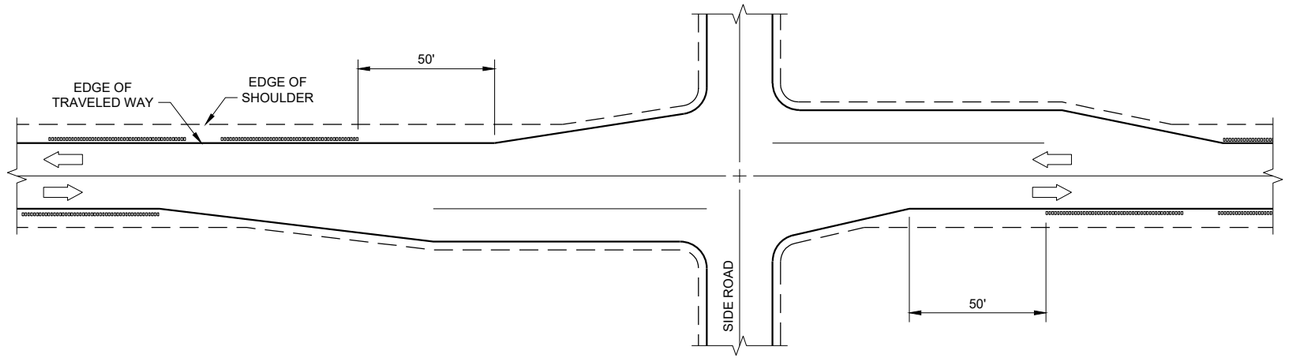
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

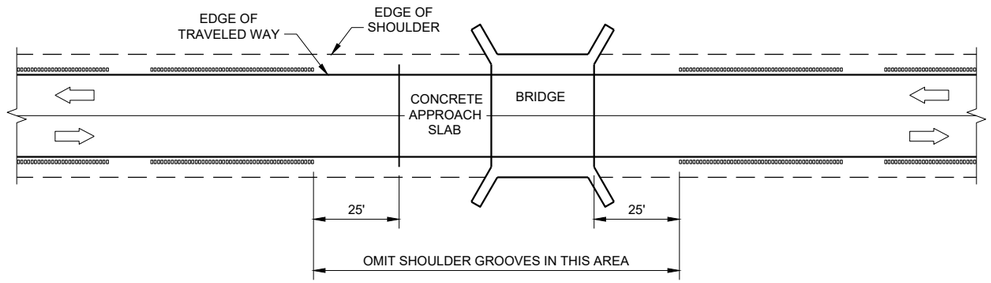
SDD 13A10 - 02b



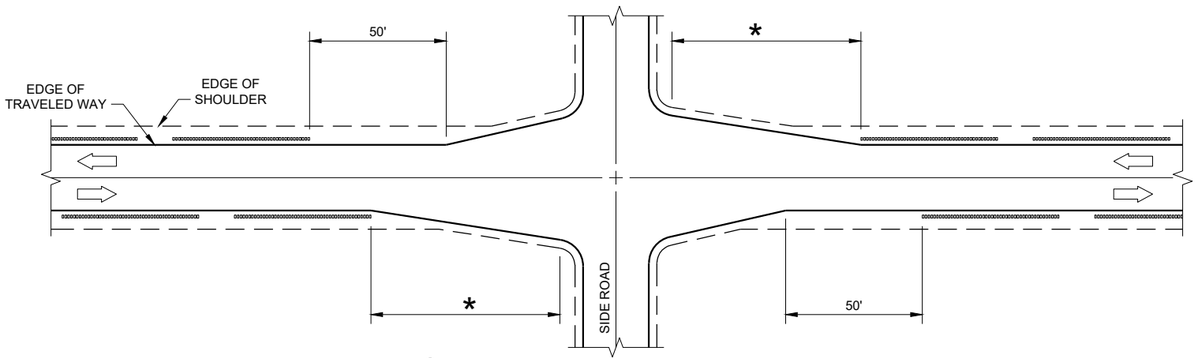
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

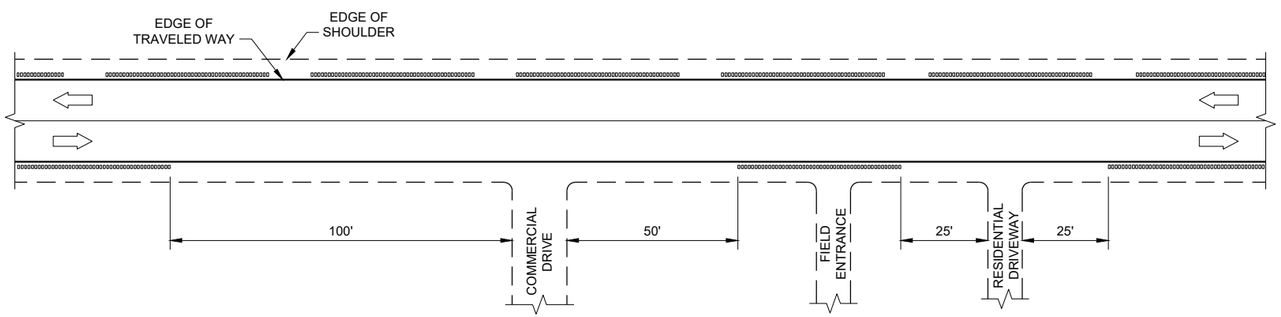


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13A10 - 02c

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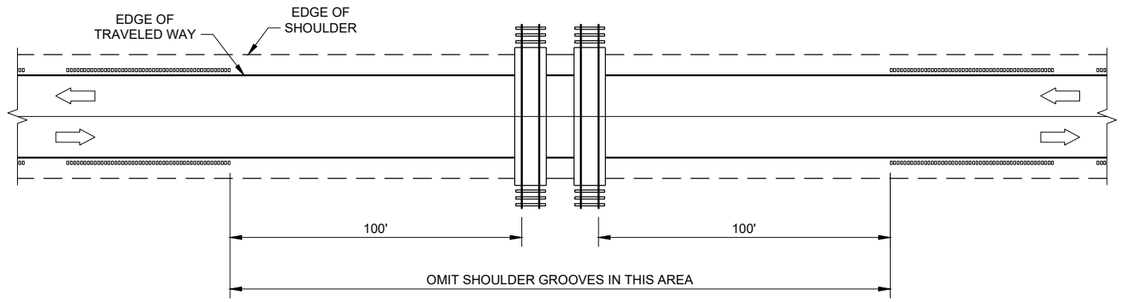
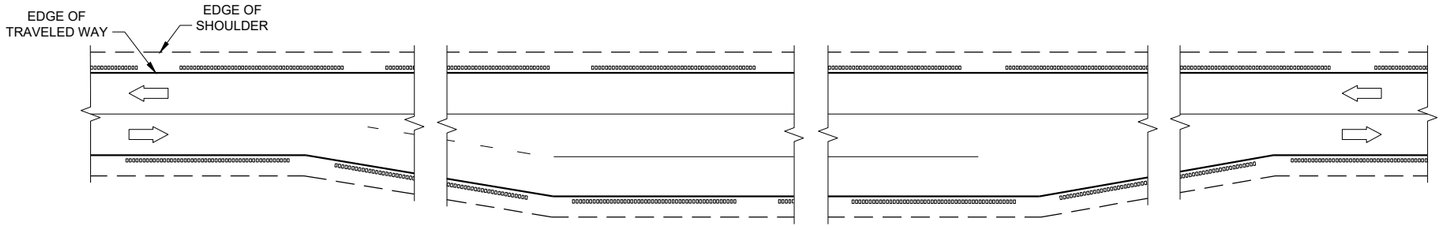
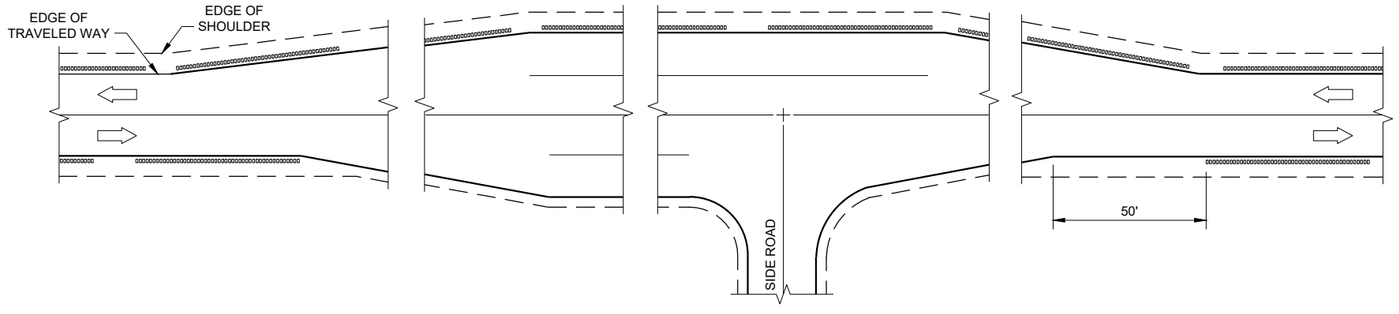
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

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SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

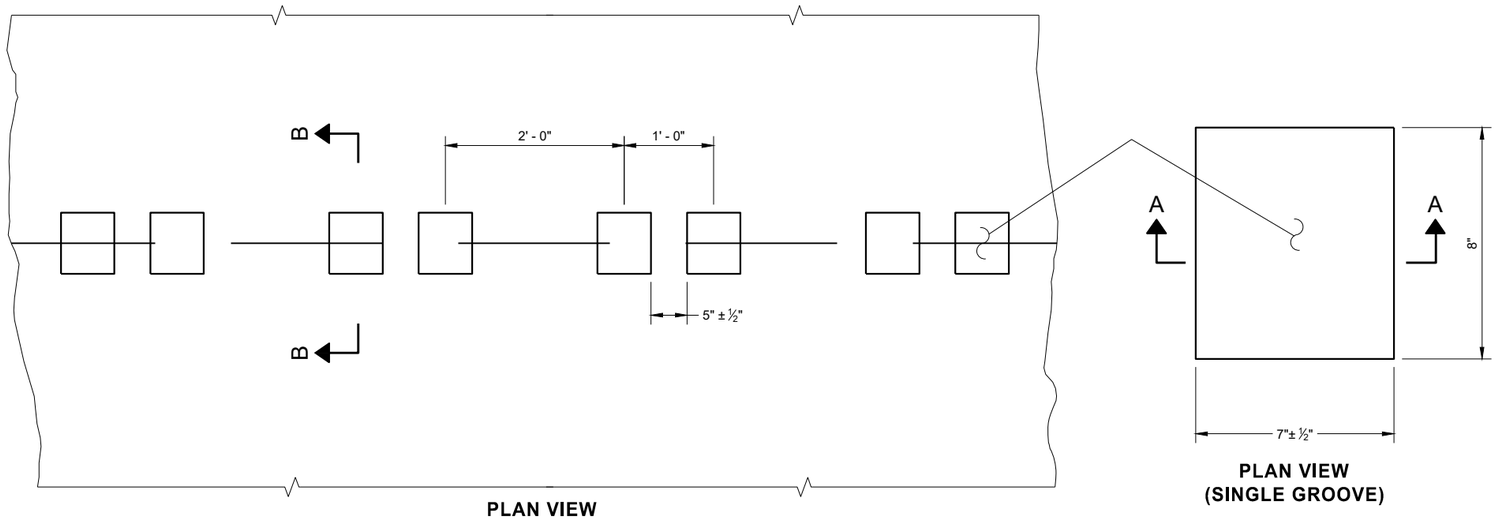
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

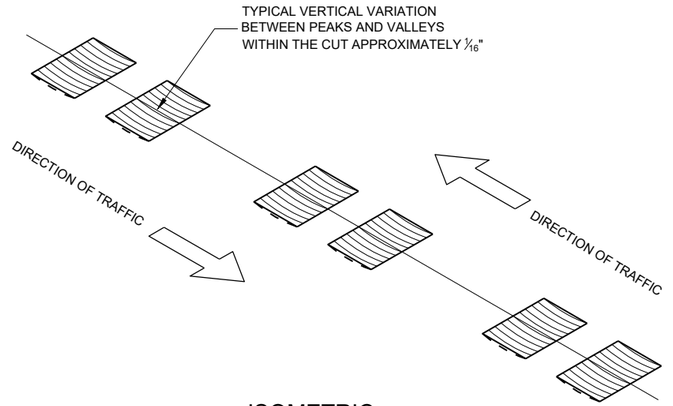
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



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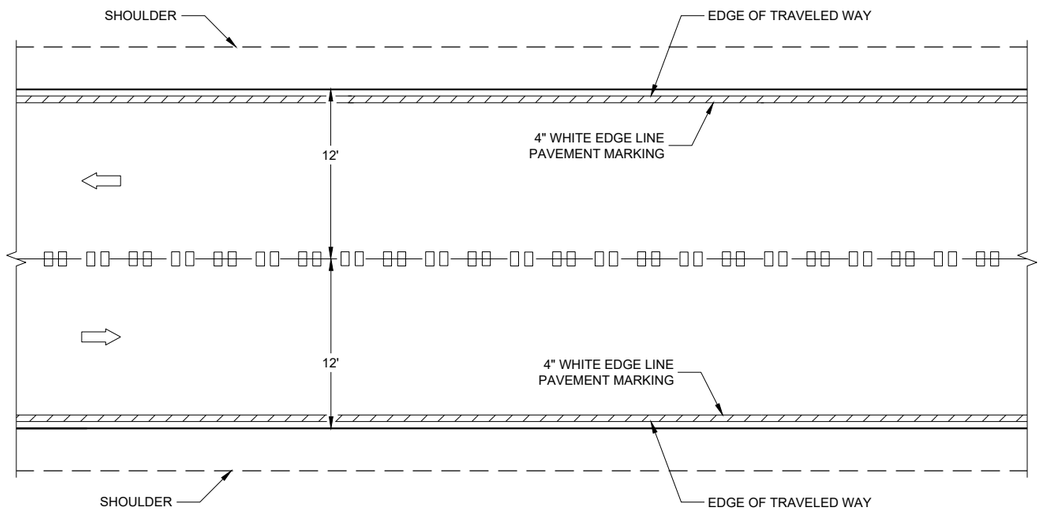
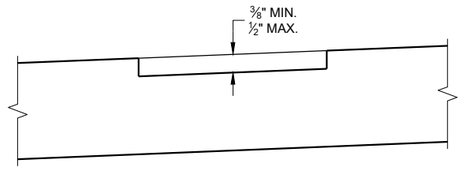
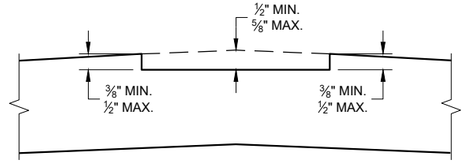


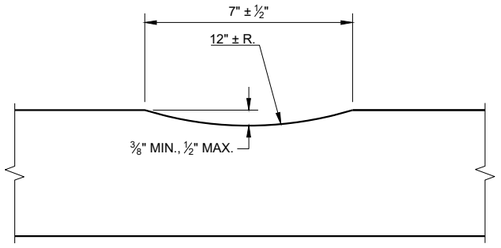
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A11 - 03a

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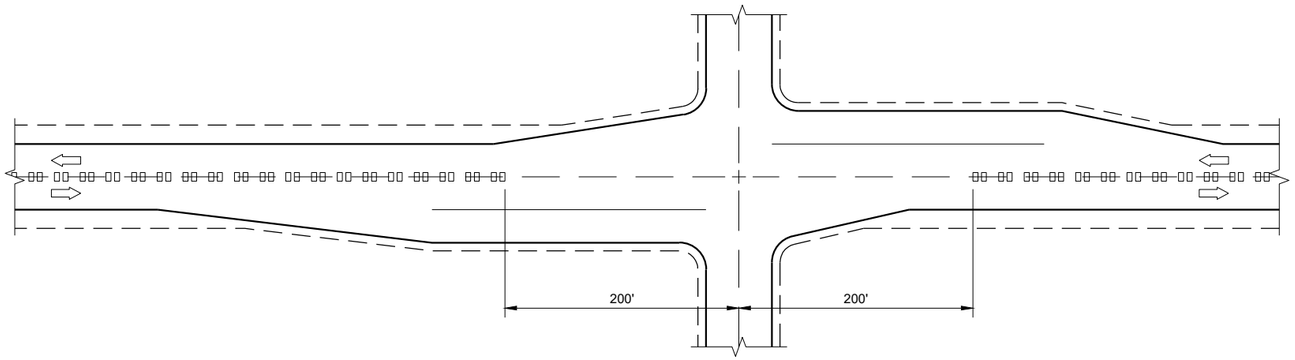
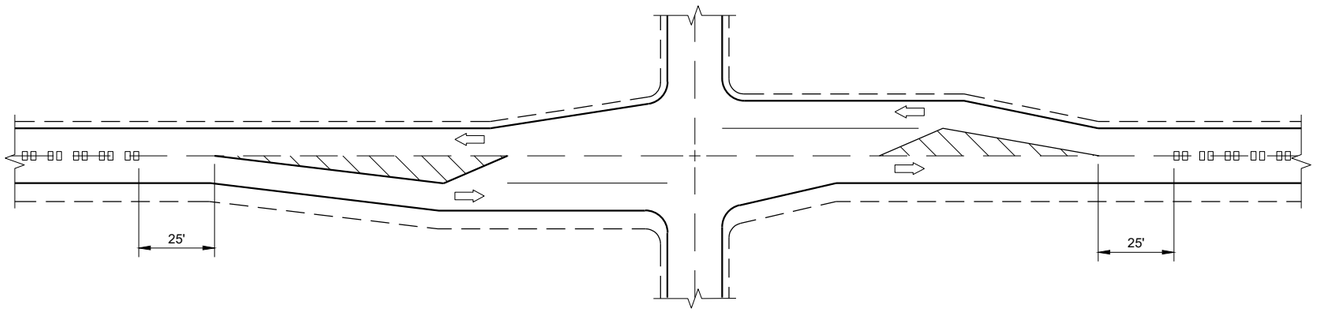
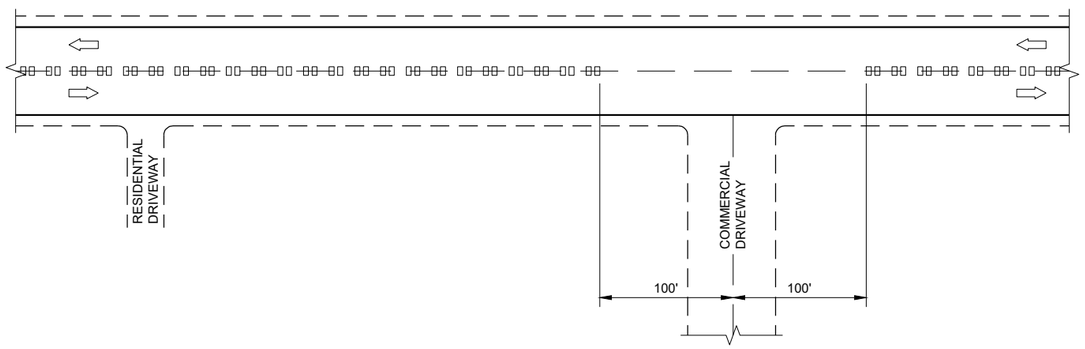
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



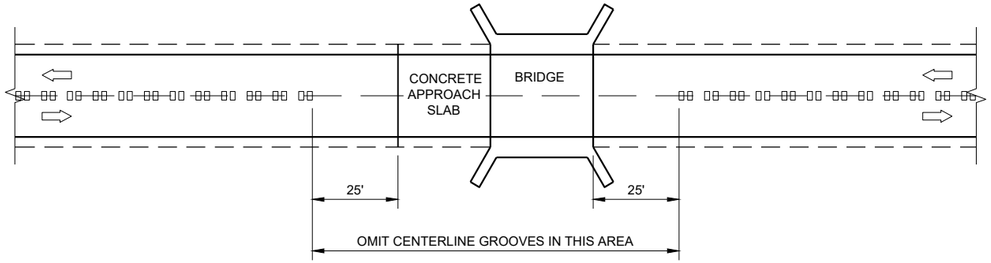
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



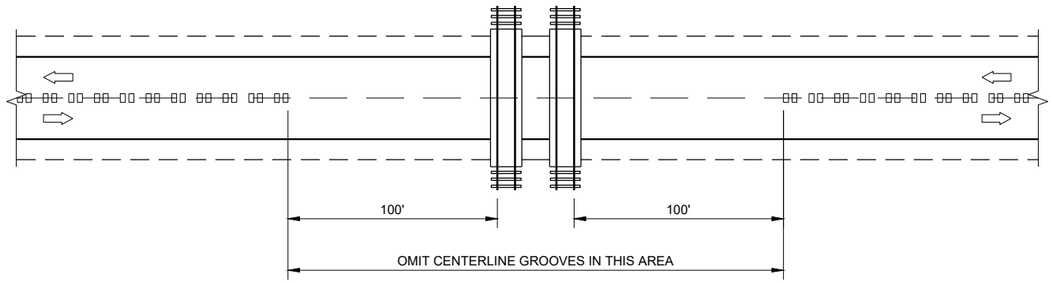
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 13A11 - 03b

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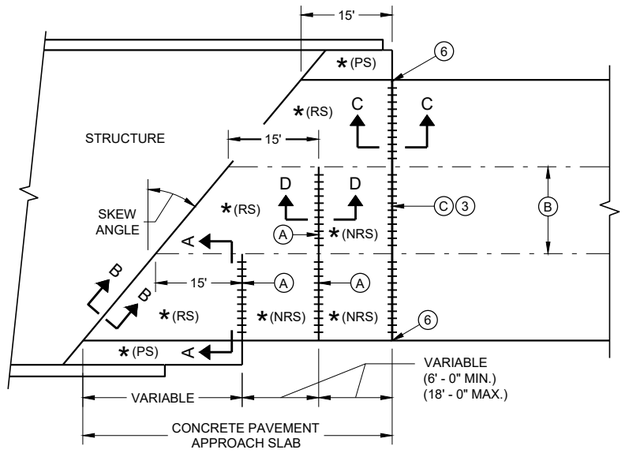
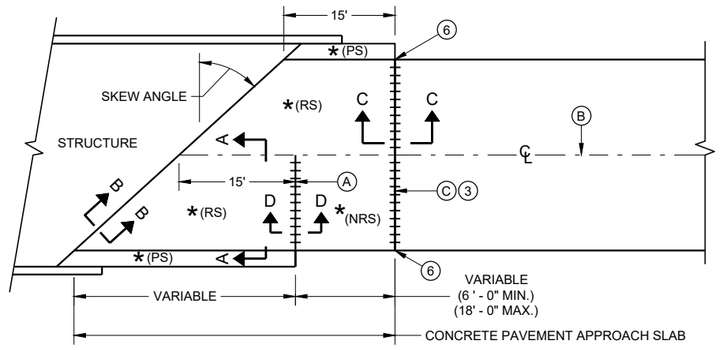
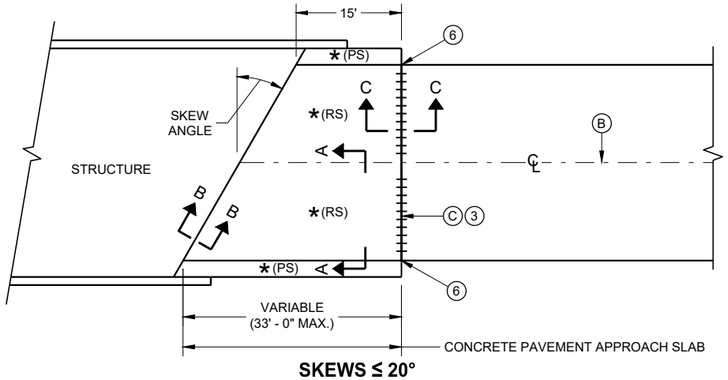
SDD 13A11 - 03b



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

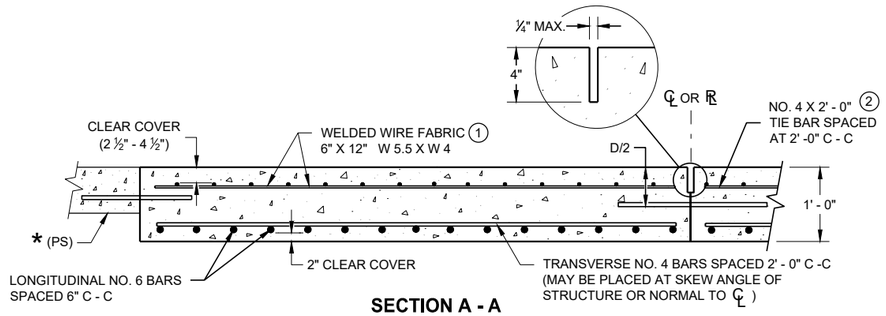
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

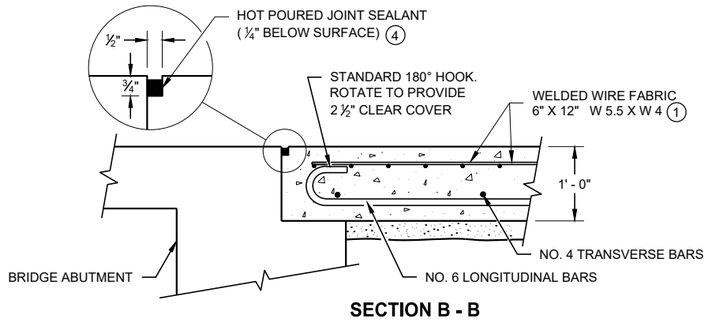
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

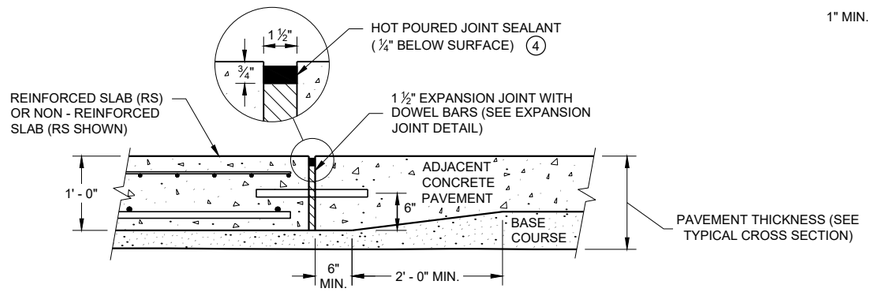
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

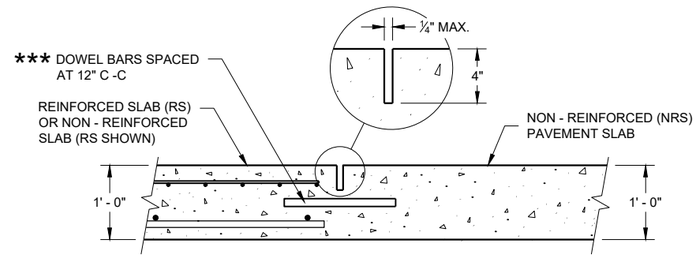
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

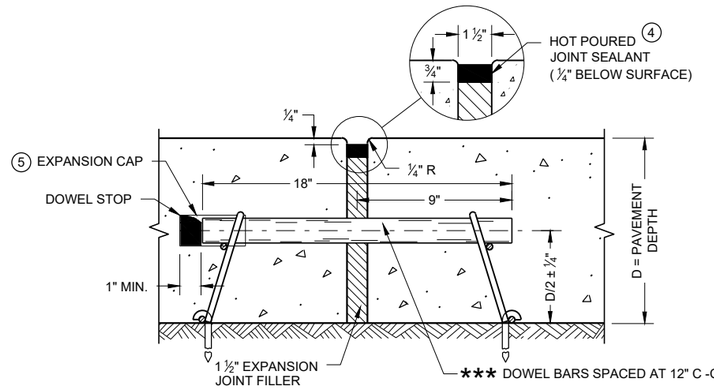
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

FHWA

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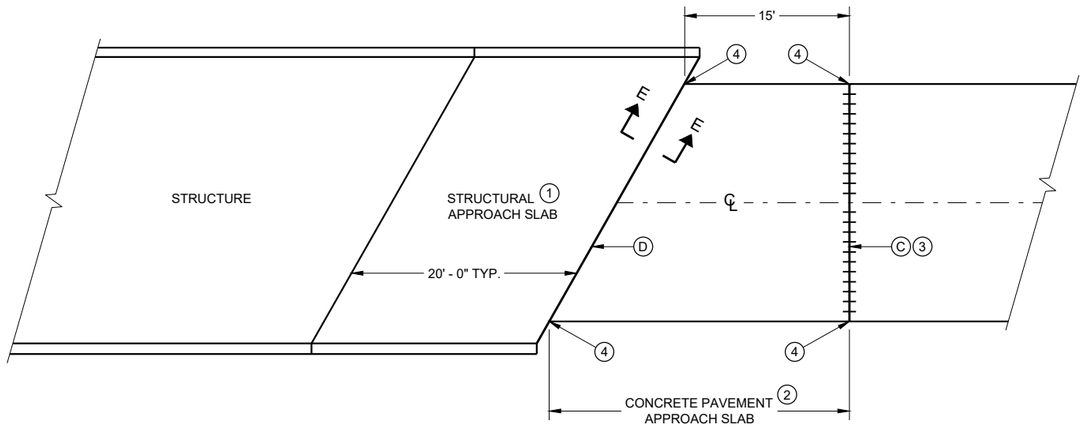
SDD 13B02 - 09a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

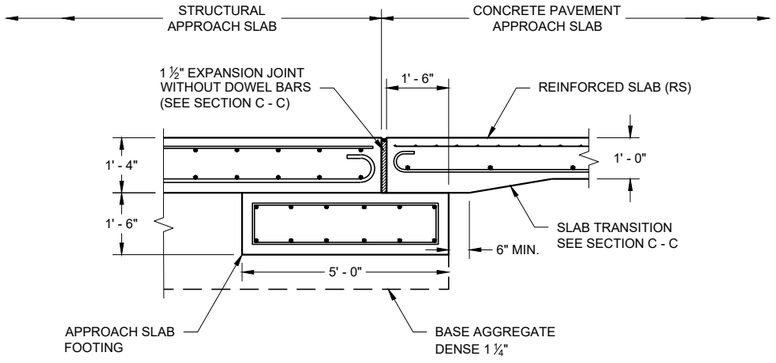
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

(D) 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD 13B02 - 09b

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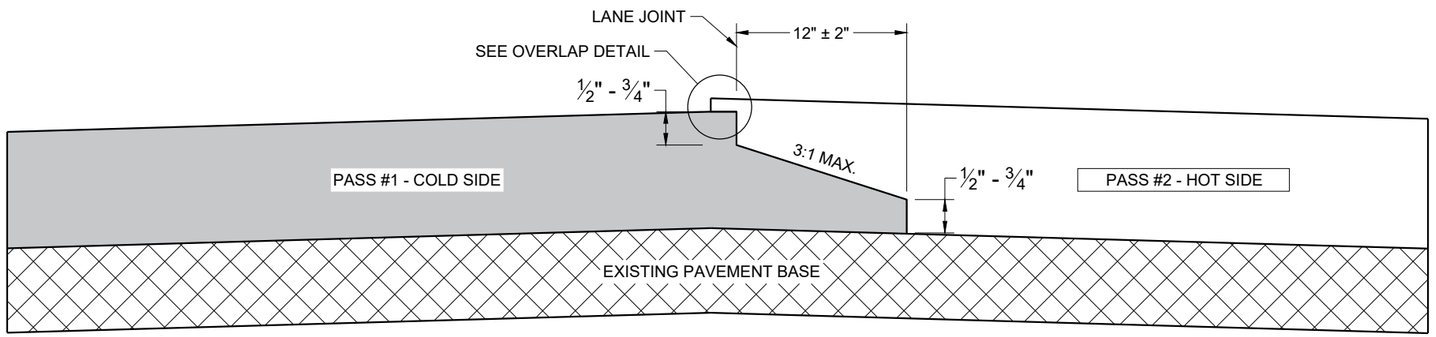
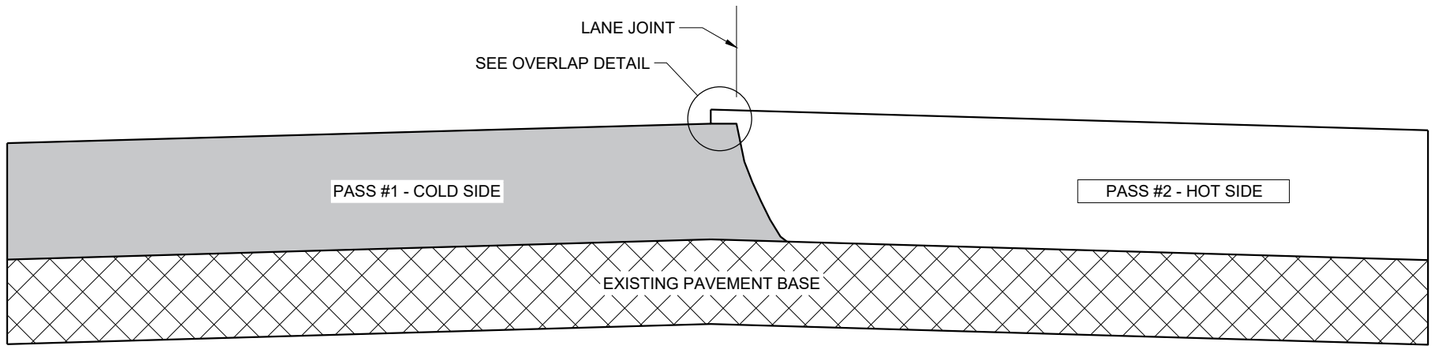
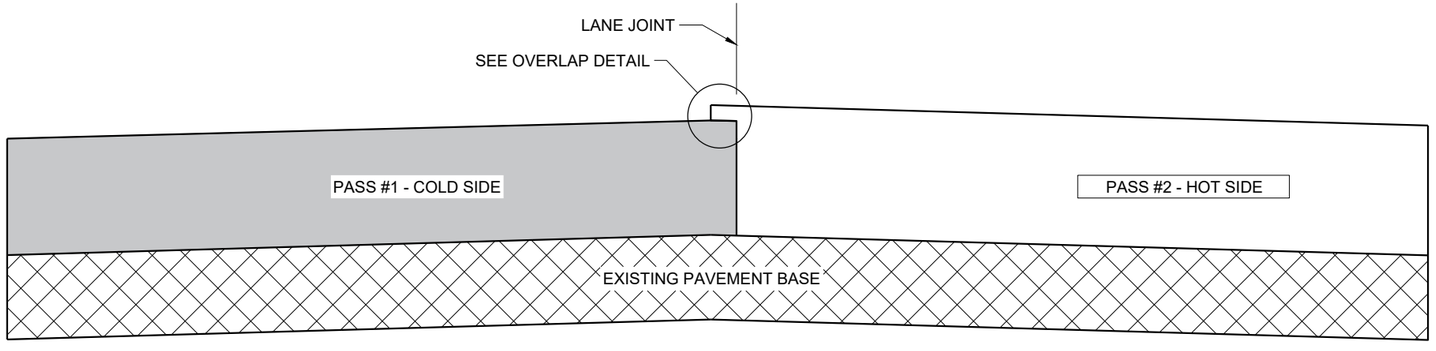
SDD 13B02 - 09b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

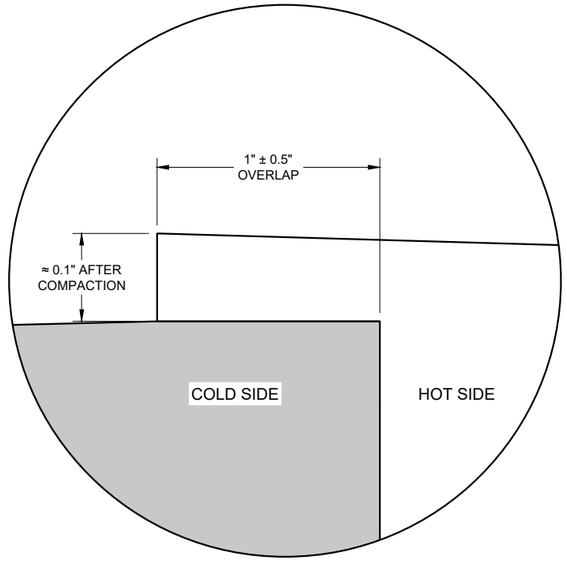
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

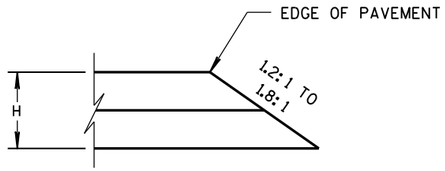
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

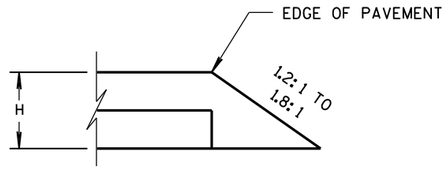
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



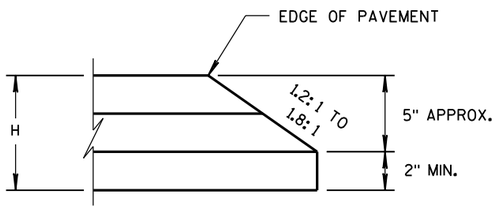
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



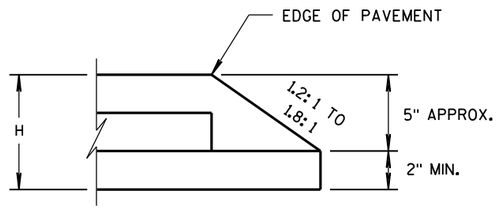
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

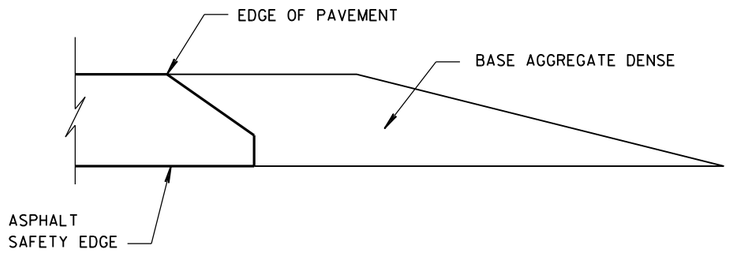
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

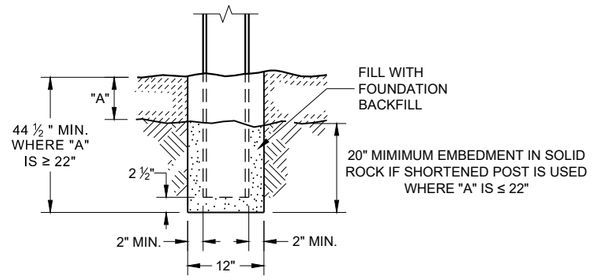
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

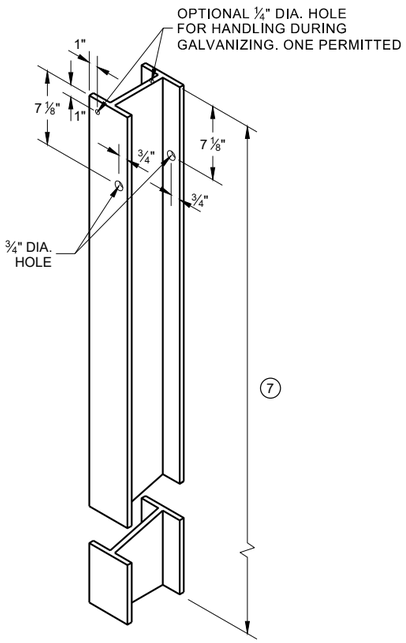
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

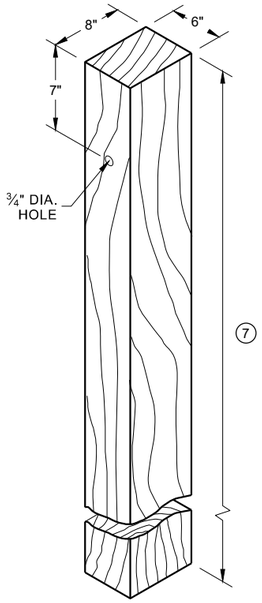
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



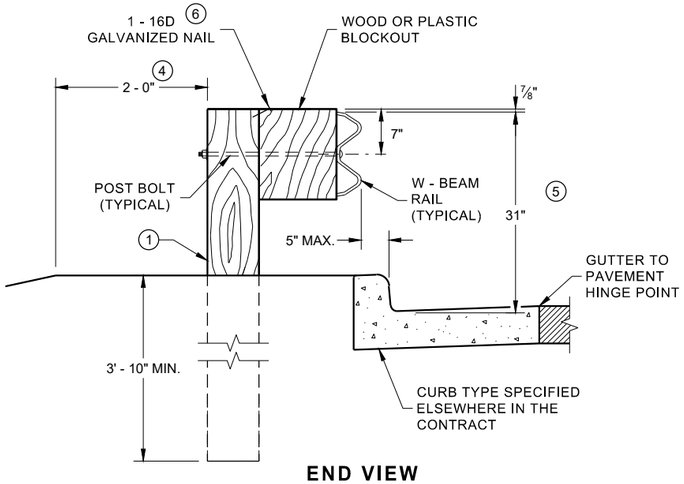
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



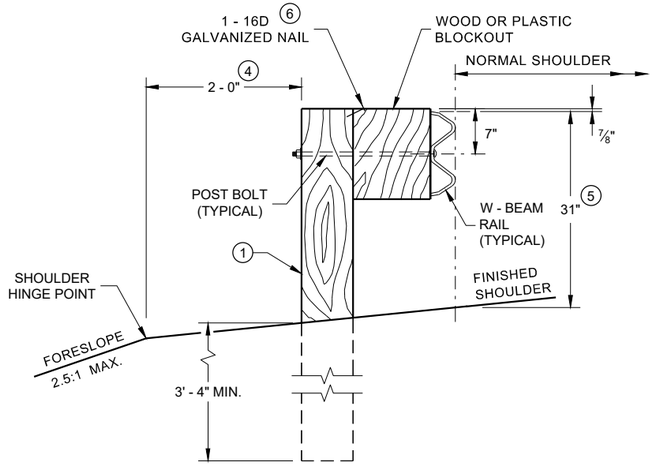
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



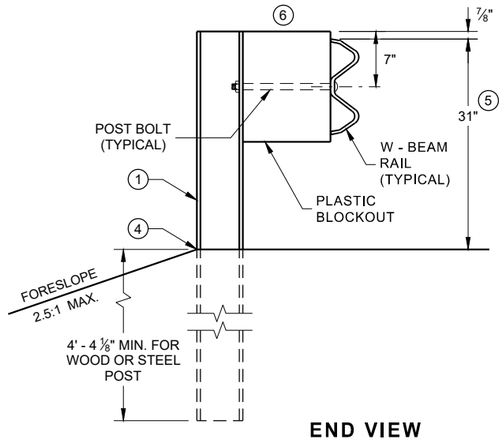
WOOD POST (6" X 8") NOMINAL (1)



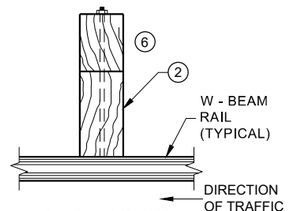
END VIEW
LOCATED ALONG A CURBED ROADWAY



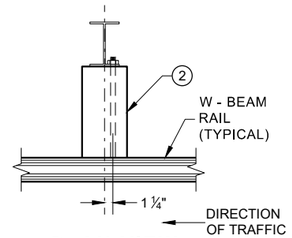
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



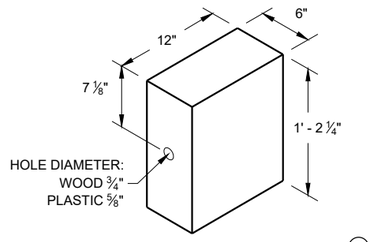
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

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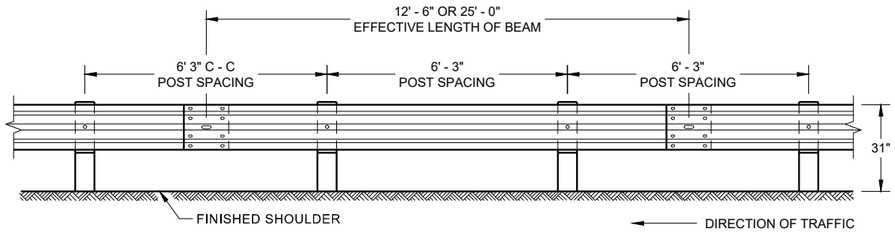
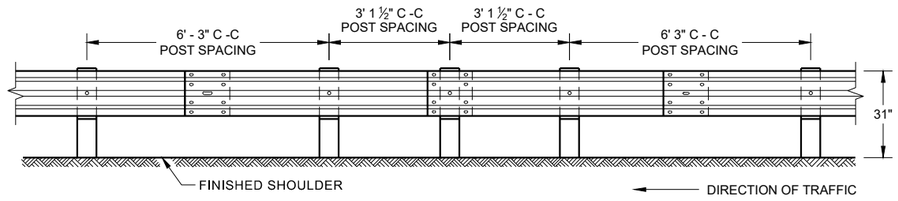
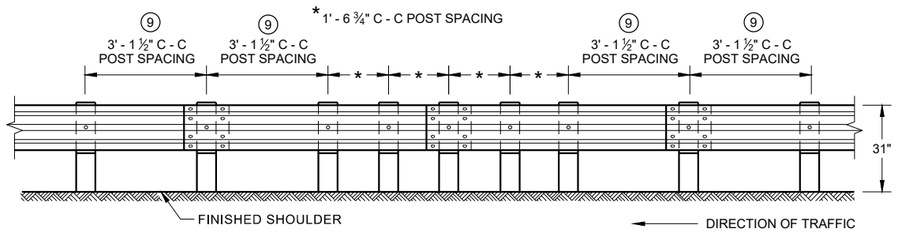


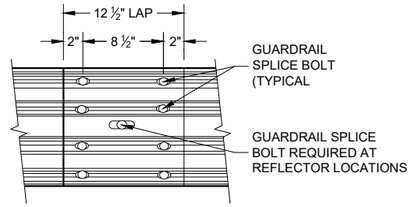
FRONT VIEW
POST SPACING STANDARD INSTALLATION



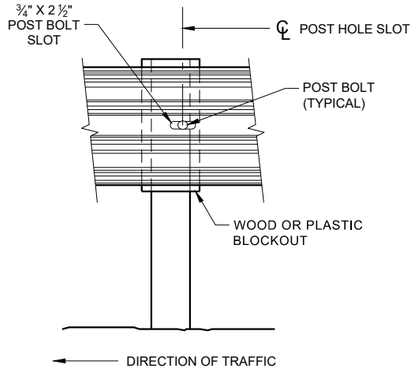
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



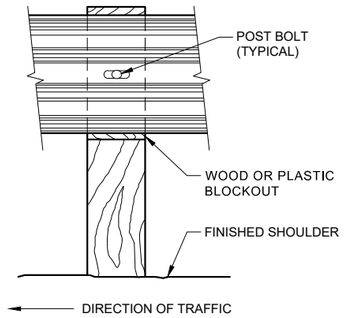
FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST

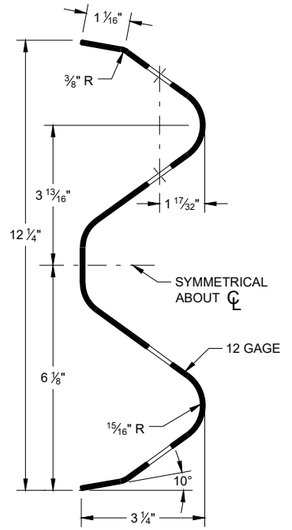
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

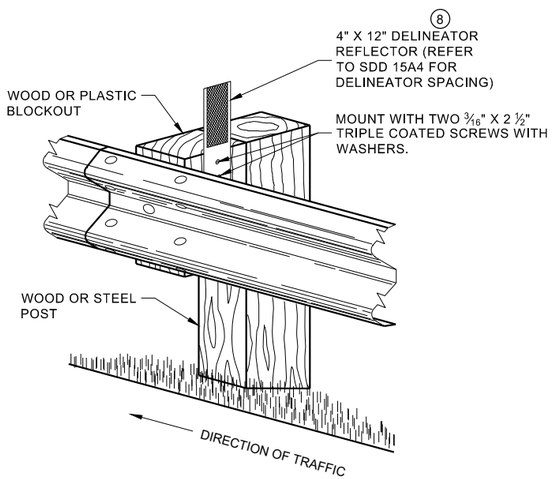
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

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



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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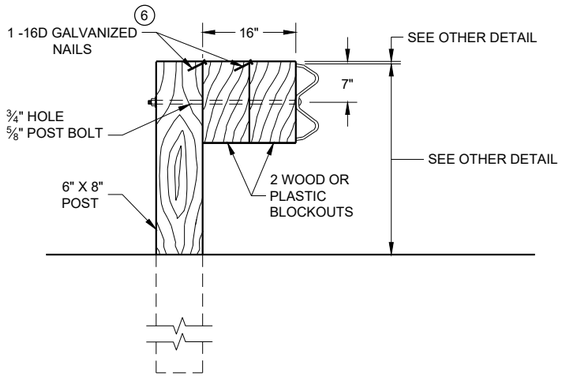
SDD 14B42 - 07b

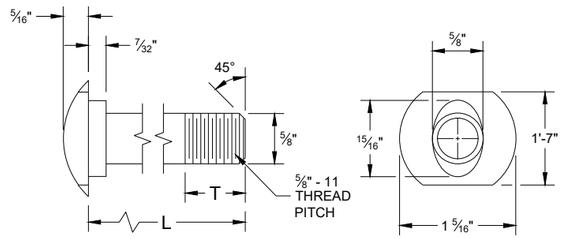


DETAIL FOR 16" BLOCKOUT DEPTH

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

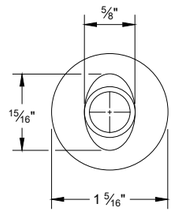
NOTE:

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

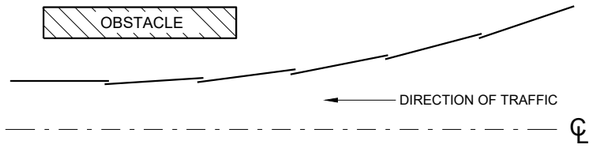


POST BOLT TABLE

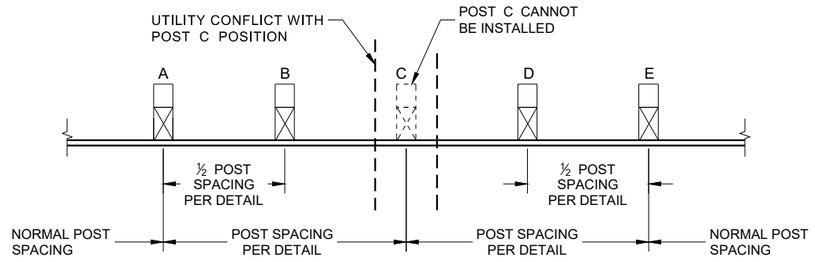
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



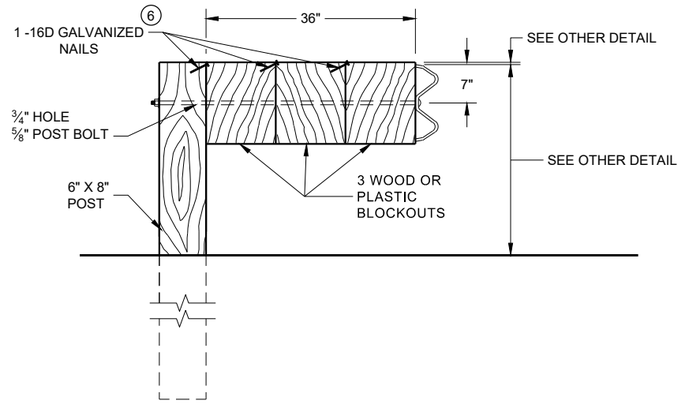
ALTERNATE BOLT HEAD



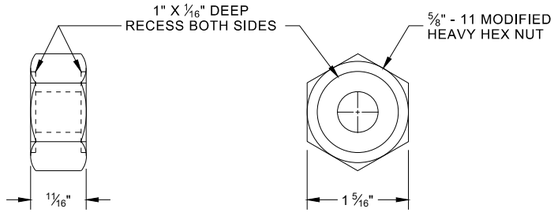
PLAN VIEW
BEAM LAPPING DETAIL



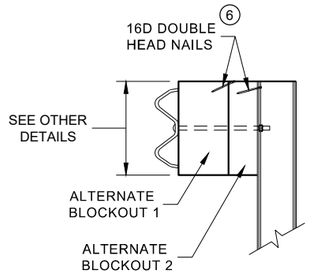
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



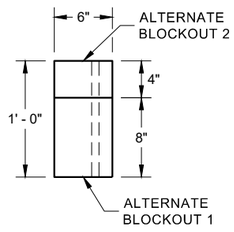
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

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

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

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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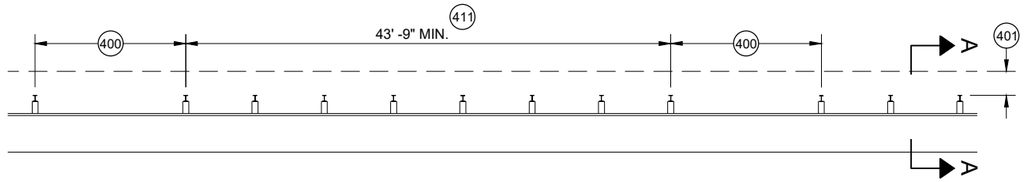
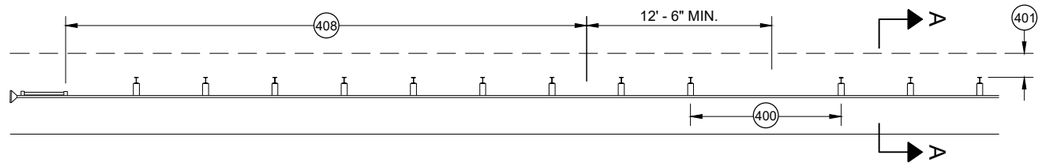
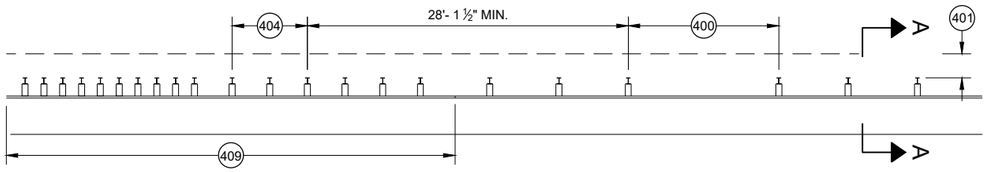


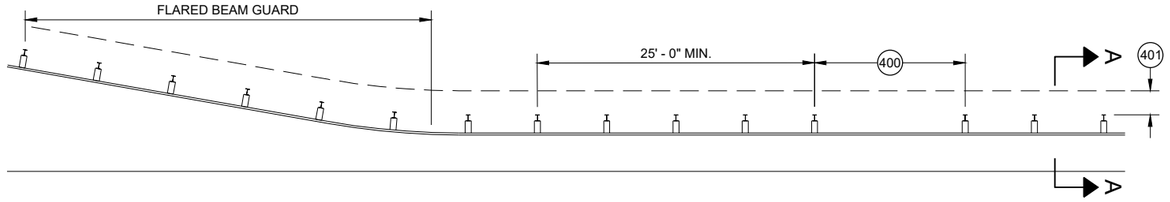
MISSING POST IN MGS GUARDRAIL



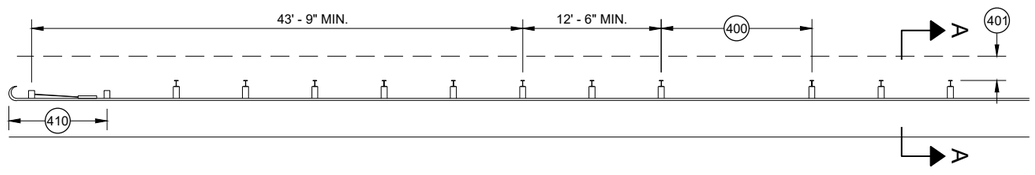
MISSING POST IN MGS GUARDRAIL NEAR EAT



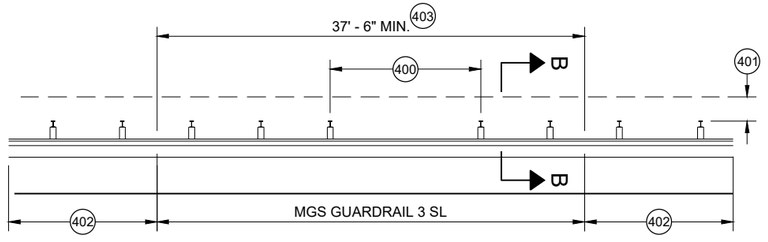
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

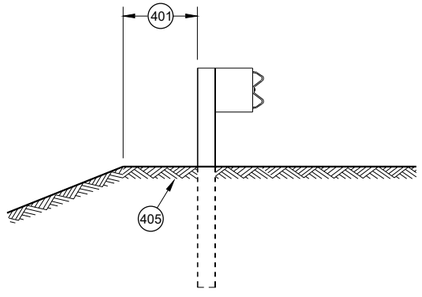


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

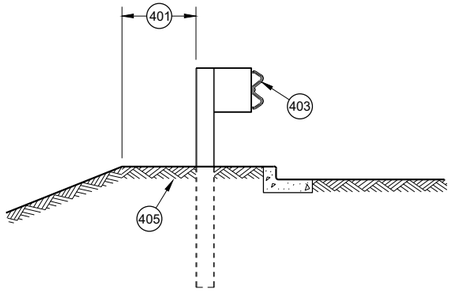


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

400 MAX SPAN 12' - 6"
401 2' MIN.
402 MGS GUARDRAIL 3
403 NESTING BEAM GUARD
404 ASYMMETRIC TRANSITION
405 SOIL WELL DRAINED AND COMPACTED
406 SEE OTHER DRAWINGS IN THIS SDD
407 SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
408 SEE SDD 14B44
409 SEE SDD 14B45
410 SEE SDD 14B47
411 MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

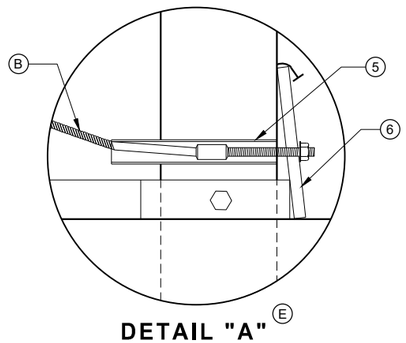
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

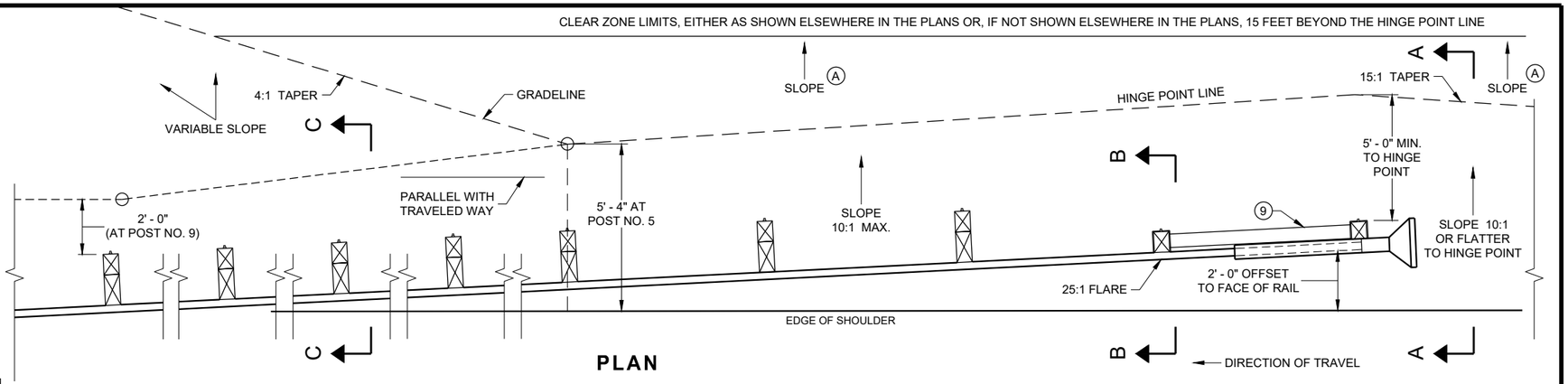
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

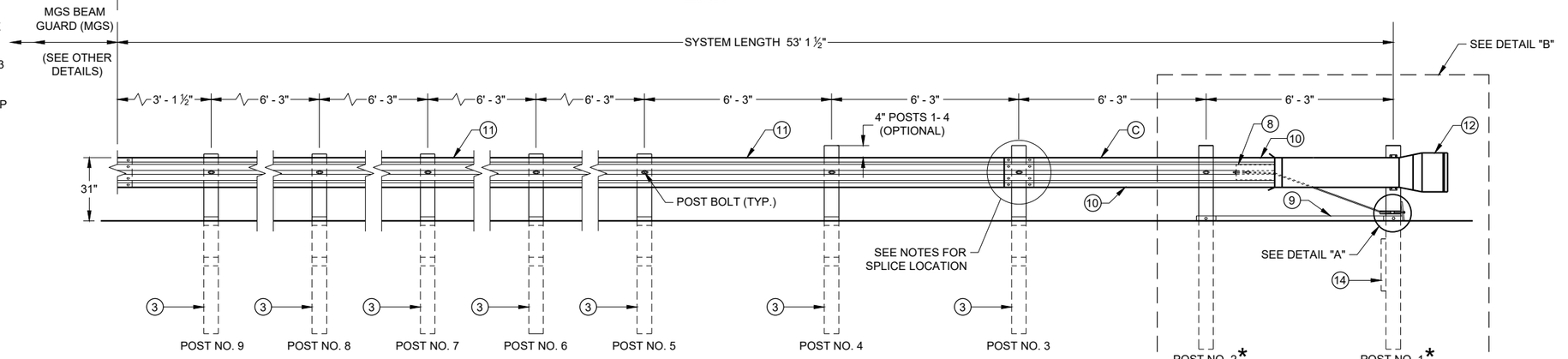
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



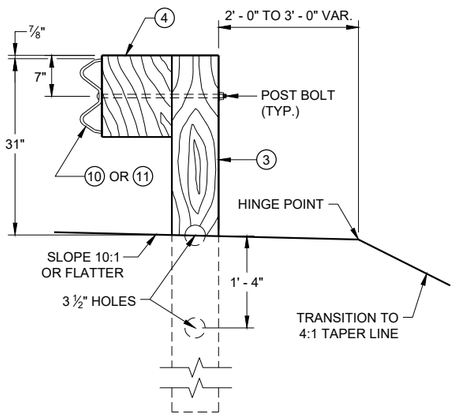
DETAIL "A" (E)



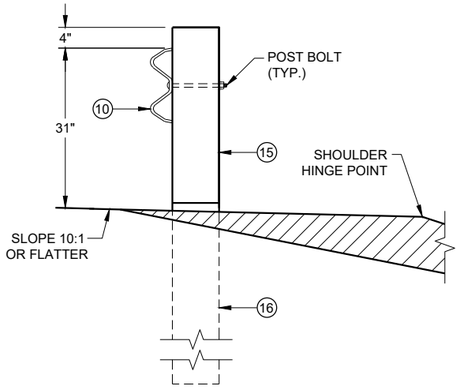
PLAN



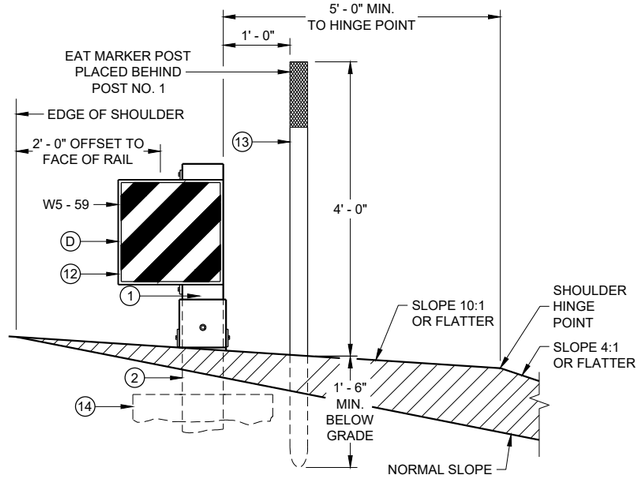
ELEVATION



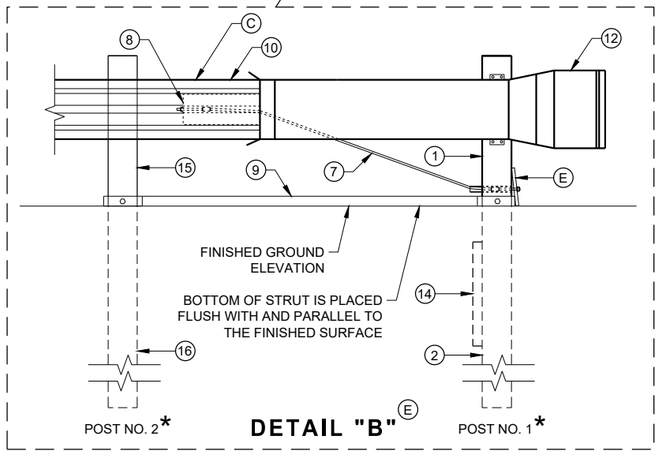
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



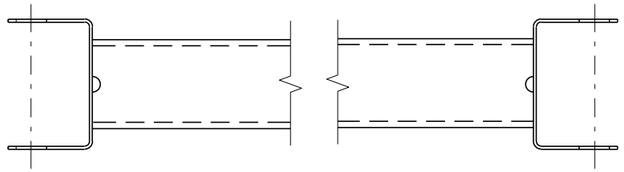
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

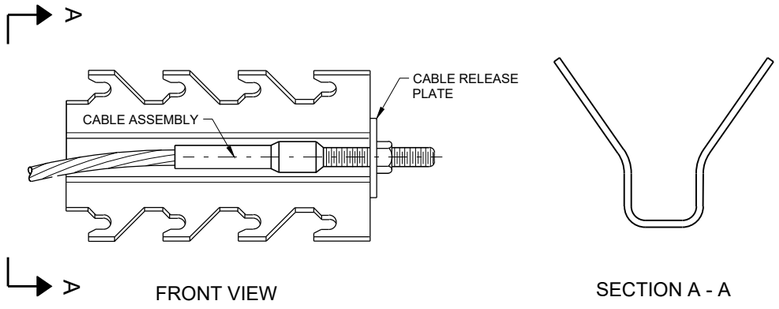
SDD 14B44 - 04a



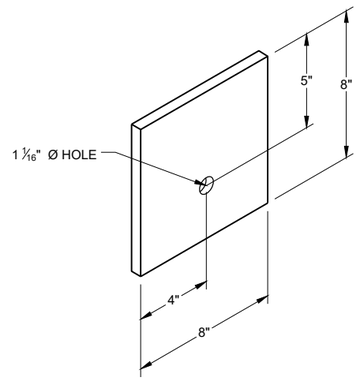
GENERIC GROUND STRUT (9) (E)

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) (E)



BEARING PLATE (6) (E)

6

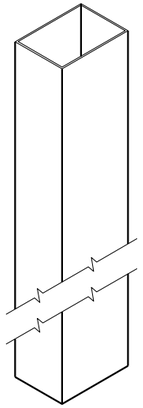
6

SDD 14B44 - 04b

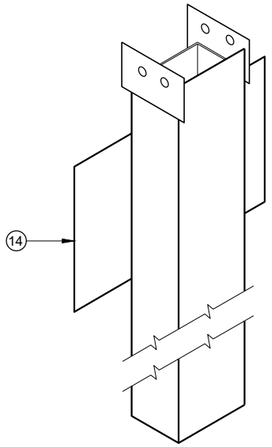
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

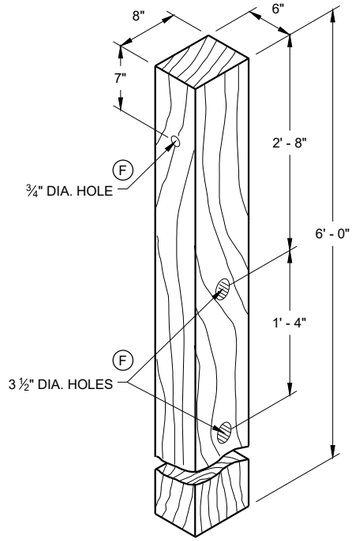
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



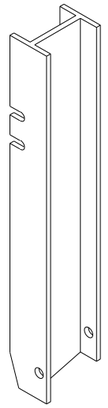
UPPER POST NO. 1 (1) (E)



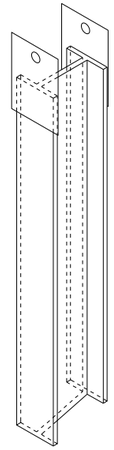
LOWER POST NO. 1 (2) (E)



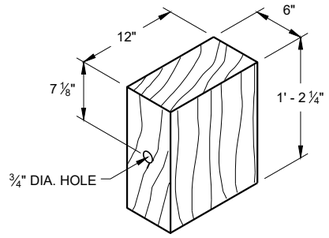
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



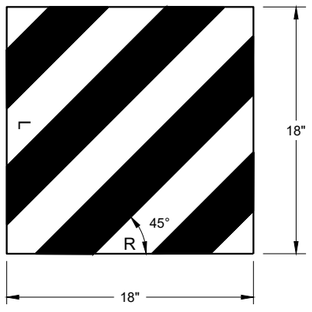
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

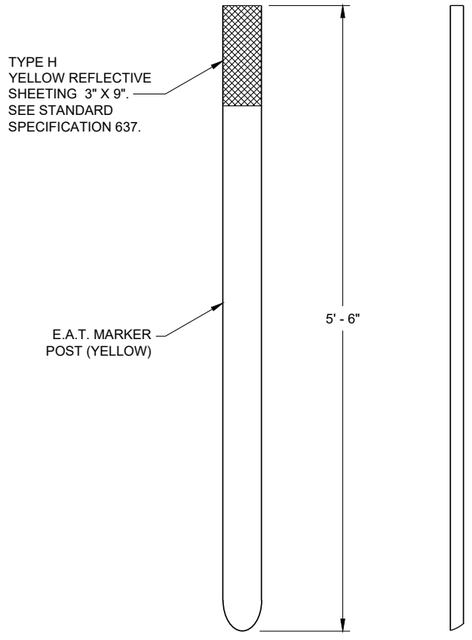


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



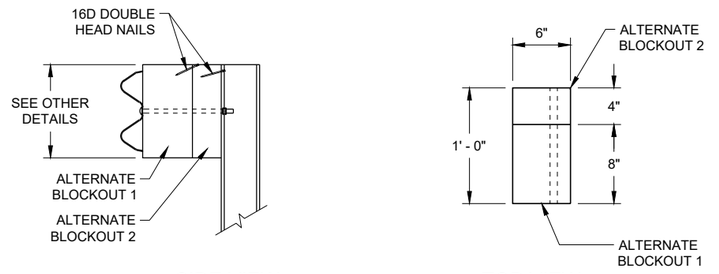
W5 - 59

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)

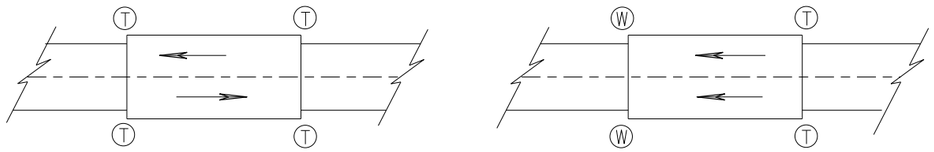
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

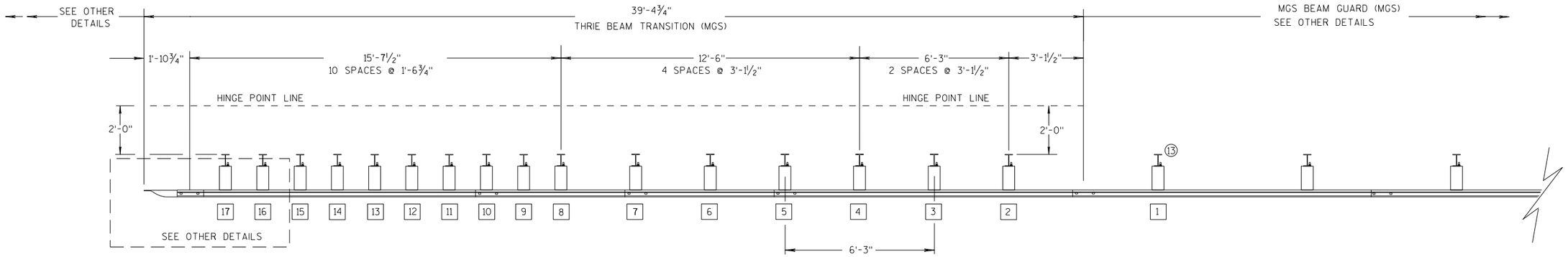
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

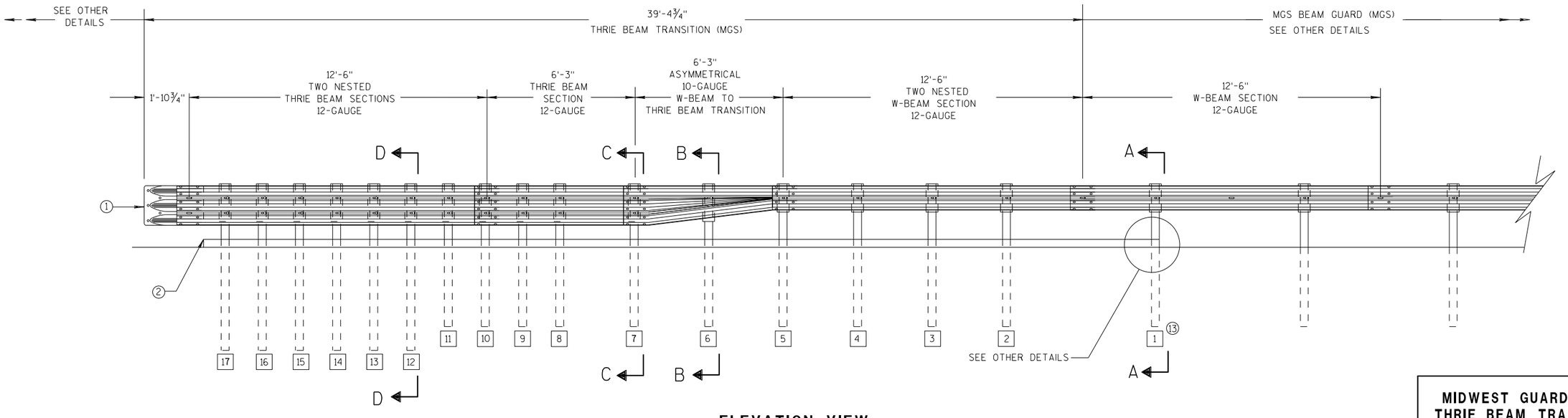
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 45-5a

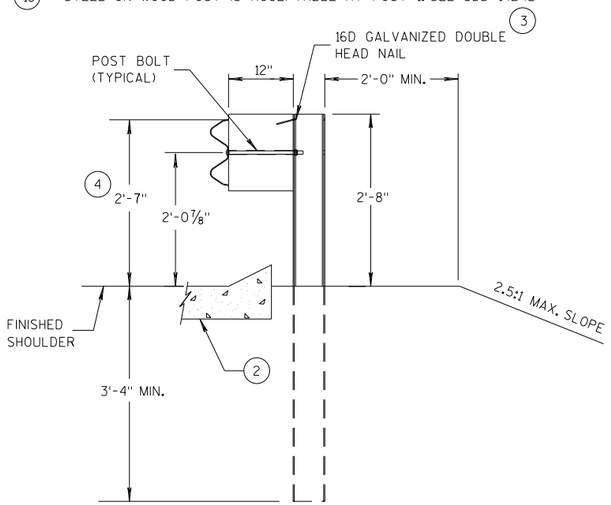
GENERAL NOTES

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

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

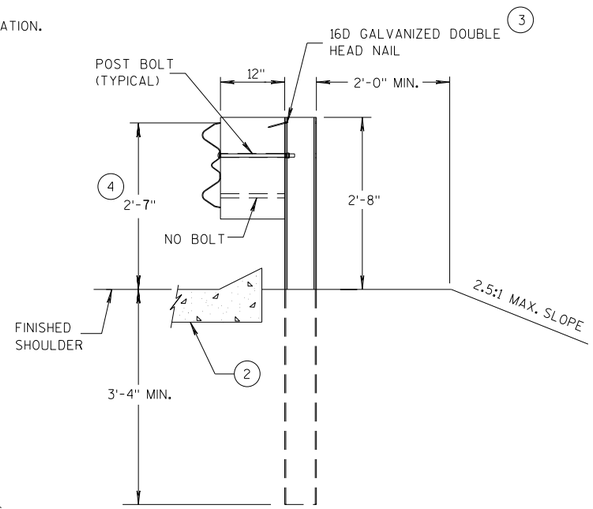
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



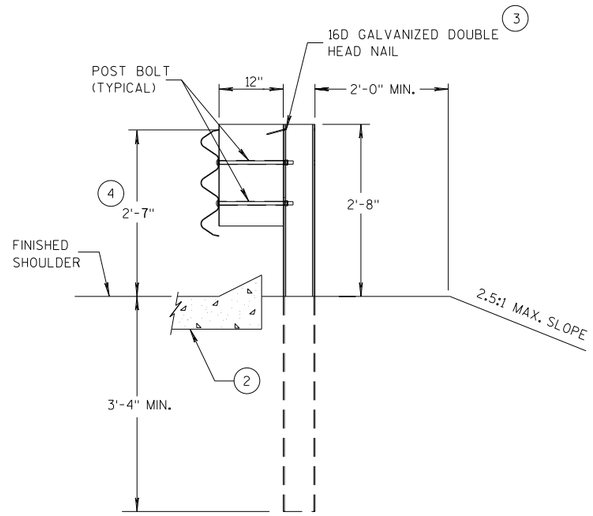
SECTION A-A (13)

POSTS 1-5



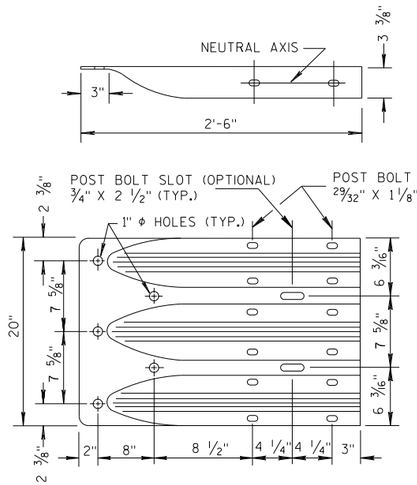
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

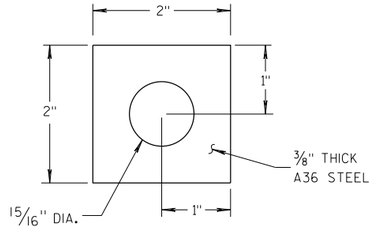
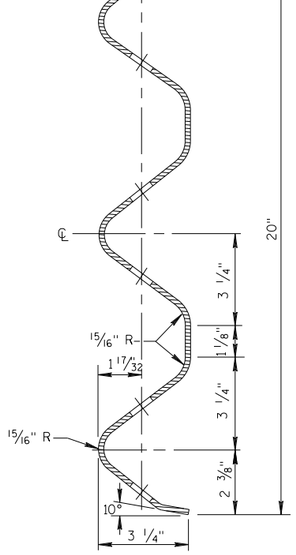
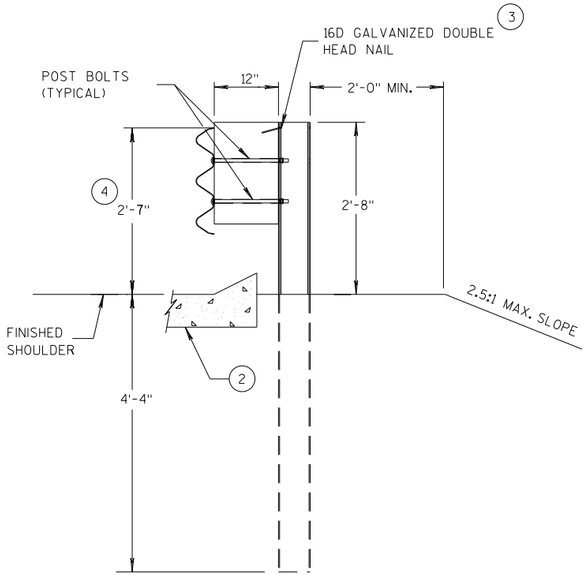


PLATE WASHER DETAIL

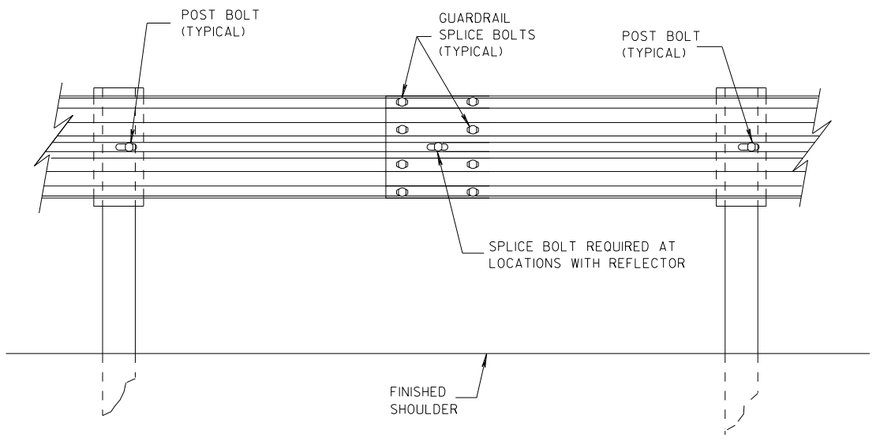


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



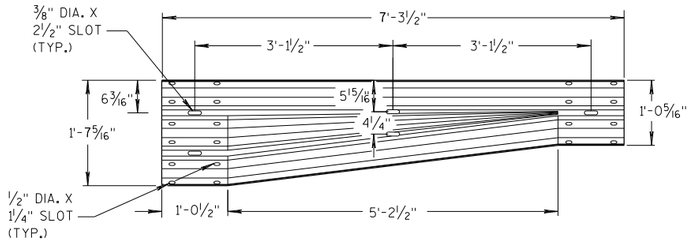
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

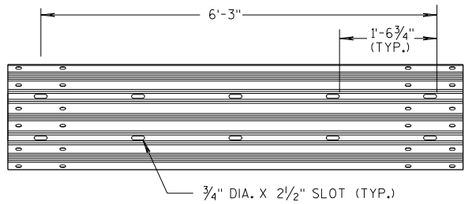
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

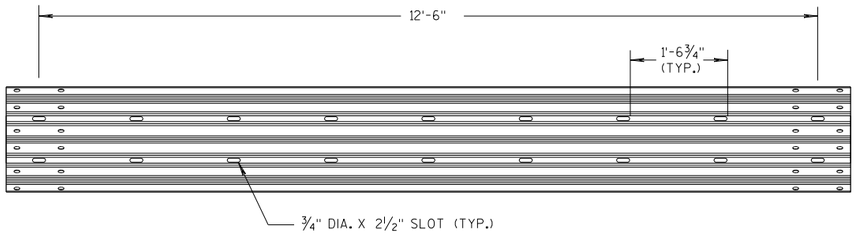
S.D.D. 14 B 45-5b



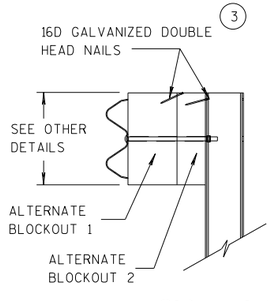
W-BEAM TO THRIE BEAM TRANSITION SECTION



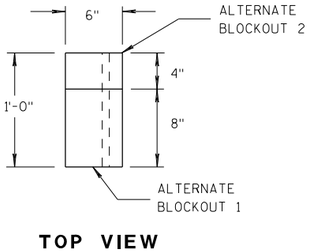
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

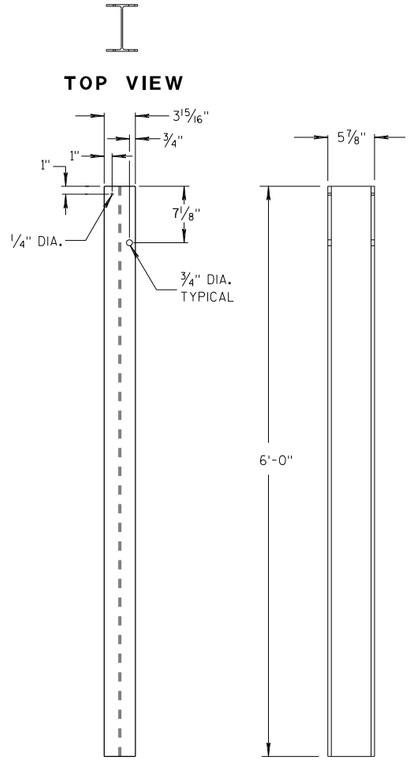


SIDE VIEW

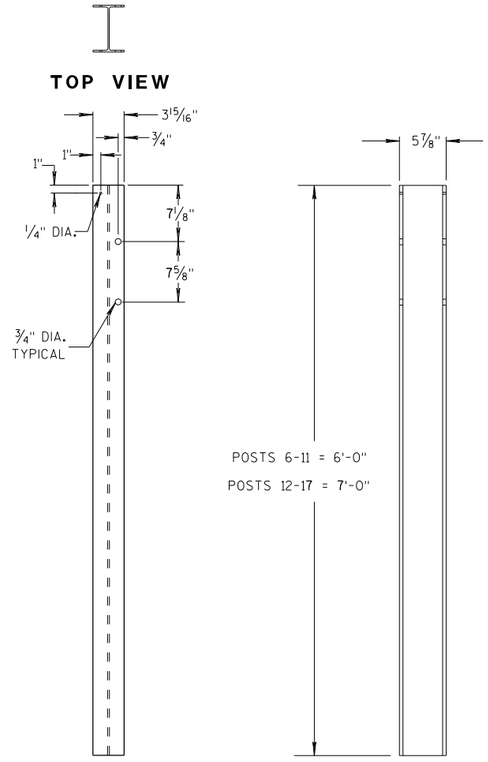


TOP VIEW

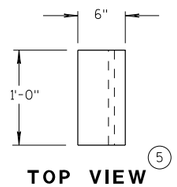
ALTERNATE WOOD BLOCKOUT DETAIL



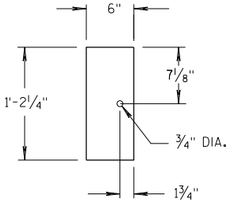
STEEL POSTS 1-5 (13)



STEEL POSTS 6-17

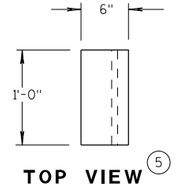


TOP VIEW (5)

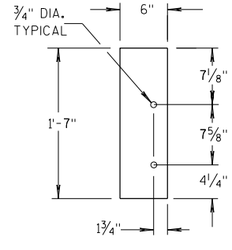


FRONT VIEW

BLOCKOUT POSTS 1-5



TOP VIEW (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 TRANSPOF

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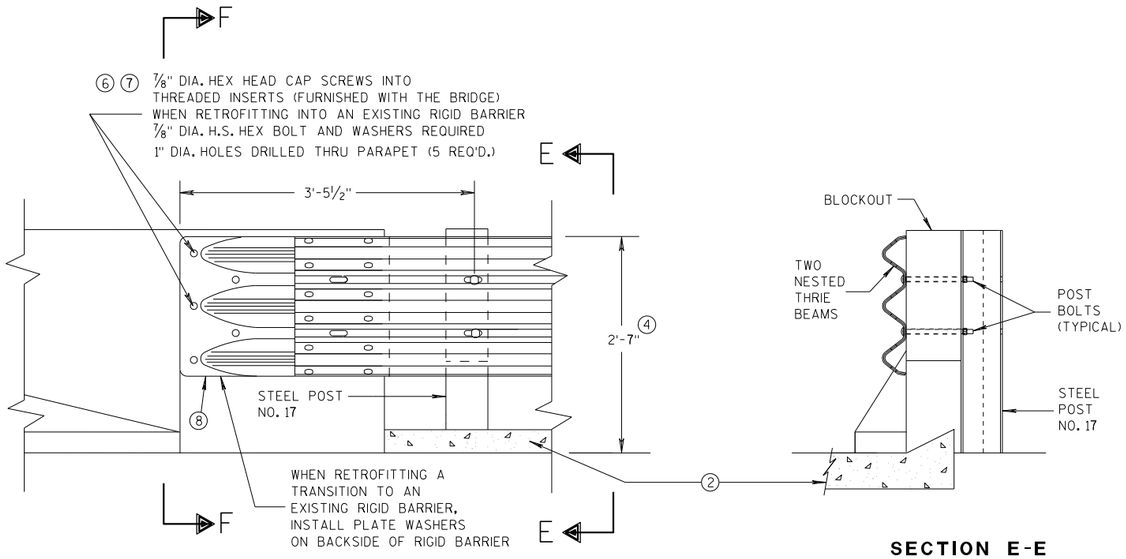


FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

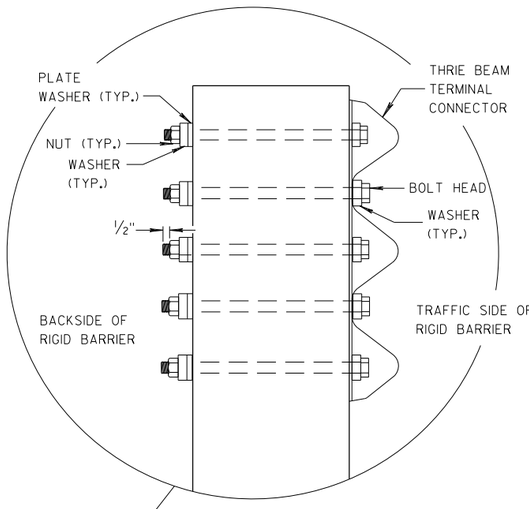
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

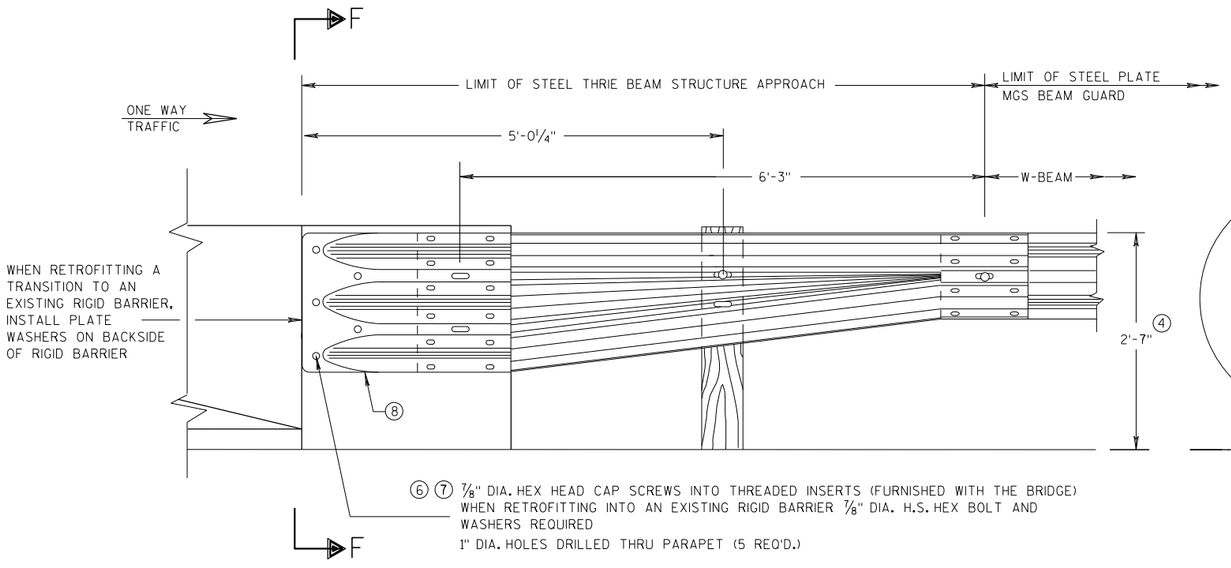
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

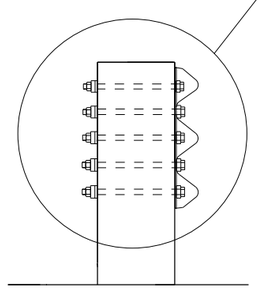
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

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

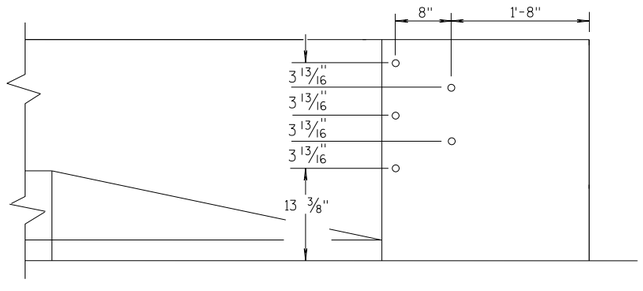




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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GENERAL NOTES

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

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

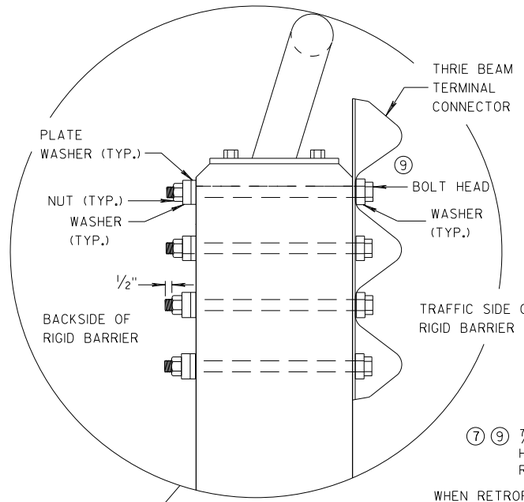
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

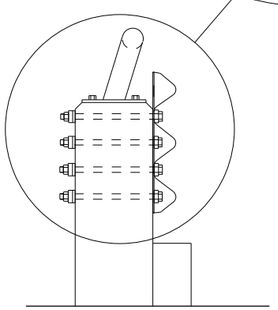
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

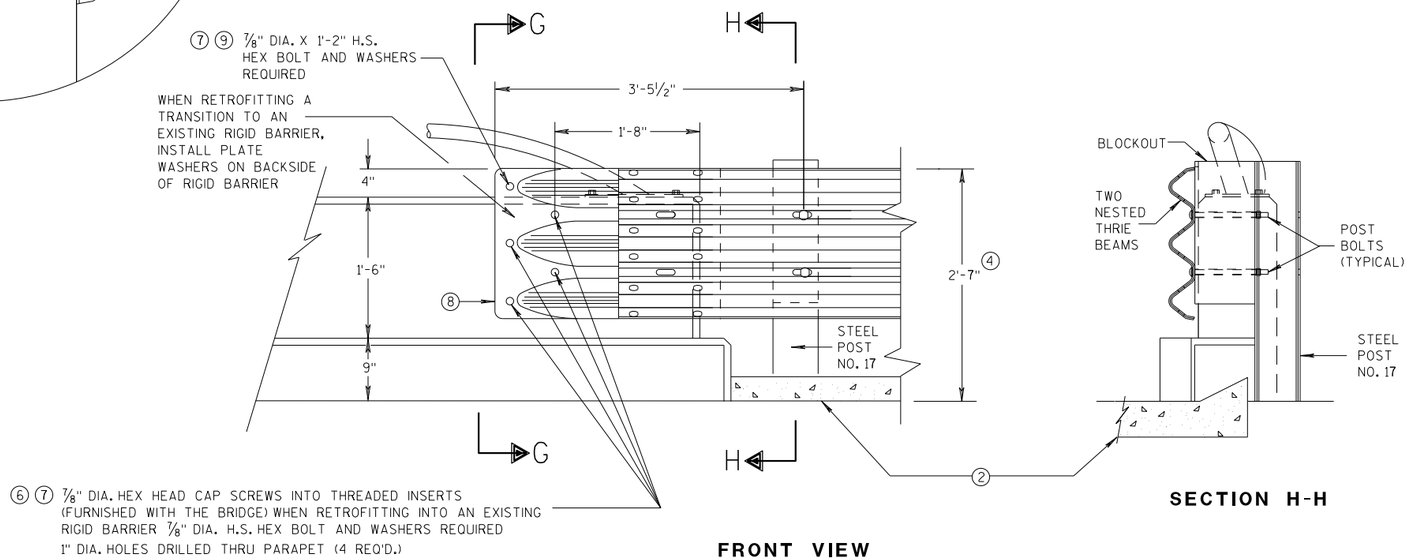
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

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





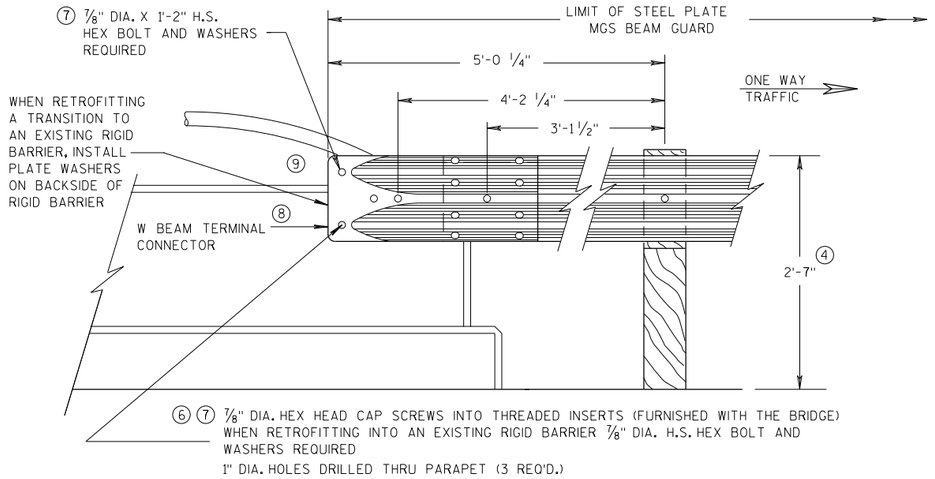
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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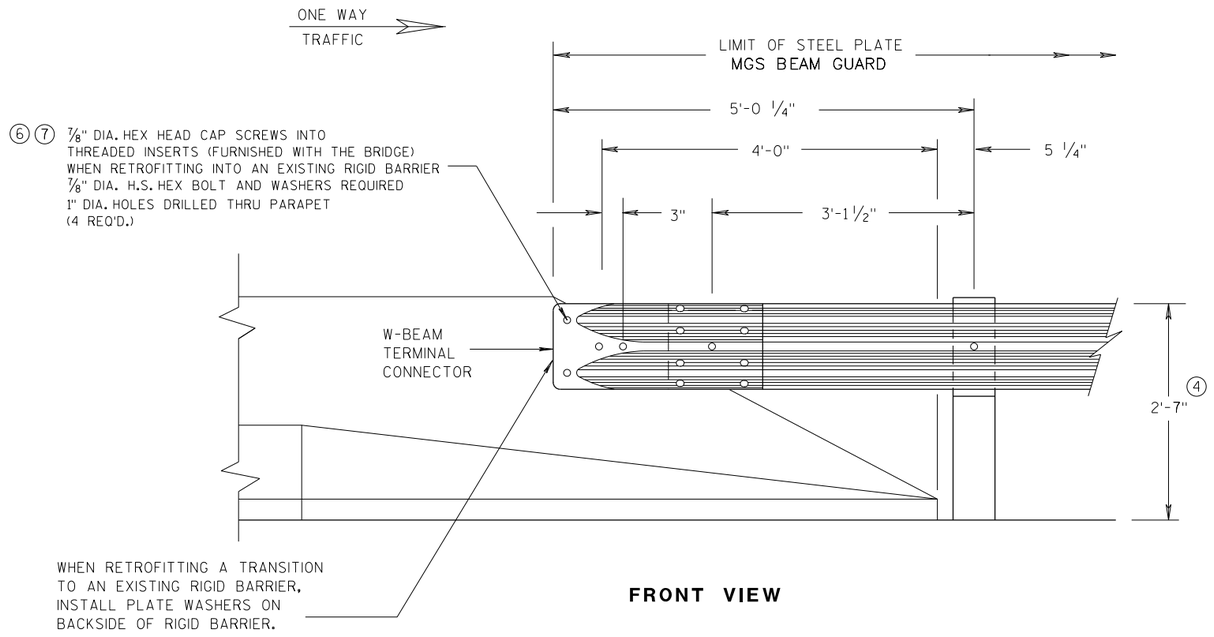


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

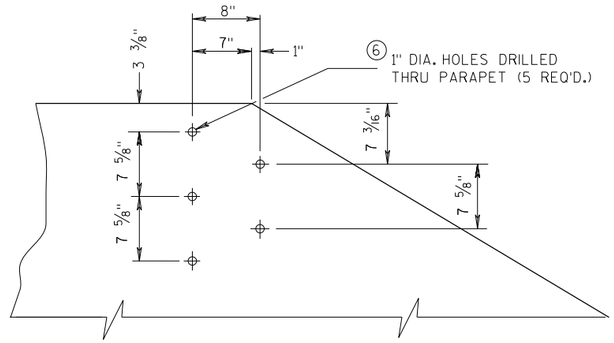
GENERAL NOTES

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

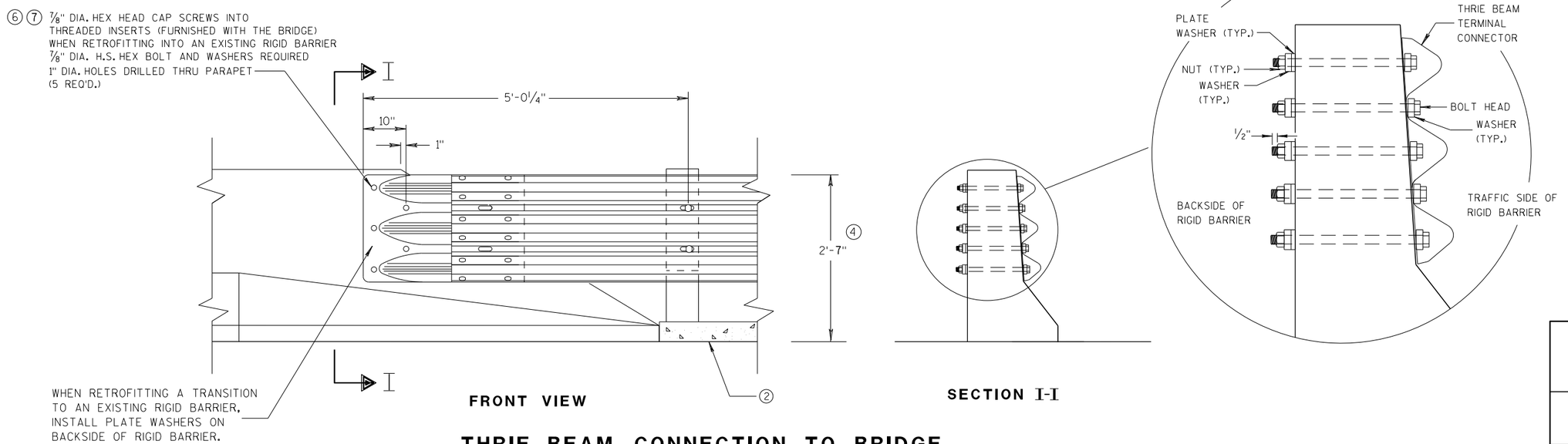
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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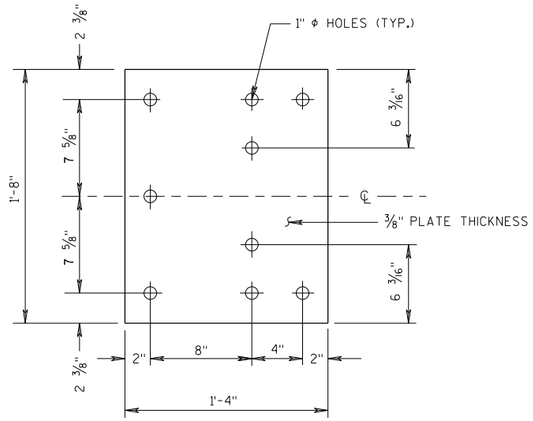
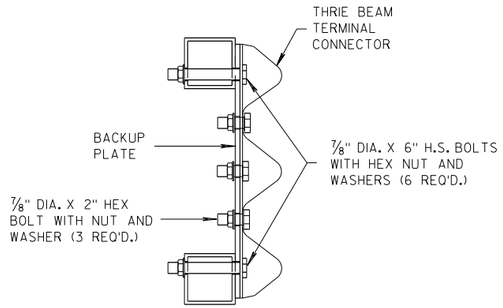
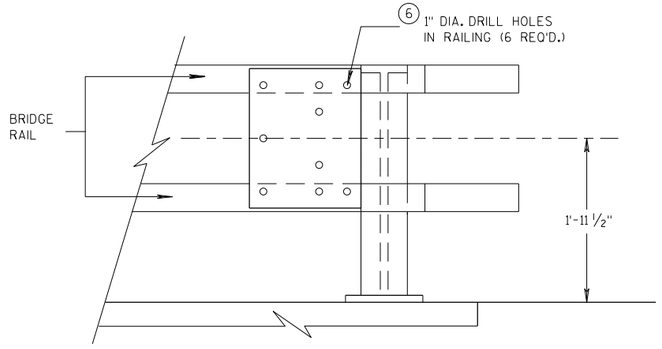


BACK-UP PLATE DETAIL



SECTION J-J

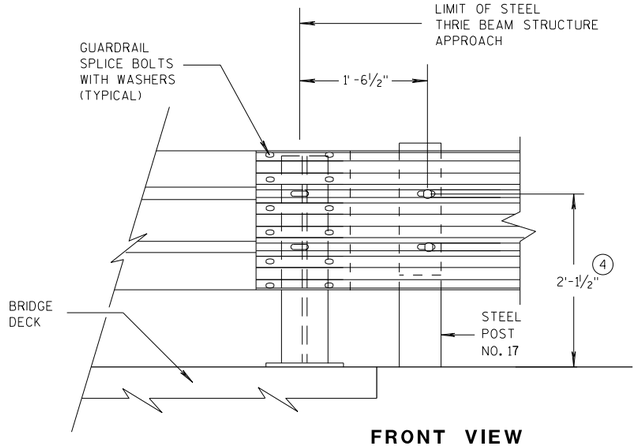


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

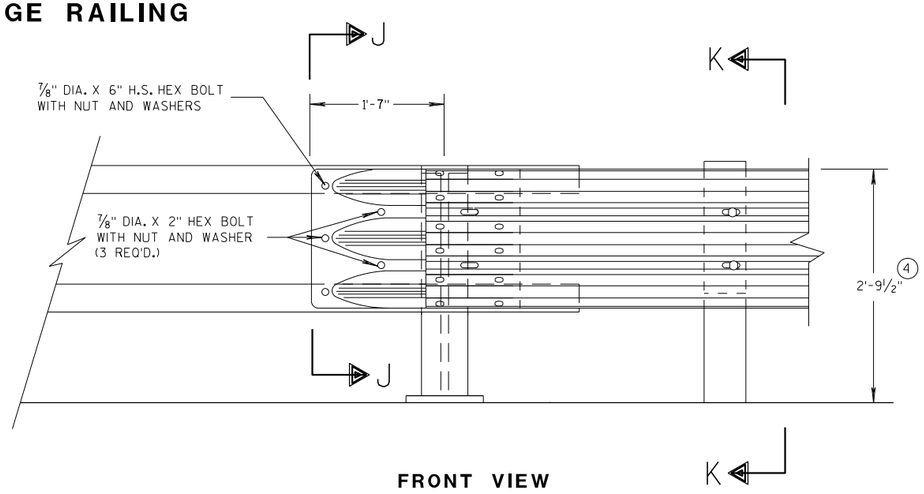
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

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

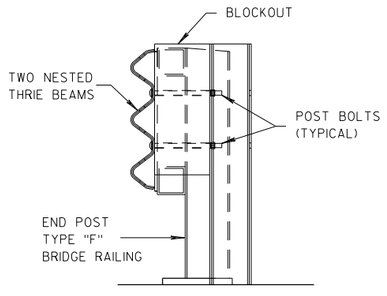


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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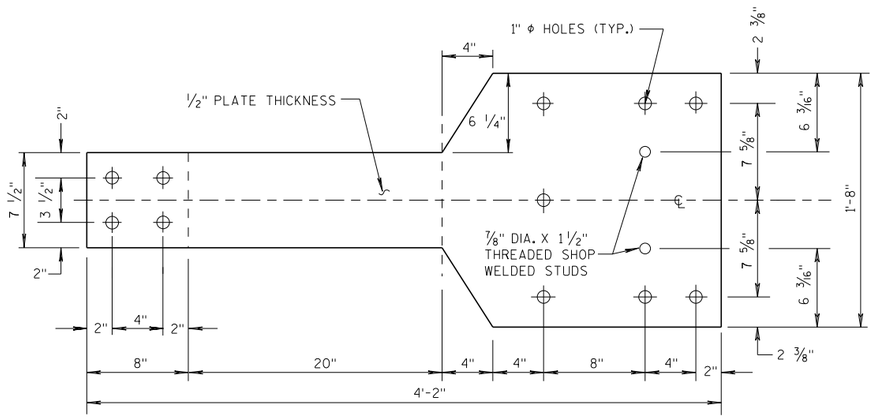
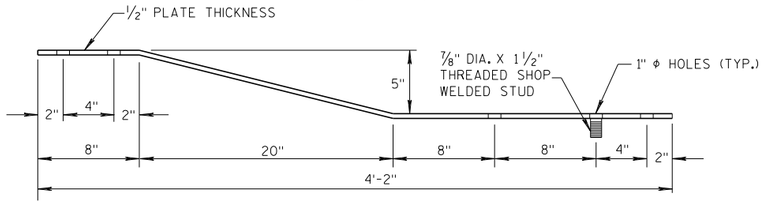
GENERAL NOTES

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

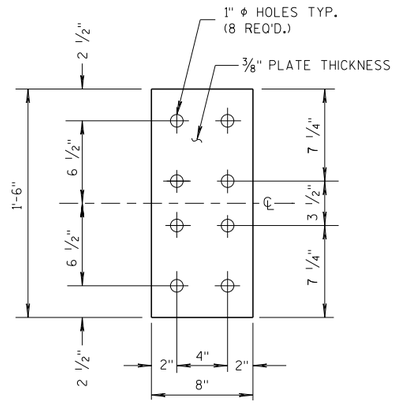


FRONT VIEW



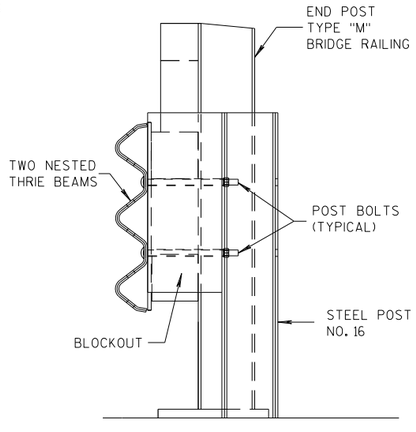
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

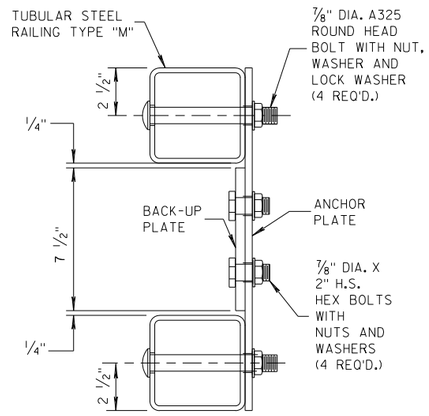


FRONT VIEW

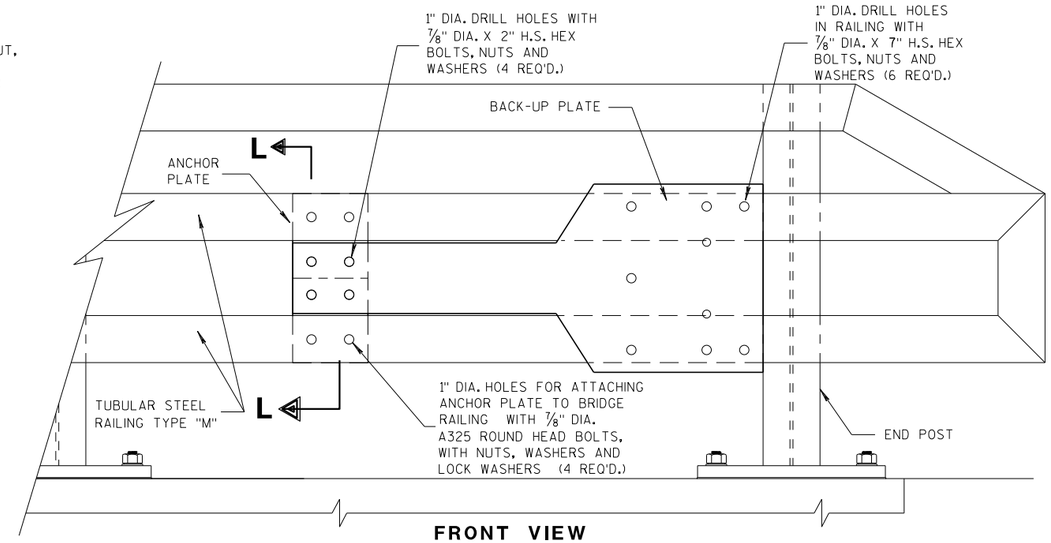
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

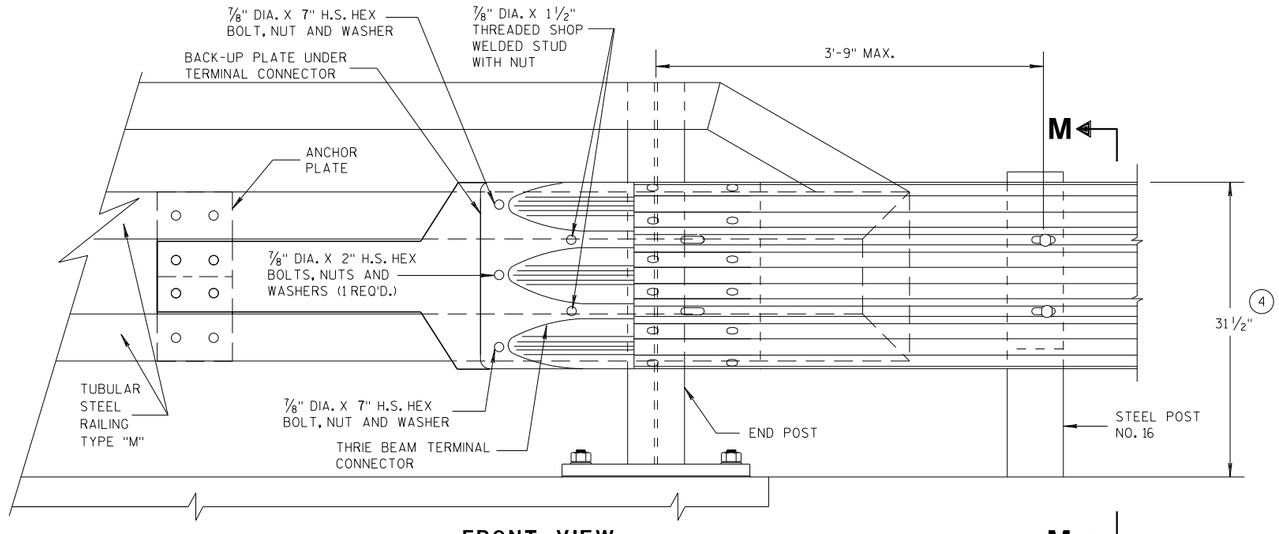


SECTION L-L

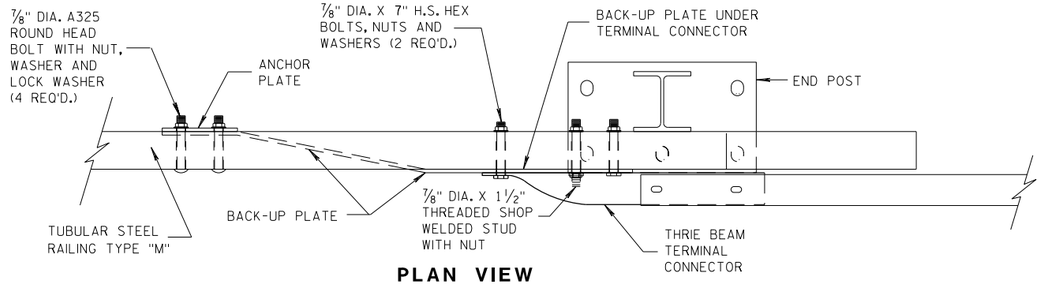


FRONT VIEW

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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GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

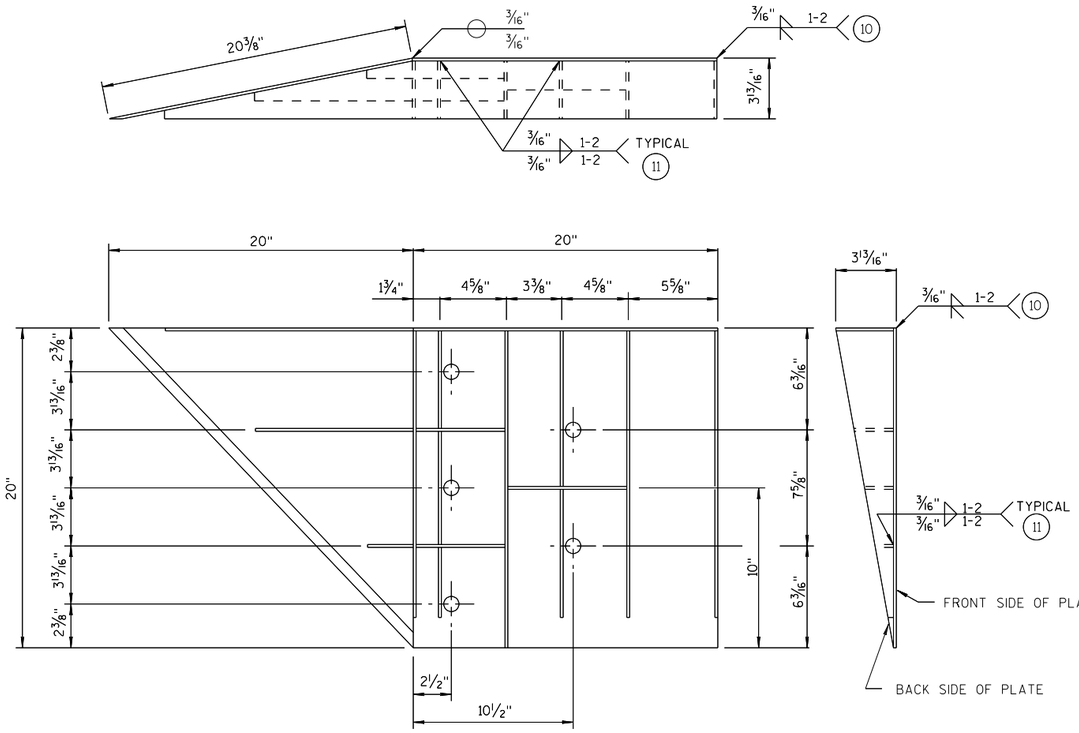
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

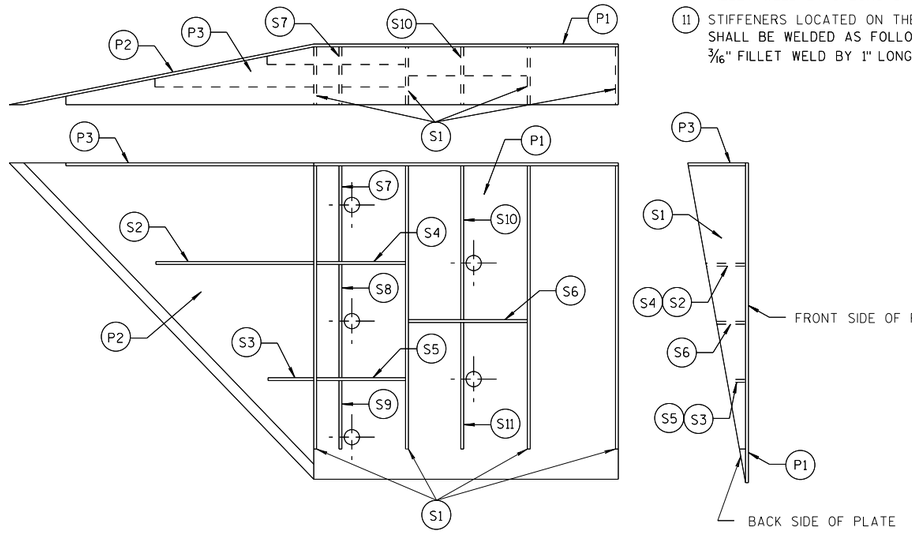


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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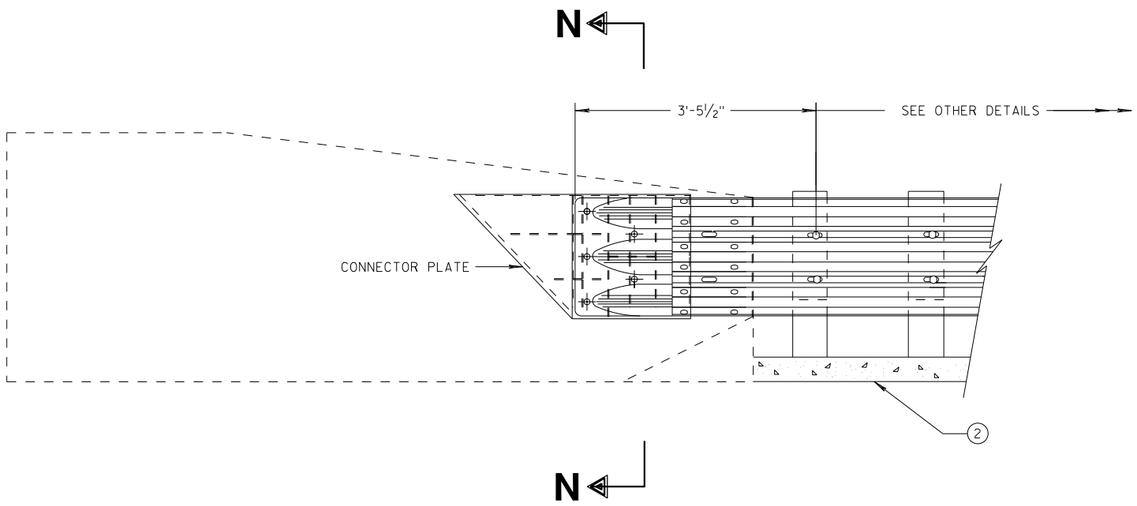
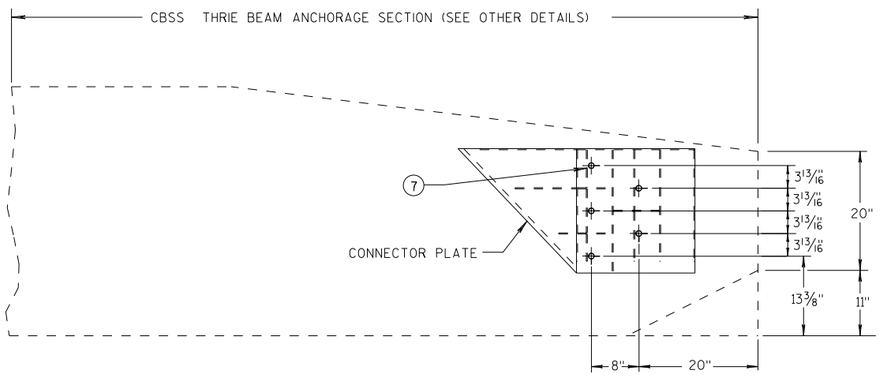


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



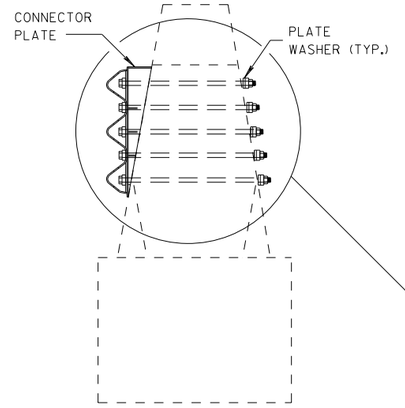
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

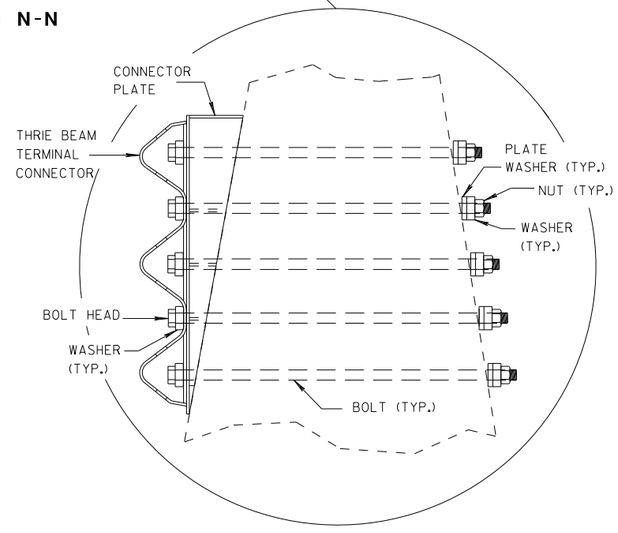
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DI UNIT SUPERVIS

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

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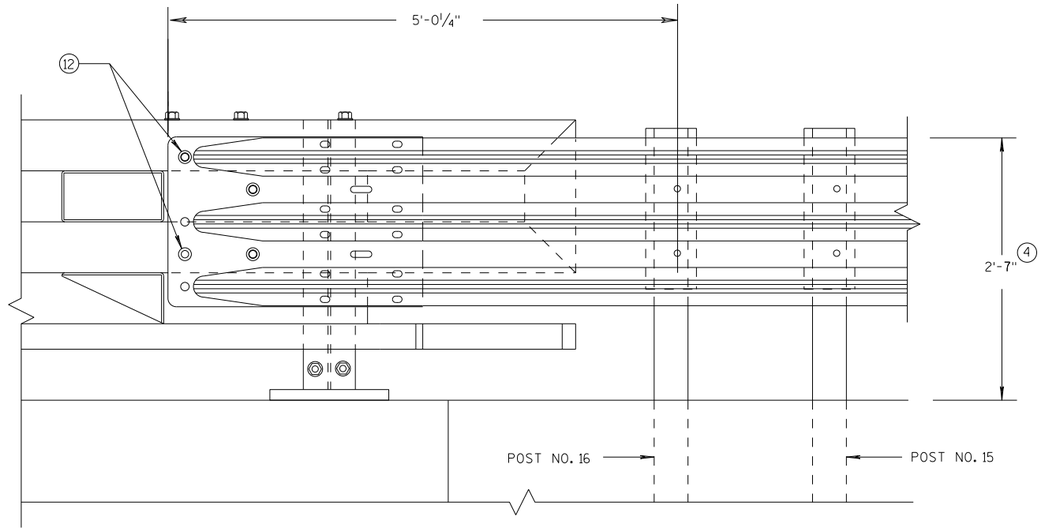
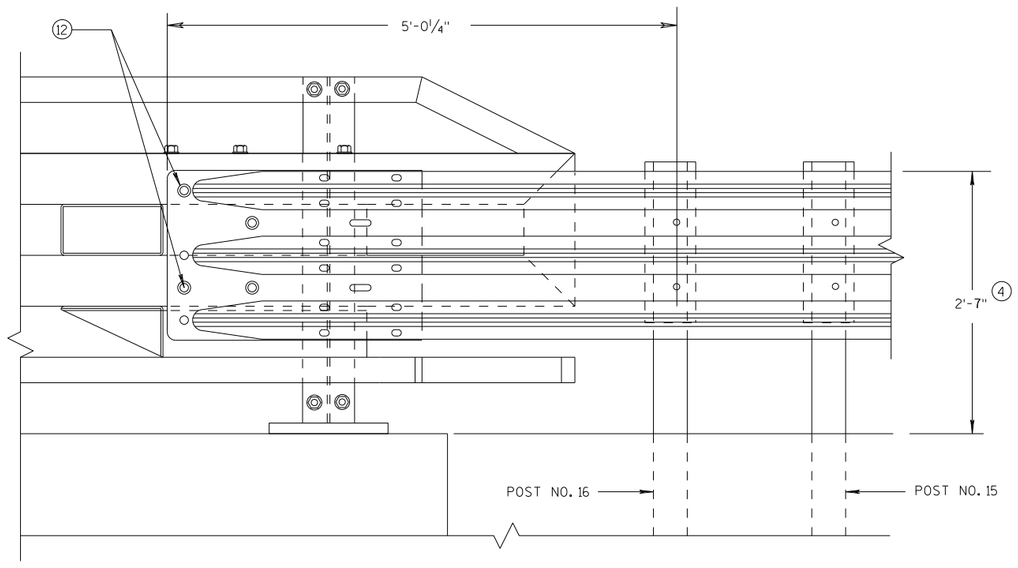


ELEVATION OF DETAIL AT NY3 END POST

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
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

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

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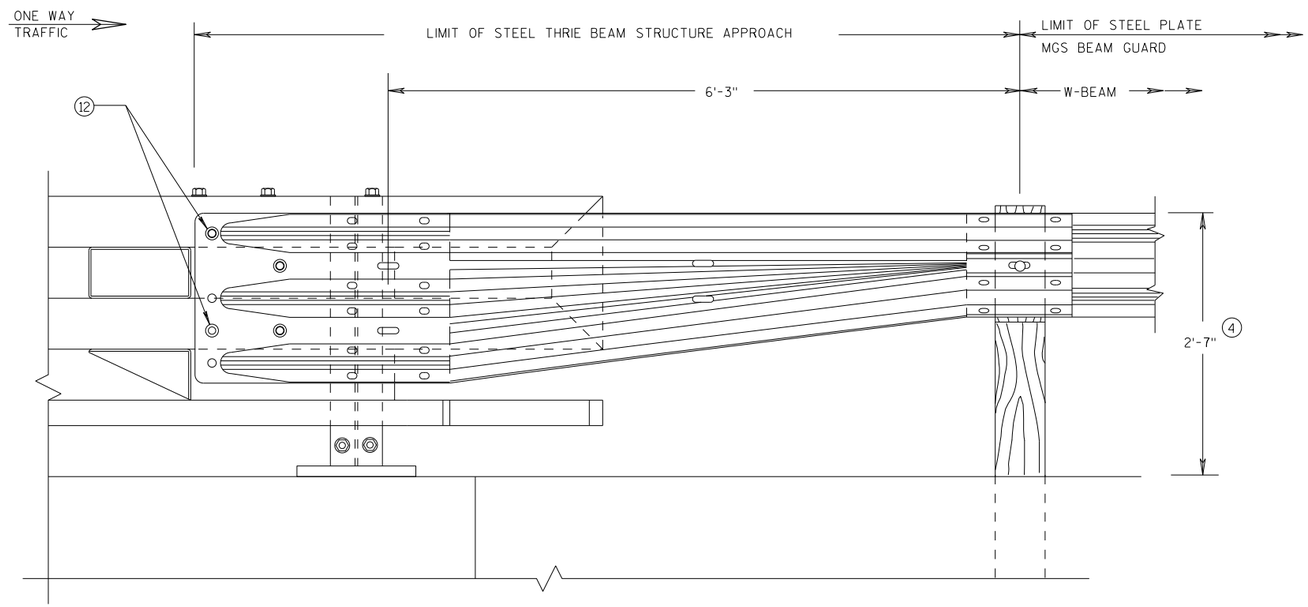
S.D.D. 14 B 45-5k



FRONT VIEW

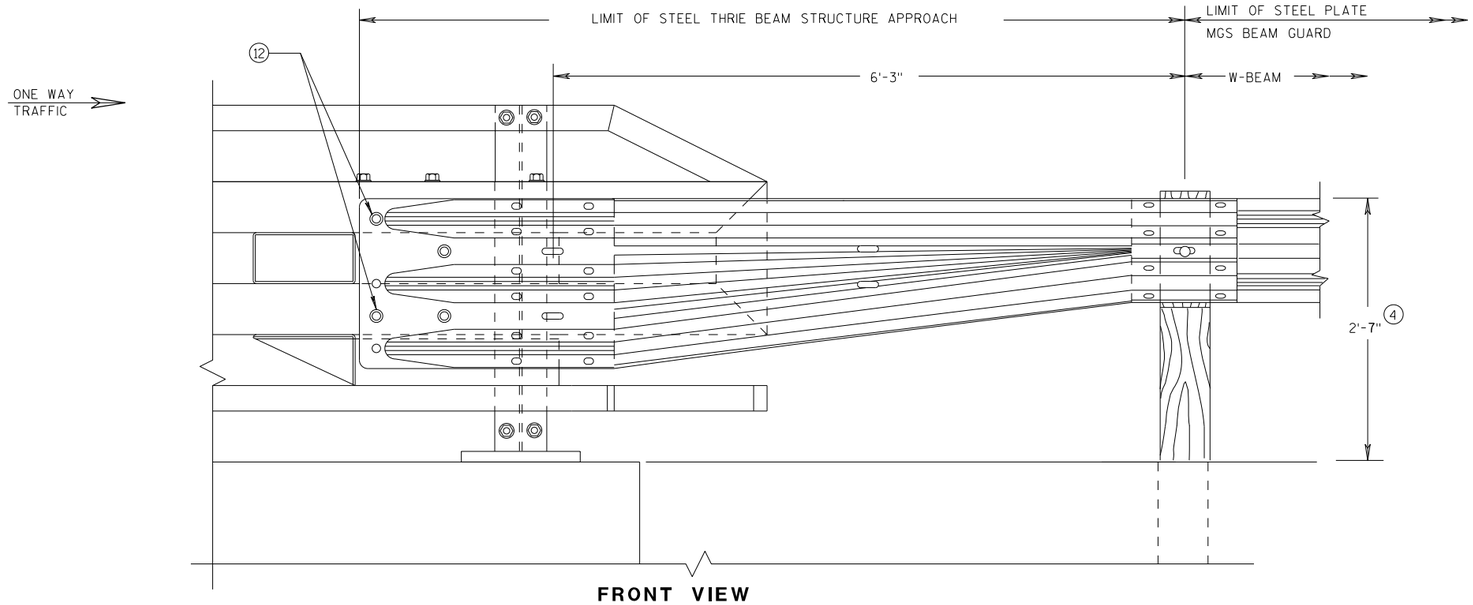
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

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



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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APPROVED
7/2018 DATE
/S/ Rodney Taylor
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S.D.D. 14 B 45-5L

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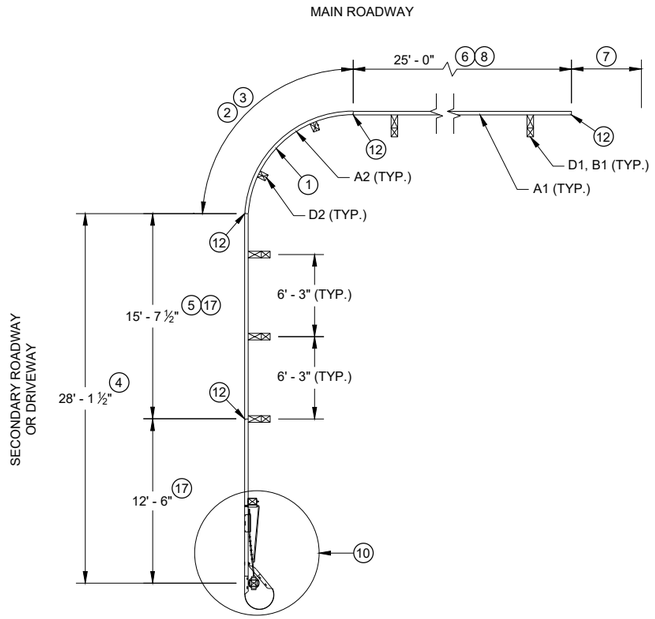
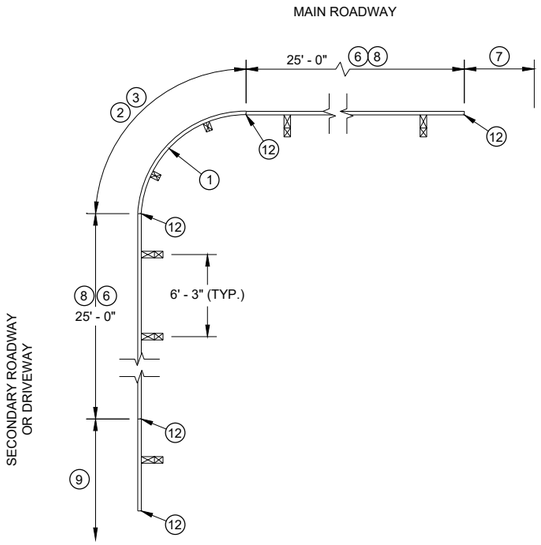


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

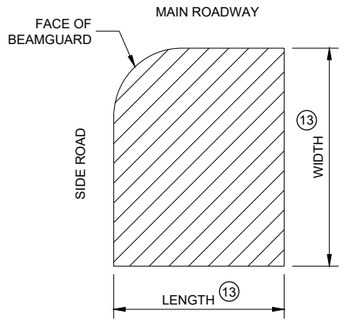


PLAN VIEW

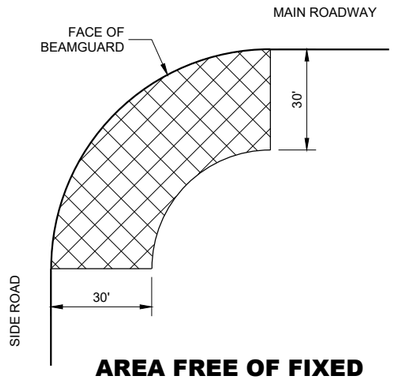
SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY

TABLE FOR RADIUS OF 32' AND LESS

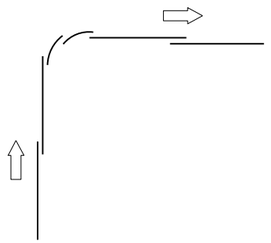
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

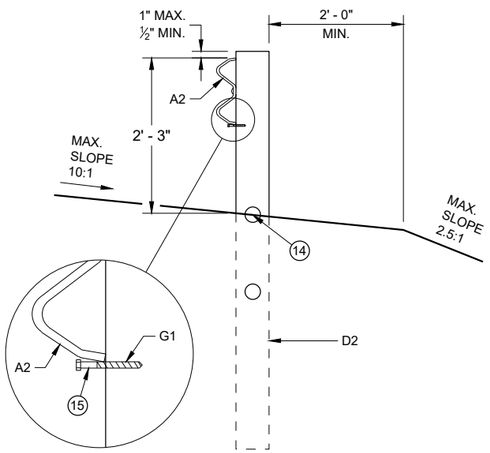
(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

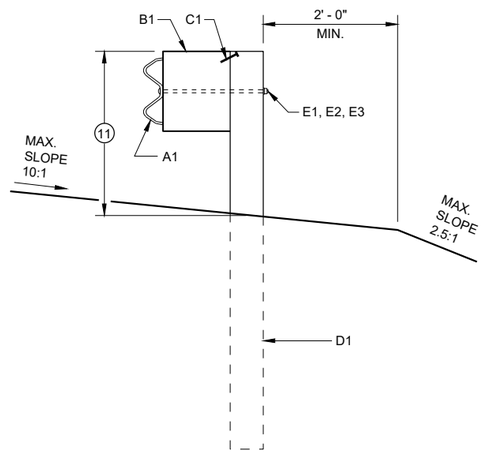
(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).



CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 01a

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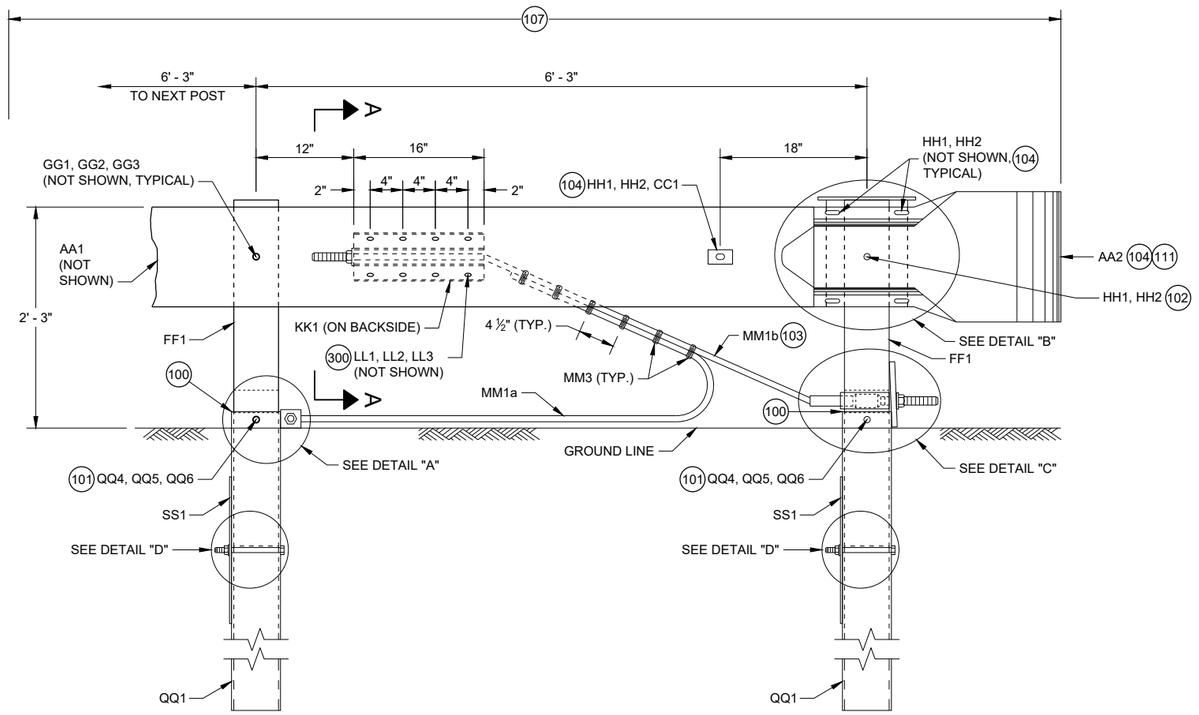
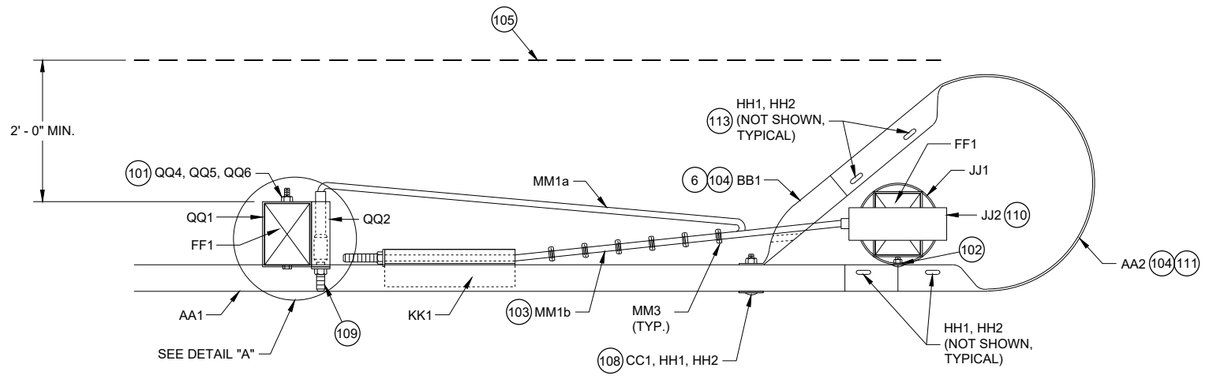
SDD 14B53 - 01a



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

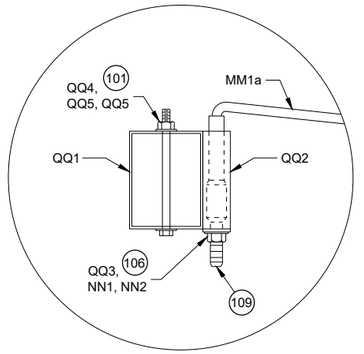
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

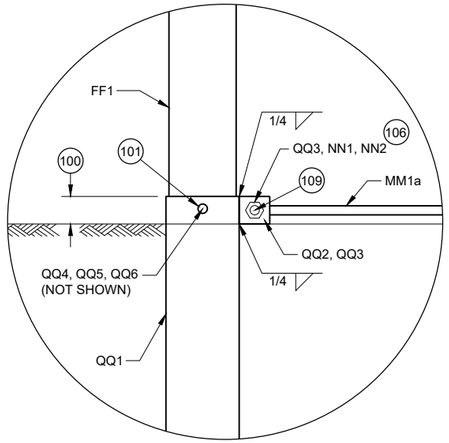
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 01b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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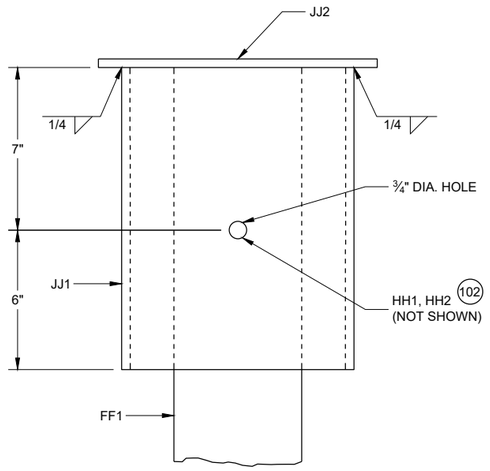
SDD 14B53 - 01b

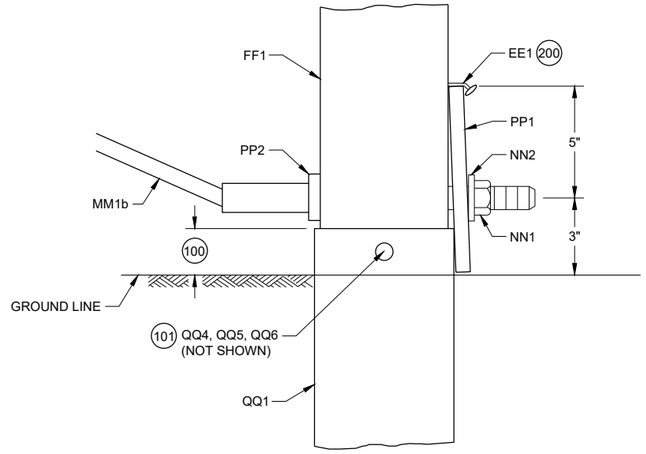
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



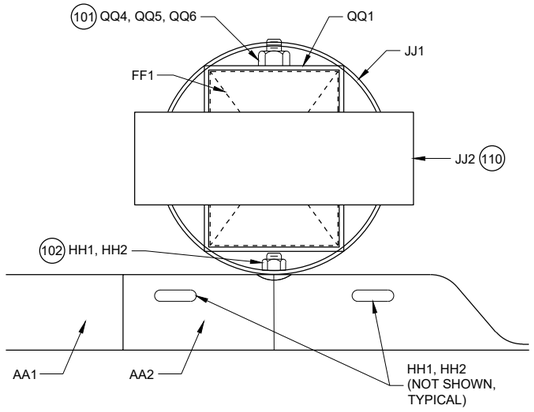
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



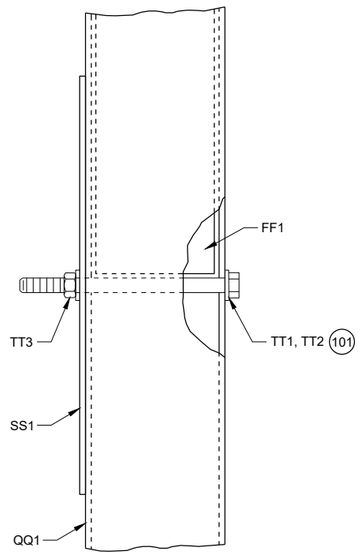
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

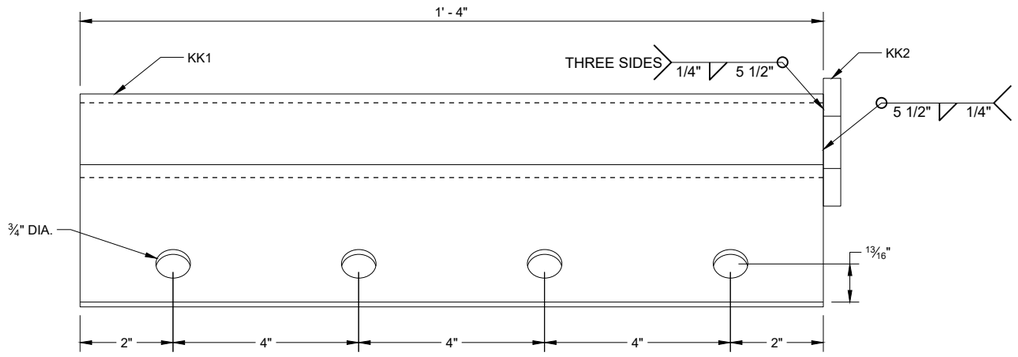
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

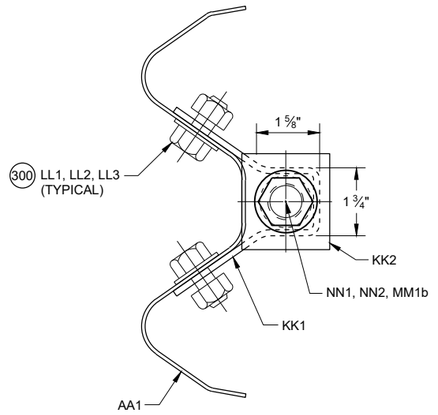
6

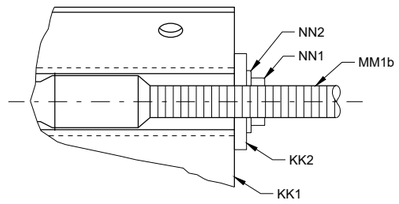
SDD 14B53 - 01c

GENERAL NOTES

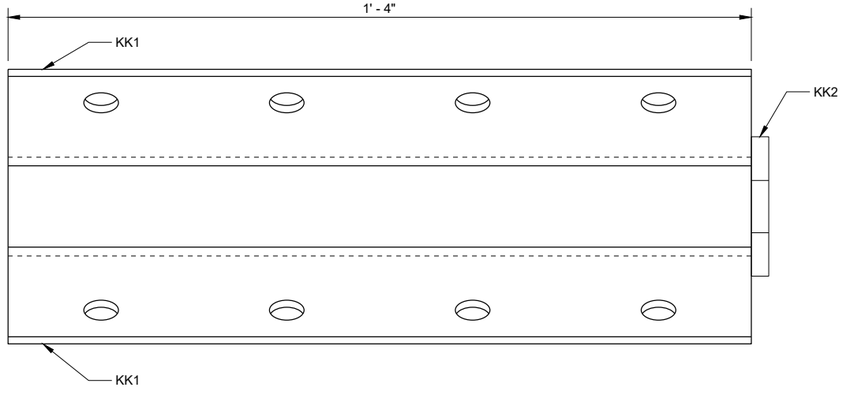
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

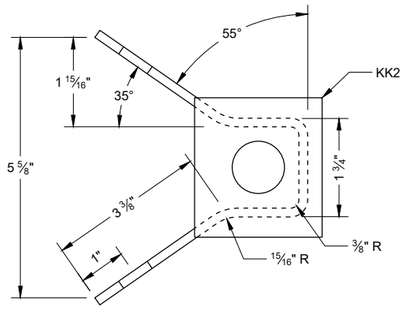




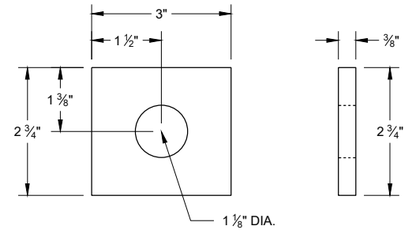


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

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SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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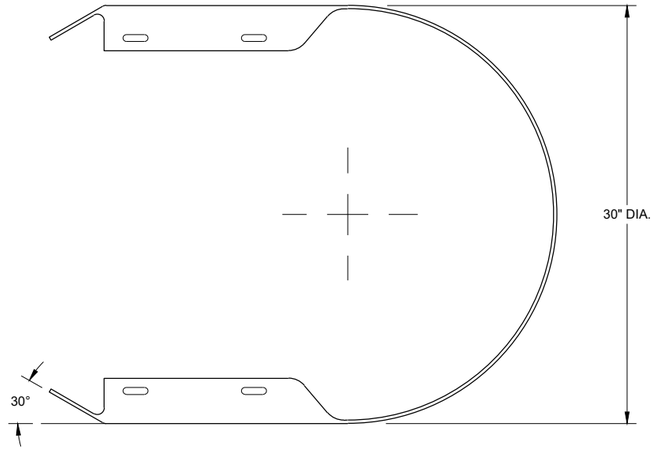
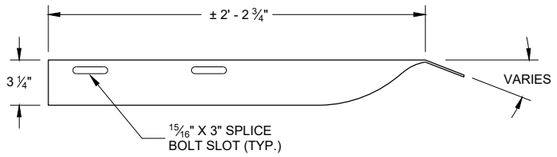
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

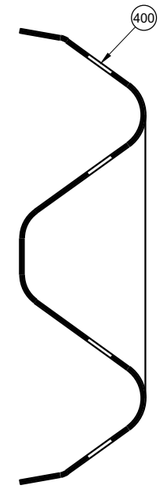
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



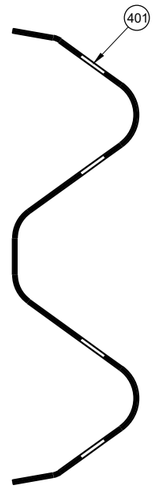
TOP VIEW



TOP VIEW



SECTION B -B



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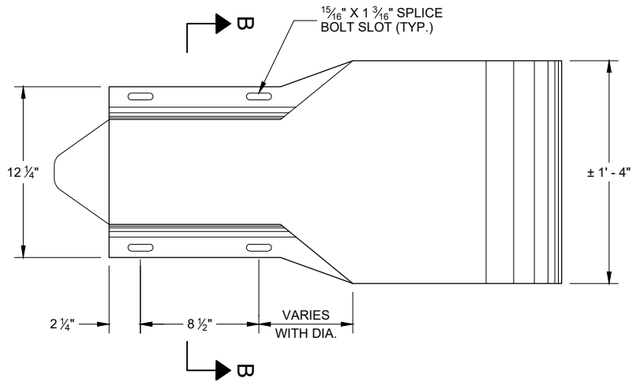
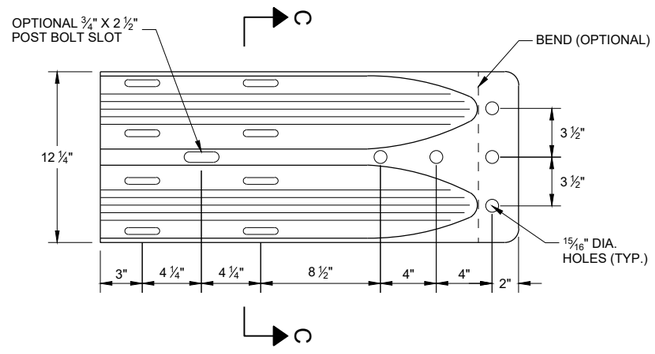


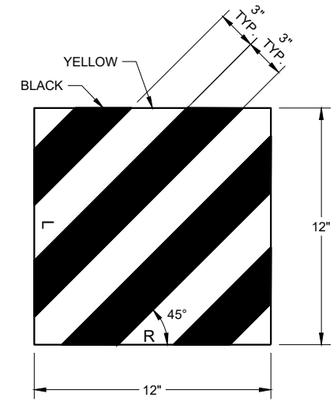
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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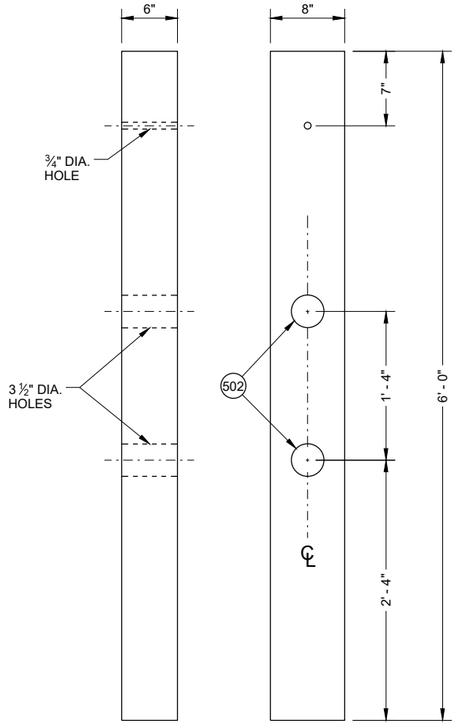
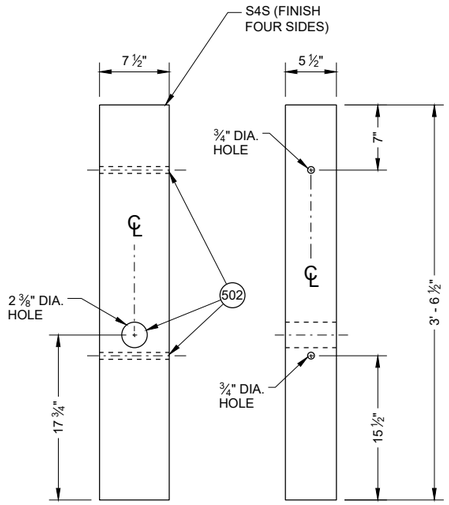
SDD 14B53 - 01e



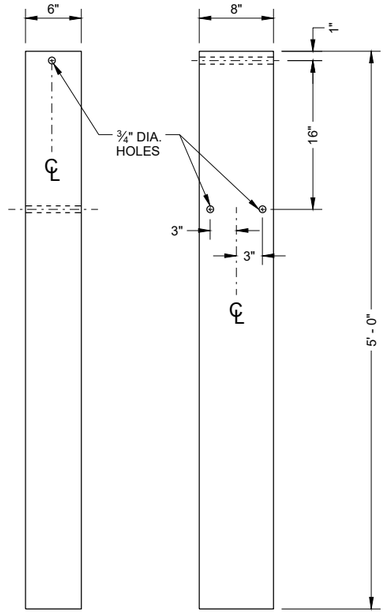
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

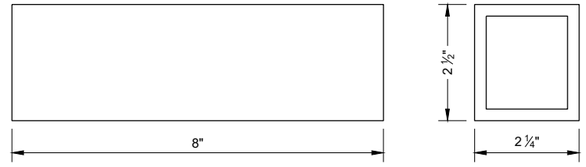
GENERAL NOTES

500 SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

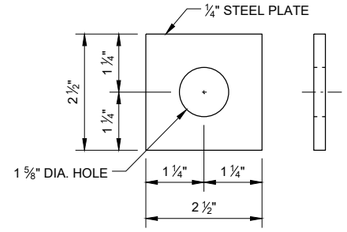
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

502 LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

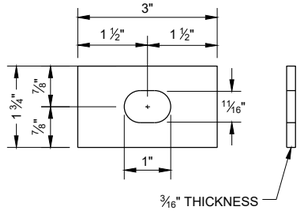
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



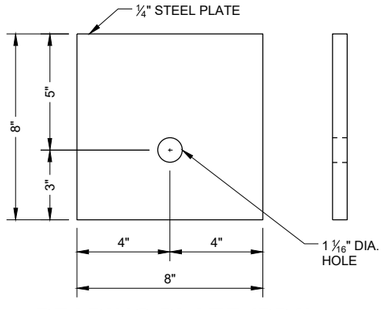
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



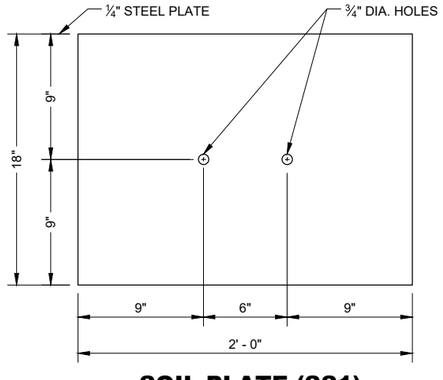
ANCHOR CABLE TUBE END PLATE (QQ3)



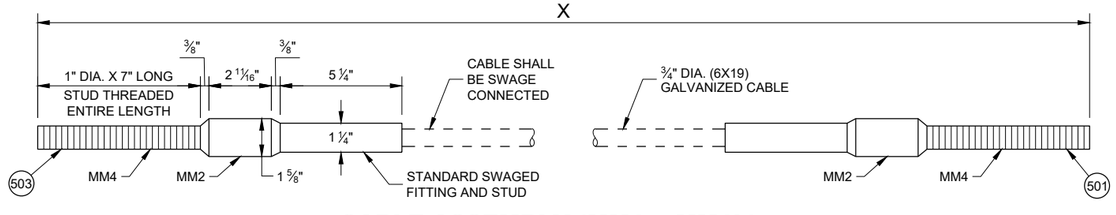
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 01f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 01g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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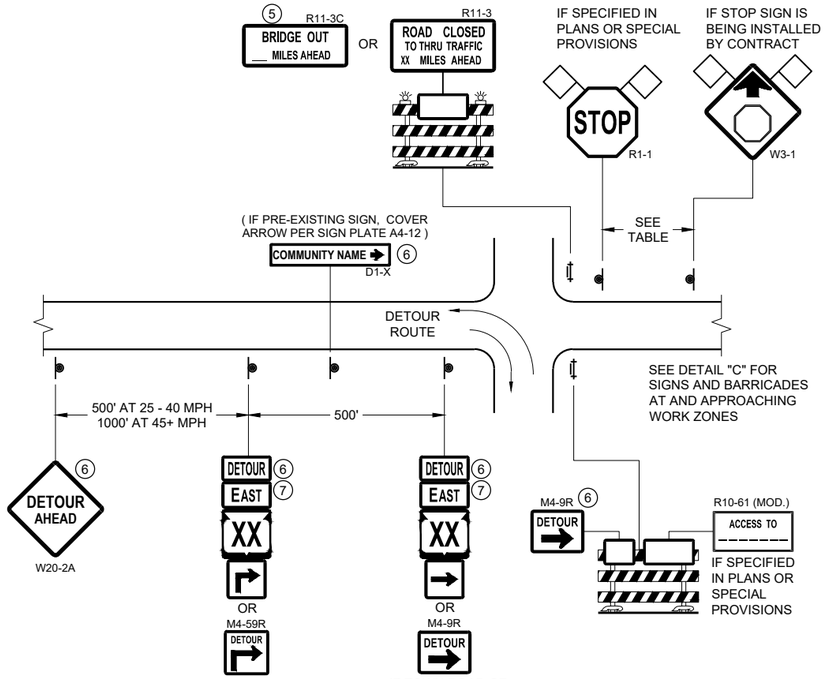
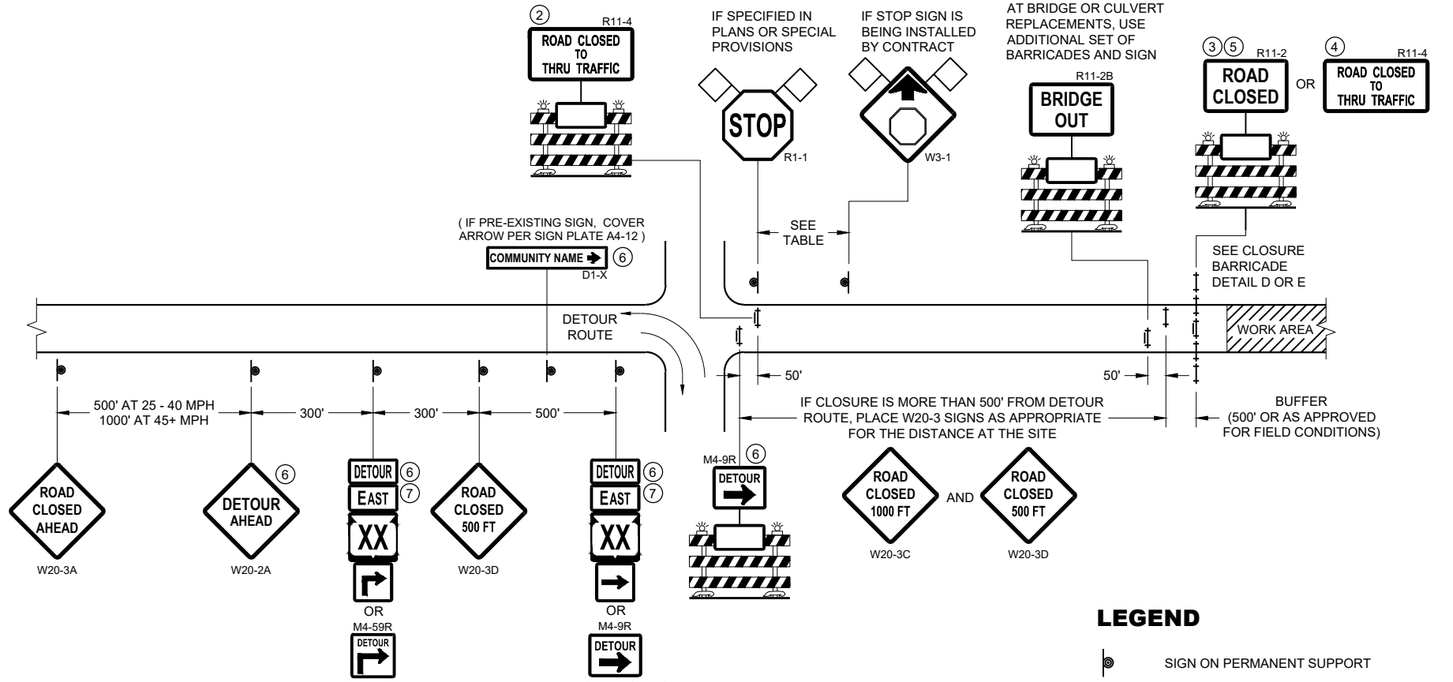
SDD 14B53 - 01i





DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

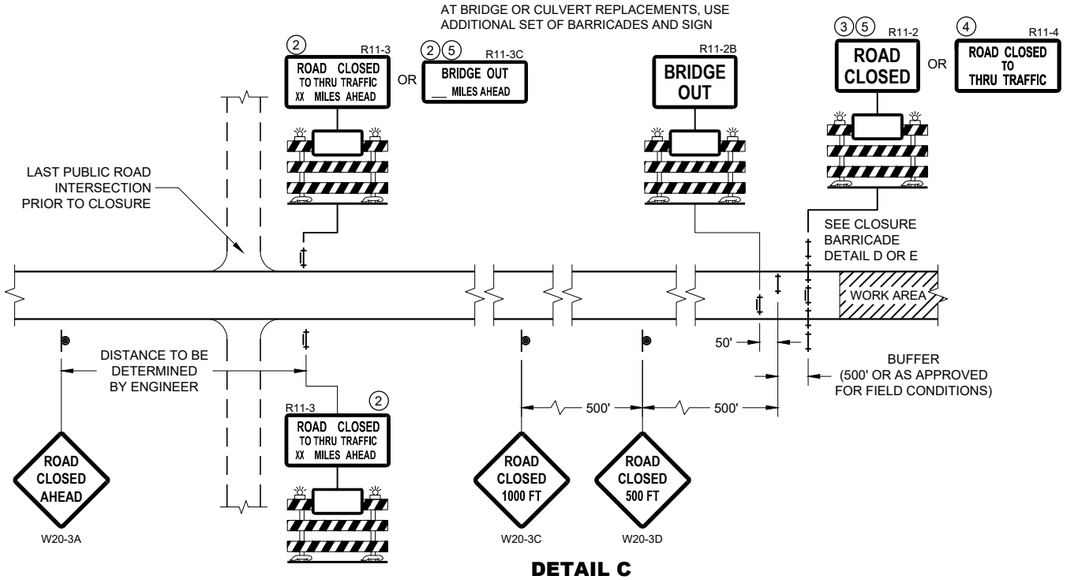
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08a

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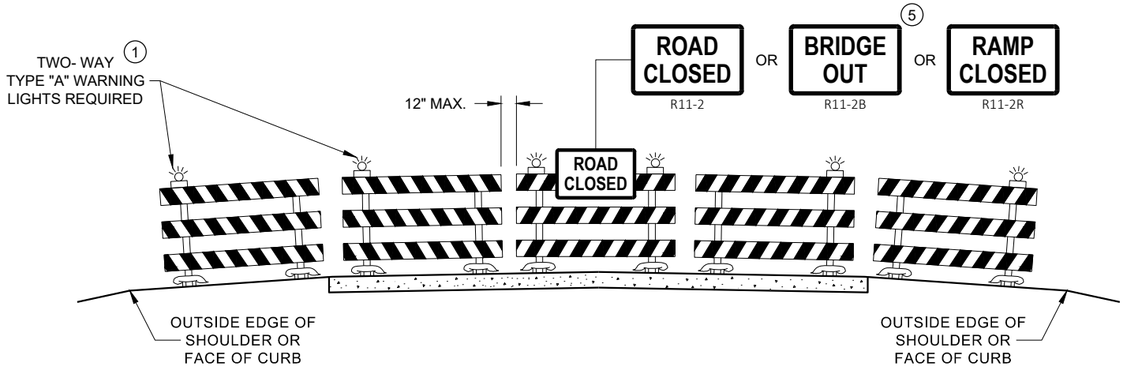
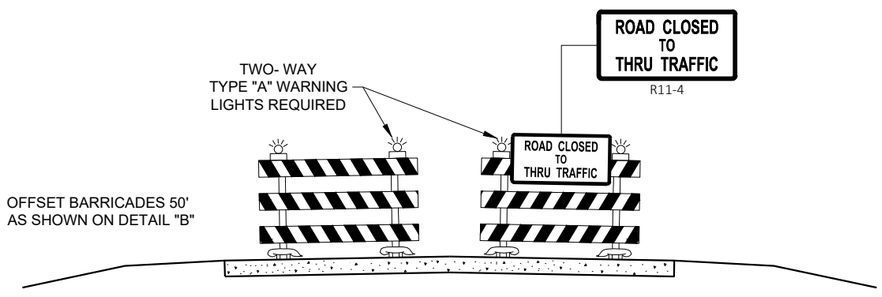
SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

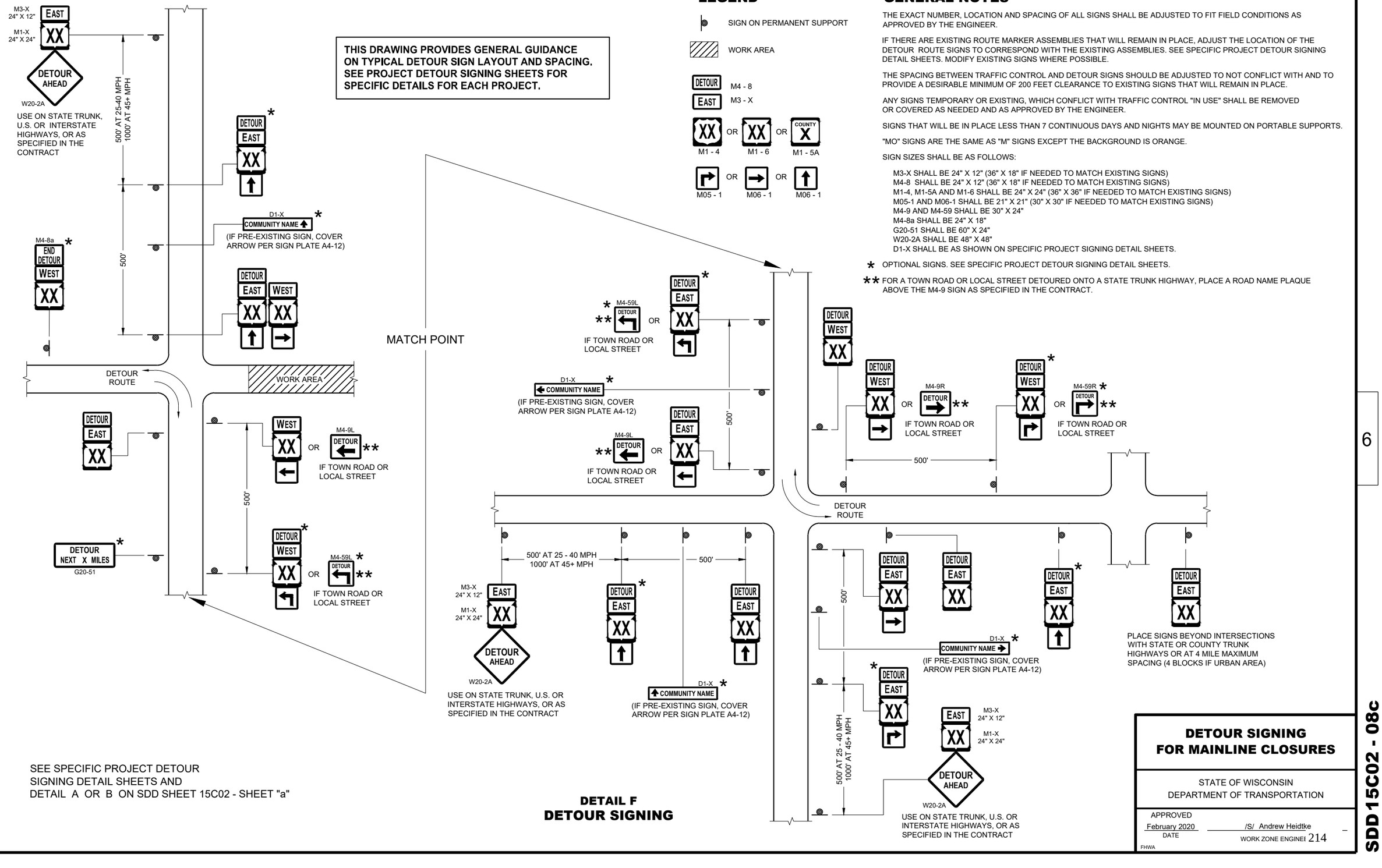
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

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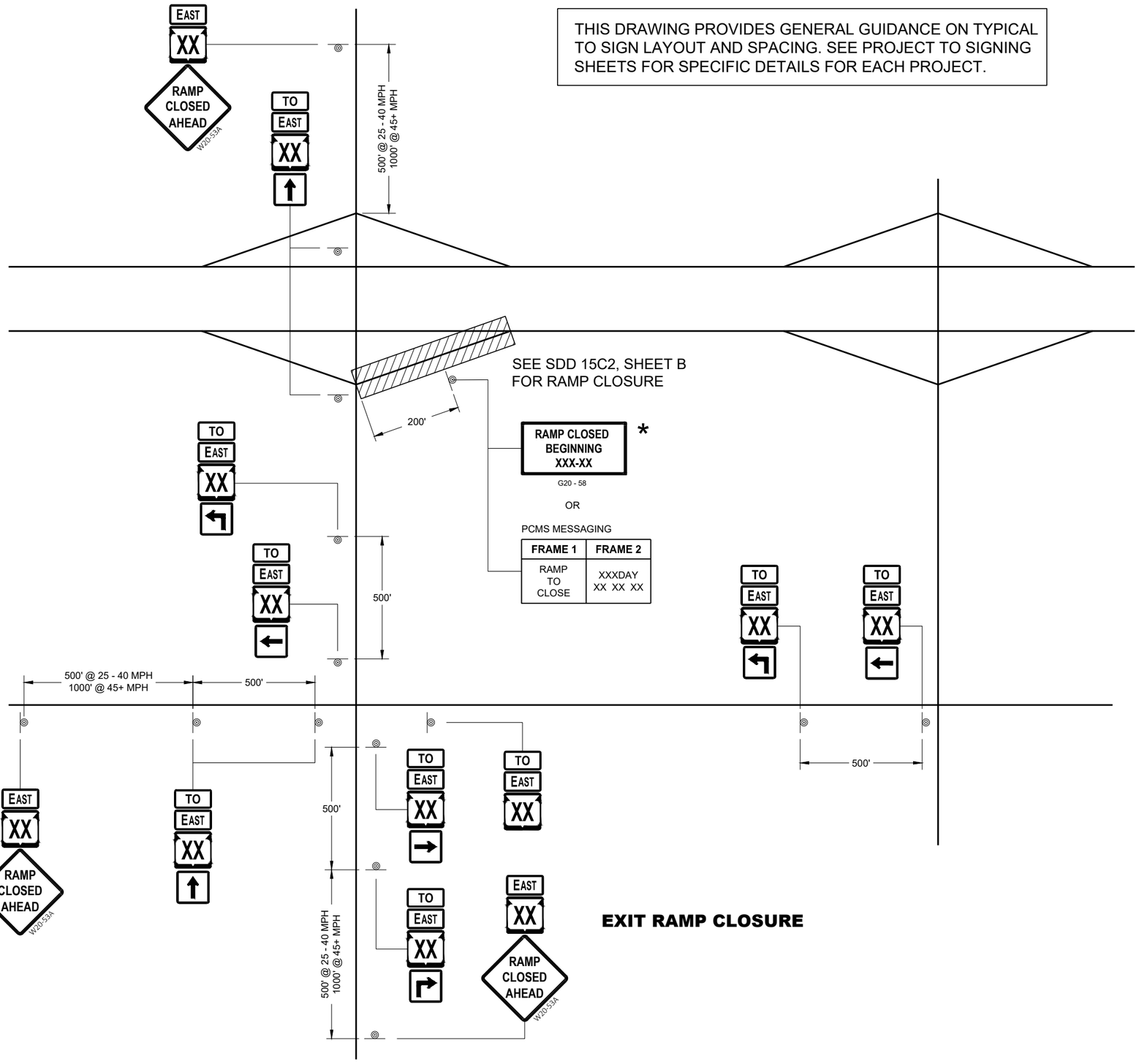

EXIT RAMP CLOSURE

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

LEGEND

◎ SIGN ON PERMANENT SUPPORT

TO / EAST — MO4 - 5, M3 - X

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

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

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

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

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

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

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

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

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

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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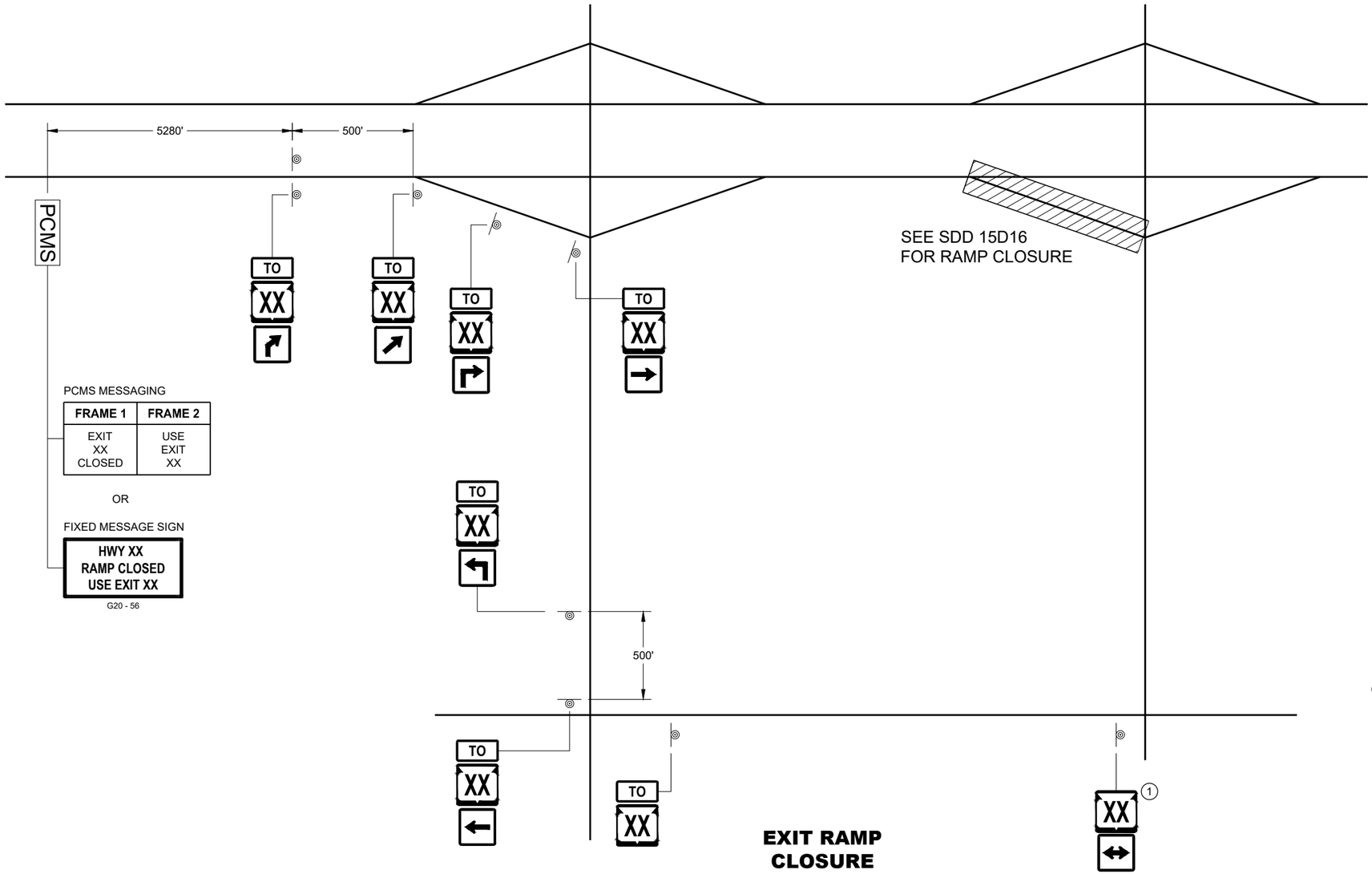
SDD 15C02 - 08d

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



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

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

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

GENERAL NOTES

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

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

OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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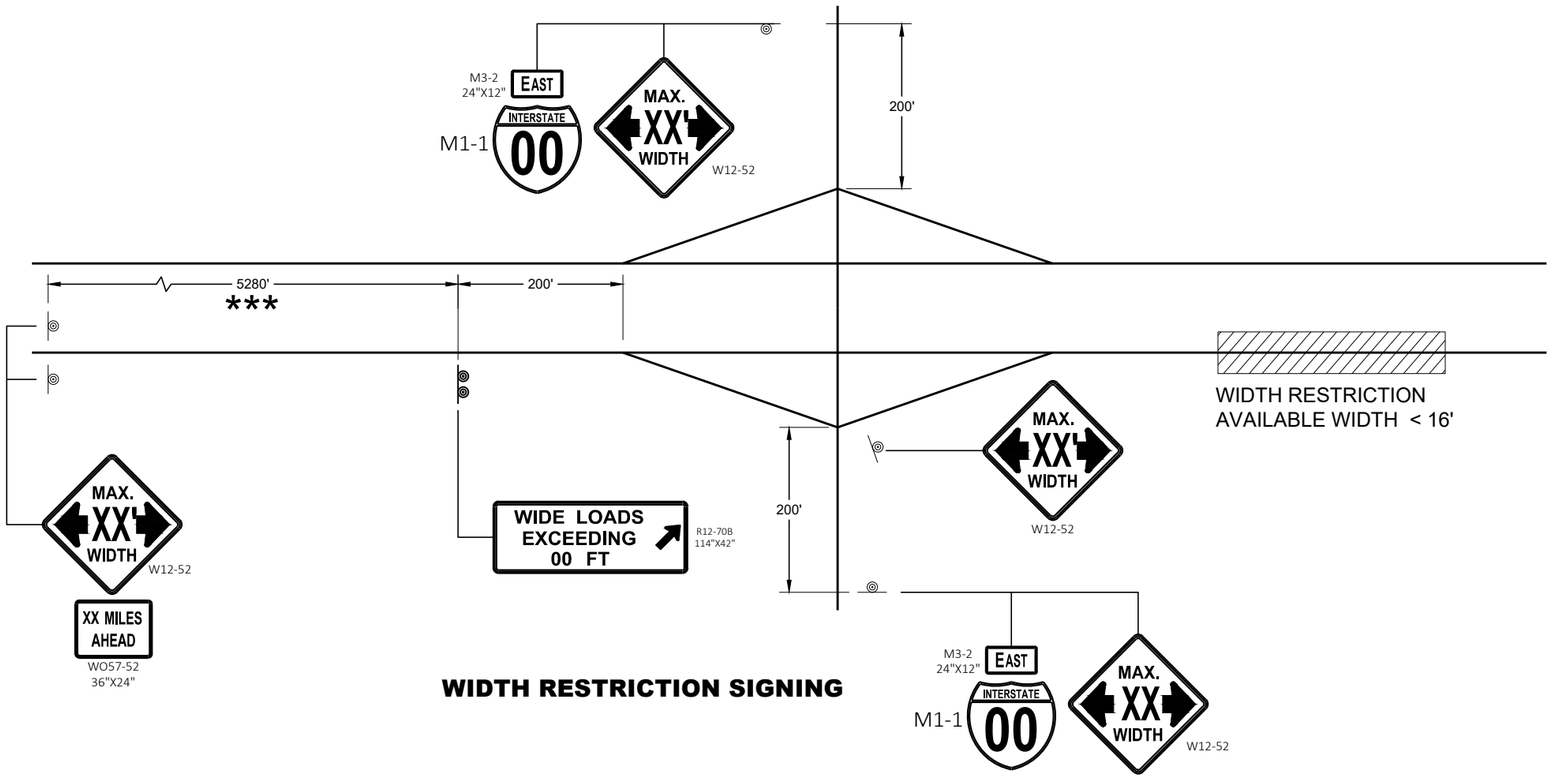
SDD 15C02 - 08e



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

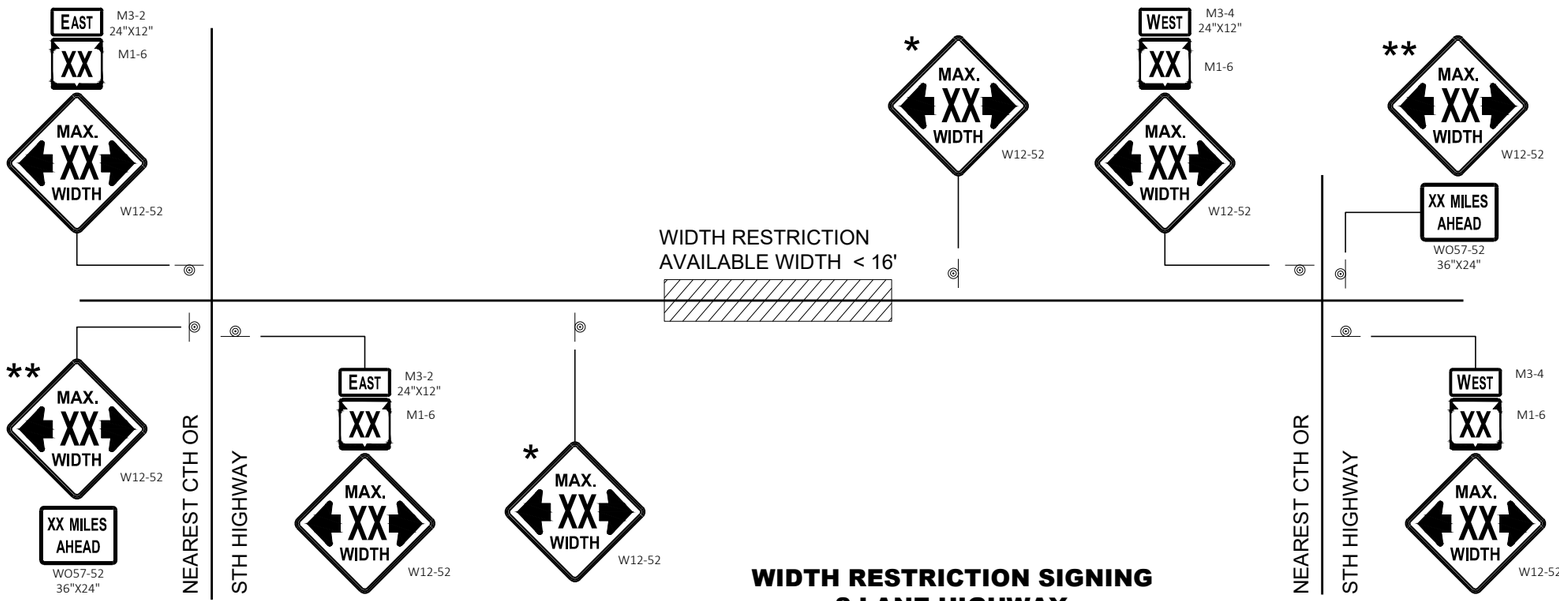
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

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

** SIGN SHALL BE VISIBLE FROM ROADWAY.

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

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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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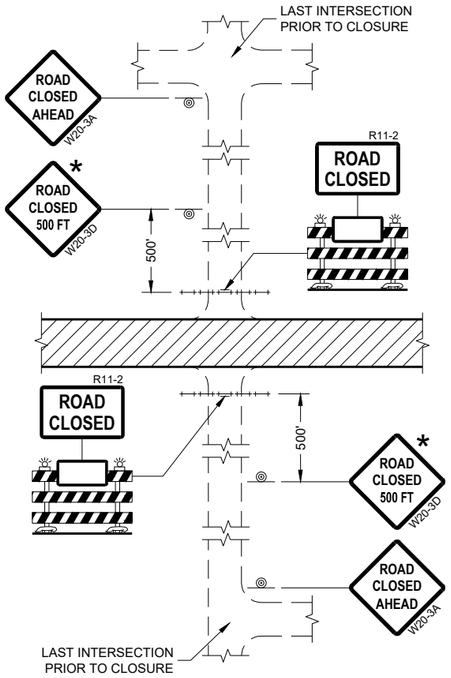
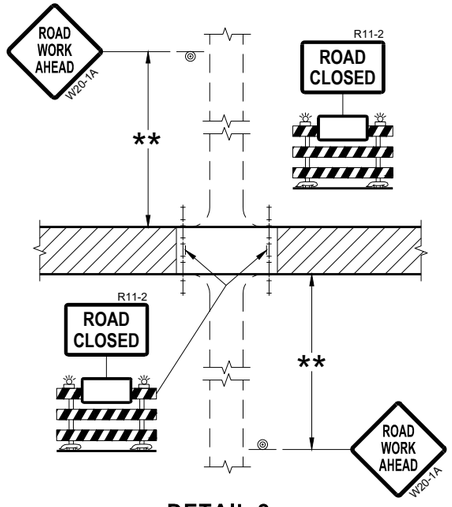
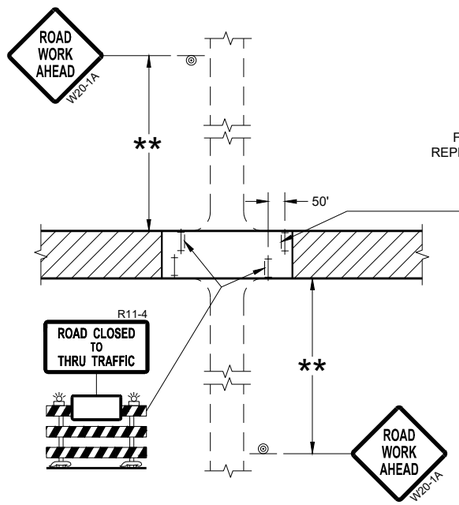
SDD 15C02 - 08f



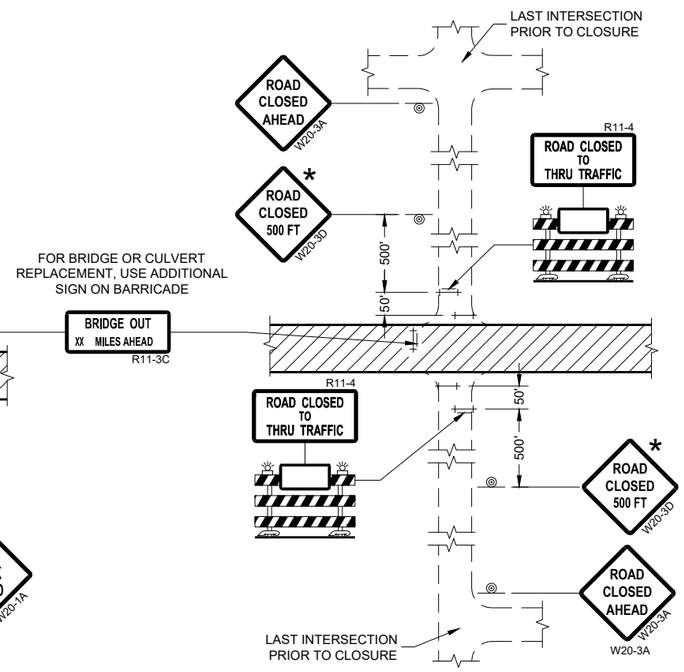
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C03 - 05

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SDD 15C03 - 05

GENERAL NOTES

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

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

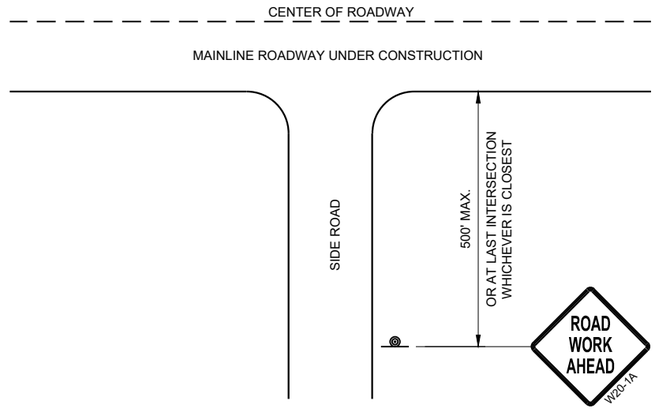
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



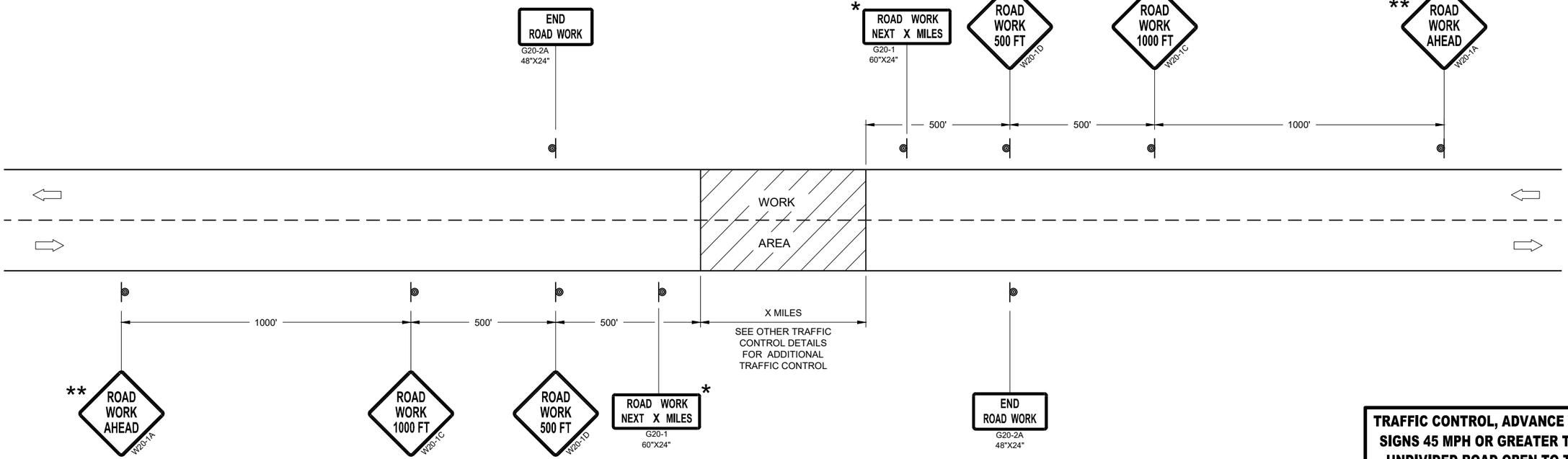
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
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DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C04 - 05

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SDD 15C04 - 05

GENERAL NOTES

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

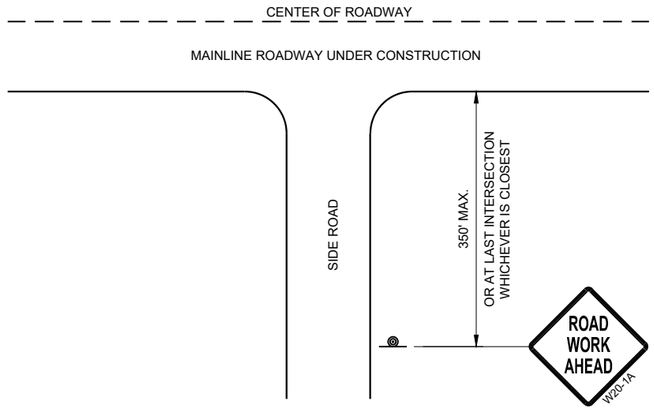
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



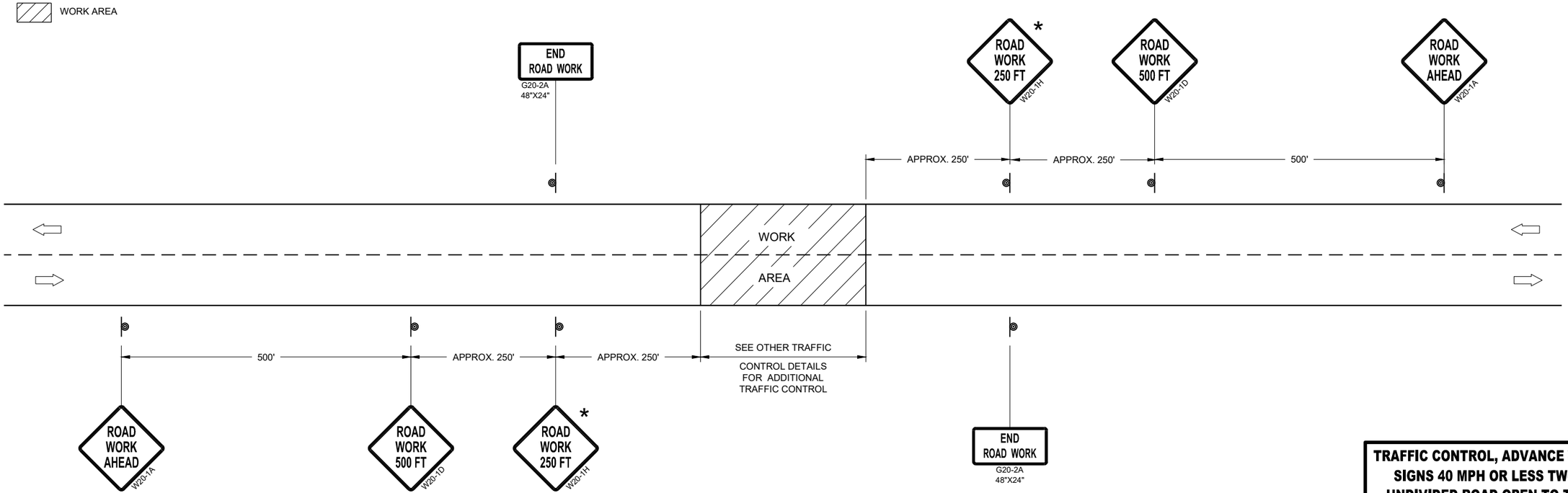
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
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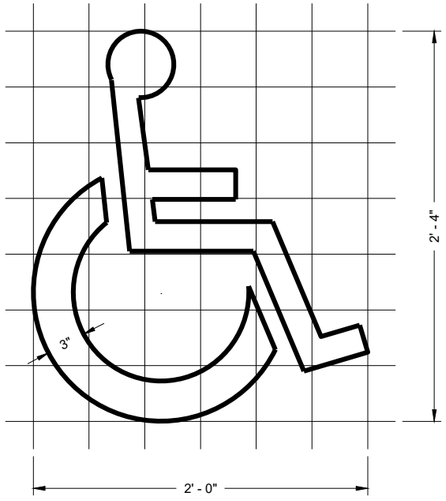
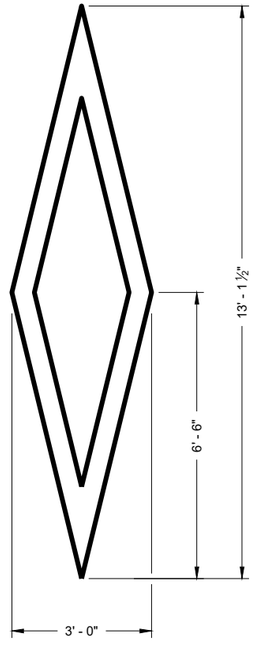
SDD 15C05 - 05

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

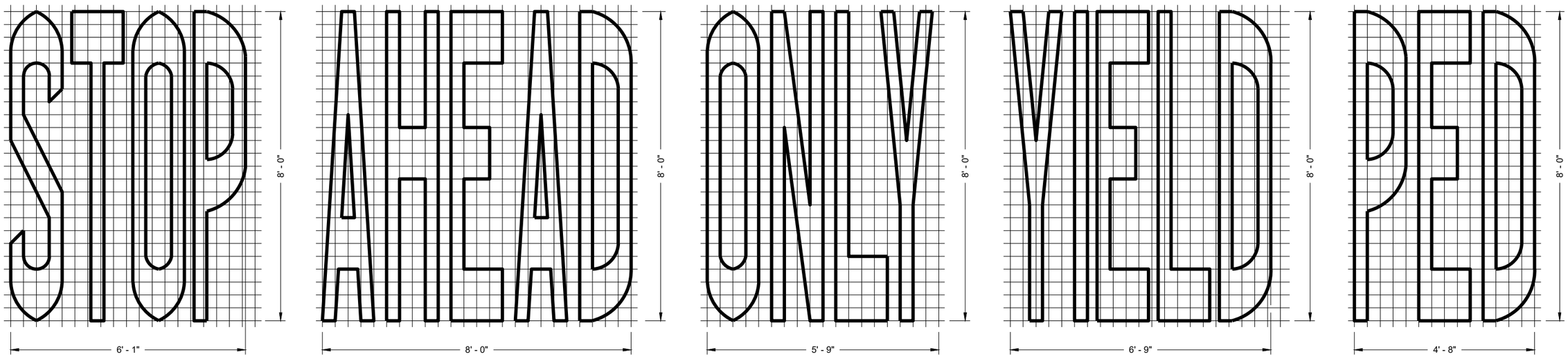
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

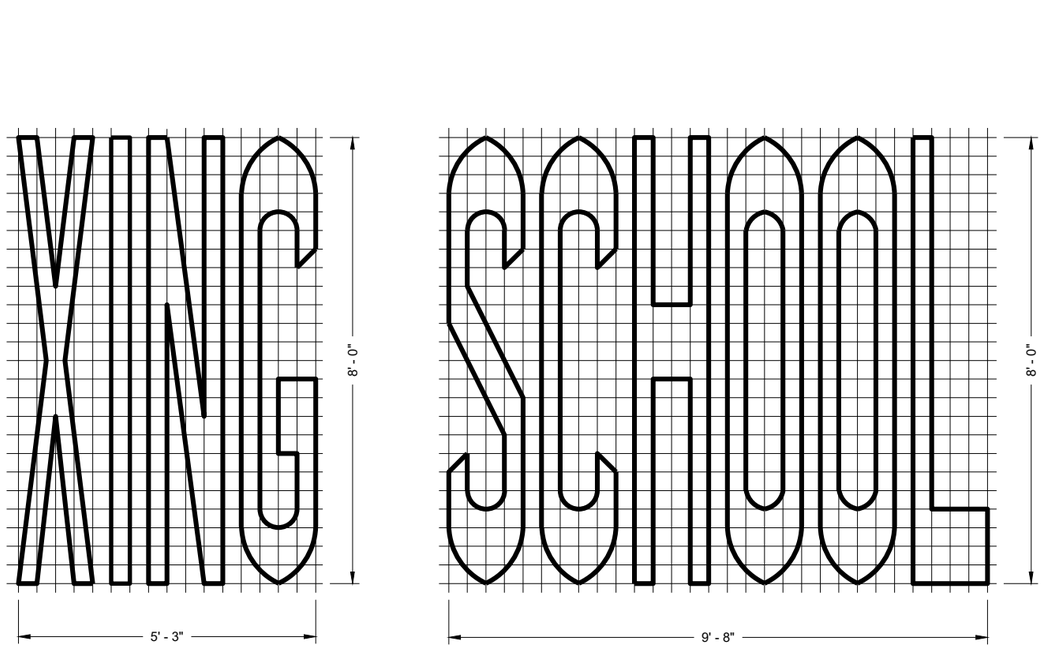
APPROVED

November 2019
DATE

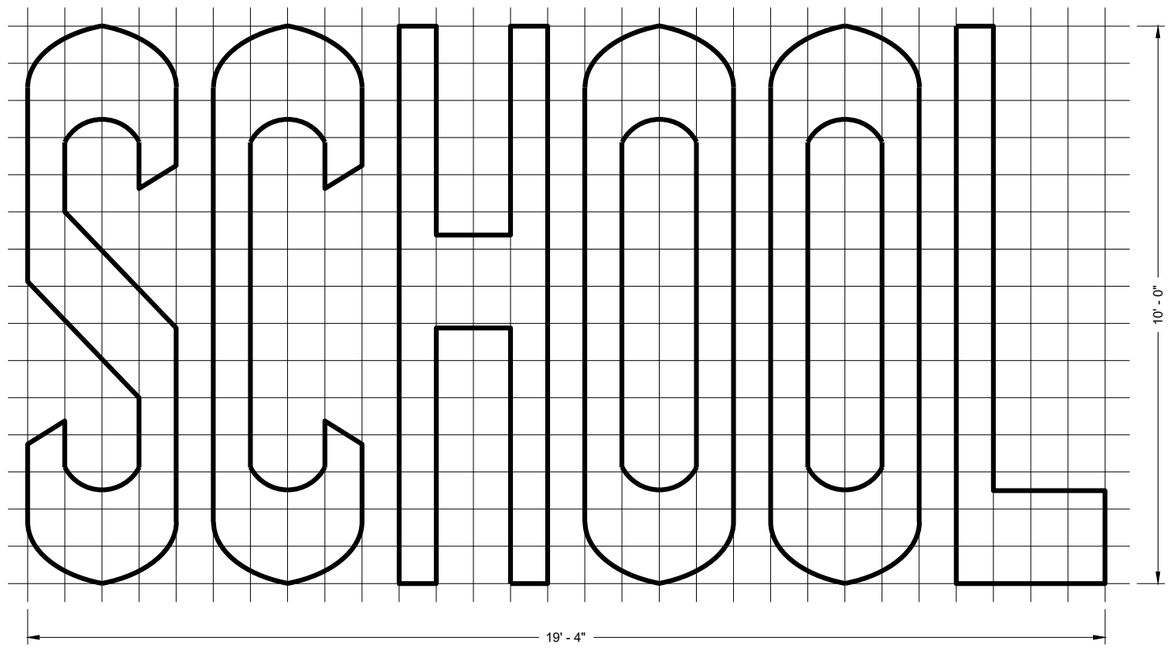
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

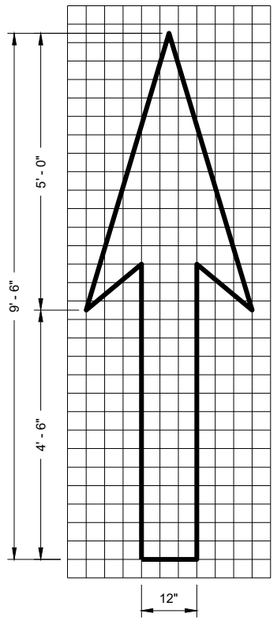
/S/ Matthew Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

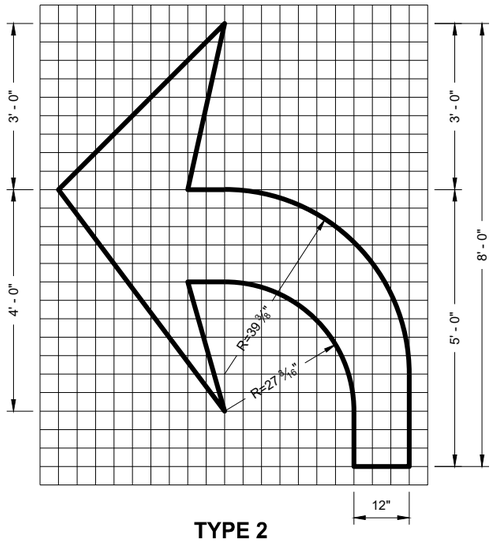
6

SDD 15C07 - 15b

SDD 15C07 - 15b



TYPE 1



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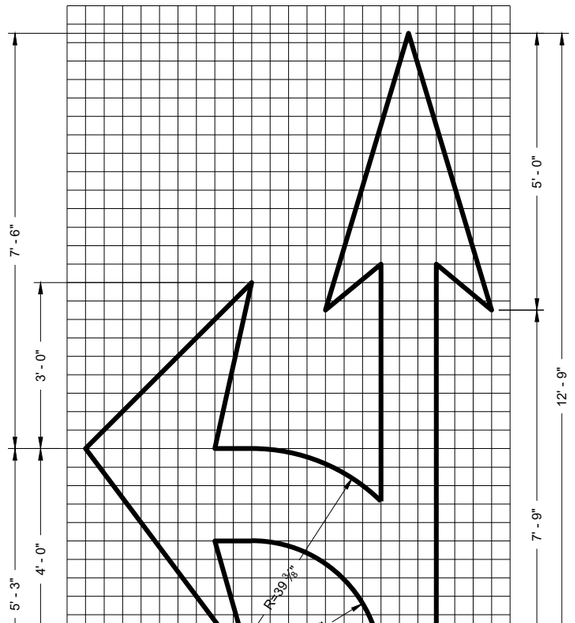

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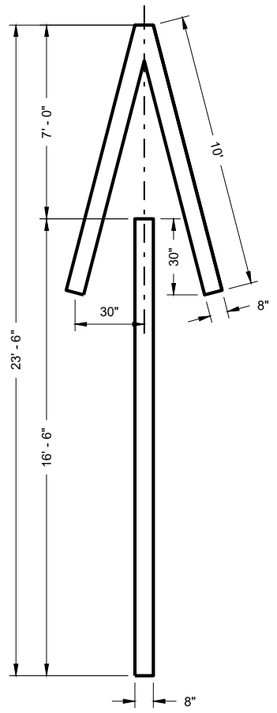
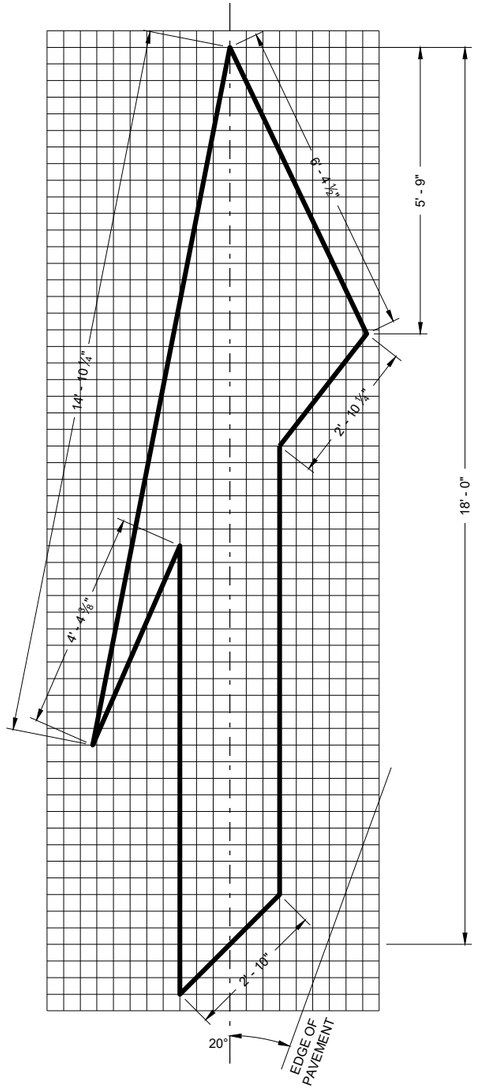


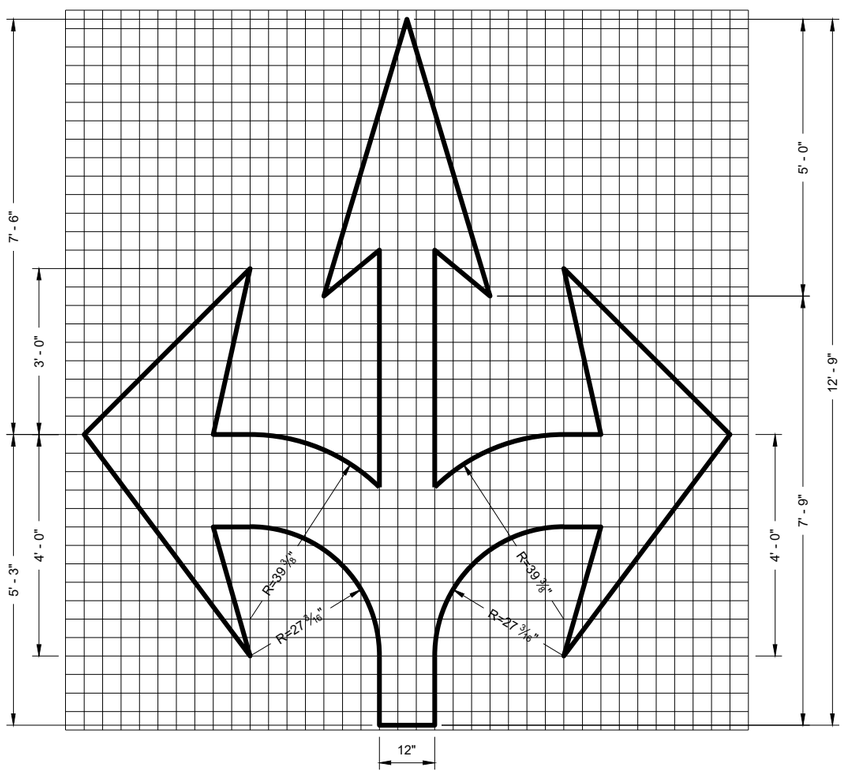
TYPE 4

GENERAL NOTES

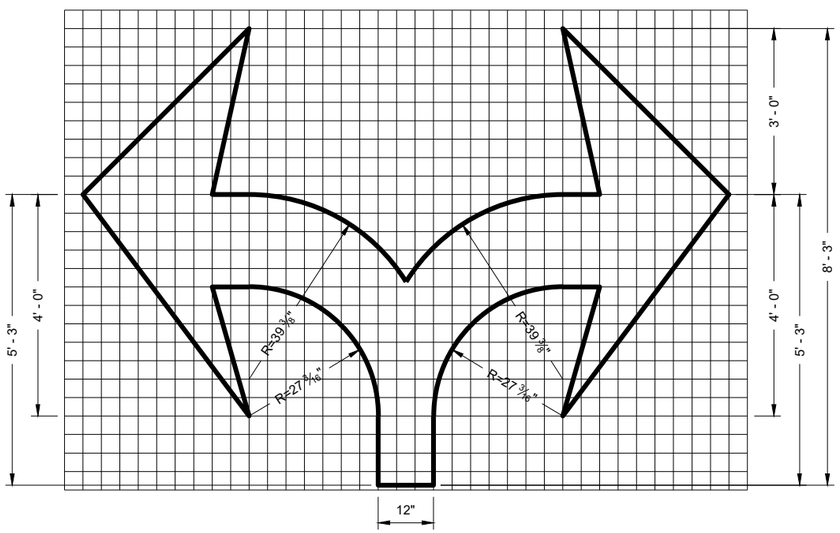
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

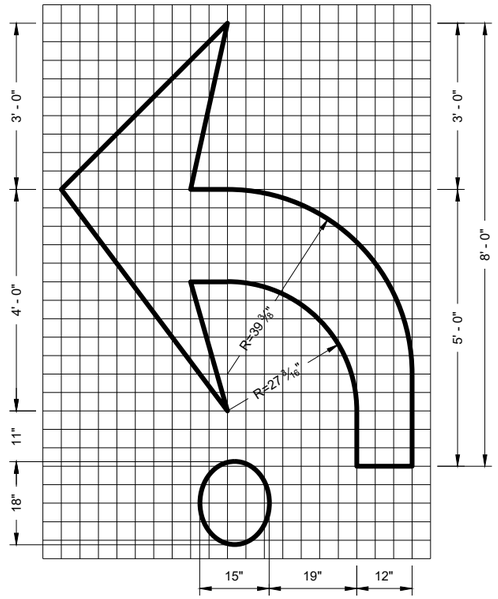
SDD 15C07 - 15c

6

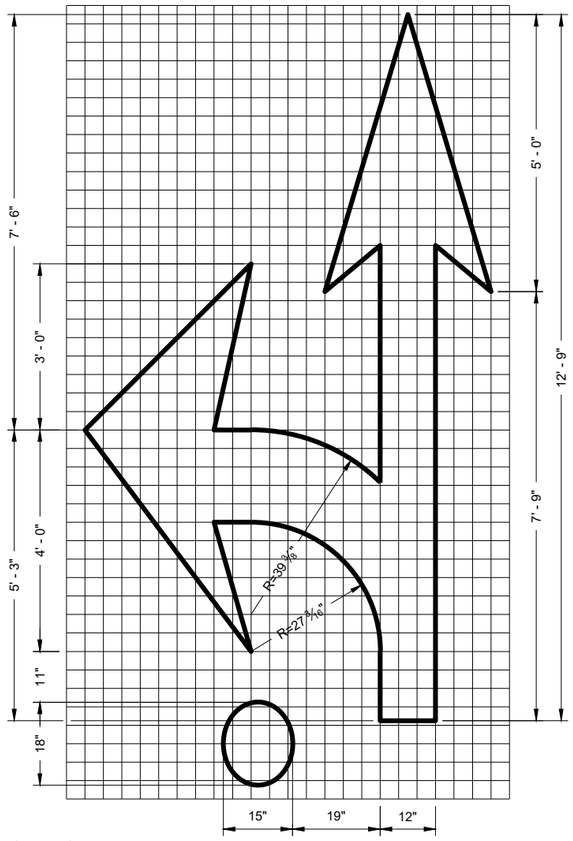
SDD 15C07 - 15c

GENERAL NOTES

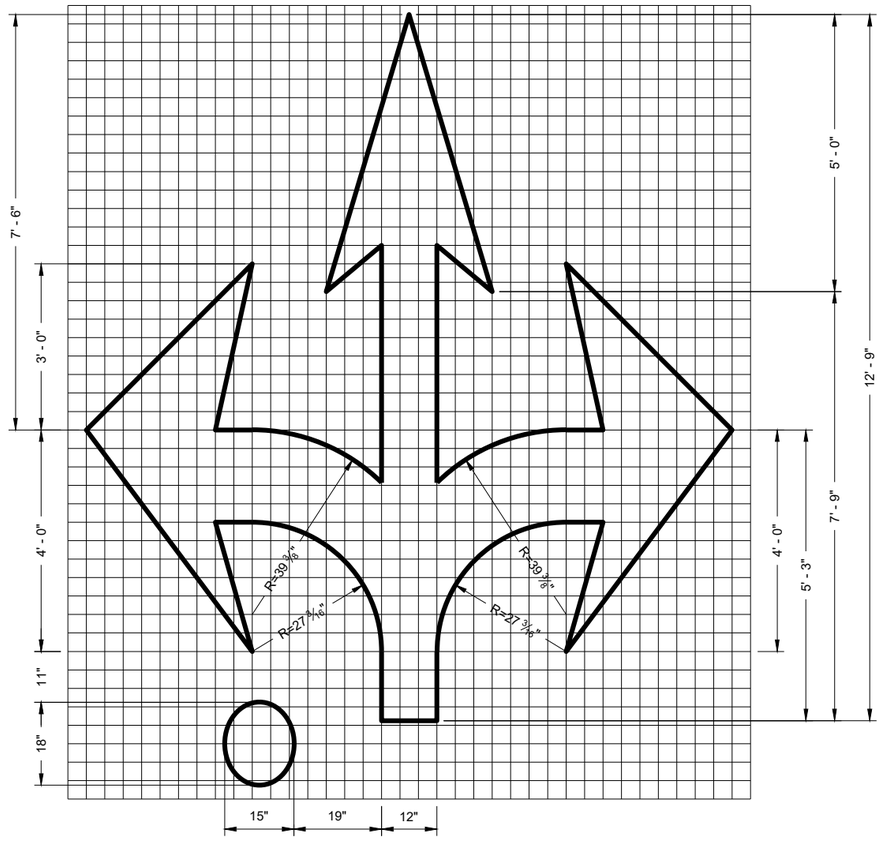
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



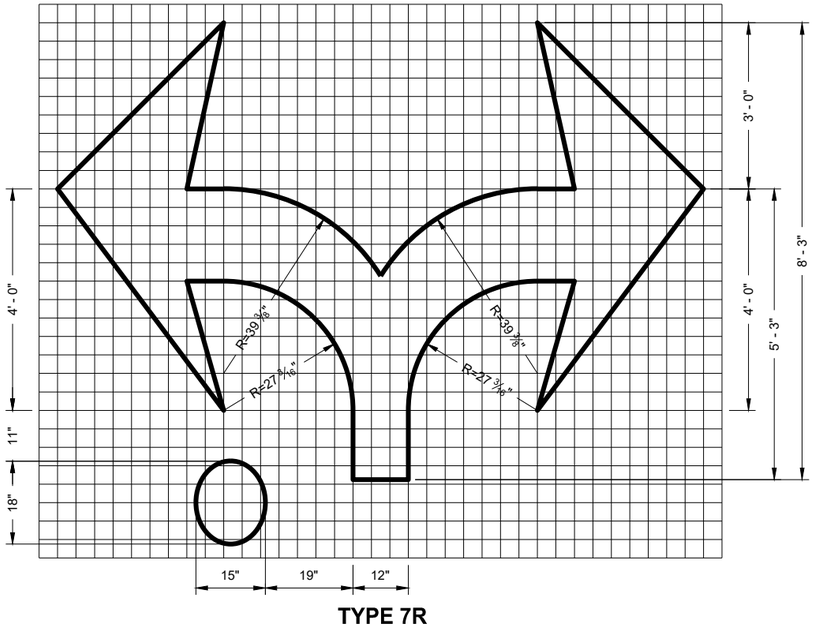
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

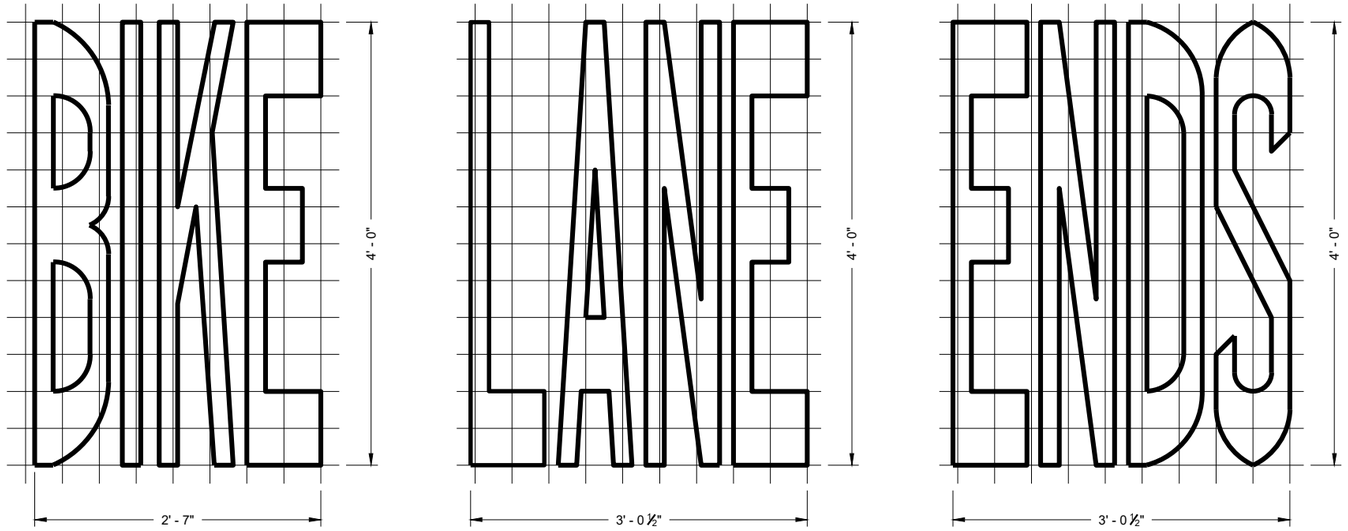
6

SDD 15C07 - 15d

6

SDD 15C07 - 15d

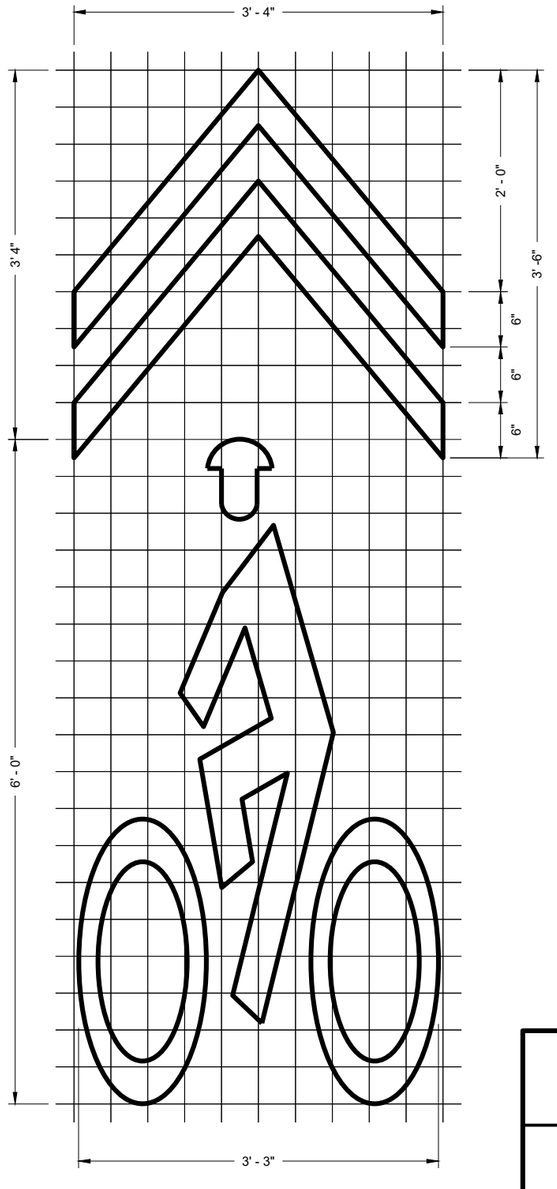
SDD 15C7-e Pavement Marking For Bike Lanes



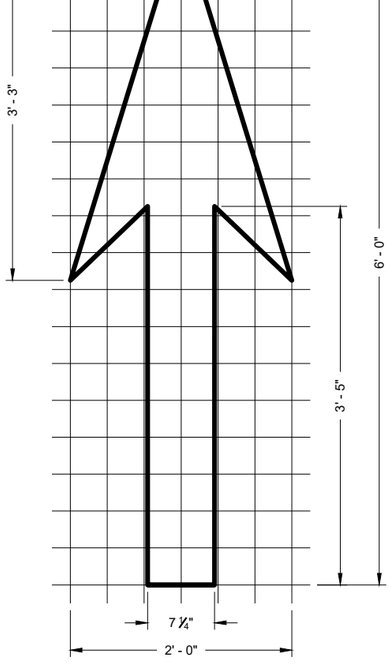
BIKE LANE WORDS

GENERAL NOTES

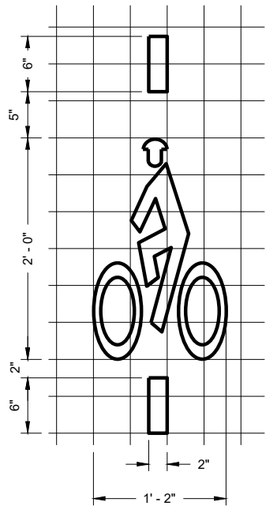
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



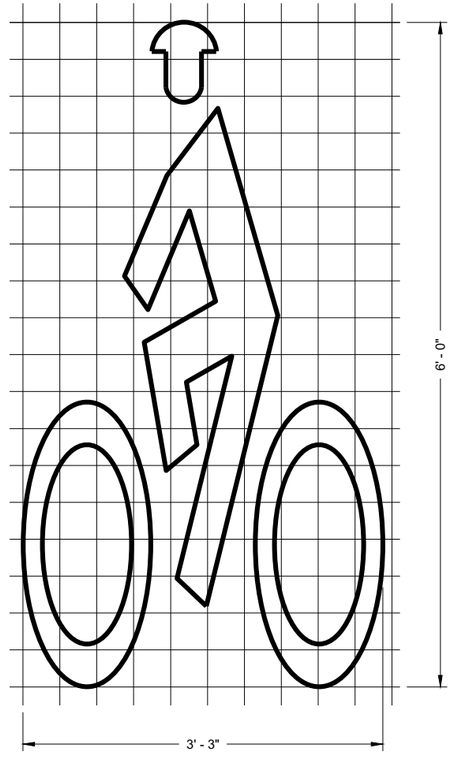
BIKE LANE SYMBOL FOR SHARED LANE



BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

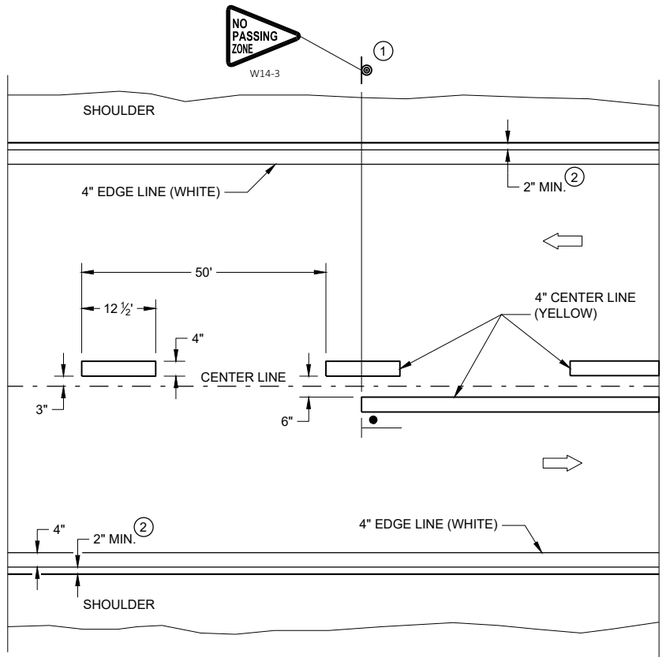
FHWA

6

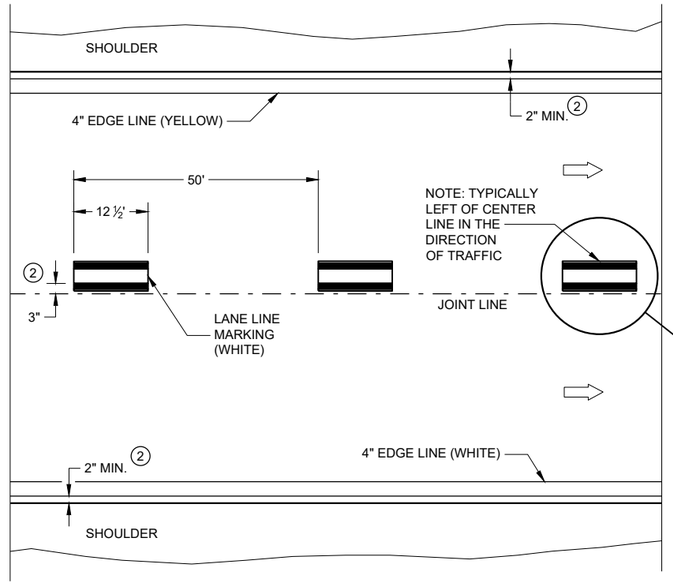
SDD 15C07 - 15e

6

SDD15C07 - 15e

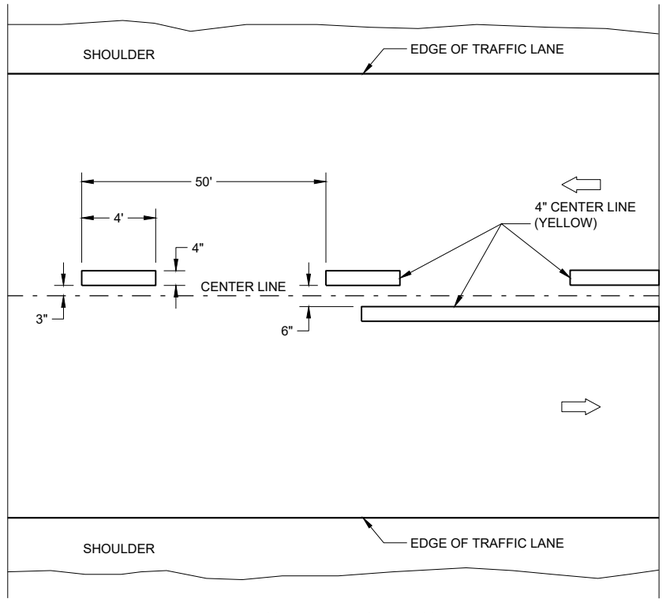


TWO WAY TRAFFIC

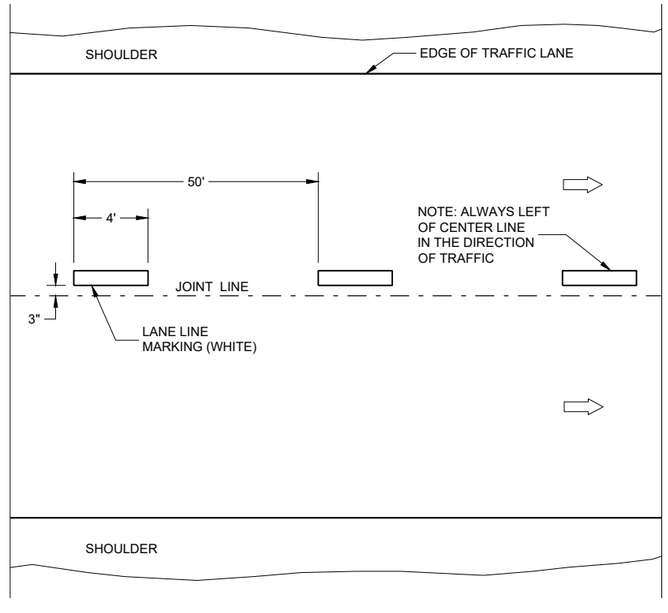


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

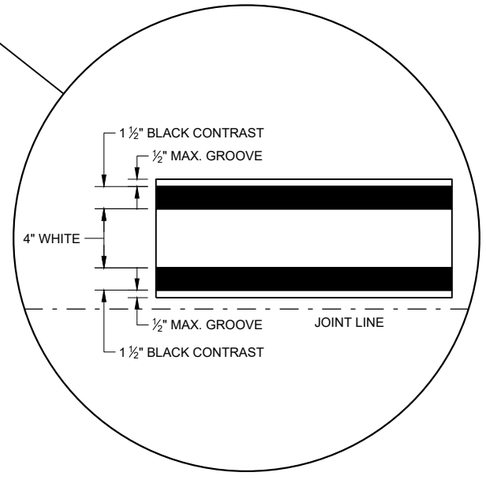
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

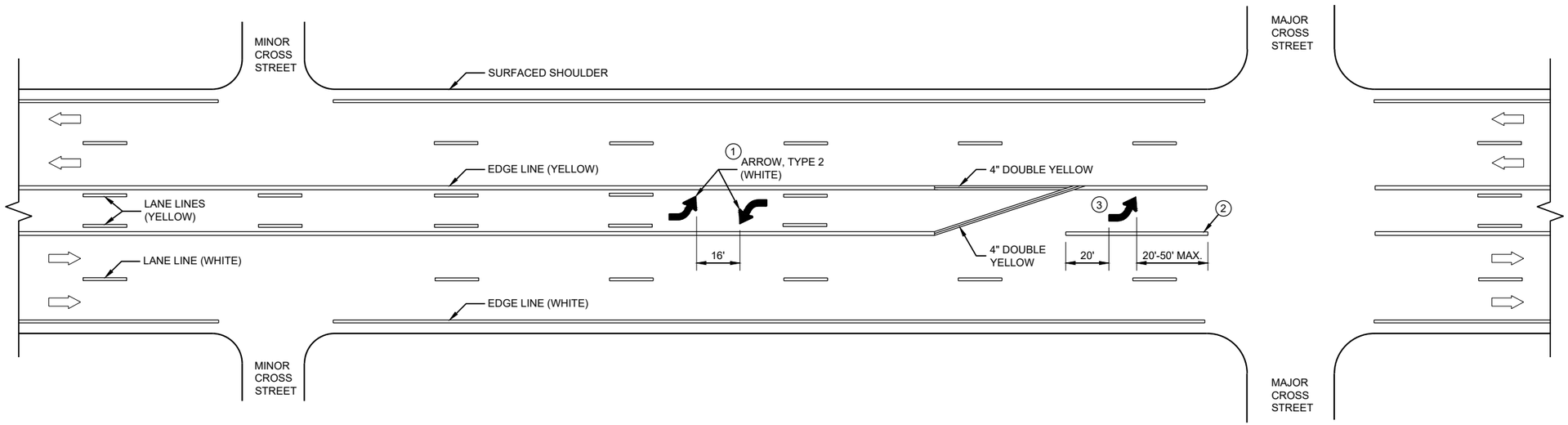
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

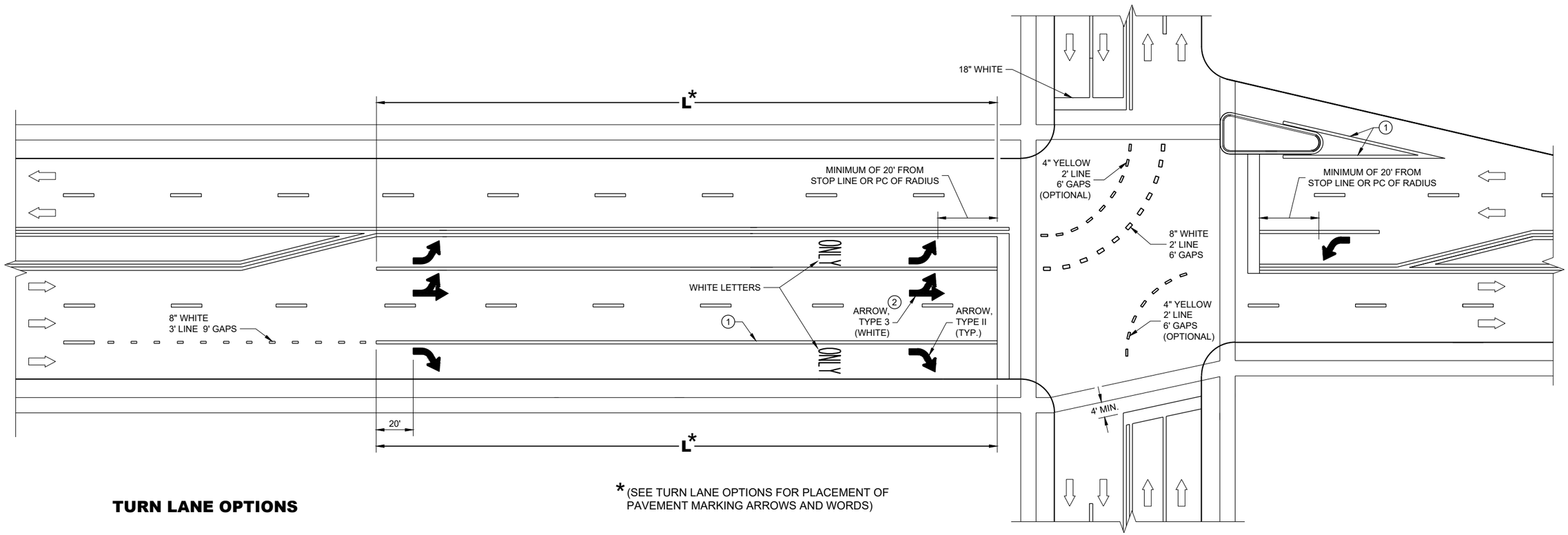
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

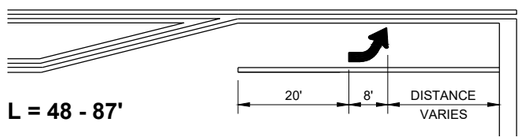
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



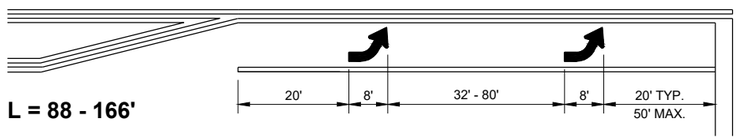
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

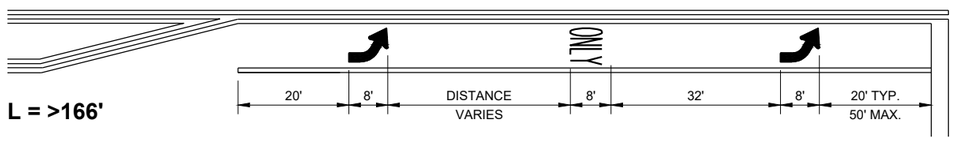
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

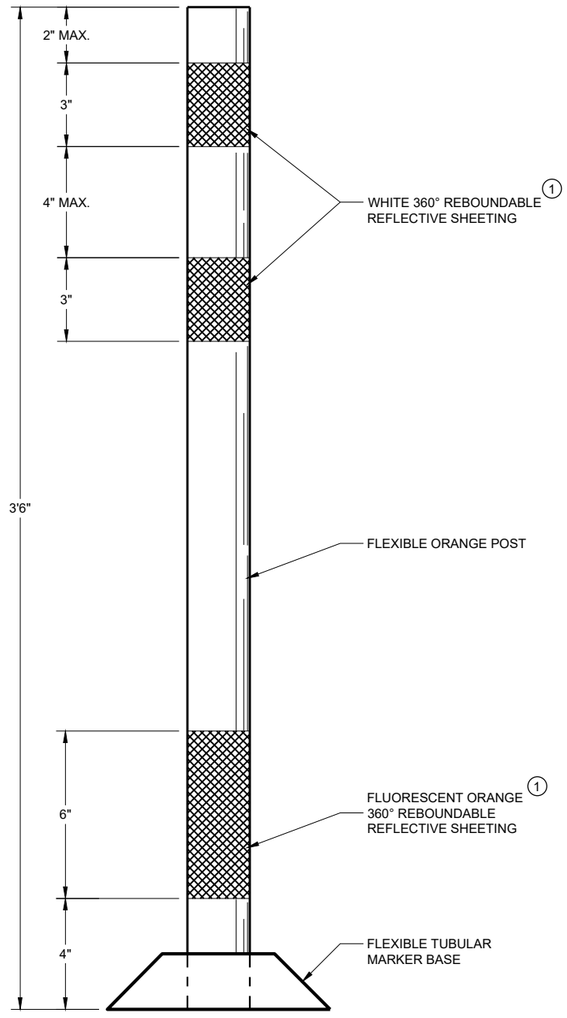
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C08 - 20c

6
SDD 15C08 - 20c



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15C11 - 09a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

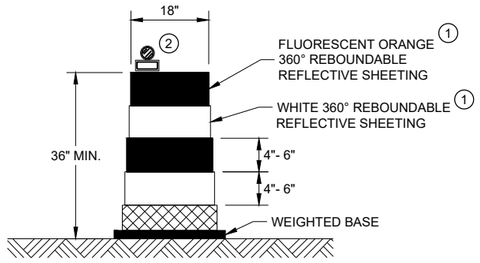
FHWA

6

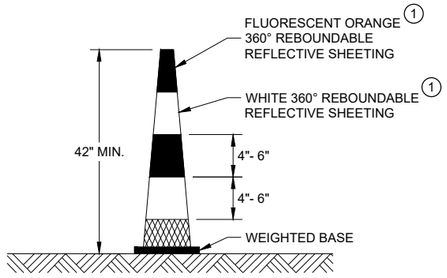
SDD 15C11 - 09a

GENERAL NOTES

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

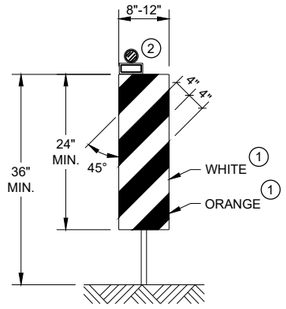


DRUM



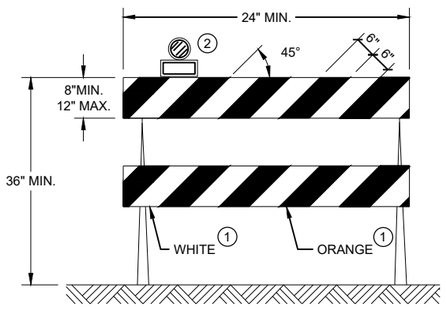
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



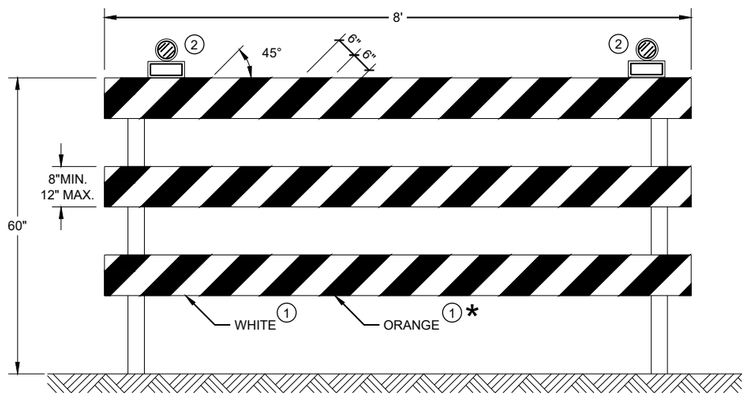
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

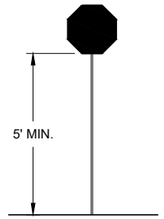
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

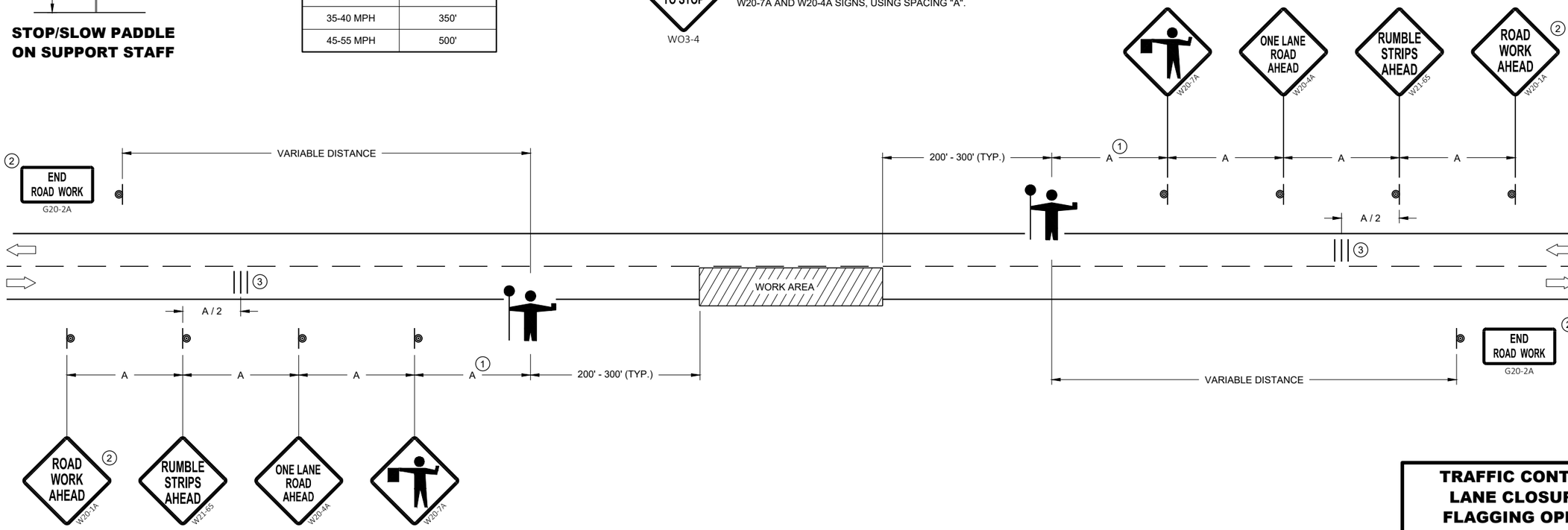
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

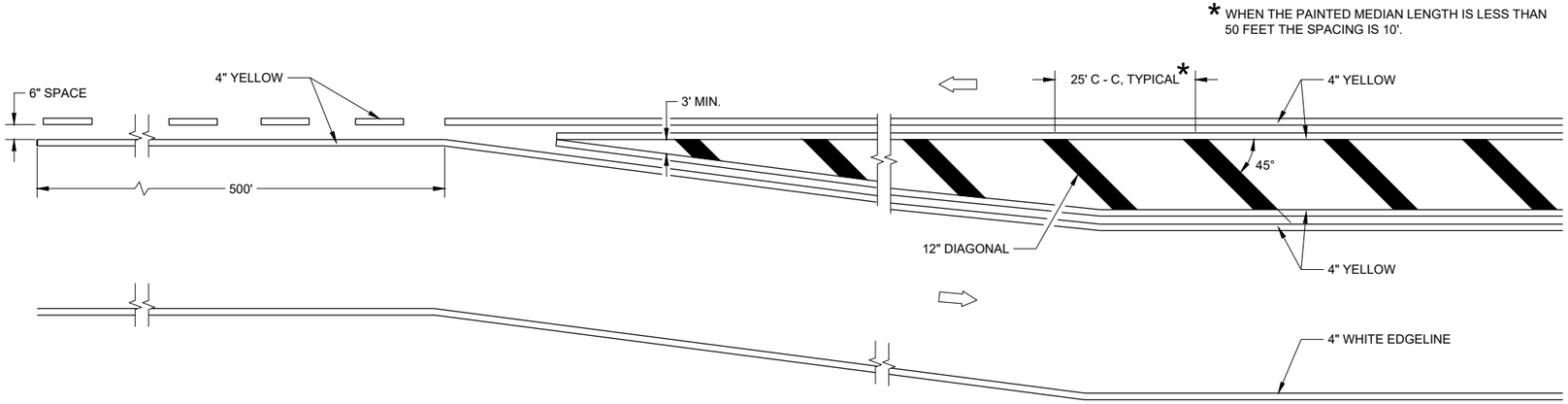
SDD 15C12 - 07

SDD 15C12 - 07

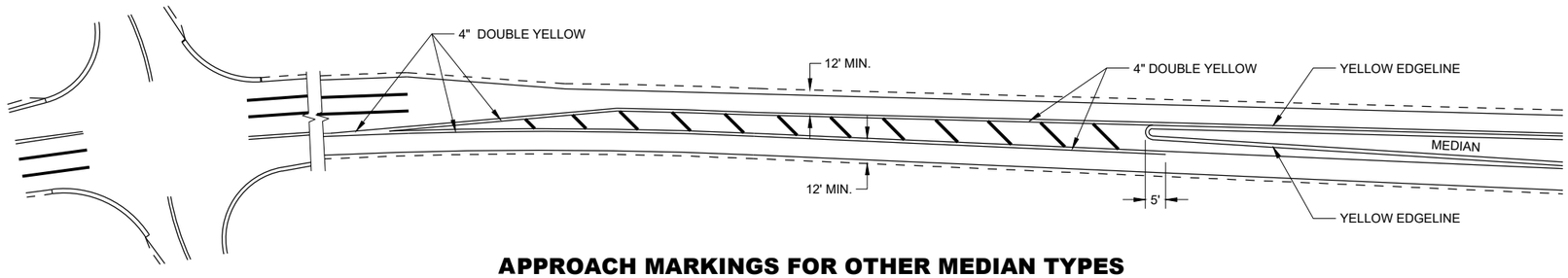
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

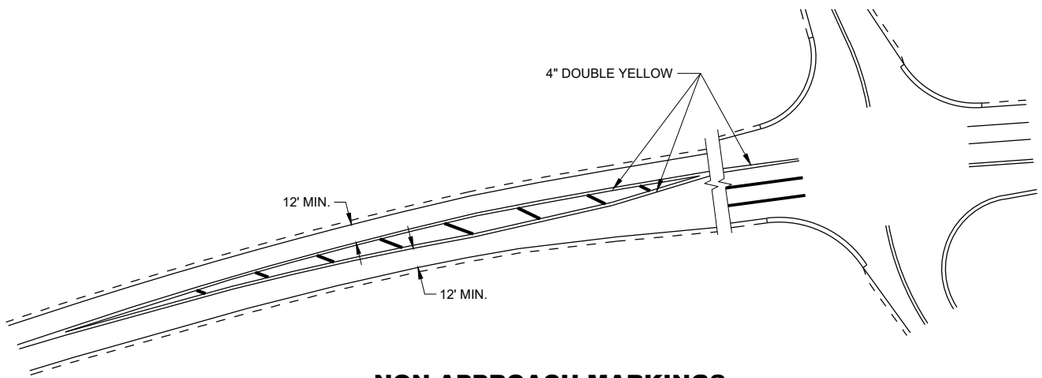
⇨ DIRECTION OF TRAVEL



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

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

FHWA

6

SDD 15C18 - 05a

6

SDD 15C18 - 05a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

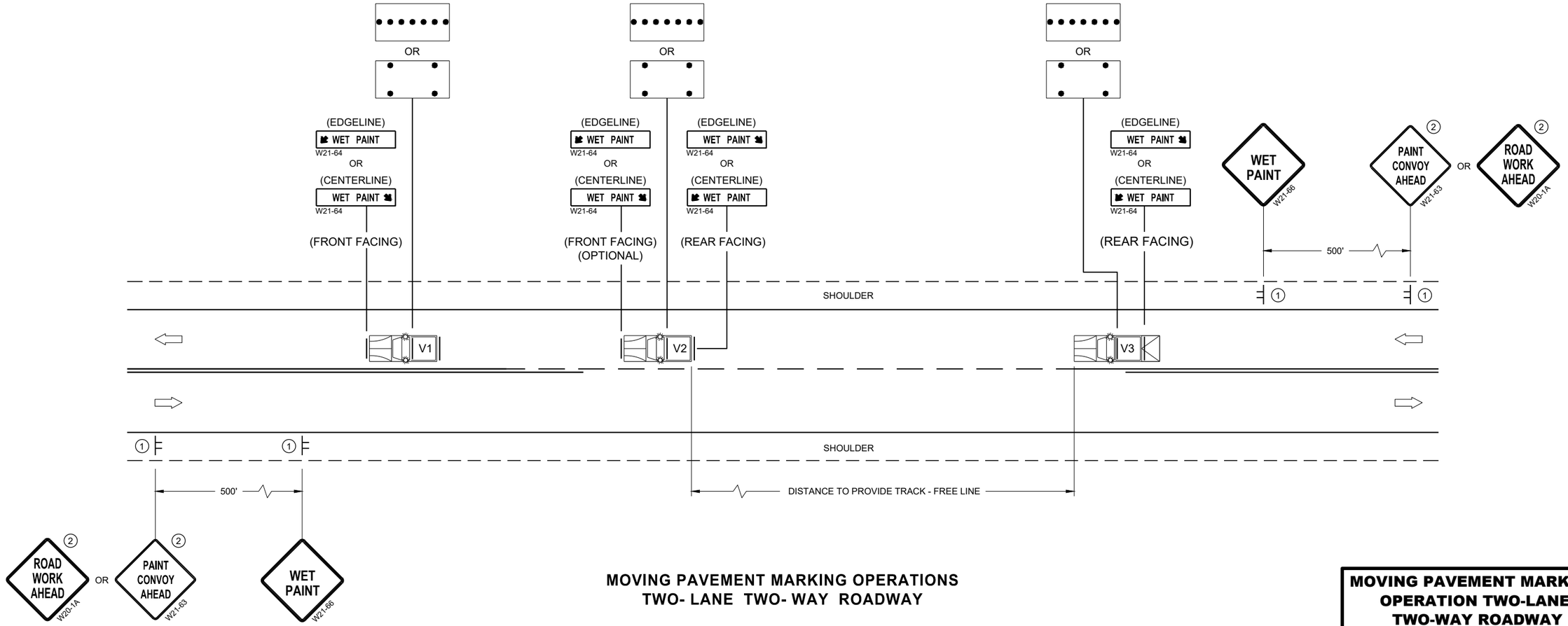
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C19 - 06a

6

SDD 15C19 - 06a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

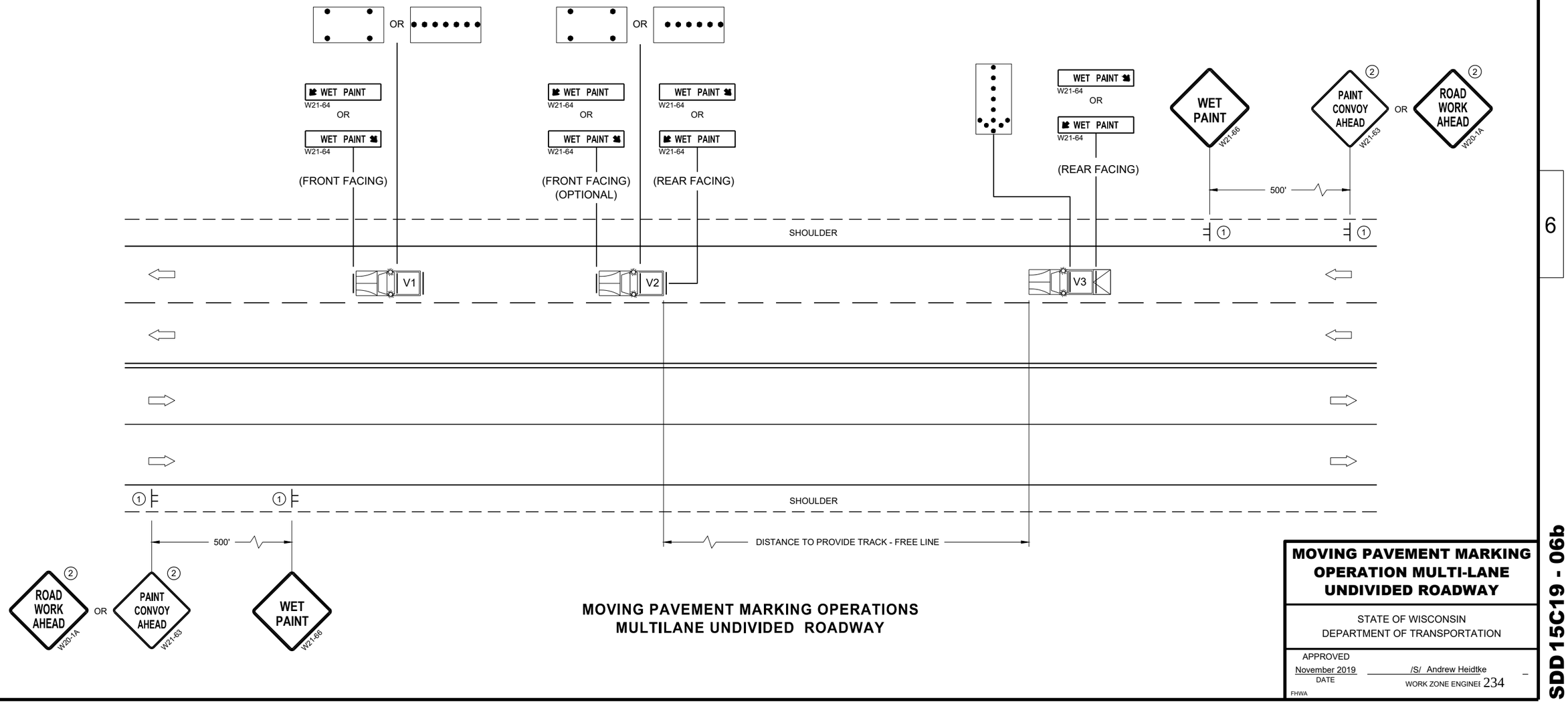
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C19 - 06b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

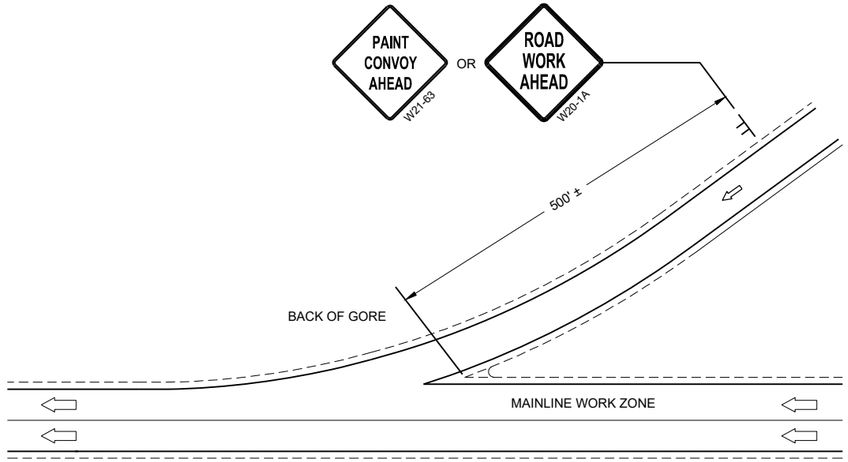
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

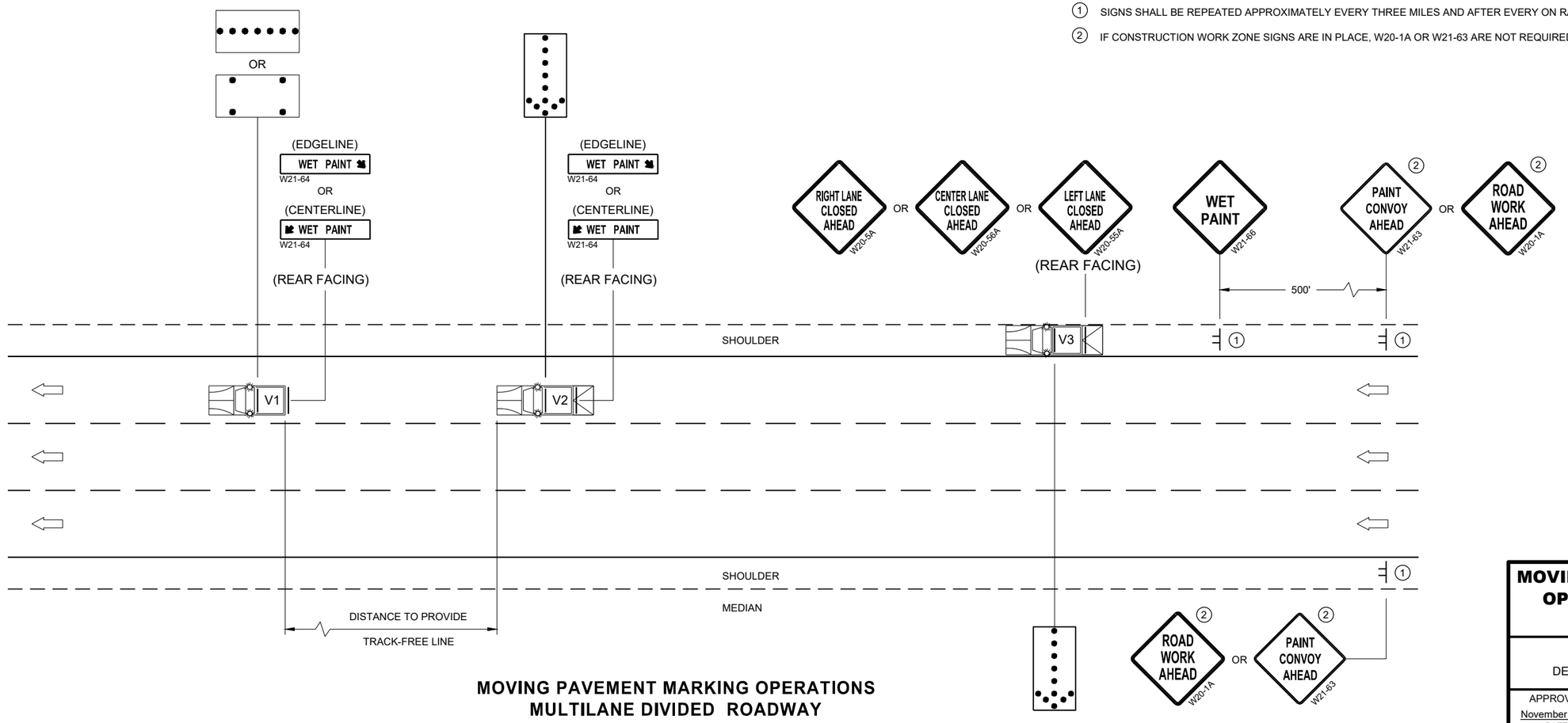
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C19 - 06c

6

SDD 15C19 - 06c

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

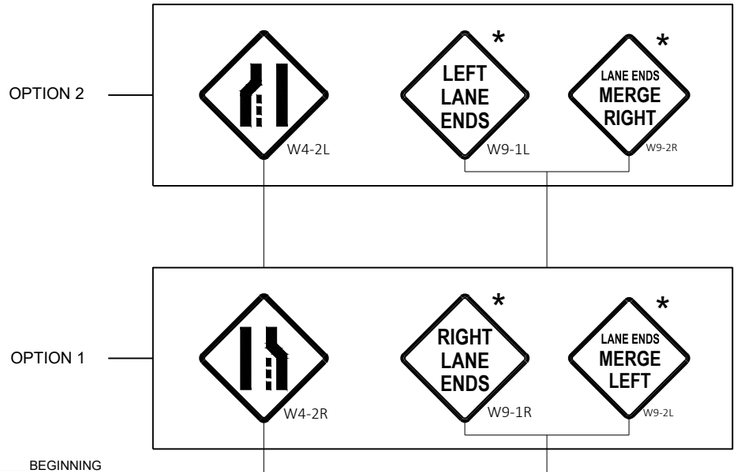
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

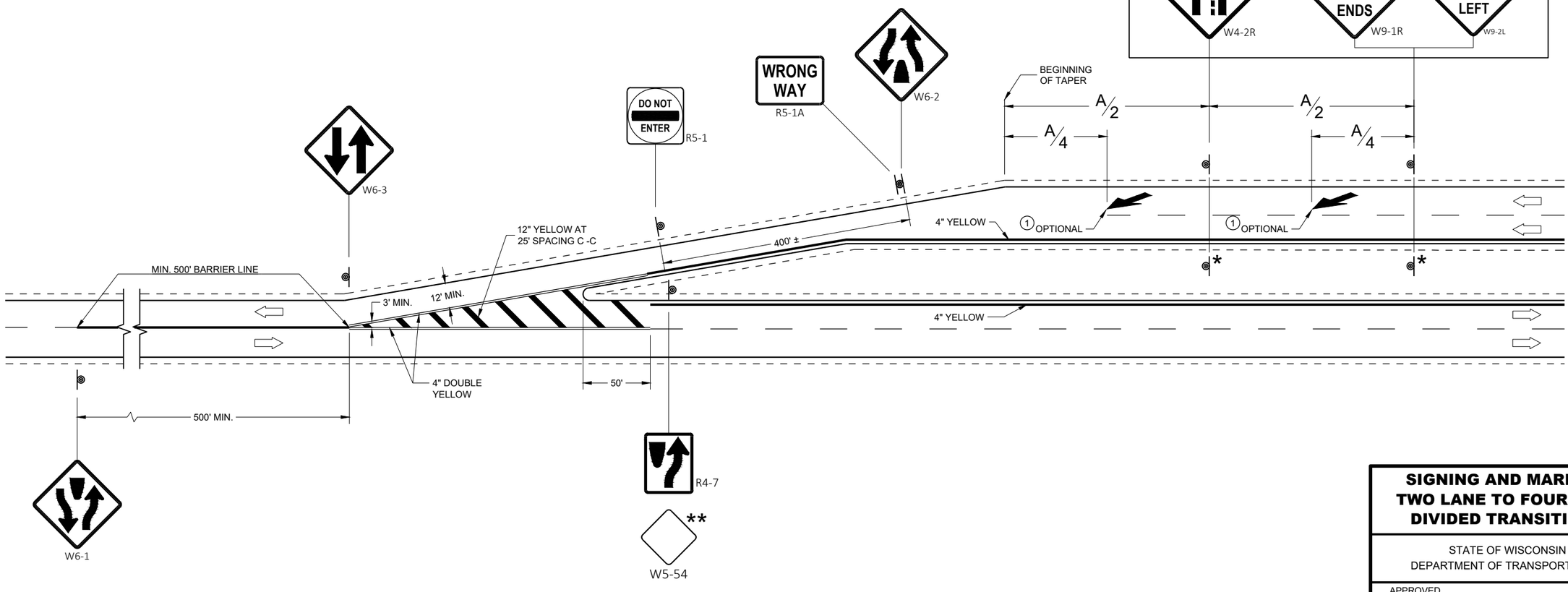
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

FHWA

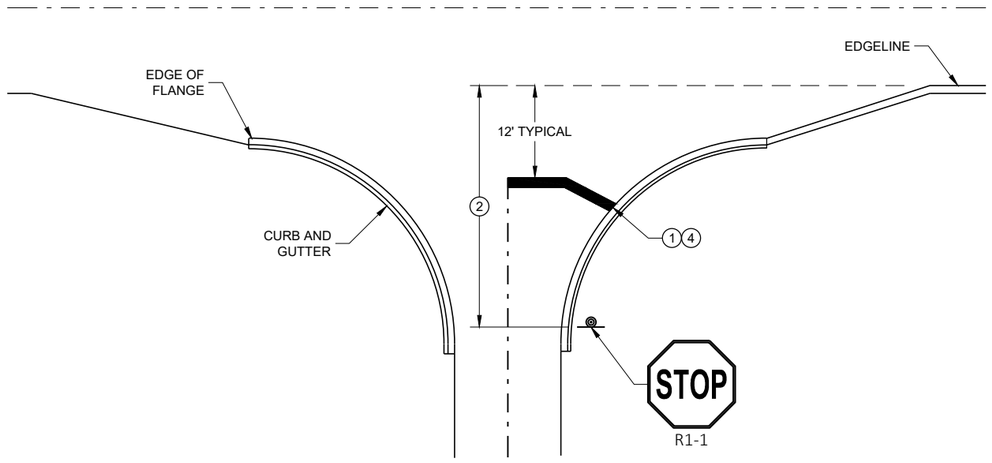
SDD 15C21 - 10

SDD 15C21 - 10

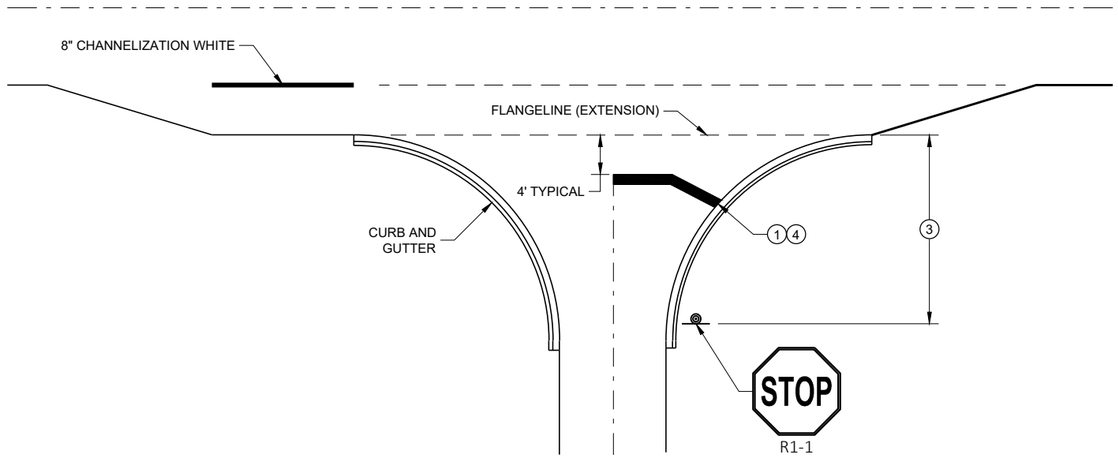
GENERAL NOTES

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

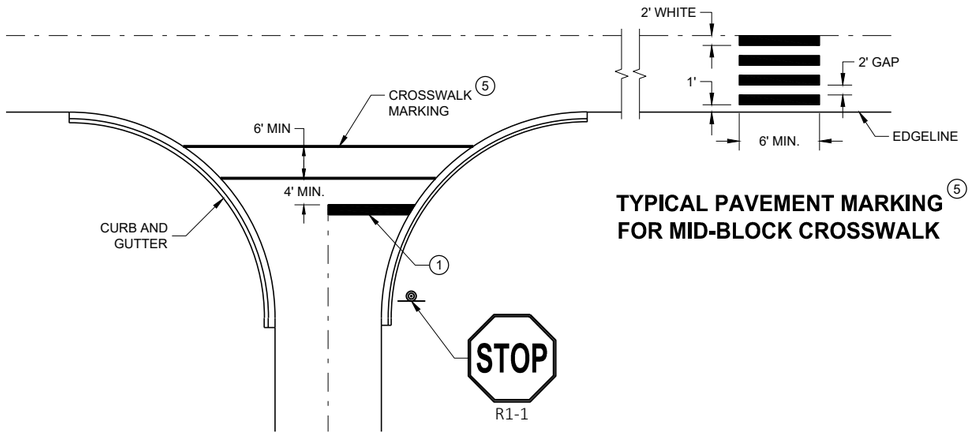
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

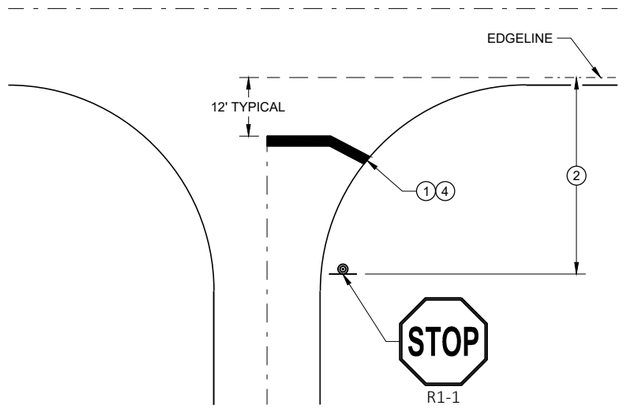


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C33 - 04

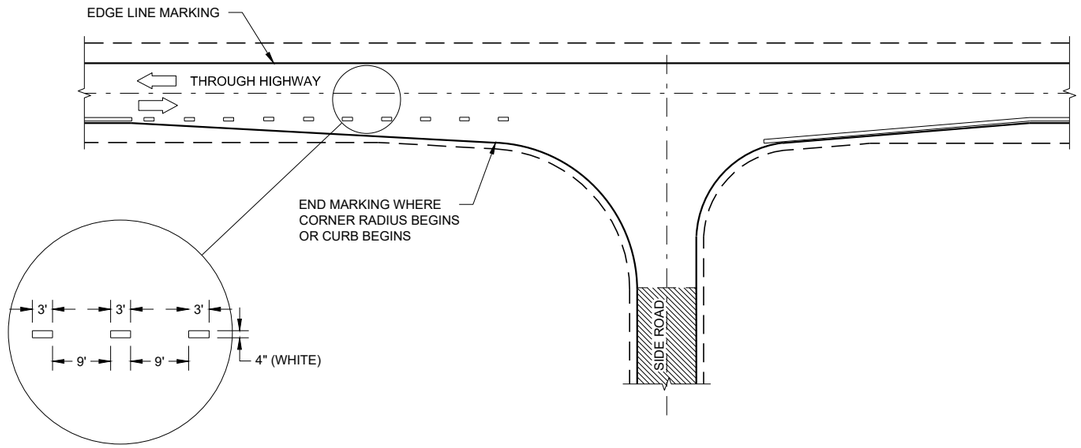
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

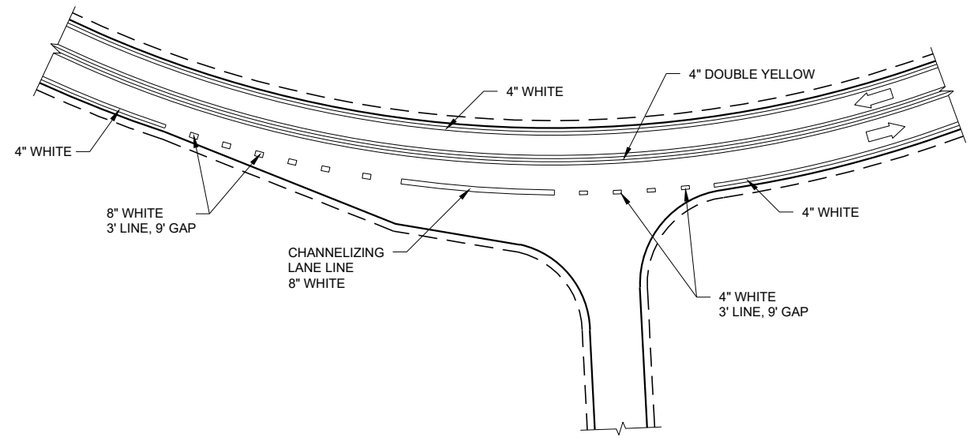
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

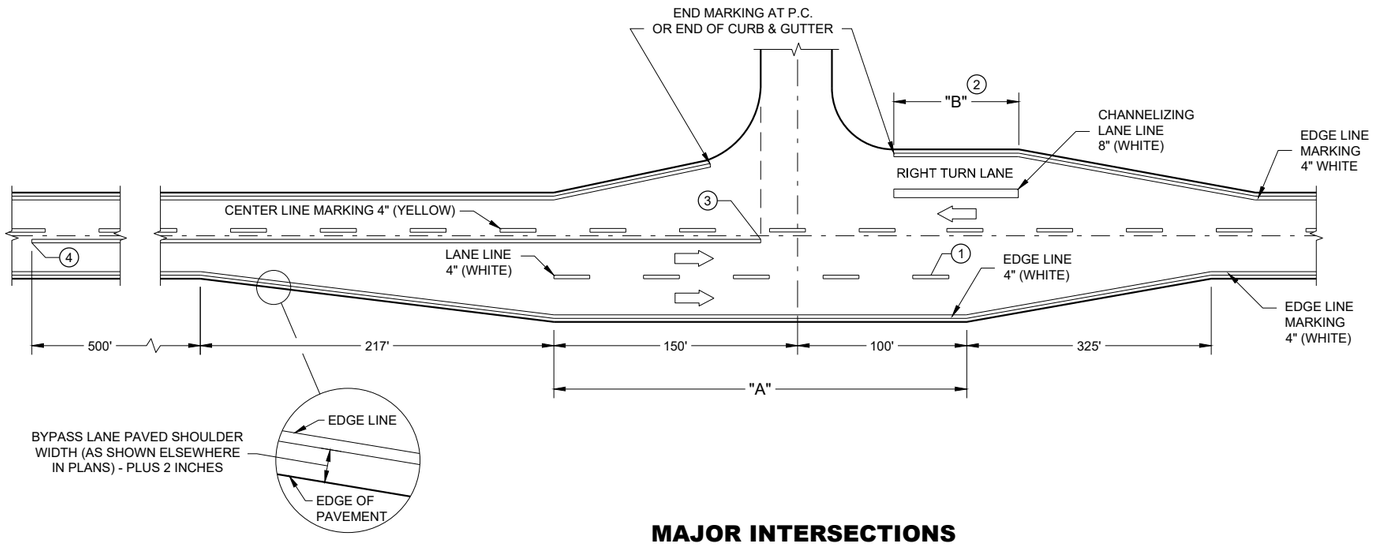
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

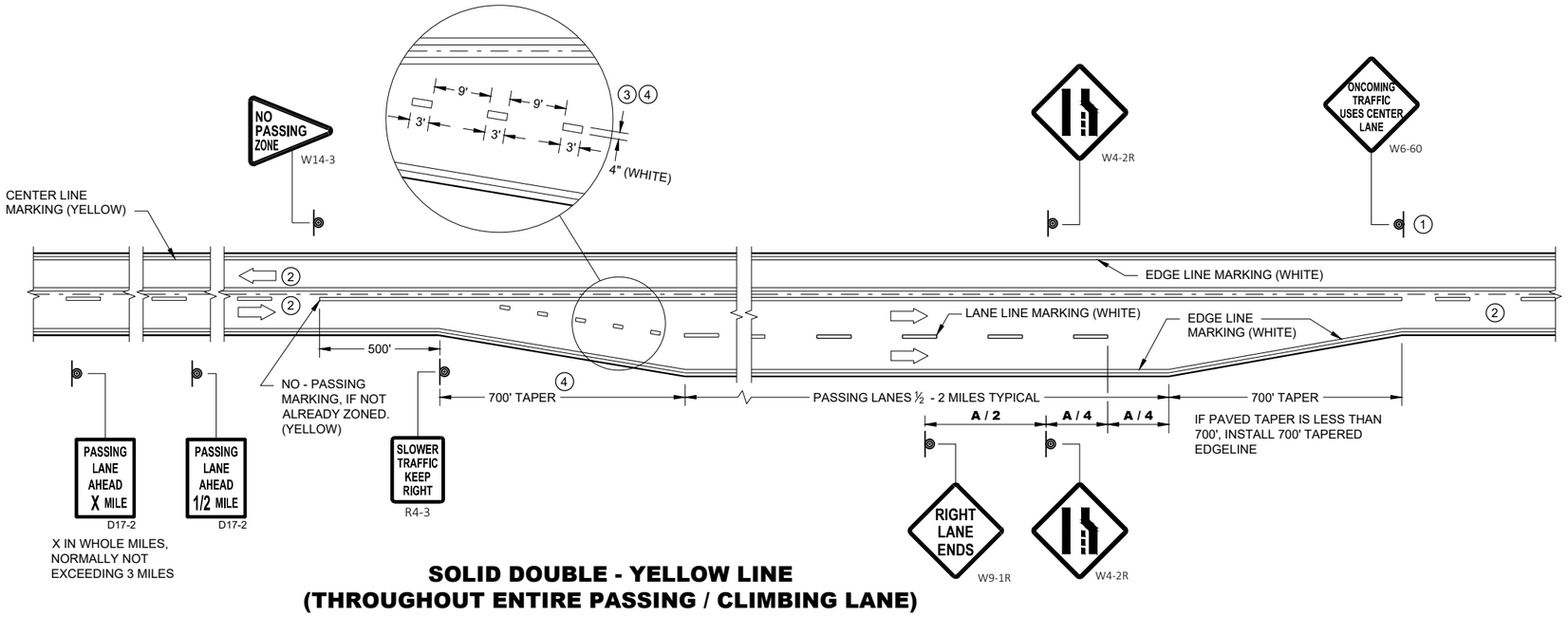
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

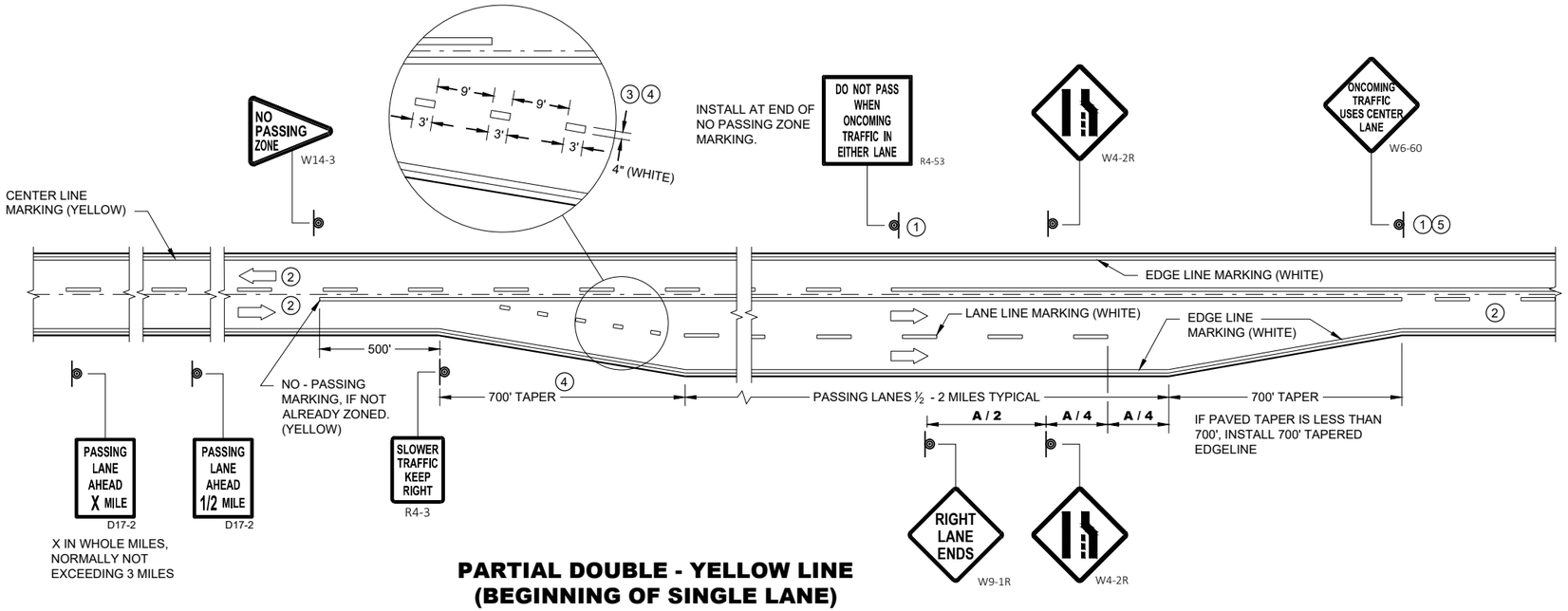
SDD 15C35 - 04a

6

SDD 15C35 - 04a



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

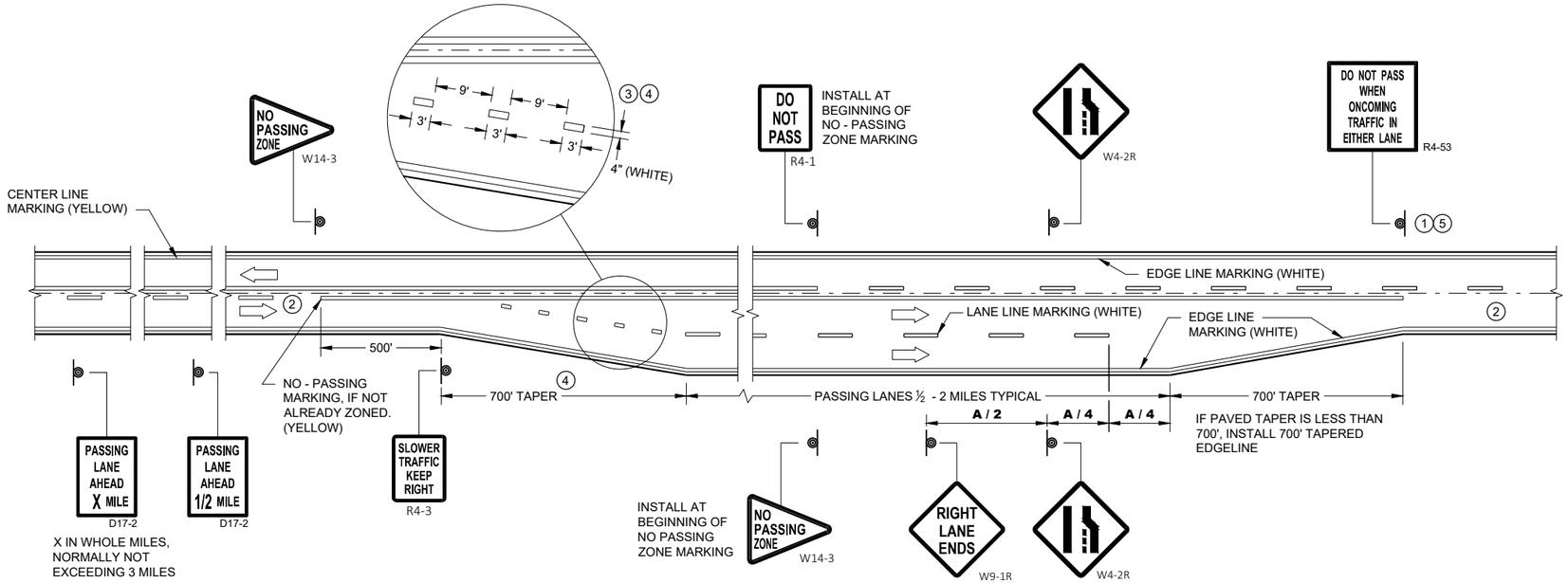
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

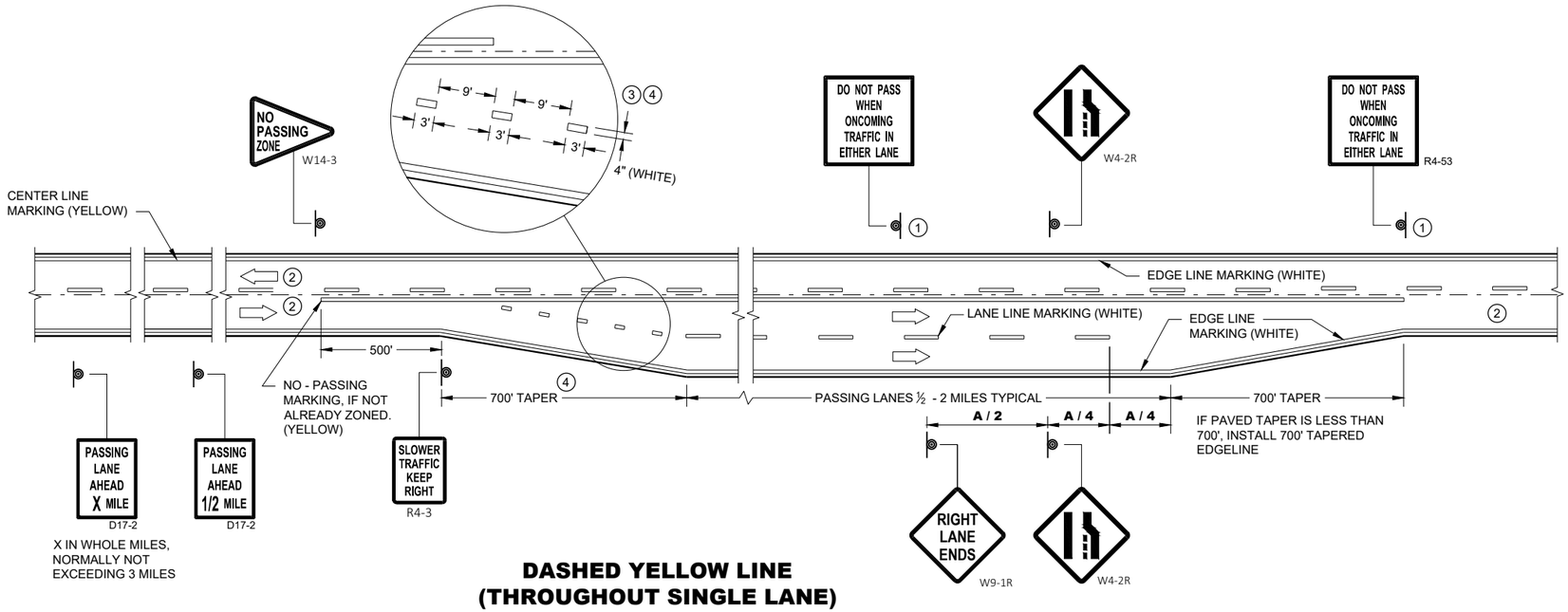
SDD 15C35 - 04b

6

SDD 15C35 - 04b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 15C35 - 04c

SDD 15C35 - 04c

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

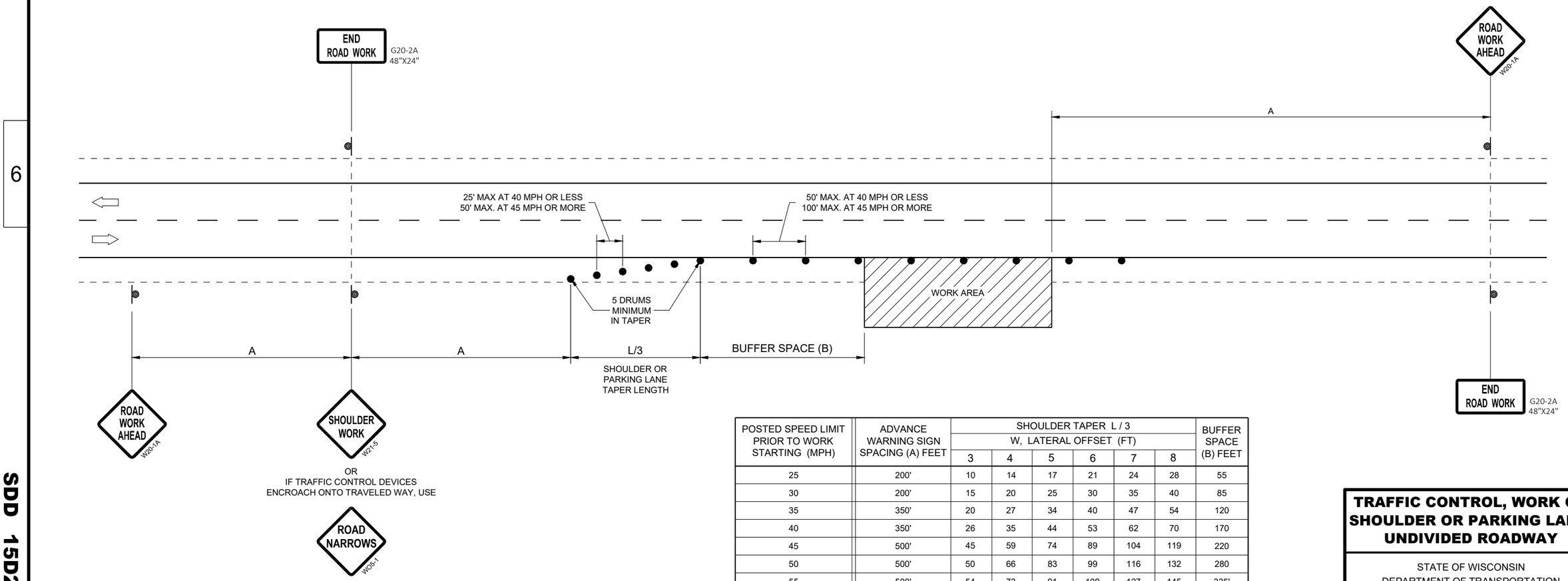
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

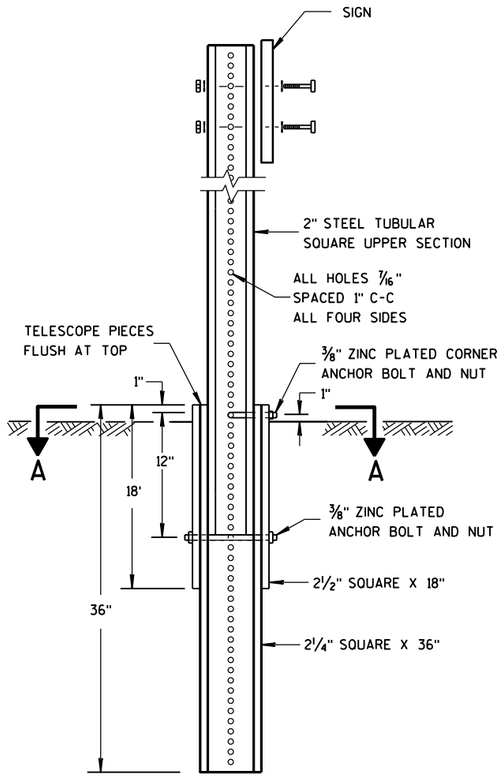
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

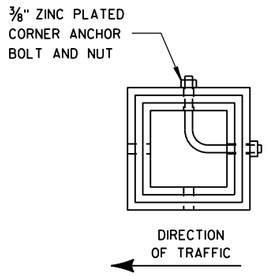
FHWA

6

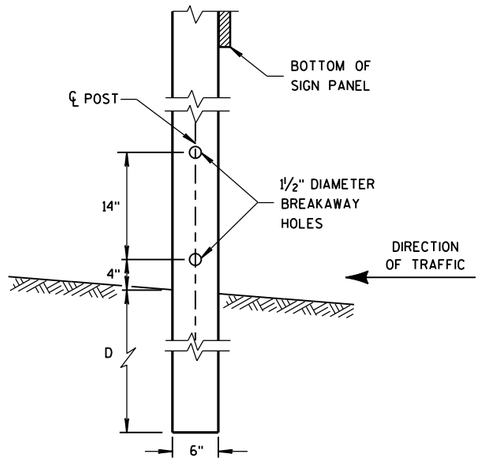
SDD 15D28 - 04



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



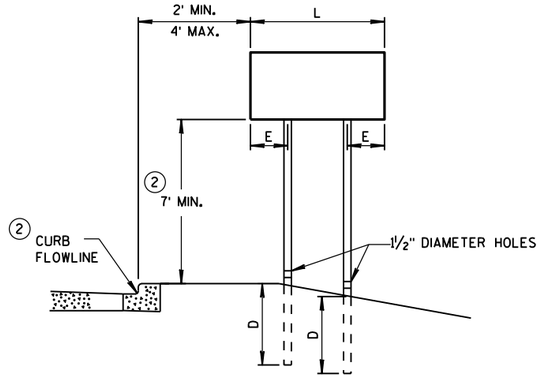
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

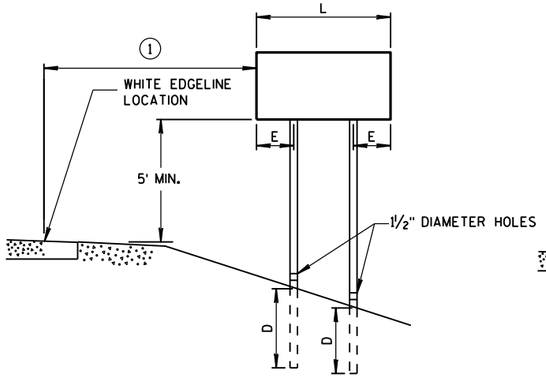
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

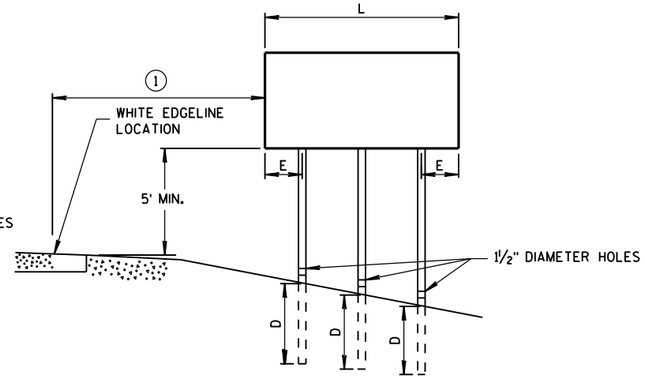
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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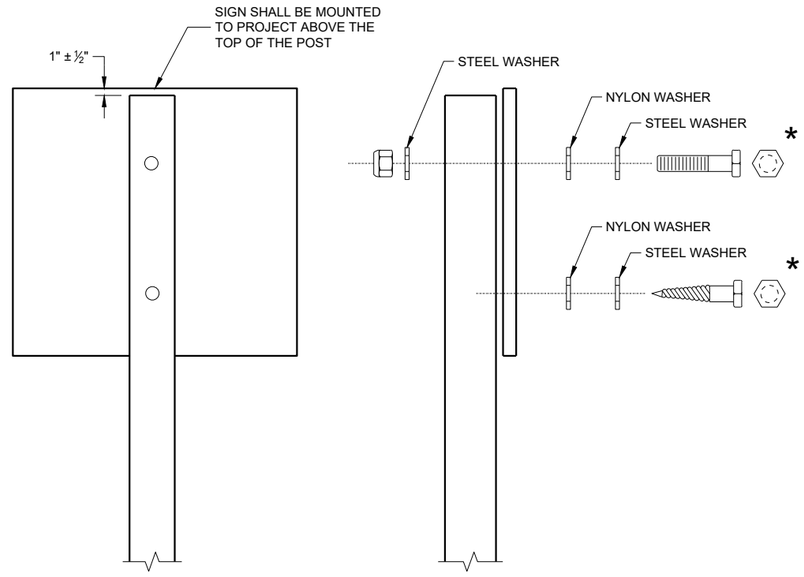
S.D.D. 15 D 38-2a



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 POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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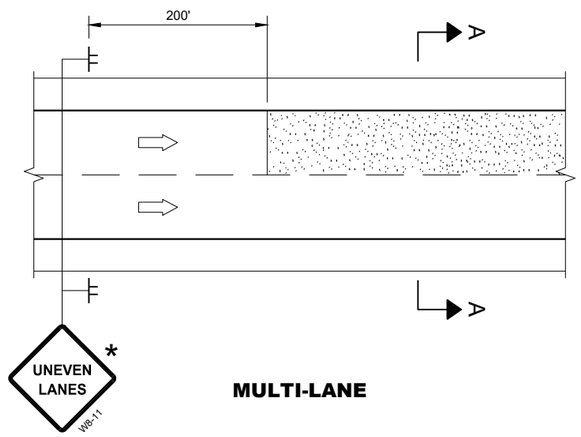
SDD 15D38 - 02b

SDD15D38 - 02b

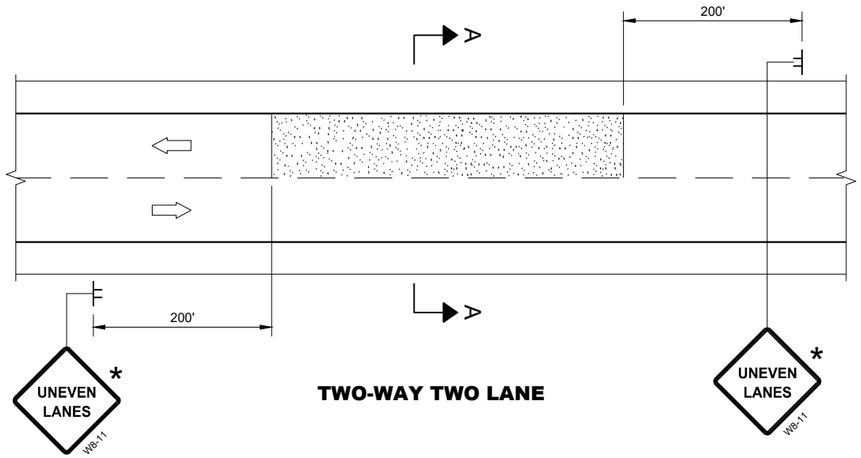
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

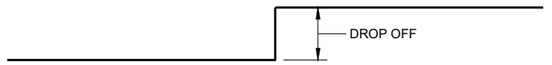
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

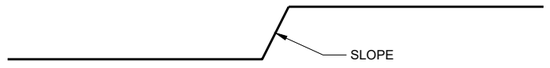
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

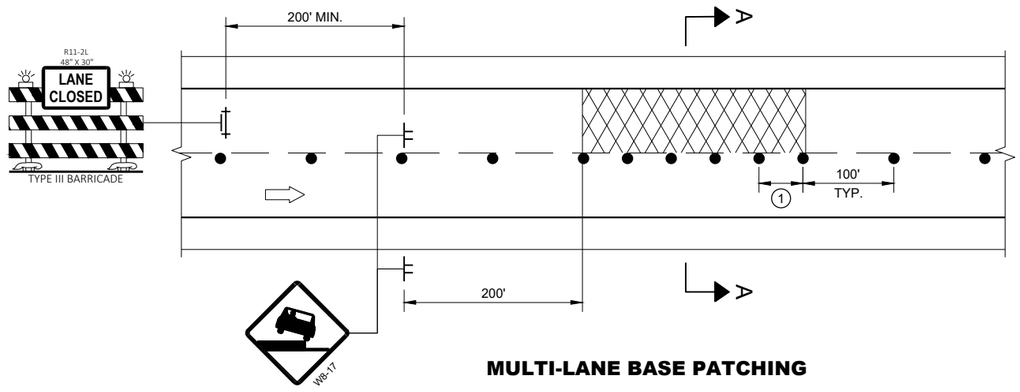


SECTION A - A

OR

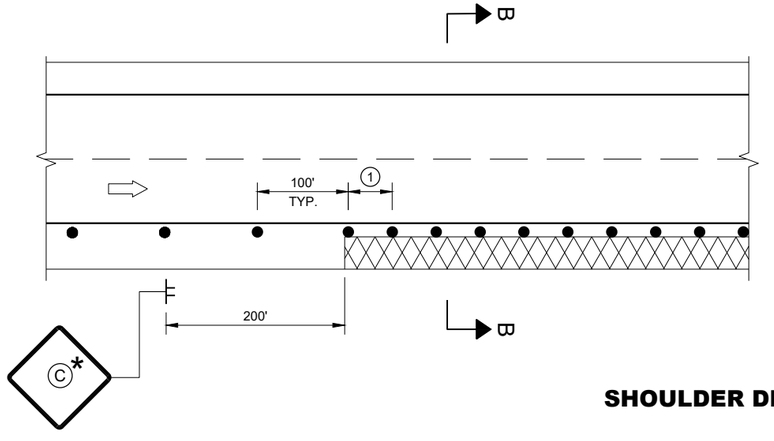


SECTION A - A

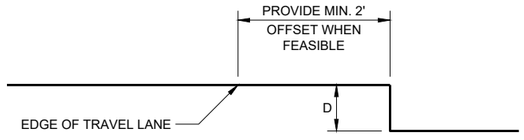


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

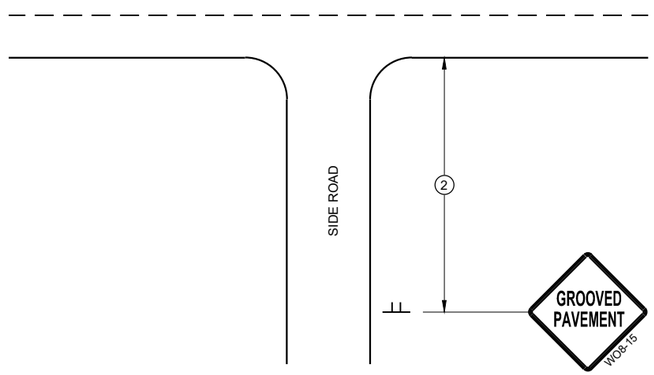
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

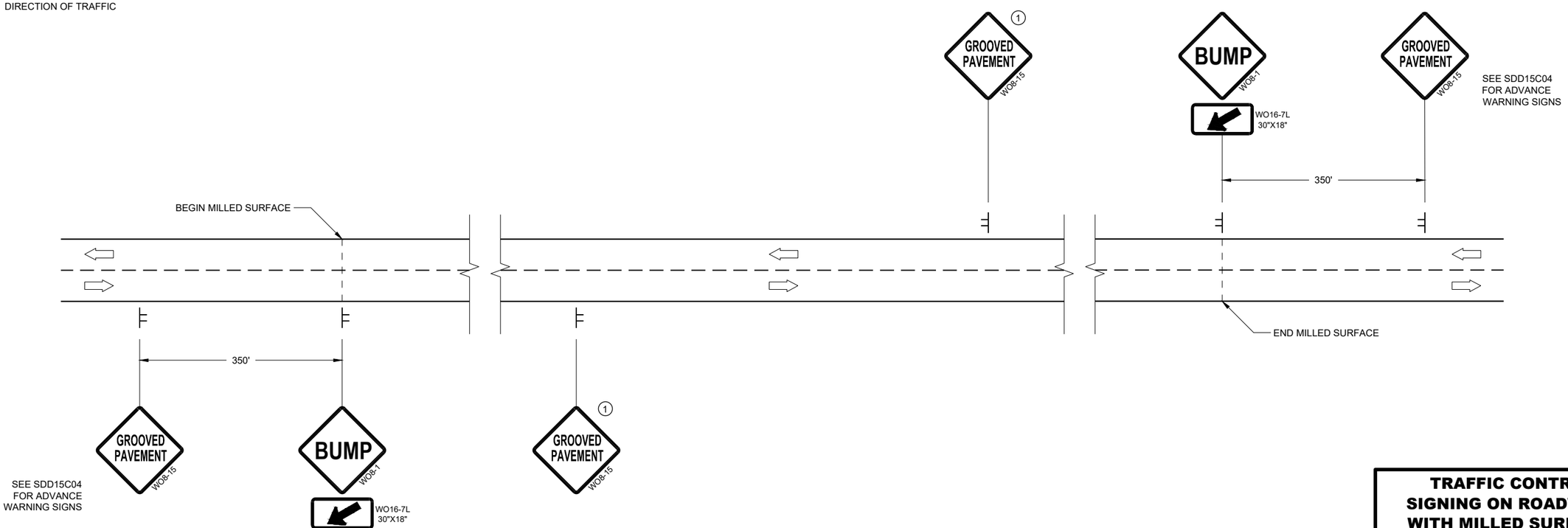
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D44 - 02

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

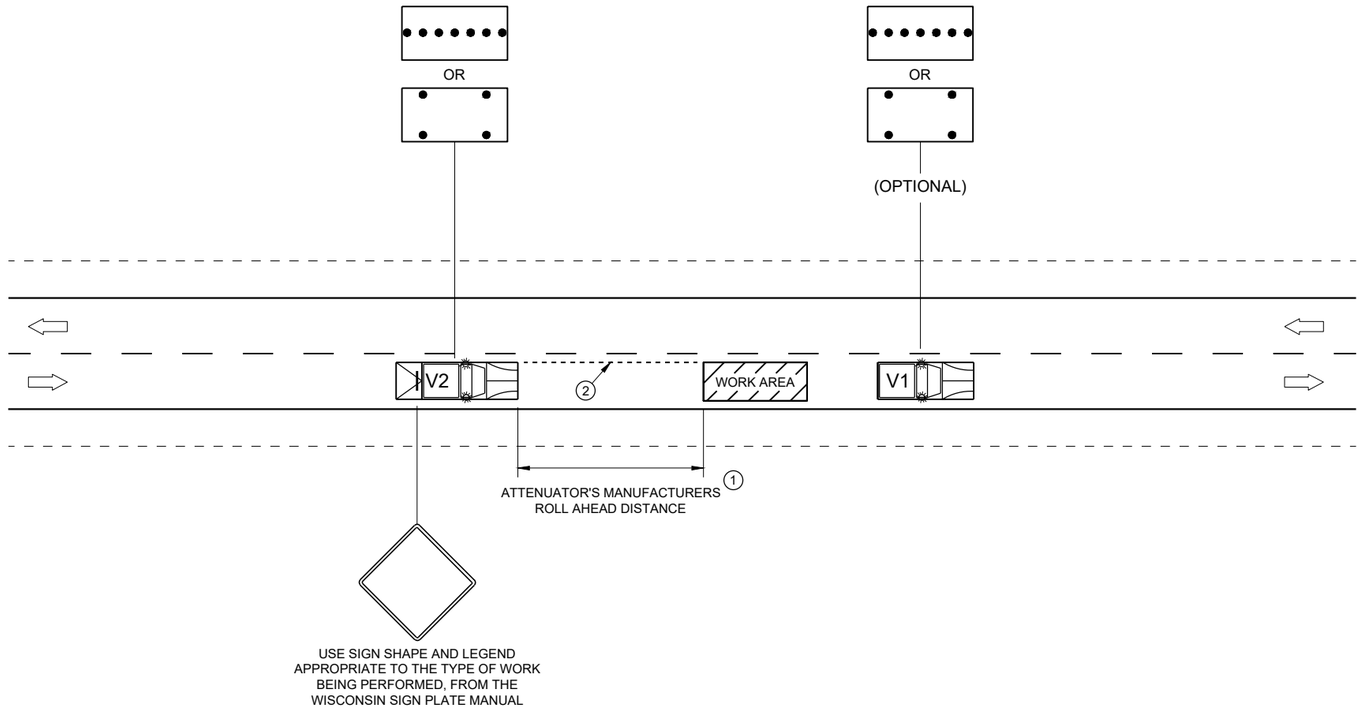
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



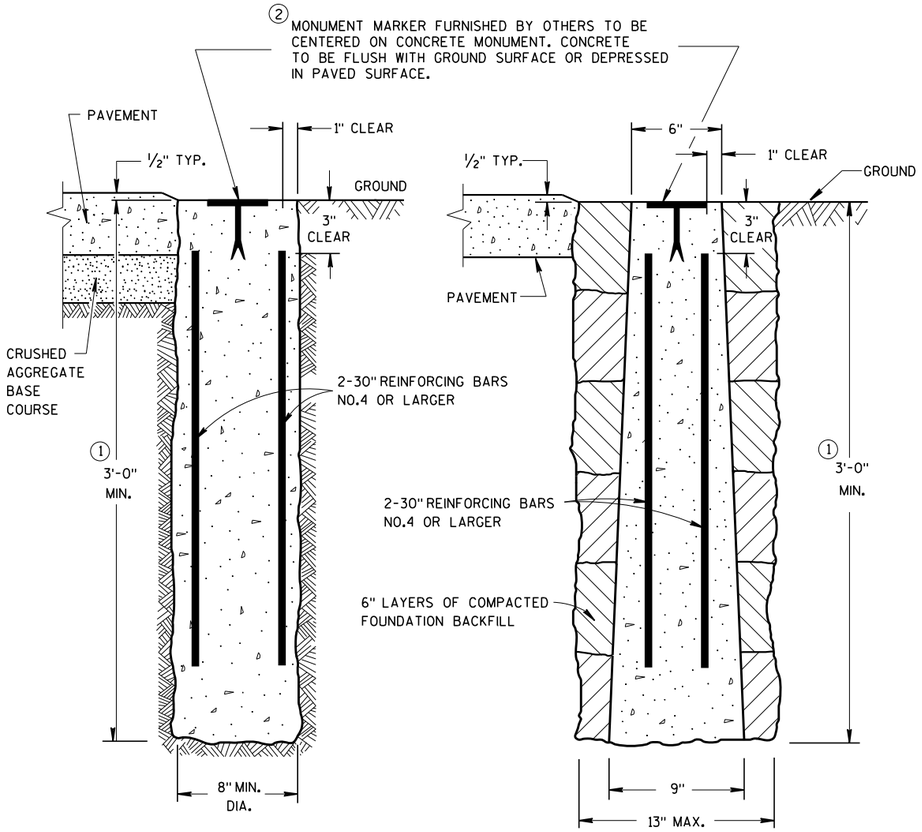
TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D51 - 01

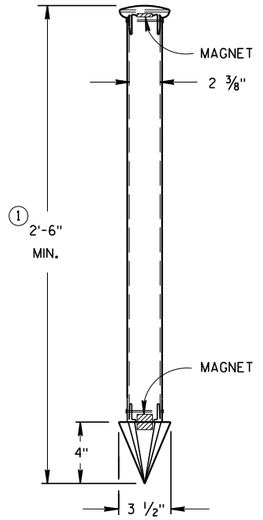


CAST-IN-PLACE

PRECAST

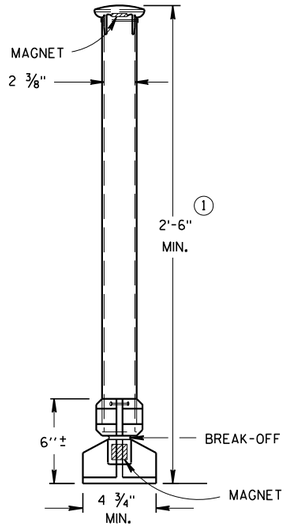
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

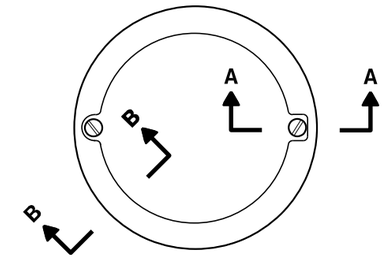
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

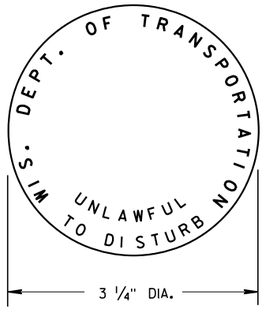
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

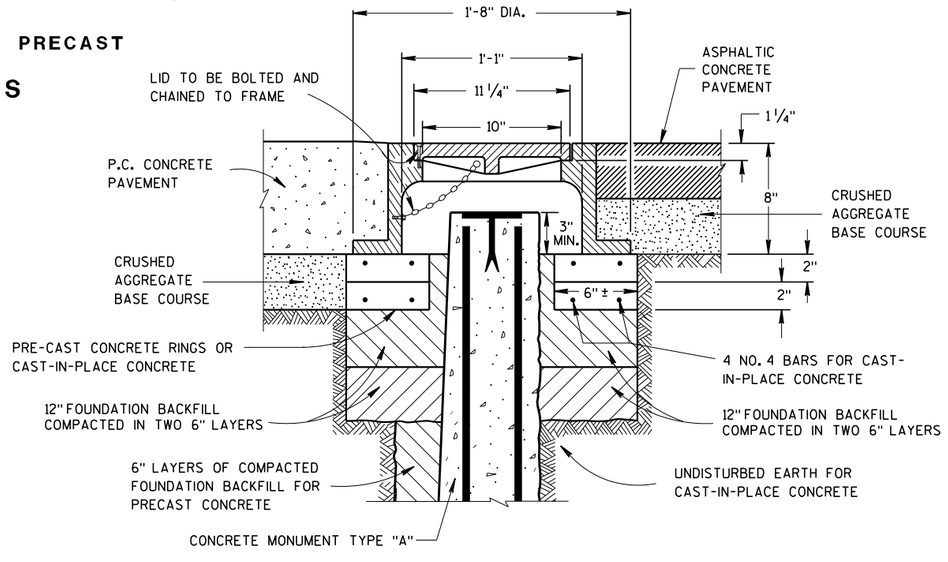


TOP VIEW



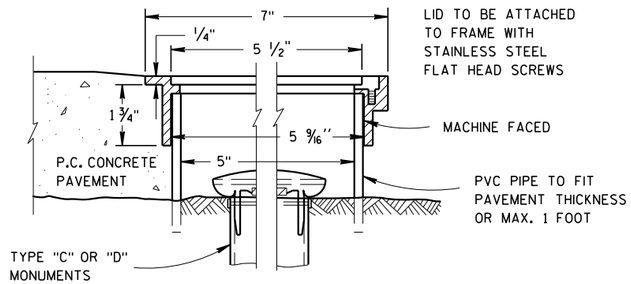
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

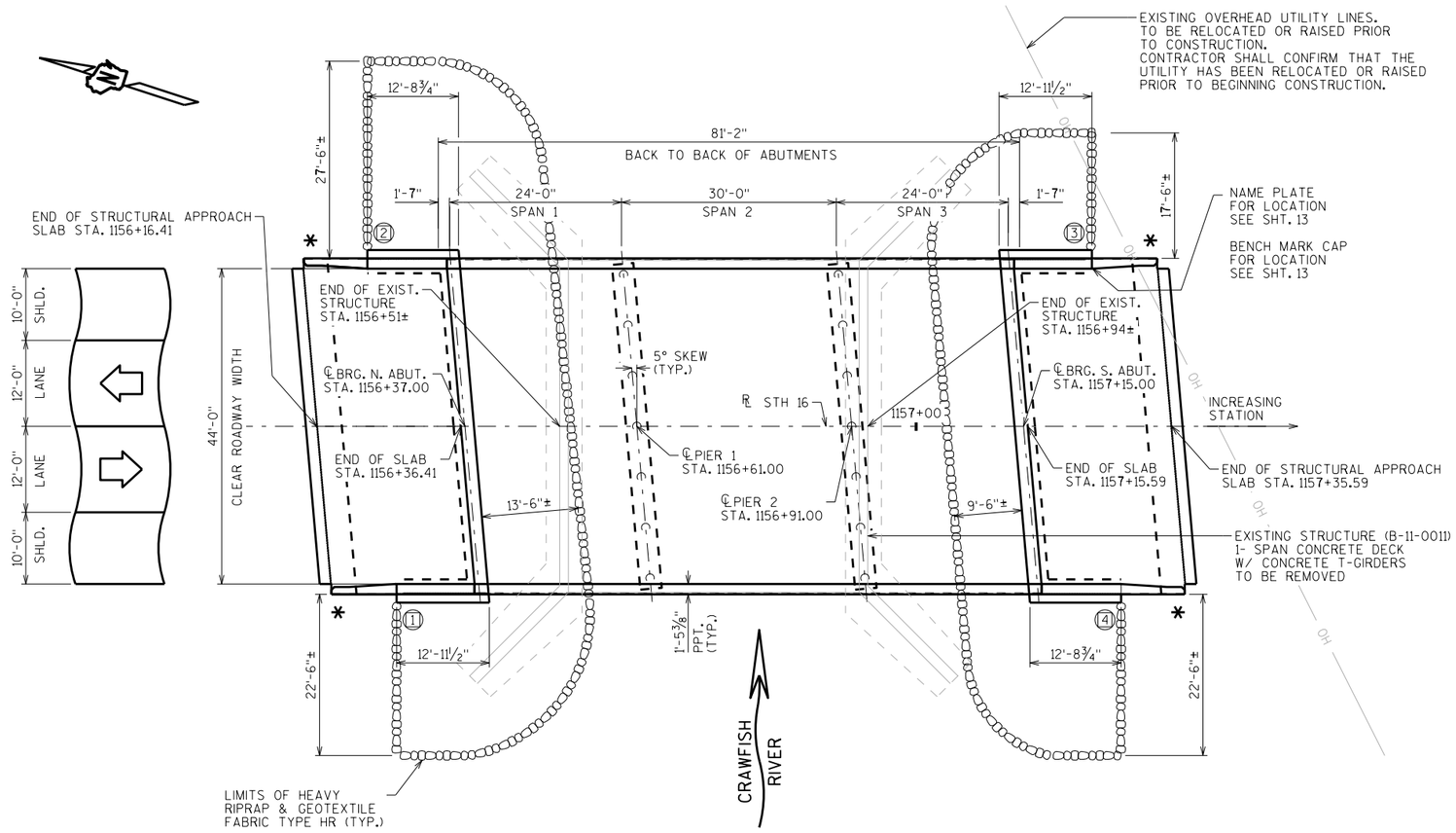
APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6

S.D.D. 16 A 1-7

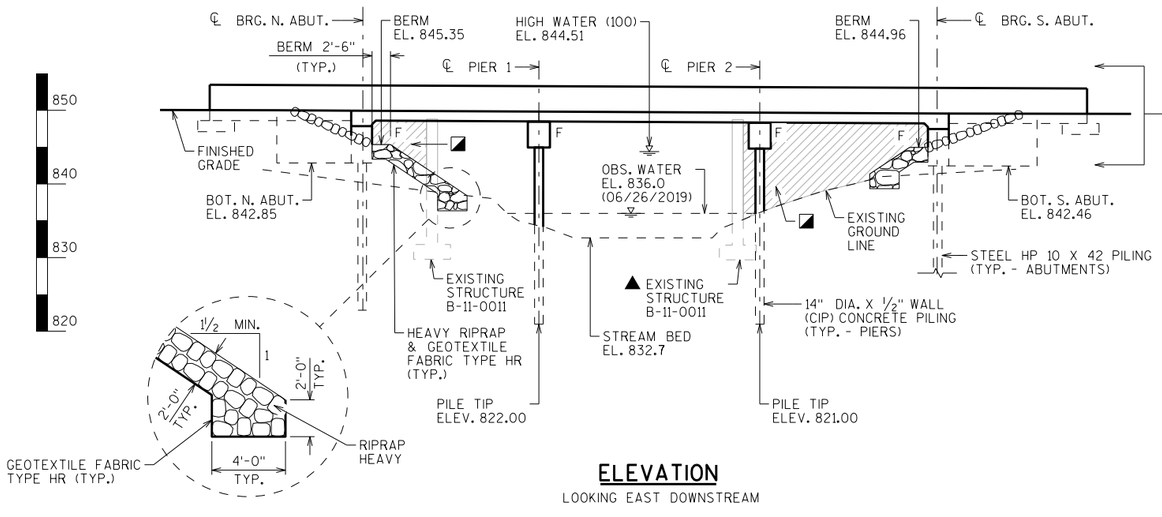
STATE PROJECT NUMBER

1400-01-70



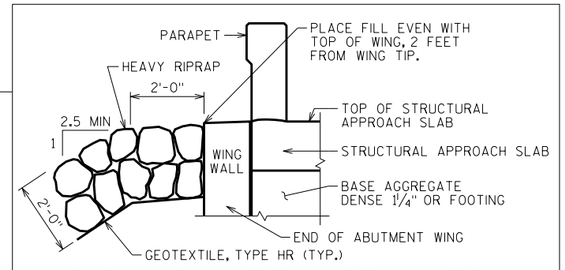
PLAN

3-SPAN FLAT SLAB



ELEVATION

LOOKING EAST DOWNSTREAM



TYPICAL FILL SECTION AT WING TIPS

◪ EXCAVATION WORK TO BE INCLUDED IN THE BID ITEM, 206.1000: 'EXCAVATION FOR STRUCTURES BRIDGES B-11-172'

▲ POSSIBLE CONFLICT WITH EXISTING STRUCTURE. REMOVAL WORK TO BE INCLUDED IN BID ITEM 203.0260: 'REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS B-11-11'

✱ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

⃞ INDICATES WING NUMBER

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.04
OPERATING RATING FACTOR: RF = 1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.
STAINLESS, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 22'-0" LONG. PILE POINTS REQUIRED.

PIERS TO BE SUPPORTED ON 14" CIP X 0.5" PILING SEATED IN PRE-BORED HOLES CORED 3 FEET MINIMUM INTO ROCK. PILE DRIVING IS NOT REQUIRED. THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED FOR DESIGN IS 240 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5. ESTIMATED 26'-0" LONG.

✱✱ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 2370 C.F.S.
$VEL._{100}$ = 5.97 F.P.S.
$HW._{100}$ = EL. 844.84
WATERWAY AREA = 396.98 SQ. FT.
DRAINAGE AREA = 55.6 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q_2 = 560 C.F.S.
$VEL._2$ = 2.1 F.P.S.
$HW._2$ = EL. 840.30

TRAFFIC VOLUME

STH. 16

A.D.T. = 11,700 (2022)
A.D.T. = 14,100 (2042)
R.D.S. = 60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. NORTH ABUTMENT
5. NORTH ABUTMENT DETAILS
6. SOUTH ABUTMENT
7. SOUTH ABUTMENT DETAILS
8. PIERS
9. SUPERSTRUCTURE
10. CROSS SECTIONS
11. SUPERSTRUCTURE DETAILS
12. STRUCTURAL APPROACH SLABS
13. SINGLE SLOPE PARAPET 42SS

STRUCTURE DESIGN CONTACTS:

CARLA PRINCIPE (608) 261-6110
DOMINIQUE BECHLE (608) 261-8205

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED DMB 08/13/21
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-11-172

STH 16 OVER CRAWFISH RIVER

COUNTY	TOWN
COLUMBIA	COLUMBUS

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
CSP	SCL	CSP	SCL

GENERAL PLAN

SHEET 1 OF 13

248

I.D. 1400-01-00A DATE: JUL/2021

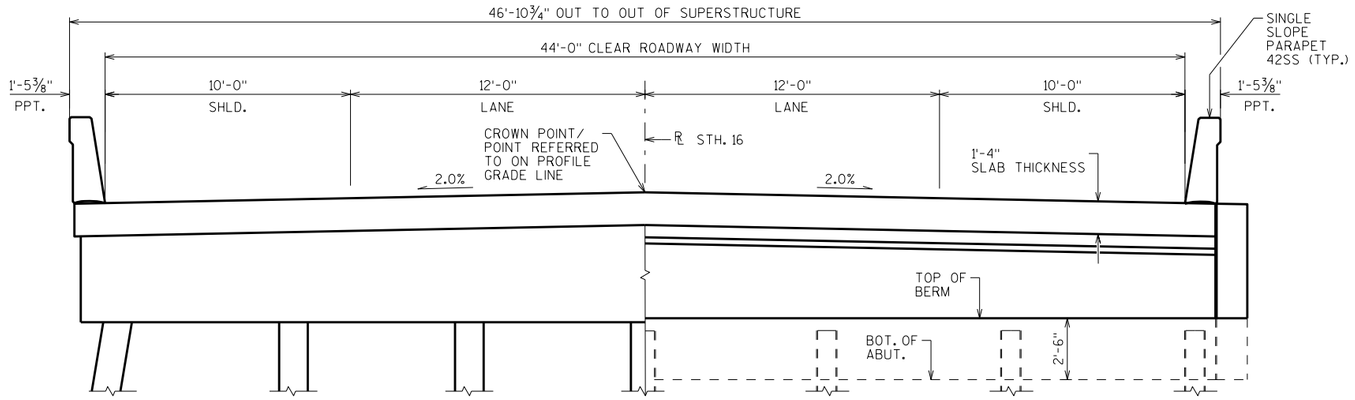
SCALE = 10.00

8

8

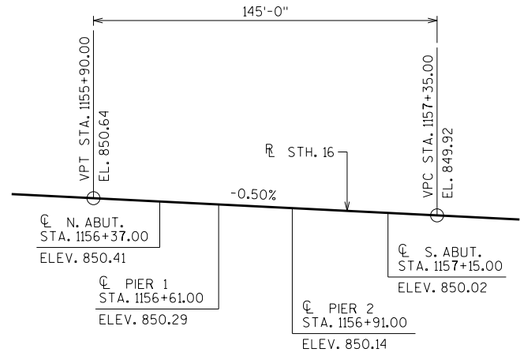
STATE PROJECT NUMBER

1400-01-70



CROSS SECTION THRU ROADWAY

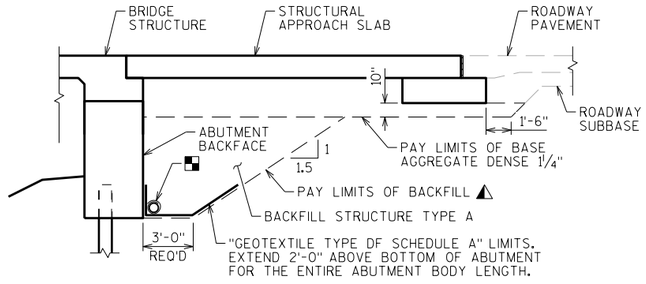
LOOKING SOUTH



PROFILE GRADE LINE - STH 16

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	N. STRUCT. APP. SLAB	NORTH ABUT.	PIER 1	PIER 2	SOUTH ABUT.	S. STRUCT. APP. SLAB	TOTALS
203.0211.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-11-11	EACH	———	———	———	———	———	———	———	1
203.0260	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS B-11-11	EACH	———	———	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-11-172	LS	———	———	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	———	———	77	———	———	77	———	154
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	———	152	———	———	———	———	152	304
502.0100	CONCRETE MASONRY BRIDGES	CY	212	65	42	19	19	42	65	464
502.3200	PROTECTIVE SURFACE TREATMENT	SY	401	99	———	———	———	———	99	599
502.3210	PIGMENTED SURFACE SEALER	SY	79	20	———	———	———	———	20	119
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	———	2,840	4,870	4,870	2,840	———	15,420
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	38,090	10,860	1,380	———	———	1,380	10,860	62,570
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	430	———	———	———	———	———	———	430
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	———	12	———	———	12	———	24
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	———	———	———	21	21	———	———	42
550.0500	PILE POINTS	EACH	———	———	7	———	———	7	———	14
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	———	154	———	———	154	———	308
550.2148	PILING CIP CONCRETE 14 X 0.50-INCH	LF	———	———	———	182	182	———	———	364
606.0300	RIPRAP HEAVY	CY	———	———	142	———	———	99	———	241
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	———	110	———	———	110	———	220
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	———	2	———	———	2	———	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	———	———	48	———	———	48	———	96
645.0120	GEOTEXTILE TYPE HR	SY	———	———	223	———	———	162	———	385
	NON-BID ITEMS									
	FILLER	SIZE	———	———	———	———	———	———	———	½", ¾", 1½"



TYPICAL SECTION THRU ABUTMENT

⚠ 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.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-11-172" SHALL BE THE EXISTING GROUNDLINE AND THE EXISTING STREAM BED AT THE PIERS.

AT THE BACK FACE OF ABUTMENT 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. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

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 ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

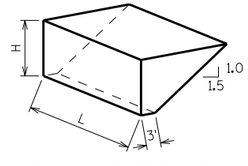
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF SLAB AND APPROACH SLAB SURFACES AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.



ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF} (EF)/27
V_{TON} = V_{CY} (2.0)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

CROSS SECTION & QUANTITIES

SHEET 2

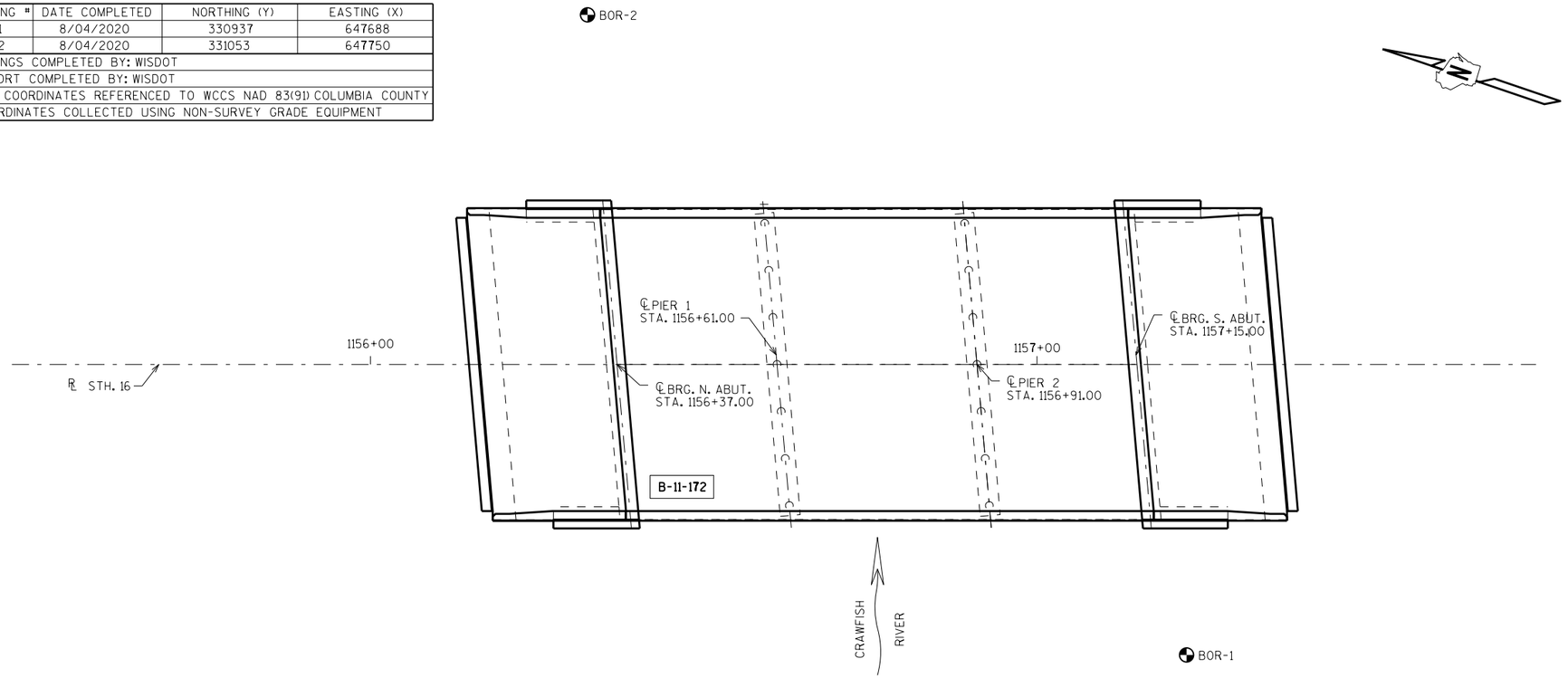
249

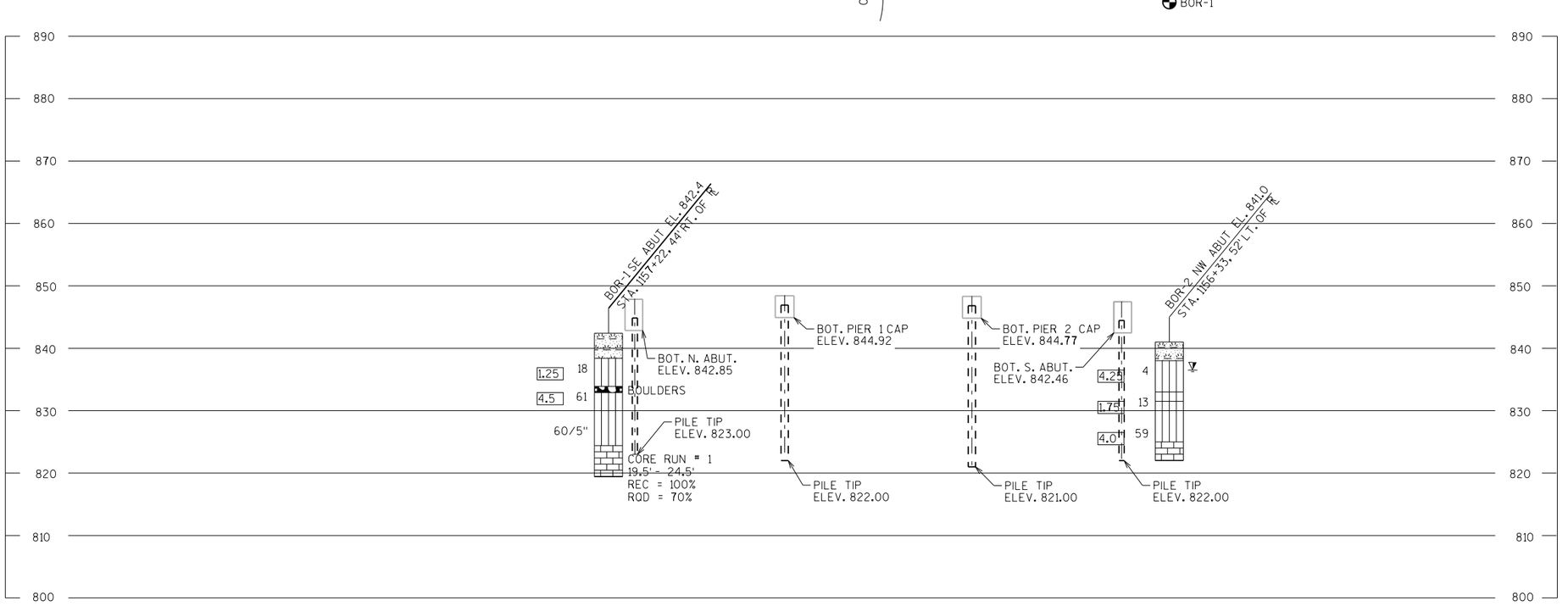
SCALE = 3.00

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	8/04/2020	330937	647688
2	8/04/2020	331053	647750
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) COLUMBIA COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





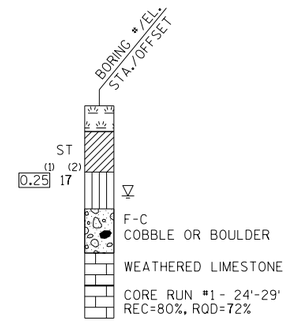
STATE PROJECT NUMBER

1400-01-70

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY TLP/CSP | PLANS CK'D. SCL

SUBSURFACE EXPLORATION

SHEET 03

250

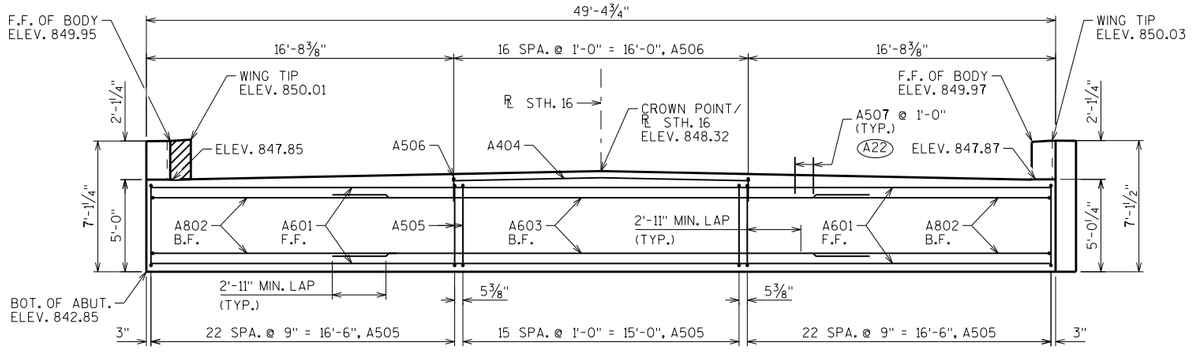
SCALE = 10.00

8

8

STATE PROJECT NUMBER

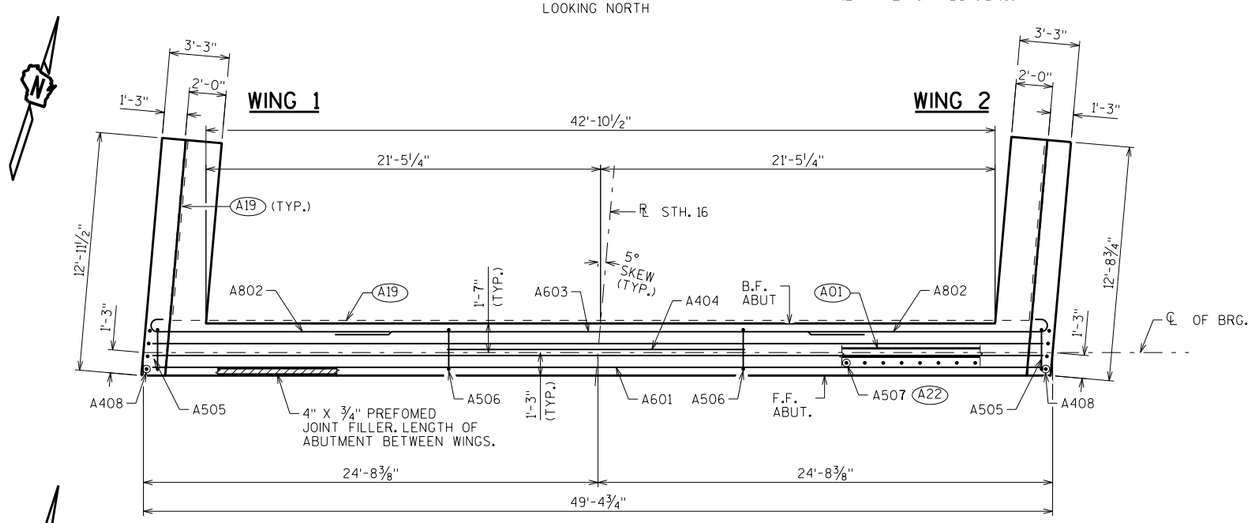
1400-01-70



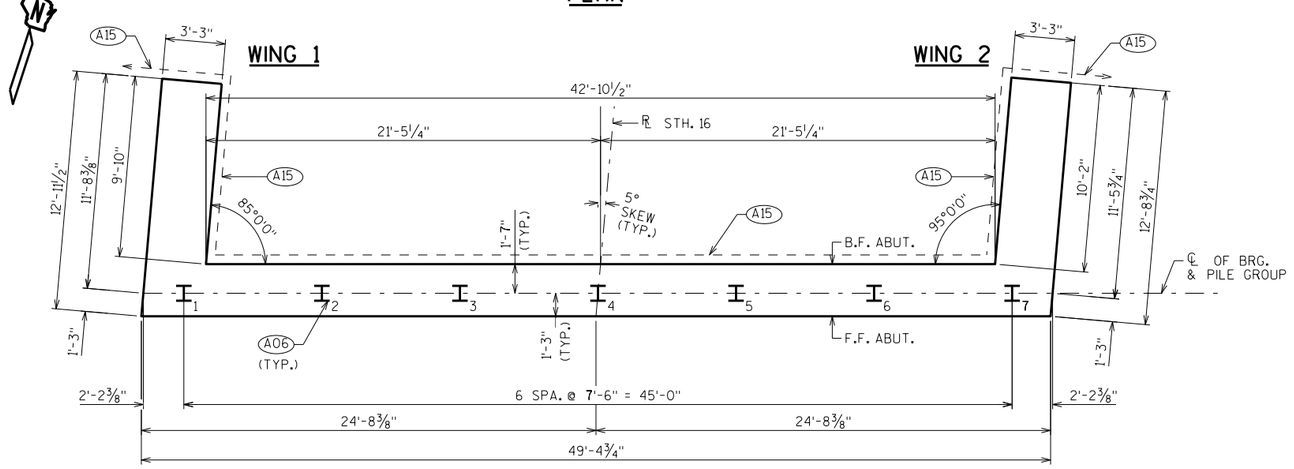
ELEVATION

LOOKING NORTH

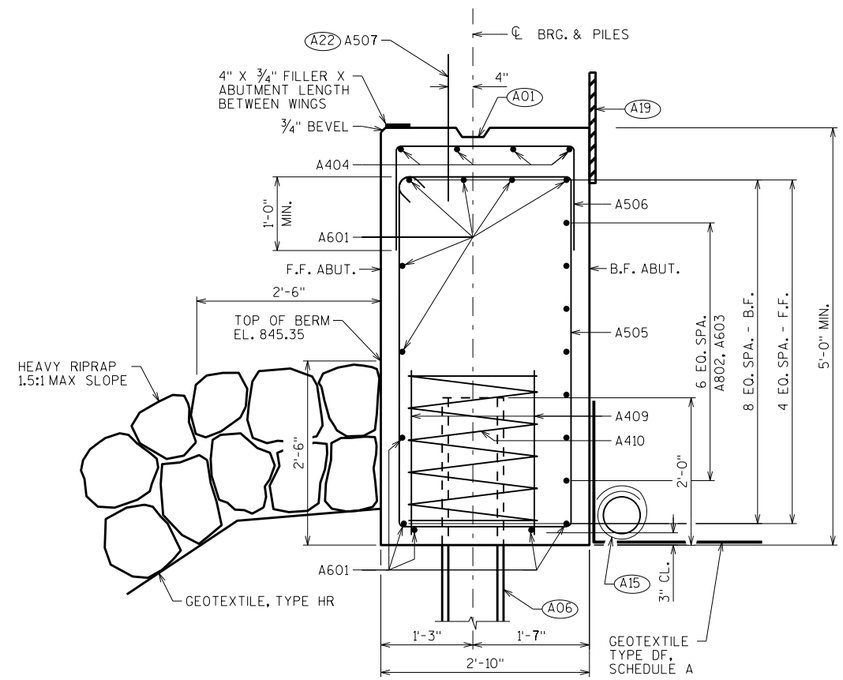
NOTE: TOP OF ABUT. ELEVATIONS ARE AT ℄ OF ABUT. BRG.



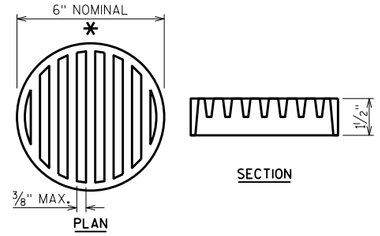
PLAN



PILE PLAN



SECTION THRU BODY



RODENT SHIELD DETAIL

* 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 A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. LENGTH OF ABUTMENT BETWEEN WINGS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 22'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) A507 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

NORTH ABUTMENT

SHEET 04

251

SCALE = 4.00

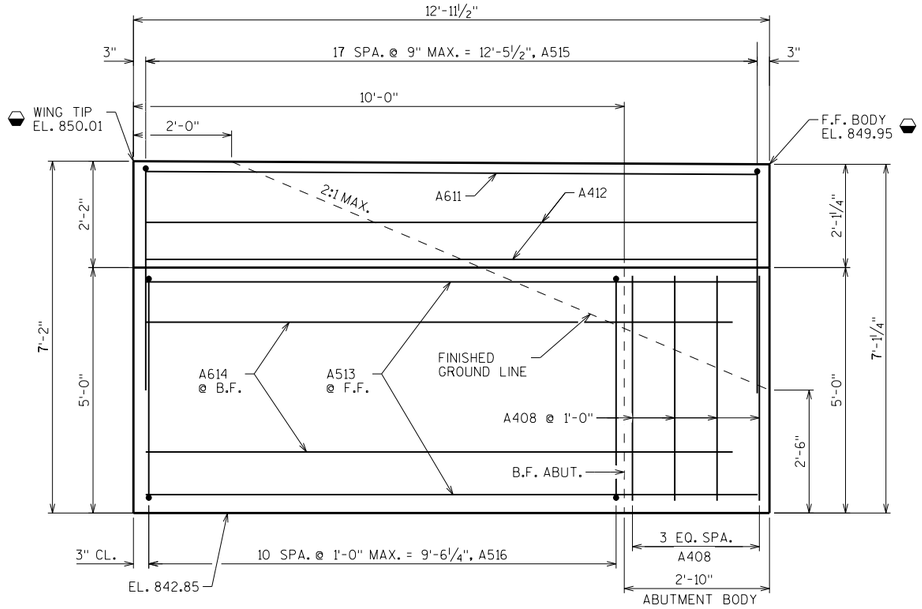
8

8

STATE PROJECT NUMBER

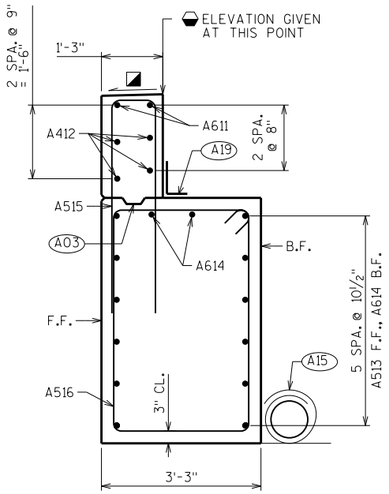
1400-01-70

SLOPE TO DRAIN A MINIMUM OF 1/8" PER FOOT.



WING 1 ELEVATION

LOOKING AT FRONT FACE

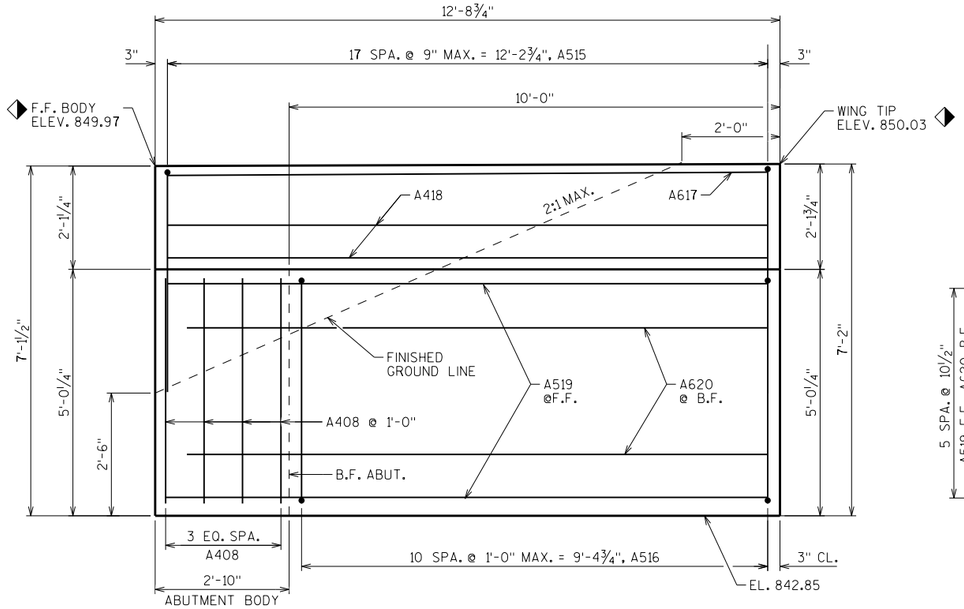


SECTION THRU WING 1

BILL OF BARS

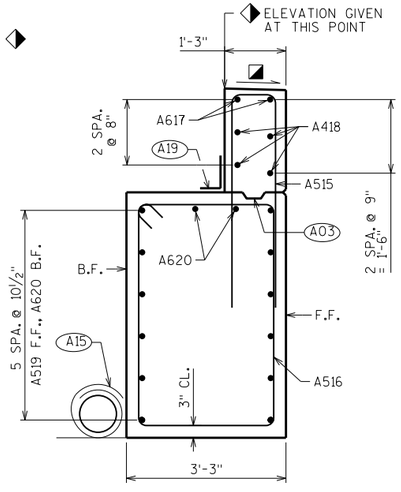
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A601		11	48'-10"			BODY - HORZ. F.F. TOP & BOT.
A802		14	10'-11"	X		BODY - HORZ. B.F.
A603		7	35'-0"			BODY - HORZ. B.F.
A404		4	16'-0"			BODY - HORZ. TOP - UNDER CROWN
A505		61	14'-10"	X		BODY - STIRRUP
A506		17	5'-3"	X		BODY - VERT.
A507	X	48	2'-0"			BODY - DOWELS
A408		8	4'-7"			BODY - VERT. ABUTMENT ENDS
A409		14	2'-3"			PILE - VERT. - 2 PER PILE
A410		7	28'-0"	X		PILE - SPIRAL - 1 PER PILE
A611	X	2	12'-5"			WING 1 - TOP
A412	X	4	12'-5"			WING 1 - HORZ. F.F. & B.F.
A513	X	6	12'-5"			WING 1 - HORZ. F.F.
A614	X	8	11'-8"			WING 1 - HORZ. B.F.
A515	X	36	9'-0"	X		WING 1 & 2 - VERT.
A516	X	22	15'-8"	X		WING 1 & 2 - STIRRUP
A617	X	2	12'-2"			WING 2 - HORZ. TOP
A418	X	4	12'-2"			WING 2 - HORZ. F.F. & B.F.
A519	X	6	12'-2"			WING 2 - HORZ. F.F.
A620	X	8	12'-0"			WING 2 - HORZ. B.F.



WING 2 ELEVATION

LOOKING AT FRONT FACE

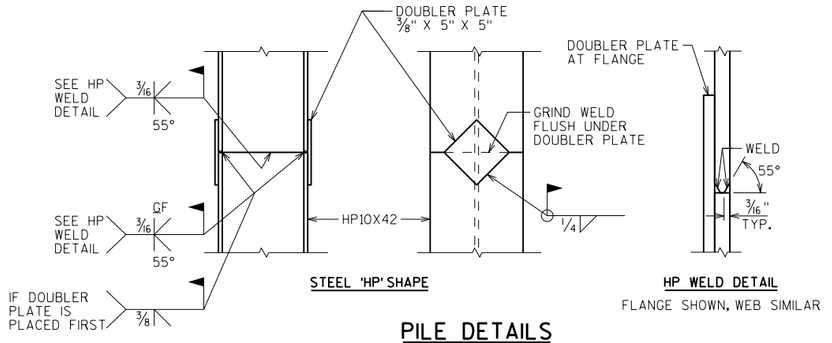


SECTION THRU WING 2

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

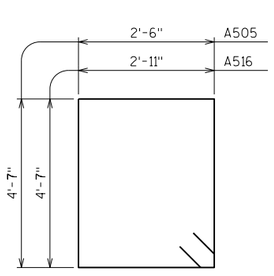


STEEL 'HP' SHAPE

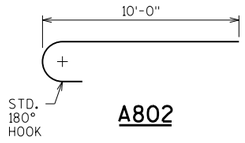
HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS



A505, A516



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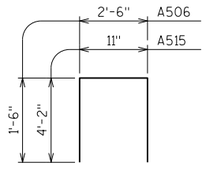
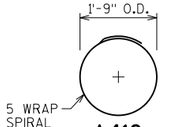


A506, A515



A410

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

NORTH ABUTMENT DETAILS

SHEET 05

252

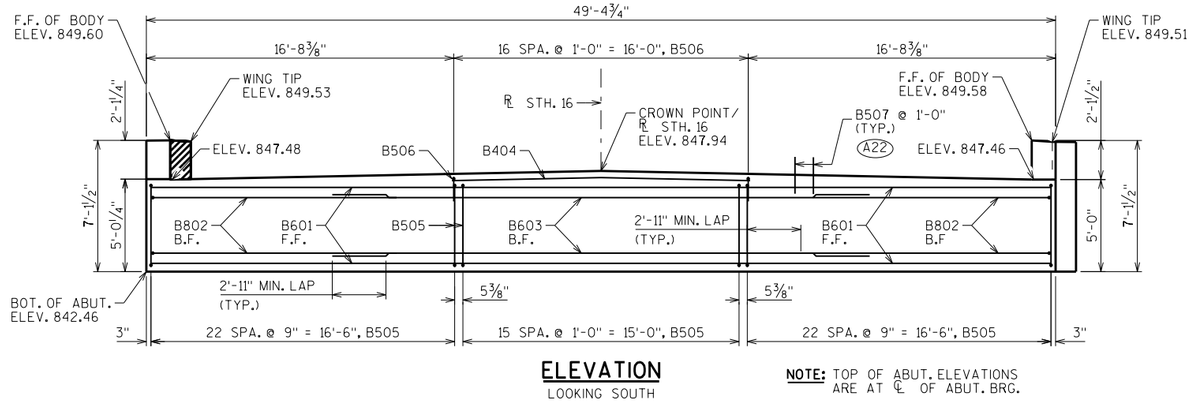
8

8

SCALE = 1.50

STATE PROJECT NUMBER

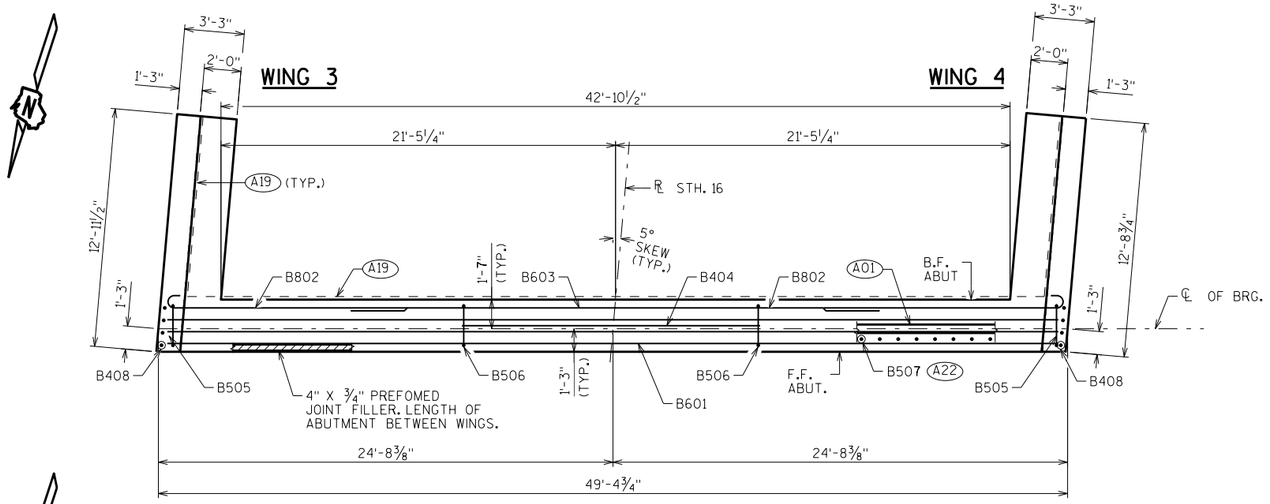
1400-01-70



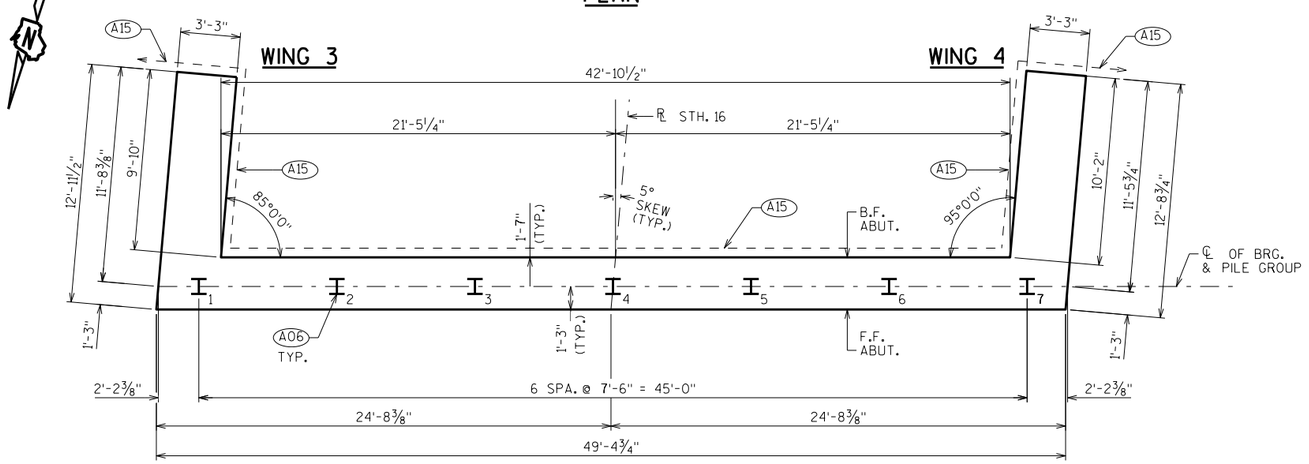
ELEVATION

LOOKING SOUTH

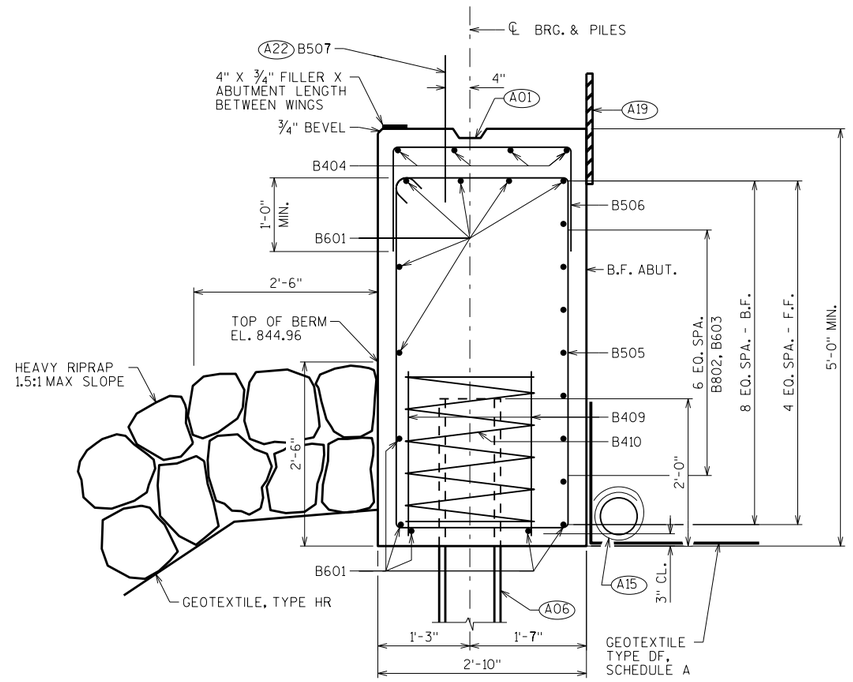
NOTE: TOP OF ABUT. ELEVATIONS ARE AT ℄ OF ABUT. BRG.



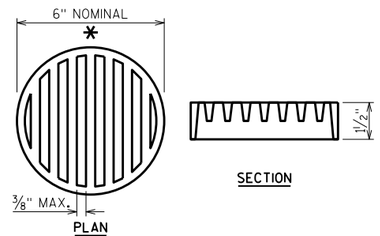
PLAN



PILE PLAN



SECTION THRU BODY



RODENT SHIELD DETAIL

* 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 A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. LENGTH OF ABUTMENT BETWEEN WINGS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 22'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) B507 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

SOUTH ABUTMENT

SHEET 06

253

8

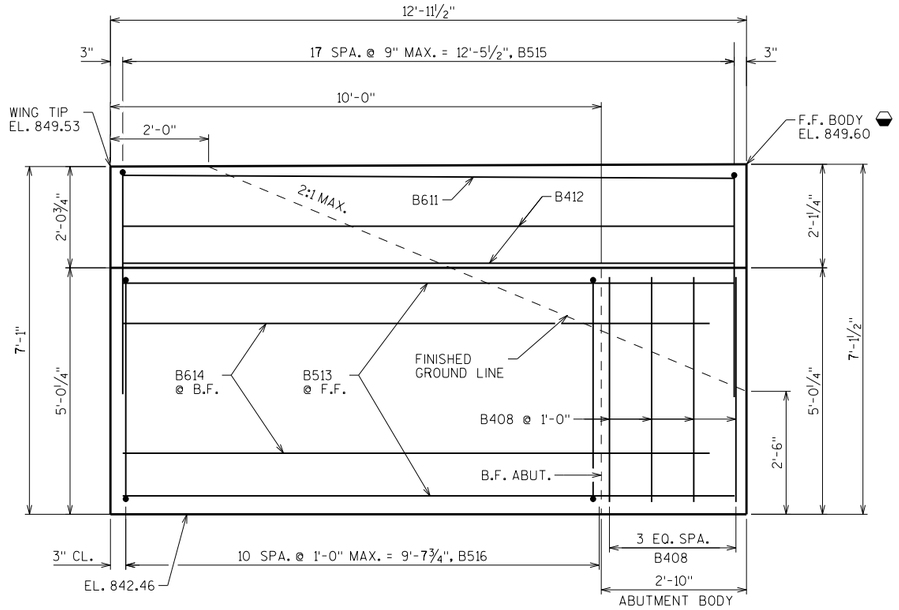
8

SCALE = 4.00

STATE PROJECT NUMBER

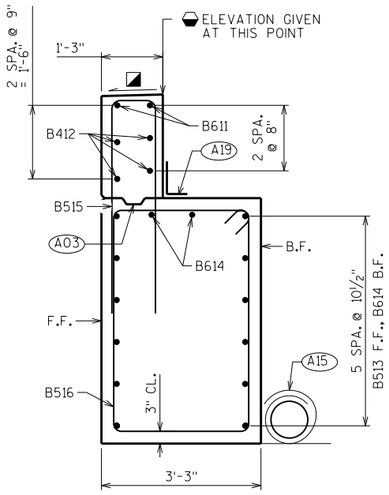
1400-01-70

SLOPE TO DRAIN A MINIMUM OF 1/8" PER FOOT.



WING 3 ELEVATION

LOOKING AT FRONT FACE

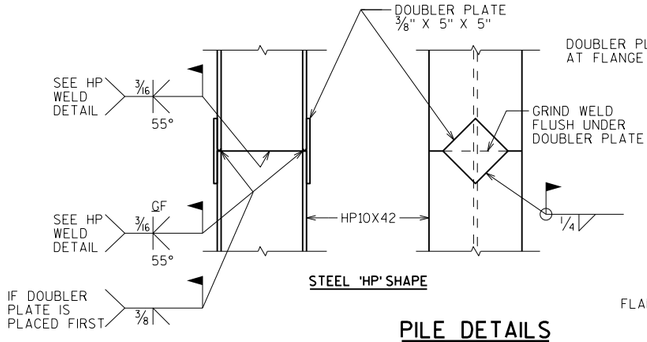


SECTION THRU WING 3

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B601		11	48'-10"			BODY - HORZ. F.F. TOP & BOT.
B802		14	10'-11"	X		BODY - HORZ. B.F.
B603		7	35'-0"			BODY - HORZ. B.F.
B404		4	16'-0"			BODY - HORZ. TOP - UNDER CROWN
B505		61	14'-10"	X		BODY - STIRRUP
B506		17	5'-3"	X		BODY - VERT.
B507	X	48	2'-0"			BODY - DOWELS
B408		8	4'-7"			BODY - VERT. ABUTMENT ENDS
B409		14	2'-3"			PILE - VERT. - 2 PER PILE
B410		7	28'-0"	X		PILE - SPIRAL - 1 PER PILE
B611	X	2	12'-5"			WING 3 - TOP
B412	X	4	12'-5"			WING 3 - HORZ. F.F. & B.F.
B513	X	6	12'-5"			WING 3 - HORZ. F.F.
B614	X	8	11'-8"			WING 3 - HORZ. B.F.
B515	X	36	9'-0"	X		WING 3 & 4 - VERT.
B516	X	22	15'-8"	X		WING 3 & 4 - STIRRUP
B617	X	2	12'-2"			WING 4 - HORZ. TOP
B418	X	4	12'-2"			WING 4 - HORZ. F.F. & B.F.
B519	X	6	12'-2"			WING 4 - HORZ. F.F.
B620	X	8	12'-0"			WING 4 - HORZ. B.F.

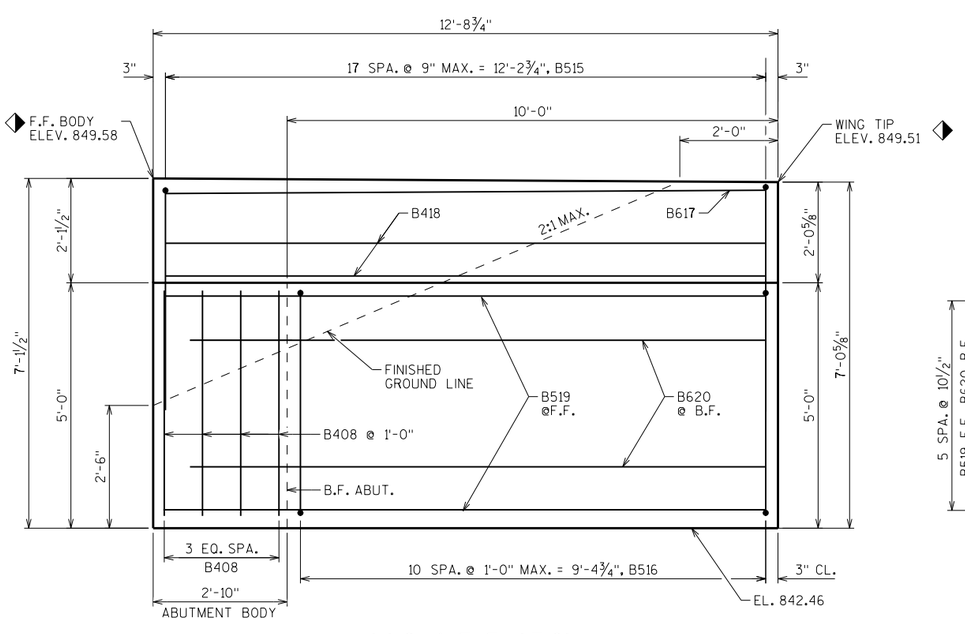


STEEL 'HP' SHAPE

HP WELD DETAIL

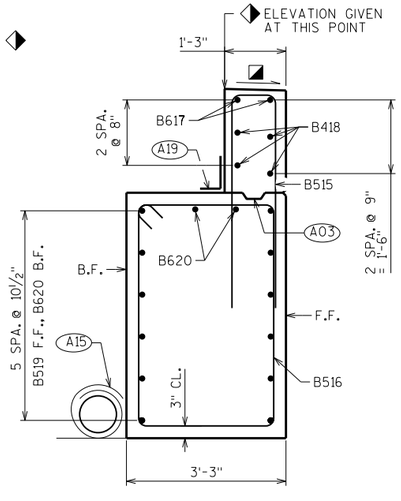
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS



WING 4 ELEVATION

LOOKING AT FRONT FACE

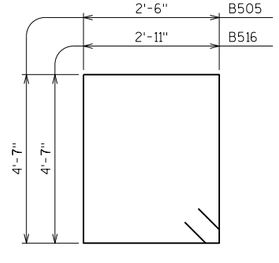


SECTION THRU WING 4

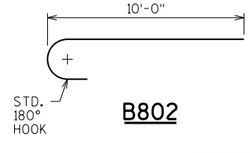
(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

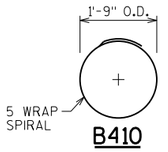
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



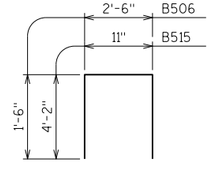
B505, B516



B802



B410



B506, B515

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

SOUTH ABUTMENT DETAILS

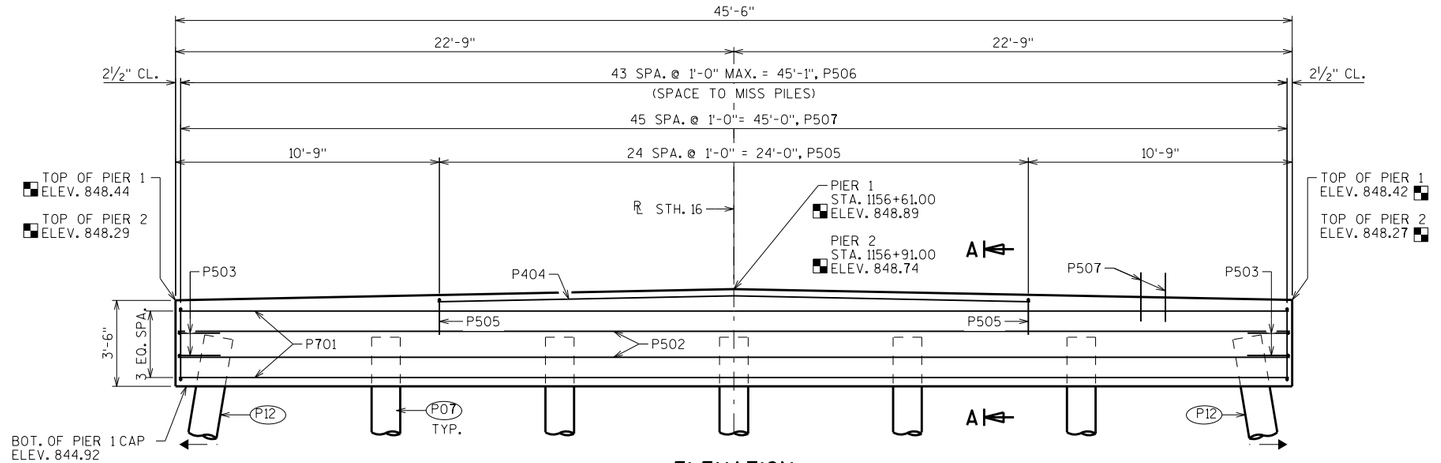
SHEET 07

254

8

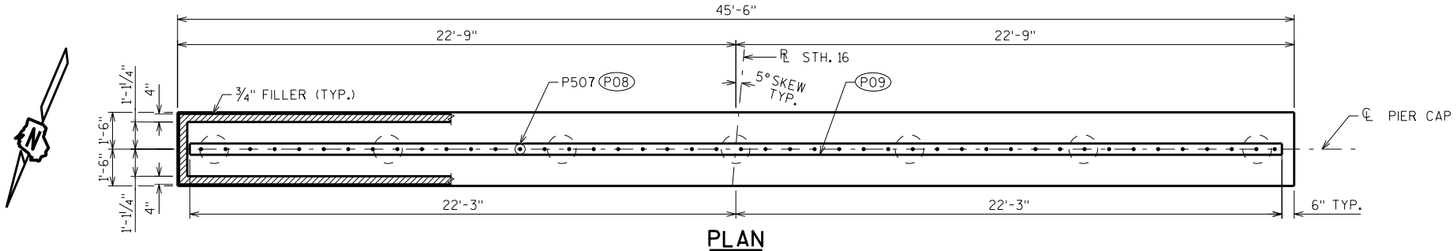
8

SCALE = 1.50



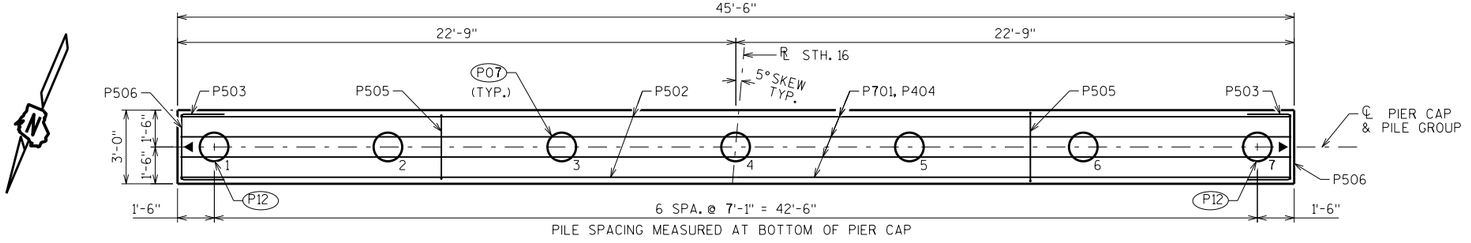
ELEVATION

LOOKING SOUTH, NORMAL TO PIER.
PIER 1 SHOWN, PIER 2 SIMILAR.



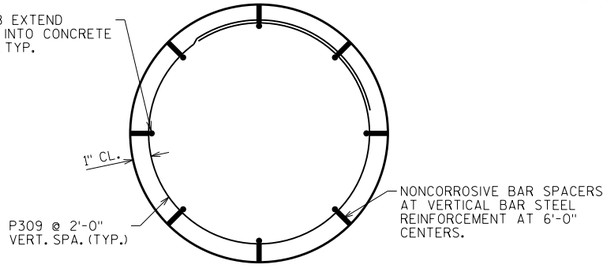
PLAN

PIER 1 SHOWN. PIER 2 SIMILAR.



PILE PLAN

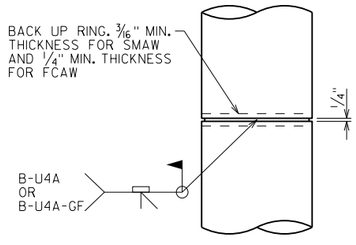
PIER 1 SHOWN. PIER 2 SIMILAR.



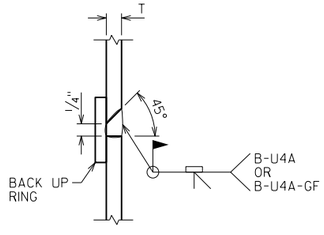
SECTION THRU PILE
CIP 14" X 1/2"

NOTE:

PILES TO BE PAINTED IN ACCORDANCE WITH SECTION 550.3.11.3 OF THE STANDARD SPECIFICATIONS. PAINTING TO BE INCLUDED IN BID ITEM 550.2148: 'PILING CIP CONCRETE 14 X 0.50-INCH'

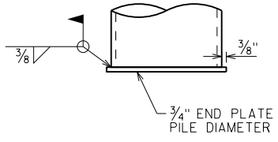


CAST-IN-PLACE 'PIPE PILE'



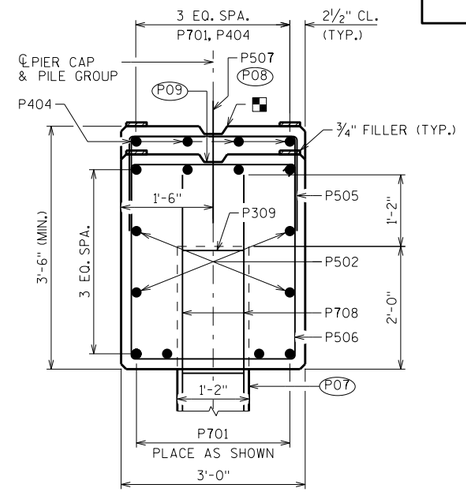
C.I.P. PILE WELD DETAIL

PILE DETAILS

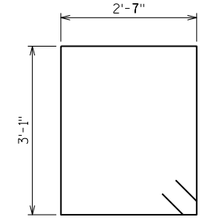


END PLATE DETAIL

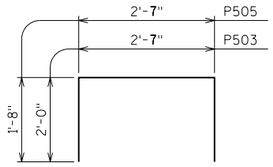
TOP OF PIER CAP ELEVATIONS GIVEN AT THIS POINT



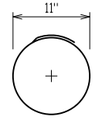
SECTION A-A



P506



P503, P505



P309

(P07) PIERS TO BE SUPPORTED ON 14" CIP X 0.5" PILING SEATED IN PRE-BORED HOLES CORED 3 FEET MINIMUM INTO ROCK. PILE DRIVING IS NOT REQUIRED. THE FACTORED AXIAL RESISTANCE OF THE PILES IN COMPRESSION USED FOR DESIGN IS 240 TONS MULTIPLIED BY A RESISTANCE FACTOR OF 0.5. ESTIMATED 26'-0" LONG.

(P08) P507 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6 KEYWAY.

(P12) INDICATES PILE BATTERED 2" PER FT. IN DIRECTION OF ARROW.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

	BAR MARK	COAT	NO. REQ'D. PIER 1	NO. REQ'D. PIER 2	LENGTH	BENT	BAR SERIES	LOCATION
	P701		8	8	45'-1"			PIER CAP - HORIZ. -TOP & BOT.
	P502		4	4	45'-1"			PIER CAP - HORIZ. - SIDES
	P503		4	4	6'-4"	X		PIER CAP - HORZ. ENDS
	P404		4	4	25'-0"			PIER CAP - HORIZ. TOP - UNDER CROWN
	P505		25	25	5'-8"	X		PIER CAP - VERT. TOP - UNDER CROWN
	P506		44	44	12'-0"	X		PIER CAP - STIRRUP
(P08)	P507		45	45	2'-0"			DOWELS
	P708		56	56	25'-6"			PILE - VERT.
	P309		91	91	3'-11"	X		PILE - SPIRAL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

PIERS

SHEET 08

255

STATE PROJECT NUMBER

1400-01-70

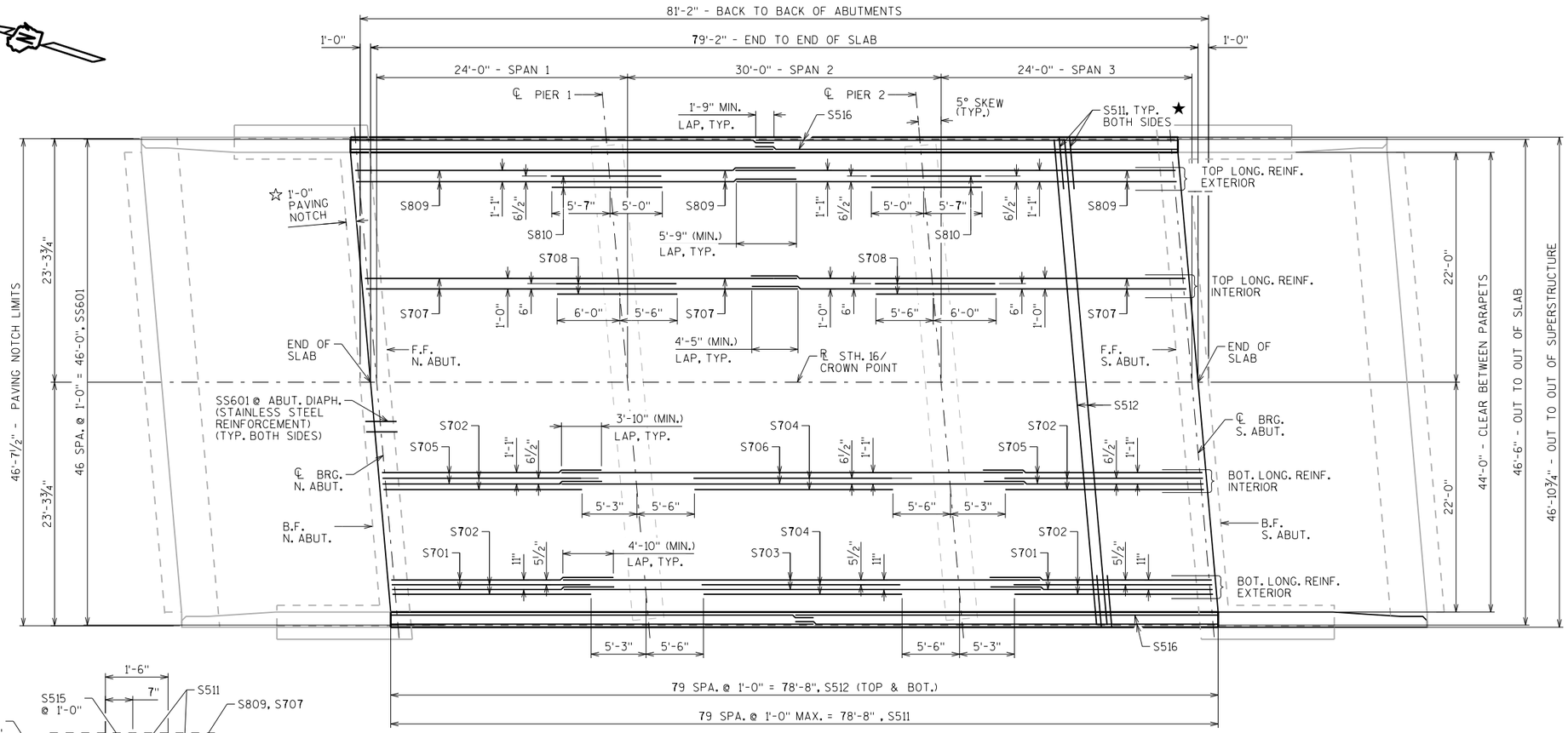
8

8

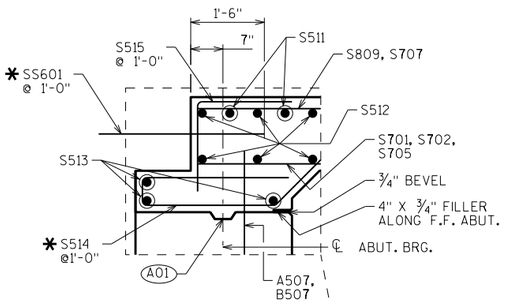
SCALE = 3.00

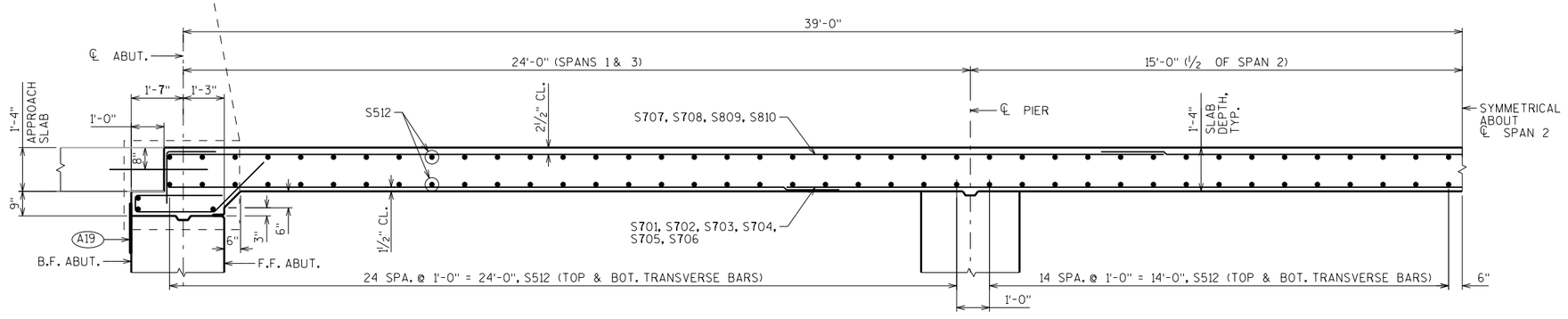
STATE PROJECT NUMBER

1400-01-70



PLAN





LONGITUDINAL SECTION

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 × 6.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

✱ BARS ARE PLACED PARALLEL TO ℄ STH. 16 AND SPACED PERPENDICULAR TO ℄ STH. 16.

☆ DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

★ TOP TRANSVERSE AT EDGE OF SLAB, BOTH SIDES. PLACE BETWEEN S512 BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

SUPERSTRUCTURE

SHEET 09

256

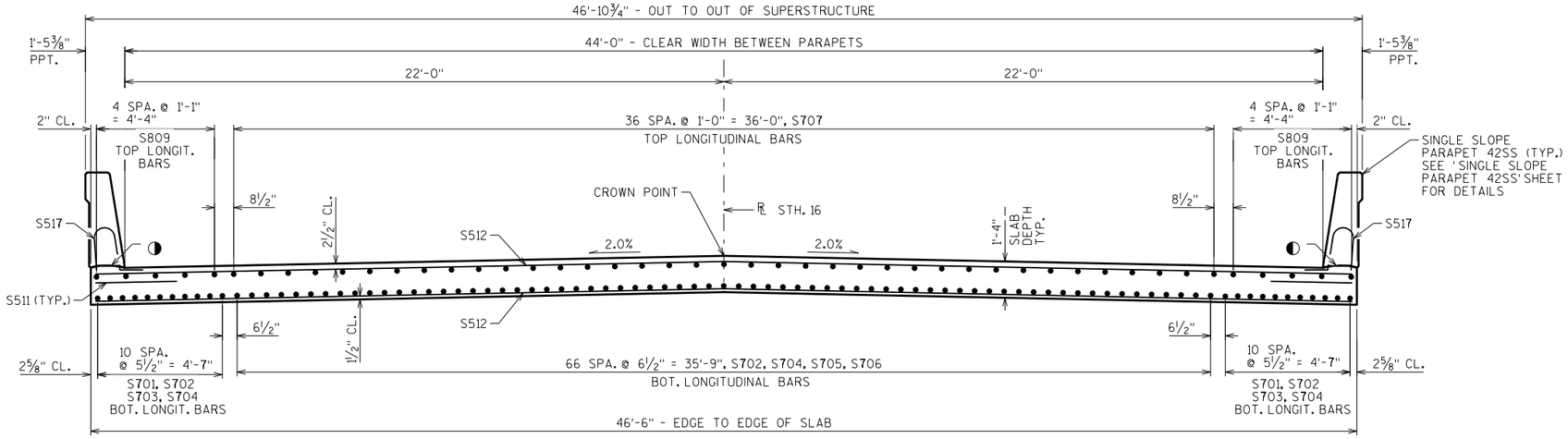
8

8

SCALE = 6.00

STATE PROJECT NUMBER

1400-01-70



CROSS SECTION THRU ROADWAY IN SPAN

LOOKING SOUTH

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM, ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

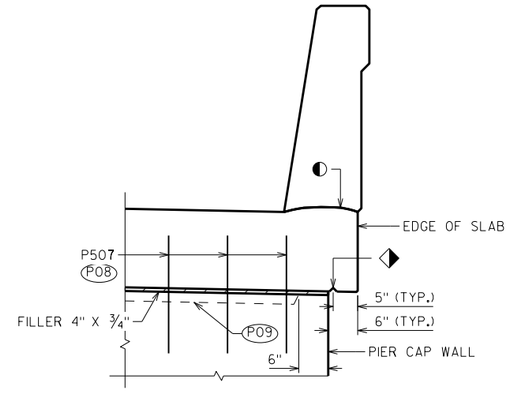
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

CAMBER SPANS AS SHOWN IN SHEET 11 TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

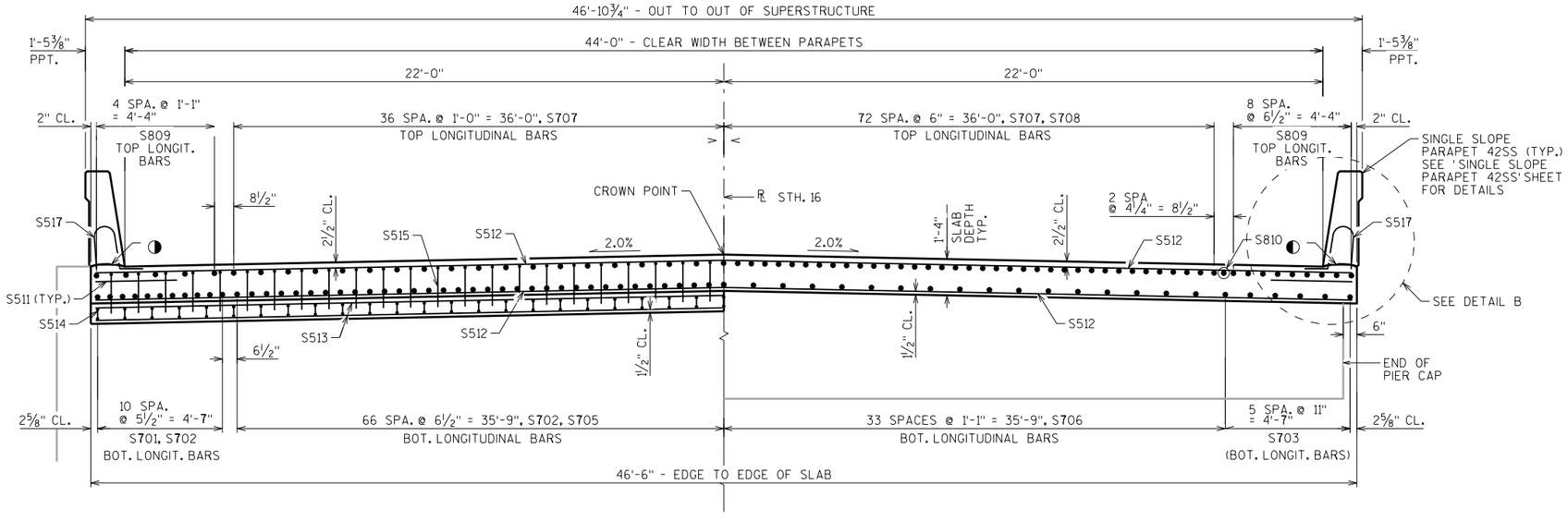
PRIOR TO RELEASING SLAB FLASEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS, THE ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER, TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN POINT/ ℞ STH. 16.

◐ CONSTRUCTION JOINT. STRIKE OFF AS SHOWN.

◆ ¾" V-GROOVE REQ'D. TO BE PLACED CONTINUOUSLY ALONG THE UNDERSIDE OF THE SLAB AND END 6" FROM F.F. OF ABUTMENT.



DETAIL B



CROSS SECTION THRU ROADWAY AT ABUTMENT

LOOKING SOUTH

CROSS SECTION THRU ROADWAY AT PIER

LOOKING SOUTH

(P08) P507 BARS @ 1'-0" CTRS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6 KEYWAY.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

CROSS SECTIONS

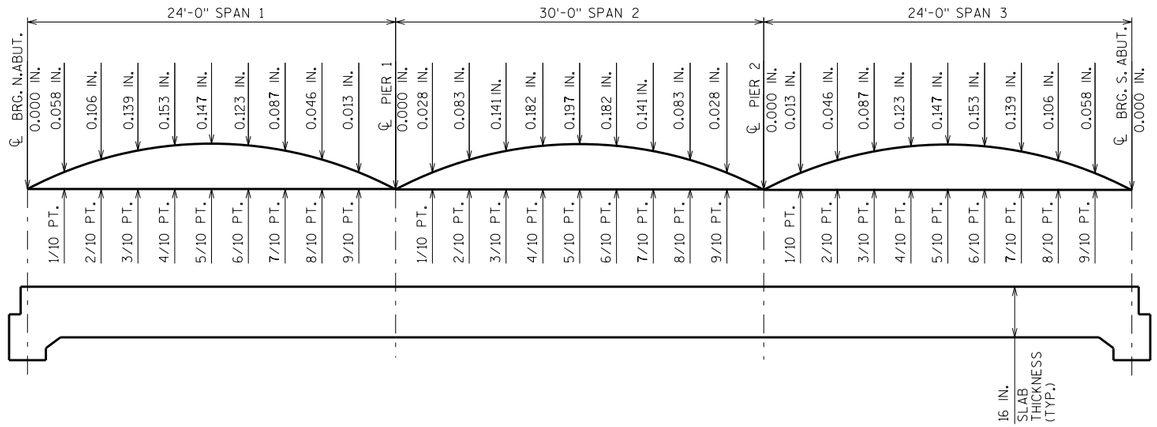
SHEET 10

257

SCALE = 2.50

STATE PROJECT NUMBER

1400-01-70



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. PARAPETS, PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS (-)	SLAB THICKNESS
PLUS (+)	CAMBER
PLUS (+)	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS =	TOP OF SLAB FALSEWORK ELEVATION.

BILL OF BARS

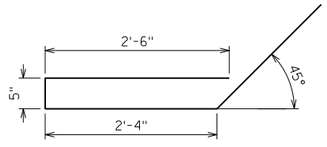
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S701	X	24	21'-5"			SLAB - LONGITUDINAL - EXTERIOR STRIP - SPANS 1& 3 - BOT.
S702	X	88	19'-2"			SLAB - LONGITUDINAL - EXT. & INT. STRIP - SPANS 1& 3 - BOT.
S703	X	12	45'-8"			SLAB - LONGITUDINAL - EXTERIOR STRIP - SPANS 2 - BOT.
S704	X	44	19'-0"			SLAB - LONGITUDINAL - EXT. & INT. STRIP - SPANS 2 - BOT.
S705	X	68	21'-3"			SLAB - LONGITUDINAL - INTERIOR STRIP - SPANS 1& 3 - BOT.
S706	X	34	44'-2"			SLAB - LONGITUDINAL - INTERIOR STRIP - SPANS 2 - BOT.
S707	X	74	41'-8"			SLAB - LONGITUDINAL - INTERIOR STRIP - TOP
S708	X	72	11'-6"			SLAB - LONGITUDINAL - INTERIOR STRIP - PIER 1& 2 - TOP
S809	X	20	42'-4"			SLAB - LONGITUDINAL - EXTERIOR STRIP - TOP
S810	X	20	10'-7"			SLAB - LONGITUDINAL - EXTERIOR STRIP - PIER 1& 2 - TOP
S511	X	158	5'-0"			SLAB - TRANSVERSE - TOP - EDGES
S512	X	160	46'-4"			SLAB - TRANSVERSE - TOP & BOT.
S513	X	6	46'-4"			ABUTMENT DIAPHRAGM - HORIZONTAL
S514	X	94	7'-0"	X		ABUTMENT DIAPHRAGM - VERTICAL
S515	X	94	2'-11"	X		ABUTMENT DIAPHRAGM - VERTICAL
S516	X	32	40'-4"			PARAPET - HORIZONTAL
S517	X	238	4'-5"	X		PARAPET - VERTICAL
S518	X	238	6'-8"	X		PARAPET - VERTICAL
STAINLESS STEEL → S601		94	3'-0"			SLAB/APPROACH SLAB - HORIZONTAL - TIE BARS

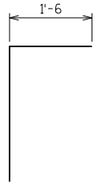
SURVEY TOP OF SLAB ELEVATIONS

	℄ BRG. NORTH ABUTMENT	5/10 PT.	℄ PIER 1	5/10 PT.	℄ PIER 2	5/10 PT.	℄ BRG. SOUTH ABUTMENT
E. GUTTERLINE							
CROWN & ℄ STH. 16							
W. GUTTERLINE							

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS, THE ℄ OF PIERS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR ℄. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.



S514



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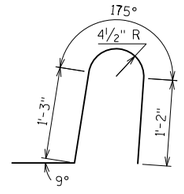

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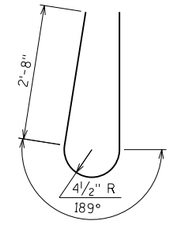

S518

TOP OF SLAB ELEVATIONS

	℄ BRG. N. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2
E. GUTTERLINE/EDGE OF SLAB	849.97	849.96	849.95	849.94	849.93	849.91	849.90	849.89	849.88	849.87	849.85	849.84	849.82	849.81	849.79	849.78	849.76	849.75	849.73	849.72	849.70
CROWN & ℄ STH. 16	850.41	850.39	850.38	850.37	850.36	850.35	850.33	850.32	850.31	850.30	850.29	850.27	850.26	850.24	850.23	850.21	850.20	850.18	850.17	850.15	850.14
W. GUTTERLINE/EDGE OF SLAB	849.96	849.94	849.93	849.92	849.91	849.90	849.98	849.87	849.86	849.85	849.84	849.82	849.81	849.79	849.78	849.76	849.75	849.73	849.72	849.70	849.69

℄ PIER 2	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. S. ABUT.
849.70	849.69	849.68	849.67	849.66	849.64	849.63	849.62	849.61	849.60	849.58
850.14	850.12	850.11	850.10	850.09	850.08	850.06	850.05	850.04	850.03	850.02
849.69	849.67	849.66	849.65	849.64	849.63	849.61	849.60	849.59	849.58	849.57

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

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SUPERSTRUCTURE DETAILS

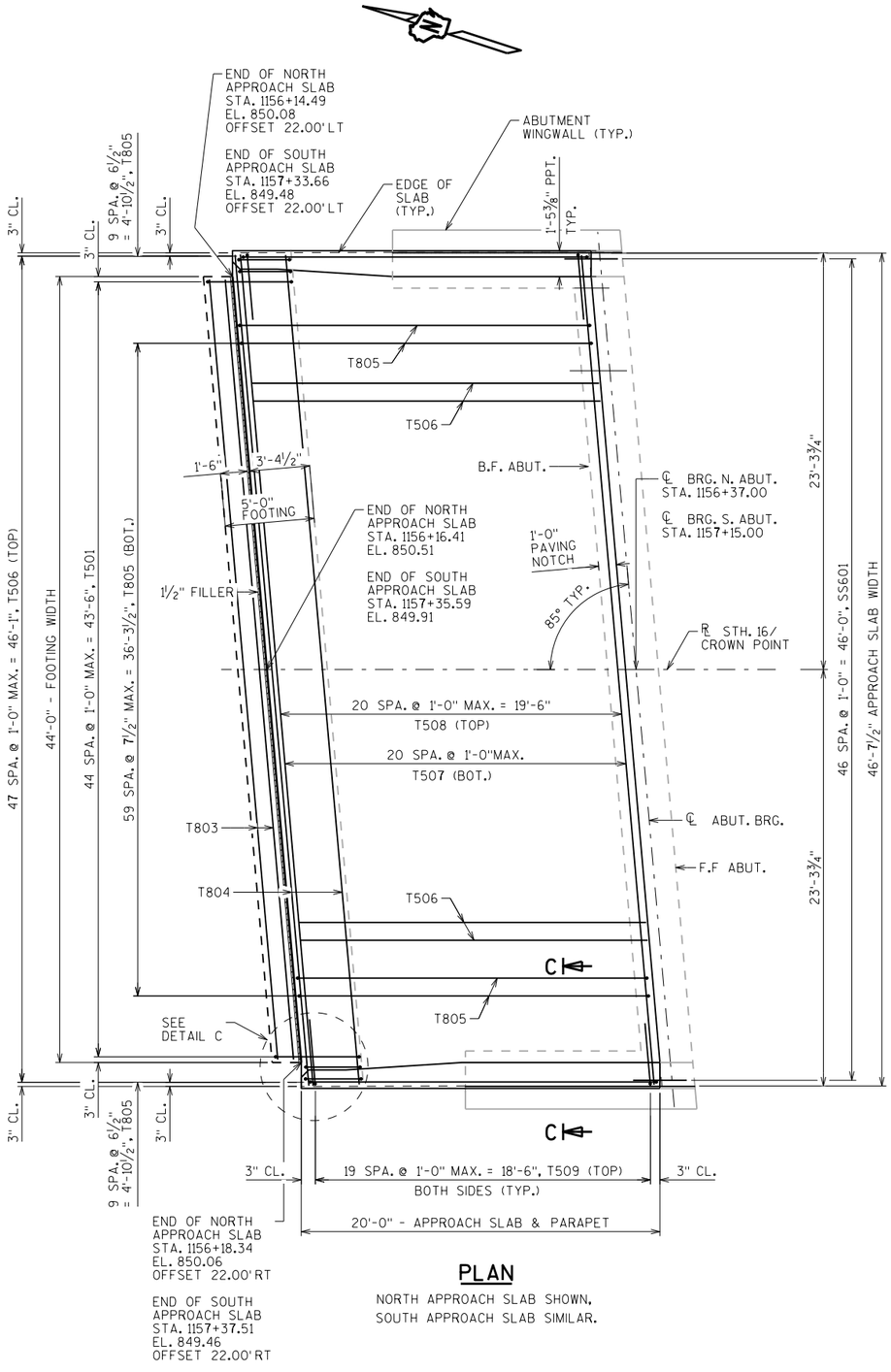
SHEET 11

258

SCALE = 1.00

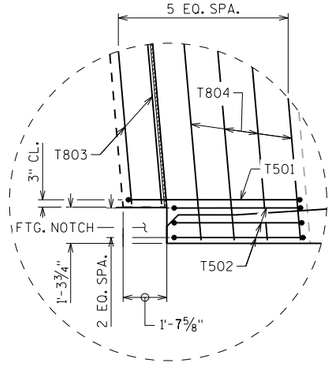
STATE PROJECT NUMBER

1400-01-70



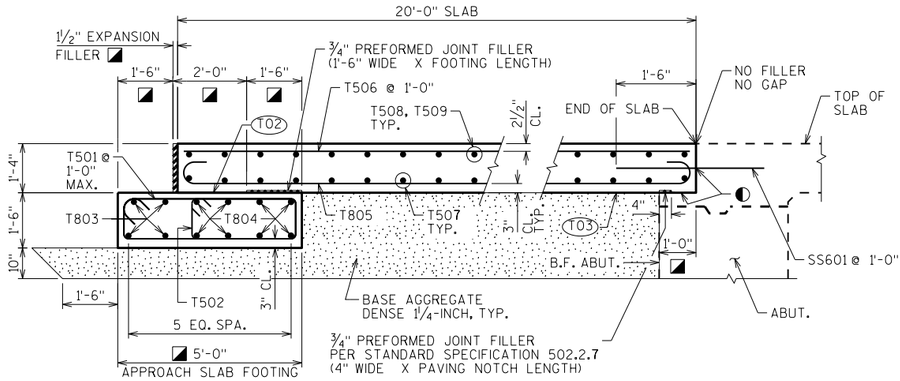
PLAN

NORTH APPROACH SLAB SHOWN, SOUTH APPROACH SLAB SIMILAR.

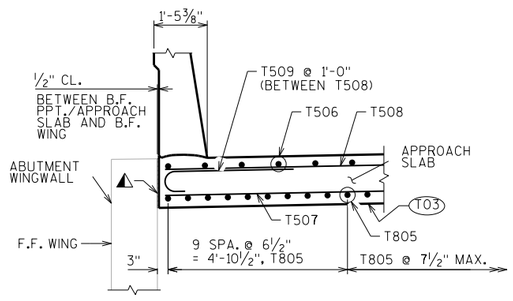


DETAIL C

WEST SIDE SHOWN, EAST SIDE SIMILAR



SECTION THRU APPROACH SLAB



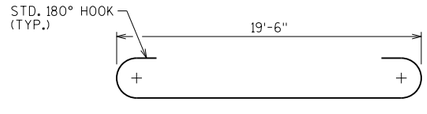
SECTION C-C

WEST SIDE SHOWN, EAST SIDE SIMILAR

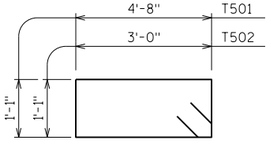
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

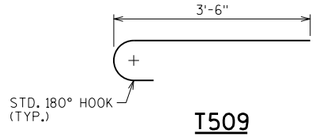
BAR MARK	COAT	NO. REQ'D. N. SLAB	NO. REQ'D. S. SLAB	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	45	45	12'-2"	X		APPROACH SLAB - FTG. - STIRRUP
T502	X	6	6	8'-10"	X		APPROACH SLAB - FTG. - STIRRUP
T803	X	4	4	43'-8"			APPROACH SLAB - FTG. - TRANS.
T804	X	8	8	46'-3"			APPROACH SLAB - FTG. - TRANS.
T805	X	78	78	21'-4"	X		APPROACH SLAB - LONG. - BOT.
T506	X	48	48	19'-6"			APPROACH SLAB - LONG. - TOP
T507	X	21	21	46'-3"			APPROACH SLAB - TRANS. - BOT.
T508	X	21	21	46'-3"			APPROACH SLAB - TRANS. - TOP
T509	X	41	41	4'-1"	X		APPROACH SLAB - TRANS. - TOP - WING



T805



T501, T502



T509

▲ 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).

◐ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.

◪ MEASURED NORMAL TO ABUTMENT

(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE SUBGRADE BENEATH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY CSP | PLANS CK'D. SCL

STRUCTURAL APPROACH SLABS

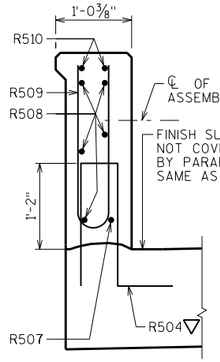
SHEET 12

259

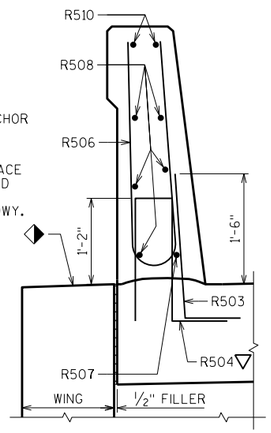
SCALE = 4.00

STATE PROJECT NUMBER

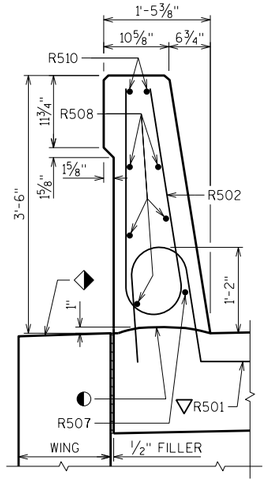
1400-01-70



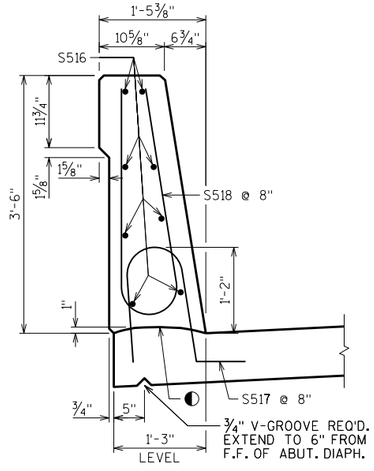
SECTION A-A



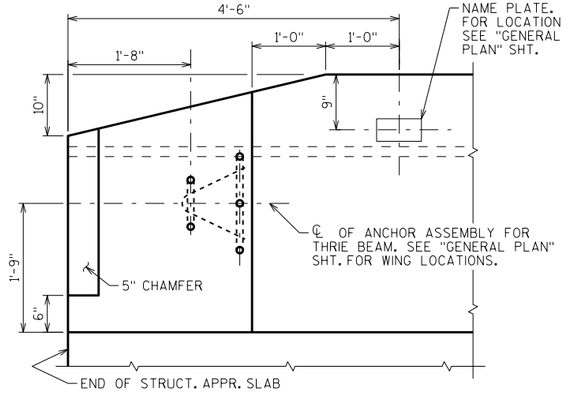
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON SLAB



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR APPROACH SLAB PARAPETS

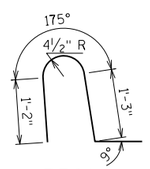
BAR MARK	COAT	N. APP.	S. APP.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4'-5"	X		PARAPET VERT.
R502	X	34	34	6'-8"	X		PARAPET VERT.
R503	X	24	24	2'-9"	X		PARAPET VERT.
R504	X	34	34	4'-4"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	2	2	19'-7"	X		PARAPET HORIZ.
R508	X	10	10	19'-7"			PARAPET HORIZ.
R509	X	12	12	5'-5"	X	⚠	PARAPET VERT.
R510	X	4	4	19'-7"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

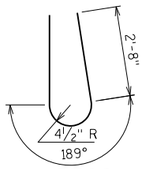
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.



R501



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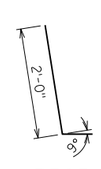
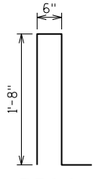


R503



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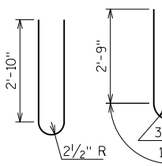
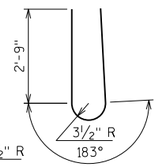


R505



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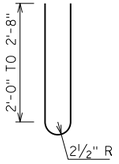

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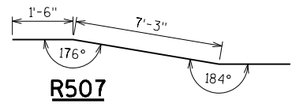
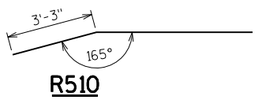
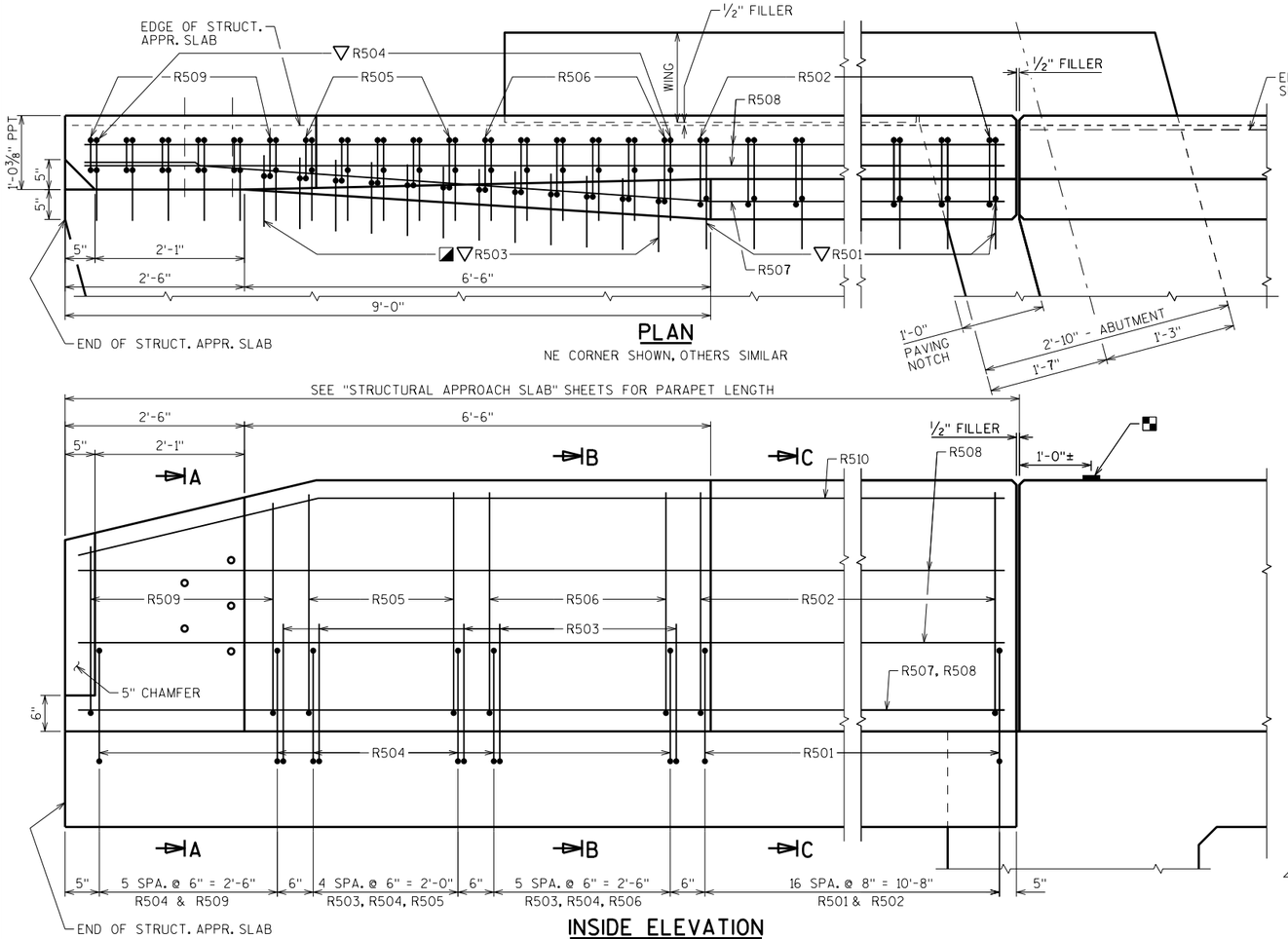


R507



R510



PLAN

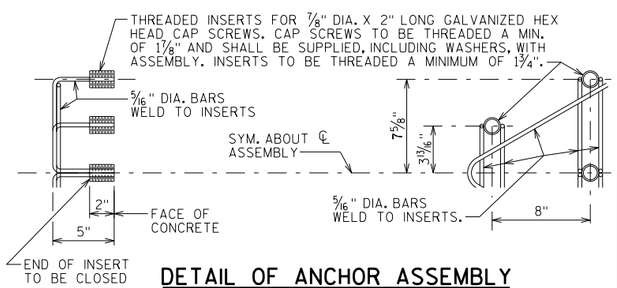
NE CORNER SHOWN, OTHERS SIMILAR

INSIDE ELEVATION

NE CORNER SHOWN, OTHERS SIMILAR

WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY

BENCH MARK CAP



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

- ◐ CONST. JOINT - STRIKE OFF AS SHOWN
- ◆ SLOPE FOR DRAINAGE
- ◪ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-11-172

DRAWN BY	CSP	PLANS CK'D.	SCL

SINGLE SLOPE PARAPET 42SS

SHEET 13

260

SCALE = 1.00

8

8

DIVISION 1 - STH 16

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50	1.10	1.30	0.60	0.80	NOTE 8
612+71.92	61271.92	0.00	13.11	13.11	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
612+82.298	61282.30	10.38	9.79	9.79	0.00	0.00	0.00	0.00	4	4	0	0	0	0	4	0	0	0	0	0	0	0
613+00	61300.00	17.70	6.85	6.85	0.00	0.00	0.00	0.00	5	5	0	0	0	0	9	0	0	0	0	0	0	0
613+07.298	61307.30	7.30	7.11	7.11	0.00	0.00	0.00	0.00	2	2	0	0	0	0	11	0	0	0	0	0	0	0
613+32.298	61332.30	25.00	6.98	6.98	0.00	0.00	0.00	0.00	7	7	0	0	0	0	18	0	0	0	0	0	0	0
613+35.423	61335.42	3.13	6.88	6.88	0.00	0.00	0.00	0.00	1	1	0	0	0	0	19	0	0	0	0	0	0	0
613+40	61340.00	4.58	7.99	7.99	0.00	0.00	0.00	0.00	1	1	0	0	0	0	20	0	0	0	0	0	0	0
613+50	61350.00	10.00	7.48	7.48	0.00	0.00	0.00	0.00	3	3	0	0	0	0	23	0	0	0	0	0	0	0
614+00	61400.00	50.00	6.38	6.38	0.00	0.00	0.00	0.00	13	13	0	0	0	0	36	0	0	0	0	0	0	0
614+50	61450.00	50.00	5.88	5.88	0.00	0.00	0.00	0.00	11	11	0	0	0	0	47	0	0	0	0	0	0	0
615+00	61500.00	50.00	4.74	4.74	0.00	0.00	0.00	0.00	10	10	0	0	0	0	57	0	0	0	0	0	0	0
615+10	61510.00	10.00	5.33	5.33	0.00	0.00	0.00	0.00	2	2	0	0	0	0	59	0	0	0	0	0	0	0
615+40	61540.00	30.00	4.61	4.61	0.00	0.00	0.00	0.00	6	6	0	0	0	0	65	0	0	0	0	0	0	0
615+50	61550.00	10.00	4.89	4.89	15.18	0.00	0.00	0.00	2	2	3	0	0	0	67	4	0	0	0	0	0	-4
615+51.048	61551.05	1.05	4.94	4.94	17.41	0.00	0.00	0.00	0	0	1	0	0	0	67	5	0	0	0	0	0	-5
615+76.048	61576.05	25.00	5.92	5.92	9.76	0.00	0.00	0.00	5	5	13	0	0	0	72	21	0	0	0	0	0	-21
616+00	61600.00	23.95	6.32	6.32	10.99	0.00	0.00	0.00	5	5	9	0	0	0	77	33	0	0	0	0	0	-33
616+01.048	61601.05	1.05	6.28	6.28	11.03	0.00	0.00	0.00	0	0	0	0	0	0	77	33	0	0	0	0	0	-33
616+21.048	61621.05	20.00	7.10	7.10	3.73	0.00	0.00	0.00	5	5	5	0	0	0	82	39	0	0	0	0	0	-39
616+50	61650.00	28.95	5.05	5.05	2.62	0.00	0.00	0.00	7	7	3	0	0	0	89	43	0	0	0	0	0	-43
616+80	61680.00	30.00	4.28	4.28	0.00	0.00	0.00	0.00	5	5	1	0	0	0	94	44	0	0	0	0	0	-44
796+10	79610.00	0.00	5.49	5.49	0.00	0.00	0.00	0.00	0	0	0	0	0	0	94	44	0	0	0	0	0	-44
796+50	79650.00	40.00	7.57	7.57	0.61	0.00	0.00	0.00	10	10	0	0	0	0	104	44	0	0	0	0	0	-44
796+60	79660.00	10.00	9.06	9.06	2.63	0.00	0.00	0.00	3	3	1	0	0	0	107	45	0	0	0	0	0	-45
796+63.778	79663.78	3.78	9.49	9.49	2.42	0.00	0.00	0.00	1	1	0	0	0	0	108	45	0	0	0	0	0	-45
796+79.033	79679.03	15.25	19.99	19.99	1.71	0.00	0.00	0.00	8	8	1	0	0	0	116	46	0	0	0	0	0	-46
796+83.737	79683.74	4.70	19.04	19.04	1.49	0.00	0.00	0.00	3	3	0	0	0	0	119	46	0	0	0	0	0	-46
796+90	79690.00	6.26	19.18	19.18	0.69	0.00	0.00	0.00	4	4	0	0	0	0	123	46	0	0	0	0	0	-46
797+00	79700.00	10.00	19.24	19.24	0.01	0.00	0.00	0.00	7	7	0	0	0	0	130	46	0	0	0	0	0	-46
797+08.68	79708.68	8.68	17.09	17.09	1.97	0.00	0.00	0.00	6	6	0	0	0	0	136	46	0	0	0	0	0	-46
797+14.289	79714.29	5.61	15.89	15.89	4.85	0.00	0.00	0.00	3	3	1	0	0	0	139	48	0	0	0	0	0	-48
797+19.578	79719.58	5.29	14.42	14.42	10.47	0.00	0.00	0.00	3	3	2	0	0	0	142	50	0	0	0	0	0	-50
797+33.621	79733.62	14.04	14.06	14.06	18.24	0.00	0.00	0.00	7	7	7	0	0	0	149	59	0	0	0	0	0	-59
797+40	79740.00	6.38	13.96	13.96	2.10	0.00	0.00	0.00	3	3	2	0	0	0	152	61	0	0	0	0	0	-61
797+50	79750.00	10.00	11.00	11.00	0.02	0.00	0.00	0.00	5	5	0	0	0	0	157	61	0	0	0	0	0	-61
797+55.813	79755.81	5.81	9.17	9.17	0.62	0.00	0.00	0.00	2	2	0	0	0	0	159	61	0	0	0	0	0	-61
797+60	79760.00	4.19	8.43	8.43	2.78	0.00	0.00	0.00	1	1	0	0	0	0	160	61	0	0	0	0	0	-61
797+80.861	79780.86	20.86	8.04	8.04	14.82	0.00	0.00	0.00	6	6	7	0	0	0	166	70	0	0	0	0	0	-70
798+00	79800.00	19.14	6.98	6.98	32.87	0.00	0.00	0.00	5	5	17	0	0	0	171	91	0	0	0	0	0	-91
798+05.919	79805.92	5.92	6.30	6.30	27.21	0.00	0.00	0.00	1	1	7	0	0	0	172	100	0	0	0	0	0	-100
798+10	79810.00	4.08	6.15	6.15	22.45	0.00	0.00	0.00	1	1	4	0	0	0	173	105	0	0	0	0	0	-105
798+50	79850.00	40.00	7.70	7.70	0.39	0.00	0.00	0.00	10	10	17	0	0	0	183	126	0	0	0	0	0	-126
799+00	79900.00	50.00	7.12	7.12	0.10	0.00	0.00	0.00	14	14	0	0	0	0	197	126	0	0	0	0	0	-126
799+20	79920.00	20.00	7.49	7.49	0.01	0.00	0.00	0.00	5	5	0	0	0	0	202	126	0	0	0	0	0	-126
799+36.37	79936.37	16.37	10.13	10.13	0.00	0.00	0.00	0.00	5	5	0	0	0	0	207	126	0	0	0	0	0	-126
799+40	79940.00	3.63	10.81	10.81	0.00	0.00	0.00	0.00	1	1	0	0	0	0	208	126	0	0	0	0	0	-126
799+50	79950.00	10.00	11.57	11.57	0.00	0.00	0.00	0.00	4	4	0	0	0	0	212	126	0	0	0	0	0	-126
799+60	79960.00	10.00	8.90	8.90	0.00	0.00	0.00	0.00	4	4	0	0	0	0	216	126	0	0	0	0	0	-126
799+80	79980.00	20.00	7.62	7.62	0.00	0.00	0.00	0.00	6	6	0	0	0	0	222	126	0	0	0	0	0	-126
799+98.63	79998.63	18.63	7.40	7.40	0.72	0.00	0.00	0.00	5	5	0	0	0	0	227	126	0	0	0	0	0	-126
800+00	80000.00	1.37	7.39	7.39	1.18	0.00	0.00	0.00	0	0	0	0	0	0	227	126	0	0	0	0	0	-126
800+20	80020.00	20.00	6.91	6.91	0.04	0.00	0.00	0.00	5	5	0	0	0	0	232	126	0	0	0	0	0	-126
800+40	80040.00	20.00	9.21	9.21	0.46	0.00	0.00	0.00	6	6	0	0	0	0	238	126	0	0	0	0	0	-126
800+50	80050.00	10.00	10.85	10.85	0.82	0.00	0.00	0.00	4	4	0	0	0	0	242	126	0	0	0	0	0	-126
801+00	80100.00	50.00	11.74	11.74	1.53	0.00	0.00	0.00	21	21	2	0	0	0	263	129	0	0	0	0	0	-129
801+50	80150.00	50.00	8.29	8.29	3.33	0.00	0.00	0.00	19	19	4	0	0	0	282	134	0	0	0	0	0	-134
801+60	80160.00	10.00	7.10	7.10	5.74	0.00	0.00	0.00	3	3	2	0	0	0	285	136	0	0	0	0	0	-136
801+97.582	80197.58	37.58	7.58	7.58	1.28	0.00	0.00	0.00	10	10	5	0	0	0	295	143	0	0	0	0	0	-143
802+00	80200.00	2.42	7.73	7.73	1.12	0.00	0.00	0.00	1	1	0	0	0	0	296	143	0	0	0	0	0	-143
802+23.027	80223.03	23.03	4.51	4.51	1.86	0.00	0.00	0.00	5	5	1	0	0	0	301	144	0	0	0	0	0	-144
802+28.645	80228.65	5.62	5.41	5.41	1.01	0.00	0.00	0.00	1	1	0	0	0	0	302	144	0	0	0	0	0	-144

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

DIVISION 1 - STH 16

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50	1.10	1.30	0.60	0.80	NOTE 8
1150+50	115050.00	0.00	152.49	67.67	6.16	0.00	0.00	0.00	0	0	0	0	0	0	302	144	0	0	0	0	0	-144
1151+00	115100.00	50.00	141.76	67.67	7.37	0.00	0.00	0.00	272	125	13	0	0	0	574	160	0	0	0	0	0	-13
1151+50	115150.00	50.00	134.88	67.67	9.53	0.00	0.00	0.00	256	125	16	0	0	0	830	180	0	0	0	0	0	98
1152+00	115200.00	50.00	128.70	67.67	17.16	0.00	0.00	0.00	244	125	25	0	0	0	1,074	211	0	0	0	0	0	186
1152+50	115250.00	50.00	118.67	67.67	21.75	0.00	0.00	0.00	229	125	36	0	0	0	1,303	256	0	0	0	0	0	245
1153+00	115300.00	50.00	110.87	67.67	26.16	0.00	0.00	0.00	213	125	44	0	0	0	1,516	311	0	0	0	0	0	278
1153+50	115350.00	50.00	103.52	67.67	29.29	0.00	0.00	0.00	199	125	51	0	0	0	1,715	375	0	0	0	0	0	288
1153+92.312	115392.31	42.31	98.45	67.67	34.38	0.00	0.00	0.00	158	106	50	0	0	0	1,873	438	0	0	0	0	0	278
1154+00	115400.00	7.69	98.84	67.67	37.96	0.00	0.00	0.00	28	19	10	0	0	0	1,901	450	0	0	0	0	0	274
1154+09.363	115409.36	9.36	99.99	67.67	38.87	0.00	0.00	0.00	34	23	13	0	0	0	1,935	466	0	0	0	0	0	269
1154+10	115410.00	0.64	80.44	67.67	34.83	0.00	0.00	0.00	2	2	1	0	0	0	1,937	468	0	0	0	0	0	268
1154+50	115450.00	40.00	79.79	61.00	53.97	0.00	0.00	0.00	119	95	66	0	0	0	2,056	550	0	0	0	0	0	209
1154+61.041	115461.04	11.04	79.22	61.00	61.96	0.00	0.00	0.00	33	25	24	0	0	0	2,089	580	0	0	0	0	0	187
1154+87.008	115487.01	25.97	80.97	61.00	57.41	0.00	0.00	0.00	77	59	57	0	0	0	2,166	651	0	0	0	0	0	134
1154+95.797	115495.80	8.79	81.32	69.67	49.77	0.00	0.00	0.00	26	21	17	0	0	0	2,192	673	0	0	0	0	0	118
1155+00	115500.00	4.20	83.51	69.17	46.18	0.00	0.00	0.00	13	11	7	0	0	0	2,205	681	0	0	0	0	0	111
1155+11.966	115511.97	11.97	99.46	68.67	38.82	0.00	0.00	0.00	41	31	19	0	0	0	2,246	705	0	0	0	0	0	97
1155+36.966	115536.97	25.00	101.23	68.67	20.25	0.00	0.00	0.00	93	64	27	0	0	0	2,339	739	0	0	0	0	0	92
1155+50	115550.00	13.03	103.10	69.83	15.66	0.00	0.00	0.00	49	33	9	0	0	0	2,388	750	0	0	0	0	0	97
1155+70.634	115570.63	20.63	107.33	74.00	8.11	0.00	0.00	0.00	80	55	9	0	0	0	2,468	761	0	0	0	0	0	111
1155+85	115585.00	14.37	109.50	78.00	0.12	0.00	0.00	0.00	58	40	2	0	0	0	2,526	764	0	0	0	0	0	126
1156+00	115600.00	15.00	108.09	77.00	5.73	0.00	0.00	0.00	60	43	2	0	0	0	2,586	766	0	0	0	0	0	141
1156+00.201	115600.20	0.20	107.96	77.00	6.36	0.00	0.00	0.00	1	1	0	0	0	0	2,587	766	0	0	0	0	0	141
1156+00.29	115600.29	0.09	29.57	77.00	6.71	0.00	0.00	0.00	0	0	0	0	0	0	2,587	766	0	0	0	0	0	141
1156+14.365	115614.37	14.08	30.23	76.83	11.11	0.00	0.00	0.00	16	40	5	0	0	0	2,603	773	0	0	0	0	0	111
1157+37.635	115737.63	0.00	53.31	71.42	10.38	0.00	0.00	0.00	0	0	0	0	0	0	2,603	773	0	0	0	0	0	111
1157+43.9	115743.90	6.27	54.60	71.58	4.78	0.00	0.00	0.00	13	17	2	0	0	0	2,616	775	0	0	0	0	0	104
1157+50	115750.00	6.10	56.62	71.75	7.10	0.00	0.00	0.00	13	16	1	0	0	0	2,629	776	0	0	0	0	0	100
1157+52.21	115752.21	2.21	57.63	71.75	5.03	0.00	0.00	0.00	5	6	0	0	0	0	2,634	776	0	0	0	0	0	99
1157+52.25	115752.25	0.04	136.48	71.75	4.94	0.00	0.00	0.00	0	0	0	0	0	0	2,634	776	0	0	0	0	0	99
1157+60	115760.00	7.75	141.80	72.08	3.07	0.00	0.00	0.00	40	21	1	0	0	0	2,674	778	0	0	0	0	0	117
1157+70	115770.00	10.00	145.98	71.83	3.39	0.00	0.00	0.00	53	27	1	0	0	0	2,727	779	0	0	0	0	0	141
1157+74.408	115774.41	4.41	147.56	71.25	0.00	0.00	0.00	0.00	24	12	0	0	0	0	2,751	779	0	0	0	0	0	153
1158+00	115800.00	25.59	156.61	72.17	1.76	0.00	0.00	0.00	144	68	1	0	0	0	2,895	780	0	0	0	0	0	228
1158+14.921	115814.92	14.92	161.32	73.08	3.20	0.00	0.00	0.00	88	40	1	0	0	0	2,983	781	0	0	0	0	0	275
1158+39.858	115839.86	24.94	167.96	73.83	5.01	0.00	0.00	0.00	152	68	4	0	0	0	3,135	786	0	0	0	0	0	354
1158+50	115850.00	10.14	170.60	73.83	6.01	0.00	0.00	0.00	64	28	2	0	0	0	3,199	789	0	0	0	0	0	387
1158+55	115855.00	5.00	172.55	73.83	7.75	0.00	0.00	0.00	32	14	1	0	0	0	3,231	790	0	0	0	0	0	404
1158+61.185	115861.18	6.18	172.80	73.83	7.94	0.00	0.00	0.00	40	17	2	0	0	0	3,271	793	0	0	0	0	0	425
1158+64.796	115864.80	3.61	172.77	73.83	7.68	0.00	0.00	0.00	23	10	1	0	0	0	3,294	794	0	0	0	0	0	436
1158+86.185	115886.18	21.39	166.72	74.00	6.38	0.00	0.00	0.00	134	59	6	0	0	0	3,428	801	0	0	0	0	0	504
1159+00	115900.00	13.82	166.32	74.00	6.90	0.00	0.00	0.00	85	38	3	0	0	0	3,513	805	0	0	0	0	0	547
1159+00.378	115900.38	0.38	166.41	74.00	6.91	0.00	0.00	0.00	2	1	0	0	0	0	3,515	805	0	0	0	0	0	548
1159+11.185	115911.18	10.81	166.73	74.17	7.16	0.00	0.00	0.00	67	30	3	0	0	0	3,582	809	0	0	0	0	0	581
1159+16.993	115916.99	5.81	165.08	74.17	6.67	0.00	0.00	0.00	36	16	1	0	0	0	3,618	810	0	0	0	0	0	600
1159+25	115925.00	8.01	159.04	74.33	3.90	0.00	0.00	0.00	48	22	2	0	0	0	3,666	813	0	0	0	0	0	624
1159+33.312	115933.31	8.31	155.73	74.33	2.52	0.00	0.00	0.00	48	23	1	0	0	0	3,714	814	0	0	0	0	0	647
1159+43	115943.00	9.69	154.00	74.50	2.16	0.00	0.00	0.00	56	27	1	0	0	0	3,770	815	0	0	0	0	0	675

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

9

9

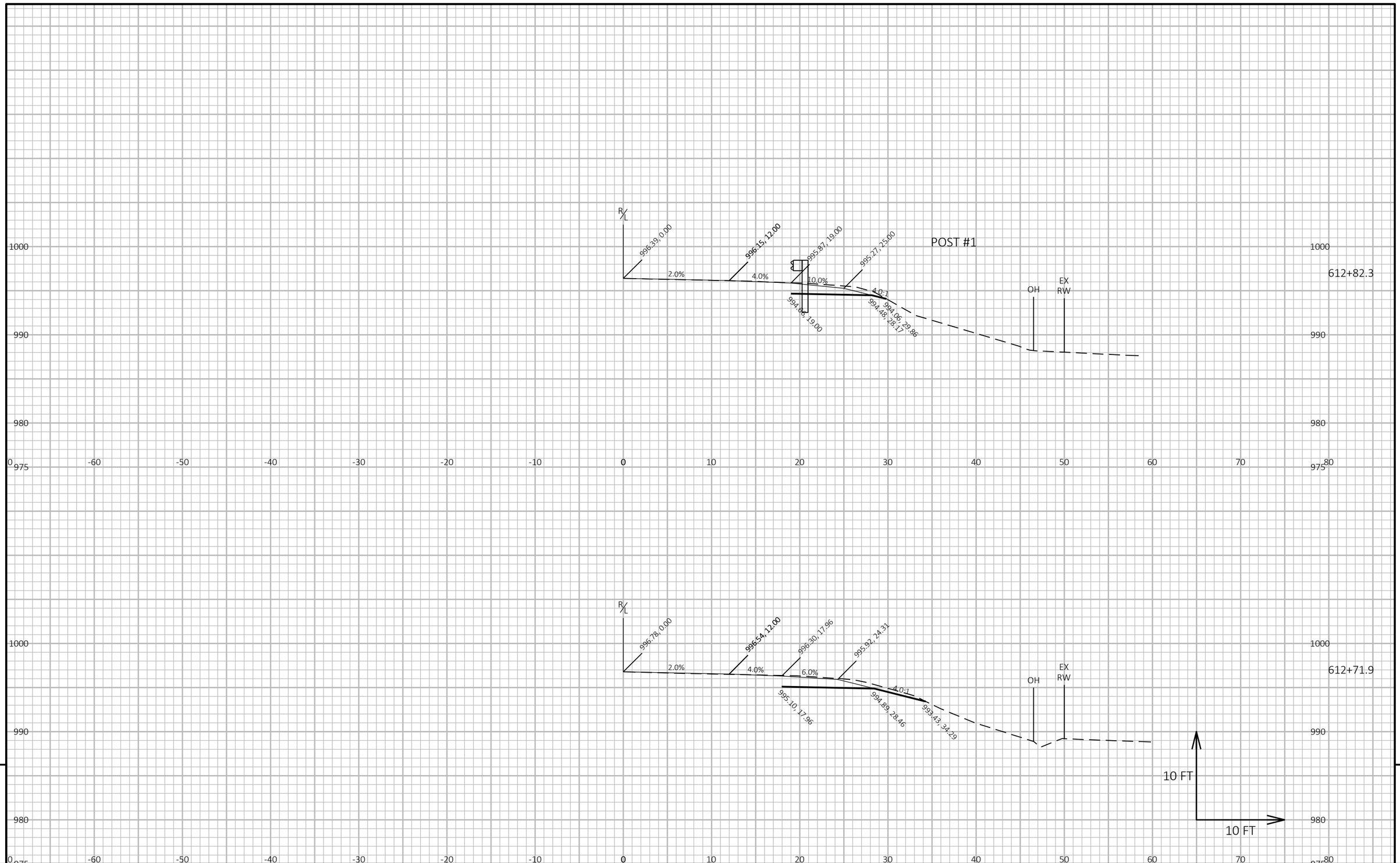
PROJECT NO: 1400-01-70 | HWY: STH 16 | COUNTY: COLUMBIA | EARTHWORK SUMMARY | SHEET NO: 262 | E

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

DIVISION 2 - DRIVEWAY

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50	1.10	1.30	0.60	0.80	NOTE 8
09+15	915.00	0.00	17.94	4.13	0.04	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09+20	920.00	5.00	16.96	4.25	2.26	0.00	0.00	0.00	3	1	0	0	0	0	3	0	0	0	0	0	0	2
09+30	930.00	10.00	15.85	4.88	7.11	0.00	0.00	0.00	6	2	2	0	0	0	9	3	0	0	0	0	0	4
09+37.728	937.73	7.73	15.95	5.50	6.21	0.00	0.00	0.00	5	1	2	0	0	0	14	5	0	0	0	0	0	5
09+40	940.00	2.27	15.90	5.75	6.86	0.00	0.00	0.00	1	0	1	0	0	0	15	6	0	0	0	0	0	5
09+50	950.00	10.00	12.71	7.75	12.29	0.00	0.00	0.00	5	3	4	0	0	0	20	11	0	0	0	0	0	2
09+60	960.00	10.00	7.44	0.00	5.65	0.00	0.00	0.00	4	1	3	0	0	0	24	15	0	0	0	0	0	1
09+70	970.00	10.00	0.16	0.00	6.90	0.00	0.00	0.00	1	0	2	0	0	0	25	18	0	0	0	0	0	-1
09+80	980.00	10.00	0.04	0.00	10.84	0.00	0.00	0.00	0	0	3	0	0	0	25	21	0	0	0	0	0	-4

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 264	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 01

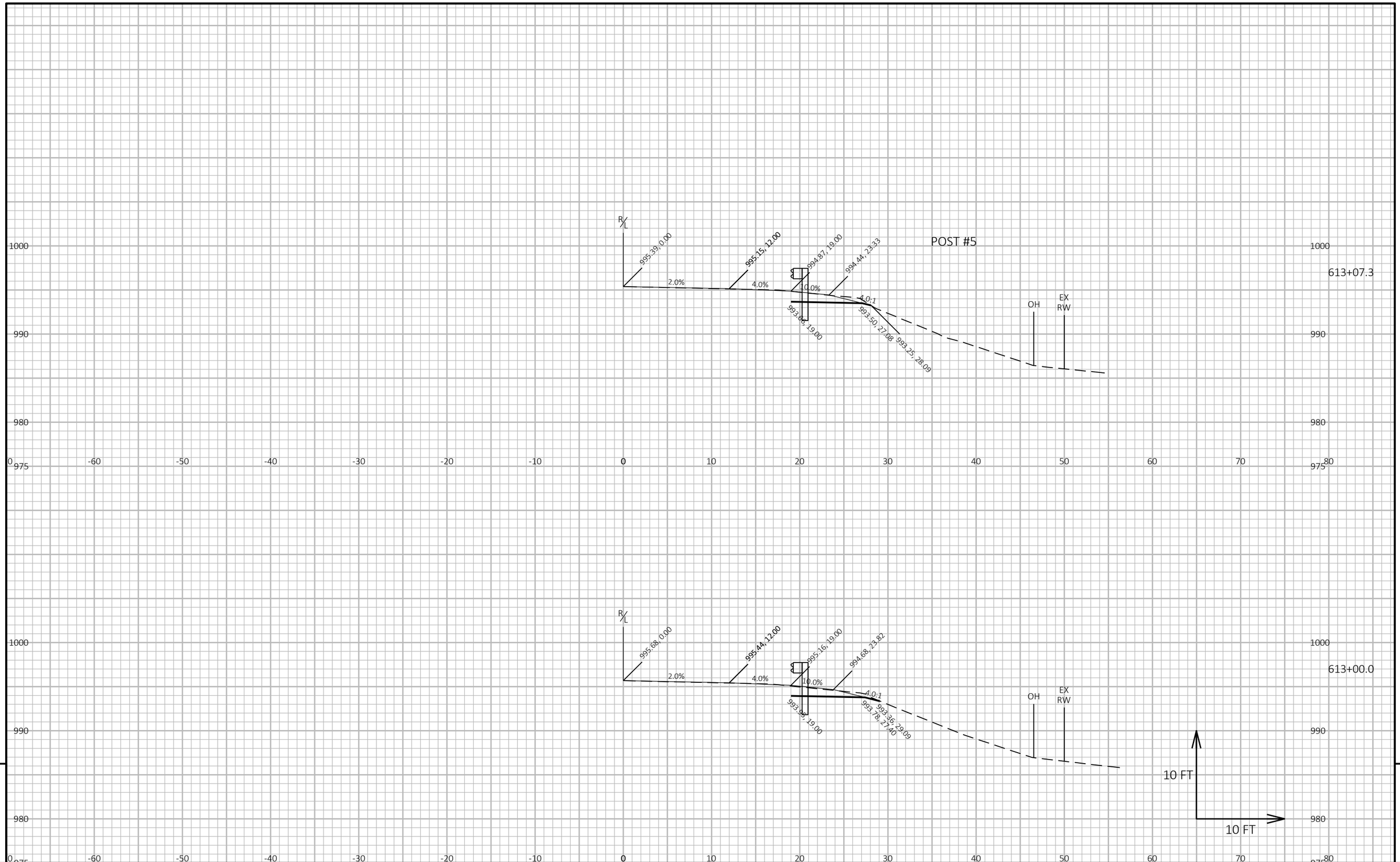
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

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: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 265	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 02

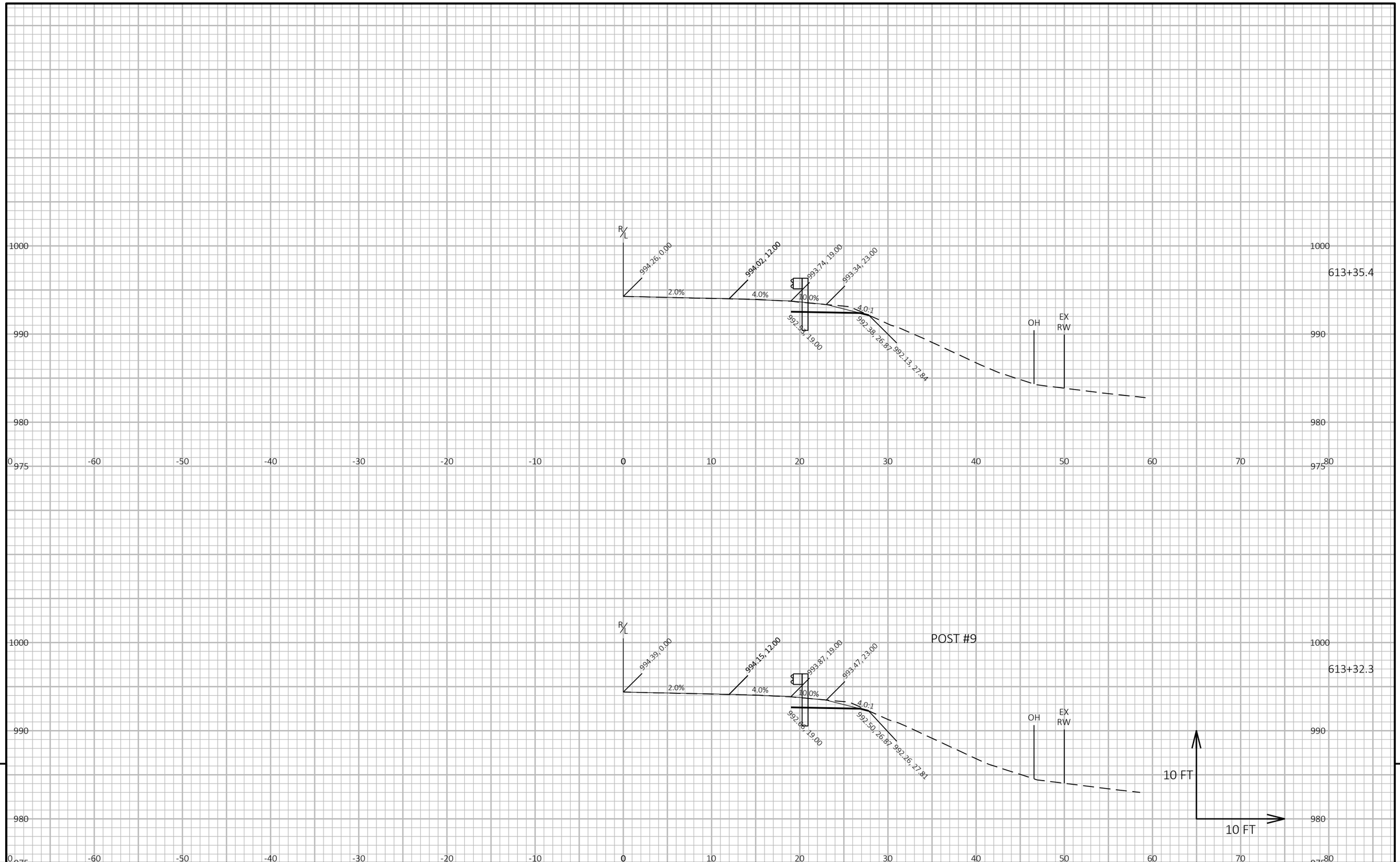
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 266	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 03

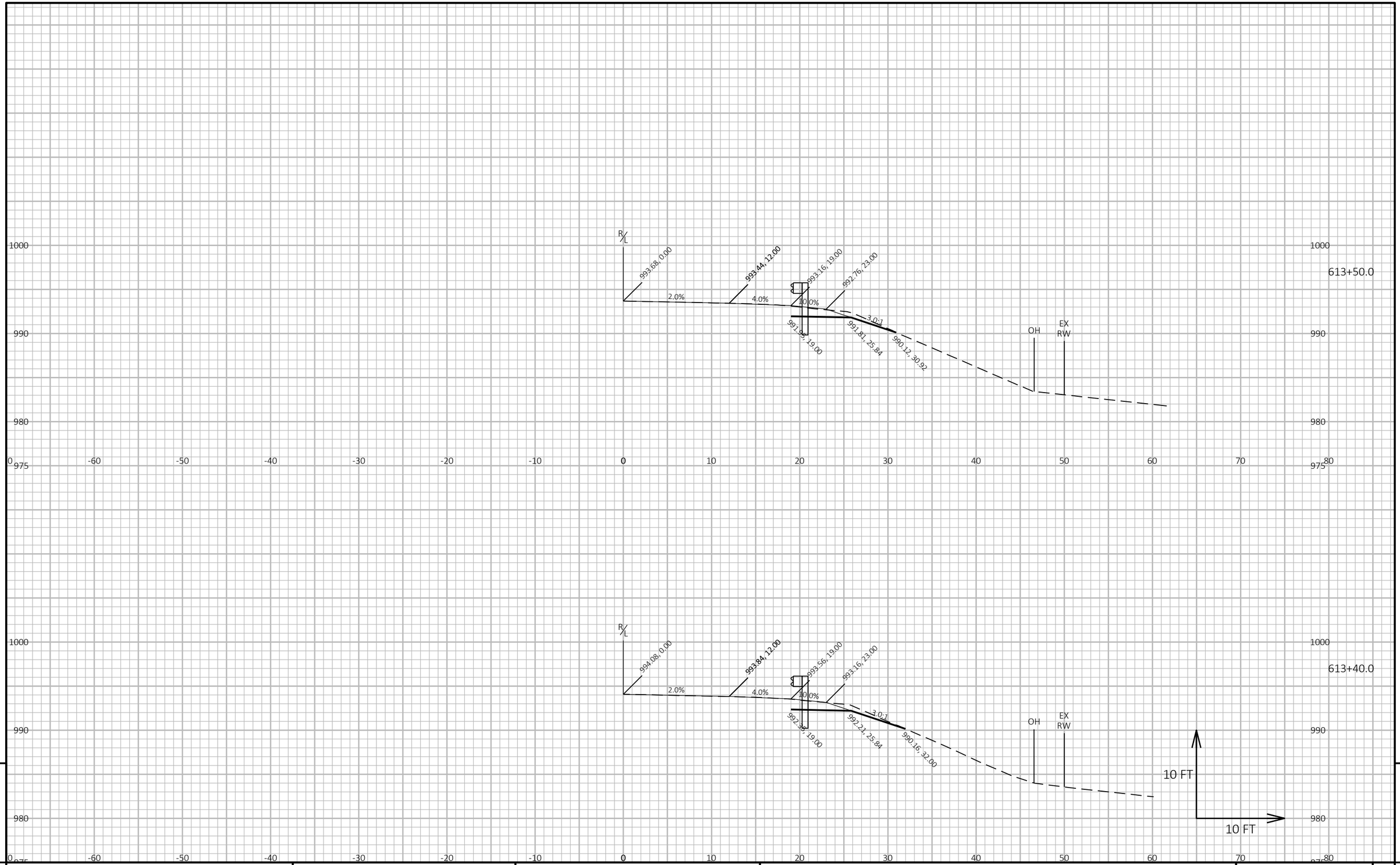
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 267	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 04

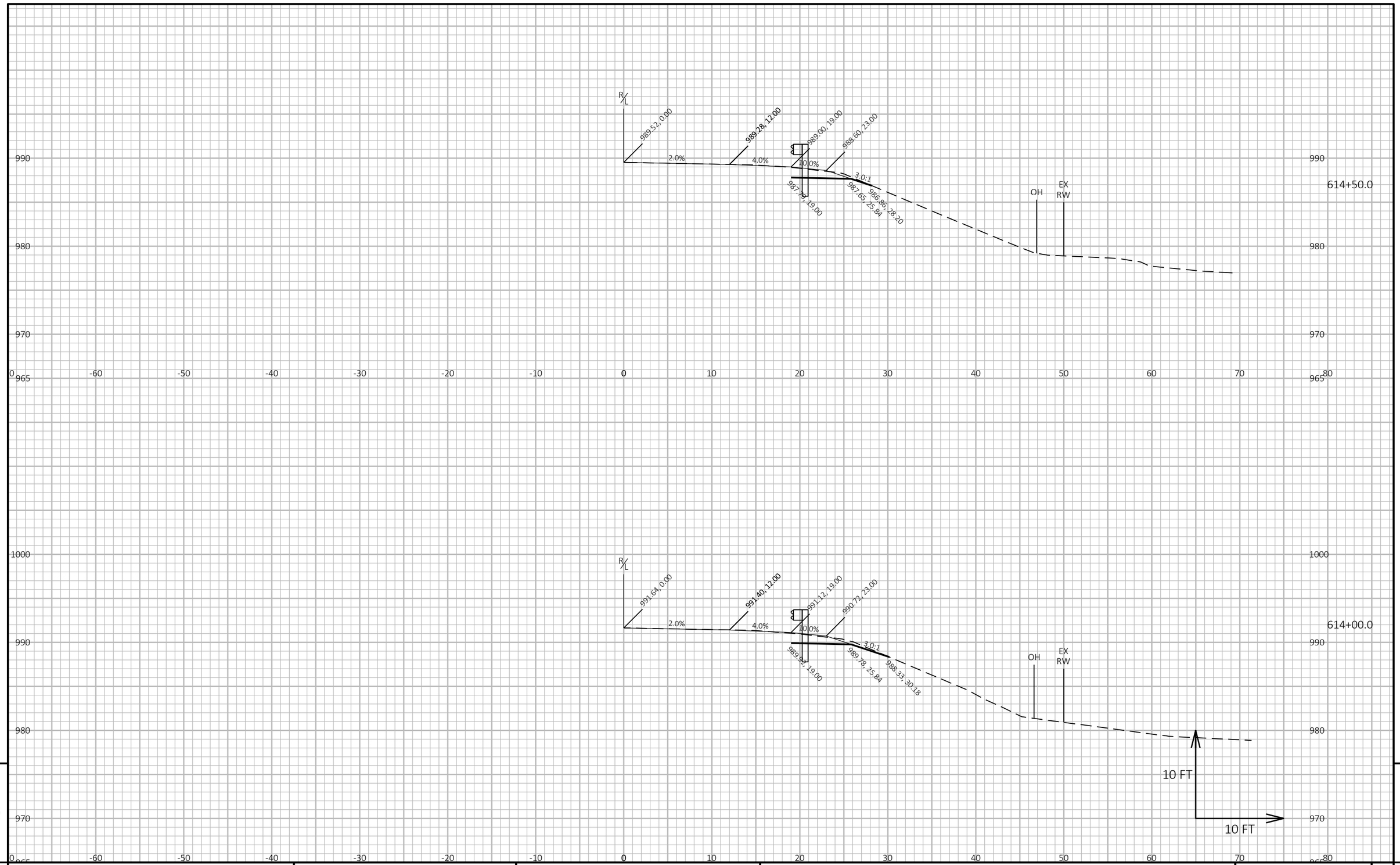
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 268	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 05

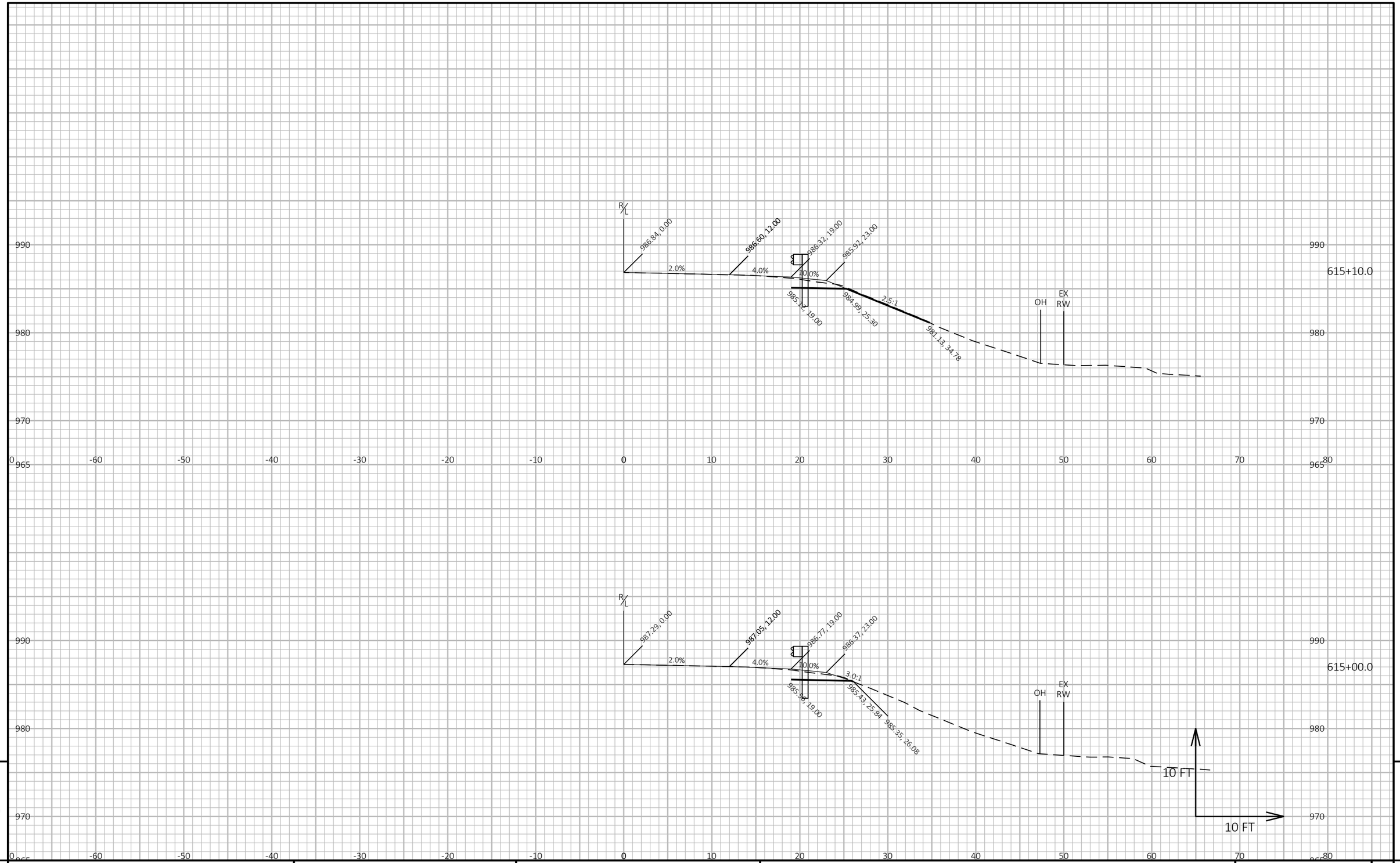
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 269	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 06

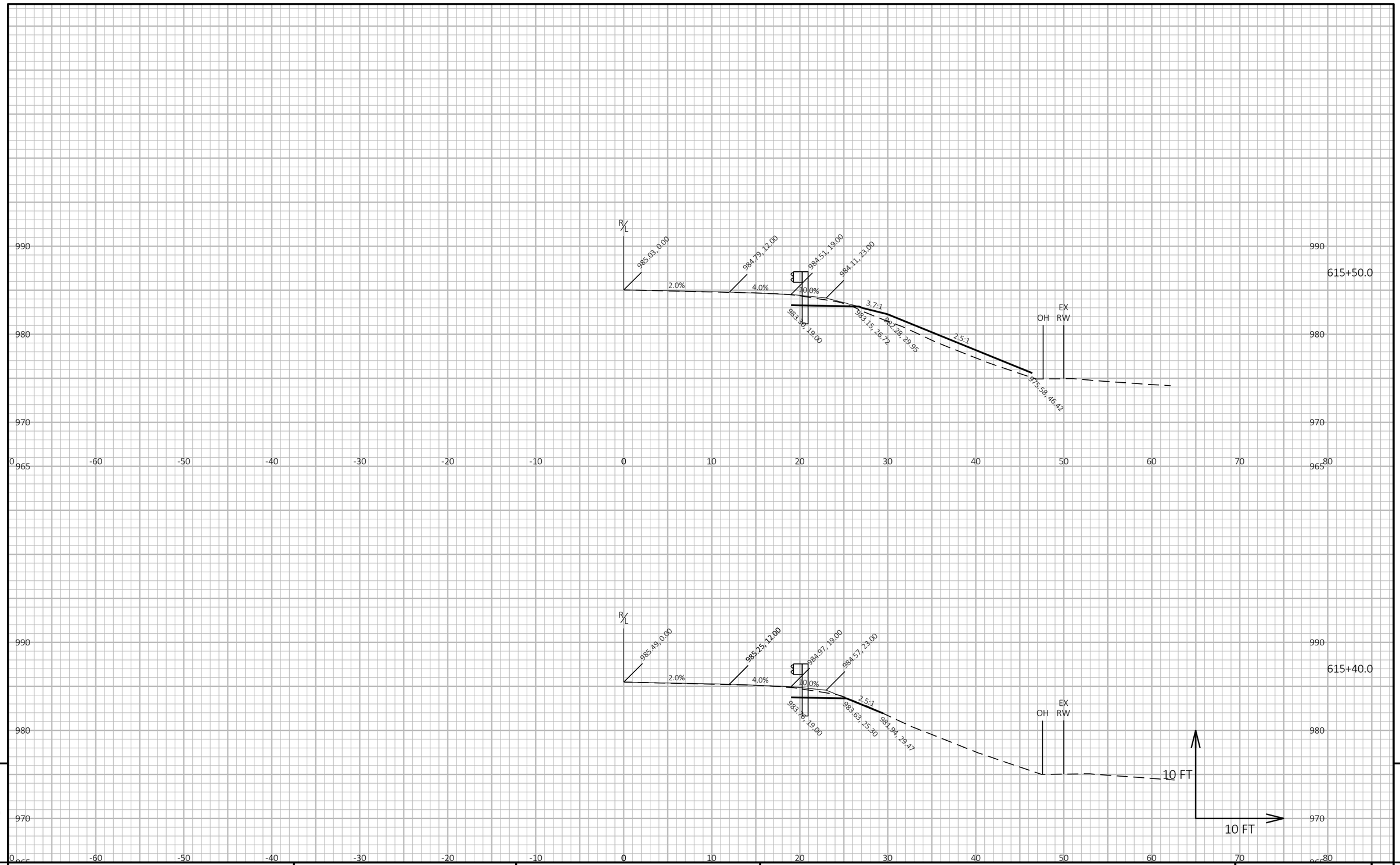
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 270	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 07

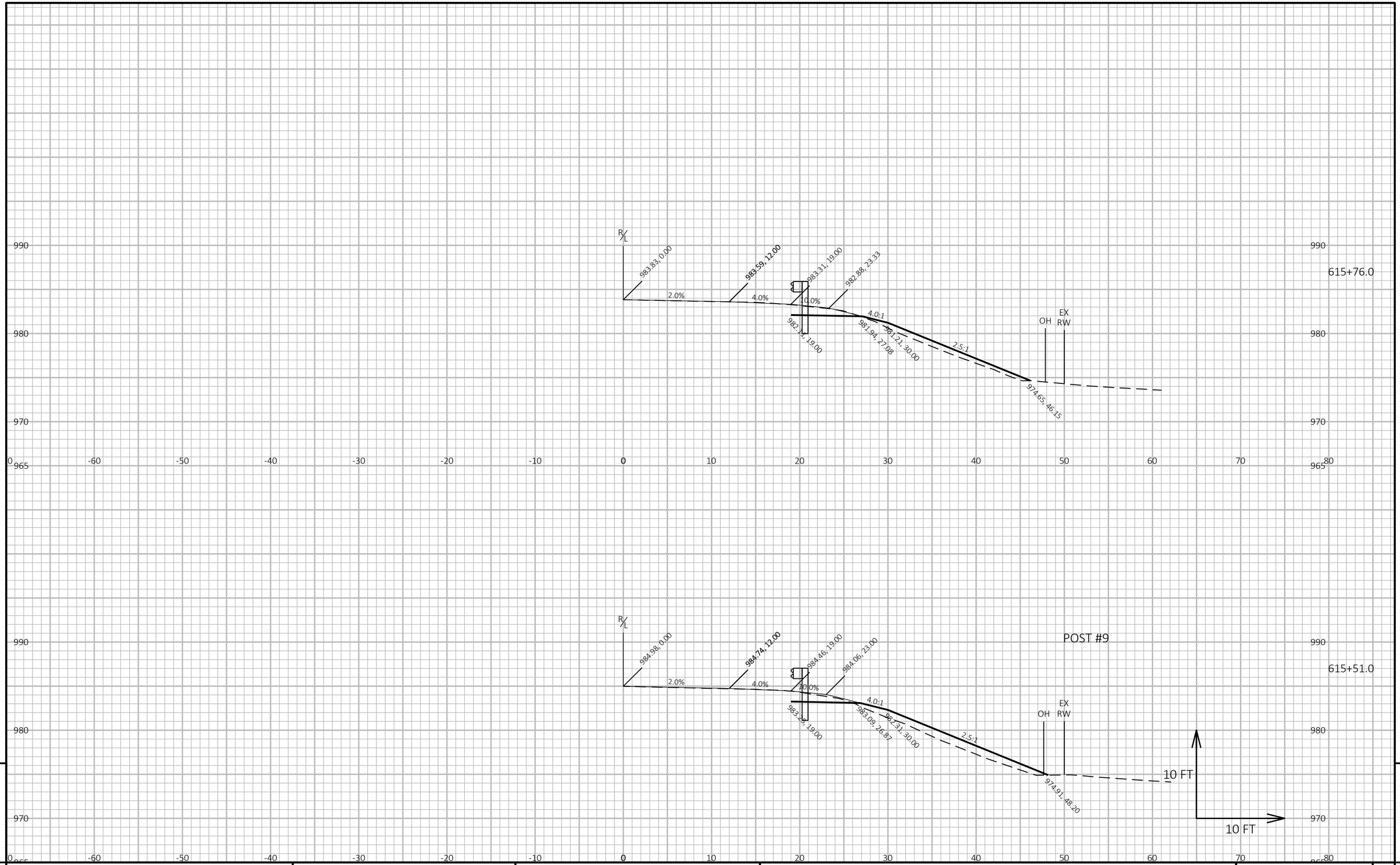
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 271	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 08

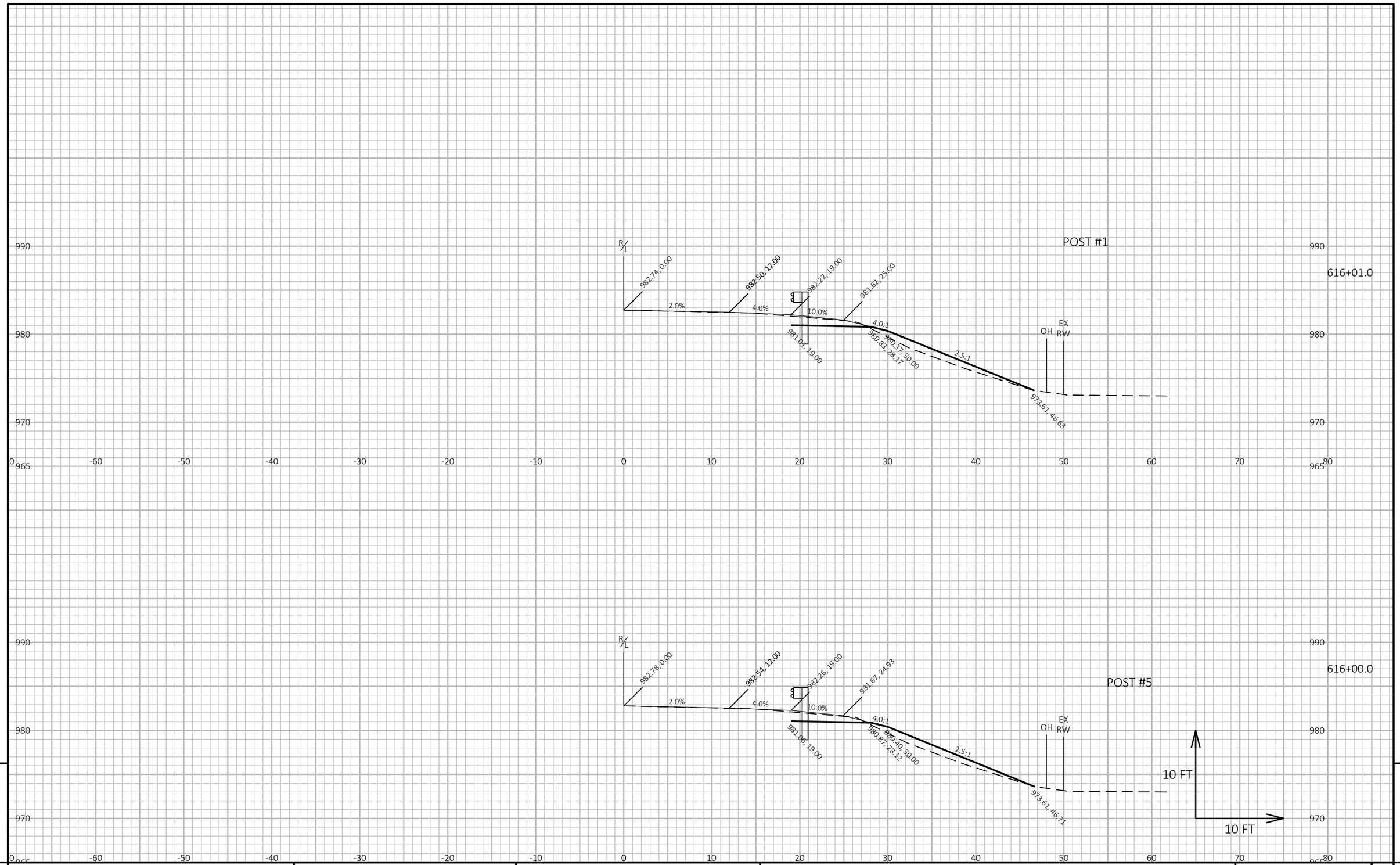
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 272	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 09

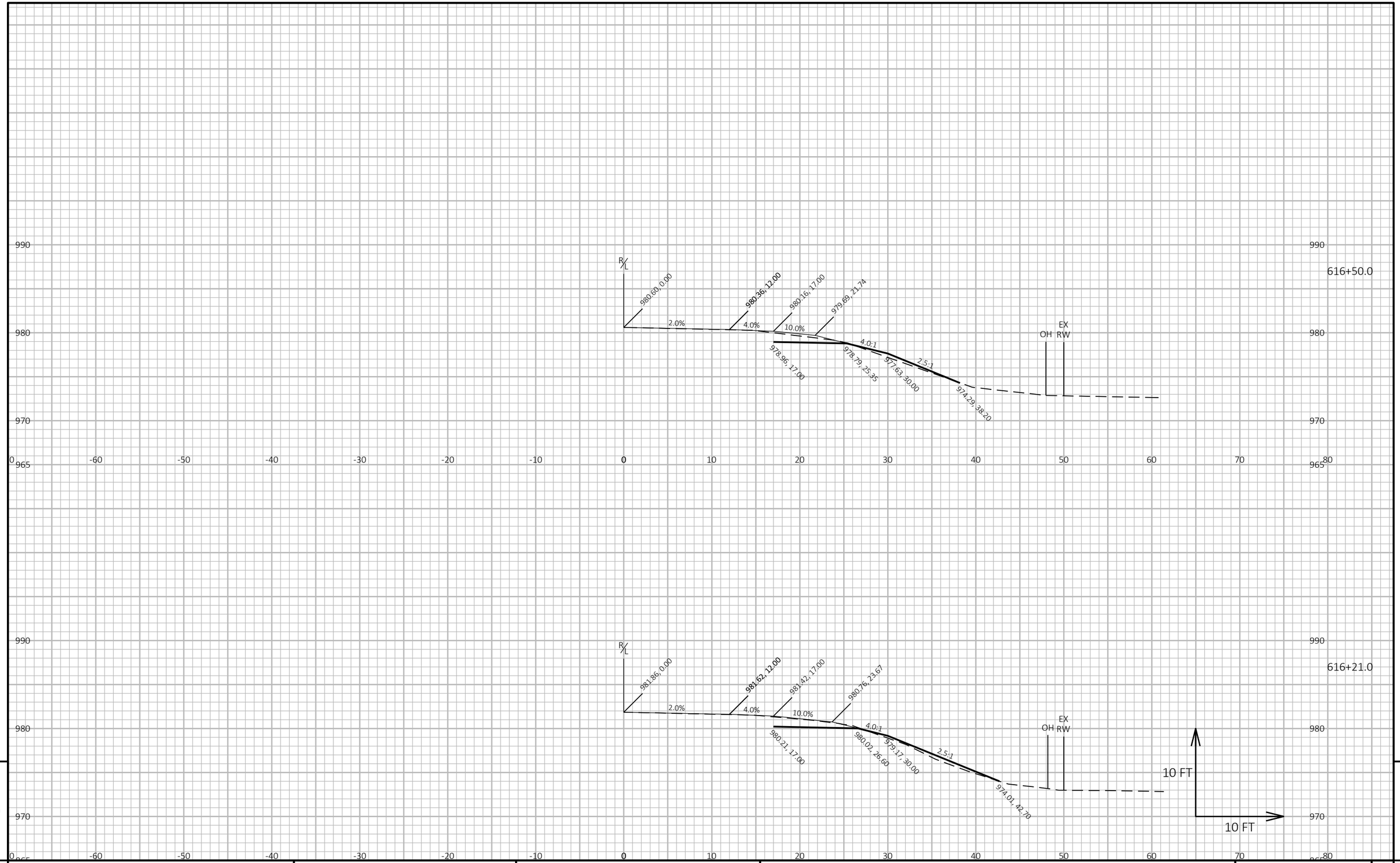
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 273	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 10

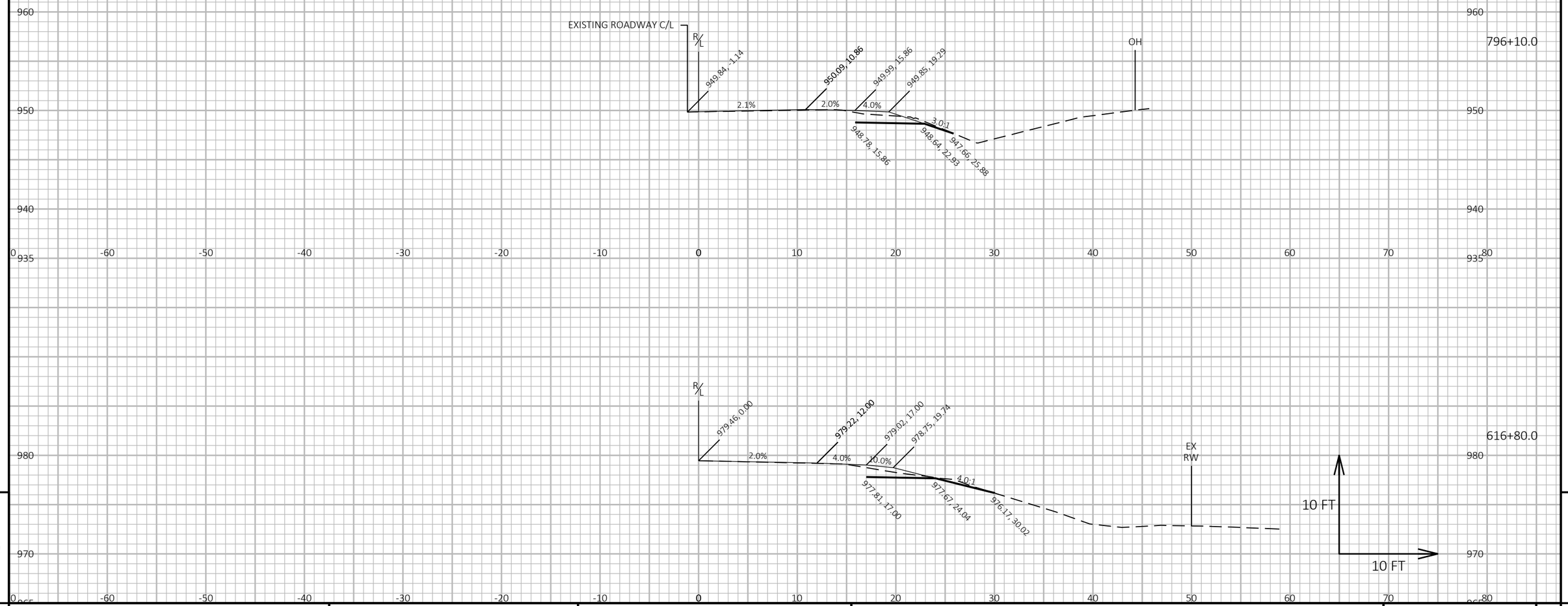
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 274	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 11

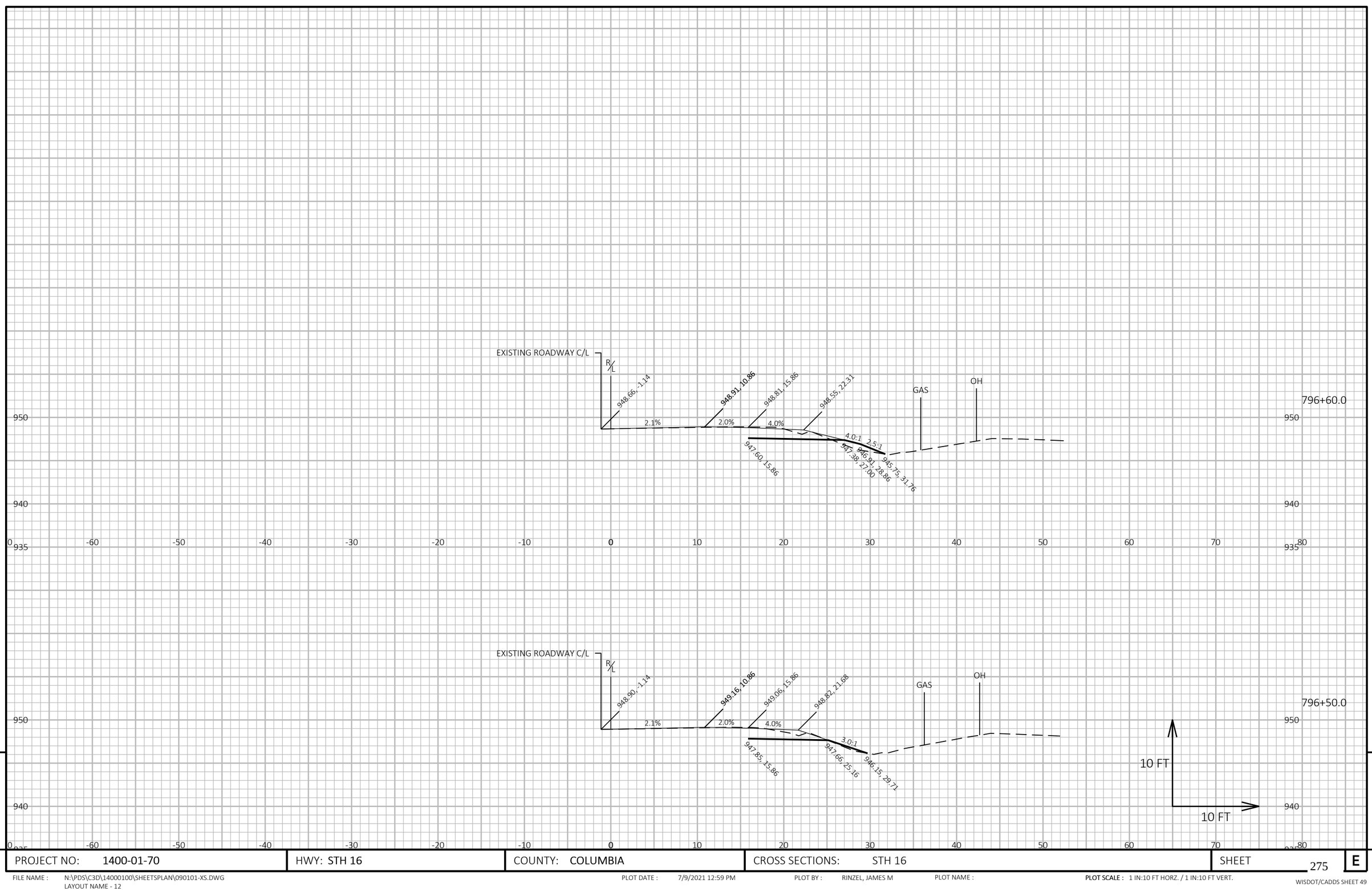
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 275	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 12

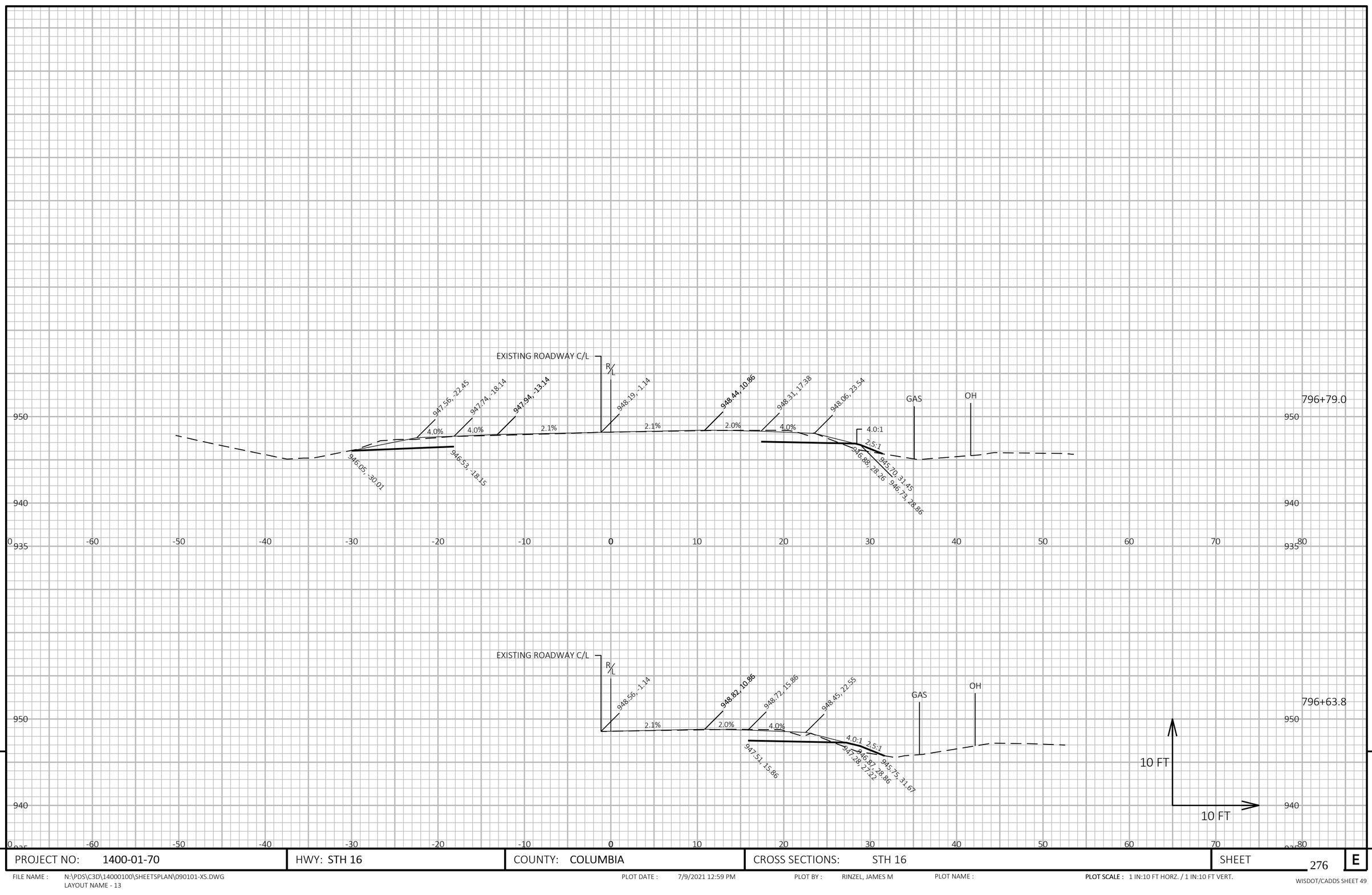
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

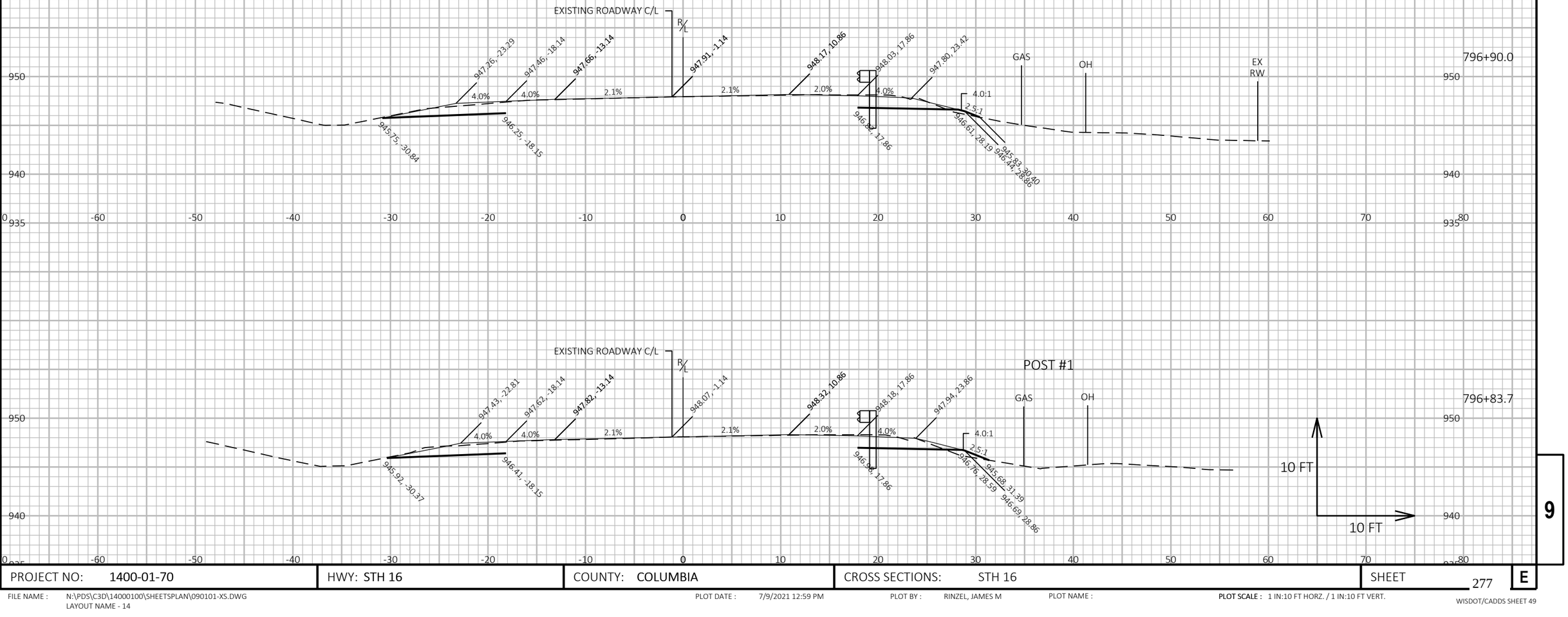


PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 276	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/9/2021 12:59 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 277	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 14

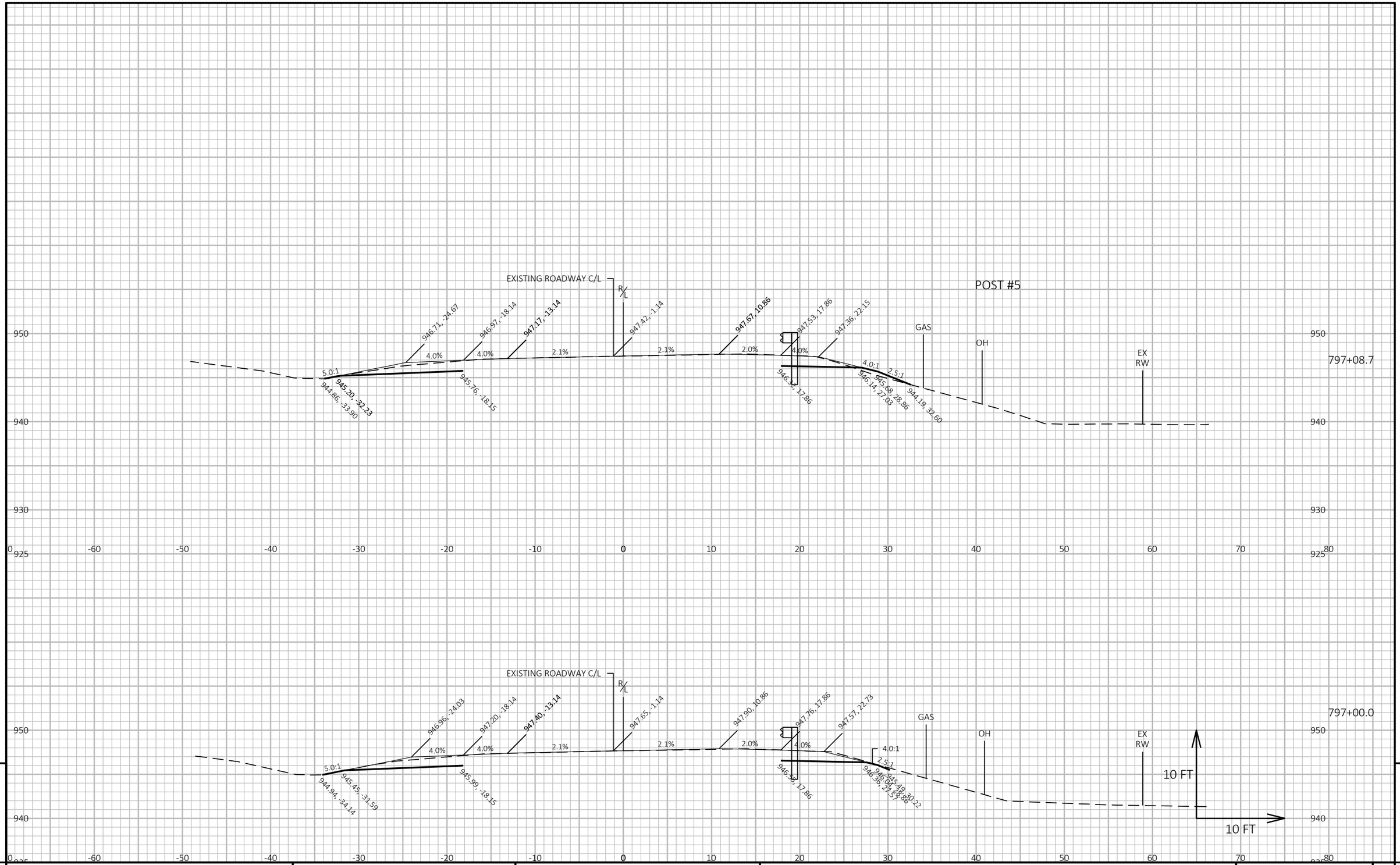
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 278	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 15

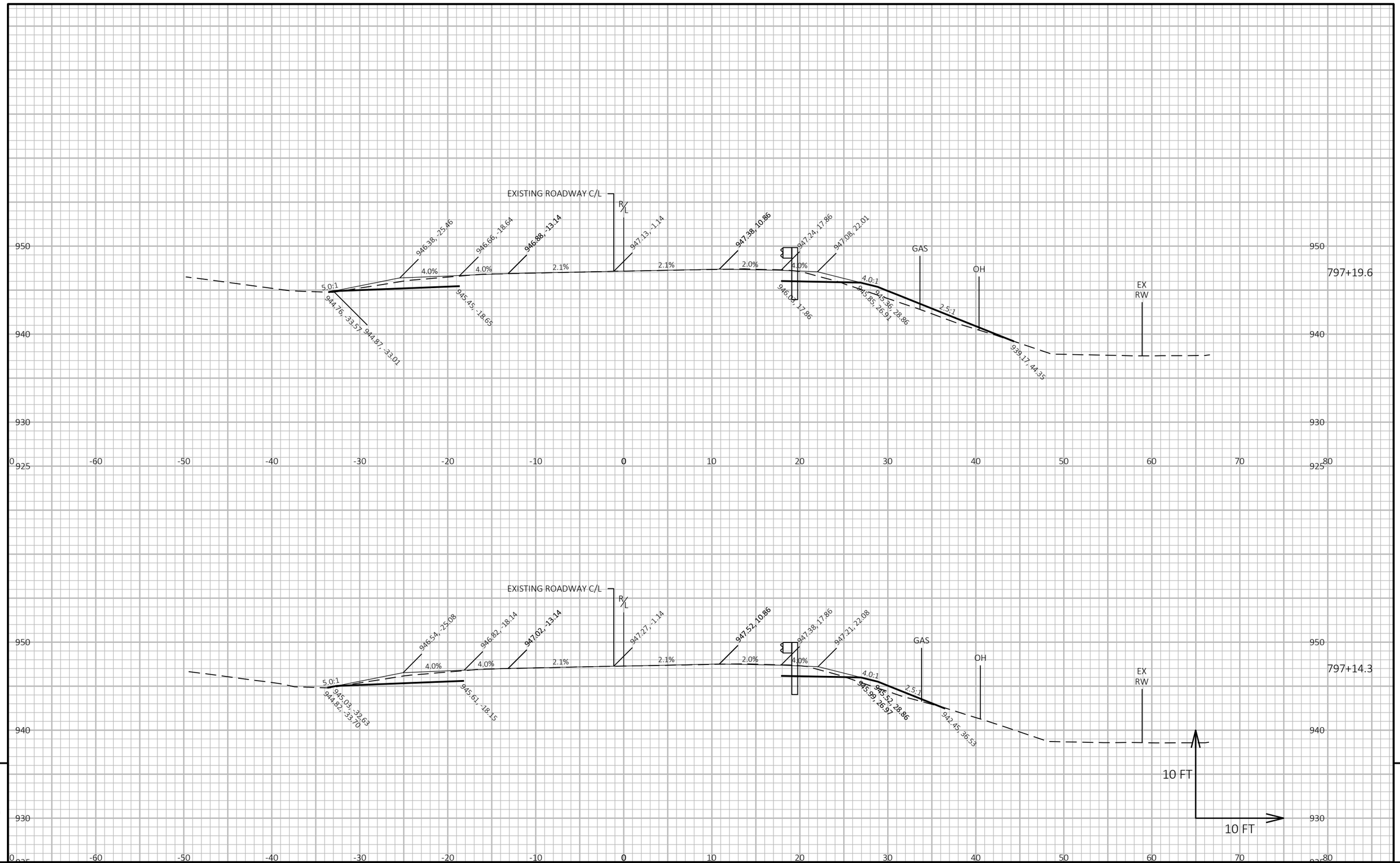
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 279	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 16

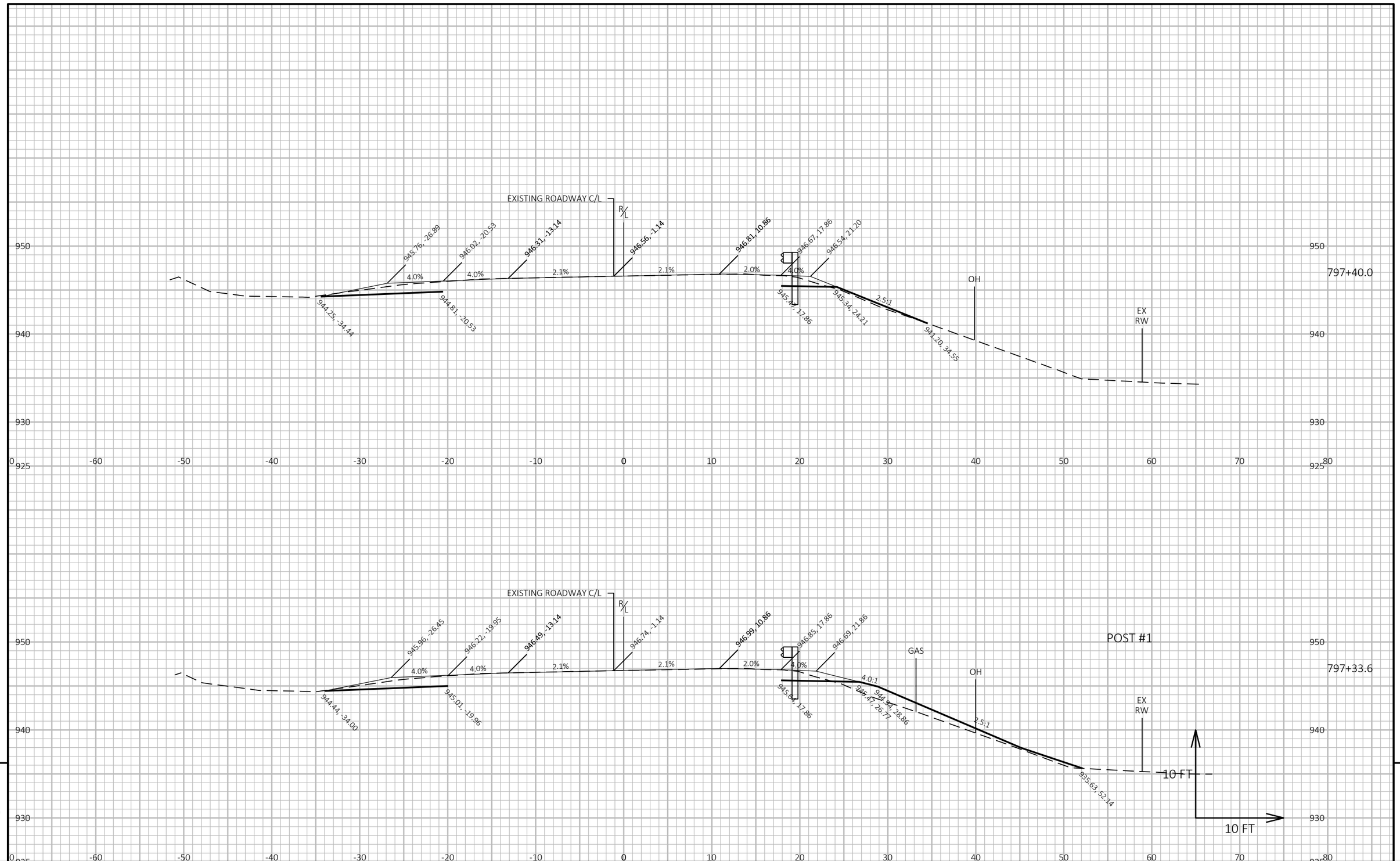
PLOT DATE : 7/9/2021 12:59 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 280	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 17

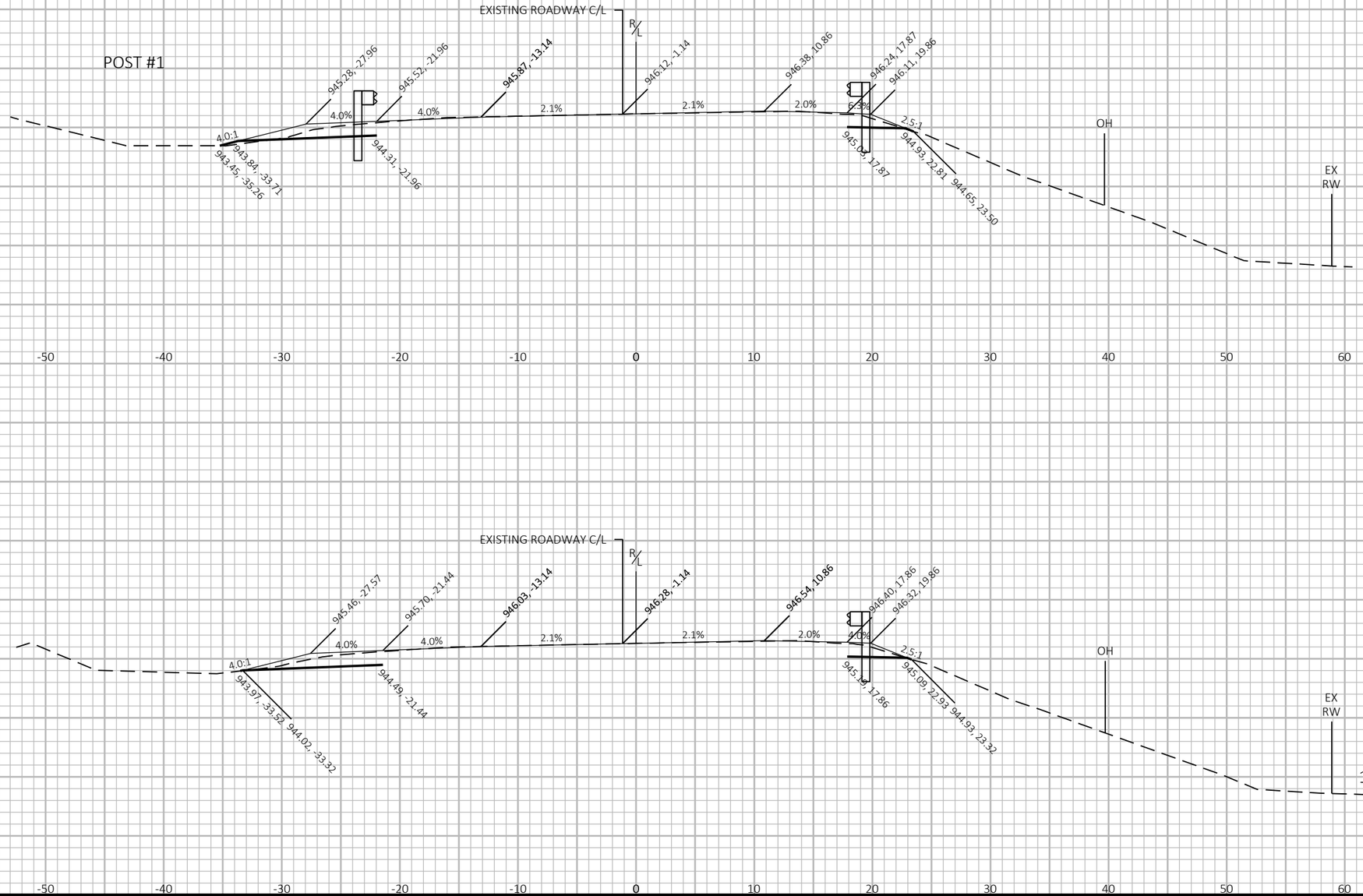
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 281 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 18

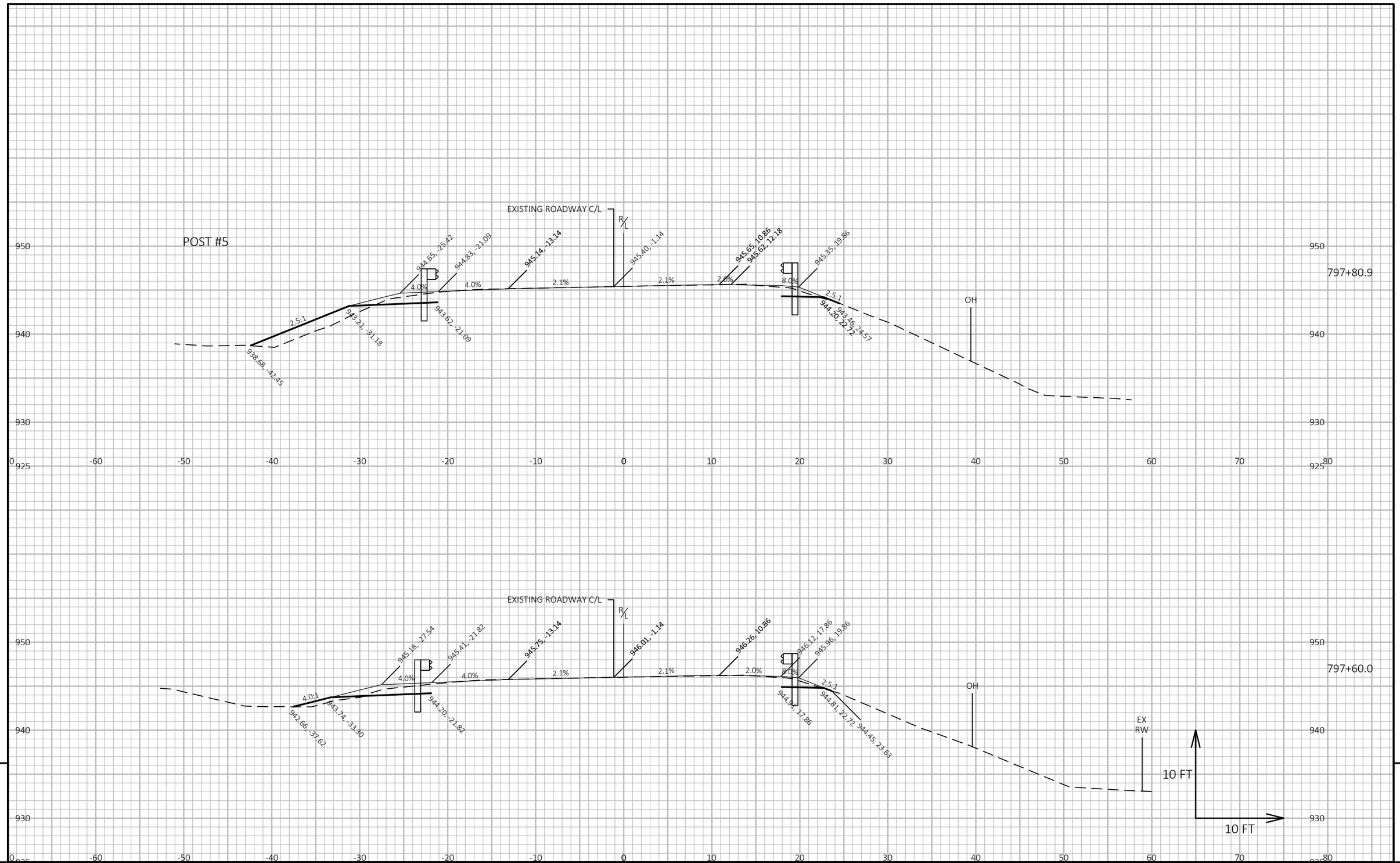
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 282	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 19

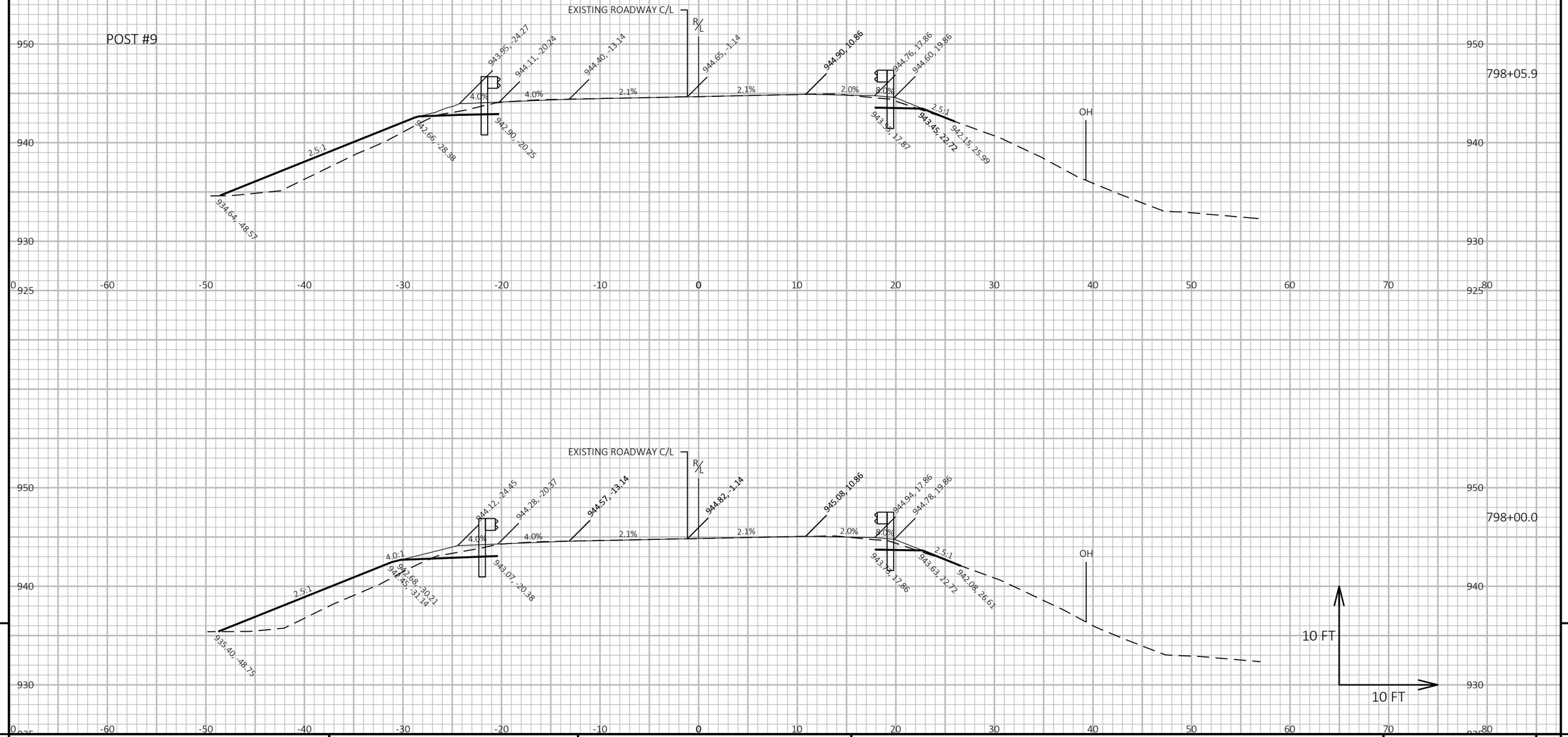
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 283 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 20

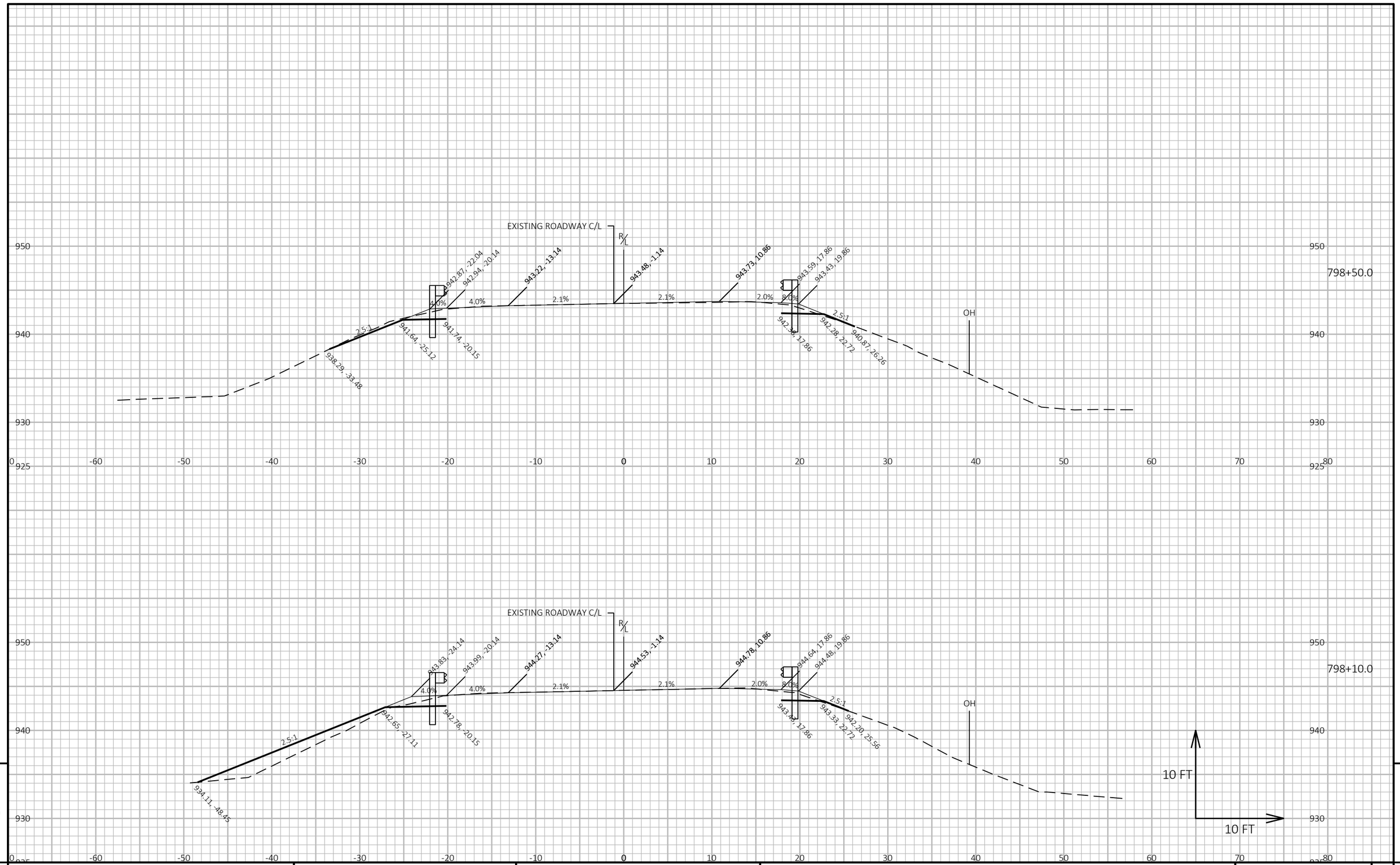
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 284 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 21

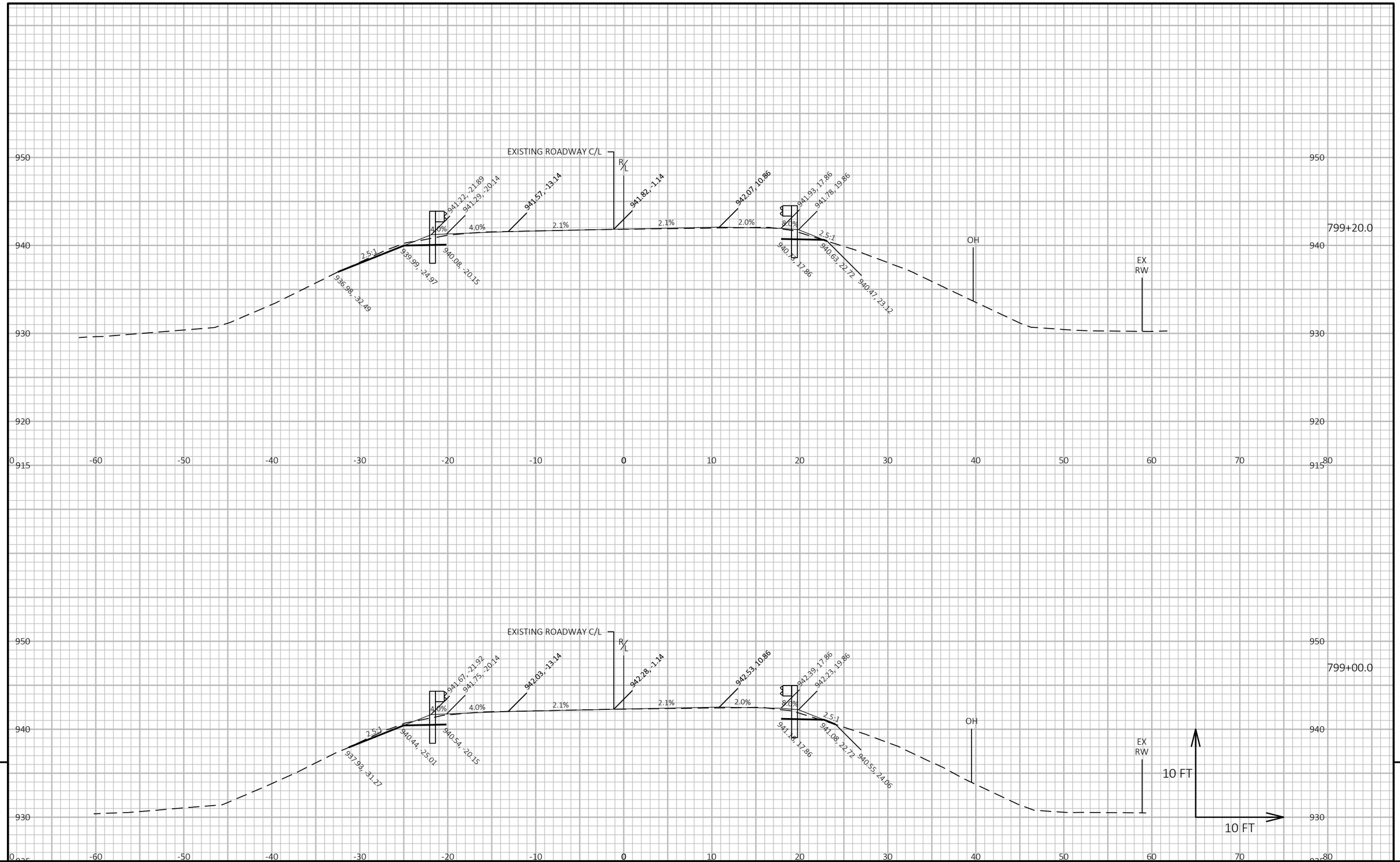
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 285 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 22

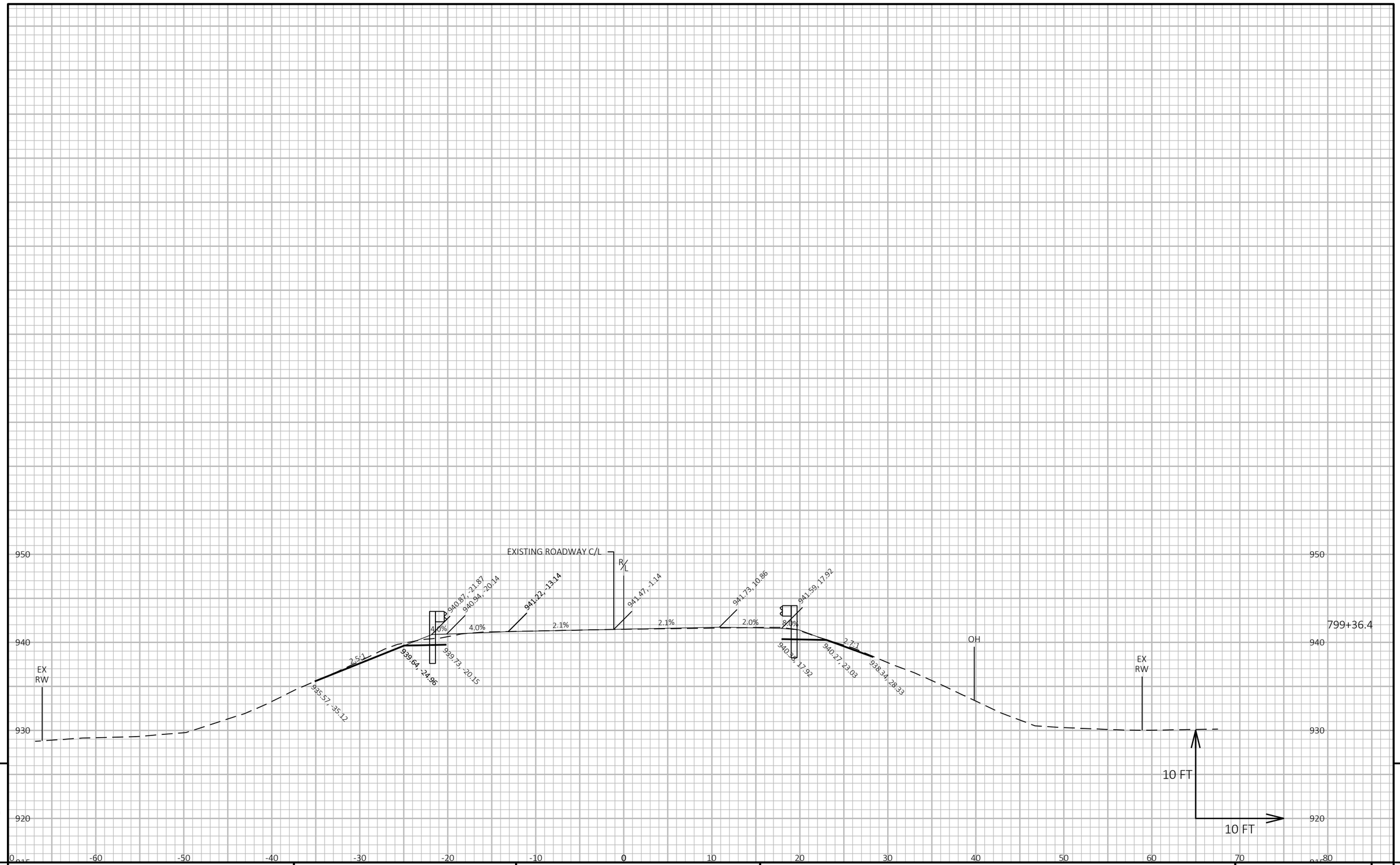
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 286	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 23

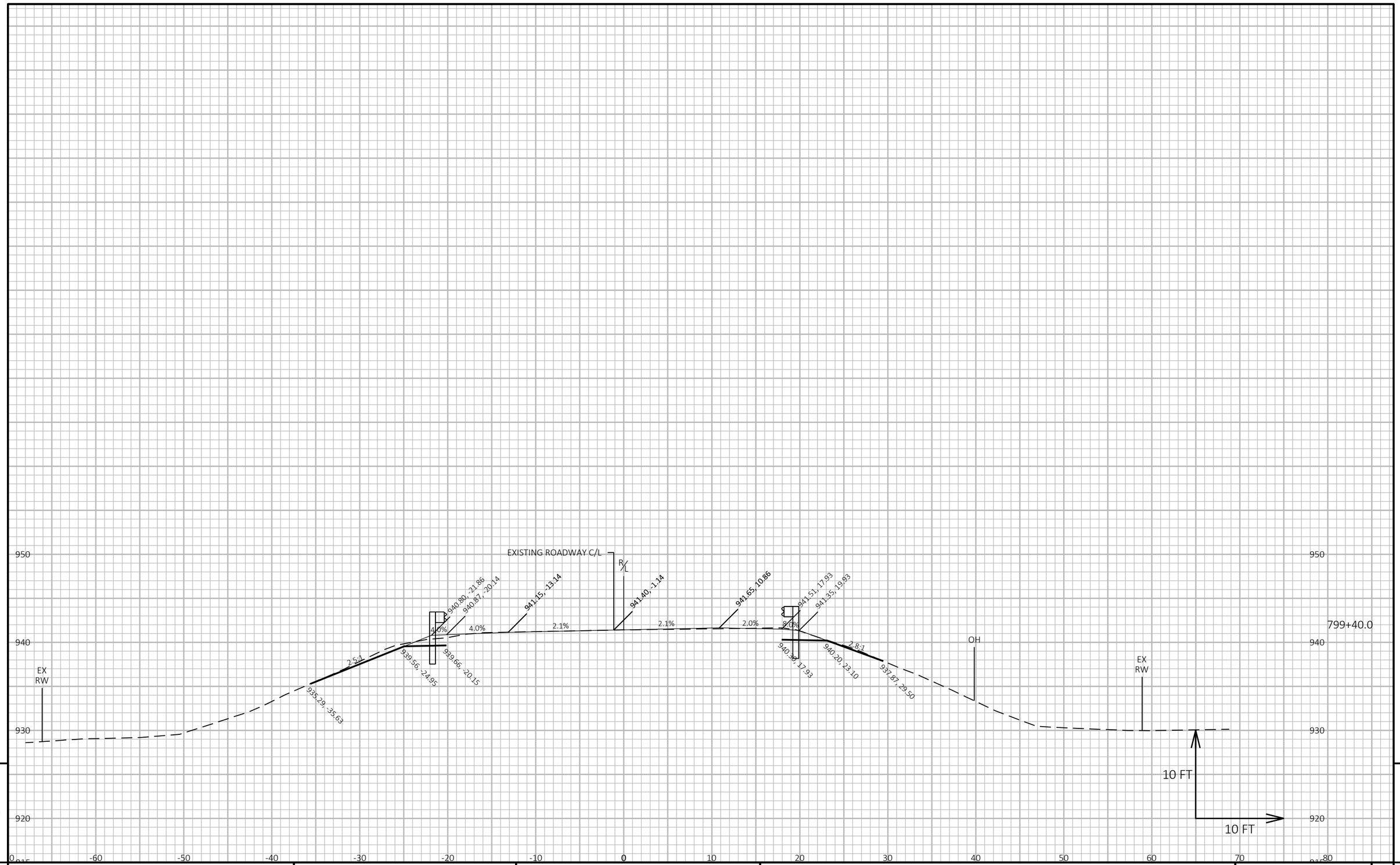
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

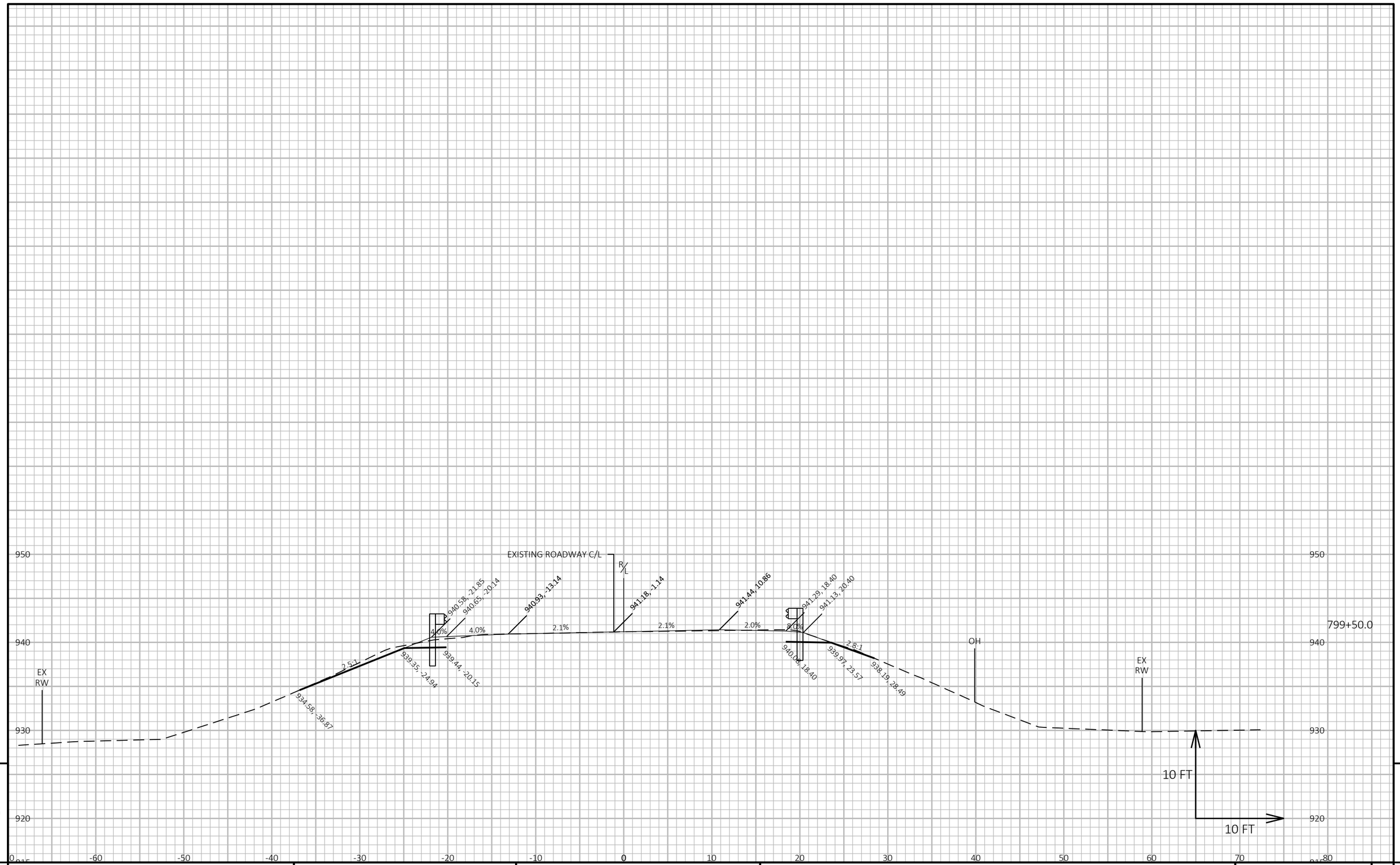


9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 287	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 7/9/2021 1:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

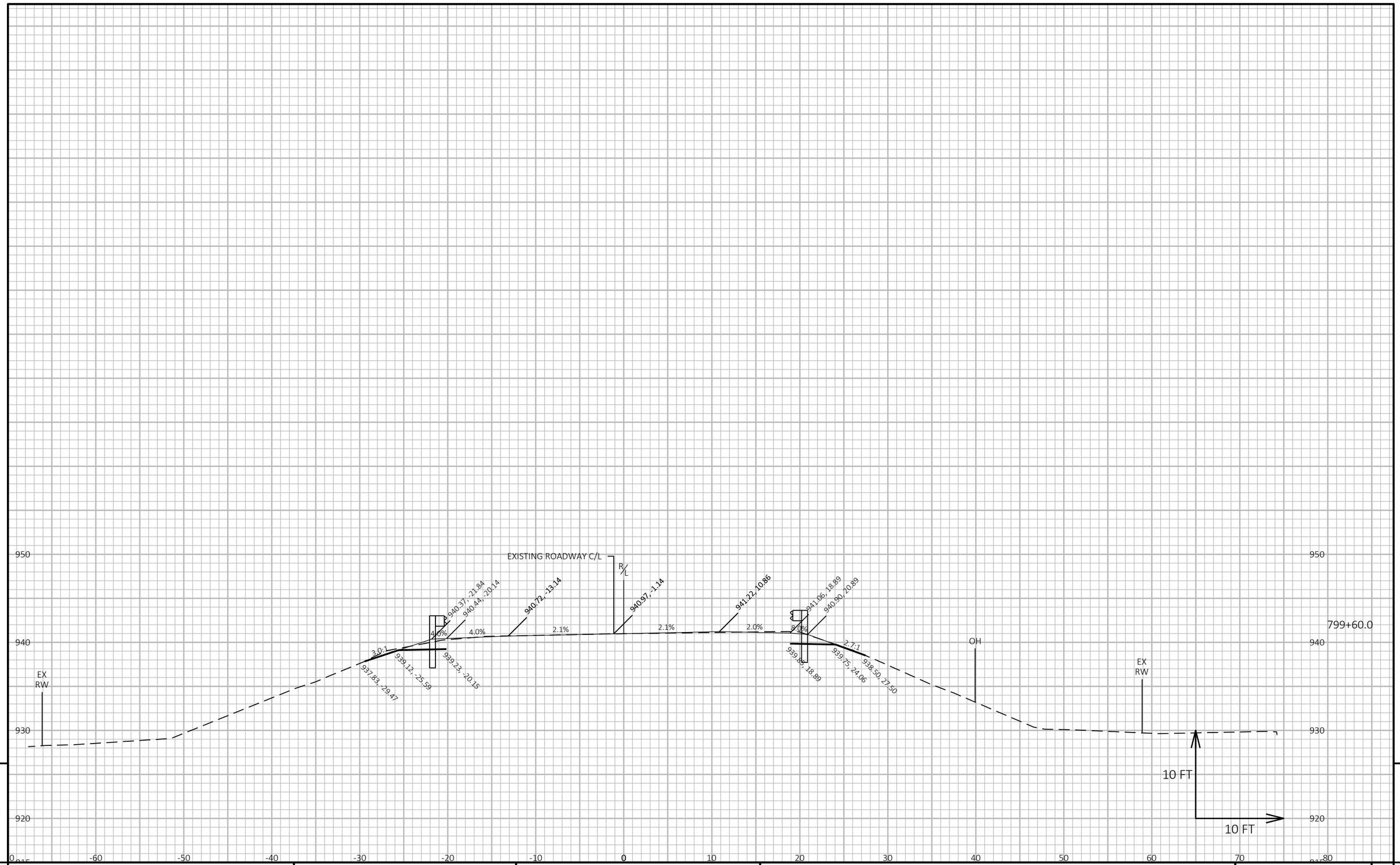


9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 288	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 7/9/2021 1:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



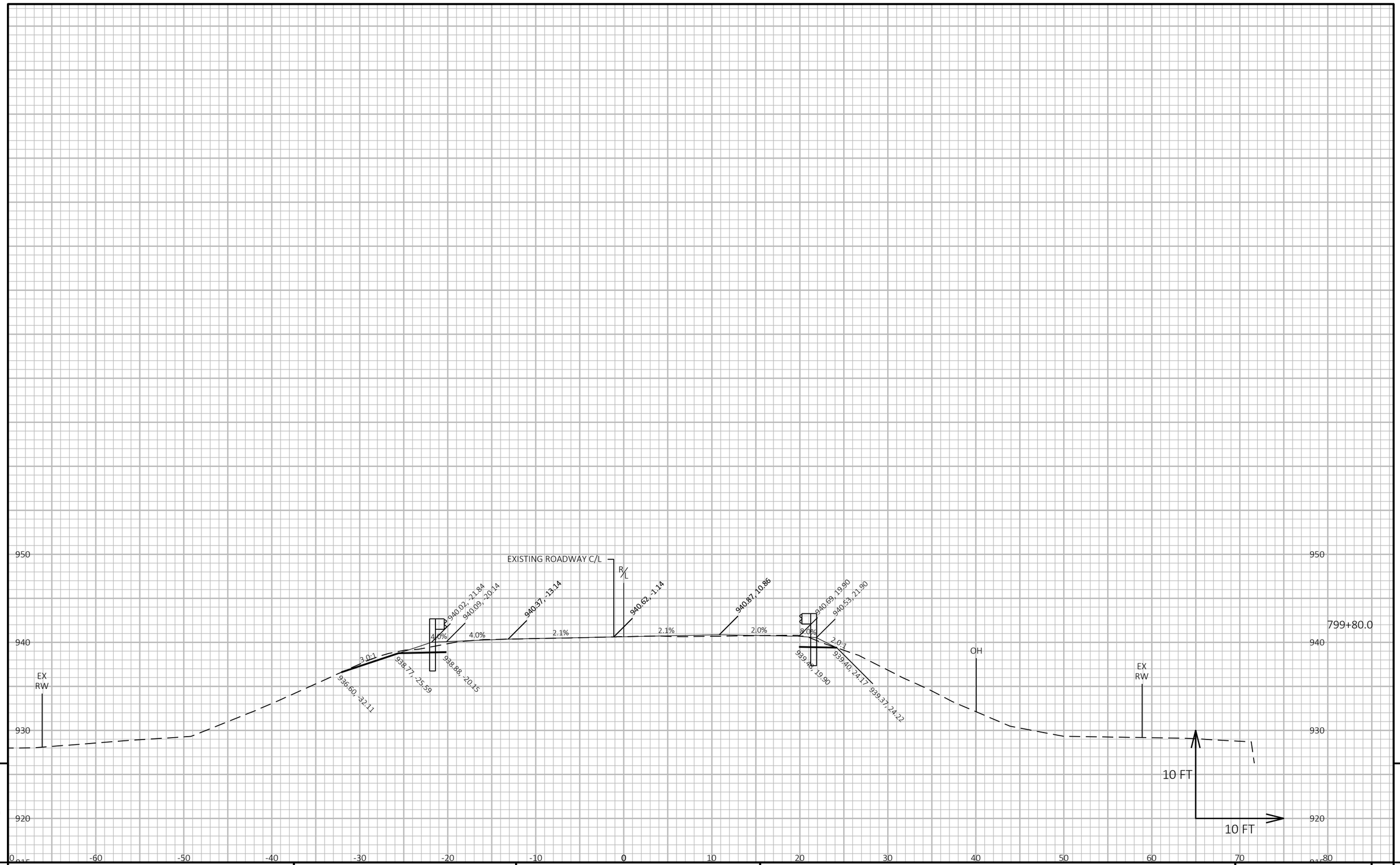
9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 289	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 7/9/2021 1:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 290	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 27

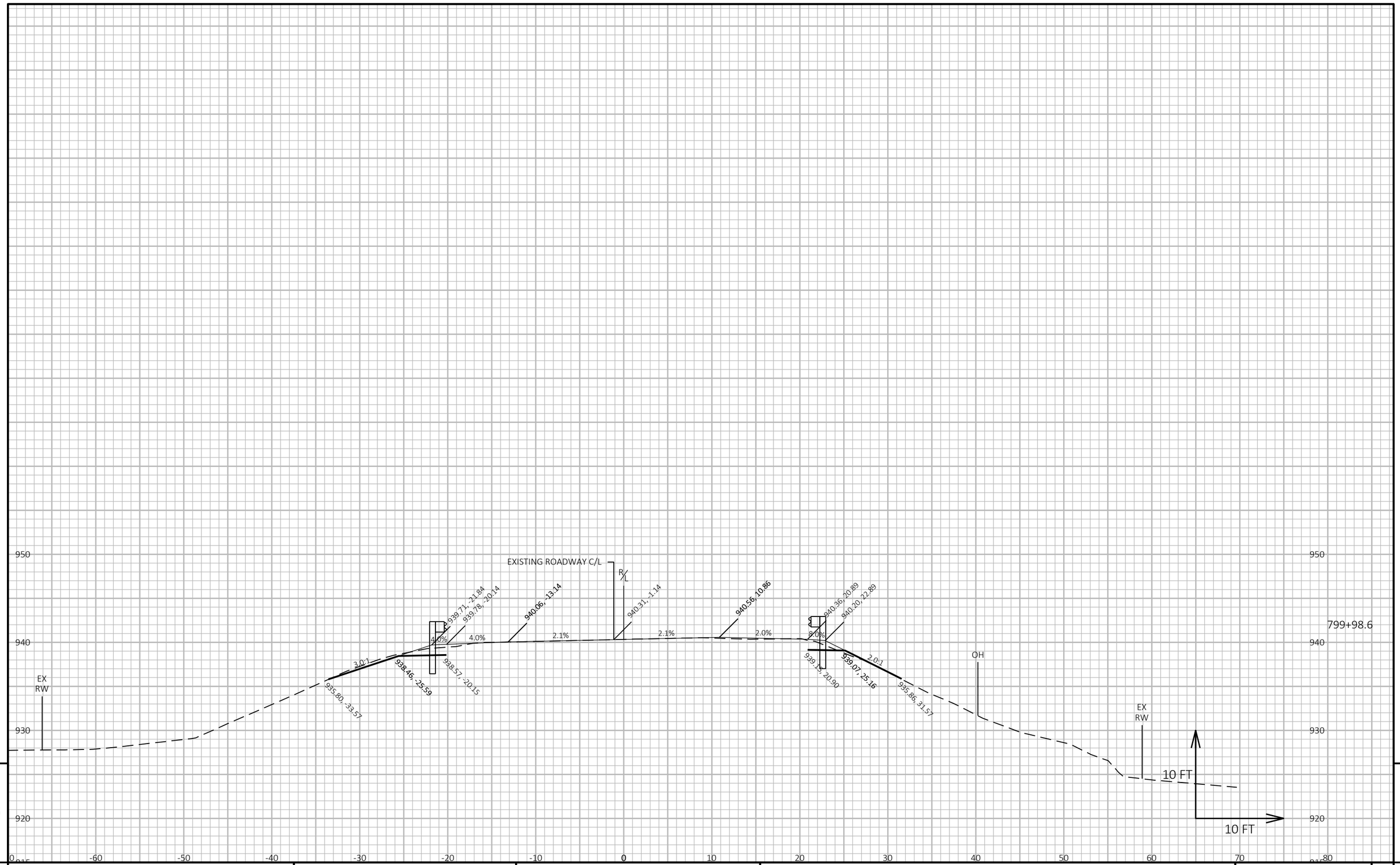
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

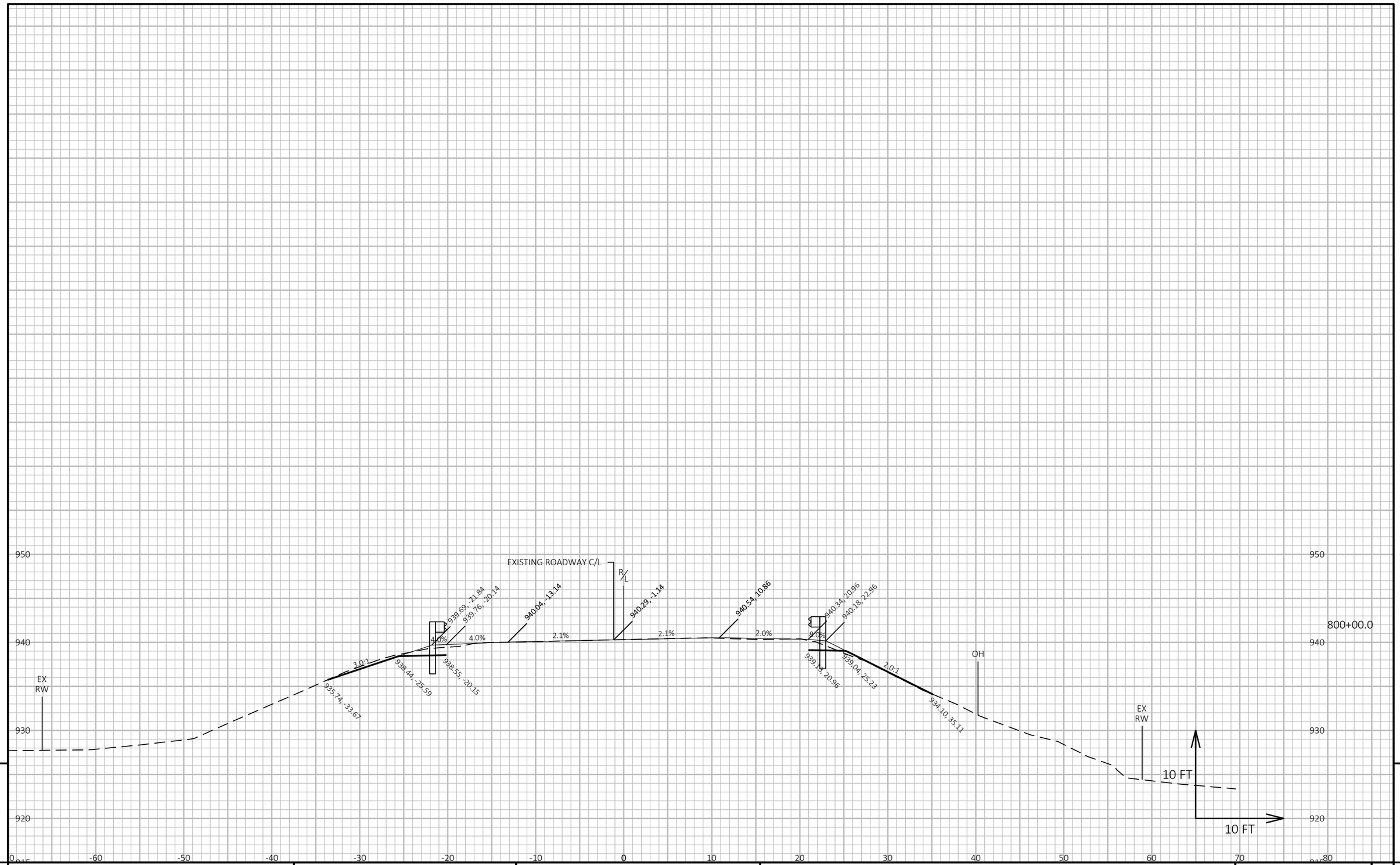


9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 291	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 28

PLOT DATE : 7/9/2021 1:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



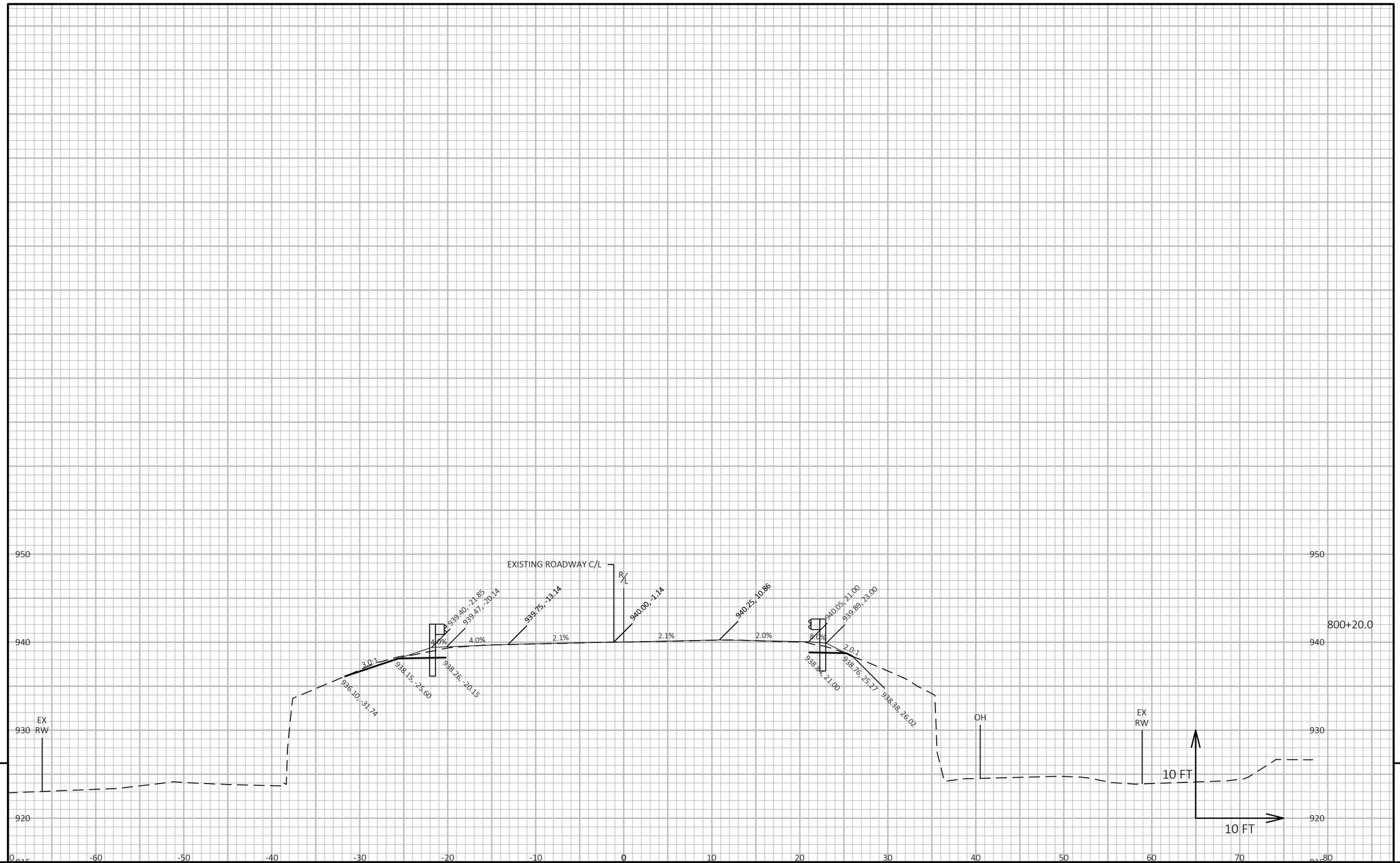
9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 292	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 7/9/2021 1:00 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 293	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 30

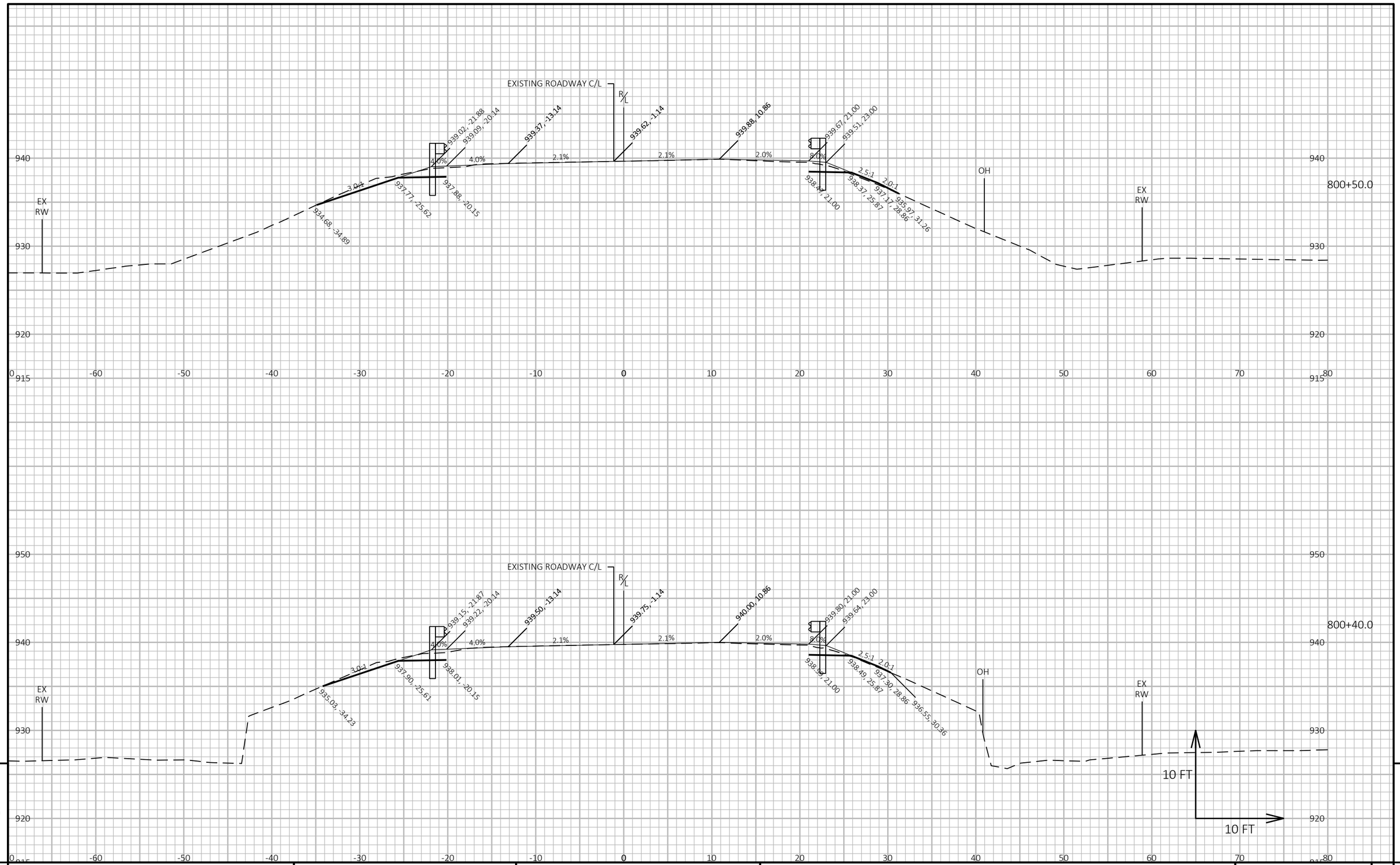
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 294	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 31

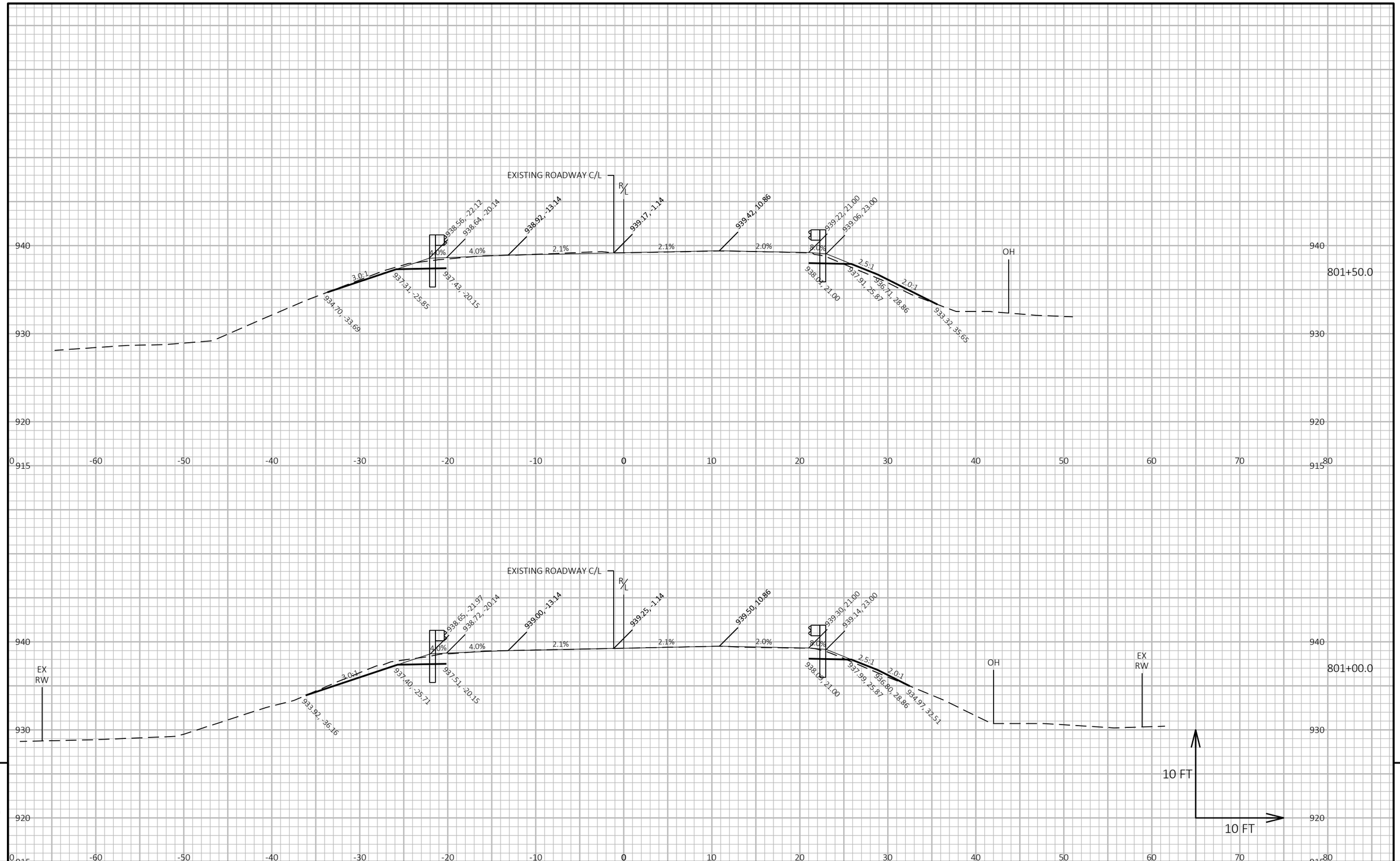
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 295 E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 32

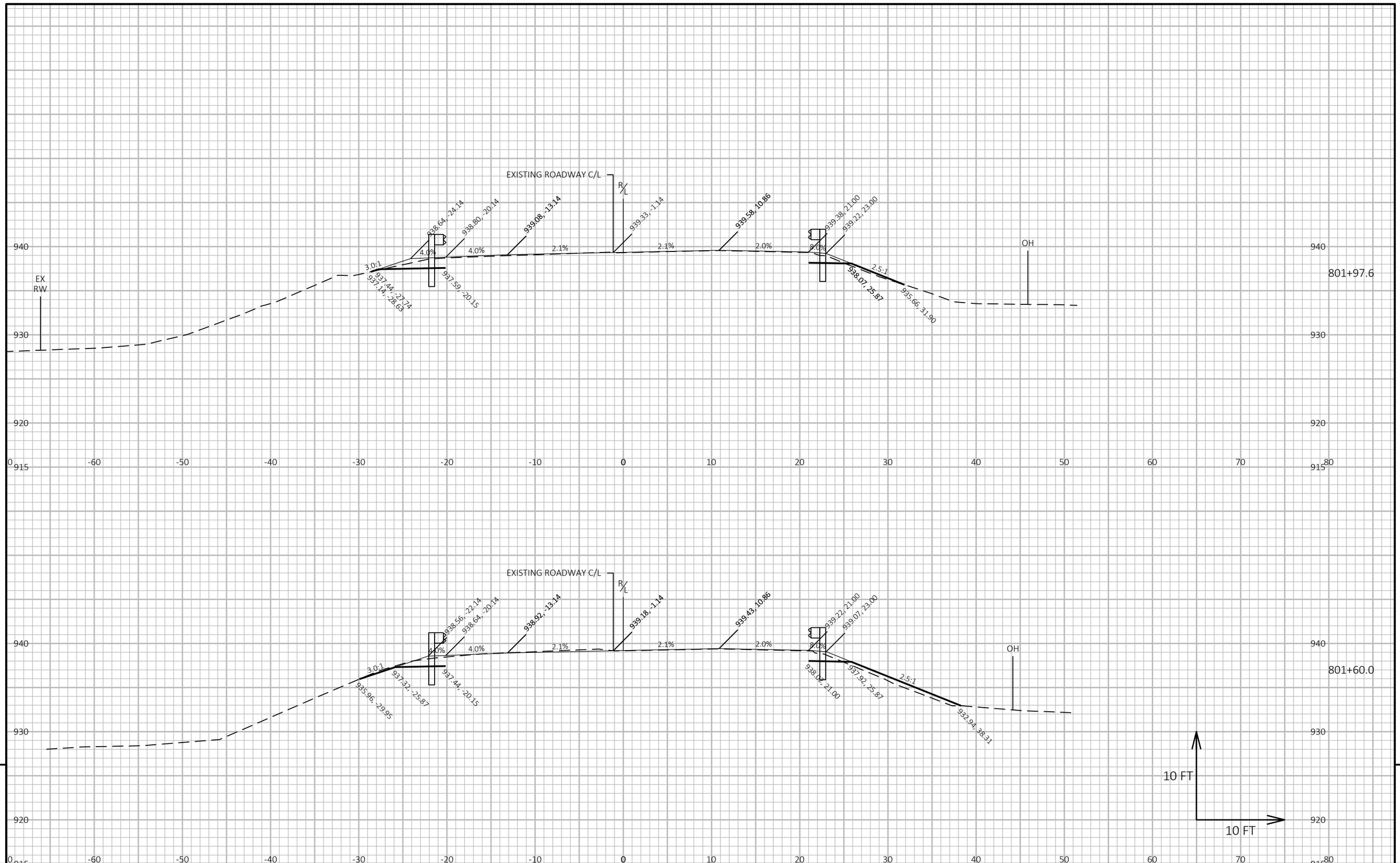
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 296	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 33

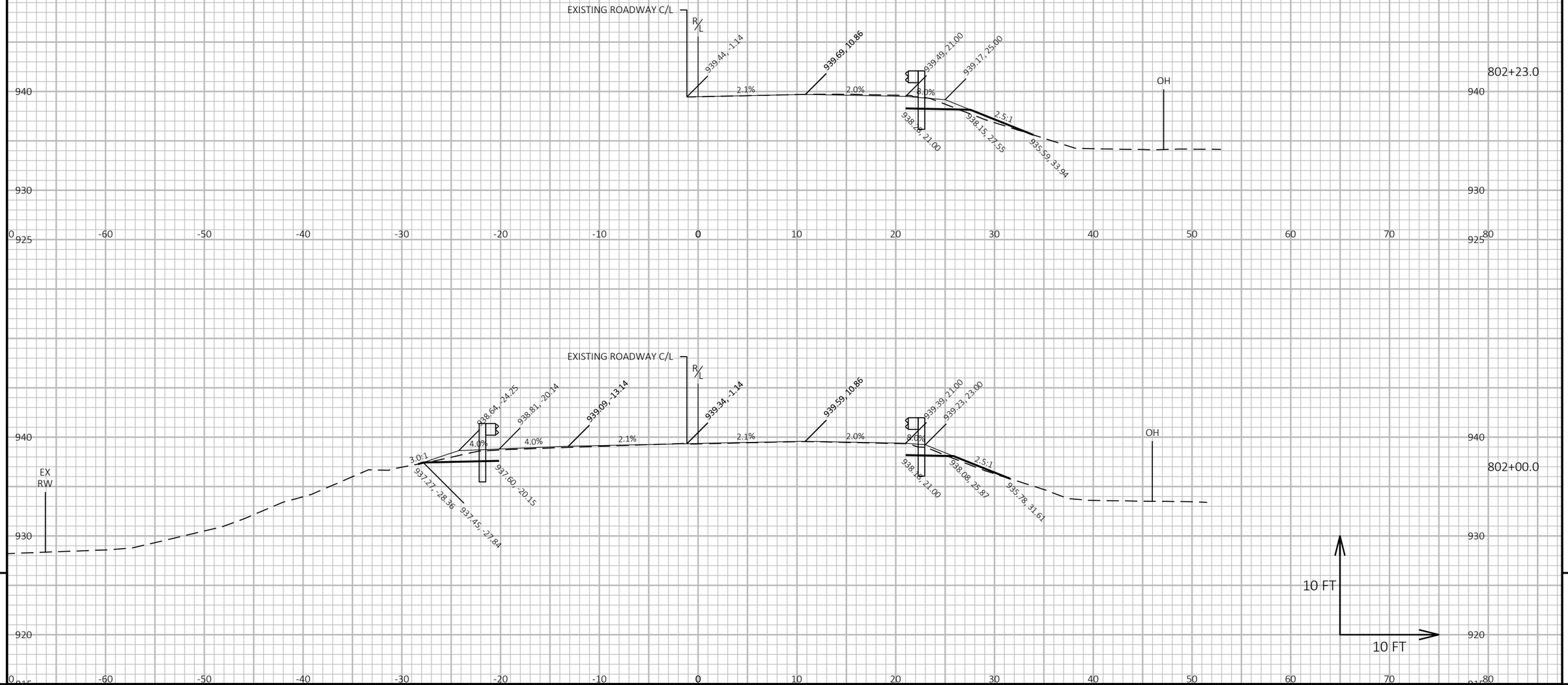
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 297	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 7/9/2021 1:00 PM

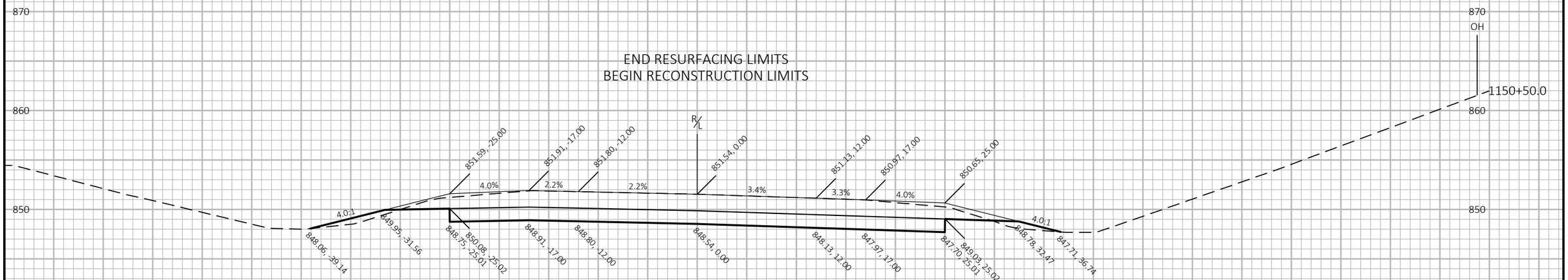
PLOT BY : RINZEL, JAMES M

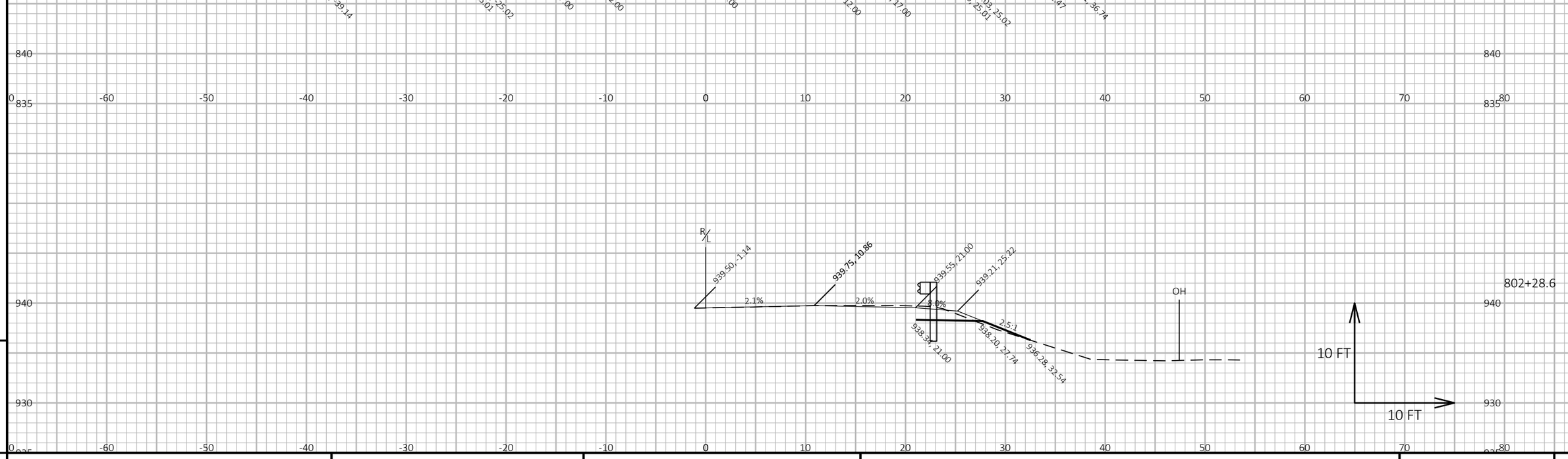
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END RESURFACING LIMITS
BEGIN RECONSTRUCTION LIMITS





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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 298	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 35

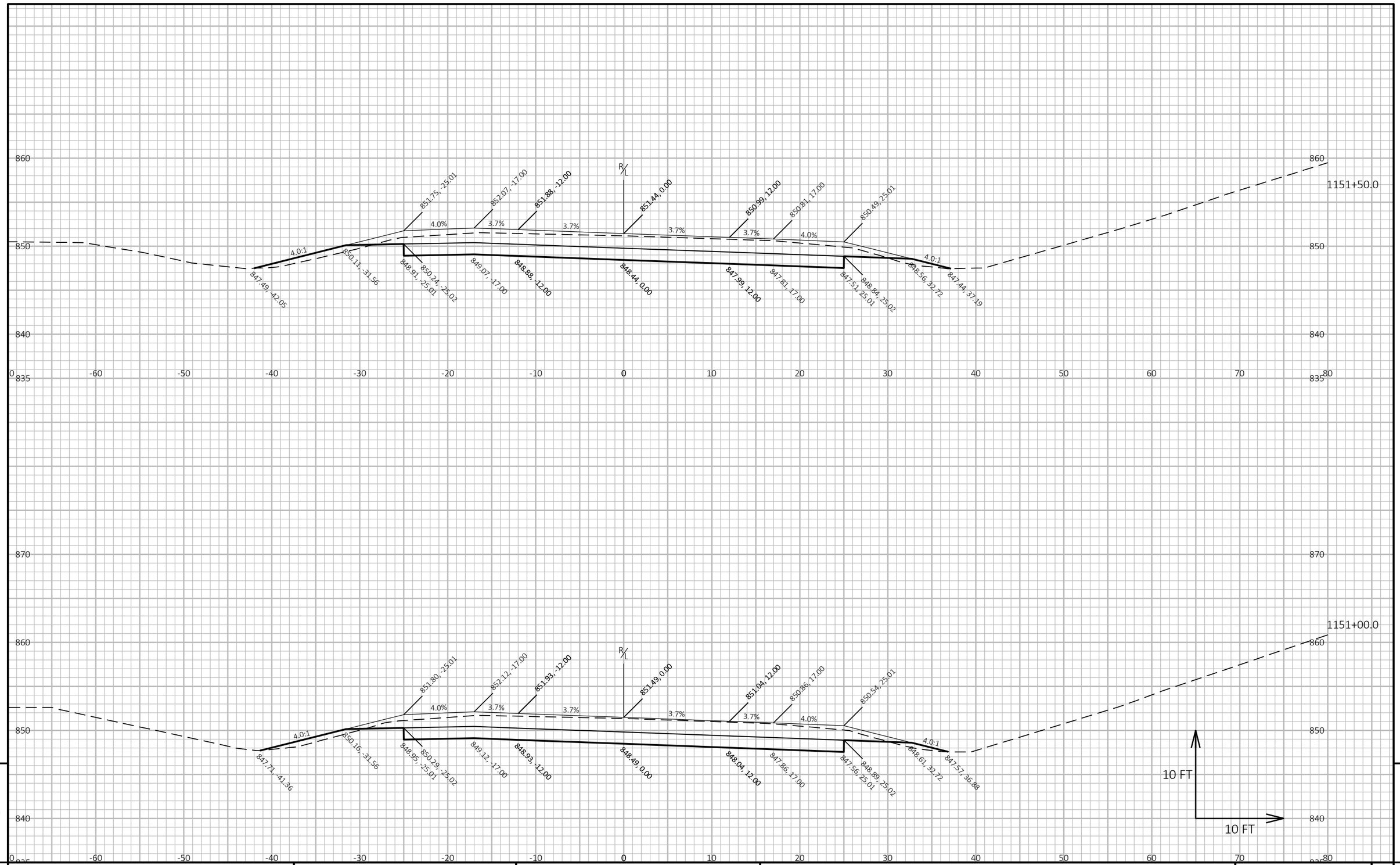
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 299	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 36

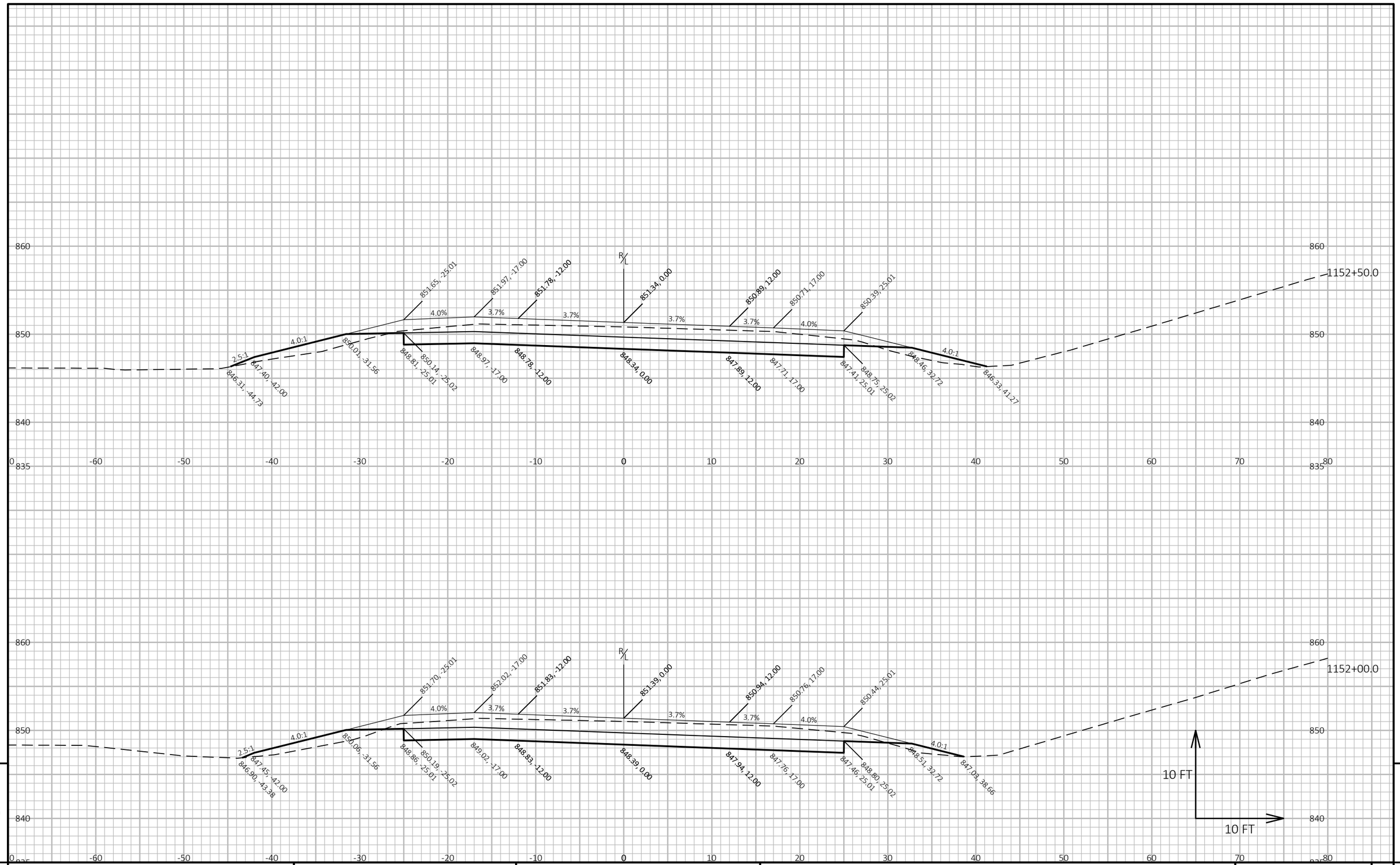
PLOT DATE : 7/9/2021 1:00 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 300	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 37

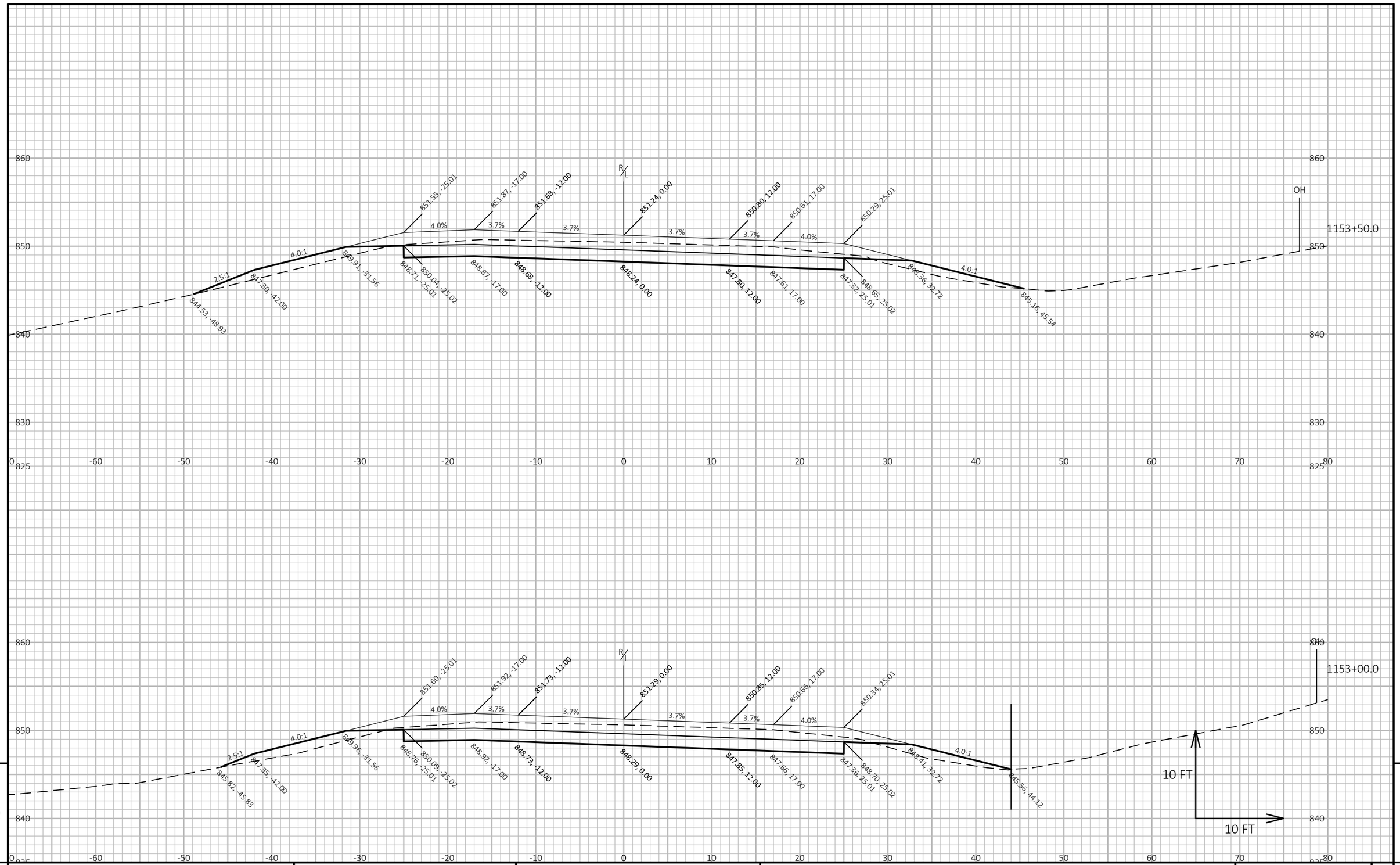
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 301	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 38

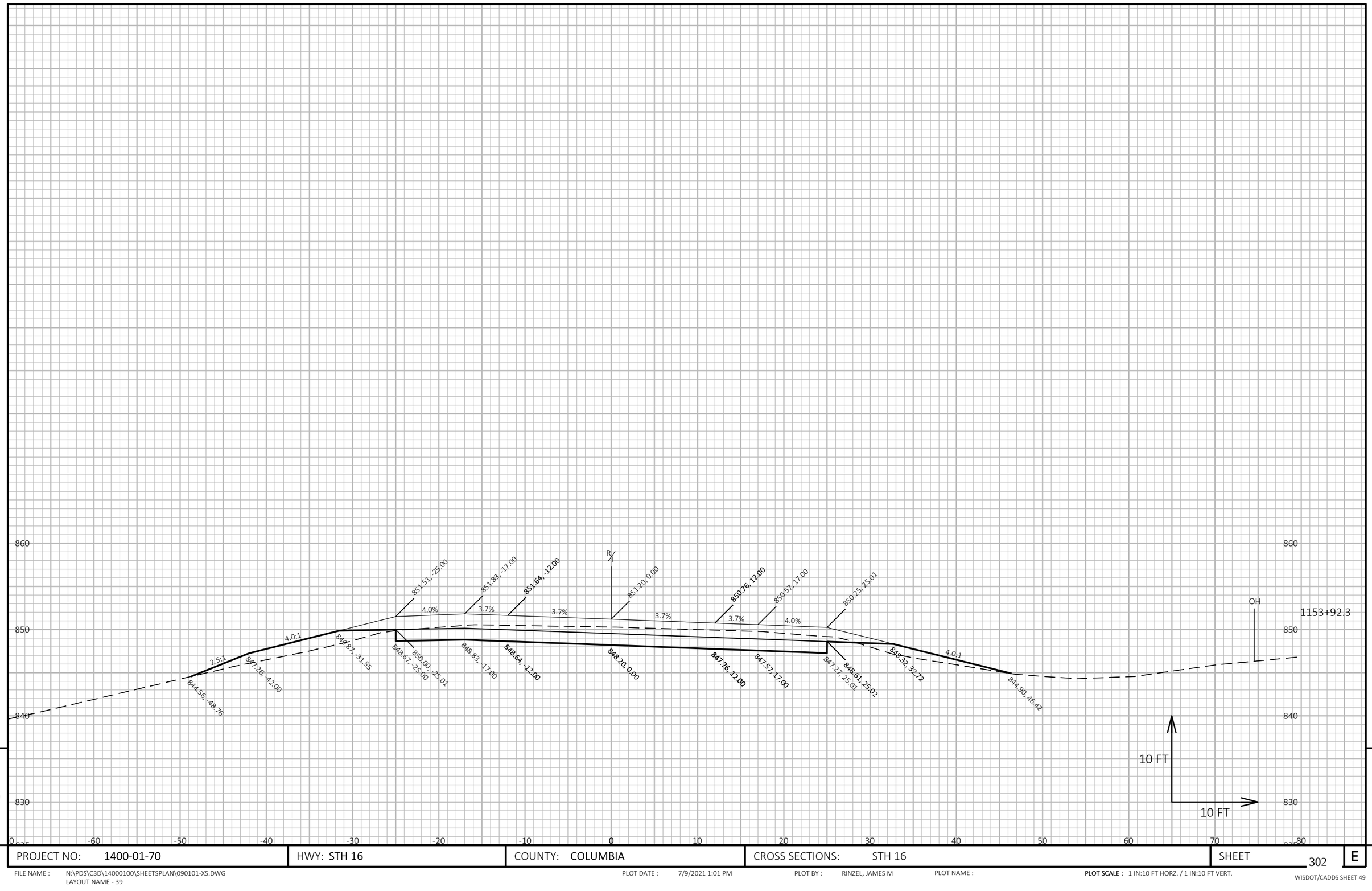
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 302	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 39

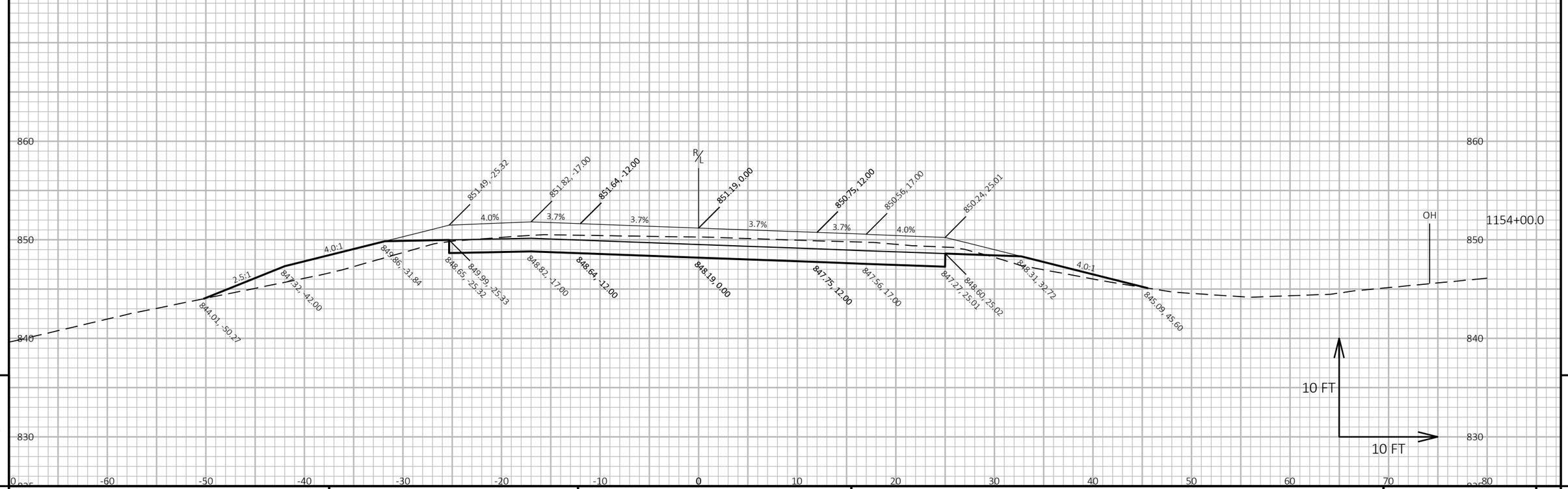
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 303	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 40

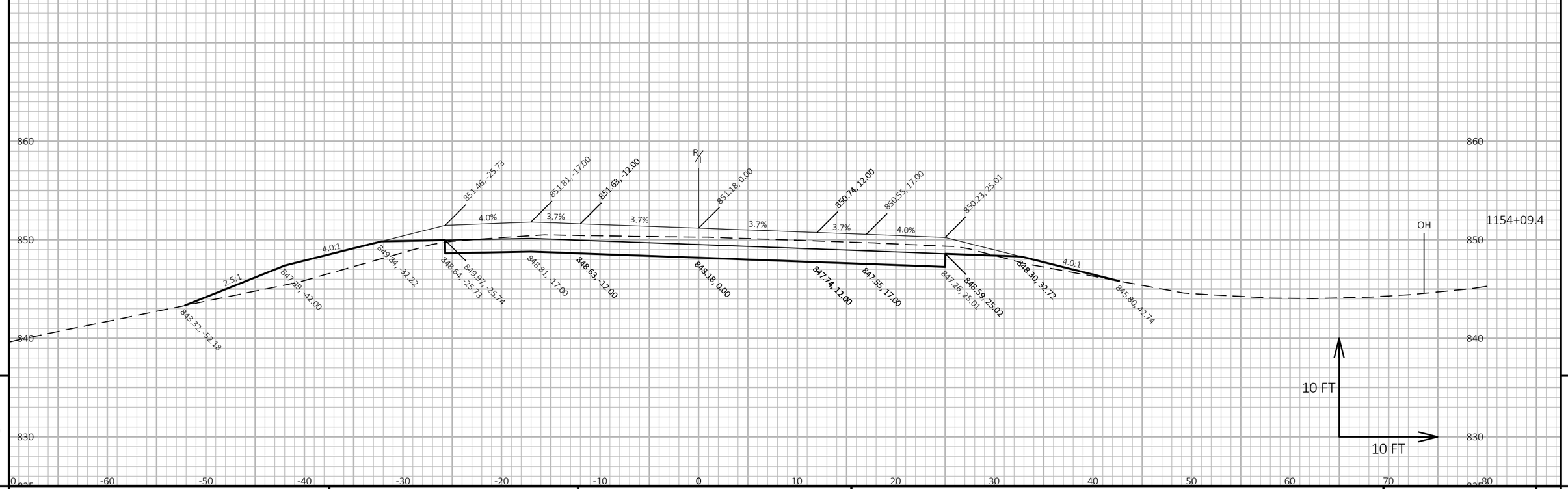
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 304	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 41

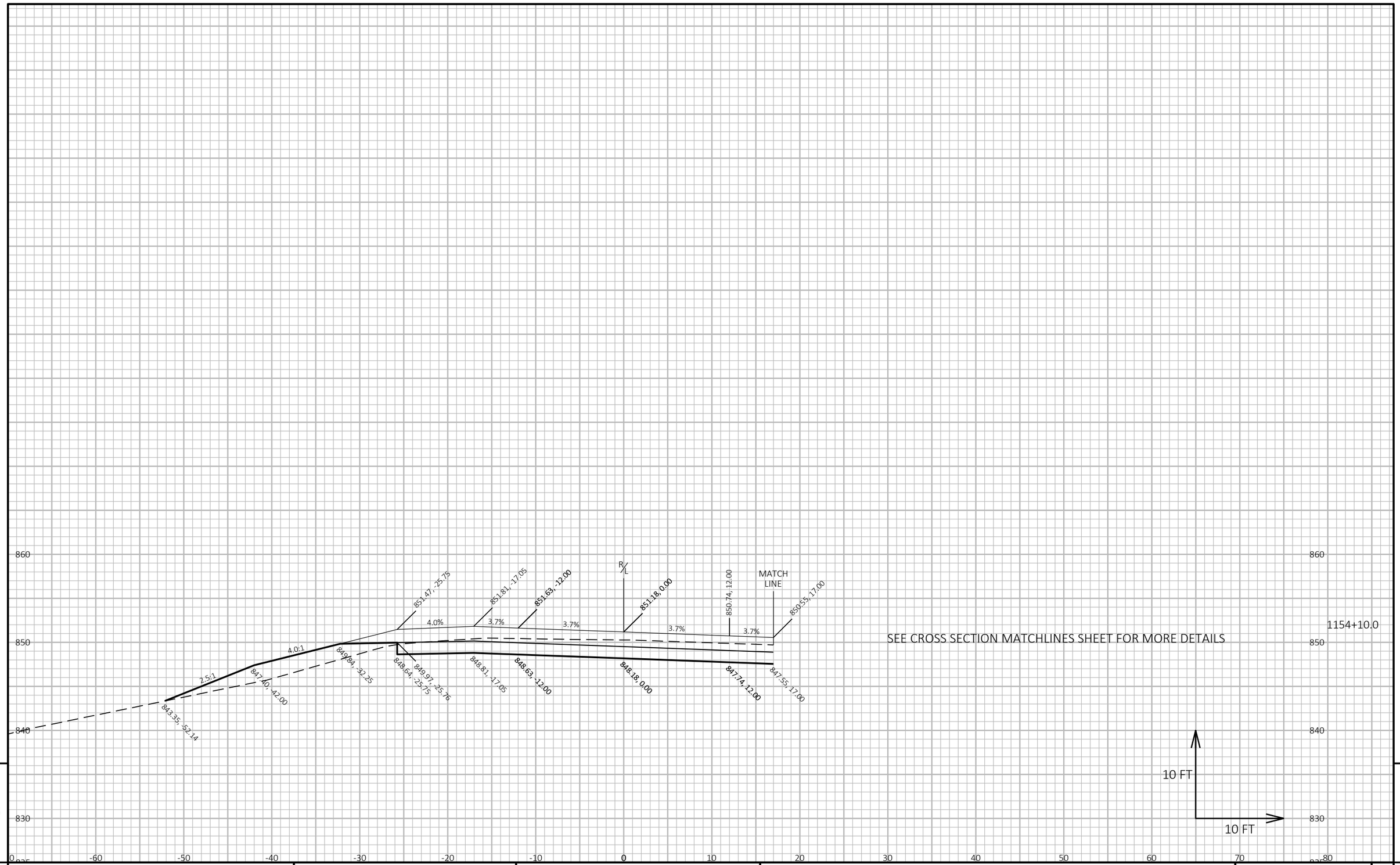
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 305	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 42

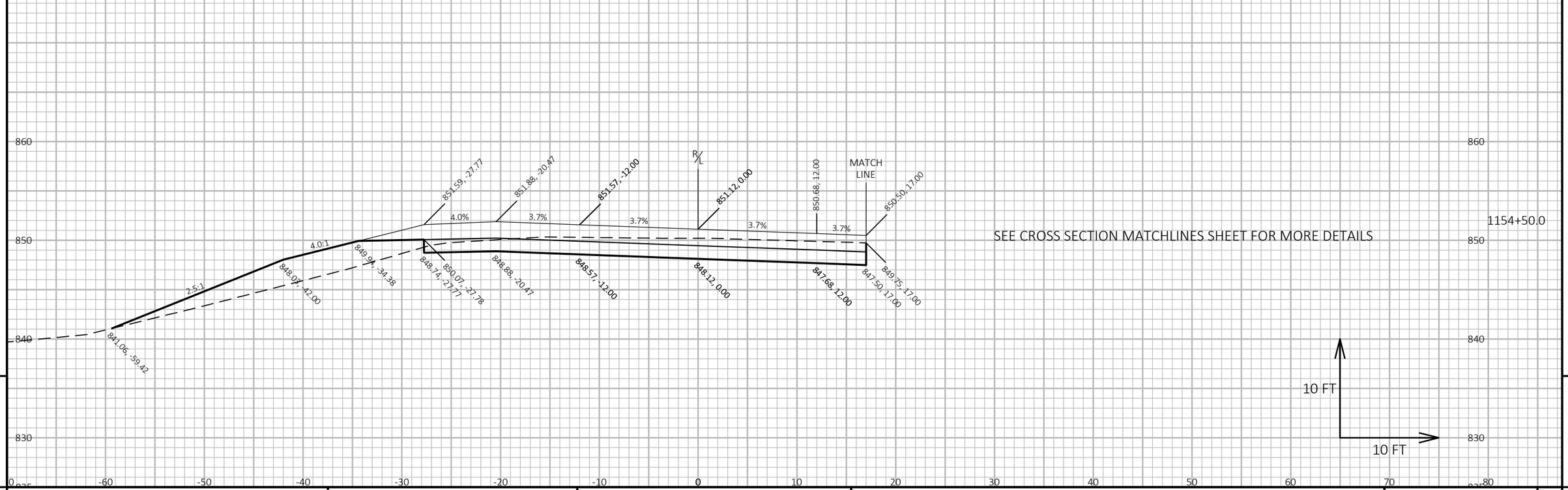
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 306	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 43

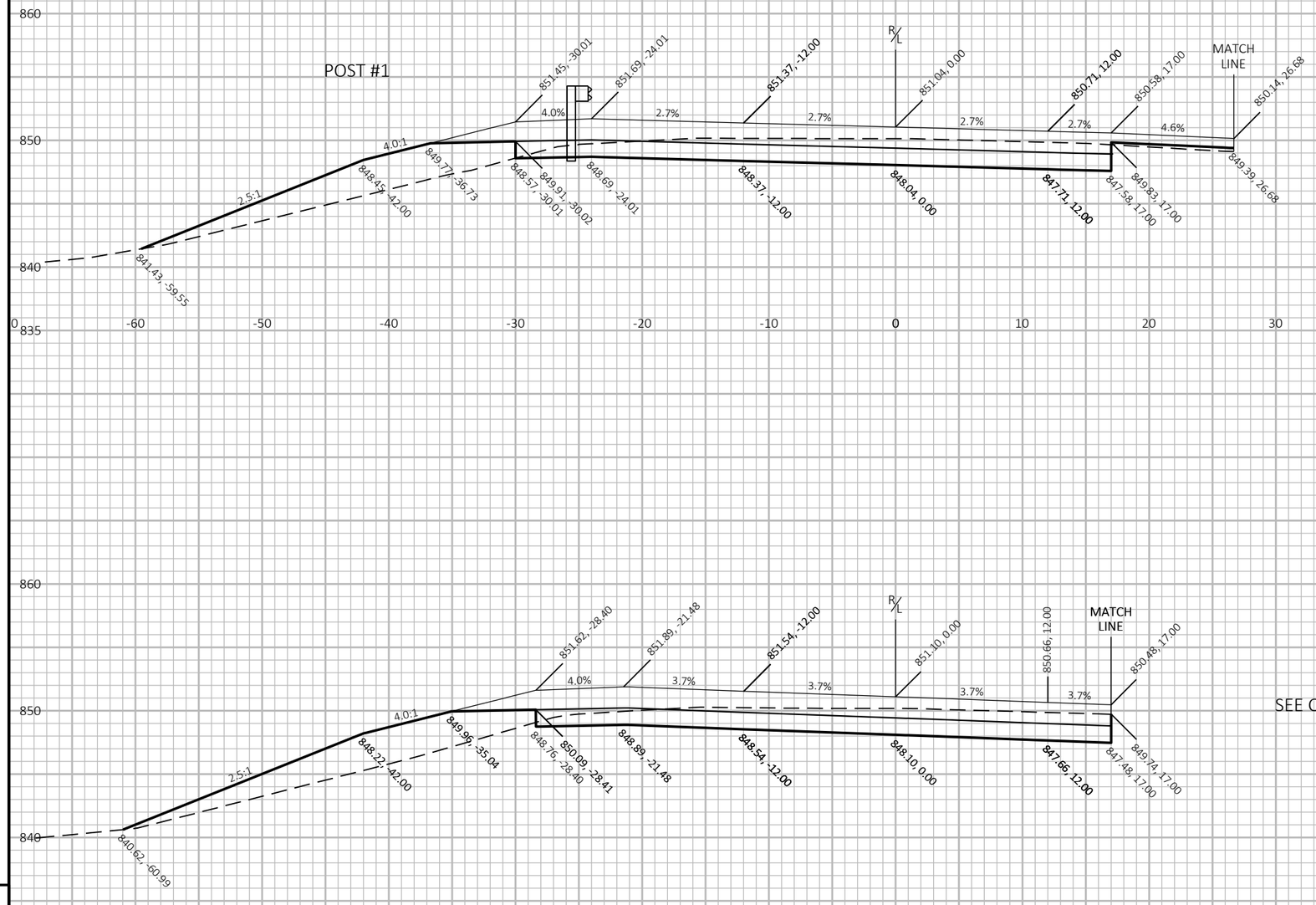
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



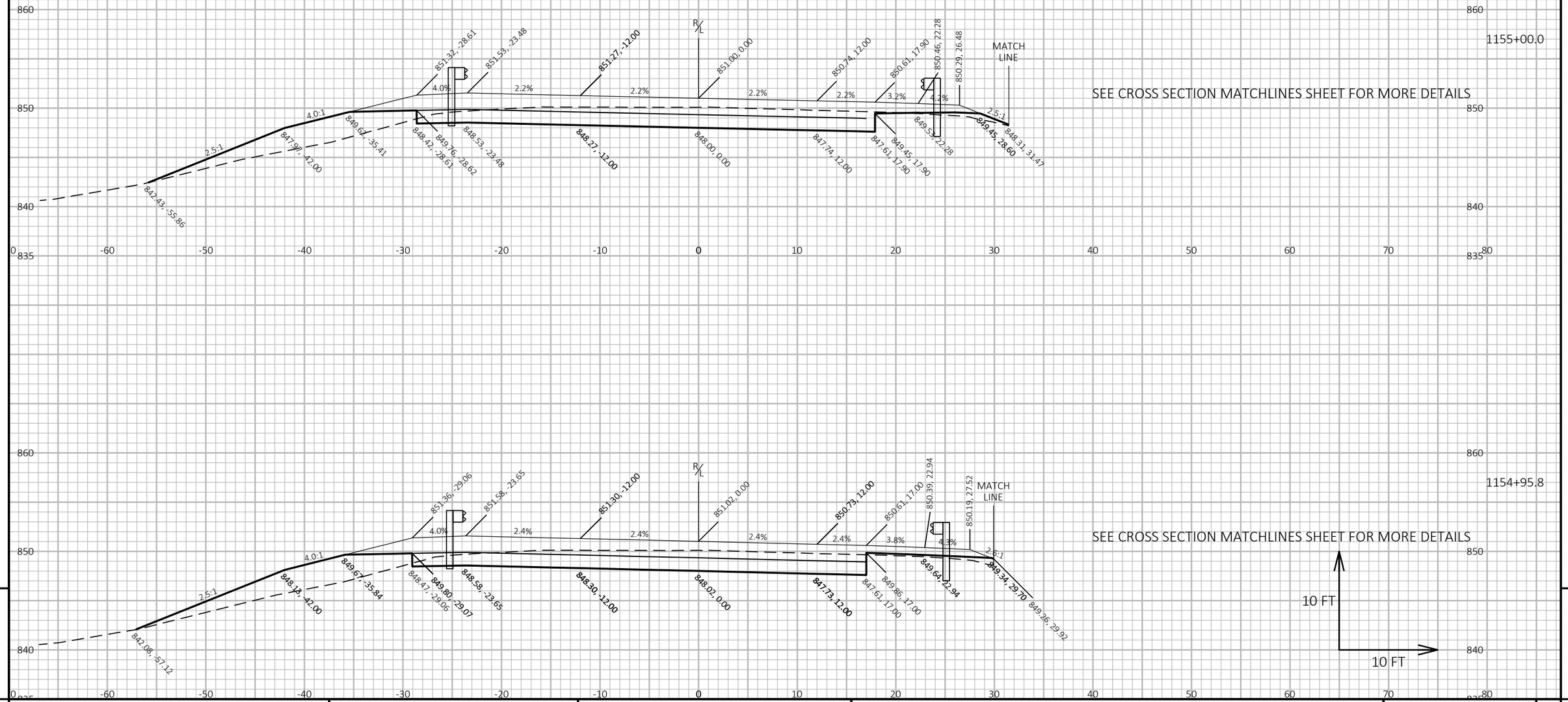
9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 307	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 7/9/2021 1:01 PM PLOT BY : RINZEL, JAMES M 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: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 308	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 45

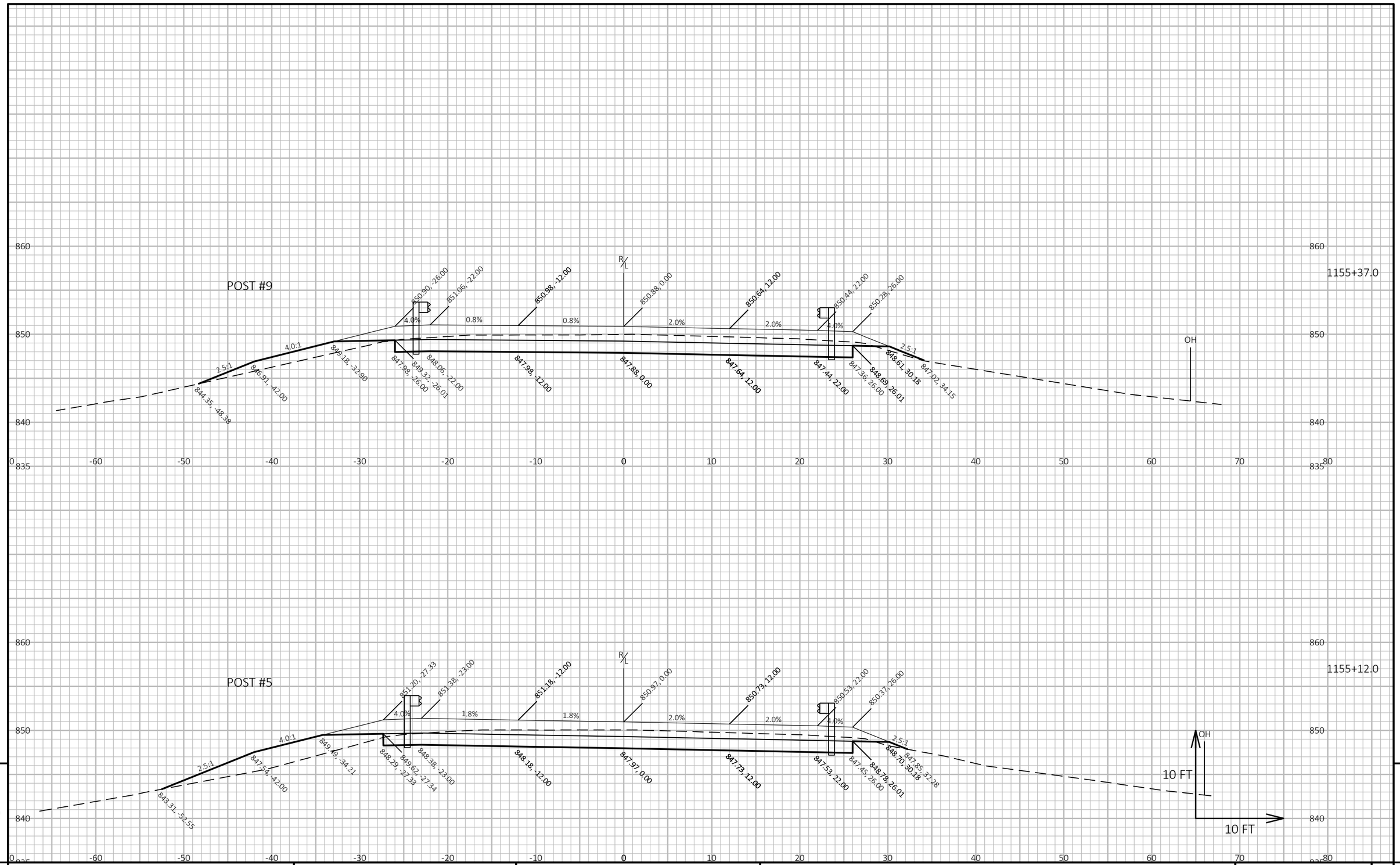
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



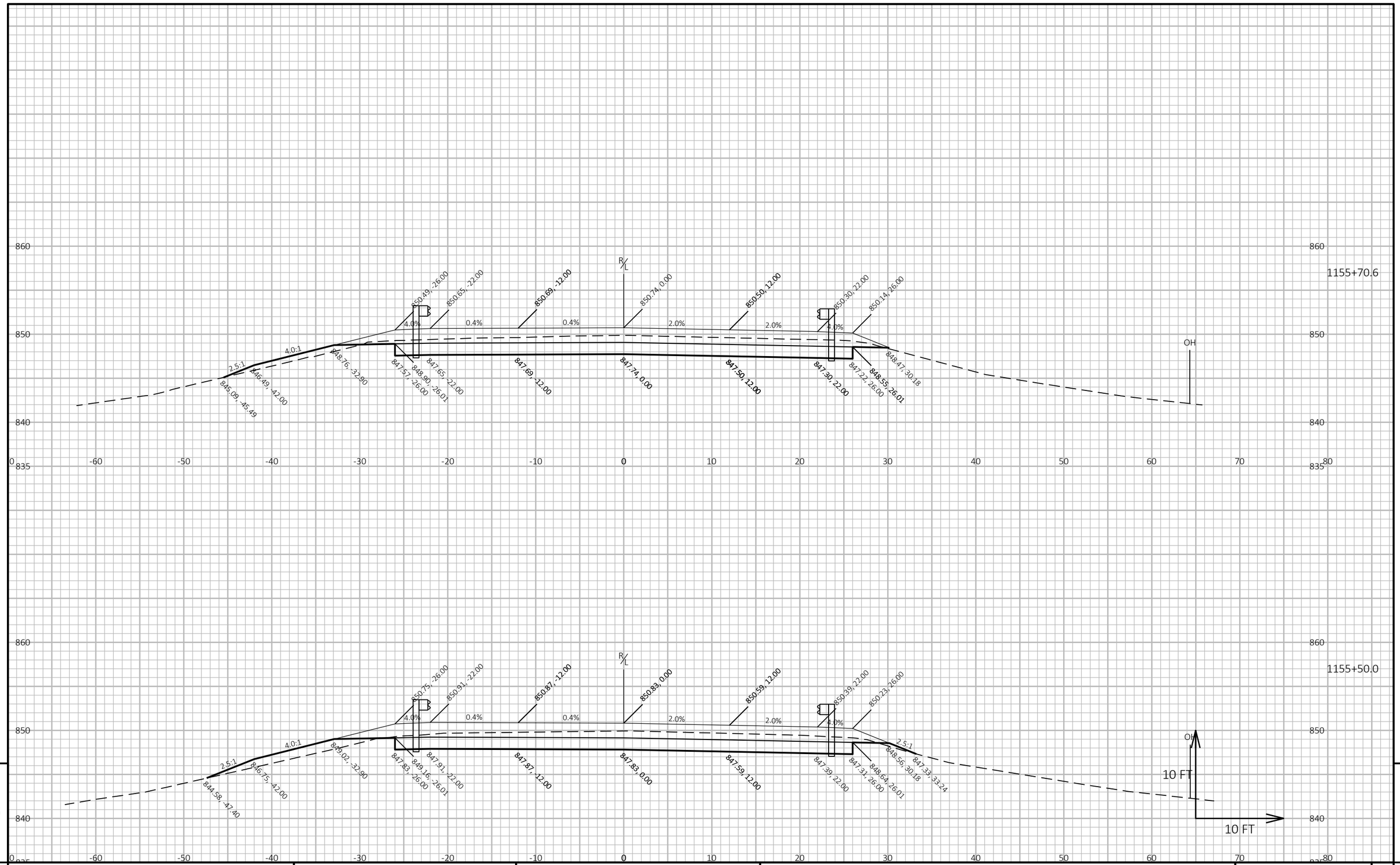
9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 309	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 7/9/2021 1:01 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 310	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 47

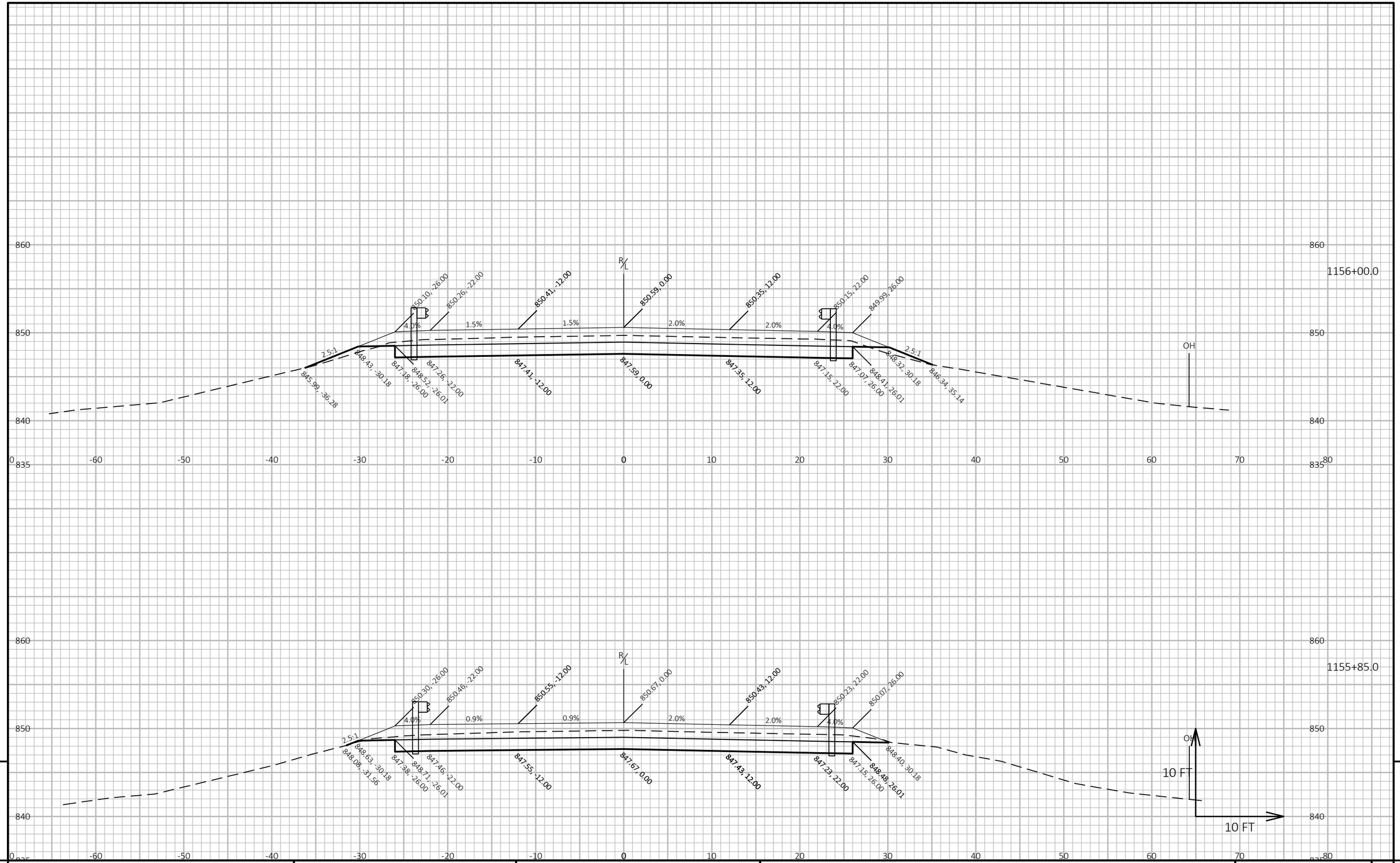
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 311	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 48

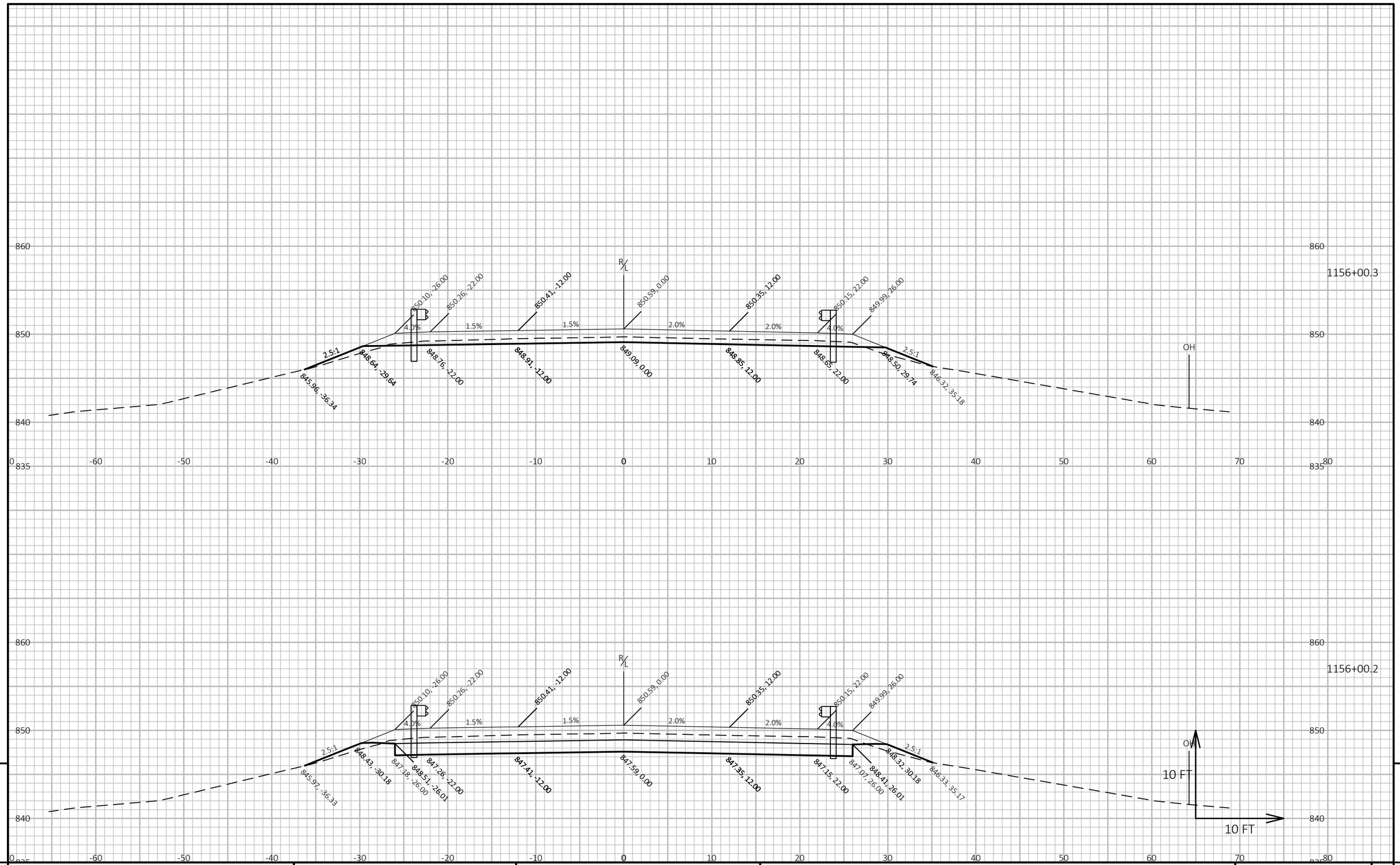
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 312	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 49

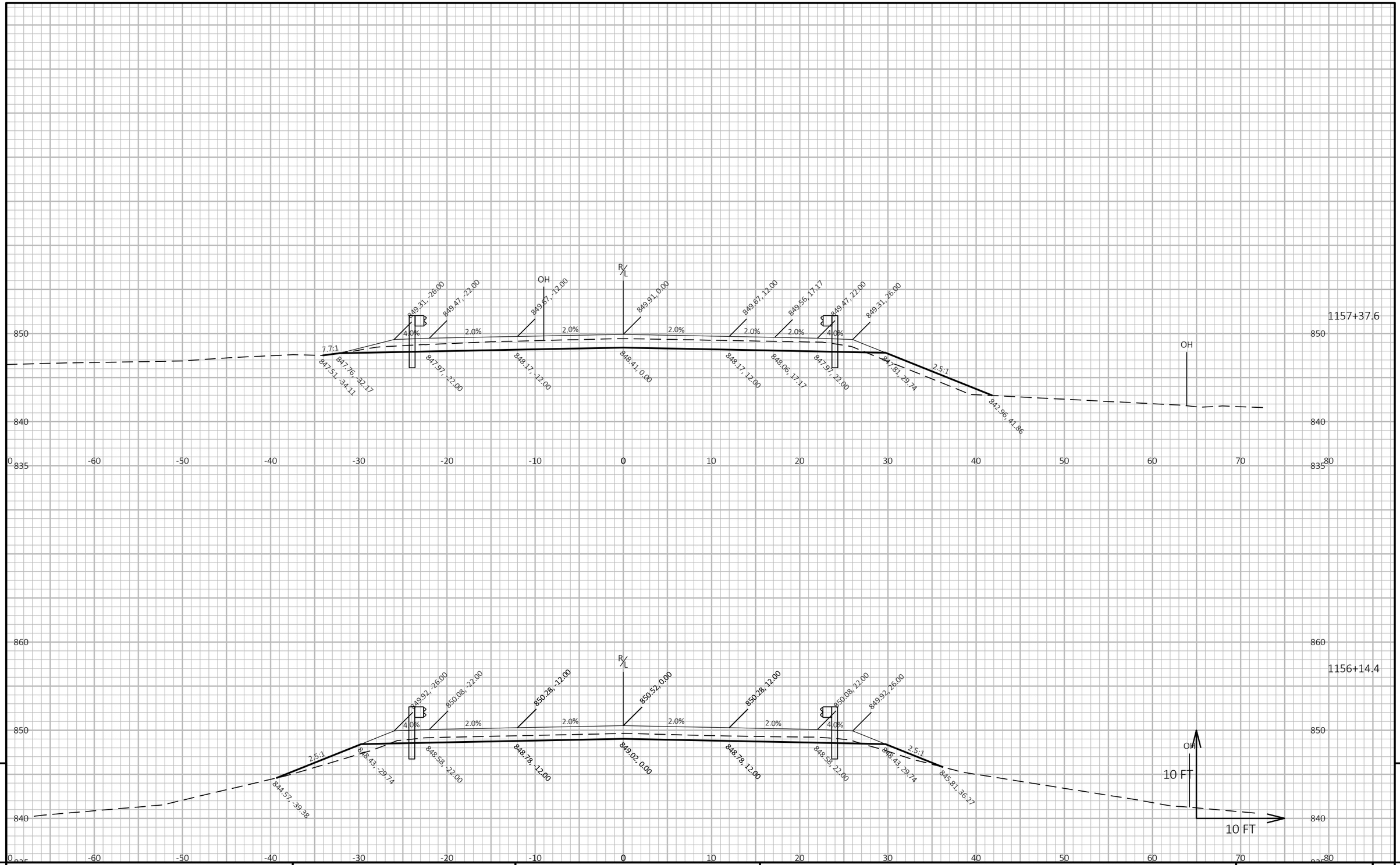
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 313	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 50

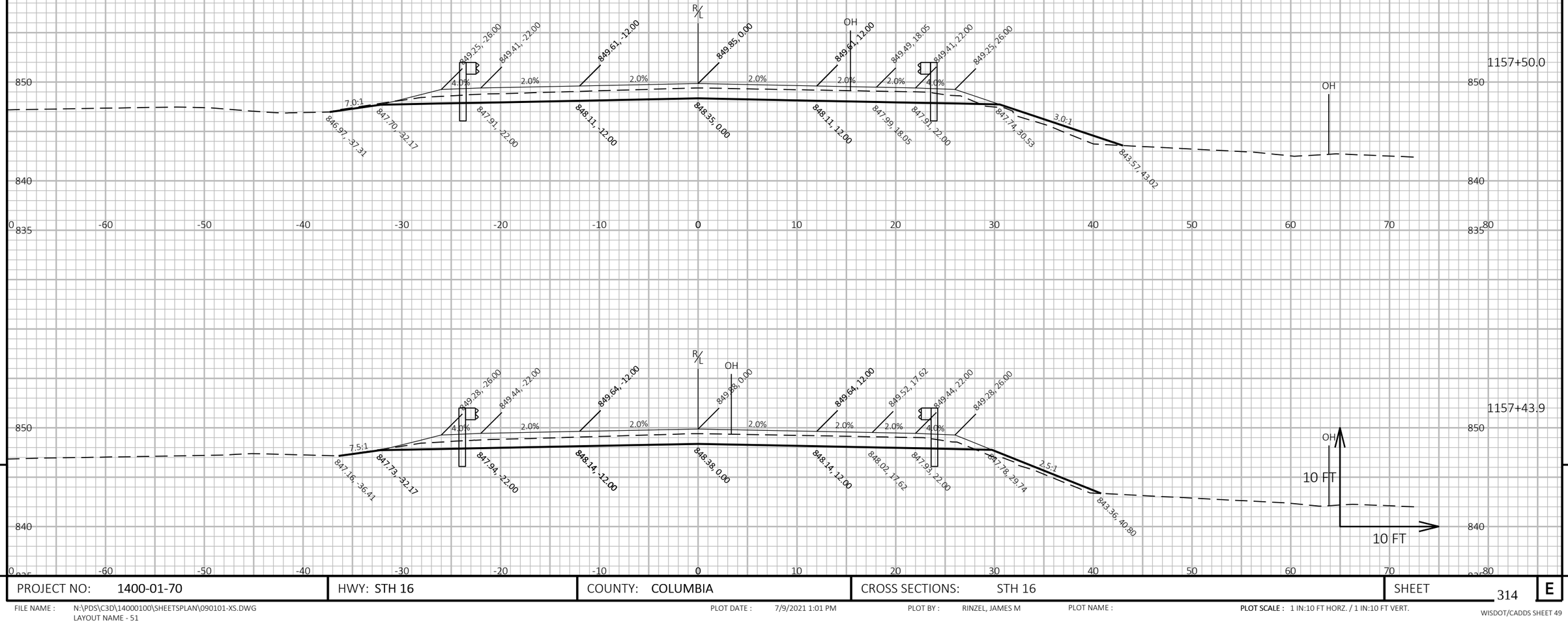
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 314	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 51

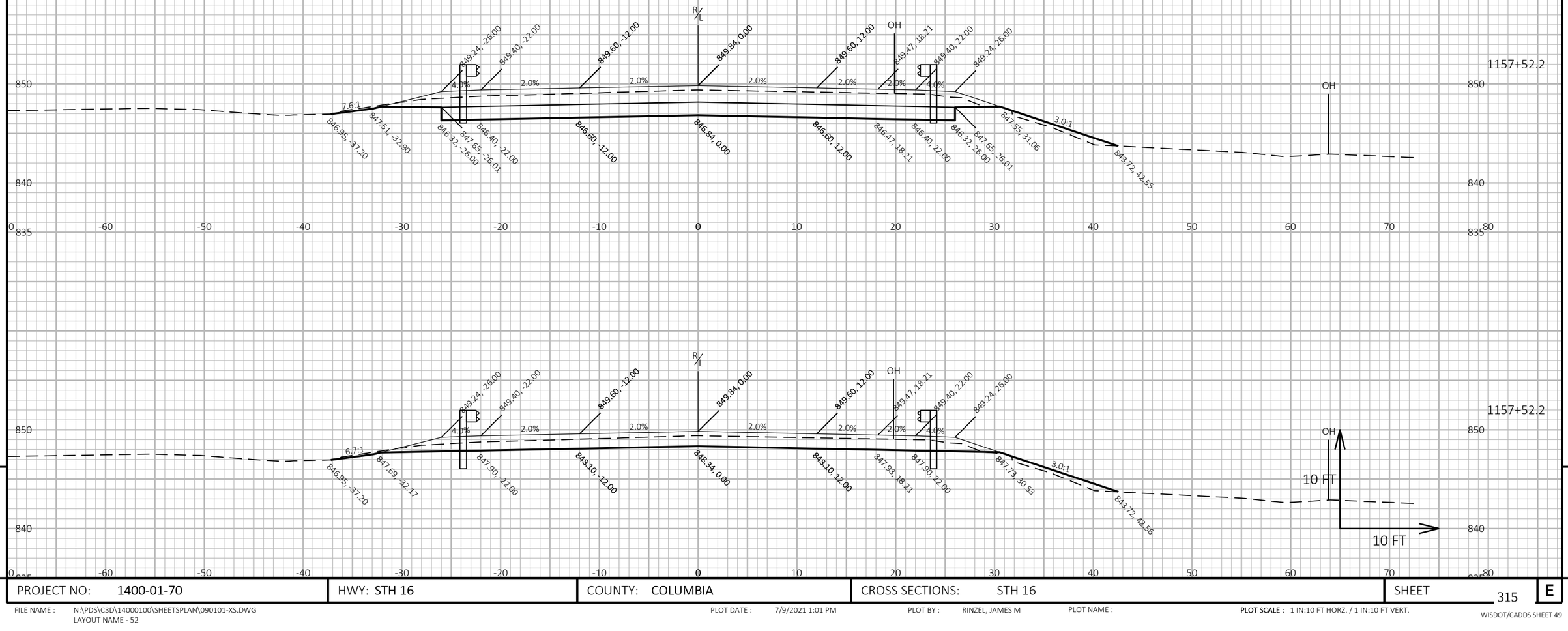
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 315	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 52

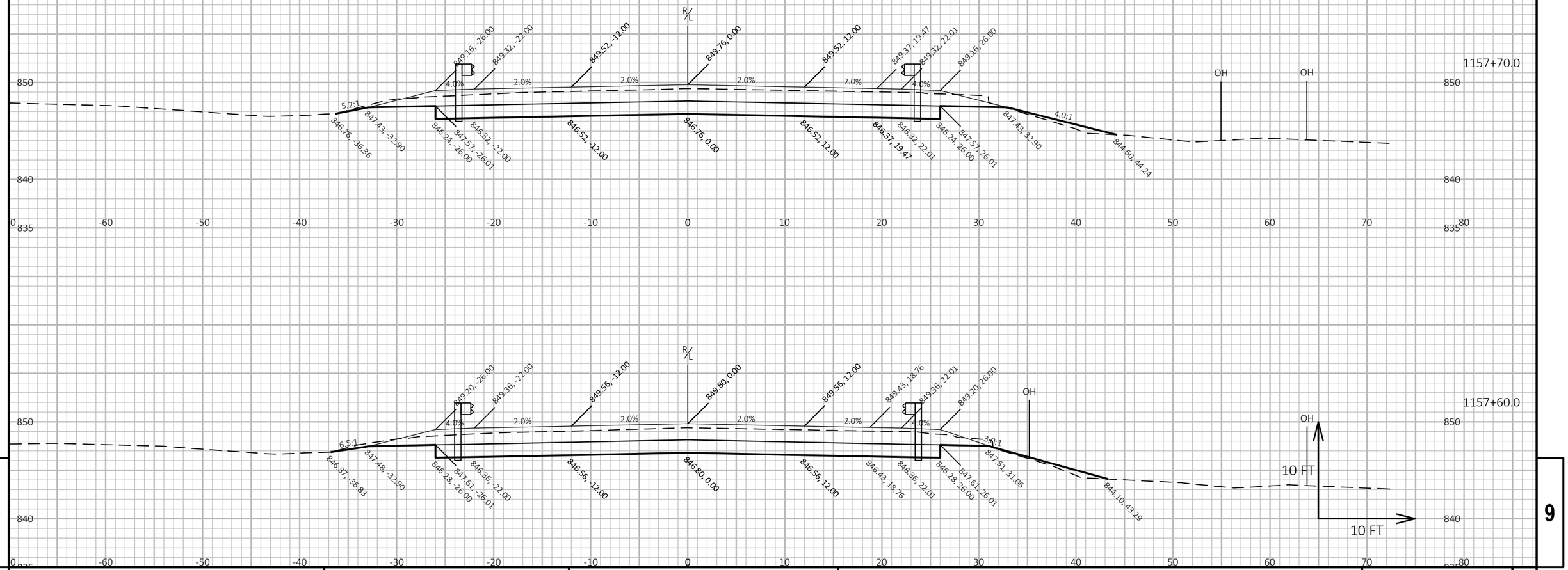
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 316	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 53

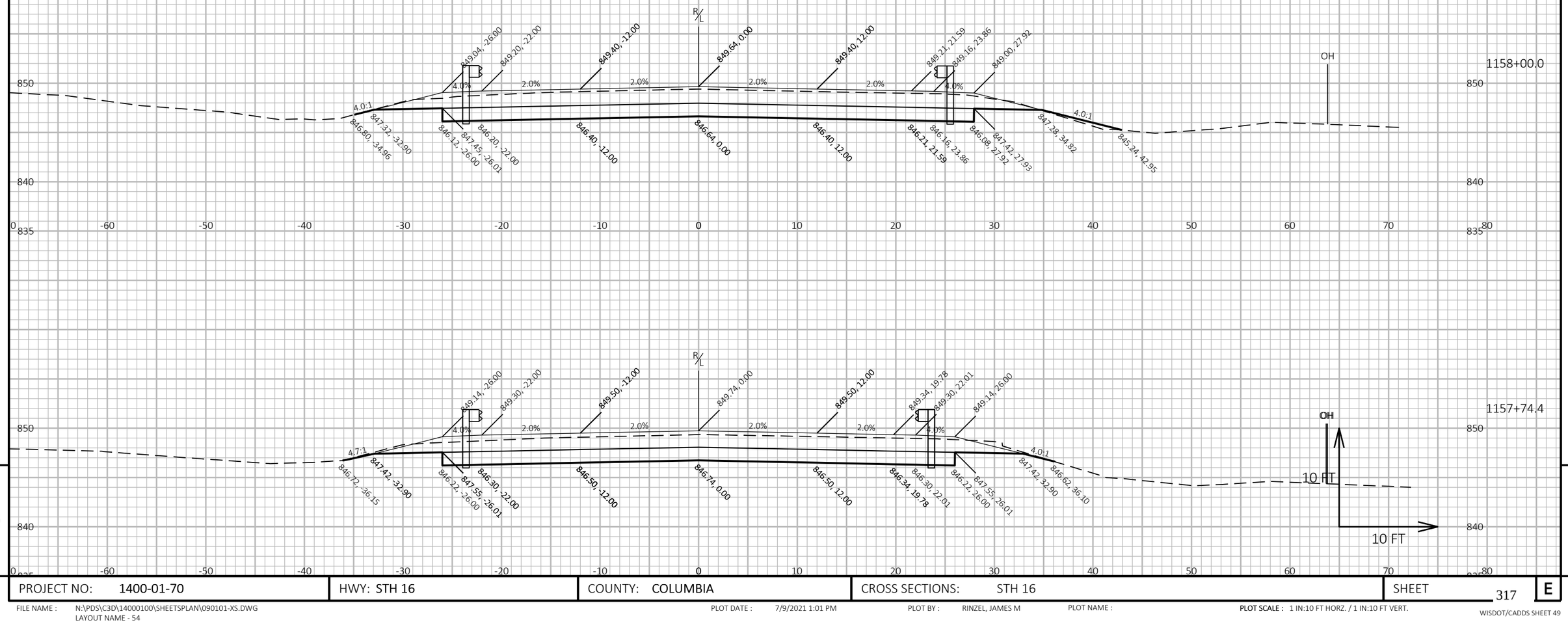
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 317	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 54

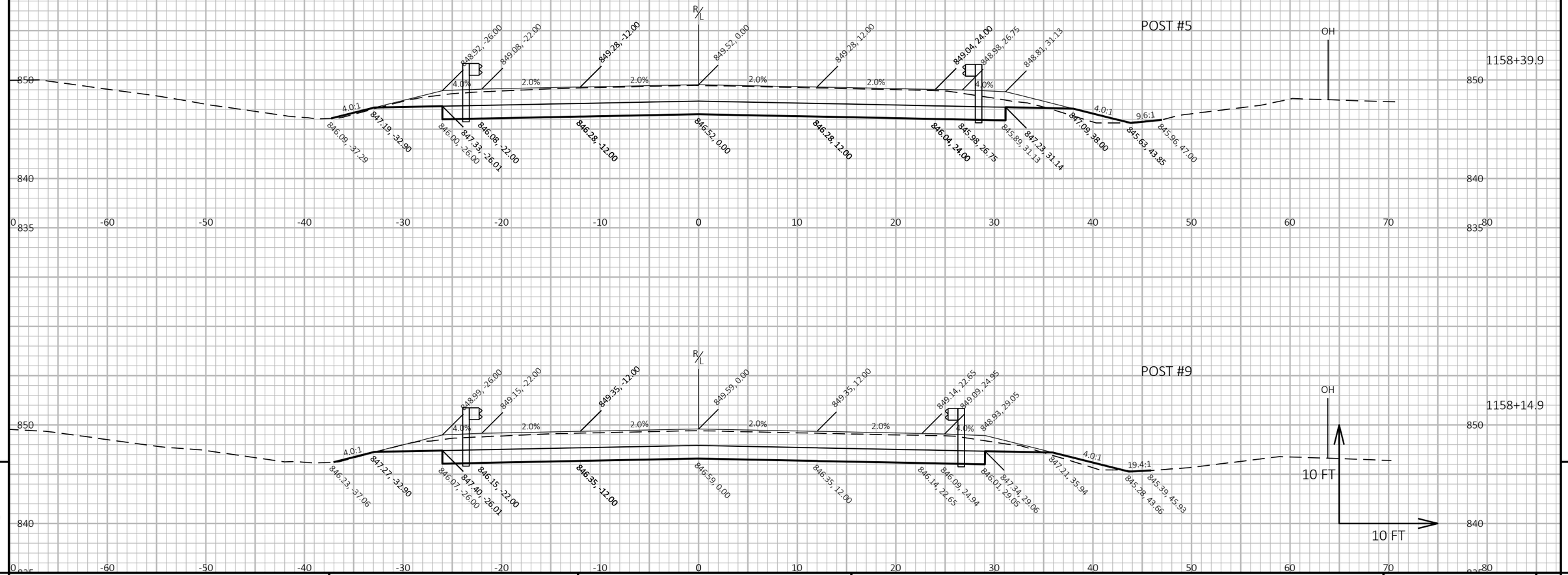
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 318	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 55

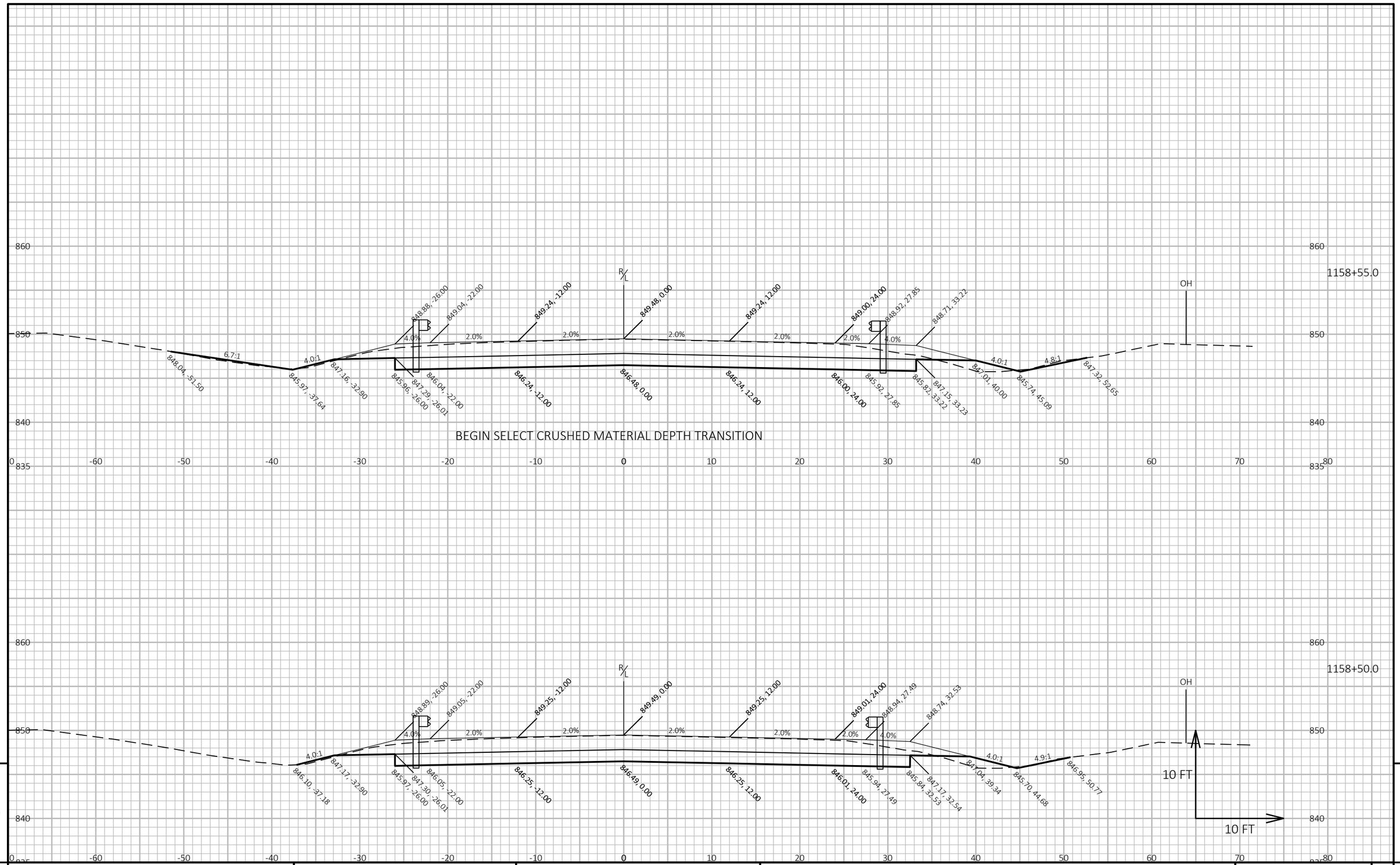
PLOT DATE : 7/9/2021 1:01 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 319	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 56

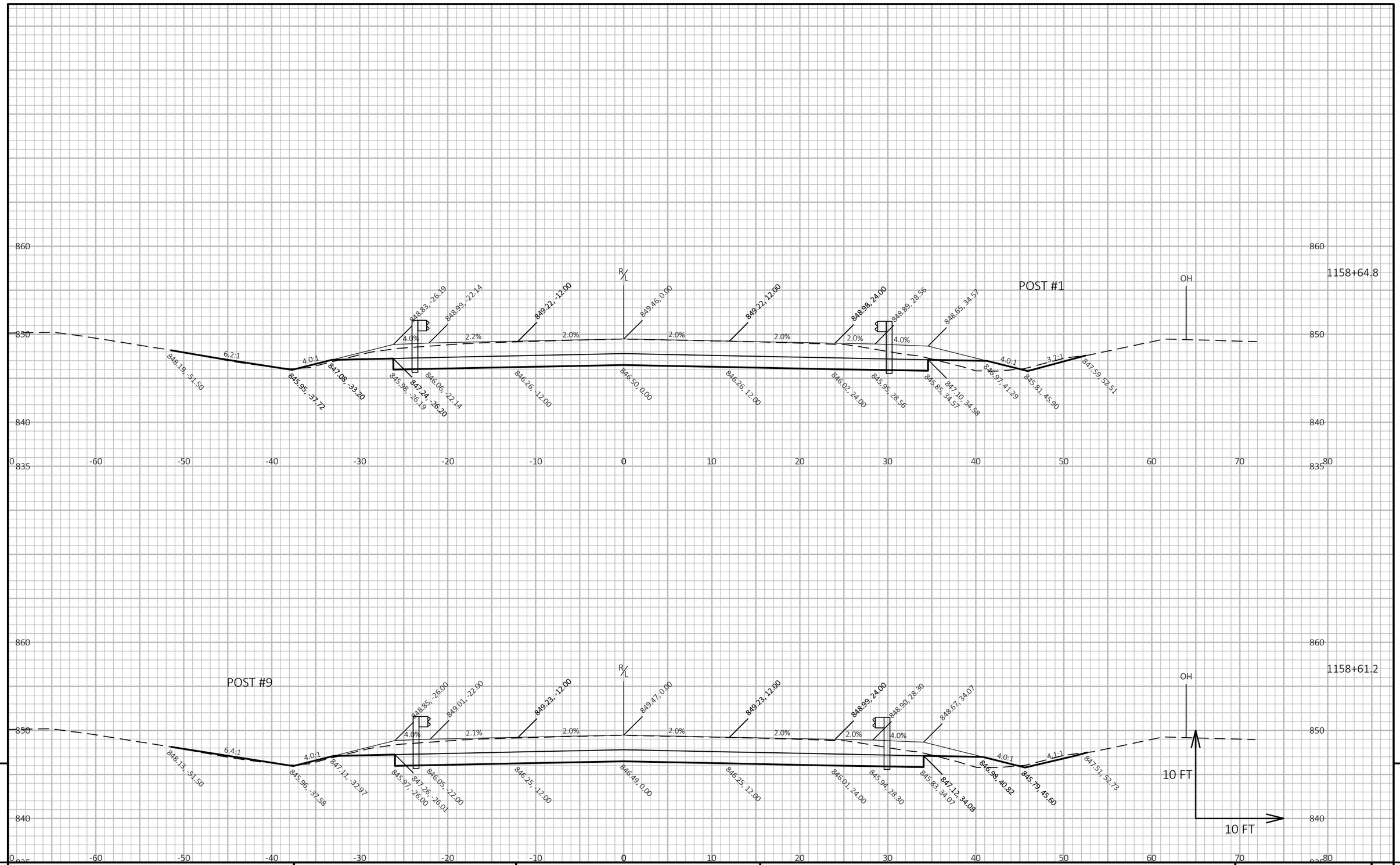
PLOT DATE : 7/9/2021 1:02 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 320	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 57

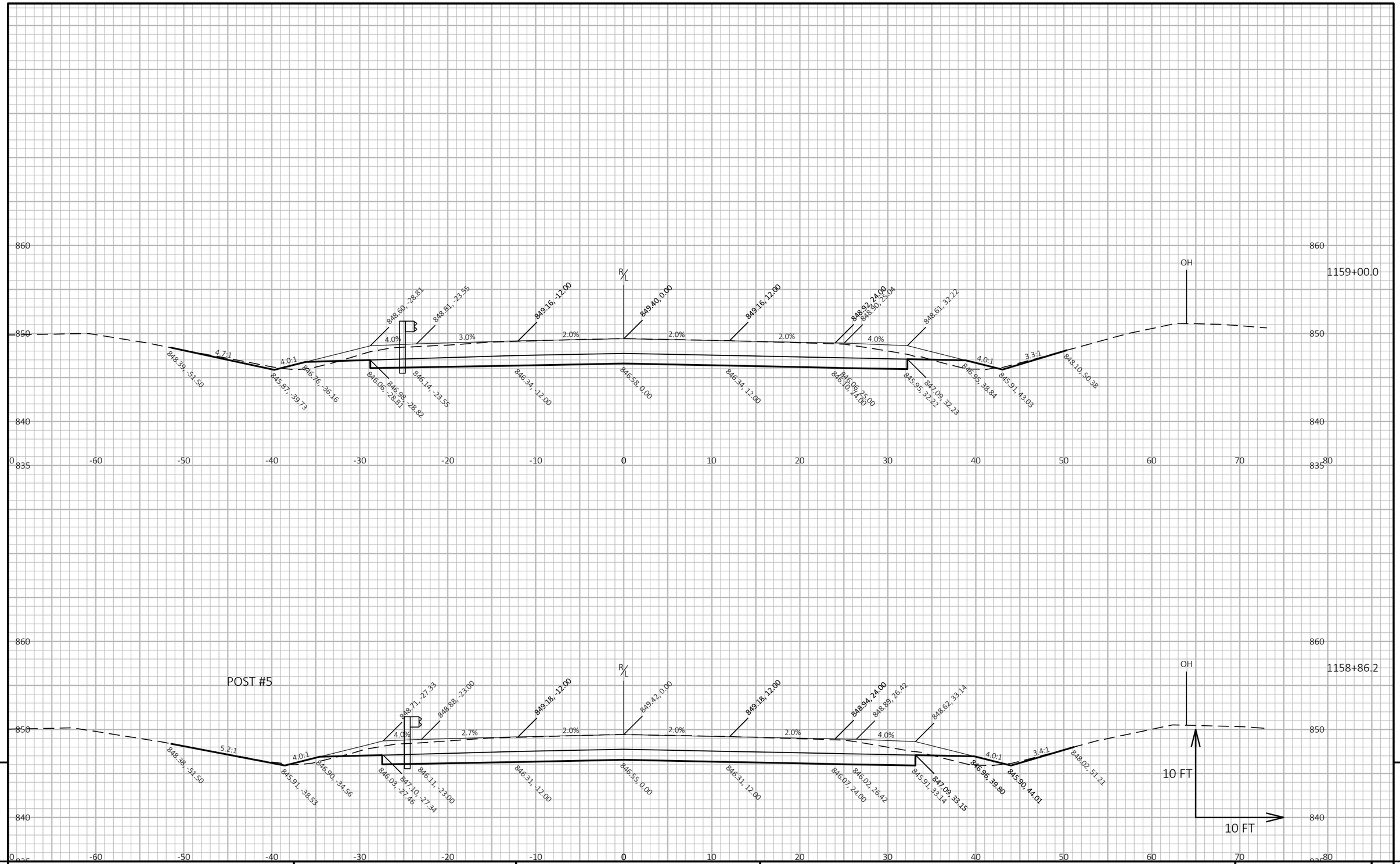
PLOT DATE : 7/9/2021 1:02 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 321	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 58

PLOT DATE : 7/9/2021 1:02 PM

PLOT BY : RINZEL, JAMES M

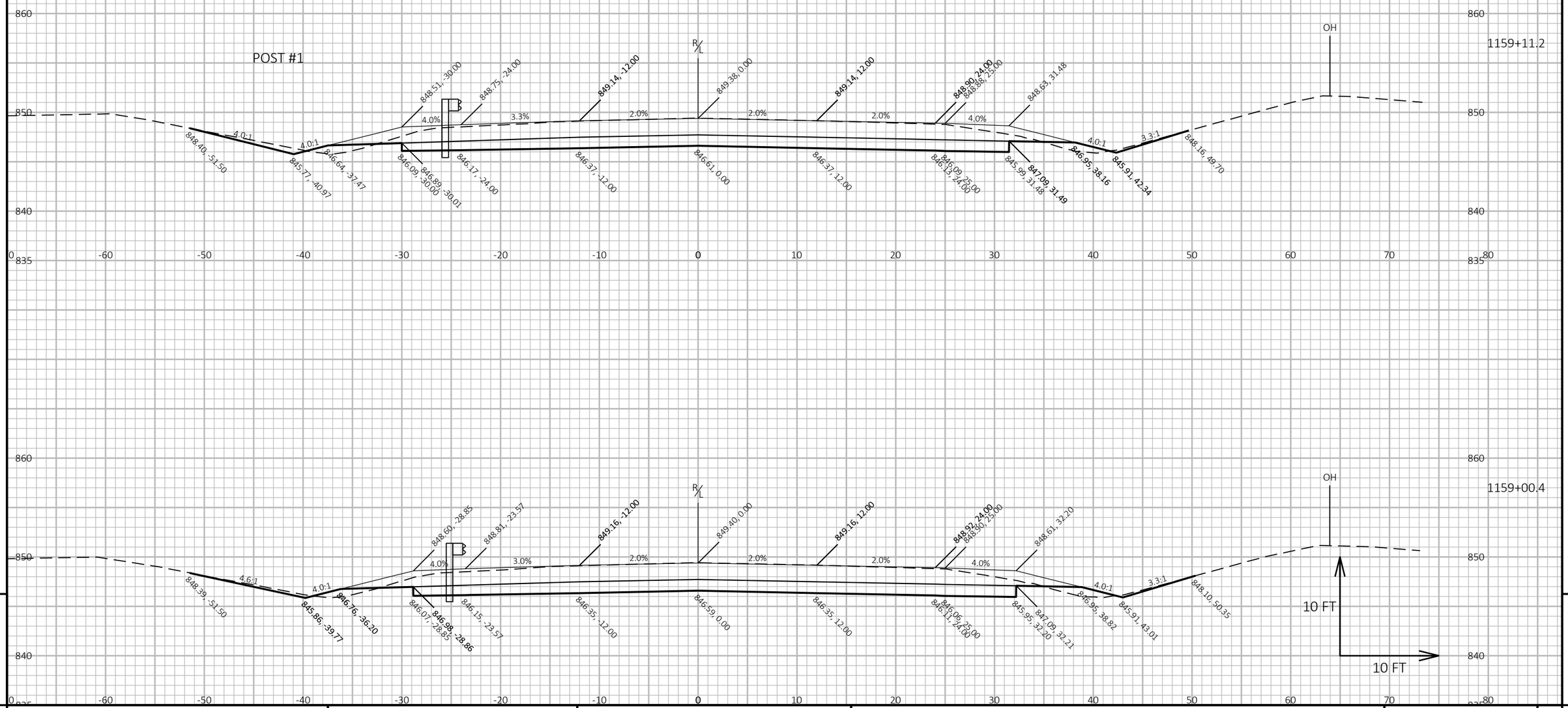
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

POST #1

1159+11.2



1159+00.4

9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 322	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 59

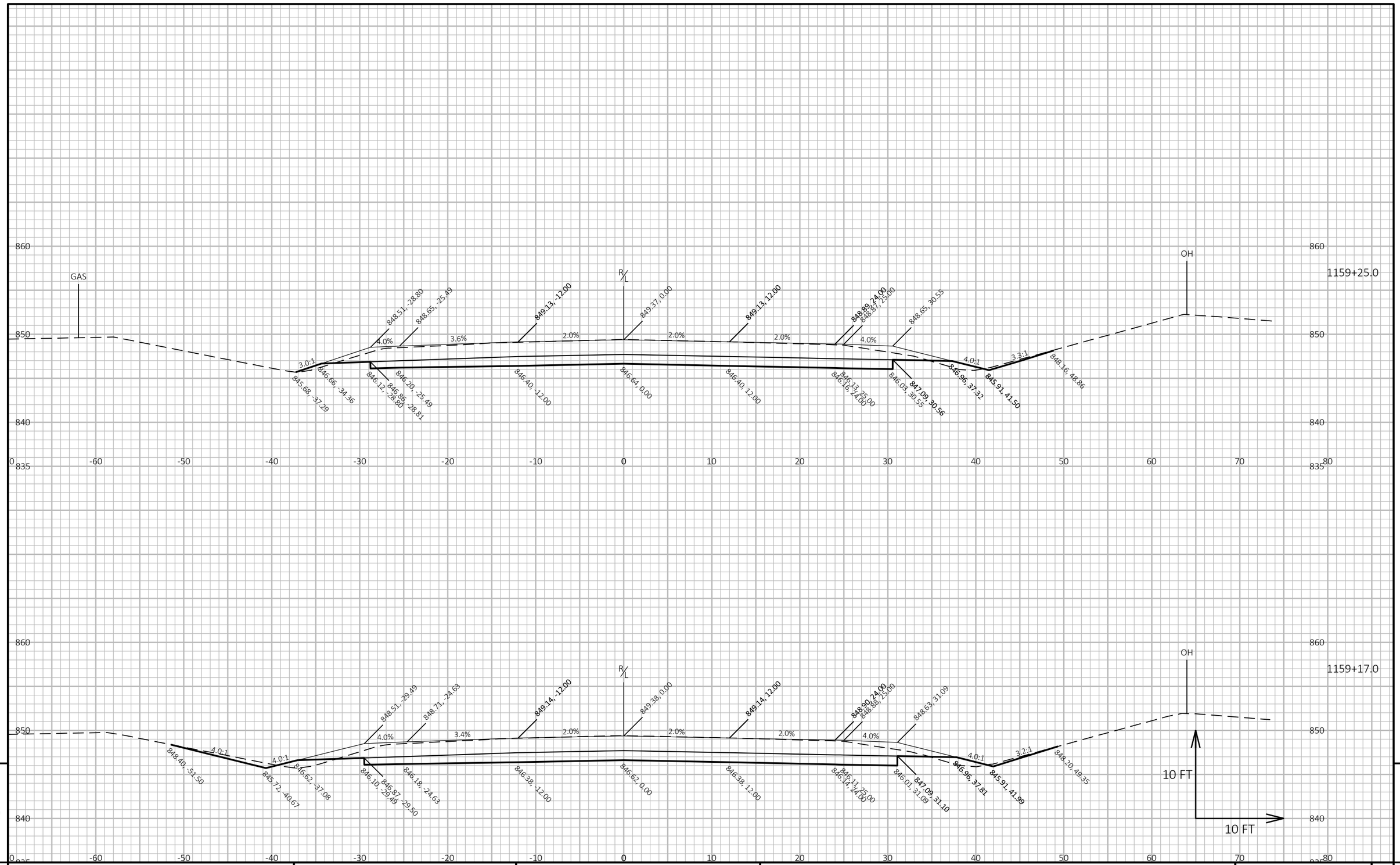
PLOT DATE : 7/9/2021 1:02 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 323	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 60

PLOT DATE : 7/9/2021 1:02 PM

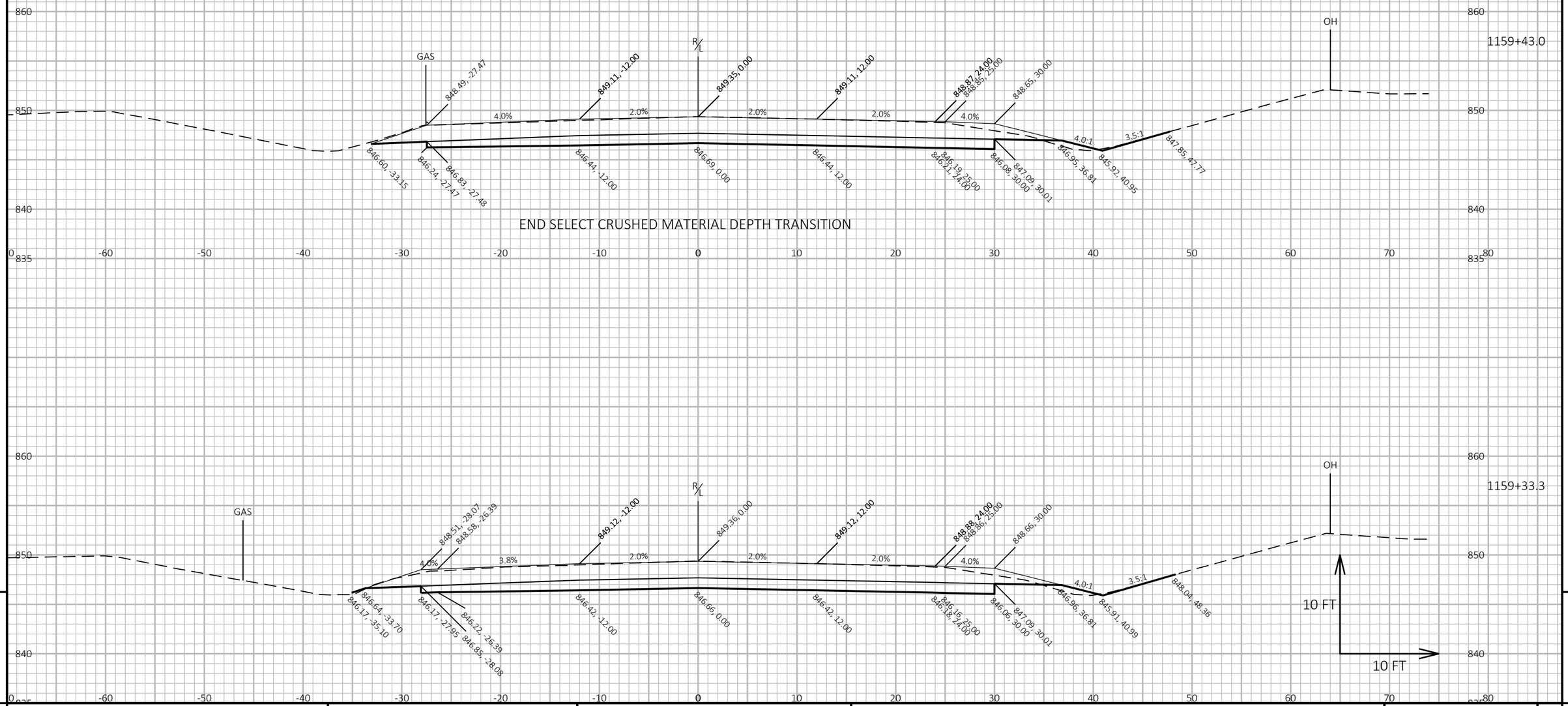
PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END RECONSTRUCTION LIMITS
BEGIN RESURFACING LIMITS



9 9

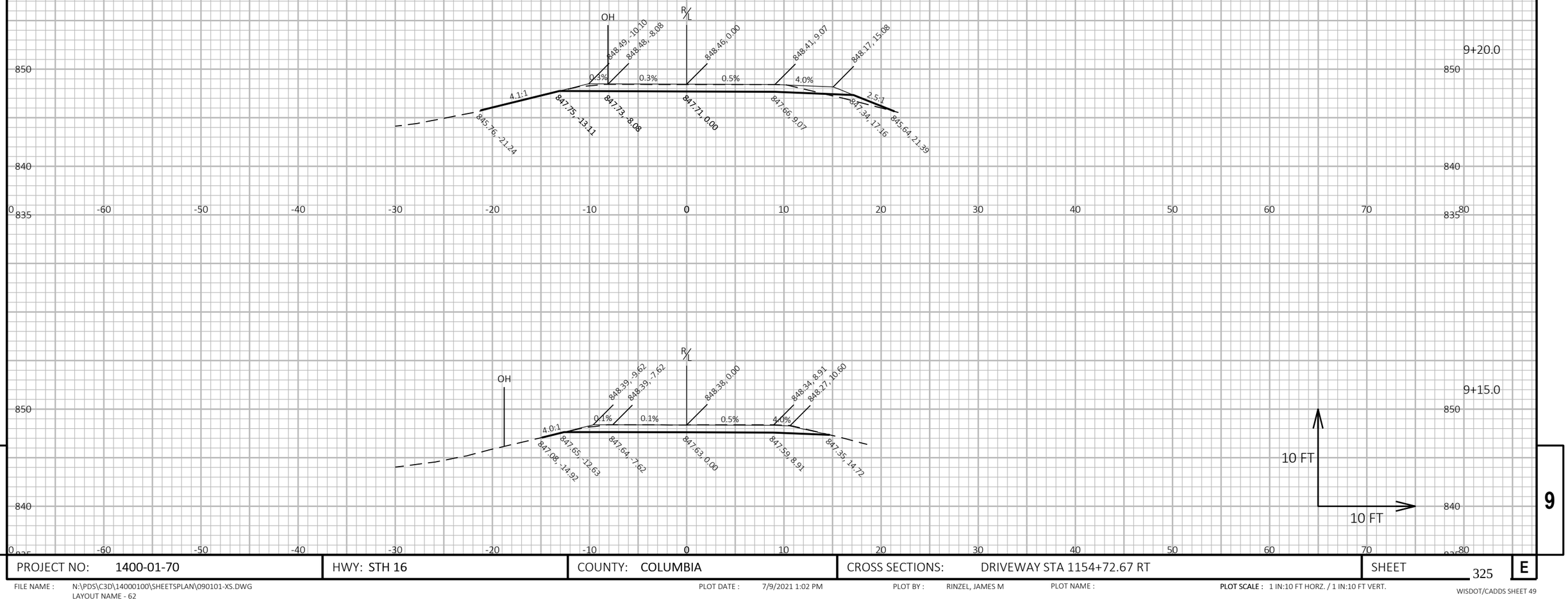
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 324	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 61

PLOT DATE : 7/9/2021 1:02 PM PLOT BY : RINZEL, JAMES M PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

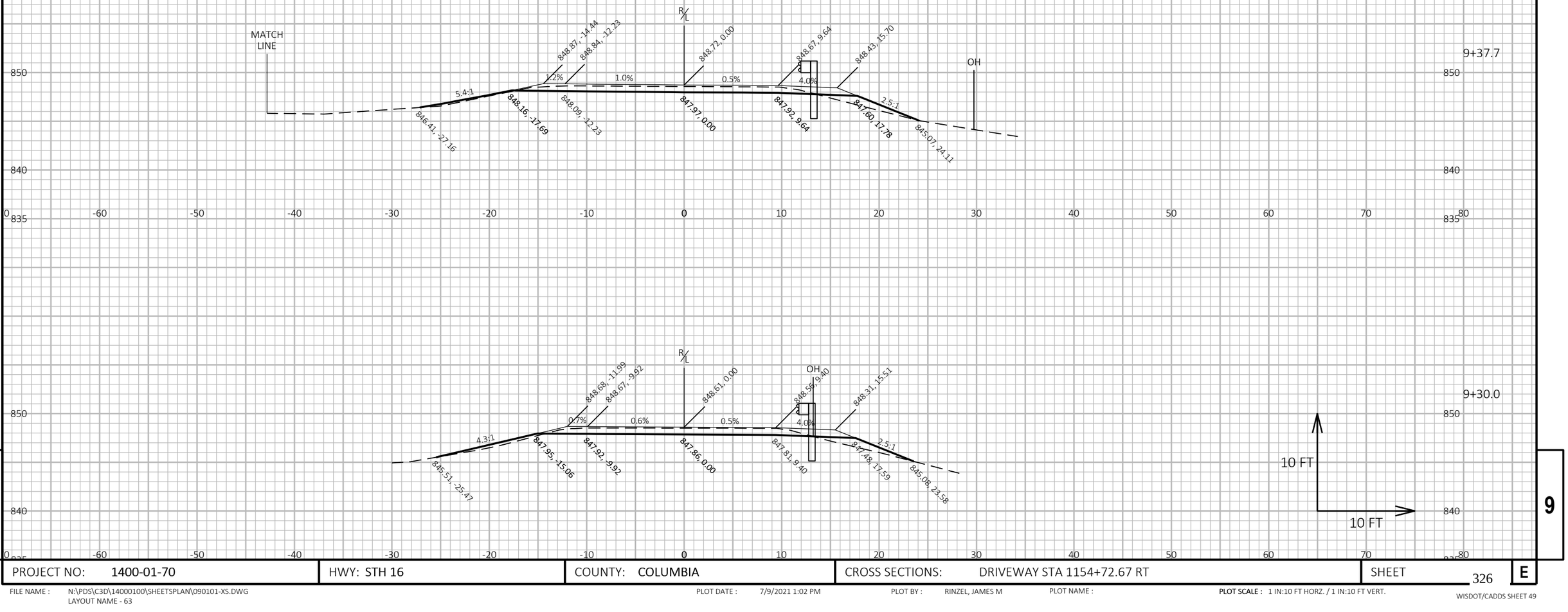
9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DRIVEWAY STA 1154+72.67 RT	SHEET 325	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 62

PLOT DATE : 7/9/2021 1:02 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



9

9

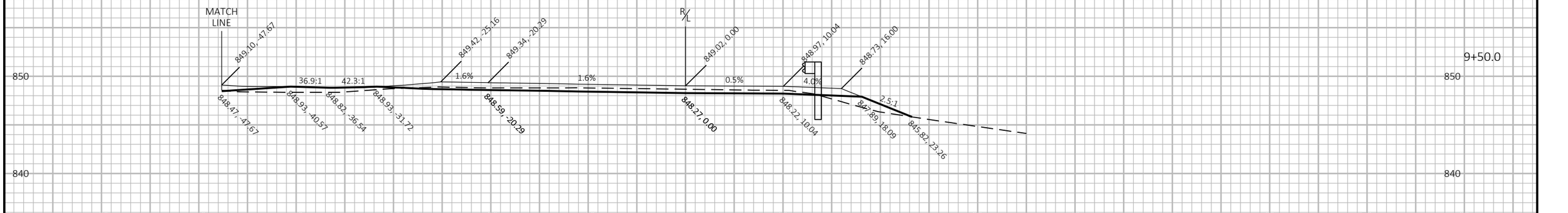
PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DRIVEWAY STA 1154+72.67 RT	SHEET 326	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 63

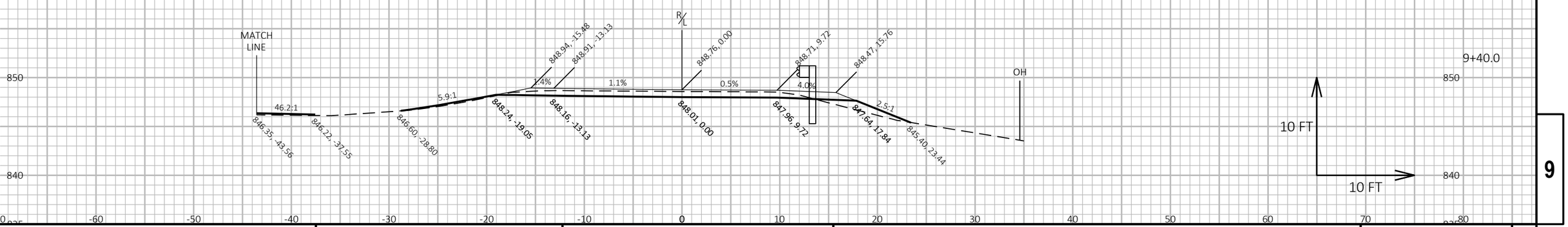
PLOT DATE : 7/9/2021 1:02 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



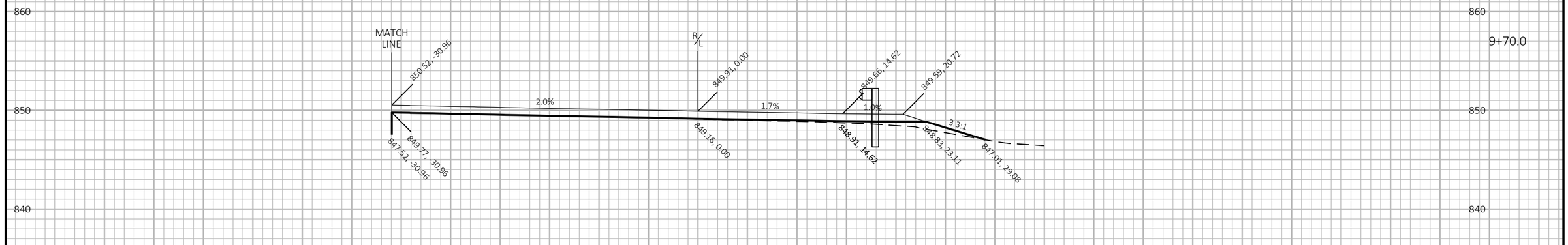
SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



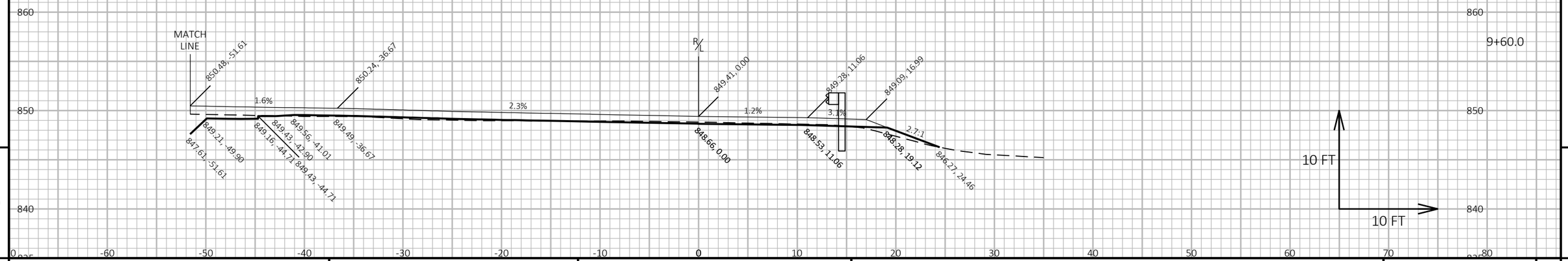
9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DRIVEWAY STA 1154+72.67 RT	SHEET 327	E

SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



9

9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DRIVEWAY STA 1154+72.67 RT	SHEET 328	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 65

PLOT DATE : 7/9/2021 1:02 PM

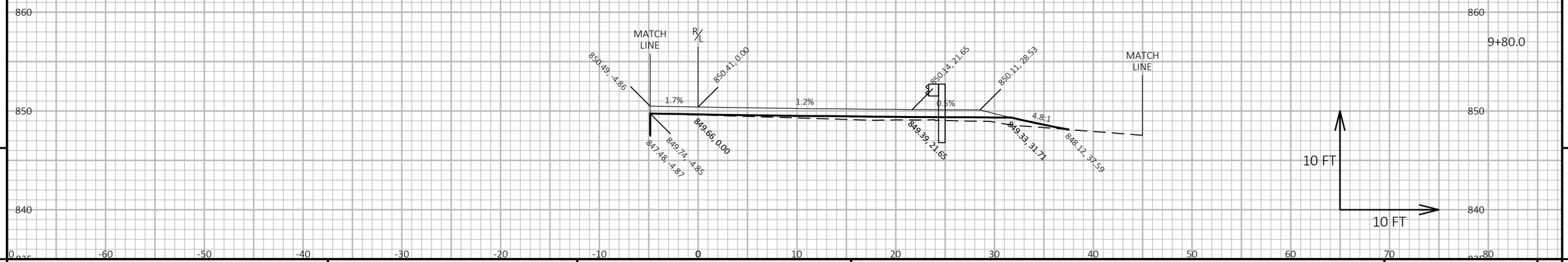
PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE CROSS SECTION MATCHLINES SHEET FOR MORE DETAILS



9 9

PROJECT NO: 1400-01-70	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: DRIVEWAY STA 1154+72.67 RT	SHEET 329	E

FILE NAME : N:\PDS\C3D\14000100\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 66

PLOT DATE : 7/9/2021 1:02 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

MAD

NOVEMBER 2021

PROJECT ID: 1400-01-73

WITH: 1400-01-70

COUNTY: COLUMBIA

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right of Way Plat~~
~~Section No.~~	~~5~~	~~Plan and Profile~~
Section No.	6	Standard Detail Drawings
~~Section No.~~	~~7~~	~~Sign Plates~~
~~Section No.~~	~~8~~	~~Structure Plans~~
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 238

03

DESIGN DESIGNATION 1400-01-73

A.A.D.T.	2022	=	4,100
A.A.D.T.	2042	=	4,600
D.H.V.		=	535
D.D.		=	65/35
T.		=	12.1%
DESIGN SPEED		=	60 MPH
ESALS		=	1,200,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

PORTAGE - COLUMBUS

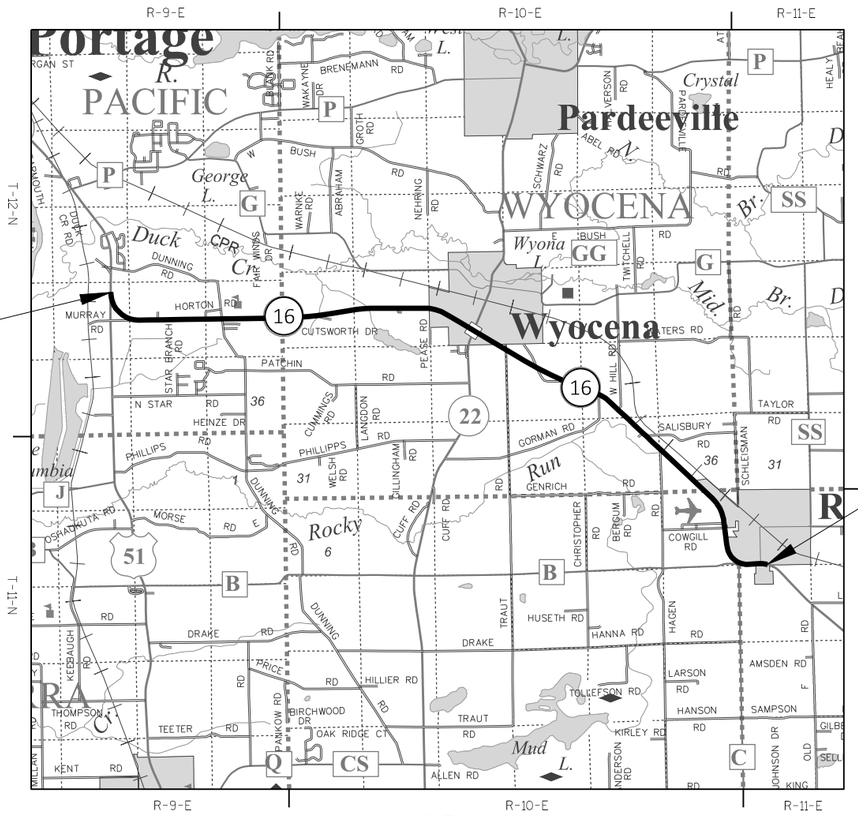
USH 51 TO LINCOLN AVE

STH 16

COLUMBIA COUNTY

STATE PROJECT NUMBER
1400-01-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1400-01-73	WISC 2022003	1
1400-01-70	WISC 2022002	1



TOTAL NET LENGTH OF CENTERLINE = 10.271 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS) , COLUMBIA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATION SHOWN ON THIS PLAN ARE IN REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS DEVELOPED BY WISDOT SW REGION

WISCONSIN DEPARTMENT OF TRANSPORTATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES
Designer	JAMES RINZEL
Project Manager	MAHESH SHRESTHA, P.E.
Regional Examiner	SW REGION
Regional Supervisor	MARC SCHWEIGER, P.E.

APPROVED FOR THE DEPARTMENT

DATE: Mahesh Shrestha Digitally signed by Mahesh Shrestha Date: 2021.07.19 14:59:01 -05'00' (Signature)

E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/9/2021 10:04 AM PLOT BY : RINZEL, JAMES M PLOT NAME :

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL THE TO UTILITIES THAT HAVE FACILITIES IN THE AREAS. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

UTILITY LINES IN THE CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

CONTRACTOR TO VERIFY ELEVATIONS OF THE EXISTING PAVEMENT TO REMAIN IN PLACE, PRIOR TO STAKING.

CONTRACTORS SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

PRIOR TO THE PLACEMENT OF MGS GUARDRAILS, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN DRIVING, TURNING, BIKE OR PARKING LANE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF ASPHALT PAVEMENT AND TO MILLED SURFACES. THE APPLICATION RATE IS 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA PAVEMENT AND 0.07 GAL/SY PLACED ON EXISTING ASPHALT, MILLED SURFACES, CONCRETE PAVEMENT, REMOVING DISTRESSED MILLING LOCATIONS OR AS DIRECTED BY THE ENGINEER.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE QUALITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTURBED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

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

NUMBER, LOCATION, AND SPACING OF SIGNS AND DEVICES, AS SHOWN IN THE PLANS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

EXISTING RIGHT OF WAY LINES SHOWN IN THE PLANS AND CROSS SECTIONS ARE APPROXIMATE.

DRIVEWAY AND ENTRANCE STATIONS AND OFFSETS IN THE PLANS REFER TO THE MATCH-IN LOCATION OF THE EXISTING DRIVEWAY/ENTRANCE.

MAINTAIN EXISTING VERTICAL CLEARANCE UNDER BRIDGE STRUCTURE B-11-72 AT THE STH 22 INTERCHANGE OVERPASS. FIELD ENGINEER WILL RECORD PRE AND POST PROJECT ELEVATIONS FOR PROJECT RECORDS.

MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE ALIGNMENT DIAGRAM FOR LOCATIONS.

CONTRACTOR TO PROTECT DH5577 GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM DH5577 GPS. SEE ALIGNMENT DIAGRAM FOR LOCATION.

ENSURE THAT DH5577 GPS IS/ARE NOT DISTURBED, BUMPED OR MOVED DURING THE DURATION OF THE PROJECT. NOTIFY JACOB ROCKWEILER IMMEDIATELY IF DH5577 GPS IS/ARE DISTURBED, BUMPED OR MOVED DURING CONSTRUCTION OPERATIONS. CONTACT INFO:

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WISCONSIN DEPARTMENT OF TRANSPORTATION
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DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN
EROSION CONTROL DETAILS
EROSION CONTROL PLAN
CURB RAMP DETAILS
MOVING SIGNS
TEMPORARY PAVEMENT MARKINGS
PAVEMENT MARKINGS
TRAFFIC CONTROL
ALIGNMENT DIAGRAM

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ANR PIPELINE CO - GAS/PETROLEUM
W3925 PIPELINE LANE
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ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
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DL-ATCDOTNOTIFICATIONS@ATCLLC.COM

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NORTH PRAIRIE, WI 53153
(262) 392-5200
RELOCATIONS@LUMEN.COM

RUSS RYAN
FRONTIER COMMUNICATIONS OF WI LLC -
COMMUNICATION LINE
118 DIVISION STREET
PLYMOUTH, WI 53073
(920) 583-3275
RUSSELL.W.RYAN@FTR.COM

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NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM
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JOHNSTON, IA 50131
(402) 530-2026
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2

ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
AE, AEW	APRON ENDWALL
ASPH	ASPHALTIC
ADT	AVERAGE DAILY TRAFFIC
AADT	ANNUAL AVERAGE DAILY TRAFFIC
BAD	BASE AGGREGATE DENSE
BF	BACK FACE
BM	BENCHMARK
BTWN	BETWEEN
CTR	CENTER
C/L	CENTERLINE
Δ	CENTRAL ANGLE OR DELTA
CE	COMMERCIAL ENTRANCE
CONST	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CMP	CORRUGATED METAL PIPE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAYS
CY	CUBIC YARD
CP	CONTROL POINT OR CULVERT PIPE
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
DISCH	DISCHARGE
DMS	DYNAMIC MESSAGE SIGN
EA	EACH
E	EAST
EB	EASTBOUND
ELEC	ELECTRIC(AL), ELEC. CABLE
EL, ELEV	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EXIST	EXISTING
FF	FACE TO FACE
FERT	FERTILIZER
FE	FIELD ENTRANCE
F/L, FL	FLOW LINE
GALV	GALVANIZE
HS	HIGH STRENGTH
CWT	HUNDRED WEIGHT
INL	INLET
INTER	INTERSECTION
JT	JOINT
LT	LEFT
L	LENGTH OF CURVE
LF	LINEAR FOOT (FEET)
LC	LONG CHORD
LS	LUMP SUM
MP	MARKER POST
MGAL	1000 GALLONS
NC	NORMAL CROWN
N	NORTH
NB	NORTH BOUND
NOR	NORMAL
NO	NUMBER
PAV'T	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY

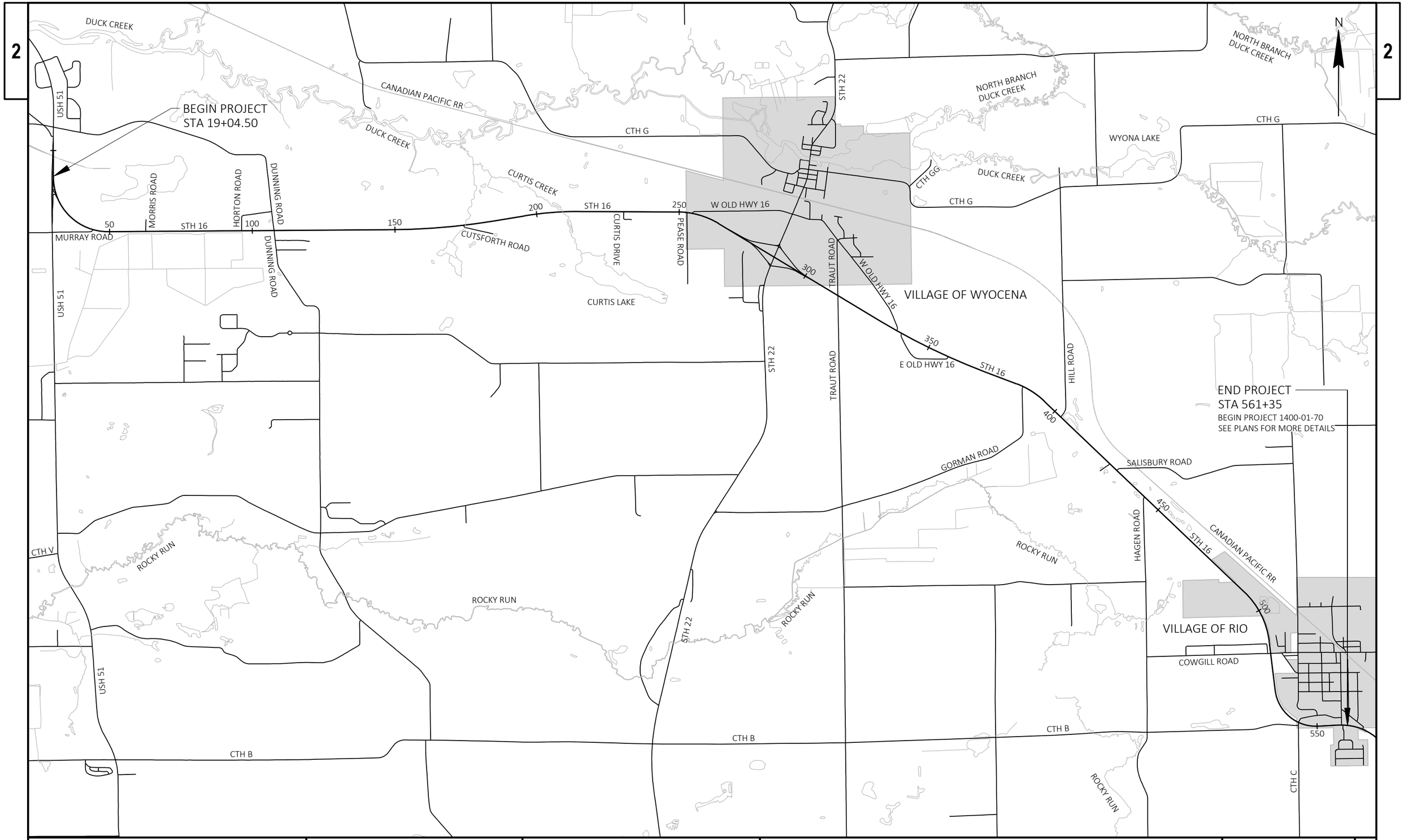
ABBREVIATIONS CONT'D

PCC	PORTLAND CEMENT CONCRETE
PE	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
PL	PROPERTY LINE
R	RADIUS OR RANGE
R/L	REFERENCE LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT OF WAY
RD	ROAD
SHLD	SHOULDER(S)
S	SOUTH
SB	SOUTHBOUND
SF	SQUARE FOOT (FEET)
SDD	STANDARD DETAIL DRAWING(S)
STH	STATE TRUNK HIGHWAYS
SS	STORM SEWER
SSD	STOPPING SIGHT DISTANCE
STA	STATION
SE	SUPERELEVATION
S/L	SURVEY LINE
SYM	SYMMETRICAL
T	TRUCKS (PERCENT OF)
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TOC	TOP OF CURB
TYP	TYPICAL
UNCL	UNCLASSIFIED
UG	UNDERGROUND
VAR	VARIABLE
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
WT	WEIGHT
W	WEST
WB	WEST BOUND

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = N/A
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.311 ACRES



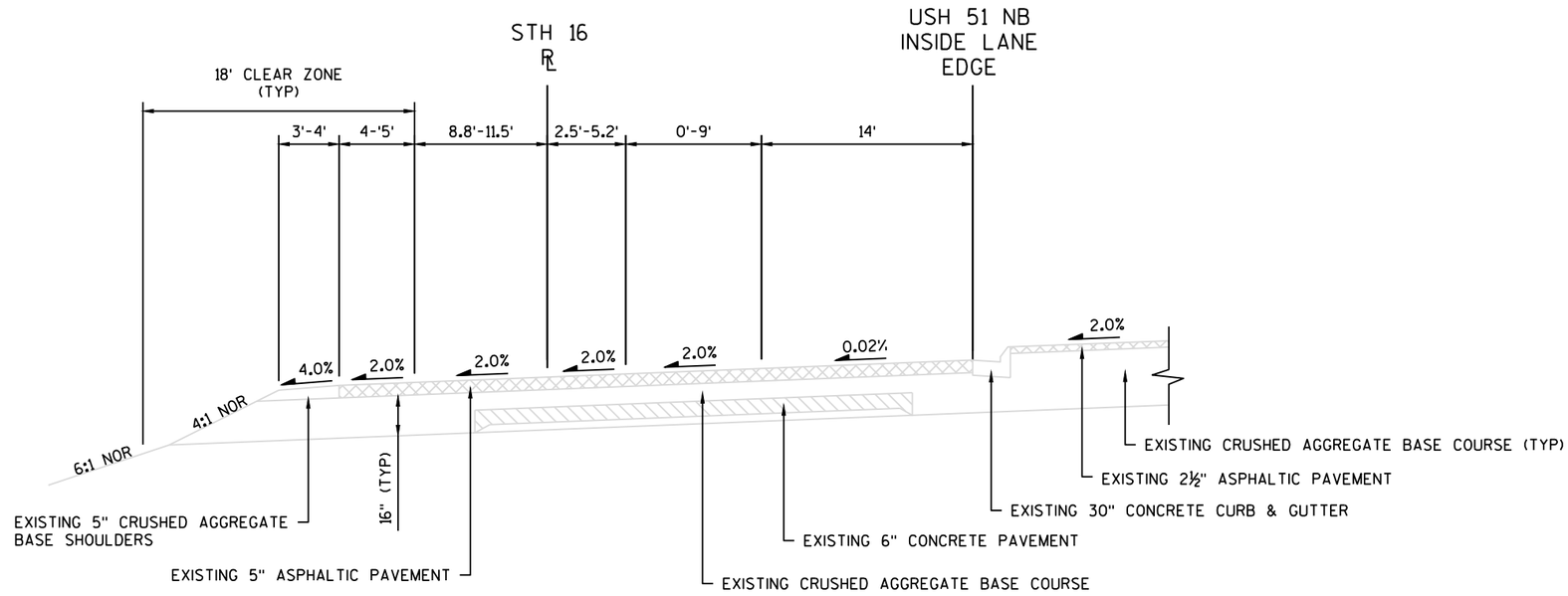
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 10:06 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:3000 FT

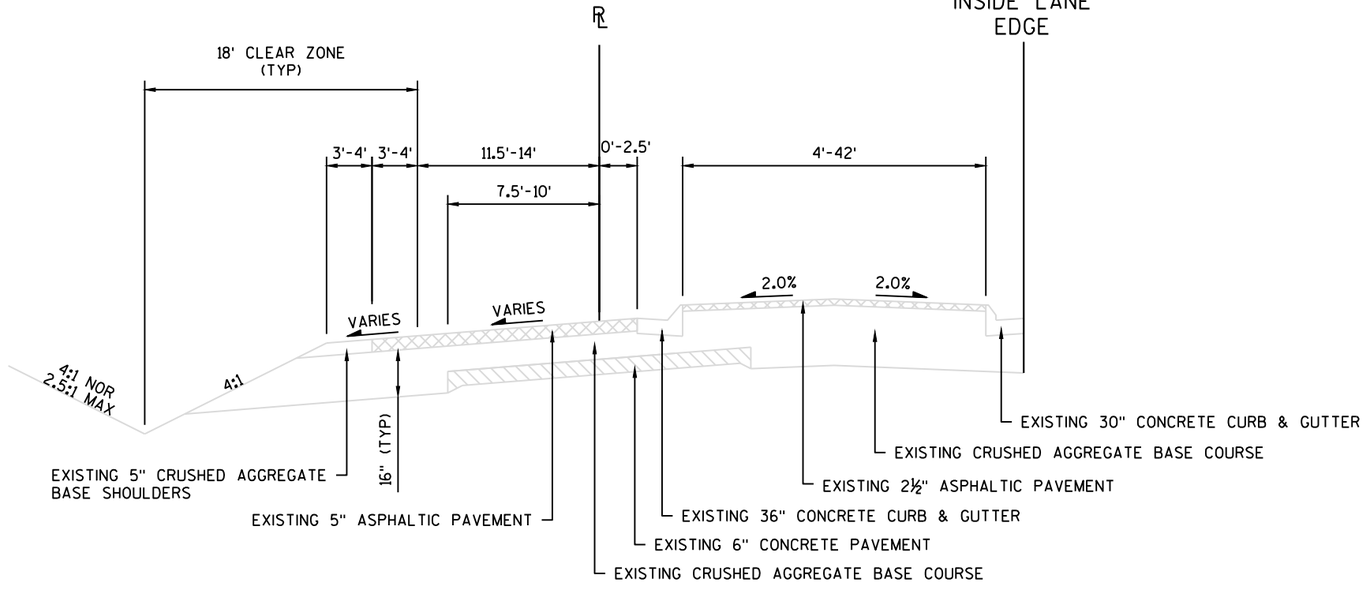
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION STH 16

STA 19+04.50 TO STA 20+39

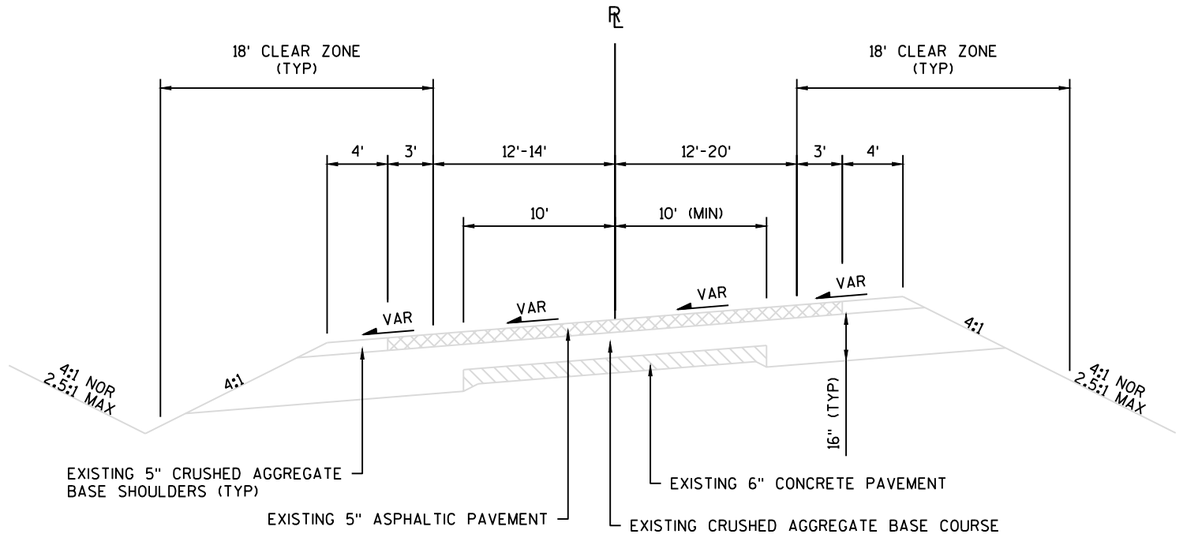


EXISTING TYPICAL SECTION STH 16

STA 20+39 TO STA 25+76.50

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 5	E

2

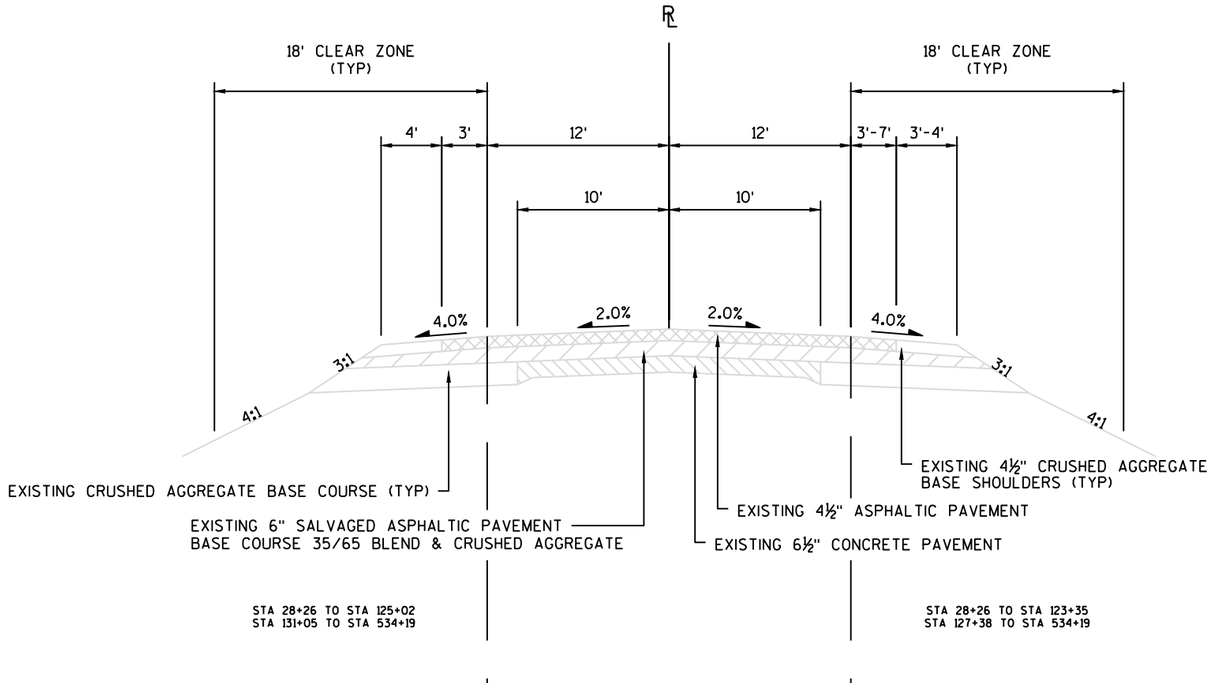


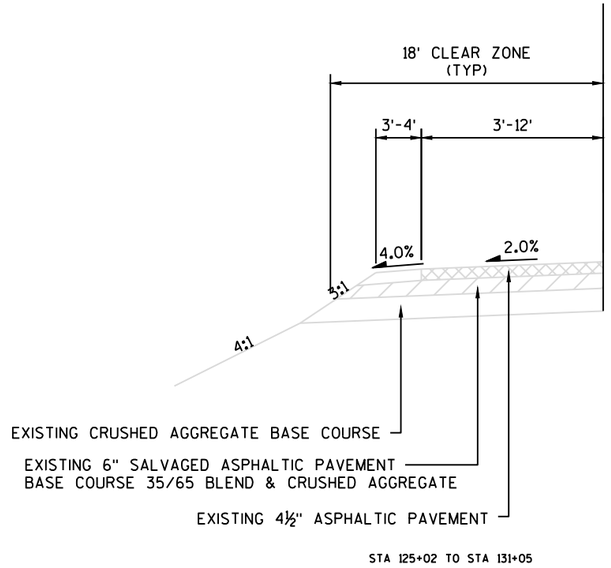
EXISTING TYPICAL SECTION STH 16

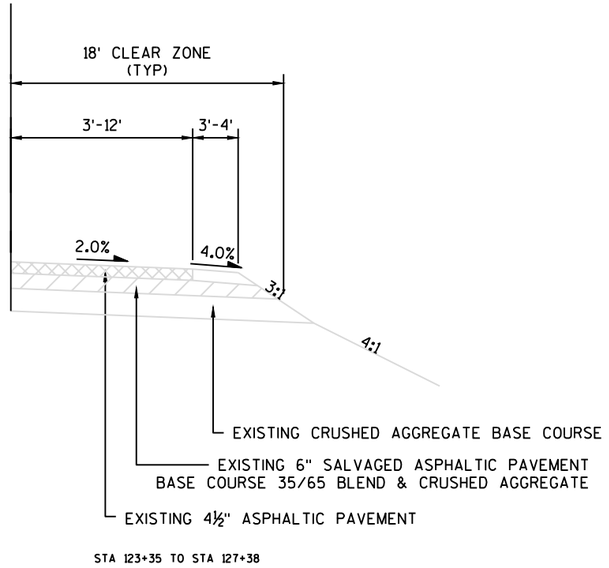
STA 25+76.50 TO STA 28+26

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 6	E

2







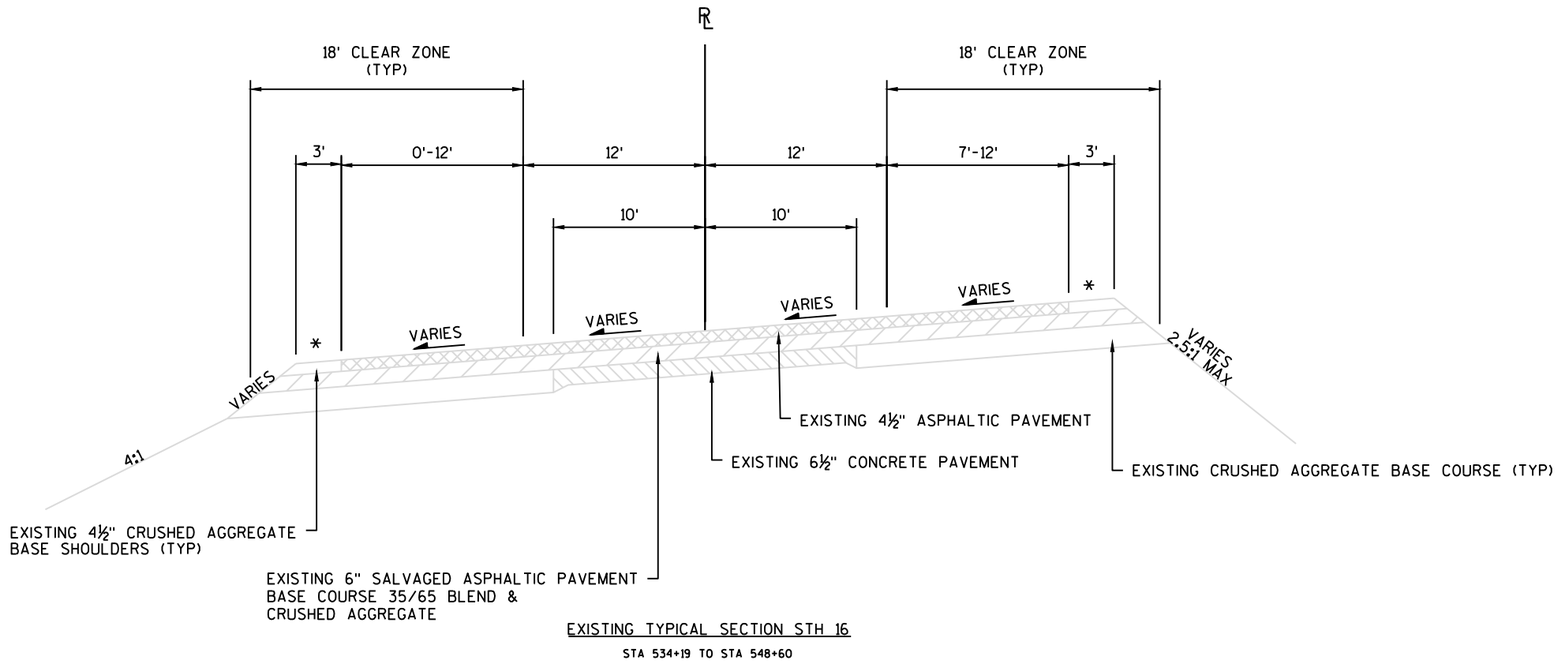
EXISTING TYPICAL SECTION STH 16

STA 28+26 TO STA 534+19

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EXISTING TYPICAL SECTIONS	SHEET 7	E

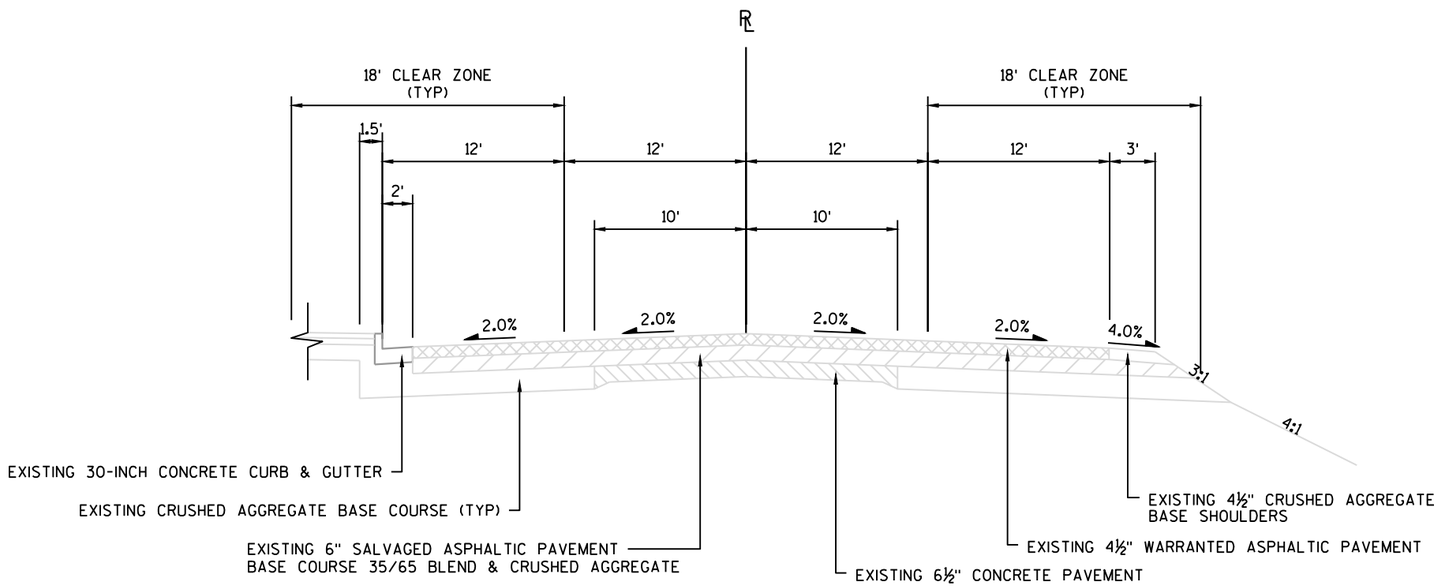
FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/20/2021 1:53 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING TYPICAL SECTION STH 16

STA 534+19 TO STA 548+60



EXISTING TYPICAL SECTION STH 16

STA 548+60 TO STA 561+35

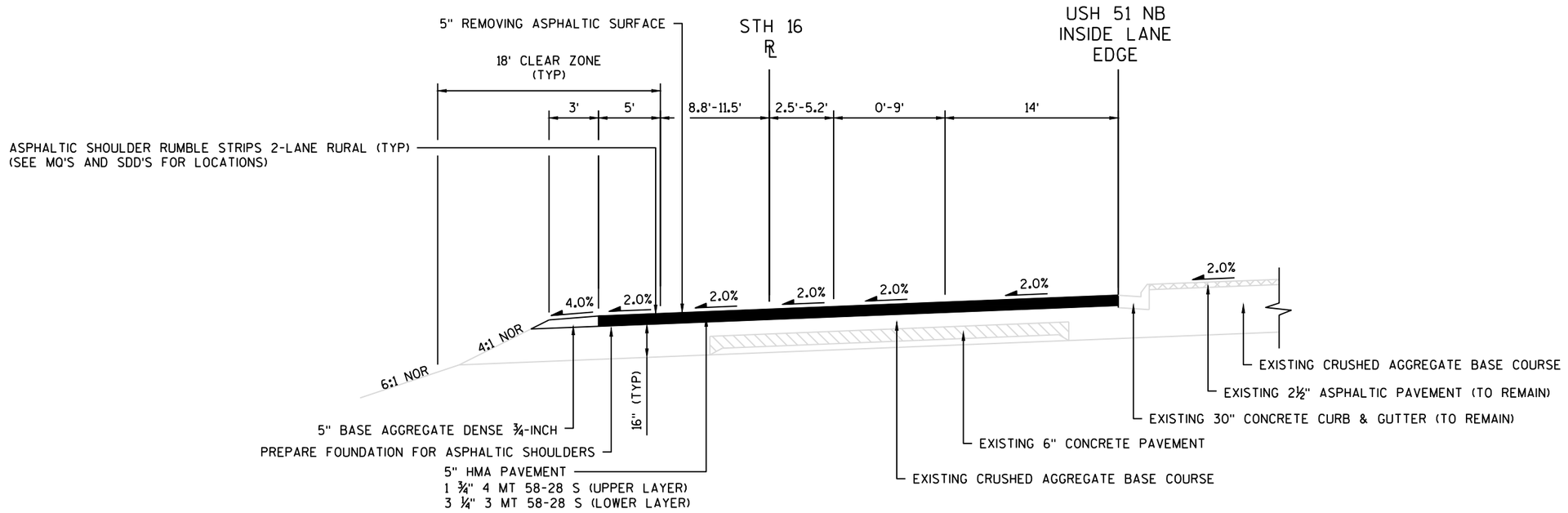
*4% MINIMUM AGGREGATE SHOULDER SLOPE.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 8	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 04

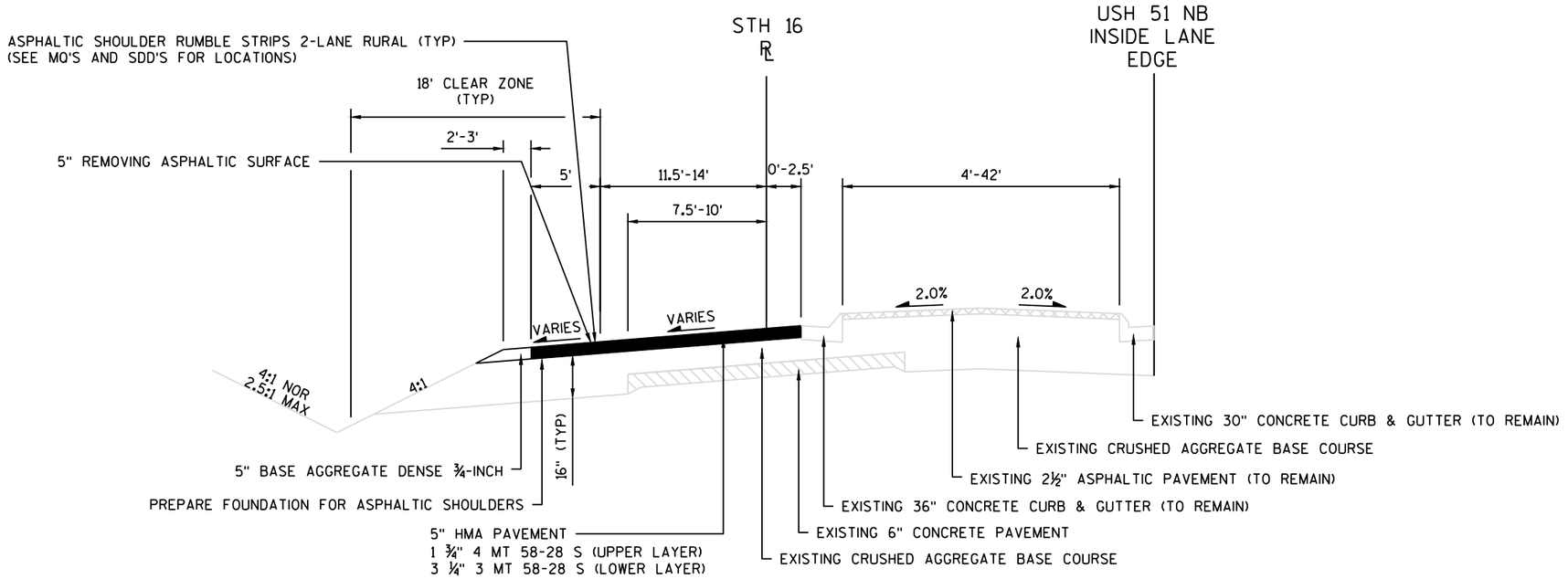
PLOT DATE : 8/20/2021 1:53 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42



PROPOSED TYPICAL SECTION STH 16

STA 19+04.50 TO STA 20+39

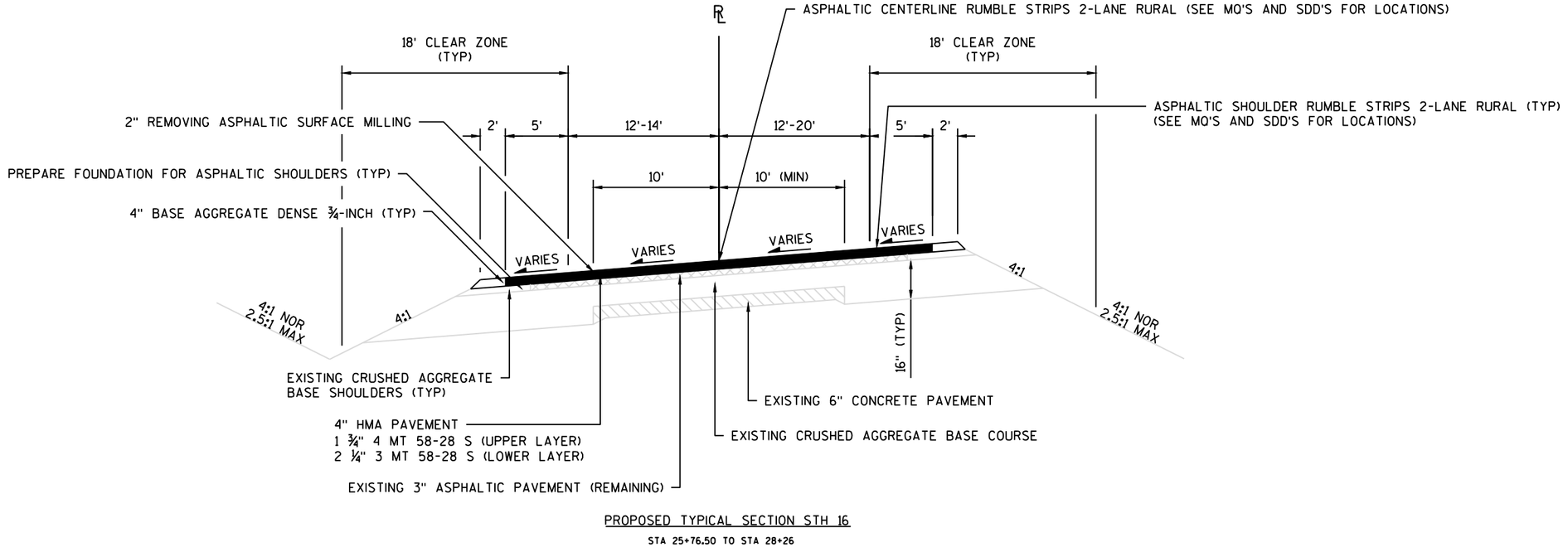


PROPOSED TYPICAL SECTION STH 16

STA 20+39 TO STA 25+76.50

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 9	E

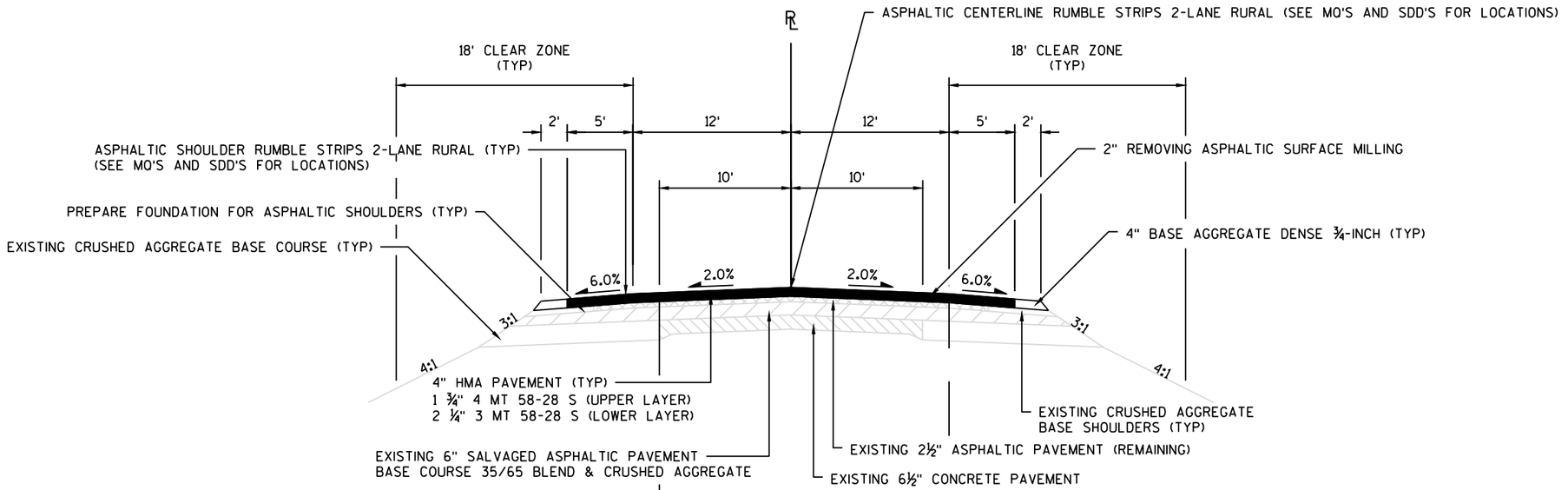
2

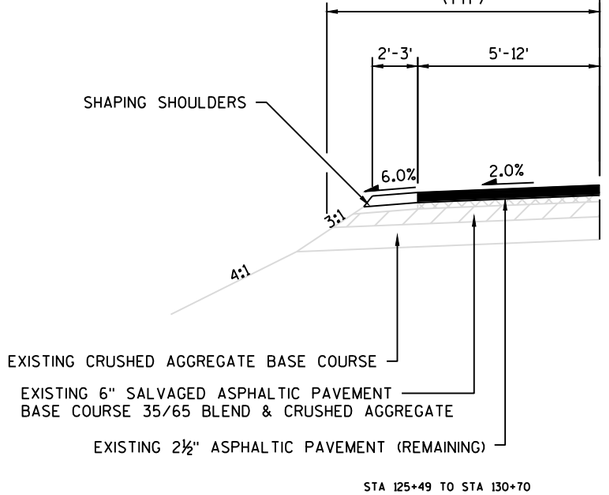


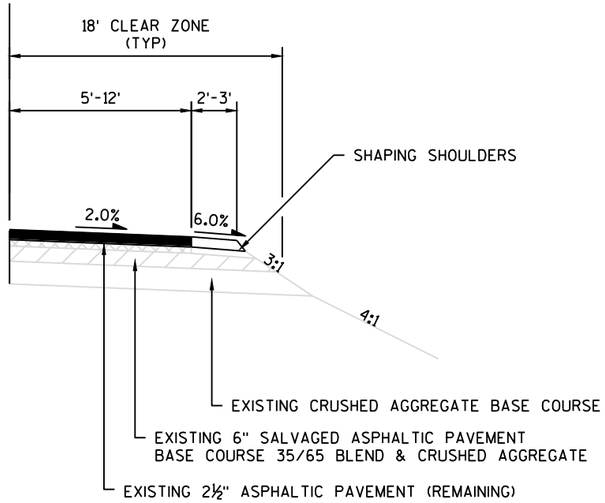
PROPOSED TYPICAL SECTION STH 16

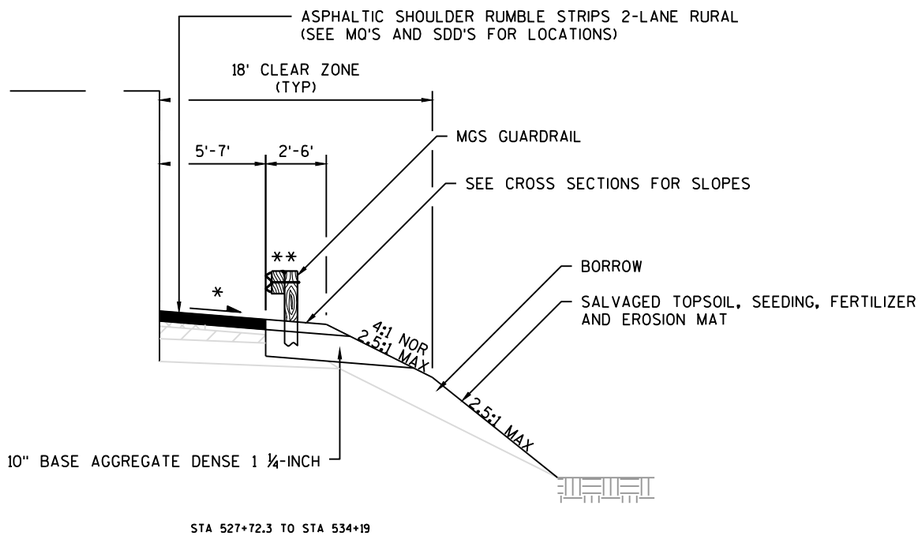
STA 25+76.50 TO STA 28+26

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 10	E







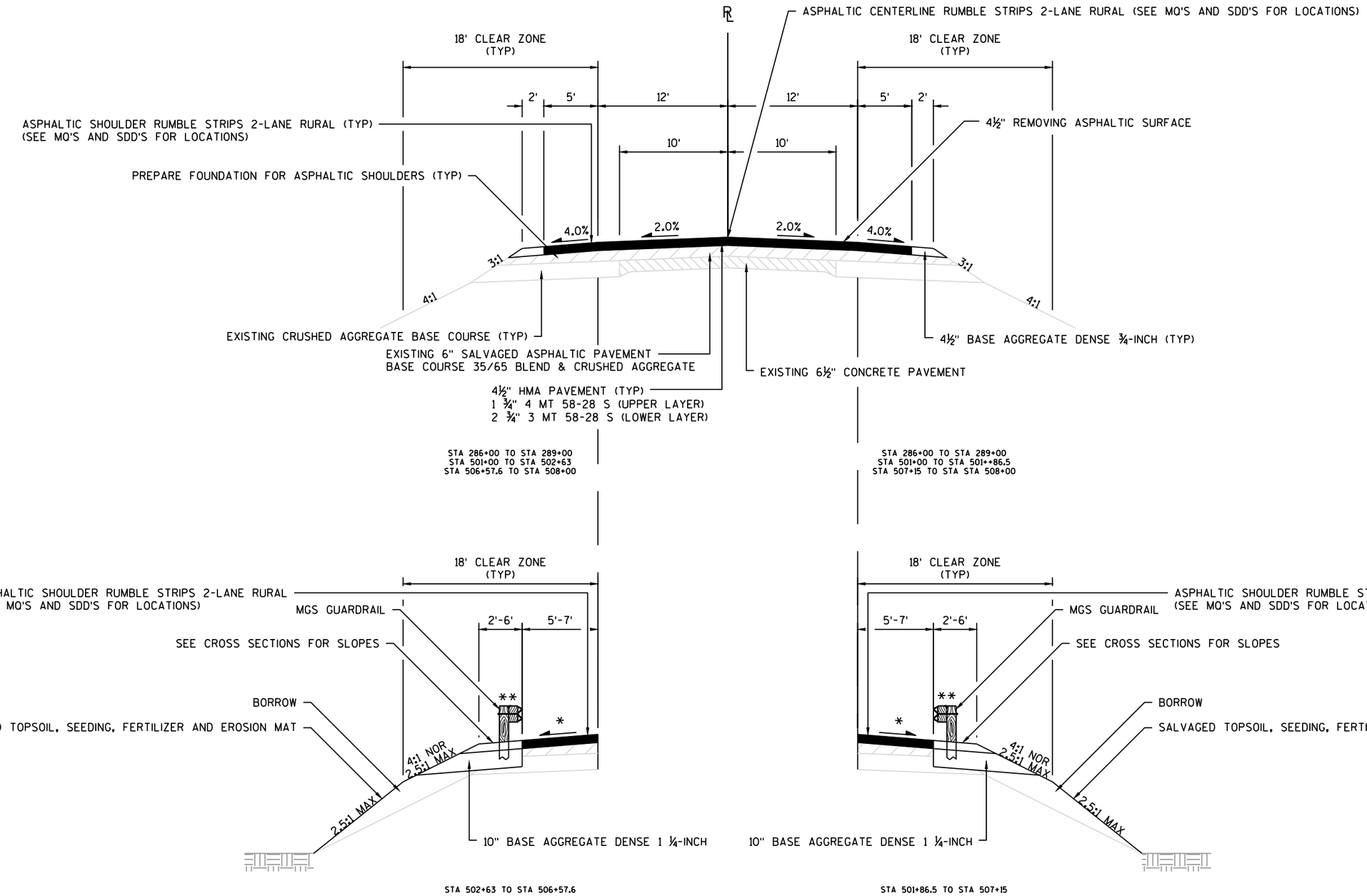


PROPOSED TYPICAL SECTION STH 16

STA 28+26 TO STA 286+00
STA 289+00 TO STA 501+00
STA 508+00 TO STA 534+19

*NOTE - SEE CROSS SECTIONS FOR SLOPES
**NOTE - STA 528+57 - STA 533+57.4 RT

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 11	E

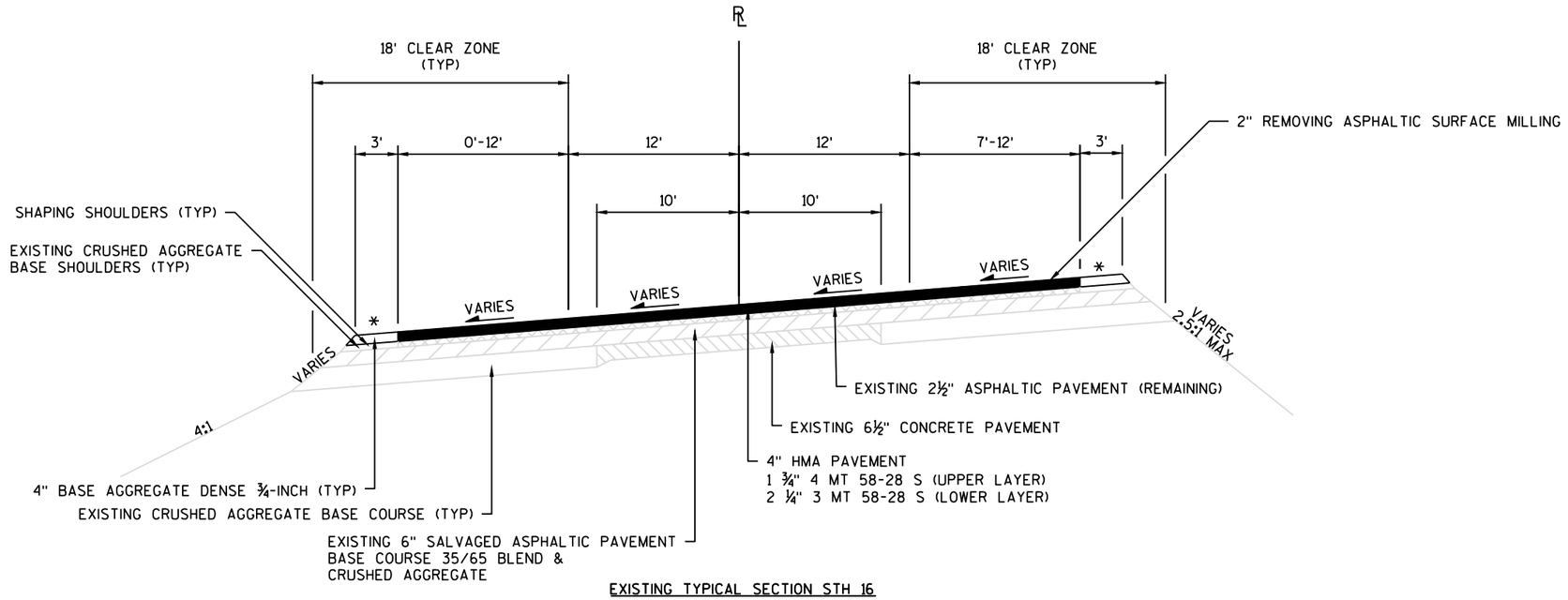


PROPOSED TYPICAL SECTION STH 16

STA 286+00 TO STA 289+00
STA 501+00 TO STA 508+00

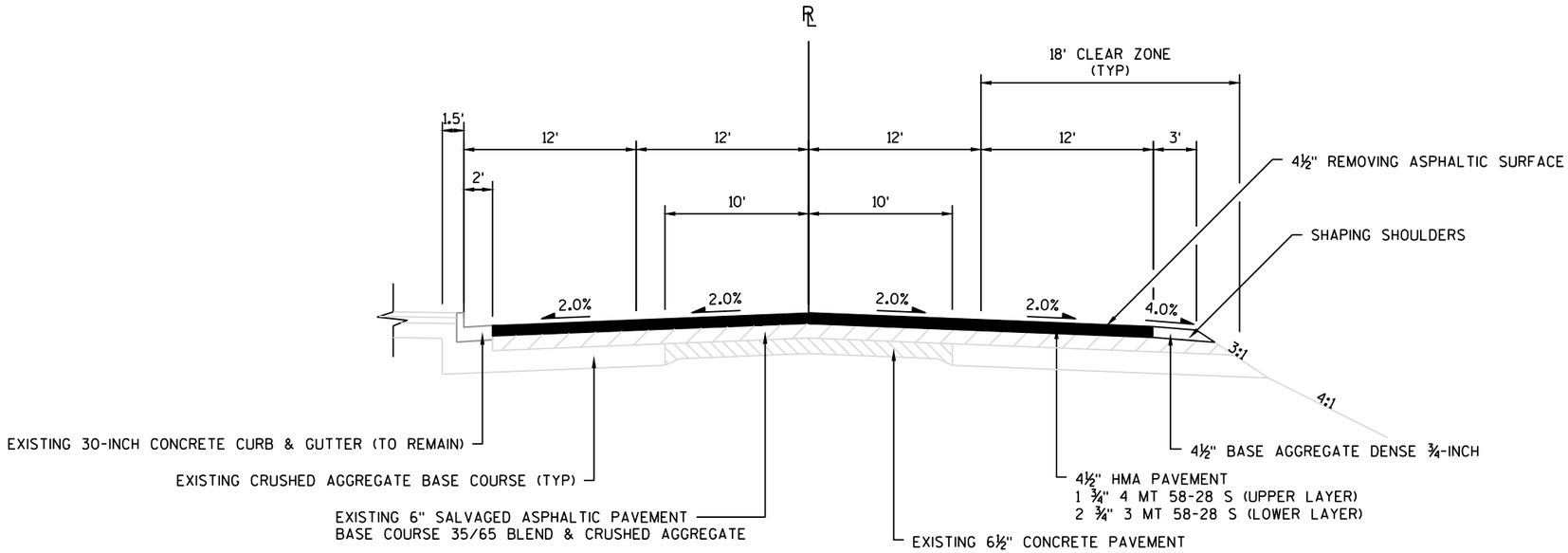
*NOTE - SEE CROSS SECTIONS FOR SLOPES
**NOTE - STA 502+01.7 - STA 506+86 RT
STA 502+63 - STA 506+26.1 LT

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 12	E



EXISTING TYPICAL SECTION STH 16

STA 534+19 TO STA 548+60



PROPOSED TYPICAL SECTION STH 16

STA 548+60 TO STA 561+35

*4.0% MINIMUM AGGREGATE SHOULDER SLOPE.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PROPOSED TYPICAL SECTIONS	SHEET 13	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 09

PLOT DATE : 8/20/2021 1:53 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT

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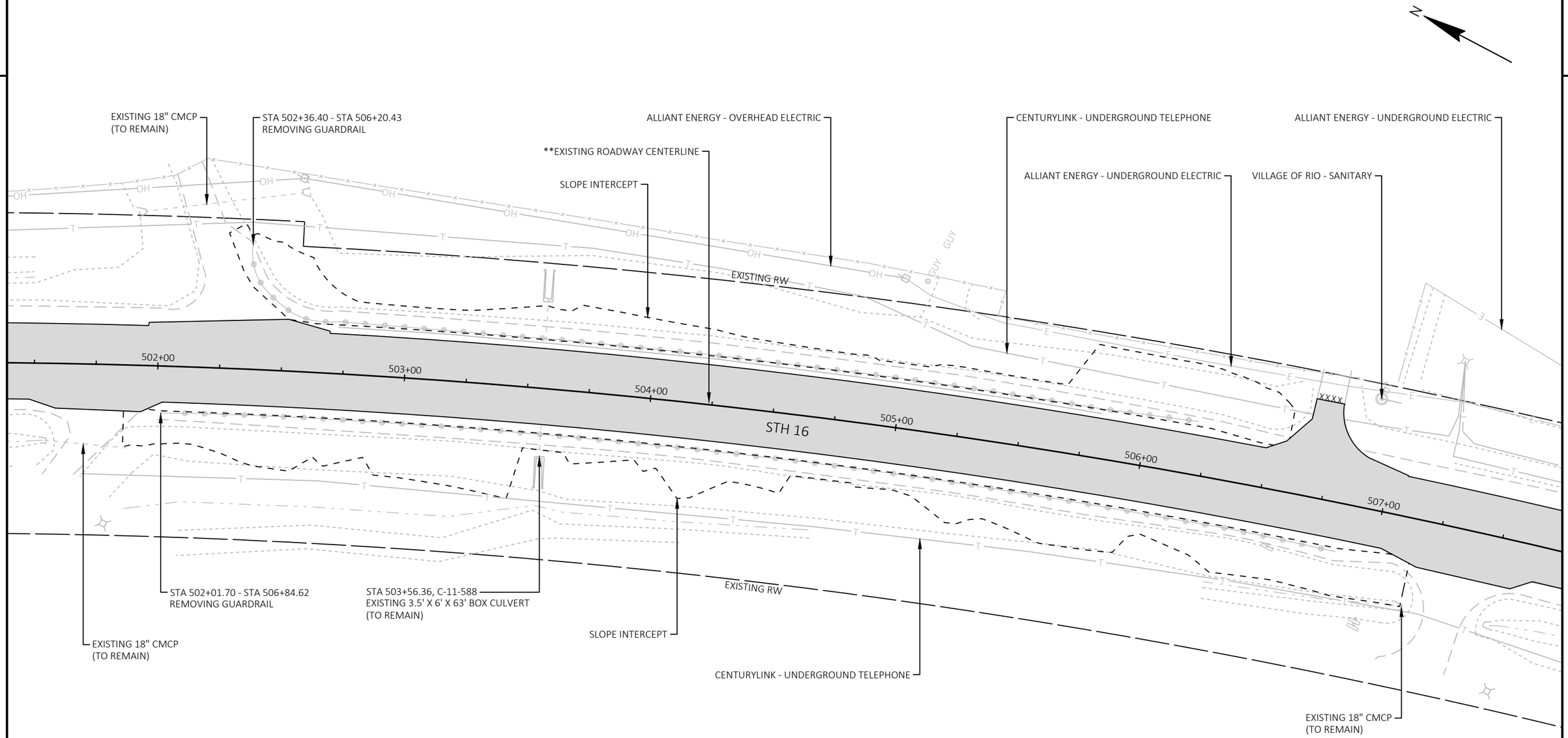


LEGEND

REMOVING ASPHALTIC SURFACE

.XXXXXXXXXXX. SAWING ASPHALT

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 0.7'-0.8' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 14	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 01
PLOT DATE : 7/9/2021 10:14 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

EXISTING RW

**EXISTING ROADWAY CENTERLINE

PC: 528+77.14

529+00

530+00

531+00

532+00

533+00

534+00

STH 16

XXXXXXXXXXX

STA 528+57.02 - STA 533+55.40
REMOVING GUARDRAIL

STA 530+54.29, C-11-589
EXISTING 3.5' X 6' X 71' BOX CULVERT
(TO REMAIN)

SLOPE INTERCEPT

EXISTING RW

CENTURYLINK - UNDERGROUND TELEPHONE

LEGEND

REMOVING ASPHALTIC SURFACE MILLING

XXXXXXXXXXX SAWING ASPHALT

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1.6'-2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 15	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2021 10:14 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

LINCOLN AVENUE

EXISTING RW

EXISTING RW

SLOPE INTERCEPT (TYP)

SIGN

SIGN

GUY

POST

POST

OH

OH

OH

OH

ALLIANT ENERGY - OVERHEAD ELECTRIC

OUT

STA 558+59, 22.3' LT
CENTURYLINK - UNDERGROUND TELEPHONE
EXISTING MANHOLE TO REMAIN
NO ADJUSTMENTS TO RIM ELEVATION REQUIRED

558+00

559+00

560+00

STH 16

EXISTING CULVERT PIPE
(TO REMAIN)

CENTURYLINK - UNDERGROUND TELEPHONE

OAKVIEW DRIVE

CAUTION

ALLIANT ENERGY - UNDERGROUND GAS

EXISTING RW

EXISTING RW

T

HO

GUY

GUY

XXX

SLOPE INTERCEPT

ALLIANT ENERGY - GAS VALVE

GV

ALLIANT ENERGY - OVERHEAD ELECTRIC

EXISTING HYDRANT TO REMAIN
VILLAGE OF RIO - WATER

ALLIANT ENERGY - UNDERGROUND ELECTRIC

LEGEND

REMOVING ASPHALTIC SURFACE

REMOVING CURB & GUTTER

REMOVING CONCRETE SIDEWALK

XXXXX SAWING ASPHALT/CONCRETE

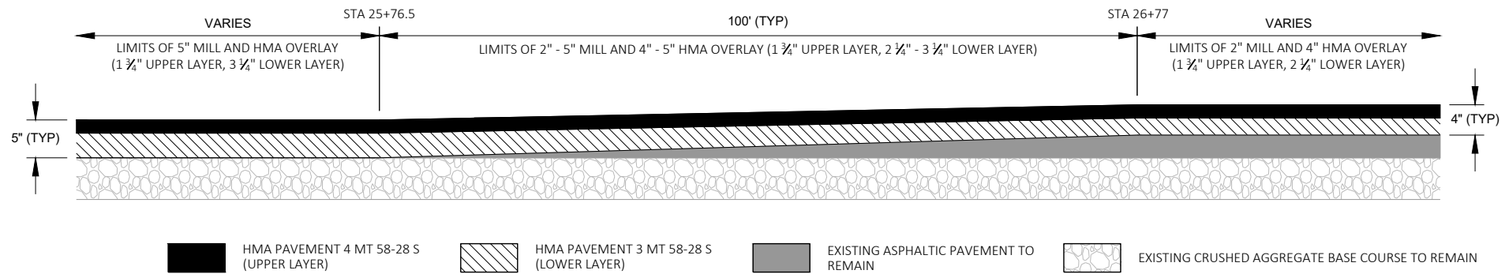
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - REMOVALS	SHEET 16	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021001B-CD.DWG
LAYOUT NAME - 01

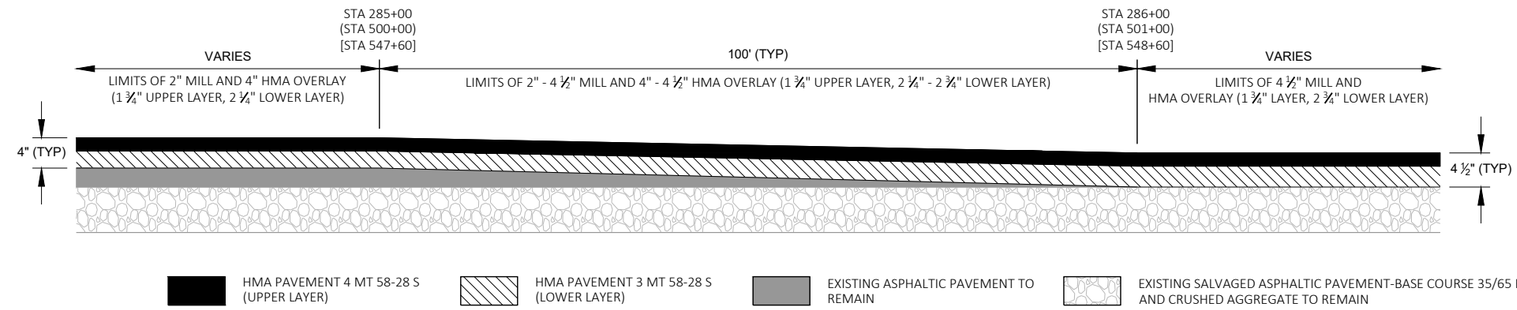
PLOT DATE : 7/9/2021 10:16 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

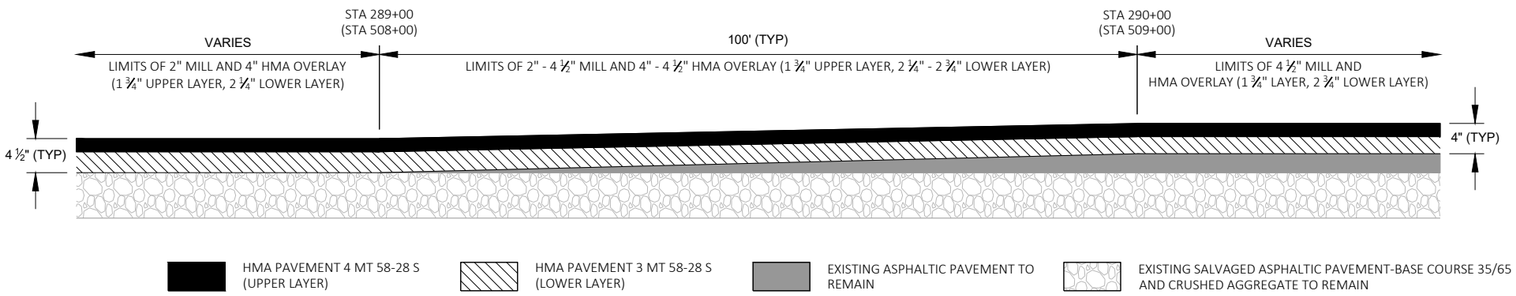
2



HMA OVERLAY DEPTH TRANSITION DETAIL
ELEVATION VIEW
STA 25+76.50 - STA 26+77

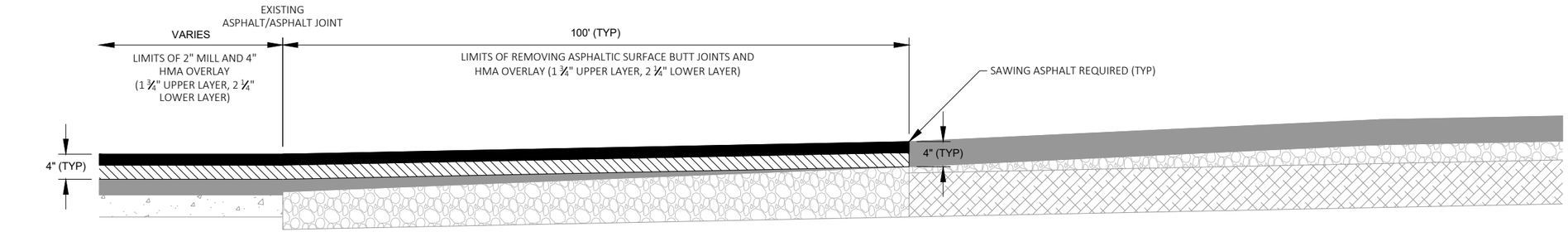


HMA OVERLAY DEPTH TRANSITION DETAIL
ELEVATION VIEW
STA 285+00 - STA 286+00
(STA 500+00 - STA 501+00)
[STA 547+60 - STA 548+60]

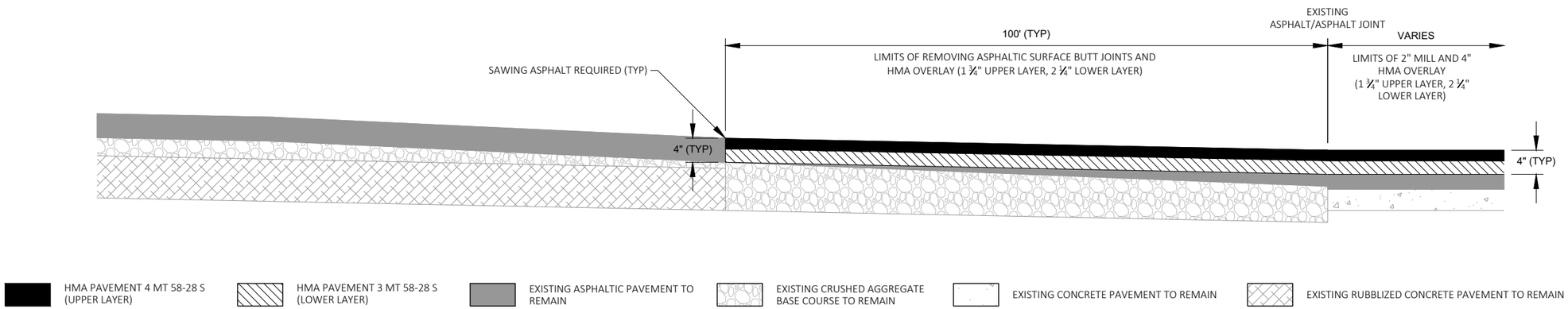


HMA OVERLAY DEPTH TRANSITION DETAIL
ELEVATION VIEW
STA 289+00 - STA 290+00
(STA 508+00 - STA 509+00)

2

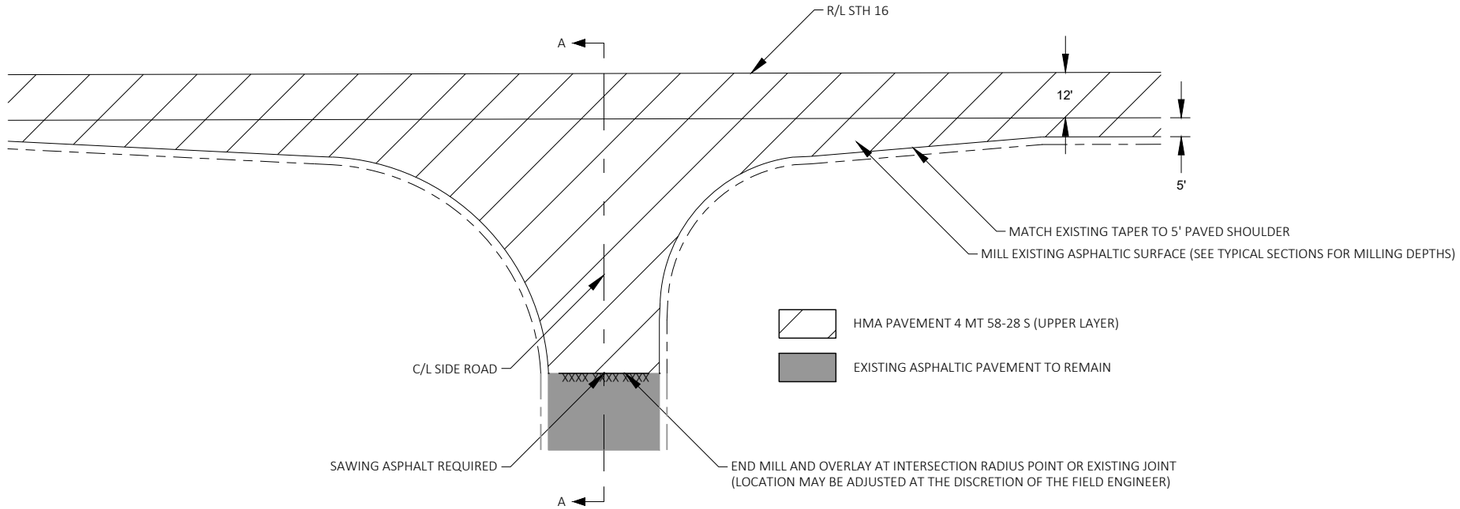


RAMP JOINT DETAIL
ELEVATION VIEW
STH 16 EB OFF RAMP
STH 16 WB ON RAMP

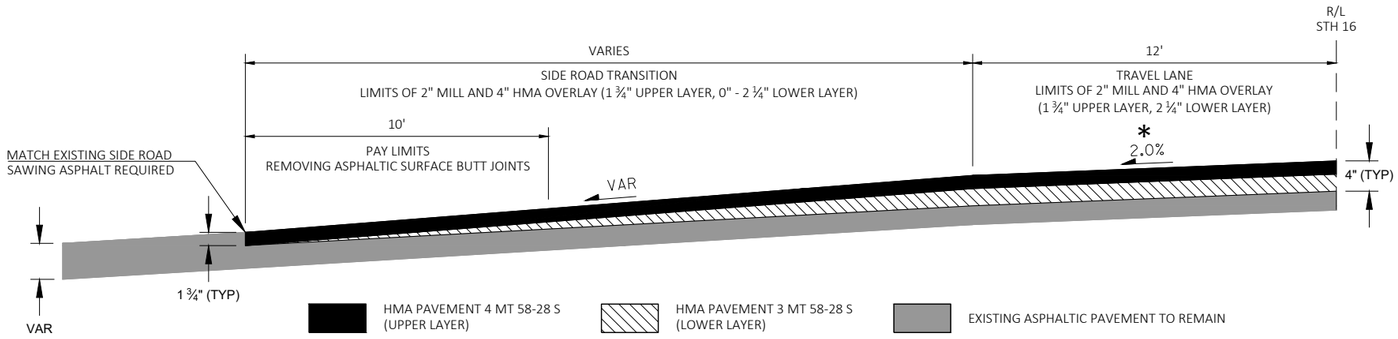


RAMP JOINT DETAIL
ELEVATION VIEW
STH 16 EB ON RAMP
STH 16 WB OFF RAMP

2



PLAN VIEW



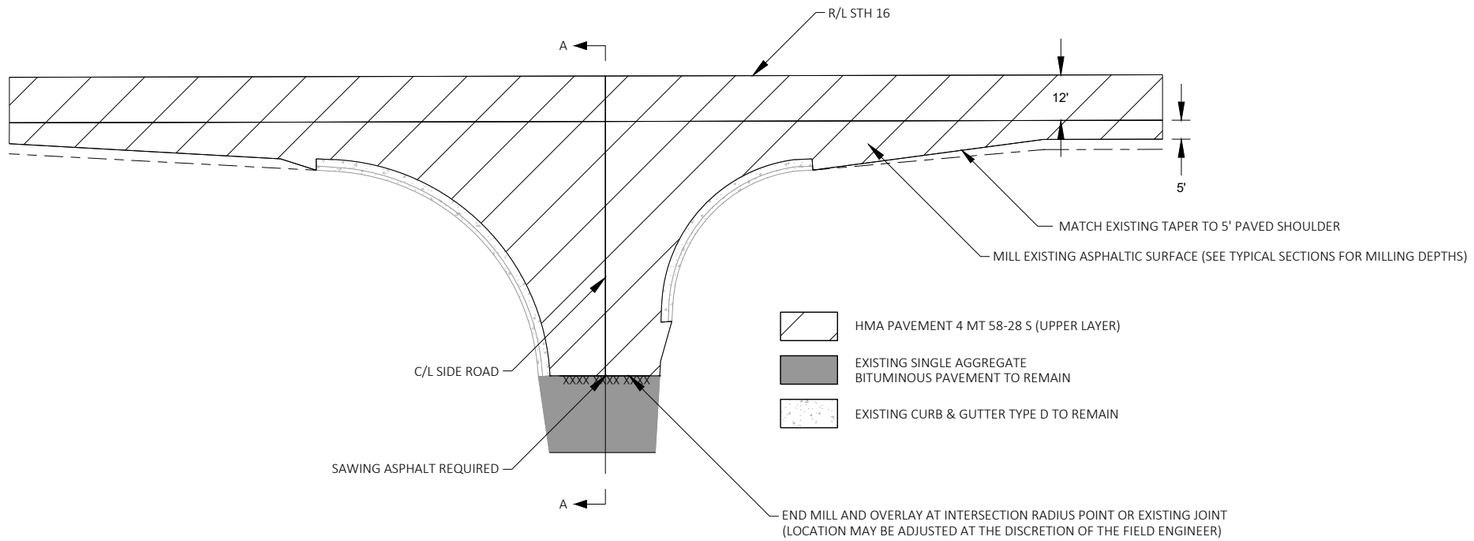
SECTION A-A

SIDE ROAD TRANSITION DETAIL

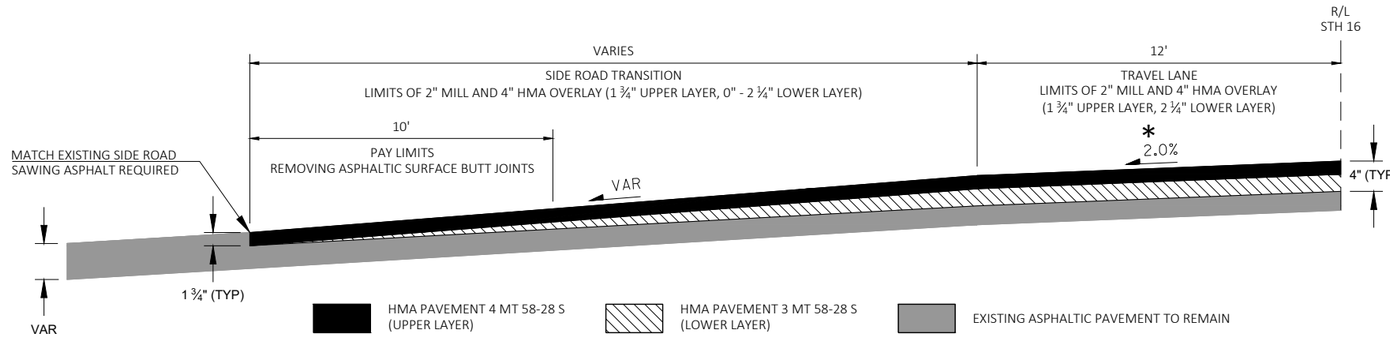
*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

MURRAY ROAD	E OLD HWY 16
MORRIS DRIVE	GORMAN ROAD
HORTON ROAD	W HILL ROAD
DUNNING ROAD (NORTH)	SALISBURY ROAD
CUTSFORTH ROAD	HAGEN ROAD
CURTIS DRIVE	
PEASE ROAD	
W OLD HWY 16	
TRAUT ROAD	

2



PLAN VIEW



SECTION A-A

SIDE ROAD WITH CURB AND GUTTER TRANSITION DETAIL

*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

DUNNING ROAD (SOUTH)

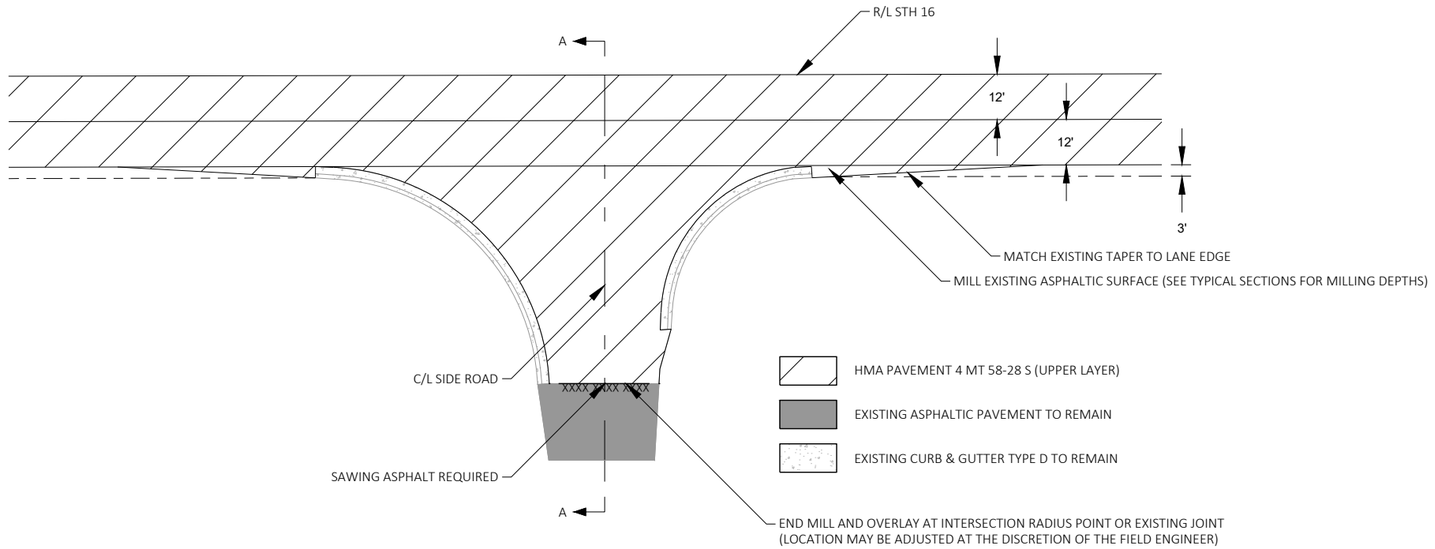
COWGILL ROAD/RIO STREET

COLUMBIA COUNTY SOLID WASTE WASTE ENTRANCE (INCLUDES RIGHT TURN LANE)

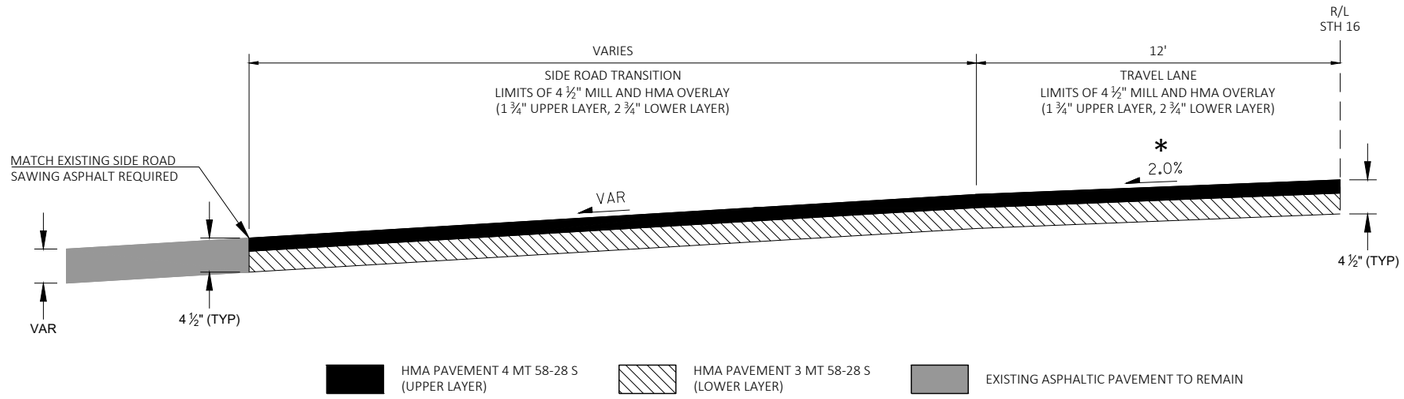
CTH B/C

PARIS STREET

2



PLAN VIEW



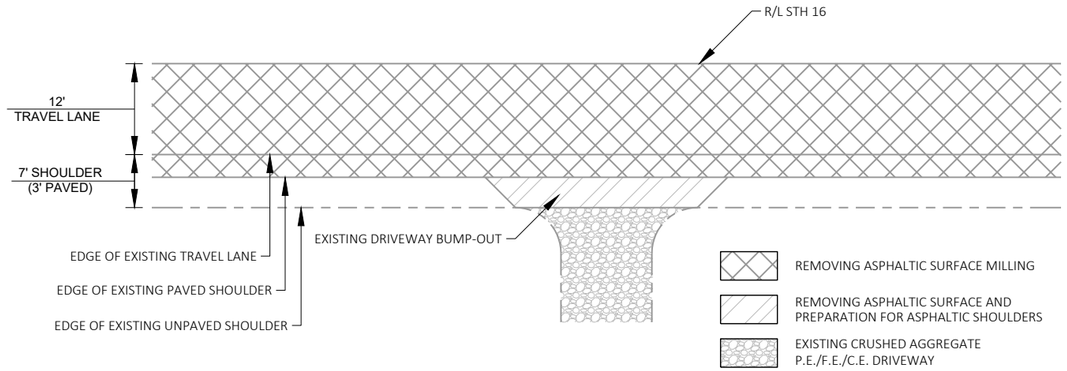
SECTION A-A

SIDE ROAD WITH CURB AND GUTTER TRANSITION DETAIL

*2.0% TYPICAL; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

LINCOLN AVENUE

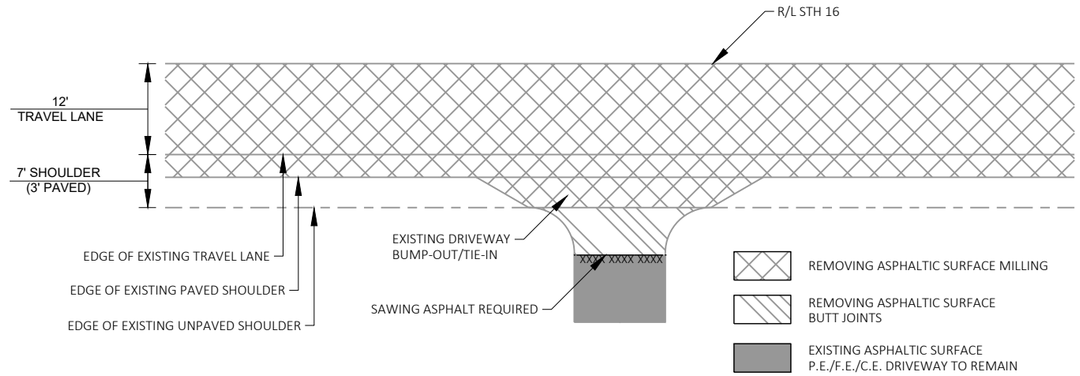
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MILLING TRANSITIONS AND BUTT JOINTS	SHEET 21	E



PLAN VIEW

REMOVING EXISTING PAVED DRIVEWAY BUMP-OUTS AT AGGREGATE ENTRANCES (STA 19+04.50 - STA 561+35)

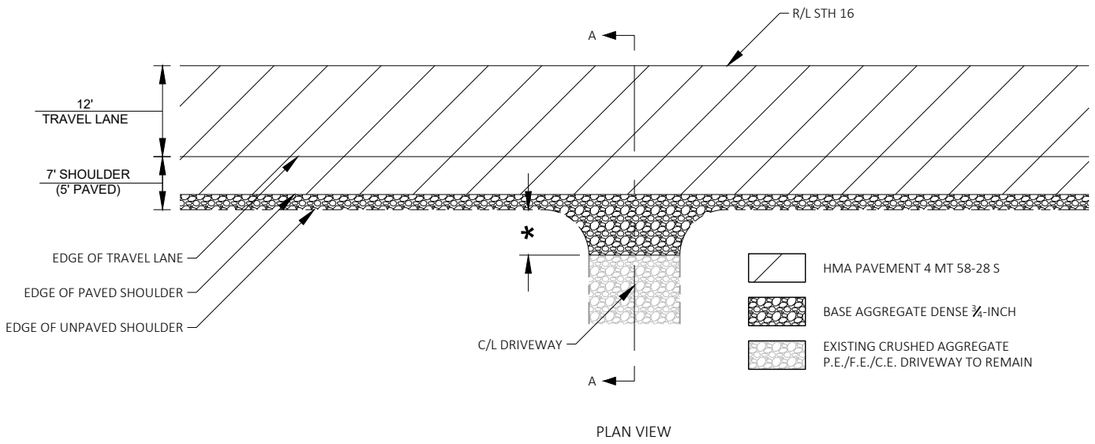
EXISTING DRIVEWAY BUMP-OUT ASPHALT DEPTH VARIES BETWEEN 3"-4".



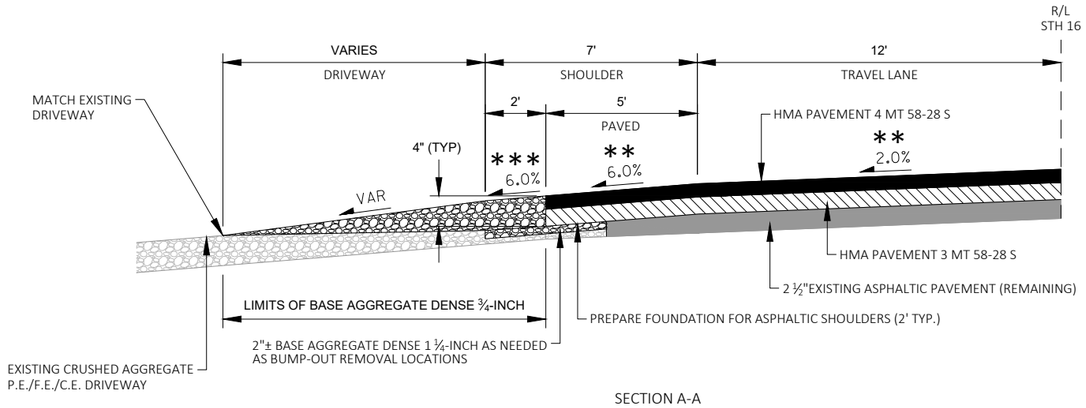
PLAN VIEW

MILLING EXISTING PAVED DRIVEWAY BUMP-OUTS AT PAVED ENTRANCES (STA 19+04.50 - STA 561+35)

EXISTING DRIVEWAY BUMP-OUT/TIE-IN ASPHALT DEPTH VARIES BETWEEN 3"-4".



PLAN VIEW



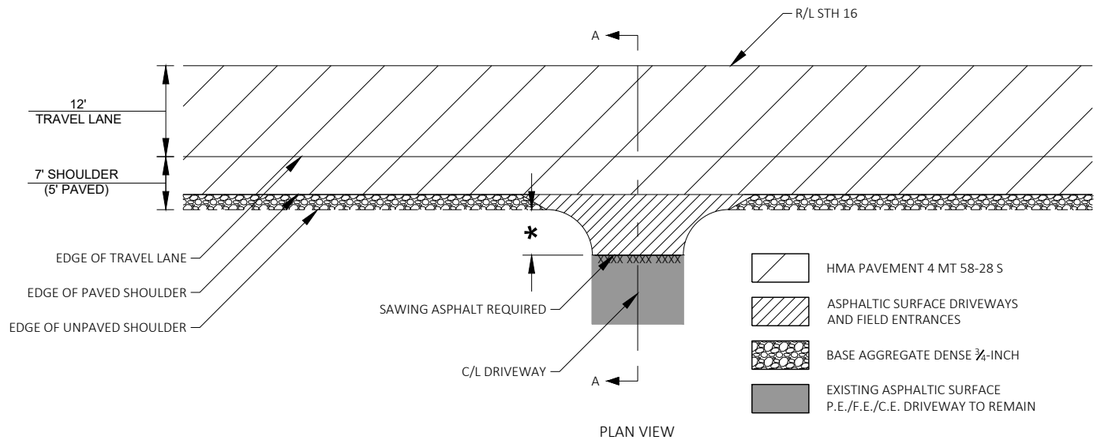
SECTION A-A

P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING CRUSHED AGGREGATE (STA 19+04.50 - STA 561+35)

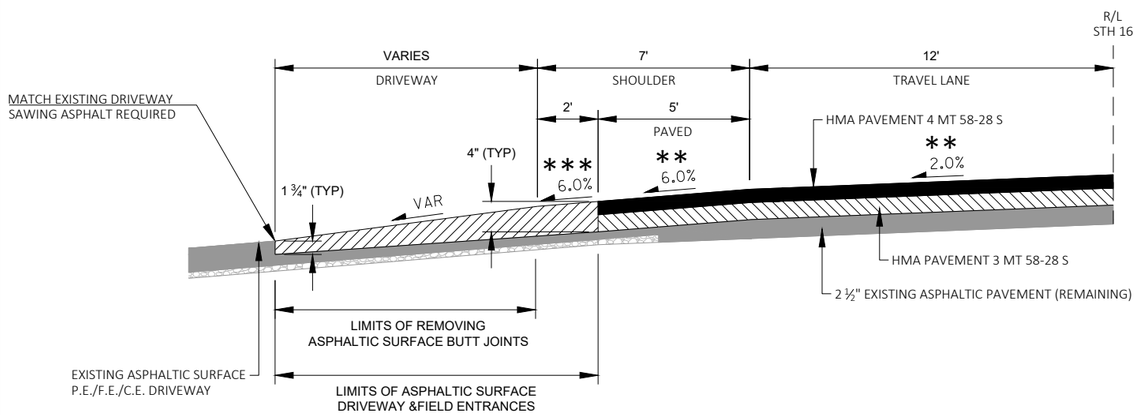
*REPLACE TO THE DRIVEWAY RADIUS POINTS OR AS DIRECTED BY THE FIELD ENGINEER

**2.0% TYPICAL ON DRIVING LANE; 6.0% TYPICAL ON PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

***6% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



PLAN VIEW



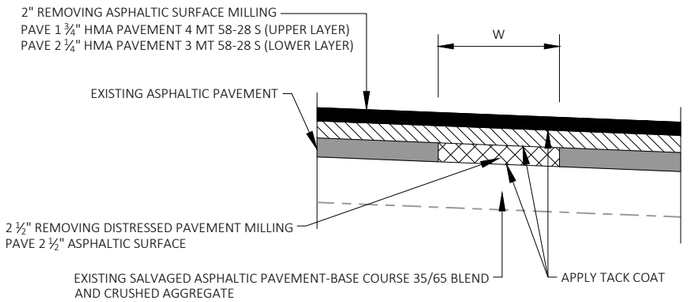
SECTION A-A

P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING ASPHALT (STA 19+04.50 - STA 561+35)

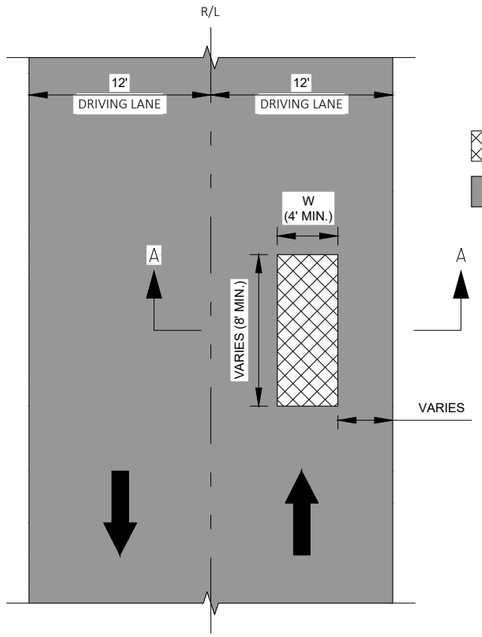
*REPLACE TO THE EXISTING PAVEMENT JOINT OR AS DIRECTED BY THE FIELD ENGINEER

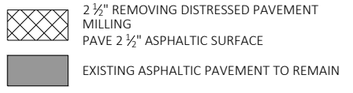
**2.0% TYPICAL ON DRIVING LANE; 6.0% TYPICAL ON PAVED SHOULDER; MATCH EXISTING PAVEMENT CROSS SLOPE ALONG SUPERELEVATED CURVES

***6% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



SECTION A-A





PLAN VIEW - MILLED SURFACE

REMOVING DISTRESSED PAVEMENT MILLING DETAIL

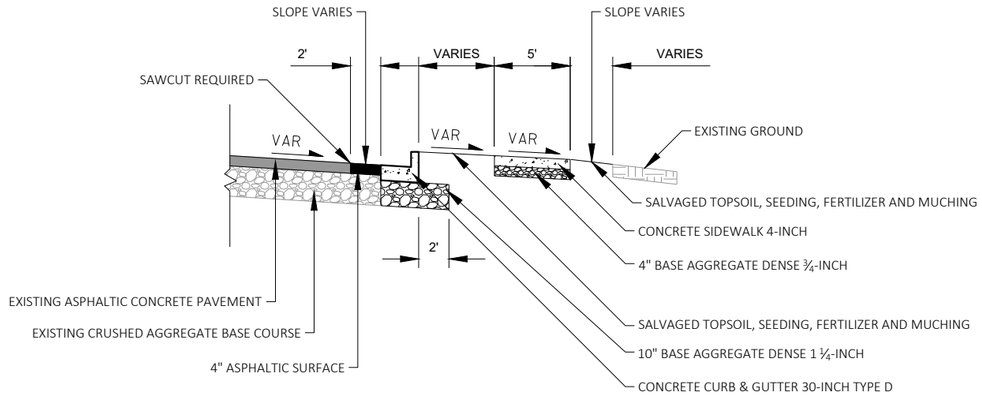
SEE TABLES (RIGHT) FOR APPROXIMATE LOCATIONS AND WIDTHS.
EXACT LOCATIONS AND WIDTHS TO BE DETERMINED BY THE FIELD ENGINEER.

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
31+42	-	31+69	LT	4	LANE EDGE
45+79	-	47+37	LT	4	LANE EDGE
47+90	-	49+69	LT	4	LANE EDGE
64+58	-	64+85	LT	4	MIDDLE OF LANE/LANE EDGE
73+98	-	74+77	LT	4	LANE EDGE
121+40	-	121+92	LT	4	LANE EDGE
124+09	-	124+62	LT	4	MIDDLE OF LANE
125+41	-	125+67	LT	4	MIDDLE OF LANE
142+04	-	142+83	LT	4	LANE EDGE
143+89	-	144+68	LT	4	MIDDLE OF LANE/LANE EDGE
147+32	-	147+85	LT	4	MIDDLE OF LANE/LANE EDGE
156+61	-	162+42	LT	4	MIDDLE OF LANE/LANE EDGE
164+53	-	166+64	LT	4	MIDDLE OF LANE/LANE EDGE
167+17	-	167+70	LT	4	MIDDLE OF LANE/LANE EDGE
168+76	-	169+02	LT	4	LANE EDGE
170+08	-	170+34	LT	4	LANE EDGE
173+24	-	174+83	LT	4	LANE EDGE
175+88	-	176+41	LT	4	MIDDLE OF LANE
181+16	-	183+54	LT	4	LANE EDGE
184+39	-	186+23	LT	4	LANE EDGE
188+35	-	189+08	LT	5	LANE EDGE
191+51	-	192+04	LT	4	MIDDLE OF LANE
194+68	-	195+21	LT	4	MIDDLE OF LANE
196+00	-	196+53	LT	4	LANE EDGE
198+38	-	201+55	LT	4	LANE EDGE
206+77	-	207+09	LT	4	LANE EDGE
212+58	-	213+11	LT	4	LANE EDGE
215+22	-	215+75	LT	4	LANE EDGE
229+42	-	229+69	LT	4	LANE EDGE
247+32	-	247+85	LT	4	LANE EDGE
248+12	-	249+44	LT	4	MIDDLE OF LANE
266+28	-	268+92	LT	4	LANE EDGE/ON RAMP FROM STH 22
289+00	-	289+77	LT	4	LANE EDGE
296+06	-	297+38	LT	4	LANE EDGE
299+28	-	311+26	LT	4	LANE EDGE/OFF RAMP TO STH 22

STATION	TO	STATION	OFFSET	W (FT)	LOCATION
183+85	-	185+70	RT	4	LANE EDGE
266+85	-	277+09	RT	4	LANE EDGE/OFF RAMP TO STH 22
285+75	-	286+00	RT	4	LANE EDGE
289+00	-	292+25	RT	4	LANE EDGE
298+21	-	310+09	RT	4	LANE EDGE/ON RAMP FROM STH 22
402+92	-	403+13	RT	4	LANE EDGE
404+45	-	404+66	RT	4	LANE EDGE
406+19	-	408+25	RT	4	LANE EDGE
450+38	-	451+18	RT	4	LANE EDGE
454+08	-	460+63	RT	4	LANE EDGE
473+99	-	474+83	RT	4	LANE EDGE
488+61	-	489+40	RT	4	LANE EDGE
511+42	-	511+69	RT	4	LANE EDGE
514+85	-	515+96	RT	12	LANE
517+02	-	517+55	RT	4	LANE EDGE
517+55	-	520+56	RT	12	LANE
520+56	-	525+10	RT	4	LANE EDGE
526+42	-	526+94	RT	12	LANE
530+17	-	532+33	RT	4	LANE EDGE
532+33	-	533+12	RT	6	LANE EDGE
533+65	-	535+29	RT	4	LANE EDGE
535+29	-	537+72	RT	8	BOTH LANE EDGES
537+72	-	539+30	RT	12	LANE
539+30	-	539+56	RT	16	LANE AND LANE EDGE
539+56	-	540+62	RT	12	LANE
540+62	-	541+73	RT	16	LANE AND LANE EDGE
541+73	-	544+42	RT	12	LANE
544+42	-	544+95	RT	16	LANE AND LANE EDGE
545+21	-	548+38	RT	12	LANE

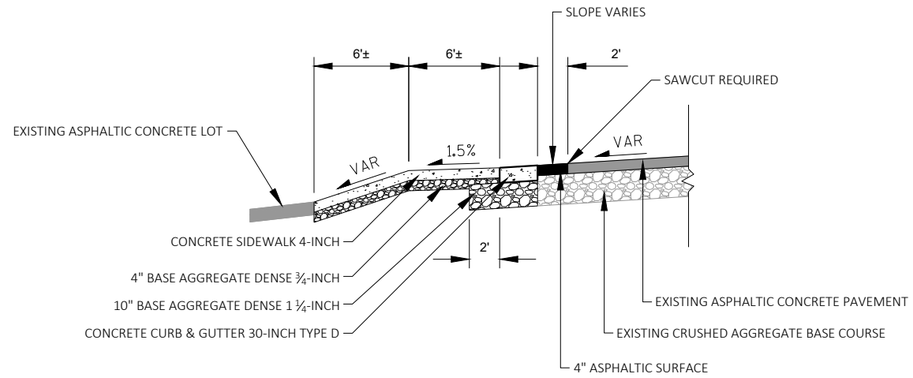
STATION	TO	STATION	OFFSET	W (FT)	LOCATION
321+03	-	321+30	LT	4	LANE EDGE
322+67	-	322+93	LT	4	LANE EDGE
335+66	-	336+77	LT	4	LANE EDGE
341+10	-	341+41	LT	4	LANE EDGE
346+01	-	346+27	LT	4	LANE EDGE
348+44	-	348+75	LT	4	LANE EDGE
350+07	-	350+60	LT	4	LANE EDGE
354+98	-	355+25	LT	4	LANE EDGE
359+84	-	360+05	LT	4	LANE EDGE
361+11	-	361+64	LT	4	LANE EDGE
362+85	-	363+11	LT	4	LANE EDGE
364+38	-	364+64	LT	4	LANE EDGE
365+91	-	366+44	LT	4	LANE EDGE
369+50	-	371+24	LT	4	LANE EDGE
375+57	-	376+58	LT	4	LANE EDGE
377+11	-	377+37	LT	4	LANE EDGE
380+91	-	381+17	LT	4	LANE EDGE
382+44	-	384+50	LT	4	LANE EDGE
386+24	-	387+24	LT	4	MIDDLE OF LANE/LANE EDGE
393+10	-	393+84	LT	4	MIDDLE OF LANE
395+90	-	396+17	LT	4	LANE EDGE
397+43	-	399+23	LT	4	LANE EDGE
399+97	-	401+50	LT	4	LANE EDGE
402+50	-	403+24	LT	6	LANE EDGE
404+56	-	406+30	LT	4	LANE EDGE
406+83	-	410+11	LT	4	LANE EDGE
411+64	-	412+16	LT	4	LANE EDGE
414+70	-	414+96	LT	4	LANE EDGE
415+23	-	415+44	LT	4	LANE EDGE
416+97	-	417+50	LT	4	LANE EDGE
424+10	-	424+63	LT	4	LANE EDGE
425+63	-	426+37	LT	4	LANE EDGE
433+39	-	433+65	LT	4	LANE EDGE
435+56	-	435+77	LT	4	LANE EDGE
437+67	-	438+14	LT	4	LANE EDGE
438+99	-	439+52	LT	5	LANE EDGE
441+36	-	441+63	LT	4	LANE EDGE
443+48	-	451+40	LT	4	LANE EDGE
452+45	-	455+67	LT	4	LANE EDGE
457+78	-	458+84	LT	4	LANE EDGE
459+90	-	461+22	LT	4	LANE EDGE
463+59	-	464+12	LT	4	LANE EDGE
468+13	-	469+98	LT	4	LANE EDGE
472+88	-	474+73	LT	4	LANE EDGE
476+58	-	478+16	LT	4	LANE EDGE
482+97	-	491+15	LT	4	LANE EDGE
498+81	-	499+34	LT	4	LANE EDGE
508+00	-	510+21	LT	5	LANE EDGE
512+33	-	514+17	LT	4	LANE EDGE
514+17	-	521+09	LT	12	LANE
521+09	-	523+47	LT	4	LANE EDGE
523+47	-	543+85	LT	12	LANE
543+85	-	544+11	LT	16	LANE AND OUTSIDE LANE EDGE
544+11	-	544+64	LT	12	LANE
544+64	-	545+17	LT	16	LANE AND OUTSIDE LANE EDGE
545+17	-	547+28	LT	4	LANE EDGE (INSIDE LANE)
547+81	-	548+60	LT	24	LANES

2



CURB & GUTTER AND SIDEWALK DETAIL - OAKVIEW DRIVE

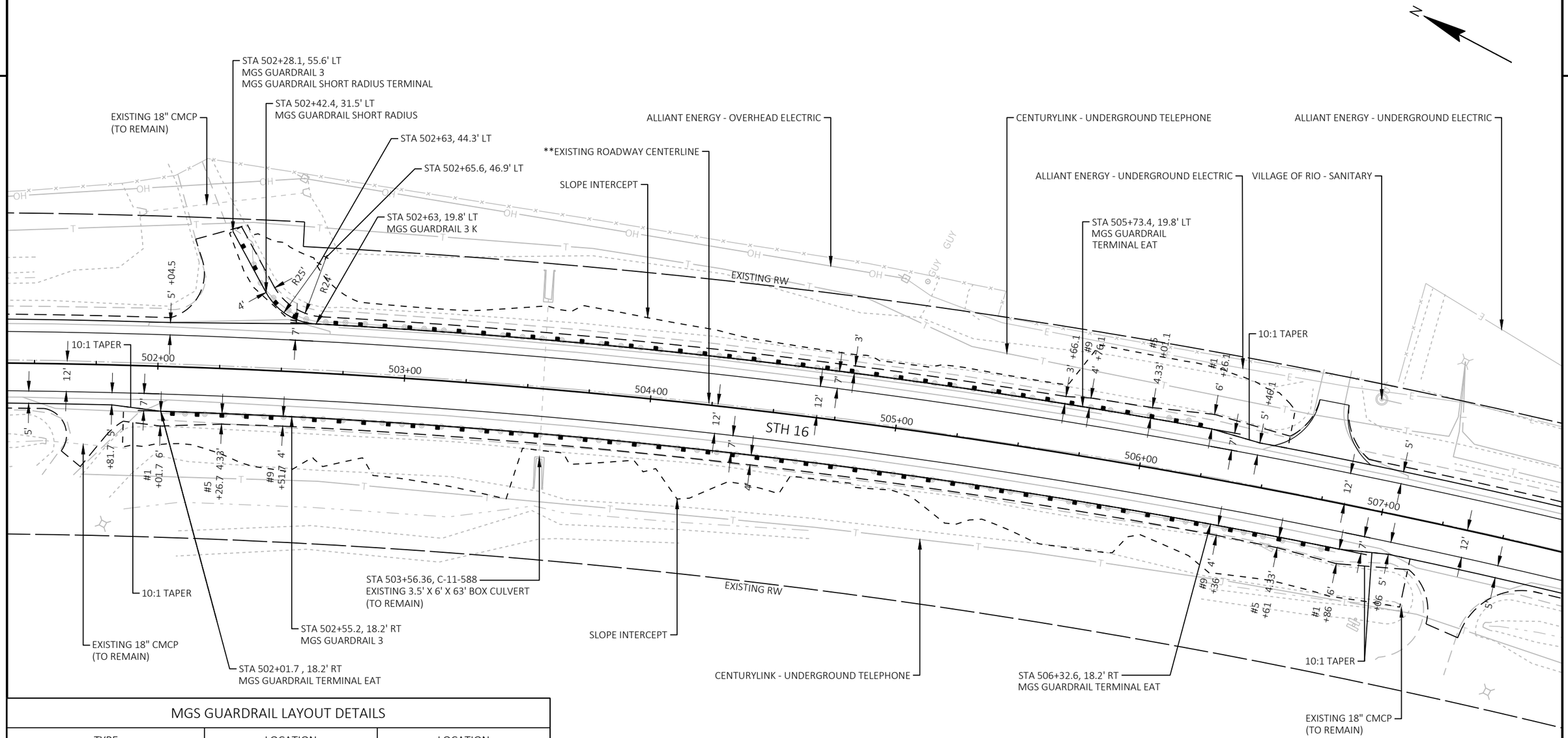
SEE CURB RAMP DETAILS FOR GRADES AND ADDITIONAL DETAILS



CURB & GUTTER AND SIDEWALK DETAIL - STH 16 WB AT LINCOLN AVENUE INTERSECTION

SEE CURB RAMP DETAILS FOR GRADES AND ADDITIONAL DETAILS

2



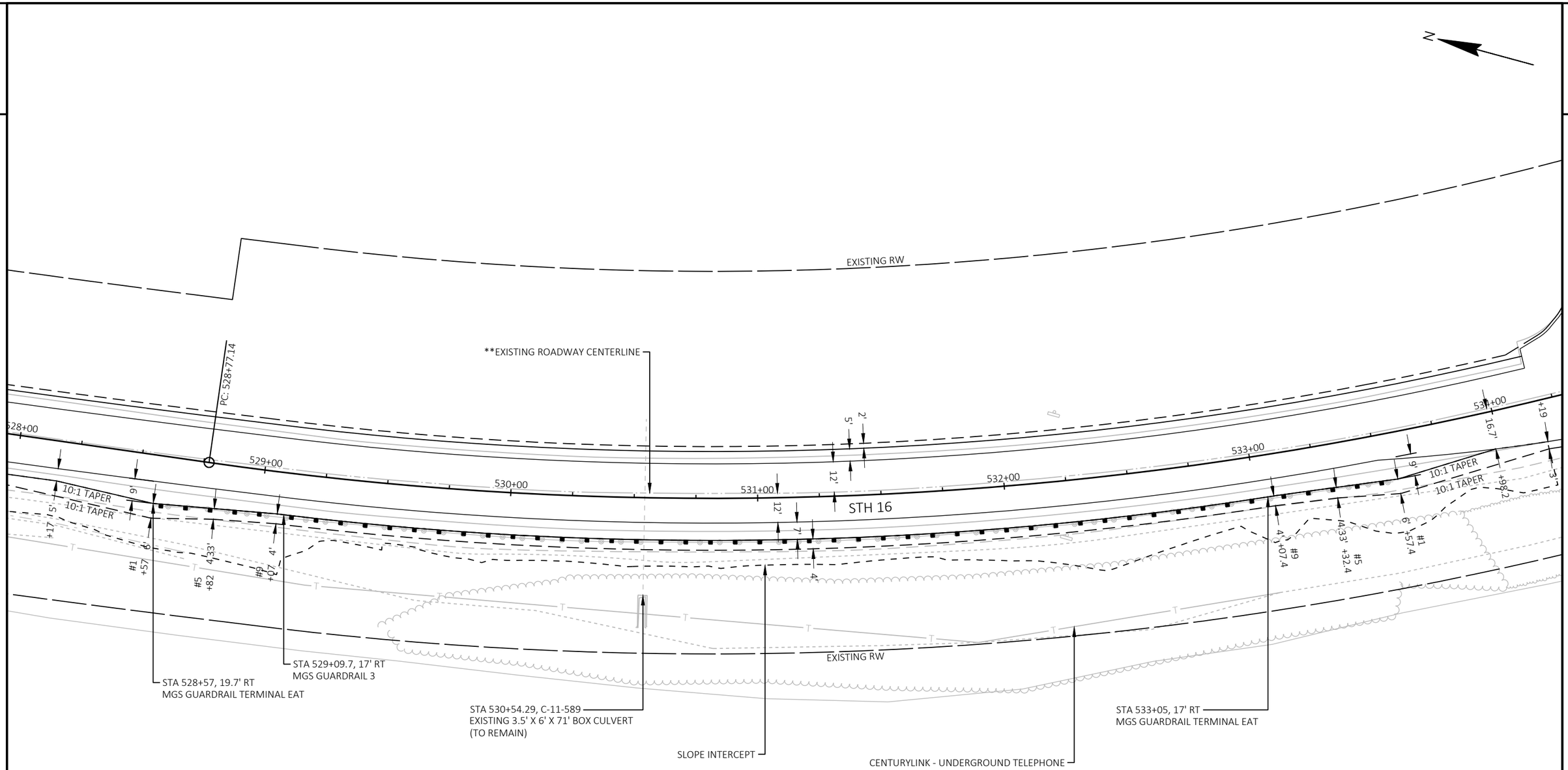
MGS GUARDRAIL LAYOUT DETAILS

TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 502+01.7, 18.2' RT	STA 502+55.2, 18.2' RT
MGS GUARDRAIL 3	STA 502+55.2, 18.2' RT	STA 506+32.6, 18.2' RT
MGS GUARDRAIL TERMINAL EAT	STA 506+32.6, 18.2' RT	STA 506+86, 18.2' RT
MGS GUARDRAIL 3	STA 502+28.1, 55.6' LT	STA 502+42.4, 31.5' LT
MGS GUARDRAIL SHORT RADIUS	STA 502+42.4, 31.5' LT	STA 502+63, 19.8' LT
MGS GUARDRAIL 3 K	STA 502+63, 19.8' LT	STA 505+73.4, 19.8' LT
MGS GUARDRAIL TERMINAL EAT	STA 505+73.4, 19.8' LT	STA 506+26.1, 19.8' LT

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 0.7'-0.8' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MGS GUARDRAIL DETAILS	SHEET 26	E

2



MGS GUARDRAIL LAYOUT DETAILS		
TYPE	LOCATION	LOCATION
MGS GUARDRAIL TERMINAL EAT	STA 528+57, 19.7' RT	STA 529+09.7, 17' RT
MGS GUARDRAIL 3	STA 529+09.7, 17' RT	STA 533+05, 17' RT
MGS GUARDRAIL TERMINAL EAT	STA 533+05, 17' RT	STA 533+57.4, 19' RT

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1.6'-2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE. SEE CROSS SECTIONS FOR MORE INFORMATION.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CONSTRUCTION DETAILS - MGS GUARDRAIL DETAILS	SHEET 27	E

2

BEGIN PROJECT
STA 19+04.50
SAWCUT REQUIRED

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 28	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 29	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 02

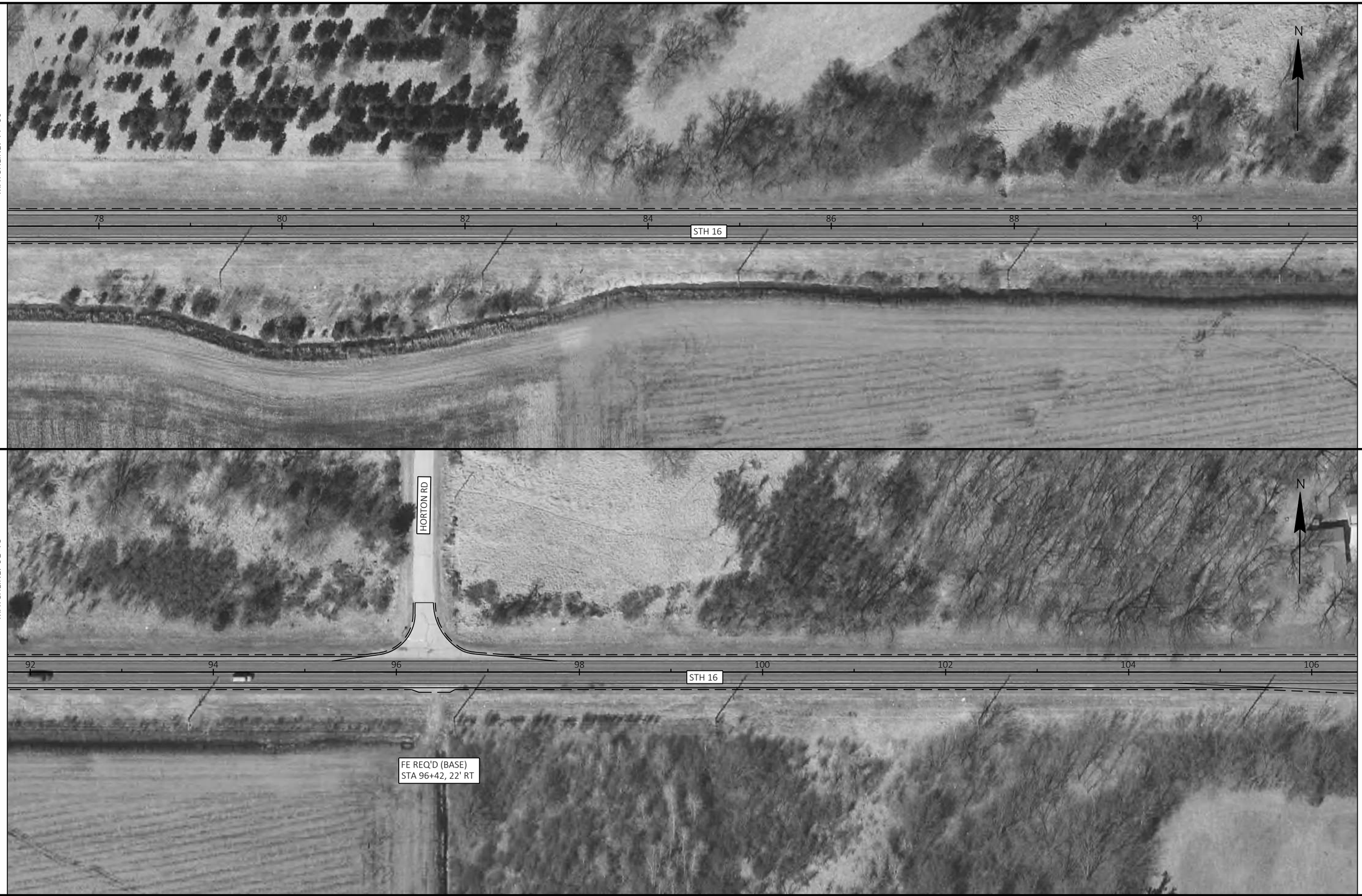
PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 77+00



MATCHLINE: 91+75

MATCHLINE: 91+75

MATCHLINE: 106+50

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 30	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 03

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCHLINE: 106+50

DUNNING RD

CE REQ'D (ASPH)
STA 114+77, 45' LT

CE REQ'D (ASPH)
STA 118+87, 36' LT

N

108 110 112 114 116 118 120

STH 16

PE REQ'D (BASE)
STA 108+91, 31' RT

PE REQ'D (BASE)
STA 113+42, 38' RT

PE REQ'D (BASE)
STA 114+69, 38' RT

PE REQ'D (BASE)
STA 117+81, 41' RT

PE REQ'D (BASE)
STA 120+30, 46' RT

DUNNING RD

MATCHLINE: 121+25

2

MATCHLINE: 121+25

PE REQ'D (BASE)
STA 124+06, 40' LT

PE REQ'D (ASPH)
STA 128+77, 41' LT

PE REQ'D (BASE)
STA 130+60, 38' LT

N

PE REQ'D (BASE)
STA 135+65, 42' LT

122 124 126 128 130 132 134

STH 16

CE REQ'D (ASPH)
STA 128+14, 63' RT

FE REQ'D (BASE)
STA 134+28, 39' RT

PE REQ'D (BASE)
STA 121+33, 44' RT

MATCHLINE: 136+00

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 31	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 04

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 136+00

PE REQ'D (BASE)
STA 136+78, 41' LT

FE REQ'D (BASE)
STA 147+75, 38' LT

PC: 148+88.89

PE REQ'D (ASPH)
STA 150+20, 41' LT

N

136 138 140 142 144 146 148 150

STH 16

PE REQ'D (BASE)
STA 147+59, 42' RT

PE REQ'D (BASE)
STA 149+55, 39' RT

MATCHLINE: 150+75

2

MATCHLINE: 150+75

PE REQ'D (ASPH)
STA 155+49, 40' LT

PE REQ'D (BASE)
STA 156+69, 46' LT

PE REQ'D (BASE)
STA 161+81, 37' LT

PE REQ'D (BASE)
STA 164+71, 45' LT

N

152 154 156 158 160 162 164

STH 16

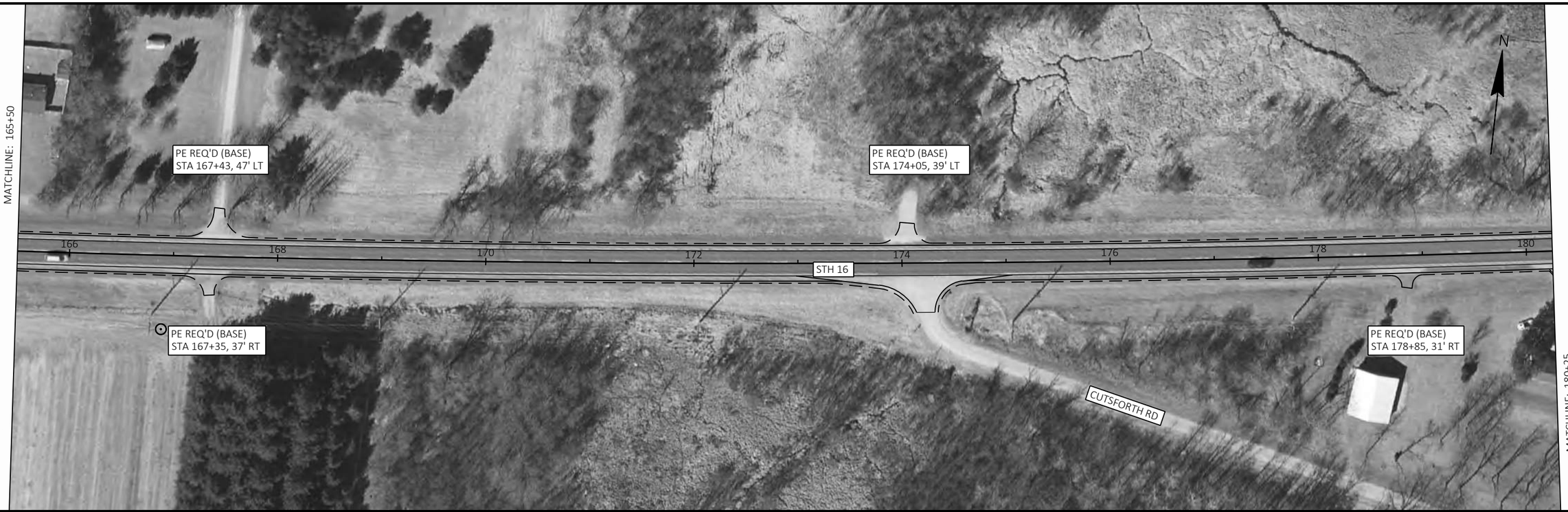
PE REQ'D (BASE)
STA 156+70, 30' RT

PE REQ'D (BASE)
STA 160+95, 38' RT

MATCHLINE: 165+50

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 32	E

2



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 33	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 06

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 195+00

PC: 195+70.23

PE REQ'D (BASE)
STA 199+19, 40' LT

196 198 200 202 STH 16 204 206 208

FE REQ'D (BASE)
STA 199+86, 46' RT

PE REQ'D (BASE)
STA 205+07, 44' RT

FE REQ'D (BASE)
STA 206+75, 47' RT

N

MATCHLINE: 209+75

MATCHLINE: 209+75

PE REQ'D (BASE)
STA 210+86, 46' LT

PE REQ'D (BASE)
STA 213+42, 44' LT

PT: 215+02.45

PE REQ'D (BASE)
STA 219+60, 48' LT

PE REQ'D (BASE)
STA 223+54, 46' LT

210 212 214 216 STH 16 218 220 222 224

PE REQ'D (BASE)
STA 212+91, 39' RT

N

MATCHLINE: 224+50

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 34	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCHLINE: 224+50

PE REQ'D (ASPH)
STA 233+90, 45' LT

PE REQ'D (ASPH)
STA 235+03, 41' LT

PE REQ'D (ASPH)
STA 236+62, 44' LT

N

226 228 230 232 234 236 238

STH 16

CURTIS DR

MATCHLINE: 239+25

2

MATCHLINE: 239+25

PE REQ'D (ASPH)
STA 239+35, 46' LT

PE REQ'D (BASE)
STA 246+07, 50' LT

PC: 249+18.50

POOL

240 242 244 246 248 250 252

STH 16

PE REQ'D (ASPH)
STA 241+38, 48' RT

PE REQ'D (BASE)
STA 247+23, 43' RT

PE REQ'D (BASE)
STA 248+20, 49' RT

PEASE RD

MATCHLINE: 254+00

N

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 35	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 08

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 36	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2021 3:48 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 283+50

STH 22

STH 16 WB OFF RAMP

N

284 286 288 290 292 294 296 298

STH 16

STH 22

STH 16 EB ON RAMP

MATCHLINE: 298+25

2

MATCHLINE: 298+25

N

TRAUT RD

300 302 304 306 308 310 312

STH 16

BERM

RIPRAP

SUBSTATION

MATCHLINE: 313+00

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 37	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 10

PLOT DATE : 4/22/2021 3:49 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 313+00

MATCHLINE: 327+75

MATCHLINE: 327+75

MATCHLINE: 342+50

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 38	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 11

PLOT DATE : 4/22/2021 3:49 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCHLINE: 342+50

FE REQ'D (BASE)
STA 347+98, 35' LT

344 346 348 350 352 354 356

STH 16

FE REQ'D (BASE)
STA 347+96, 39' RT

PE REQ'D (ASPH)
STA 354+12, 38' RT

PE REQ'D (ASPH)
STA 356+45, 35' RT

E OLD HWY 16

MATCHLINE: 357+25

N

MATCHLINE: 357+25

PE REQ'D (ASPH)
STA 358+39, 45' LT

FE REQ'D (BASE)
STA 358+77, 33' LT

PE REQ'D (BASE)
STA 365+98, 45' LT

PT: 371+66.36

358 360 362 364 366 368 370

STH 16

E OLD HWY 16

FE REQ'D (BASE)
STA 365+91, 34' RT

MATCHLINE: 372+00

N

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 39	E

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 40	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 13

PLOT DATE : 4/22/2021 3:49 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 401+50

W HILL RD

UNNAMED POND

PE REQ'D (ASPH)
STA 412+00, 48' LT

N

402 404 406 408 410 412 414 416

STH 16

MATCHLINE: 416+25

2

MATCHLINE: 416+25

UNNAMED POND

UNNAMED POND

FE REQ'D (BASE)
STA 420+55, 34' LT

N

SALISBURY RD

418 420 422 424 426 428 430

STH 16

PE REQ'D (ASPH)
STA 417+39, 41' RT

HENDRICKSON LN

PE REQ'D (BASE)
STA 429+98, 45' RT

MATCHLINE: 431+00

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 41	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 14

PLOT DATE : 4/22/2021 3:49 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCHLINE: 431+00

MATCHLINE: 445+75

MATCHLINE: 445+75

MATCHLINE: 460+50

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 42	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 15

PLOT DATE : 4/22/2021 3:49 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCHLINE: 460+50

MATCHLINE: 475+25

MATCHLINE: 475+25

MATCHLINE: 490+00

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 43	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 16

PLOT DATE : 4/22/2021 3:50 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 44	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 17

PLOT DATE : 4/22/2021 3:50 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 45	E

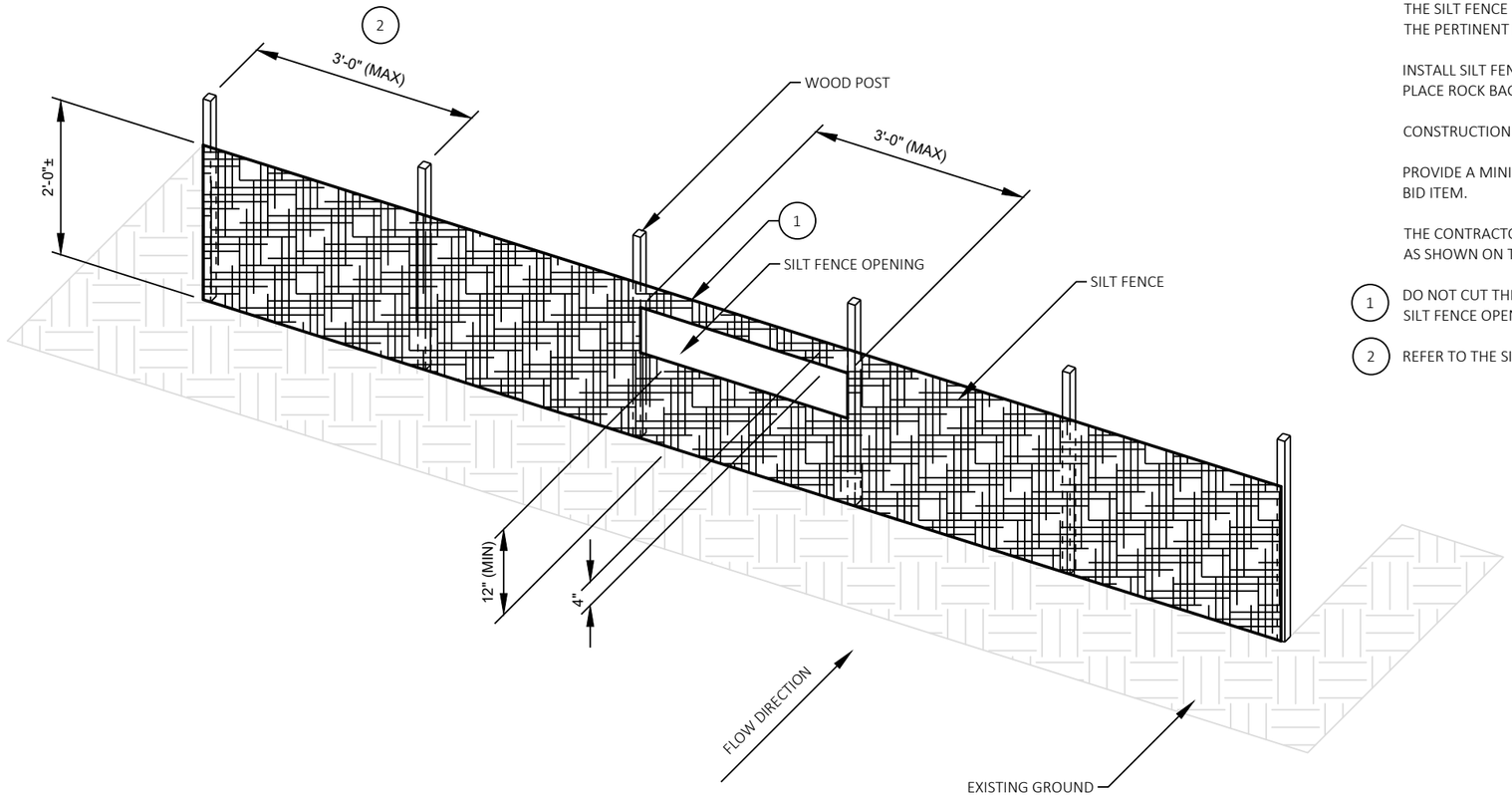
FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\021201-PN.DWG
LAYOUT NAME - 18

PLOT DATE : 4/22/2021 3:50 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PLAN	SHEET 46	E



GENERAL NOTES

THE SILT FENCE RELIEF DETAIL IS A SUPPLEMENTAL DETAIL TO THE SILT FENCE STANDARD DETAILS AND SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

INSTALL SILT FENCE PRIOR TO CONSTRUCTING THE SILT FENCE OPENING. PRIOR TO CONSTRUCTING THE SILT FENCE OPENING, PLACE ROCK BAGS AT THE SILT FENCE OPENING AS SHOWN IN THIS DETAIL.

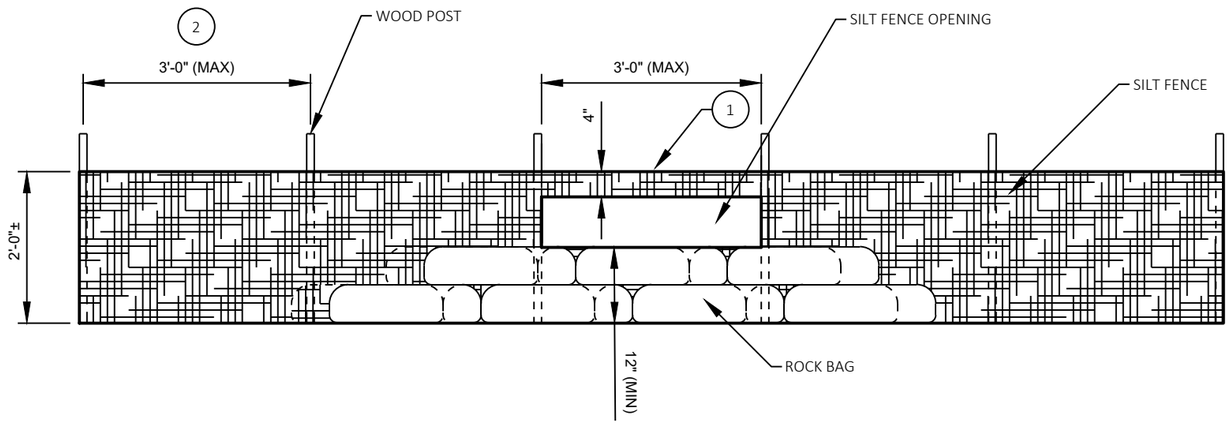
CONSTRUCTION OF THE SILT FENCE OPENING SHALL BE INCIDENTAL TO THE COST OF THE SILT FENCE BID ITEM.

PROVIDE A MINIMUM OF 22 ROCK BAGS MINIMUM PER 3 FOOT OPENING. ROCK BAGS SHALL BE PAID UNDER THE ROCK BAGS BID ITEM.

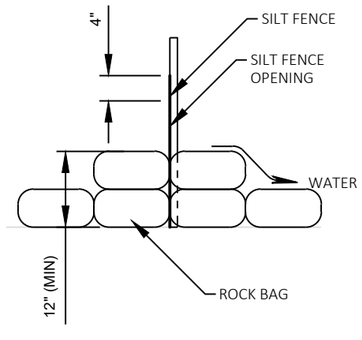
THE CONTRACTOR SHALL ADJUST THE SILT FENCE RELIEF OPENINGS WITHIN THE SILT FENCE AS NECESSARY TO PROVIDE RELIEF: AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE FIELD ENGINEER.

(1) DO NOT CUT THE SUPPORT CORD OR TENSION TAPE WHEN CONSTRUCTING THE SILT FENCE OPENING. KEEP THE TOP OF THE SILT FENCE OPENING 1"± BELOW THE 3" FOLD AT THE SUPPORT CORD OR TENSION TAPE.

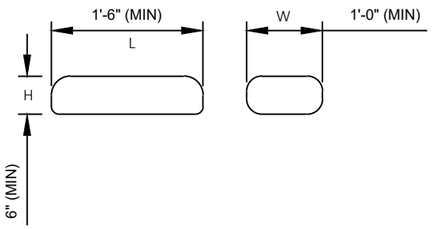
(2) REFER TO THE SILT FENCE STANDARD DETAILS FOR ALLOWABLE ADJUSTMENTS TO POST SPACING.



SECTION VIEW



ROCK BAG DETAIL



SILT FENCE RELIEF DETAIL

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL DETAILS	SHEET 47	E

2

2

EXISTING 18" CMCP
(TO REMAIN)

+56.4, 60.8' LT

+56.4, 50.8' LT

EXISTING ROADWAY CENTERLINE

SLOPE INTERCEPT (TYP)

ALLIANT ENERGY - OVERHEAD ELECTRIC

CENTURYLINK - UNDERGROUND TELEPHONE

ALLIANT ENERGY - UNDERGROUND ELECTRIC

ALLIANT ENERGY - UNDERGROUND ELECTRIC

VILLAGE OF RIO - SANITARY

EXISTING RW

502+00

503+00

504+00

505+00

506+00

507+00

STH 16

EXISTING RW

STA 503+56.36, C-11-588
EXISTING 3.5' X 6' X 63' BOX CULVERT
(TO REMAIN)

EXISTING 18" CMCP
(TO REMAIN)

CENTURYLINK - UNDERGROUND TELEPHONE

EXISTING 18" CMCP
(TO REMAIN)

LEGEND

SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B

SILT FENCE

SILT FENCE WITH ROCK BAG RELIEF

TEMPORARY DITCH CHECK

SURFACE FLOW PATH DIRECTION

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 48	E

2

N

EXISTING RW

EXISTING ROADWAY CENTERLINE

STH 16

528+00

529+00

530+00

531+00

532+00

533+00

534+00

PC: 528+77.14

STA 530+54.29, C-11-589
EXISTING 3.5' X 6' X 71' BOX CULVERT
(TO REMAIN)

SLOPE INTERCEPT

EXISTING RW

CENTURYLINK - UNDERGROUND TELEPHONE

LEGEND

SALVAGED TOPSOIL, SEEDING, FERTILIZER AND EROSION MAT CLASS I TYPE B

SILT FENCE

SILT FENCE WITH ROCK BAG RELIEF

TEMPORARY DITCH CHECK

SURFACE FLOW PATH DIRECTION

2

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 49	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 8/20/2021 2:10 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

VILLAGE OF RIO - SANITARY

EXISTING RW

STA 553+05, 21' LT
VILLAGE OF RIO - SANITARY
EXISTING MANHOLE TO REMAIN
NO ADJUSTMENTS TO RIM ELEVATION REQUIRED

SAN

+00 | 553+00 | 554+00 | 555+00 | 556+00 | 557+00 | 558+00

STH 16

PC: 557+41.79

EXISTING RW

VILLAGE OF RIO - SANITARY

STA 558+59, 22.3' LT
CENTURYLINK - UNDERGROUND TELEPHONE
EXISTING MAHOLE TO REMAIN
NO ADJUSTMENTS TO RIM ELEVATION REQUIRED

LINCOLN AVENUE

SLOPE INTERCEPT

EXISTING RW

ALLIANT ENERGY - OVERHEAD ELECTRIC

+00 | 558+00 | 559+00 | 560+00

STH 16

PC: 557+41.79

CENTURYLINK - UNDERGROUND TELEPHONE

OAKVIEW DRIVE

SLOPE INTERCEPT

EXISTING CULVERT PIPE (TO REMAIN)

ALLIANT ENERGY - UNDERGROUND GAS

CAUTION

EXISTING RW

ALLIANT ENERGY - OVERHEAD ELECTRIC

N

N

LEGEND

- INLET PROTECTION TYPE B
- INLET PROTECTION TYPE D
- SALVAGED TOPSOIL, SEEDING, FERTILIZER AND MULCH

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	EROSION CONTROL PLAN	SHEET 50	E

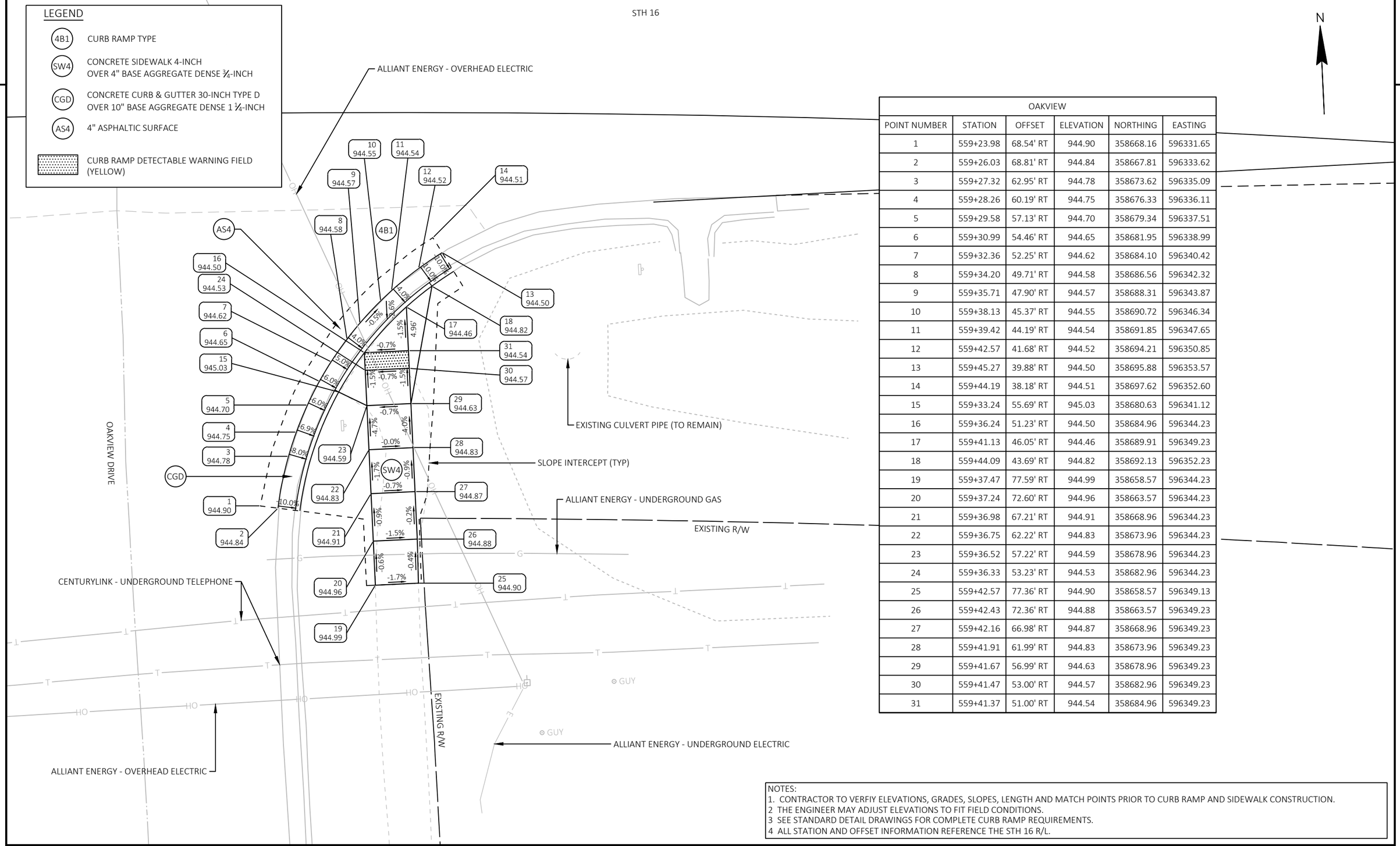
FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 8/20/2021 2:10 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- 4B1 — CURB RAMP TYPE
- SW4 — CONCRETE SIDEWALK 4-INCH OVER 4" BASE AGGREGATE DENSE ¾-INCH
- CGD — CONCRETE CURB & GUTTER 30-INCH TYPE D OVER 10" BASE AGGREGATE DENSE 1 ¼-INCH
- AS4 — 4" ASPHALTIC SURFACE
- CURB RAMP DETECTABLE WARNING FIELD (YELLOW)

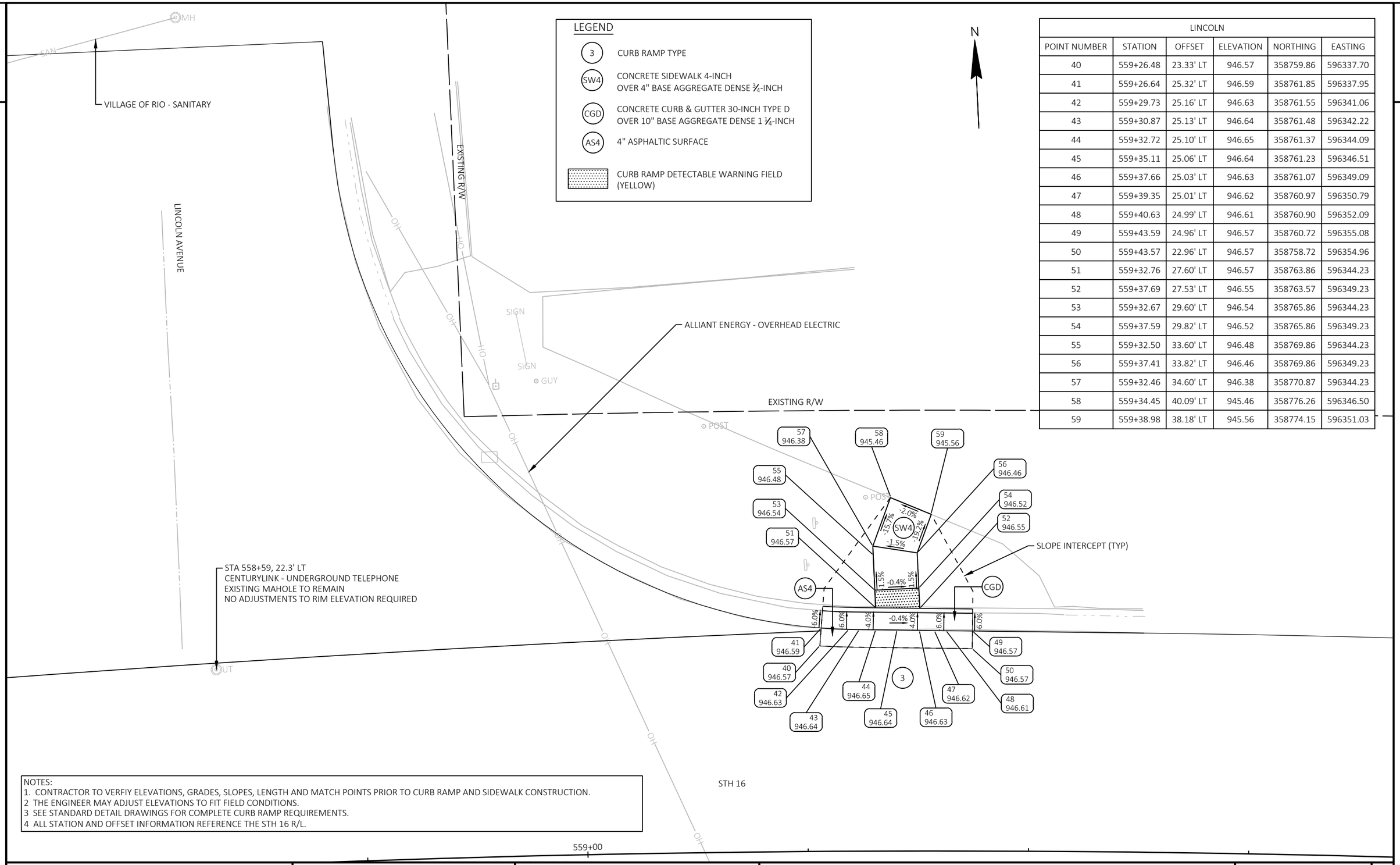


OAKVIEW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	559+23.98	68.54' RT	944.90	358668.16	596331.65
2	559+26.03	68.81' RT	944.84	358667.81	596333.62
3	559+27.32	62.95' RT	944.78	358673.62	596335.09
4	559+28.26	60.19' RT	944.75	358676.33	596336.11
5	559+29.58	57.13' RT	944.70	358679.34	596337.51
6	559+30.99	54.46' RT	944.65	358681.95	596338.99
7	559+32.36	52.25' RT	944.62	358684.10	596340.42
8	559+34.20	49.71' RT	944.58	358686.56	596342.32
9	559+35.71	47.90' RT	944.57	358688.31	596343.87
10	559+38.13	45.37' RT	944.55	358690.72	596346.34
11	559+39.42	44.19' RT	944.54	358691.85	596347.65
12	559+42.57	41.68' RT	944.52	358694.21	596350.85
13	559+45.27	39.88' RT	944.50	358695.88	596353.57
14	559+44.19	38.18' RT	944.51	358697.62	596352.60
15	559+33.24	55.69' RT	945.03	358680.63	596341.12
16	559+36.24	51.23' RT	944.50	358684.96	596344.23
17	559+41.13	46.05' RT	944.46	358689.91	596349.23
18	559+44.09	43.69' RT	944.82	358692.13	596352.23
19	559+37.47	77.59' RT	944.99	358658.57	596344.23
20	559+37.24	72.60' RT	944.96	358663.57	596344.23
21	559+36.98	67.21' RT	944.91	358668.96	596344.23
22	559+36.75	62.22' RT	944.83	358673.96	596344.23
23	559+36.52	57.22' RT	944.59	358678.96	596344.23
24	559+36.33	53.23' RT	944.53	358682.96	596344.23
25	559+42.57	77.36' RT	944.90	358658.57	596349.13
26	559+42.43	72.36' RT	944.88	358663.57	596349.23
27	559+42.16	66.98' RT	944.87	358668.96	596349.23
28	559+41.91	61.99' RT	944.83	358673.96	596349.23
29	559+41.67	56.99' RT	944.63	358678.96	596349.23
30	559+41.47	53.00' RT	944.57	358682.96	596349.23
31	559+41.37	51.00' RT	944.54	358684.96	596349.23

NOTES:
1. CONTRACTOR TO VERFIY ELEVATIONS, GRADES, SLOPES, LENGTH AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2 THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3 SEE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
4 ALL STATION AND OFFSET INFORMATION REFERENCE THE STH 16 R/L.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CURB RAMP DETAILS - OAKVIEW	SHEET 51	E

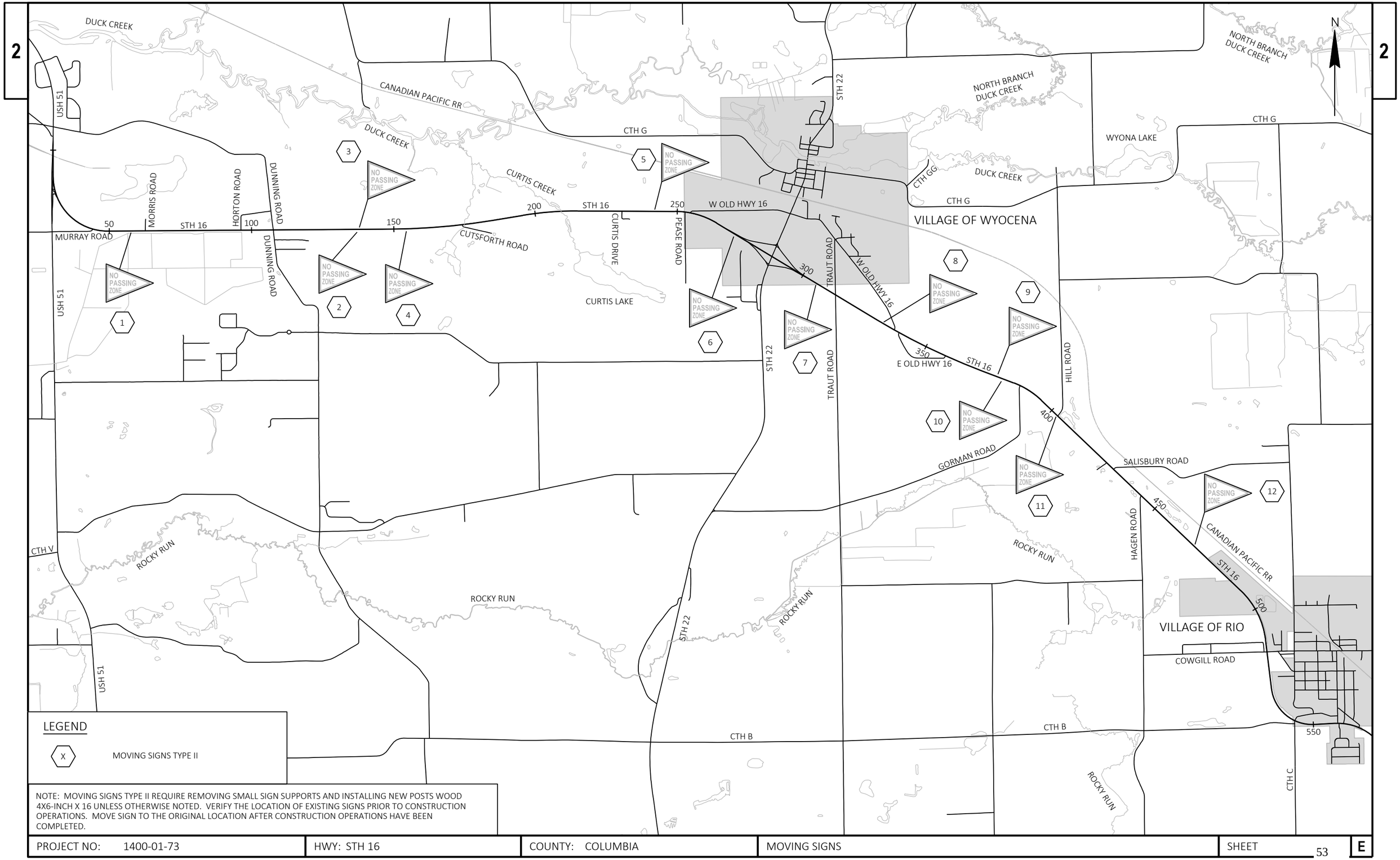
2



LINCOLN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
40	559+26.48	23.33' LT	946.57	358759.86	596337.70
41	559+26.64	25.32' LT	946.59	358761.85	596337.95
42	559+29.73	25.16' LT	946.63	358761.55	596341.06
43	559+30.87	25.13' LT	946.64	358761.48	596342.22
44	559+32.72	25.10' LT	946.65	358761.37	596344.09
45	559+35.11	25.06' LT	946.64	358761.23	596346.51
46	559+37.66	25.03' LT	946.63	358761.07	596349.09
47	559+39.35	25.01' LT	946.62	358760.97	596350.79
48	559+40.63	24.99' LT	946.61	358760.90	596352.09
49	559+43.59	24.96' LT	946.57	358760.72	596355.08
50	559+43.57	22.96' LT	946.57	358758.72	596354.96
51	559+32.76	27.60' LT	946.57	358763.86	596344.23
52	559+37.69	27.53' LT	946.55	358763.57	596349.23
53	559+32.67	29.60' LT	946.54	358765.86	596344.23
54	559+37.59	29.82' LT	946.52	358765.86	596349.23
55	559+32.50	33.60' LT	946.48	358769.86	596344.23
56	559+37.41	33.82' LT	946.46	358769.86	596349.23
57	559+32.46	34.60' LT	946.38	358770.87	596344.23
58	559+34.45	40.09' LT	945.46	358776.26	596346.50
59	559+38.98	38.18' LT	945.56	358774.15	596351.03

NOTES:
1. CONTRACTOR TO VERFIY ELEVATIONS, GRADES, SLOPES, LENGTH AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2 THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3 SEE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
4 ALL STATION AND OFFSET INFORMATION REFERENCE THE STH 16 R/L.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CURB RAMP DETAILS - LINCOLN	SHEET 52	E



LEGEND

X — MOVING SIGNS TYPE II

NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	MOVING SIGNS	SHEET 53	E

2

2

ALLIANT ENERGY - OVERHEAD ELECTRIC

CENTURYLINK - UNDERGROUND TELEPHONE

ALLIANT ENERGY - UNDERGROUND ELECTRIC

SLOPE INTERCEPT

EXISTING ROADWAY CENTERLINE

ALLIANT ENERGY - UNDERGROUND ELECTRIC

VILLAGE OF RIO - SANITARY

EXISTING RW

502+00

503+00

504+00

505+00

STH 16

506+00

507+00

EXISTING RW

STA 503+56.36, C-11-588
EXISTING 3.5' X 6' X 63' BOX CULVERT
(TO REMAIN)

EXISTING 18" CMCP
(TO REMAIN)

SLOPE INTERCEPT

CENTURYLINK - UNDERGROUND TELEPHONE

45 MPH

13

14

LEGEND

X — MOVING SIGNS TYPE II

NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	MOVING SIGNS	SHEET 54	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 4:05 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

EXISTING RW

PC: 528+77.14

**EXISTING ROADWAY CENTERLINE

529+00

530+00

531+00

532+00

533+00

534+00

STH 16

SPEED LIMIT 45

15

EXISTING RW

STA 530+54.29, C-11-589
EXISTING 3.5' X 6' X 71' BOX CULVERT
(TO REMAIN)

SLOPE INTERCEPT

CENTURYLINK - UNDERGROUND TELEPHONE

LEGEND

X — MOVING SIGNS TYPE II

NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	MOVING SIGNS	SHEET 55	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 02
PLOT DATE : 4/22/2021 4:05 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

LINCOLN AVENUE

EXISTING RW

16
17
18

Business Dist
NO PARKING ONE
COUNTY B

SIGN
SIGN
GUY
POST
POST
OH
OH
OH
OH

EXISTING RW

N

2

ALLIANT ENERGY - OVERHEAD ELECTRIC

OUT

STA 558+59, 22.3' LT
CENTURYLINK - UNDERGROUND TELEPHONE
EXISTING MANHOLE TO REMAIN
NO ADJUSTMENTS TO RIM ELEVATION REQUIRED

558+00
559+00
560+00
STH 16

19
STOP

EXISTING CULVERT PIPE
(TO REMAIN)

CENTURYLINK - UNDERGROUND TELEPHONE

OAKVIEW DRIVE

CAUTION

ALLIANT ENERGY - UNDERGROUND GAS

EXISTING RW

EXISTING RW

T
HO
GUY
GV

SLOPE INTERCEPT

ALLIANT ENERGY - UNDERGROUND ELECTRIC

ALLIANT ENERGY - GAS VALVE

ALLIANT ENERGY - OVERHEAD ELECTRIC

EXISTING HYDRANT TO REMAIN
VILLAGE OF RIO - WATER

LEGEND

X — MOVING SIGNS TYPE II

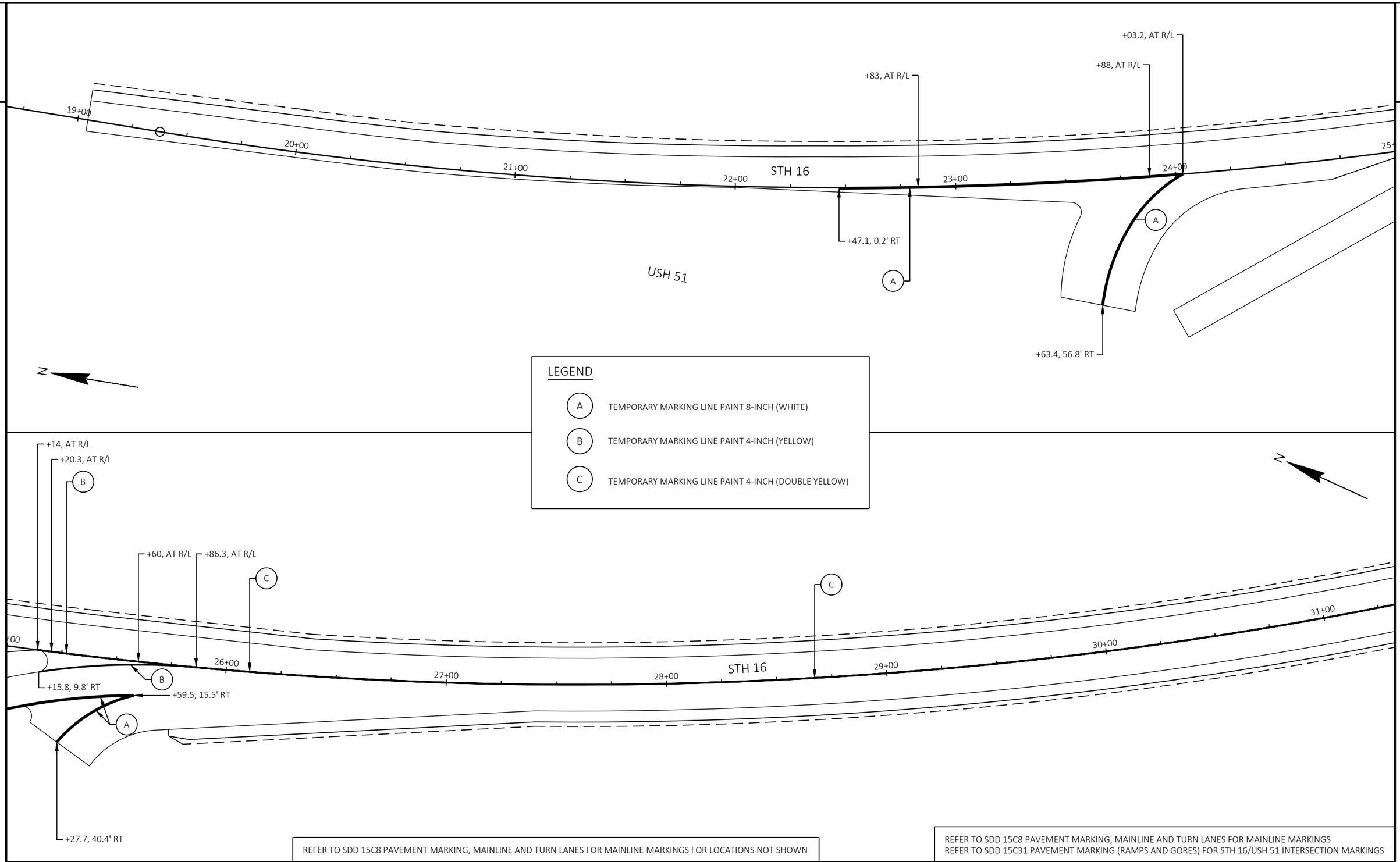
NOTE: MOVING SIGNS TYPE II REQUIRE REMOVING SMALL SIGN SUPPORTS AND INSTALLING NEW POSTS WOOD 4X6-INCH X 16 UNLESS OTHERWISE NOTED. VERIFY THE LOCATION OF EXISTING SIGNS PRIOR TO CONSTRUCTION OPERATIONS. MOVE SIGN TO THE ORIGINAL LOCATION AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	MOVING SIGNS	SHEET 56	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\023203-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 4:07 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:20 FT

2



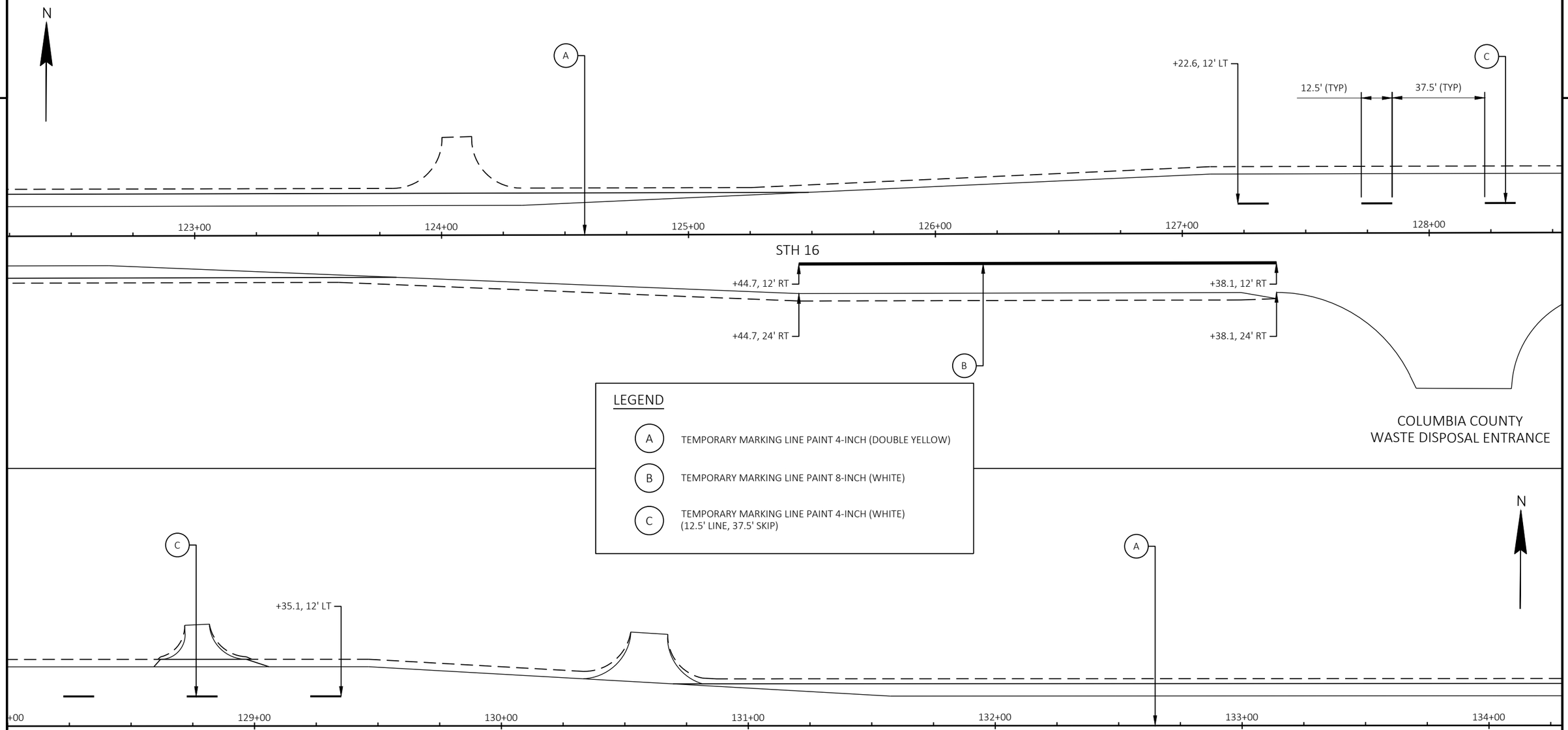
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS FOR LOCATIONS NOT SHOWN

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/USH 51 INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 57	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024501-TM.DWG
LAYOUT NAME - 01
PLOT DATE : 7/9/2021 10:30 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



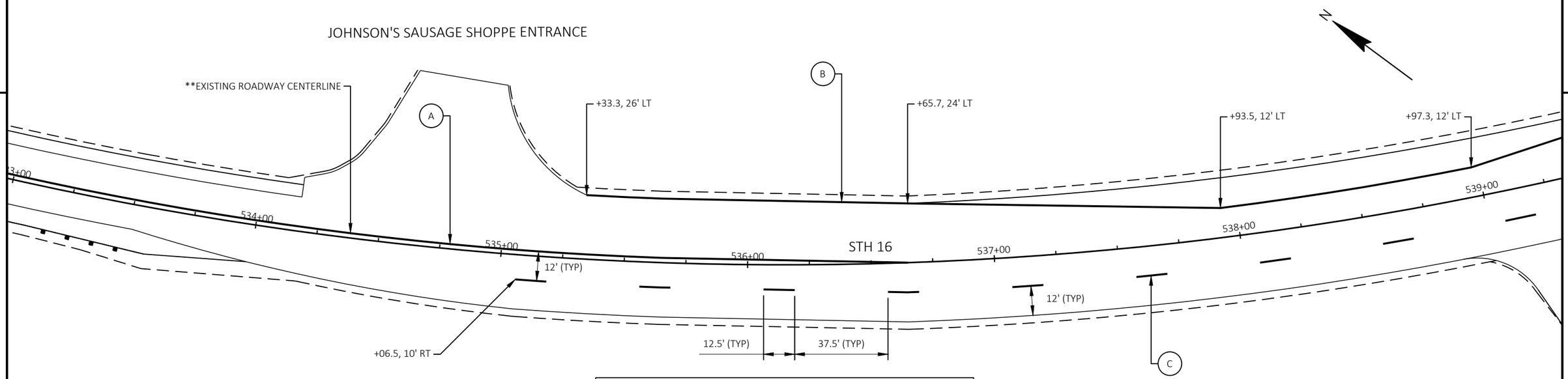
LEGEND

- A — TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- B — TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- C — TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 58	E

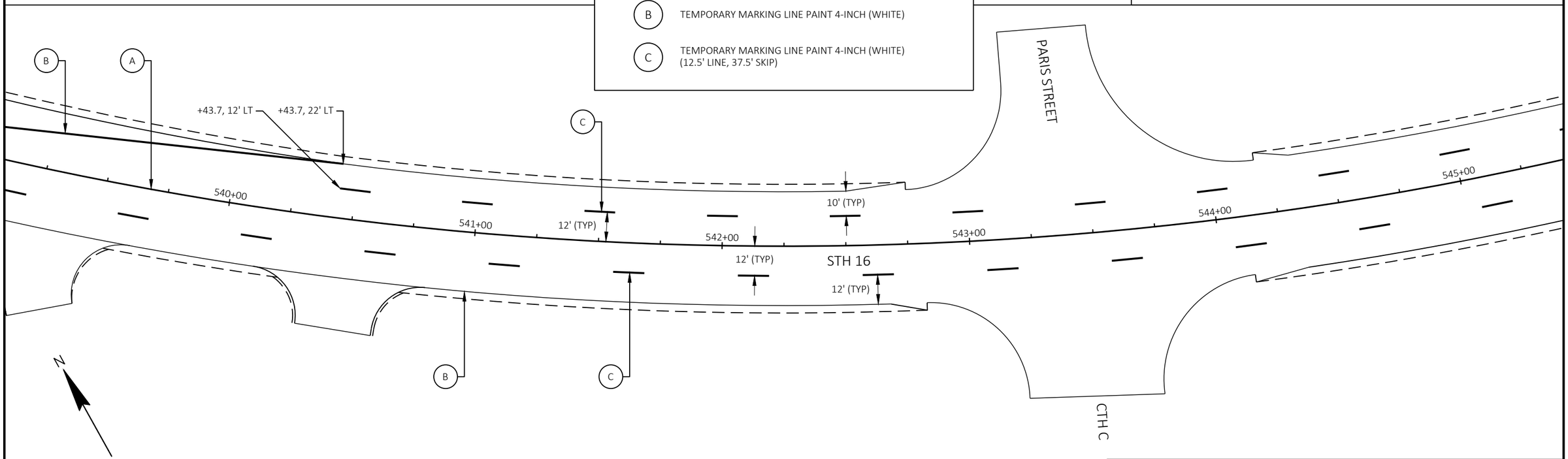
2



LEGEND

- A — TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- B — TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- C — TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1.9'- 2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.

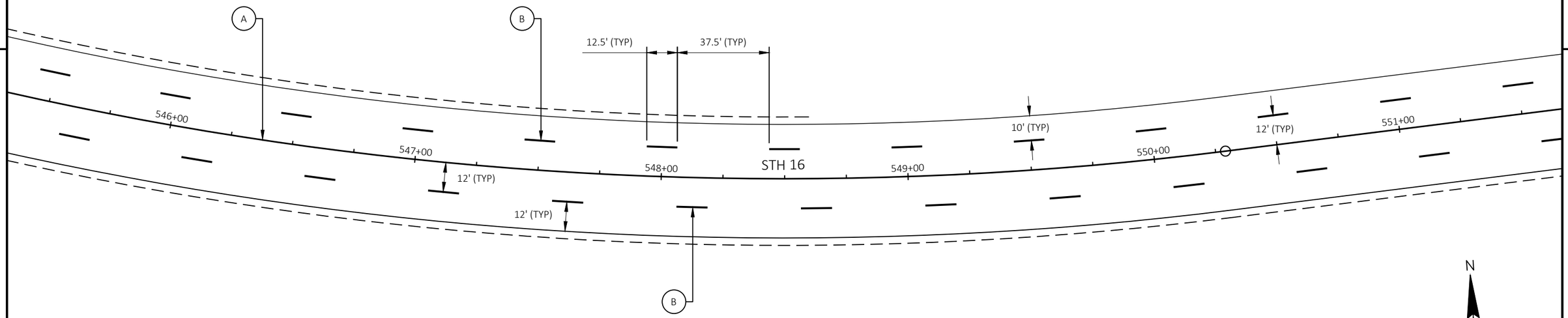


REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 59	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024501-TM.DWG
LAYOUT NAME - 03
PLOT DATE : 7/9/2021 10:30 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

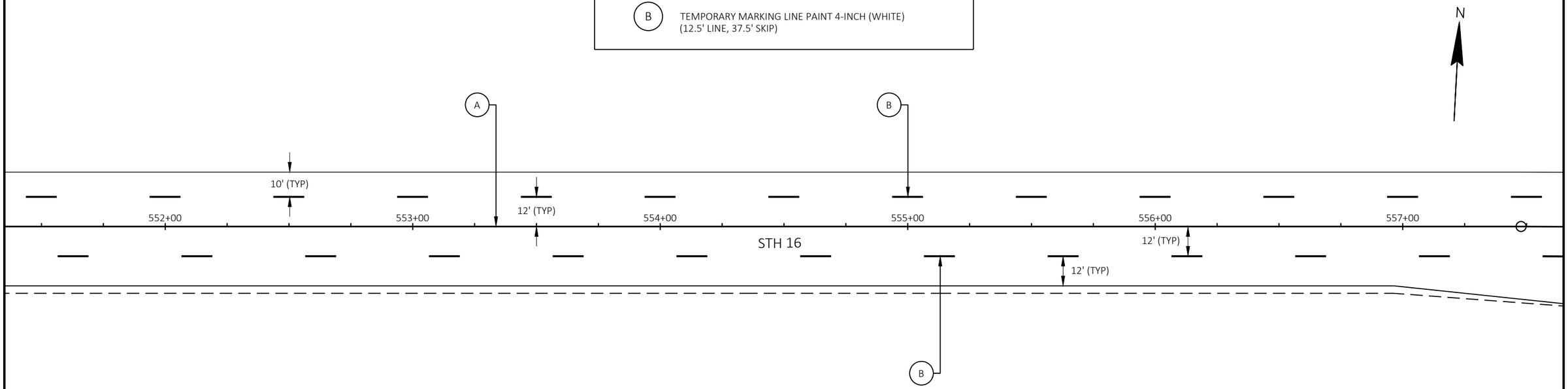
2



LEGEND

A — TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

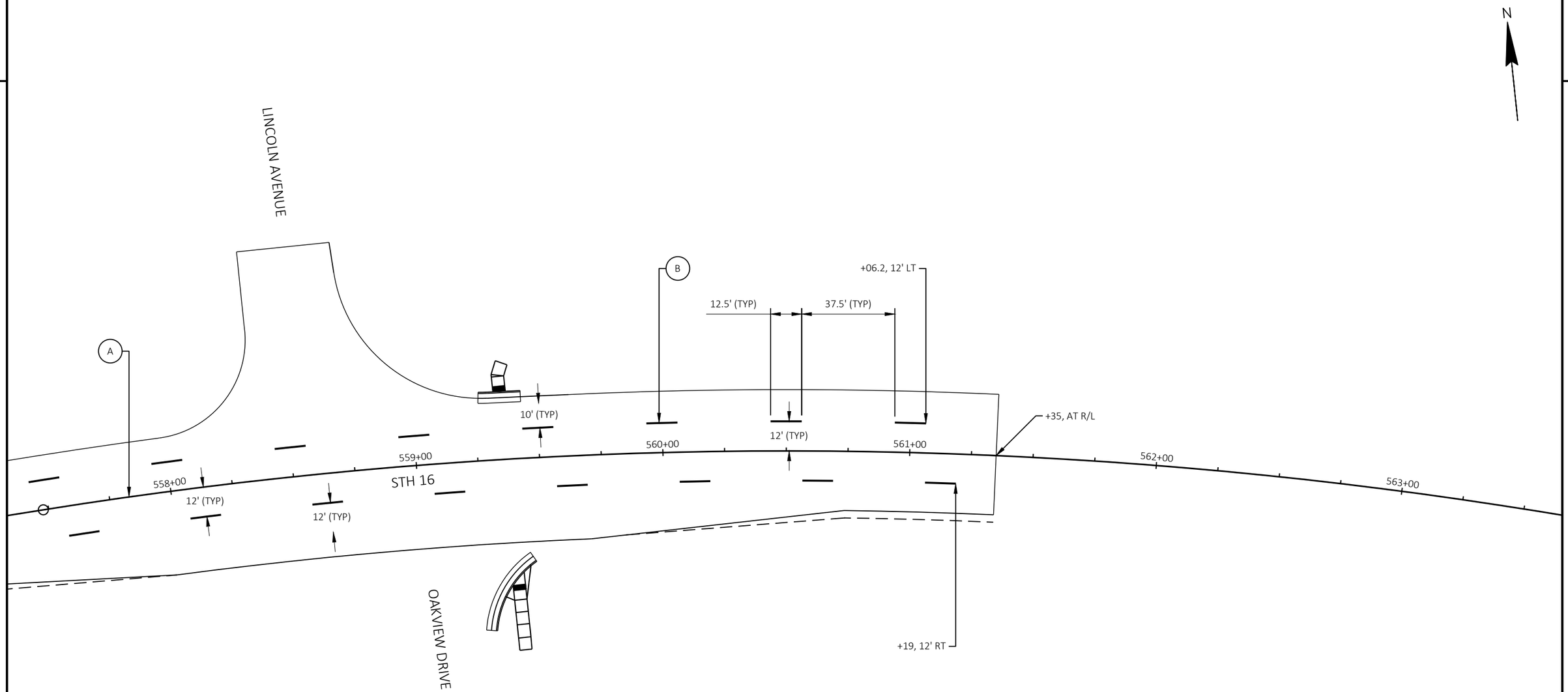
B — TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
(12.5' LINE, 37.5' SKIP)



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 60	E

2



LEGEND

A — TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)

B — TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

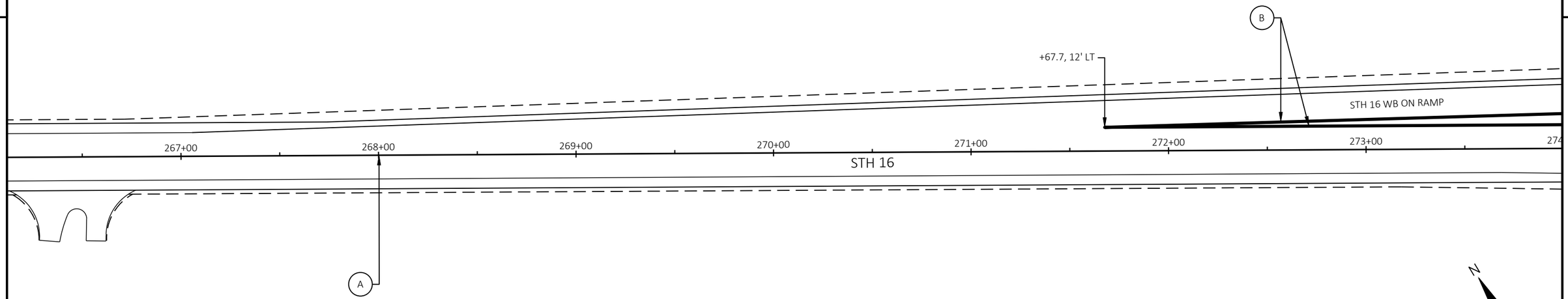
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 61	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024501-TM.DWG
LAYOUT NAME - 05
PLOT DATE : 7/9/2021 10:30 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

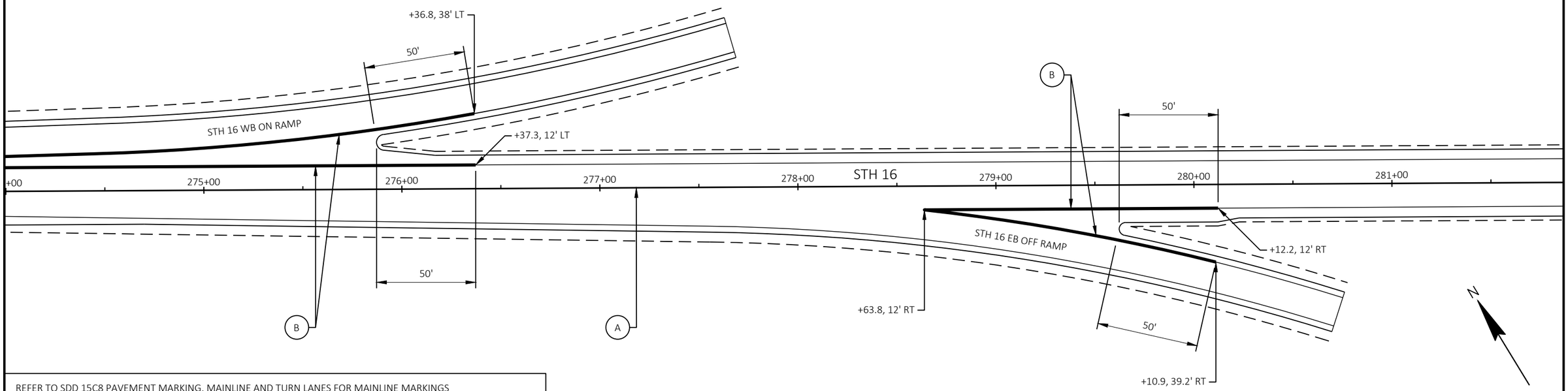
2

2



LEGEND

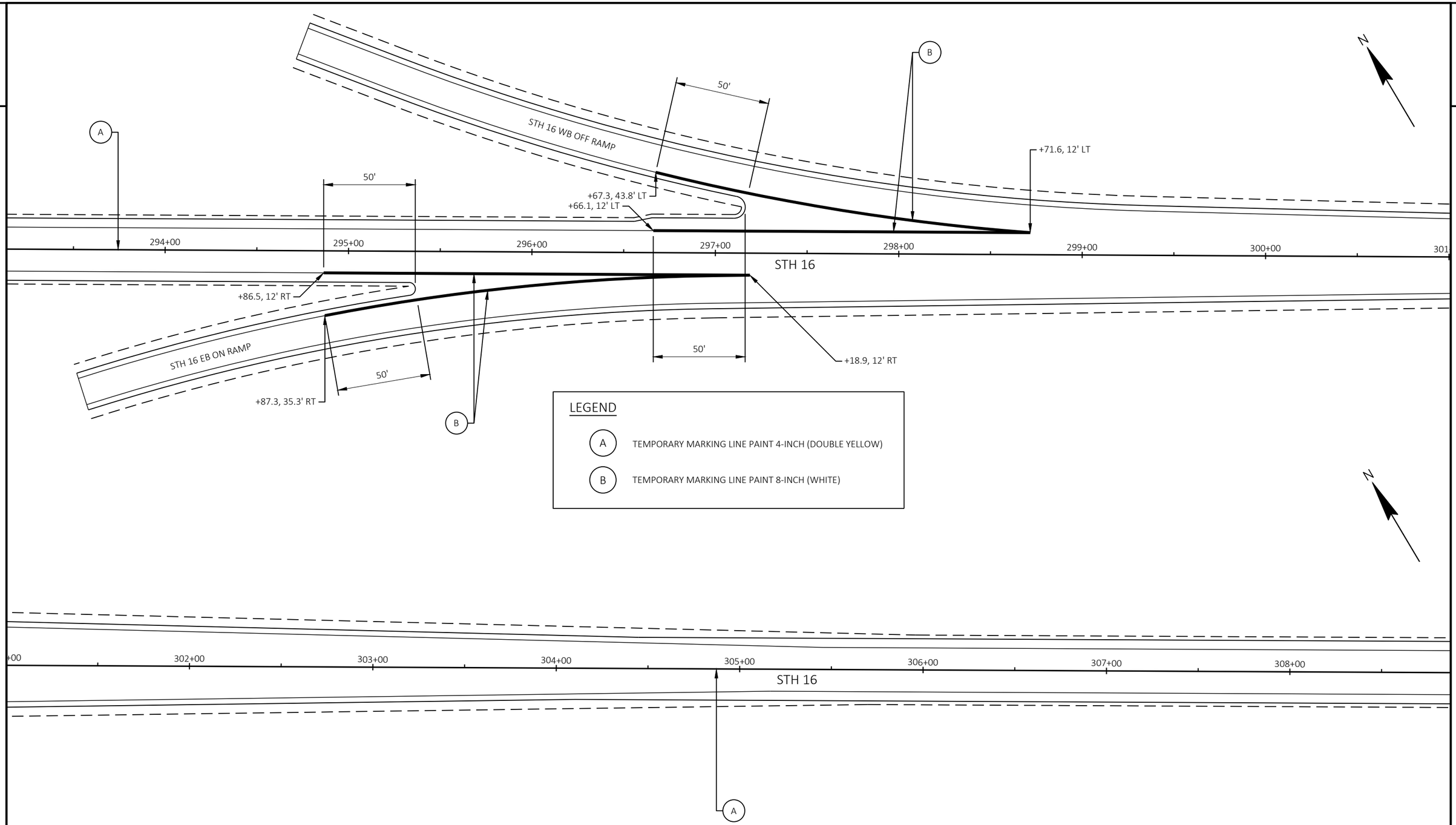
A	TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
B	TEMPORARY MARKING LINE PAINT EPOXY 8-INCH (WHITE)



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 62	E

2



LEGEND

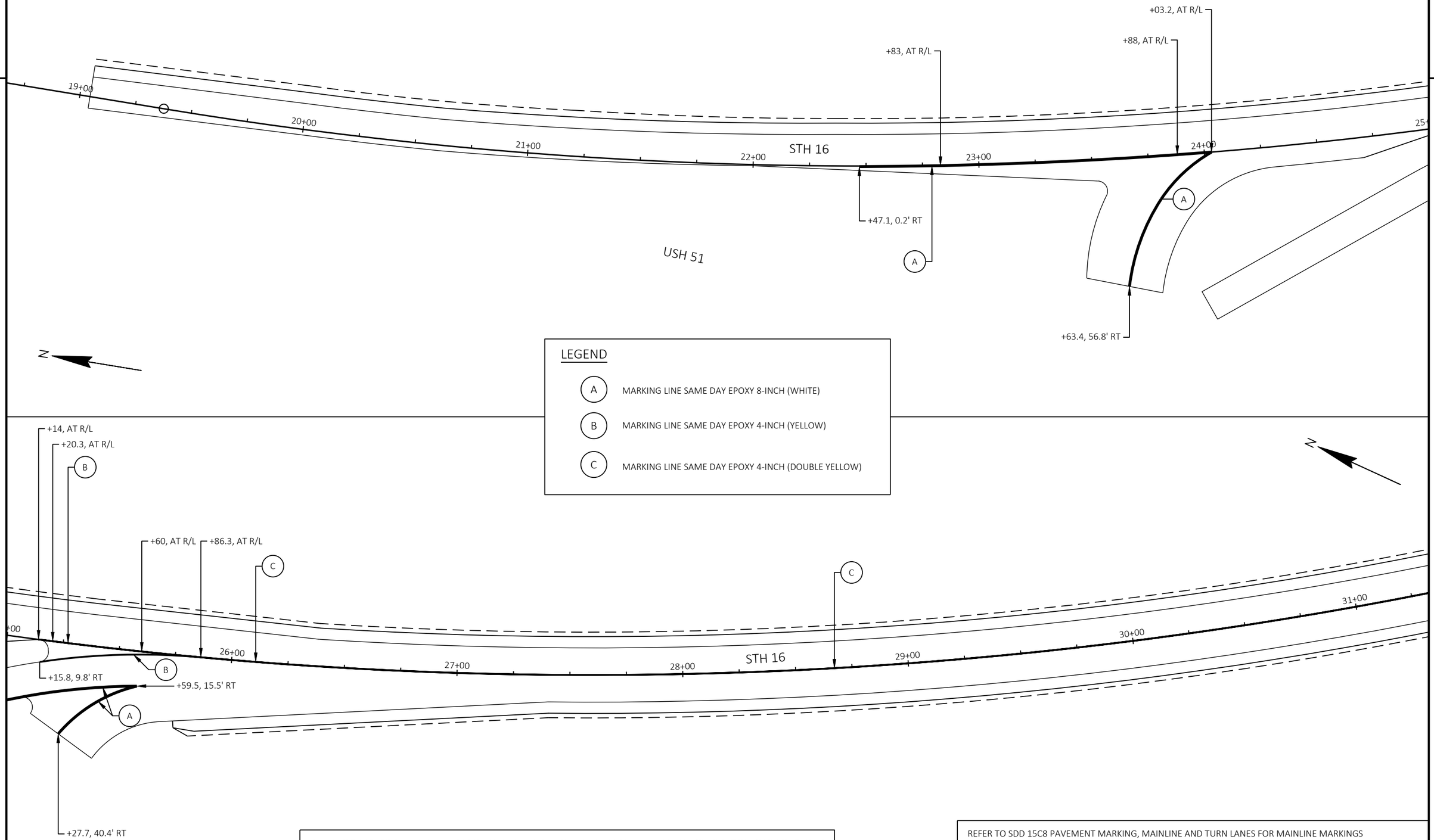
A	TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
B	TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - LOWER HMA LAYER	SHEET 63	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024502-TM.DWG
LAYOUT NAME - 02
PLOT DATE : 7/9/2021 10:38 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS FOR LOCATIONS NOT SHOWN

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/USH 51 INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 64	E

2

N

A

+22.6, 12' LT

C

12.5' (TYP)

37.5' (TYP)

123+00 124+00 125+00 126+00 127+00 128+00

STH 16

+44.7, 12' RT

+38.1, 12' RT

B

+13.9, AT R/L
END DASHED CENTERLINE MARKINGS
BEGIN SOLID LEFT/DASHED RIGHT CENTERLINE MARKINGS

COLUMBIA COUNTY
WASTE DISPOSAL ENTRANCE

LEGEND

A — MARKING LINE SAME DAY EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)

B — MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

C — MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

N

C

+35.1, 12' LT

+00 129+00 130+00 131+00 132+00 133+00 134+00

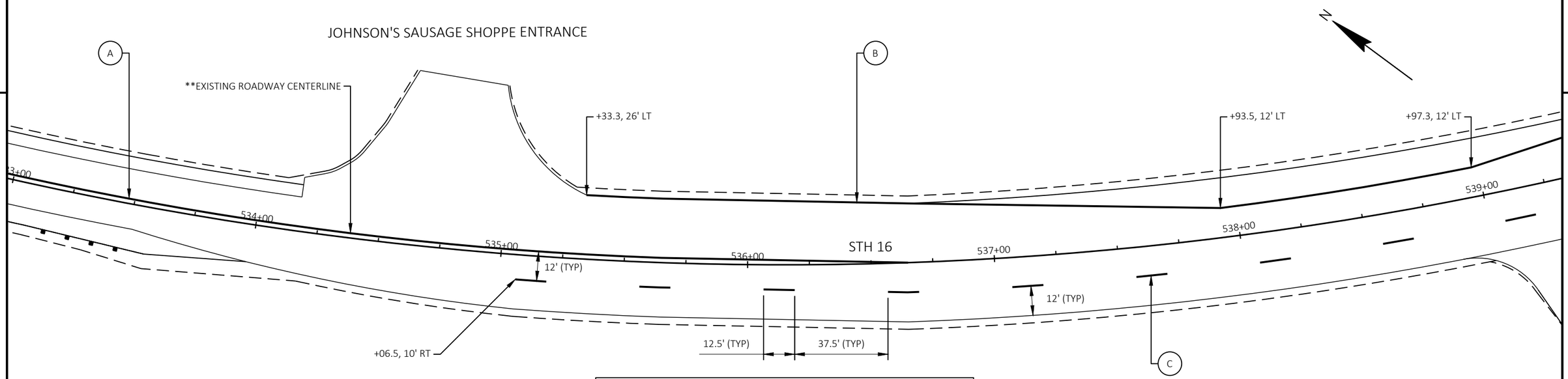
STH 16

COLUMBIA COUNTY
WASTE DISPOSAL ENTRANCE

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 65	E

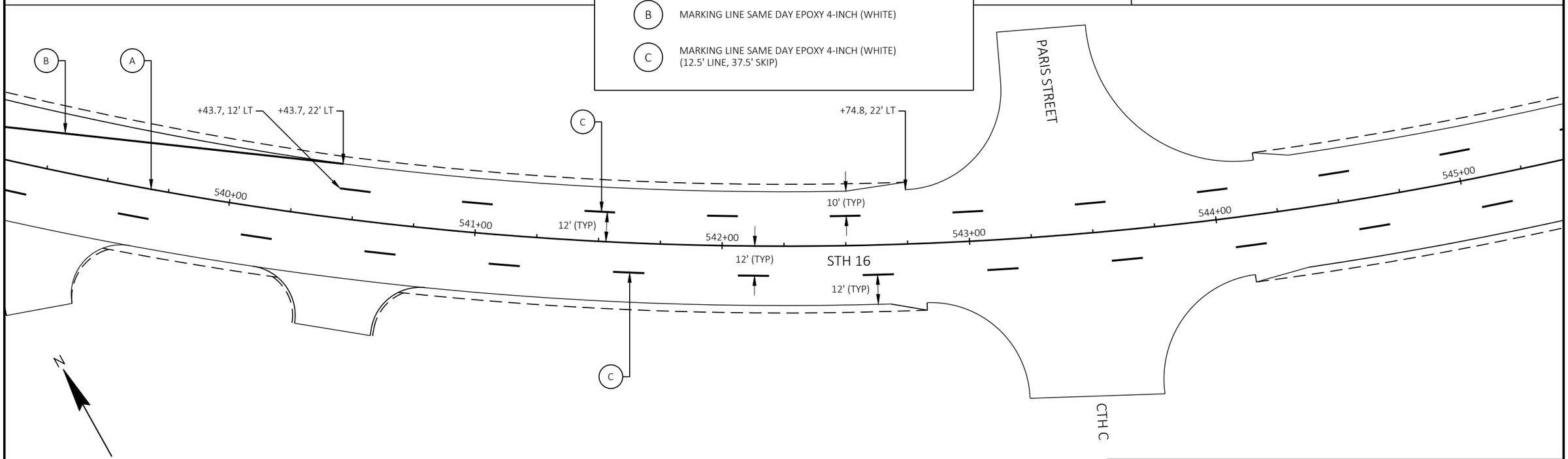
2



LEGEND

- A — MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
- B — MARKING LINE SAME DAY EPOXY 4-INCH (WHITE)
- C — MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1.9'- 2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.



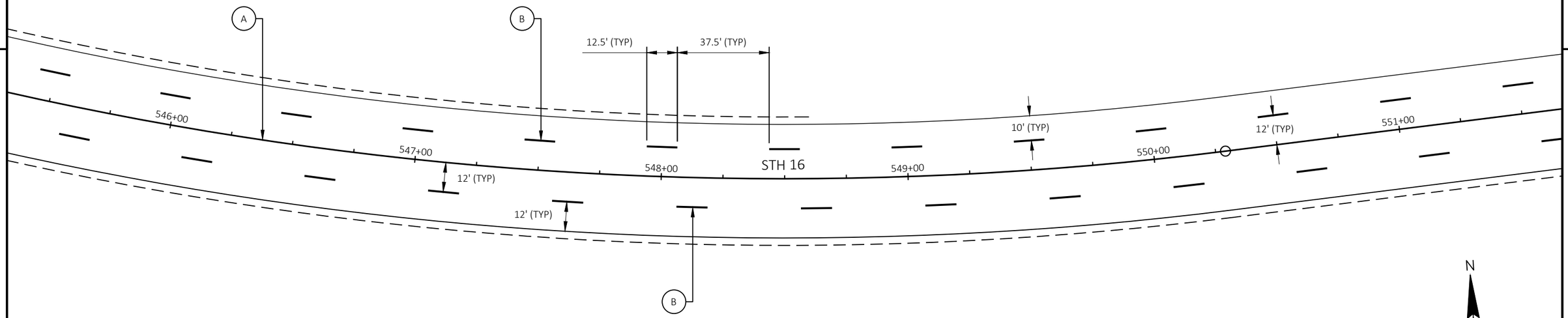
CTH B

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 66	E

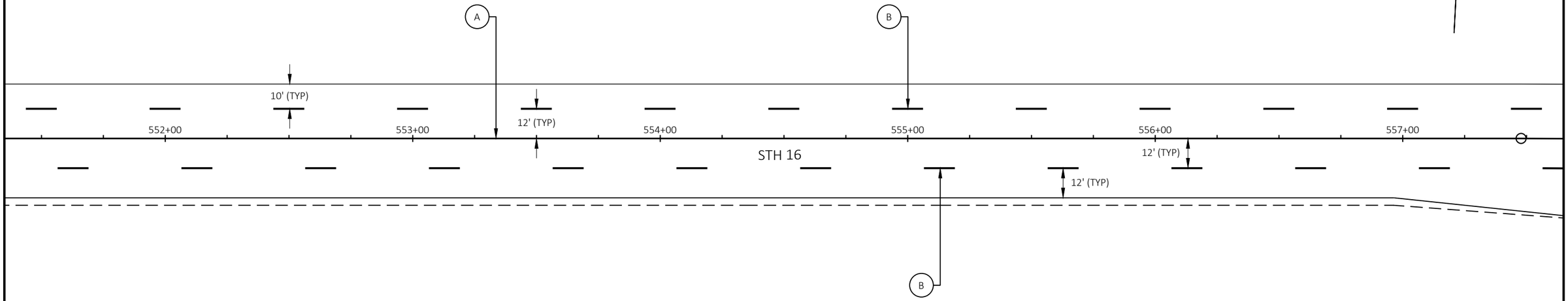
FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024503-TM.DWG
LAYOUT NAME - 03
PLOT DATE : 7/9/2021 10:41 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



LEGEND

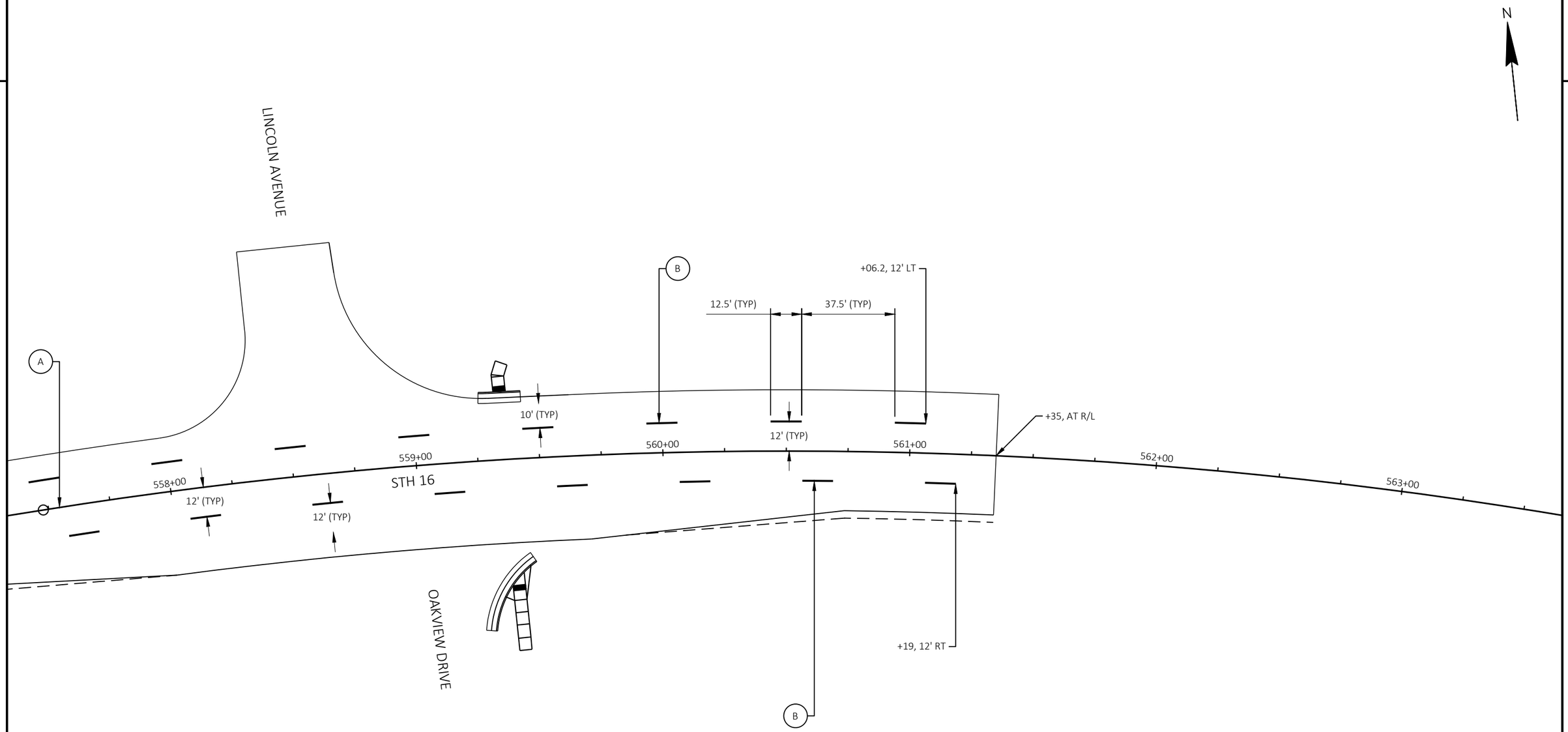
A	MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 67	E

2



LEGEND

A — MARKING LINE SAME DAY EPOXY 4-INCH (DOUBLE YELLOW)

B — MARKING LINE SAME DAY EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 68	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024503-TM.DWG
LAYOUT NAME - 05
PLOT DATE : 7/9/2021 10:41 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

DOUBLE YELLOW CENTERLINE MARKINGS

A

+67.7, 12' LT

STH 16 WB ON RAMP

267+00 268+00 269+00 270+00 271+00 272+00 273+00 274

STH 16

+50, AT R/L

SOLID YELLOW RIGHT/DASHED LEFT CENTERLINE MARKINGS

N

LEGEND

A MARKING LINE SAME DAY EPOXY 8-INCH (WHITE)

+36.8, 38' LT

50'

STH 16 WB ON RAMP

+37.3, 12' LT

DASHED YELLOW CENTERLINE MARKINGS

A

50'

+00 275+00 276+00 277+00 278+00 STH 16 279+00 280+00 281+00

+05, AT R/L

STH 16 EB OFF RAMP

+12.2, 12' RT

50'

A

SOLID YELLOW RIGHT/DASHED LEFT CENTERLINE MARKINGS

+63.8, 12' RT

50'

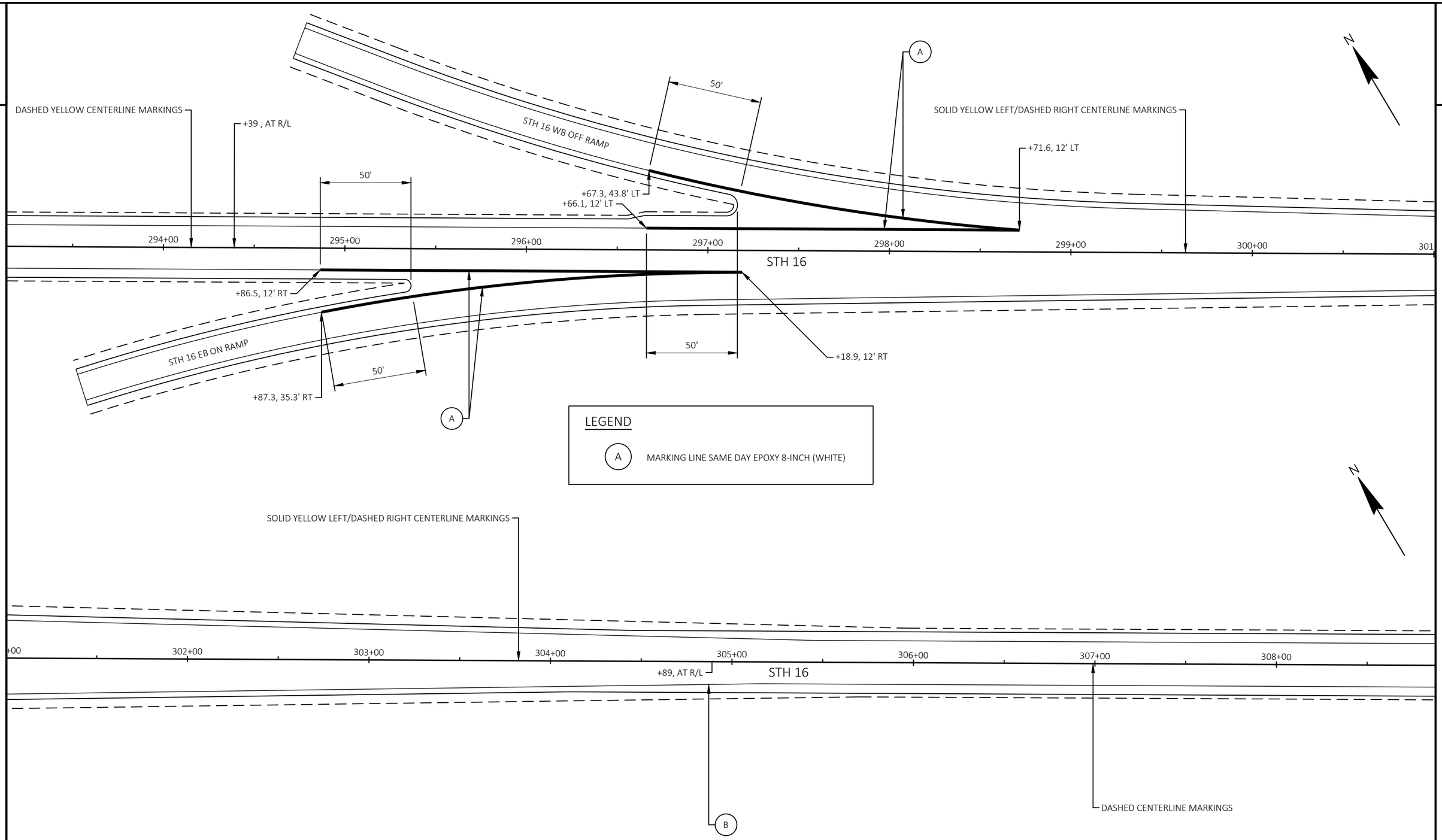
+10.9, 39.2' RT

N

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

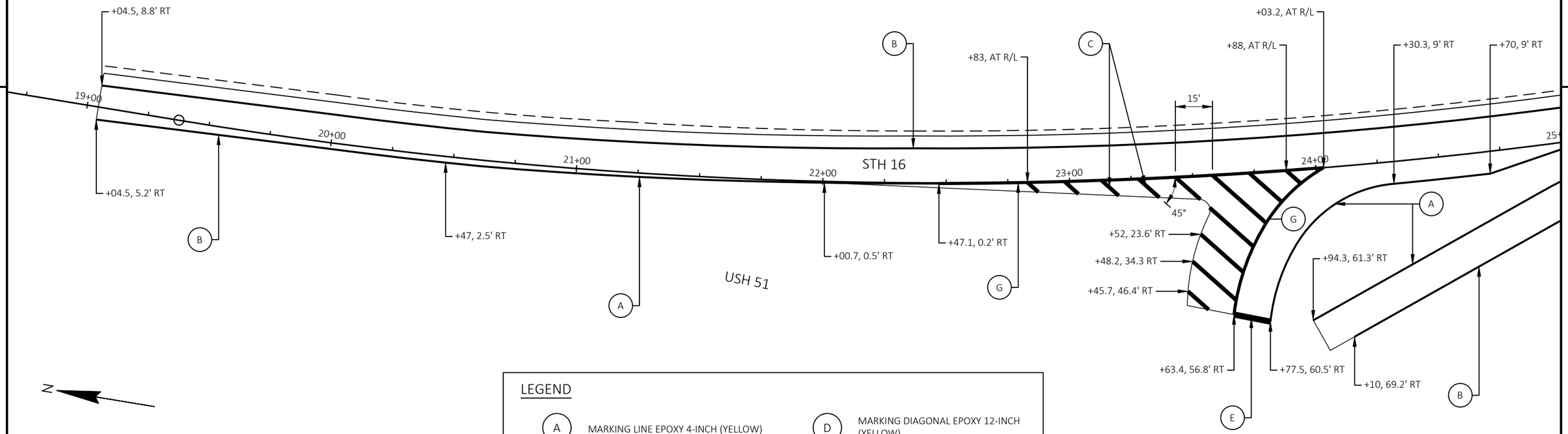
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 69	E

2



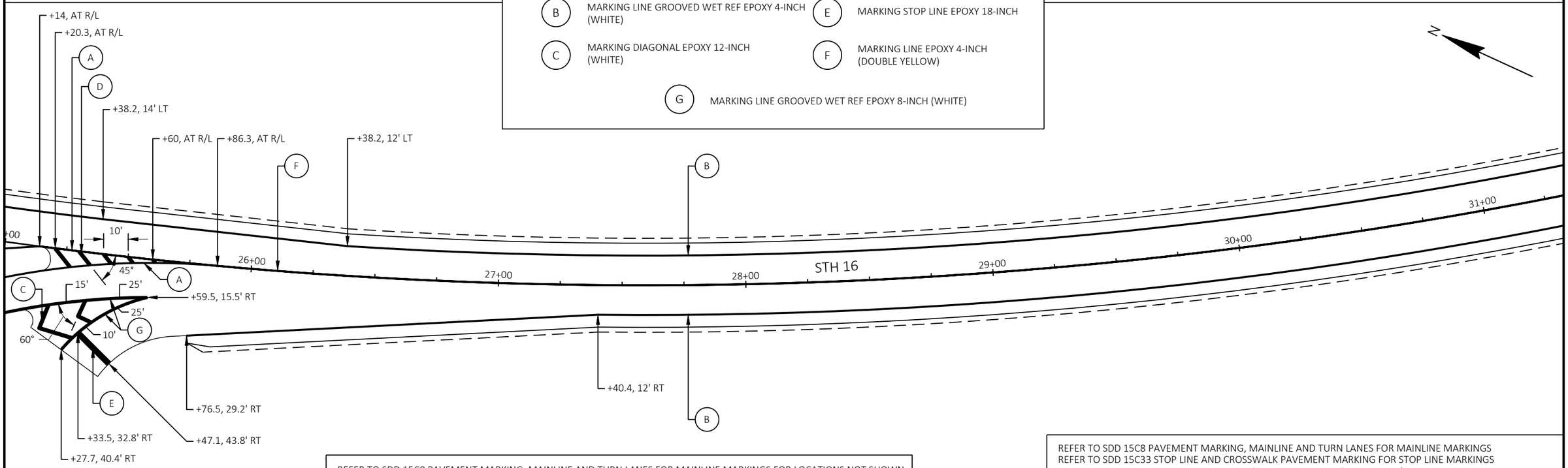
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TEMPORARY PAVEMENT MARKINGS - UPPER HMA LAYER	SHEET 70	E



LEGEND

A	MARKING LINE EPOXY 4-INCH (YELLOW)	D	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	E	MARKING STOP LINE EPOXY 18-INCH
C	MARKING DIAGONAL EPOXY 12-INCH (WHITE)	F	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
G	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)		



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS FOR LOCATIONS NOT SHOWN

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/USH 51 INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 71	E

2

N

A

B

+32.6, 12' LT

+22.6, 12' LT

+11.4, 24' LT

C

12.5' (TYP)

37.5' (TYP)

123+00

124+00

125+00

126+00

127+00

128+00

STH 16

+65.3, 12' RT

B

+44.7, 12' RT

+44.7, 24' RT

+38.1, 12' RT

+38.1, 24' RT

D

+13.9, AT R/L
END DASHED CENTERLINE MARKINGS
BEGIN SOLID LEFT/DASHED RIGHT CENTERLINE MARKINGS

COLUMBIA COUNTY
WASTE DISPOSAL ENTRANCE

LEGEND

A — MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)

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

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

D — MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)

N

C

+46.2, 24' LT

+35.1, 12' LT

B

+57.5, 12' LT

+00

129+00

130+00

131+00

132+00

133+00

134+00

STH 16

+67.9, 24.4' RT

+59.5, 12' RT

B

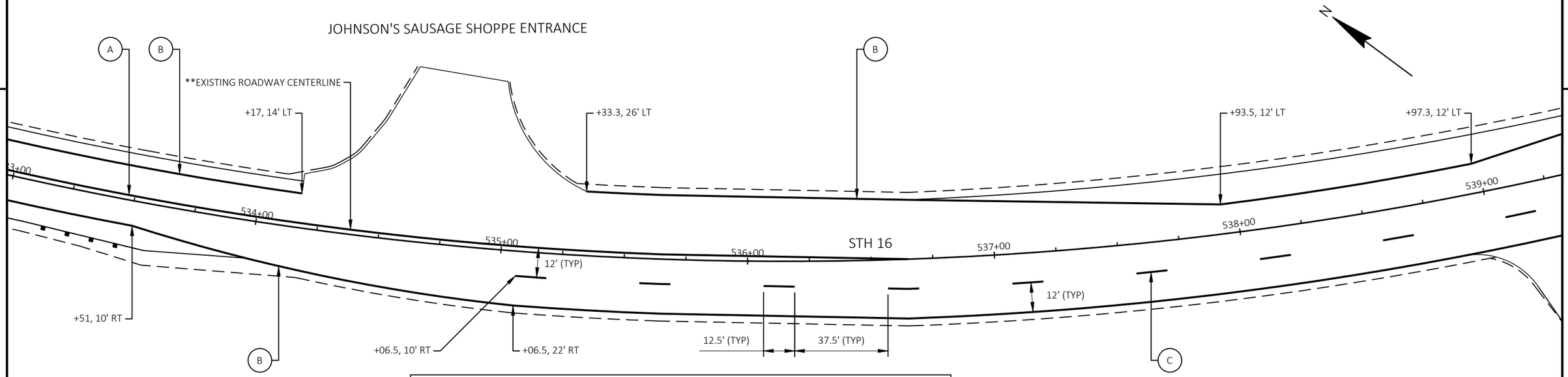
COLUMBIA COUNTY
WASTE DISPOSAL ENTRANCE

REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 72	E

2

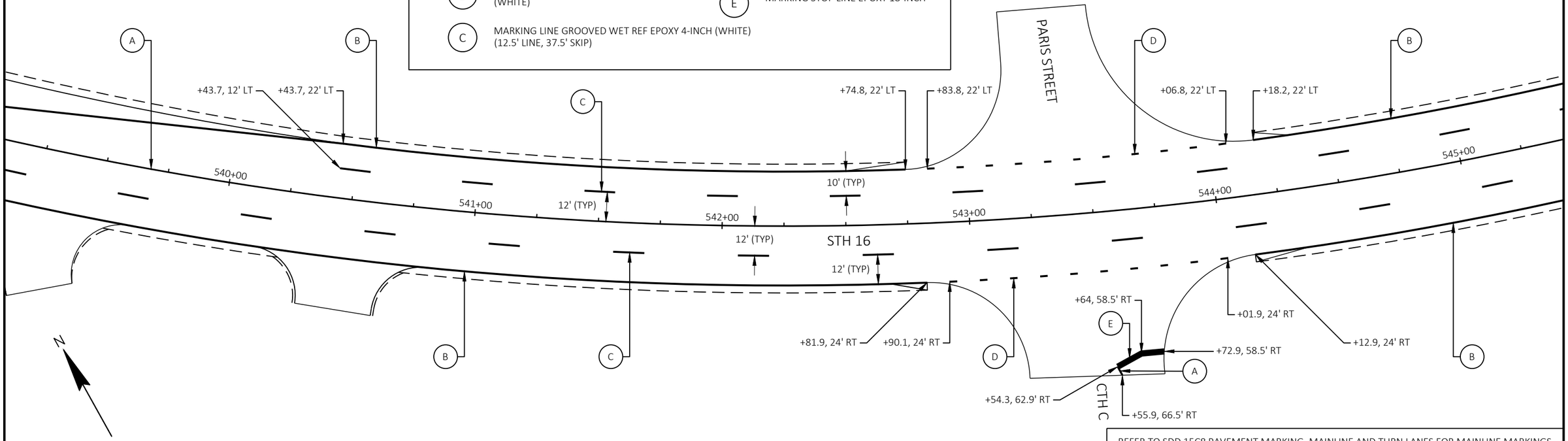
JOHNSON'S SAUSAGE SHOPPE ENTRANCE



LEGEND

- A — MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- B — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
- D — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)
- E — MARKING STOP LINE EPOXY 18-INCH

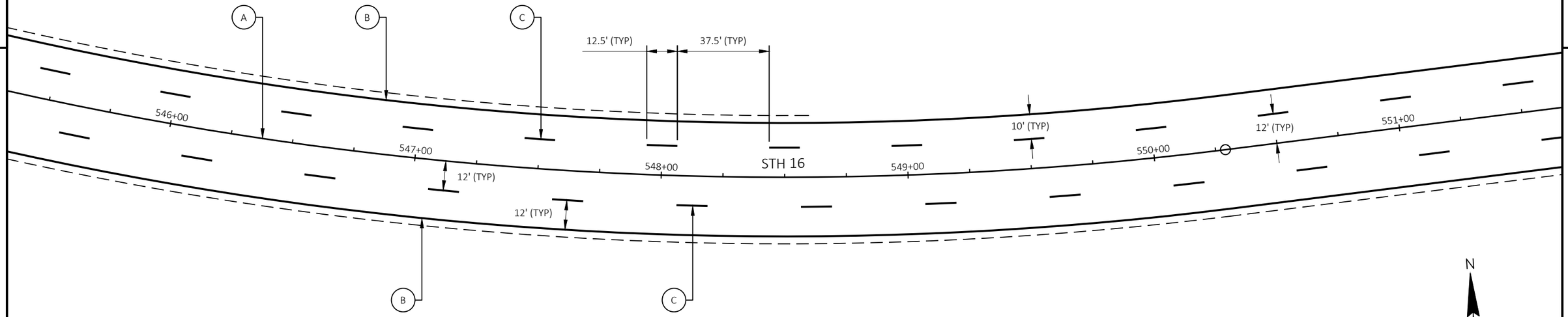
**NOTE: THE EXISTING ROADWAY CENTERLINE IS 1.9'- 2' LEFT OF THE ROADWAY REFERENCE LINE WITHIN THE ROADWAY CURVE.



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

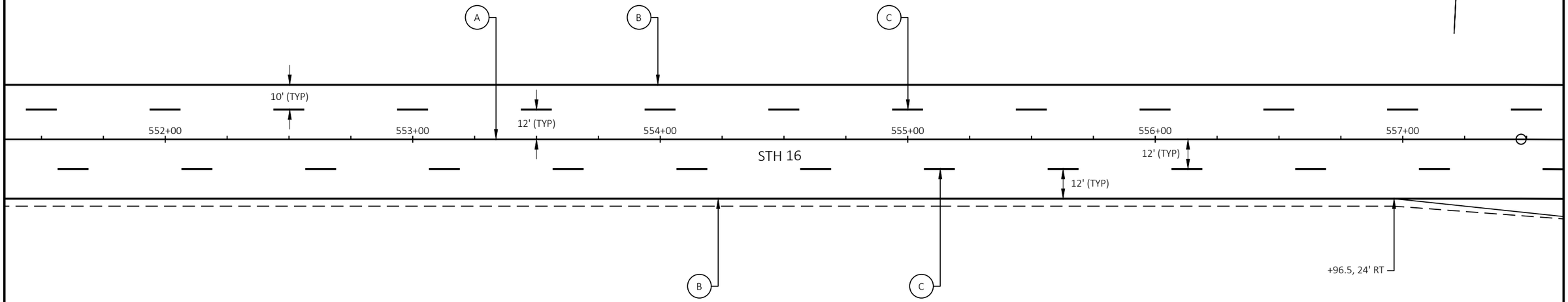
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 73	E

2



LEGEND

A	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)



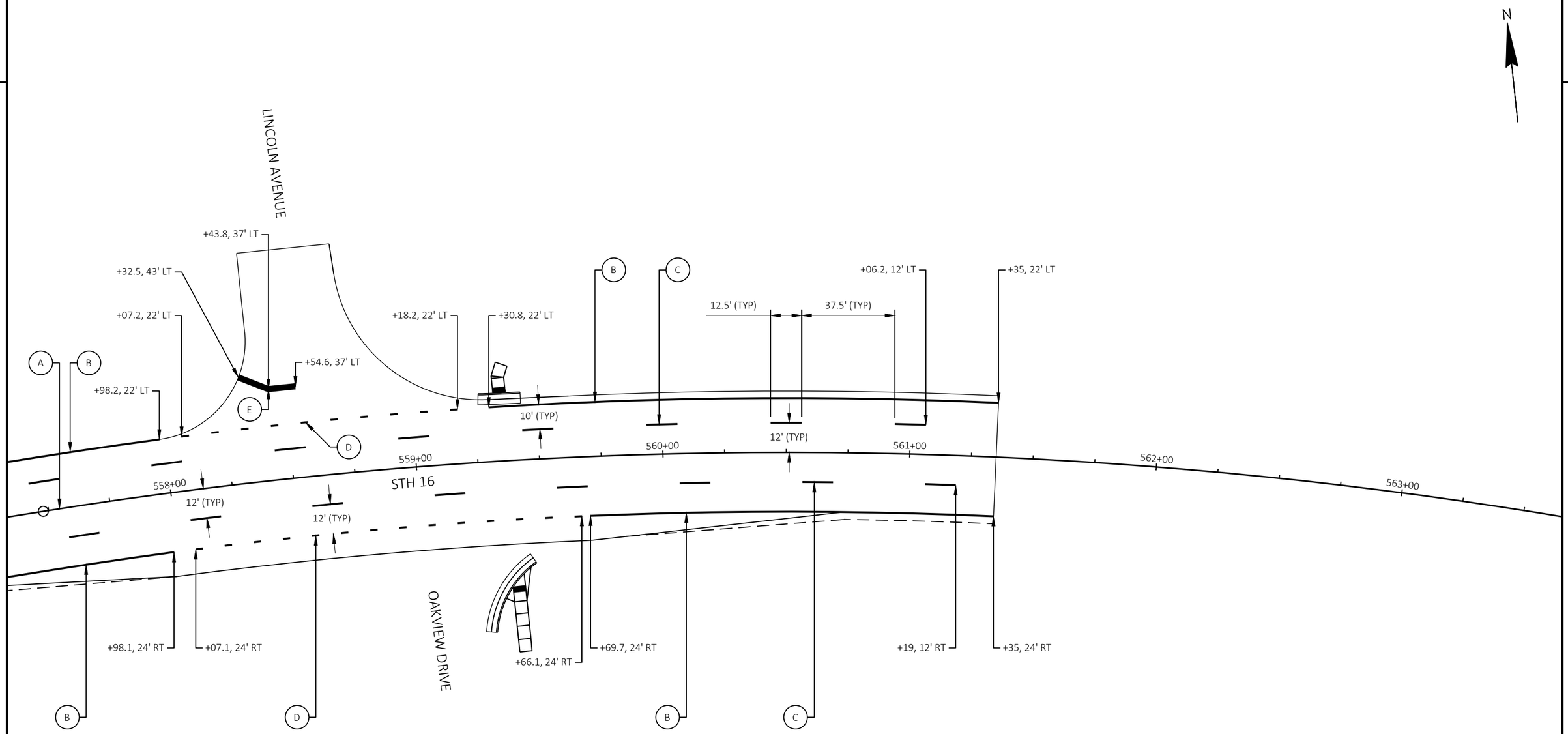
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 74	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 04

PLOT DATE : 7/9/2021 10:51 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING FOR STOP LINE MARKINGS
REFER TO SDD 15C35 PAVEMENT MARKING FOR INTERSECTION MARKINGS

LEGEND

- A — MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- B — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- C — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
- D — MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) (3' LINE, 9' SKIP)
- E — MARKING STOP LINE EPOXY 18-INCH

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 75	E

2

2

DOUBLE YELLOW CENTERLINE MARKINGS

B

+05.7, 12' LT

C

+67.7, 12' LT

STH 16 WB ON RAMP

267+00 268+00 269+00 270+00 271+00 272+00 273+00 274

STH 16

+50, AT R/L

+68.5, 12' RT

SOLID YELLOW RIGHT/DASHED LEFT CENTERLINE MARKINGS

B

N

LEGEND

A	MARKING LINE EPOXY 4-INCH (YELLOW)
B	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
C	MARKING LINE GROOVED WET REF EPOXY 8-INCH (WHITE)

+64.1, 82.8' LT

B

+36.8, 38' LT

50'

+68.3, 68.4' LT

STH 16 WB ON RAMP

A

+37.3, 12' LT

B

C

B

50'

DASHED YELLOW CENTERLINE MARKINGS

+00 275+00 276+00 277+00 278+00 279+00 280+00 281+00

STH 16

+05, AT R/L

STH 16 EB OFF RAMP

+12.2, 12' RT

+74.8, 57.6' RT

50'

+63.8, 12' RT

B

C

50'

SOLID YELLOW RIGHT/DASHED LEFT CENTERLINE MARKINGS

A

+10.9, 39.2' RT

+70.2, 71.9' RT

N

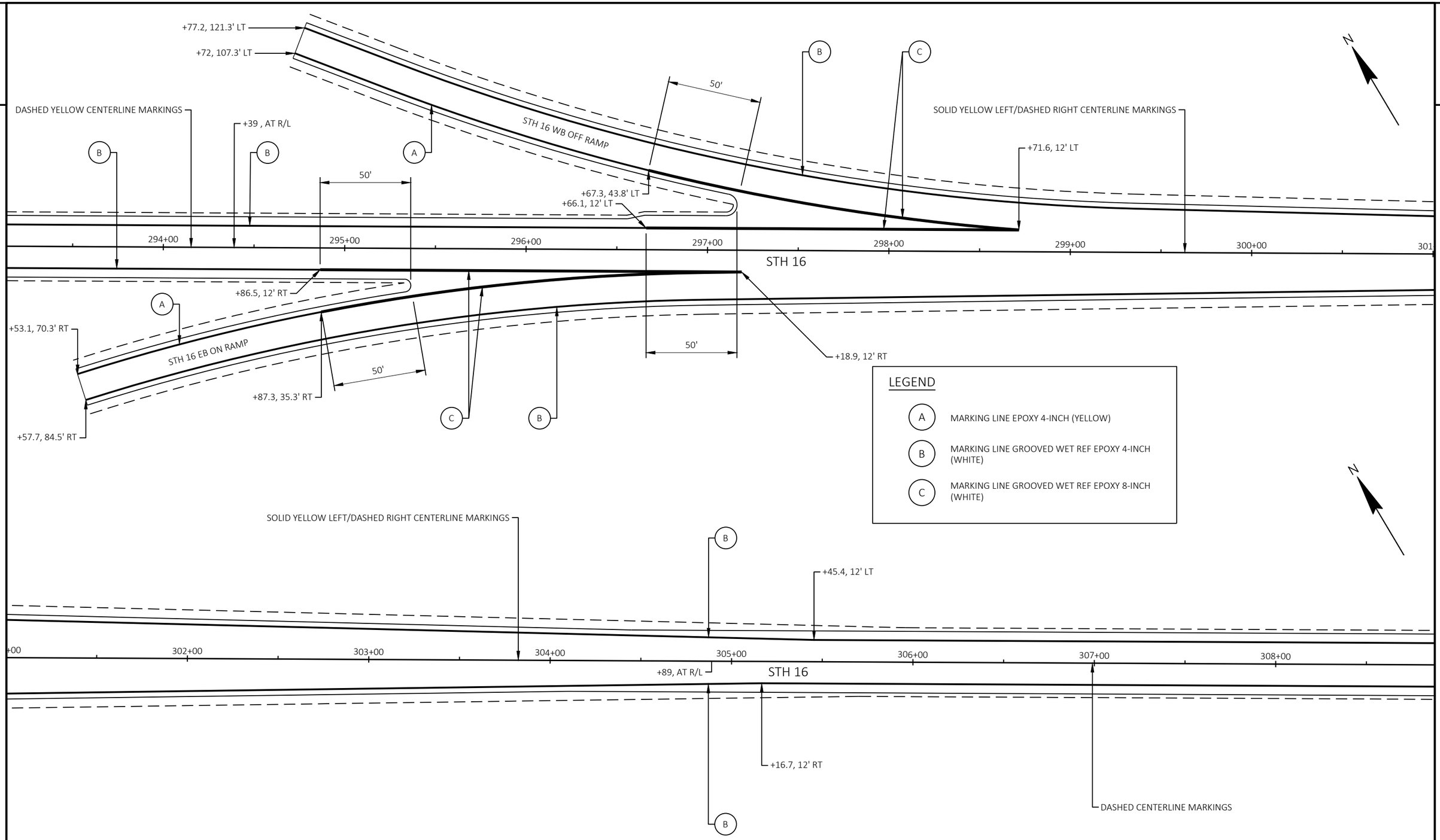
REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 76	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\024511-PM.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 10:53 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



REFER TO SDD 15C8 PAVEMENT MARKING, MAINLINE AND TURN LANES FOR MAINLINE MARKINGS
REFER TO SDD 15C31 PAVEMENT MARKING (RAMPS AND GORES) FOR STH 16/STH 22 INTERCHANGE GORE MARKINGS

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	PAVEMENT MARKINGS	SHEET 77	E

2

MB

FRAME 1	FRAME 2
ROAD WORK TO BEGIN	xx/xx/xx

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION

SEE SDD15C04 TRAFFIC CONTROL , ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC FOR ROAD WORK AHEAD SIGN PLACEMENT

MB

FRAME 1	FRAME 2
ROAD WORK TO BEGIN	xx/xx/xx

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION

MB

FRAME 1	FRAME 2
ROAD WORK TO BEGIN	xx/xx/xx

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION

MB

FRAME 1	FRAME 2
ROAD WORK TO BEGIN	xx/xx/xx

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION

SEE SDD15C04 TRAFFIC CONTROL , ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC FOR ROAD WORK AHEAD SIGN PLACEMENT

COORDINATE TRAFFIC CONTROL SIGNING AND PLACEMENT WITH PROJECT 1400-01-70 TO AVOID WORK ZONE OVERLAPS DUE TO CONTRACTOR WORKING OPERATIONS

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

WORK ZONE

A

CENTER OF ROADWAY

MAINLINE ROADWAY UNDER CONSTRUCTION

200' MIN.

500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSEST

200' MIN.

GROOVED PAVEMENT

WO8-52

ROAD WORK AHEAD

W20-1A

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING	SHEET 78	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\025001-TC.DWG
LAYOUT NAME - 01
PLOT DATE : 7/9/2021 10:55 AM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - ADVANCED WARNING SIGNING FOR NIGHT-TIME WORK	SHEET 79	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\025002-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2021 10:57 AM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:1 MI

WISDOT/CADDS SHEET 42

2

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION AND REMOVE WHEN WORK IN WORK ZONE IS COMPLETED

FRAME 1	FRAME 2
NIGHT-TIME WORK CLOSURES	XX/XX/XX TO XX/XX/XX

EAST 16

LANE CLOSED
R11-2L
48"X30"

Madison
Columbus

FRAME 1	FRAME 2
NIGHT-TIME WORK CLOSURES	XX/XX/XX TO XX/XX/XX

PLACE 7 CALENDAR DAYS PRIOR TO BEGINNING CONSTRUCTION AND REMOVE WHEN WORK IN WORK ZONE IS COMPLETED

50' (TYP)

USH 51

MB

USH 51/STH 16

LANE CLOSED
R11-2L
48"X30"

NORTH 51 | WEST 16 | EAST 16

ALTERNATE US-STATE 39

Portage
Columbus

EAST 16

PC: 19+37.61

EAST 16 | SOUTH 51 | ALTERNATE US-STATE 39 | ALTERNATE US-STATE 90

MB

FRAME 1	FRAME 2
NIGHT-TIME WORK CLOSURES	XX/XX/XX TO XX/XX/XX

MURRAY ROAD

STH 16

ROAD CLOSED
R11-2
48"X30"

N

LEGEND

- WORK ZONE
- MB — TRAFFIC CONTROL SIGNS PCMS
- TRAFFIC CONTROL BARRICADE TYPE III AND TYPE A WARNING LIGHTS
- EXISTING SIGN
- TRAFFIC CONTROL BARRICADE TYPE III W/SIGN AND TYPE A WARNING LIGHTS
- TRAFFIC CONTROL DRUM

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STH 16 & USH 51 INTERSECTION - SHORT TERM NIGHT-TIME WORK	SHEET 80	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 4:29 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

FULL DEPTH MILLING AND PAVING LOCATION (STA 285+00 - STA 290+00)
LOWER LIFT OF HMA MUST BE PLACED BY THE END OF THE WORKING DAY PRIOR TO OPENING TO TRAFFIC

FULL DEPTH MILLING AND PAVING LOCATION (STA 500+00 - STA 509+00)
LOWER LIFT OF HMA MUST BE PLACED BY THE END OF THE WORKING DAY PRIOR TO OPENING TO TRAFFIC

SEE OTHER TRAFFIC CONTROL DETAILS

SEE OTHER TRAFFIC CONTROL DETAILS
FOR NON-WORKING HOURS SHOULDER CLOSURE

SEE OTHER TRAFFIC CONTROL DETAILS
FOR NON-WORKING HOURS SHOULDER CLOSURE

SEE OTHER TRAFFIC CONTROL DETAILS
FOR CURB RAMP CONSTRUCTION OPERATIONS
ON STH 16 WB AT LINCOLN AVENUE INTERSECTION

SEE OTHER TRAFFIC CONTROL DETAILS
FOR CURB RAMP CONSTRUCTION
OPERATIONS ON OAK VIEW DRIVE

FULL DEPTH MILLING AND PAVING LOCATION (STA 547+60 - STA 561+35)
LOWER LIFT OF HMA MUST BE PLACED BY THE END OF THE WORKING DAY PRIOR TO OPENING TO TRAFFIC
MILL AND PAVE TWO LANES ONE DIRECTION DURING FLAGGING OPERATIONS AT THIS LOCATION

LEGEND

WORK ZONE

(A) SEE SDD 15C12 TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

(B) SEE SDD 15C19 MOVING PAVEMENT MARKING OPERATIONS

(C) SEE SDD 15D39 TRAFFIC CONTROL, DROP OFF SIGNING

(D) SEE SDD 15D44 TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

LIMIT MILLING AND PAVING WORK ZONES TO 2 MILES IN LENGTH. A SECOND MILLING AND PAVING OPERATION MAY OCCUR WITH A 5 MILE BUFFER SPACE BETWEEN THEM.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - RESURFACING AND LANE MARKING OPERATIONS	SHEET 81 E

2

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

- WORK ZONE
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 82	E

2

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

- WORK ZONE
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 83	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 02
PLOT DATE : 4/22/2021 4:39 PM
PLOT BY : RINZEL, JAMES M
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

- WORK ZONE
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

SEE SDD 15D28 TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR ADDITIONAL SPACING AND SIGNING INFORMATION

MGS GUARDRAIL AND GRADING WORK SHALL BE DONE UNDER FLAGGING OPERATIONS DURING CONTRACTOR WORKING HOURS. THIS LOCATION MAY BE DONE AS A SEPARATE OPERATION FOR FLAGGING OR MAY DONE WITH THE MILLING AND PAVING MOVING OPERATION. DURING NON-WORKING HOURS PROVIDE TRAFFIC CONTROL PER THIS DETAIL UNTIL MGS GUARDRAIL AND GRADING OPERATIONS ARE COMPLETED. MAINTAIN A 12 FOOT TRAVEL LANE ADJACENT TO THE SHOULDER CLOSURE.

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - NON WORKING HOURS SHOULDER CLOSURE	SHEET 84	E

2

N

STH 16

558+00

559+00

560+00

STOP

R1-1
30"X30"

10' (TYP)

+13.6, 42.1' RT

+02.5, 42.4' RT

EXISTING CENTERLINE

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)

25' (TYP)

EXISTING R/W

OAKVIEW DRIVE

5' (TYP)

SIDEWALK CLOSED

R9-9
24"X12"

EXISTING R/W

EXISTING CURB AND GUTTER FLANGE LINE

11'

11'

+15.6, 98.3' RT

+04.1, 98.7' RT

EXISTING R/W

EXISTING R/W

10' (TYP)

WO1-6
48"X24"

+27.3, 145.6' RT

+14.5, 148' RT

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)

LEGEND

- WORK ZONE
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE PLYWOOD (5' MIN. WIDTH)
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM W/TYPE C LIGHT
- TRAFFIC CONTROL TYPE III BARRICADE W/SIGN
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - OAKVIEW DRIVE INTERSECTION & PEDESTRIAN ACCOMODATIONS	SHEET 85	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\025007-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 4/22/2021 4:44 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

END ROAD WORK
G20-2A
48"X24"

LINCOLN AVENUE

UNION STREET

CHURCH STREET

R11-2L
48"X30"
LANE CLOSED

15' (TYP)

25'

100' (TYP)

15' (TYP)

15' (TYP)

556

558

560

562

564

566

568

STH 16

OAKVIEW DRIVE

PC: 557+47.79

MAINTAIN ACCESS FOR COMMERCIAL ENTRANCE

N

ROAD WORK AHEAD
W20-1A

PT: 574+11.99

50' (TYP)

570

572

574

576

578

580

582

500'

MAINTAIN ACCESS FOR PRIVATE ENTRANCE

MAINTAIN ACCESS FOR COMMERCIAL ENTRANCE

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE INDICATED

LEGEND

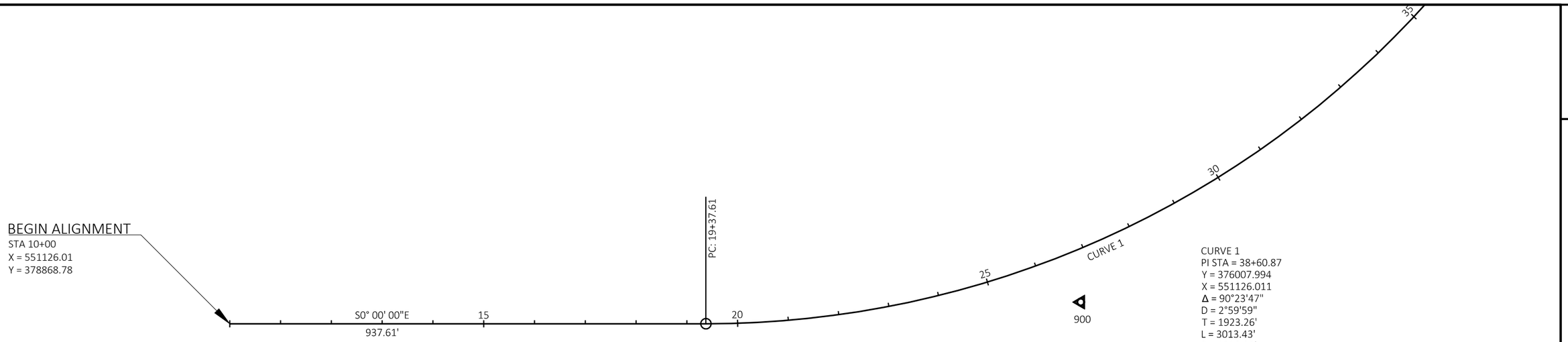
- WORK ZONE
- TRAFFIC CONTROL TYPE III BARRICADE W/SIGN AND TYPE A WARNING LIGHTS
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM

COORDINATE THIS LANE CLOSURE WITH PROJECT 1400-01-70 TRAFFIC CONTROL TO AVOID CONFLICTING CONSTRUCTION OPERATIONS

SEE SDD 15D21 TRAFFIC CONTROL, INTERSECTION WITH SINGLE RIGHT LANE CLOSURE AND SDD 15D50 TRAFFIC CONTROL, ADDED LANE CLOSURE FOR ADDITIONAL SPACING AND SIGNING INFORMATION

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	TRAFFIC CONTROL - STH 16 WB CURB RAMP - ADDED LANE CLOSURE WITHOUT LANE SHIFT	SHEET 86	E

2



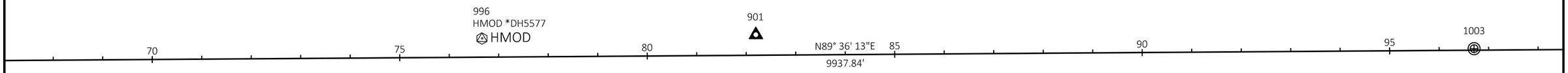
NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
900	FENO MONUMENT	STA 26+55.57	98.40' RT	551167.834	377193.962	813.22
1002	COLUMBIA COUNTY SECTION MONUMENT	STA 43+33.40	115.04' LT	552405.810	376006.768	795.95

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 87	E

2

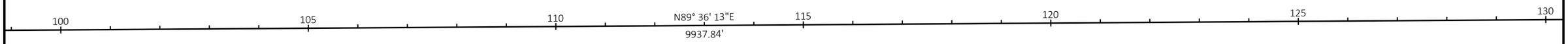


NOTE: DO NOT DISTURB DH5577 GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM DH5577 GPS. SEE GENERAL NOTES.
MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

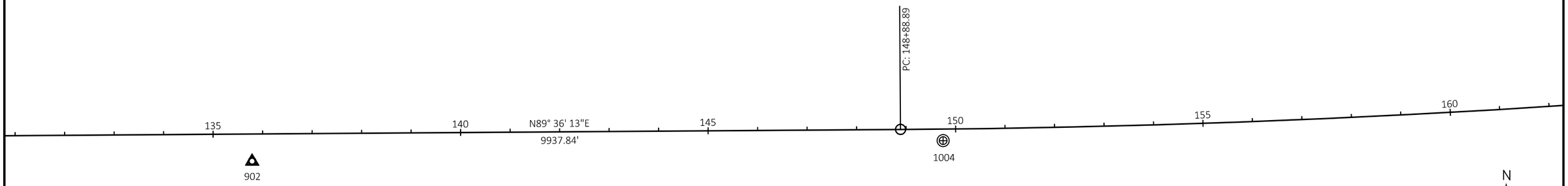
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
901	FENO MONUMENT	STA 82+18.98	41.44' LT	556316.790	376085.345	794.35
996	DH5577	STA 76+66.52	37.54' LT	555764.367	376077.624	795.47
1003	COLUMBIA COUNTY SECTION MONUMENT	STA 96+70.48	3.17' LT	557768.522	376057.116	796.17

NOTE: SECTION MONUMENT 1003 WILL BE DISTURBED DUE TO MILLING AND PAVING OPERATIONS. SEE SPECIAL PROVISIONS FOR BIDS ITEMS FOR RE-LOCATING AND RE-SETTING THE MONUMENT.



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 88	E

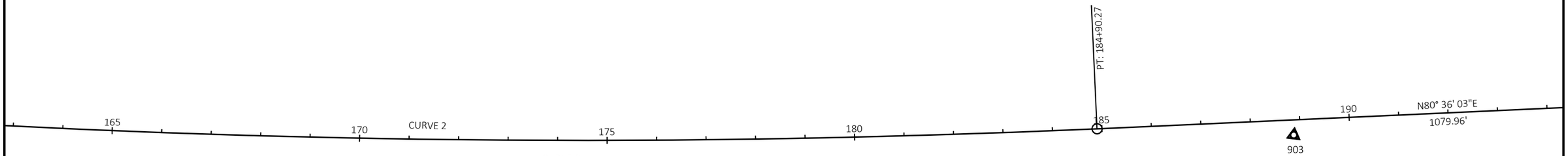
2



NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

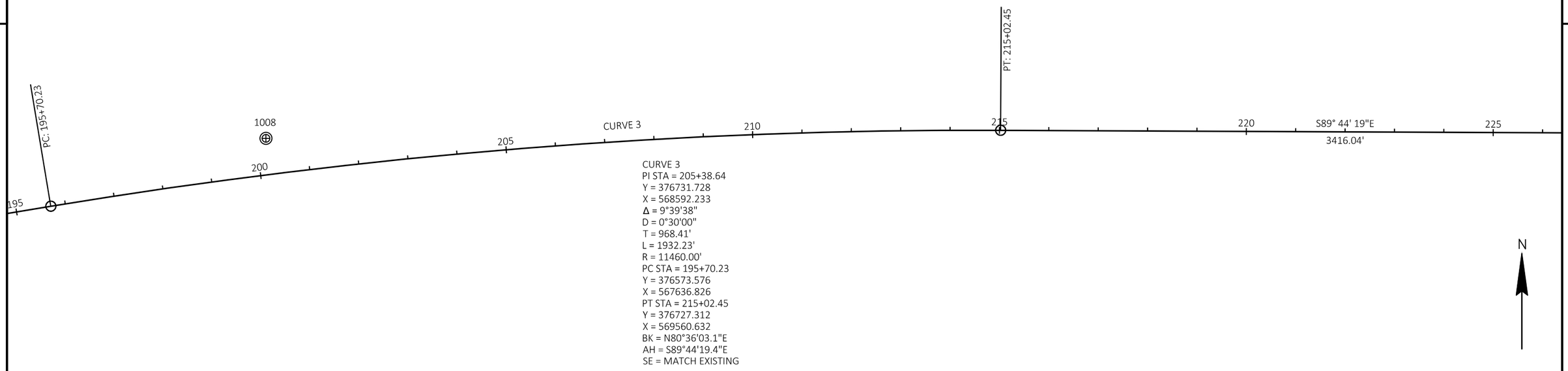
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
902	FENO MONUMENT	STA 135+77.57	55.02' RT	561675.922	376025.959	817.17
1004	COLUMBIA COUNTY SECTION MONUMENT	STA 149+74.50	23.35' RT	563072.686	376067.447	819.33
903	FENO MONUMENT	STA 188+85.84	30.15' RT	566966.551	376432.062	794.33



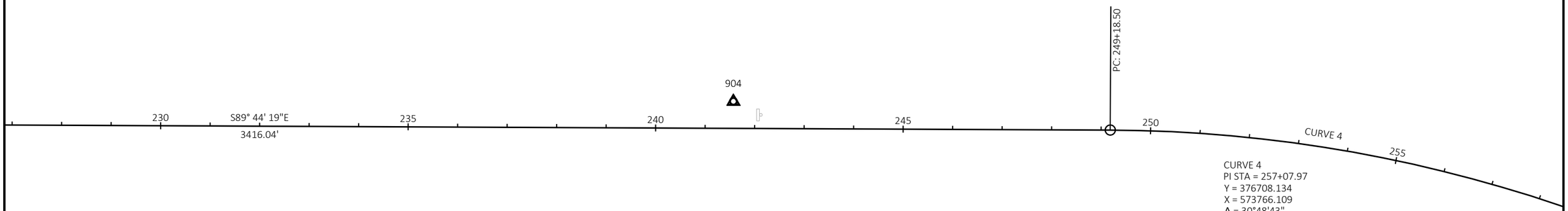
CURVE 2
PI STA = 166+93.29
Y = 376102.528
X = 564791.188
Δ = 9°00'10"
D = 0°15'00"
T = 1804.40'
L = 3601.38'
R = 22920.00'
PC STA = 148+88.89
Y = 376090.046
X = 562986.828
PT STA = 184+90.27
Y = 376397.207
X = 566571.366
BK = N89°36'13.1"E
AH = N80°36'03.1"E
SE = MATCH EXISTING

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 89	E

2



CURVE 3
PI STA = 205+38.64
Y = 376731.728
X = 568592.233
Δ = 9°39'38"
D = 0°30'00"
T = 968.41'
L = 1932.23'
R = 11460.00'
PC STA = 195+70.23
Y = 376573.576
X = 567636.826
PT STA = 215+02.45
Y = 376727.312
X = 569560.632
BK = N80°36'03.1"E
AH = S89°44'19.4"E
SE = MATCH EXISTING



CURVE 4
PI STA = 257+07.97
Y = 376708.134
X = 573766.109
Δ = 30°48'43"
D = 1°59'59"
T = 789.48'
L = 1540.72'
R = 2865.00'
PC STA = 249+18.50
Y = 376711.734
X = 572976.640
PT STA = 264+59.21
Y = 376300.656
X = 574442.302
BK = S89°44'19.4"E
AH = S58°55'35.9"E
SE = MATCH EXISTING

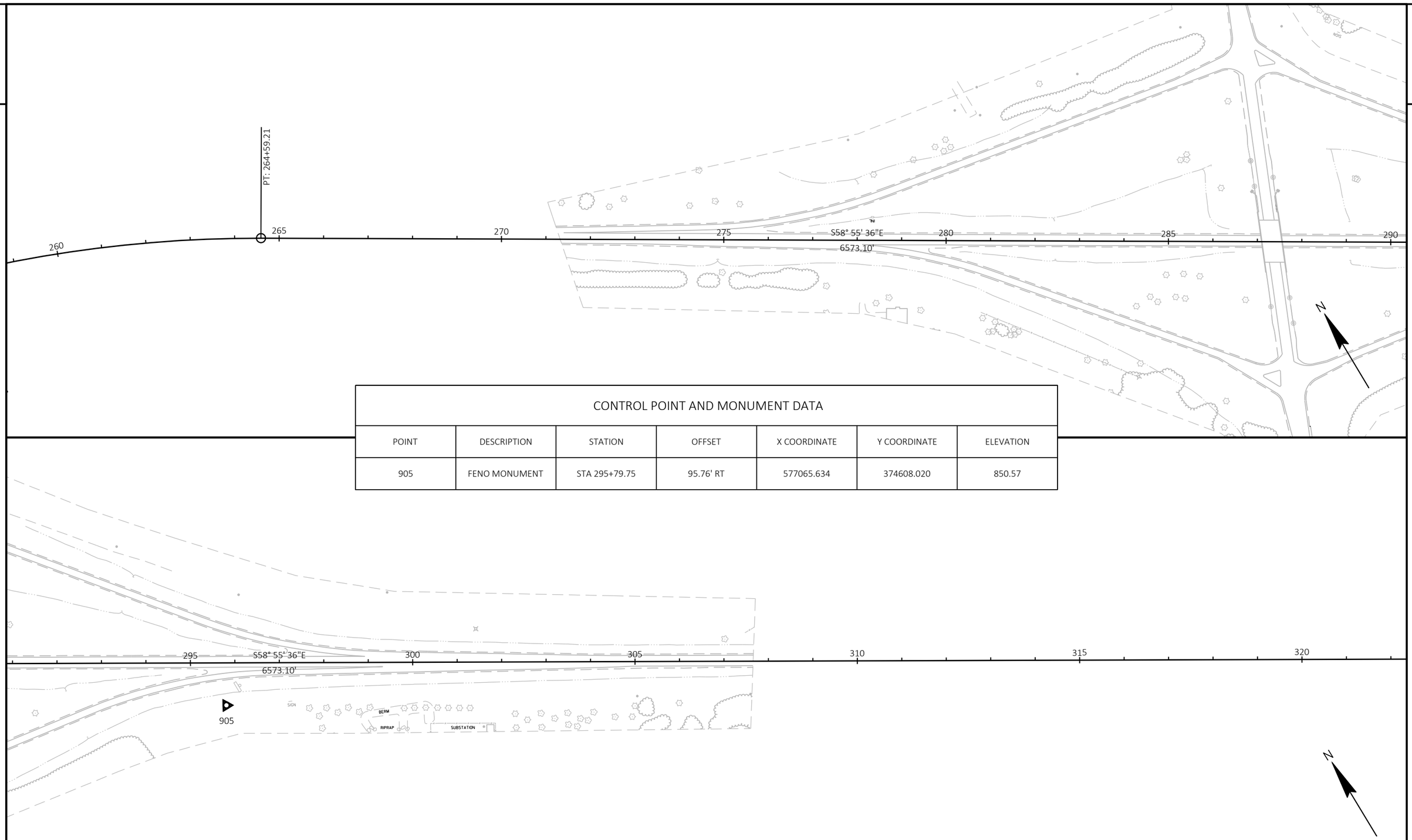
NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
1008	COLUMBIA COUNTY SECTION MONUMENT	STA 200+19.64	73.36' LT	568072.393	376711.044	796.96
904	FENO MONUMENT	STA 241+56.13	54.65' LT	572214.527	376769.863	814.01

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 90	E

2



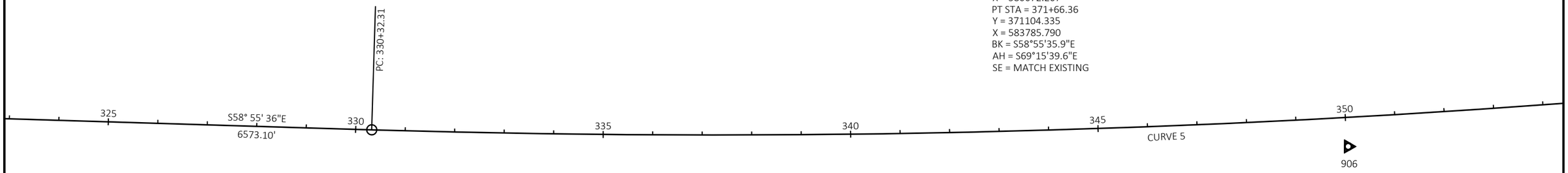
CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
905	FENO MONUMENT	STA 295+79.75	95.76' RT	577065.634	374608.020	850.57

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 91	E

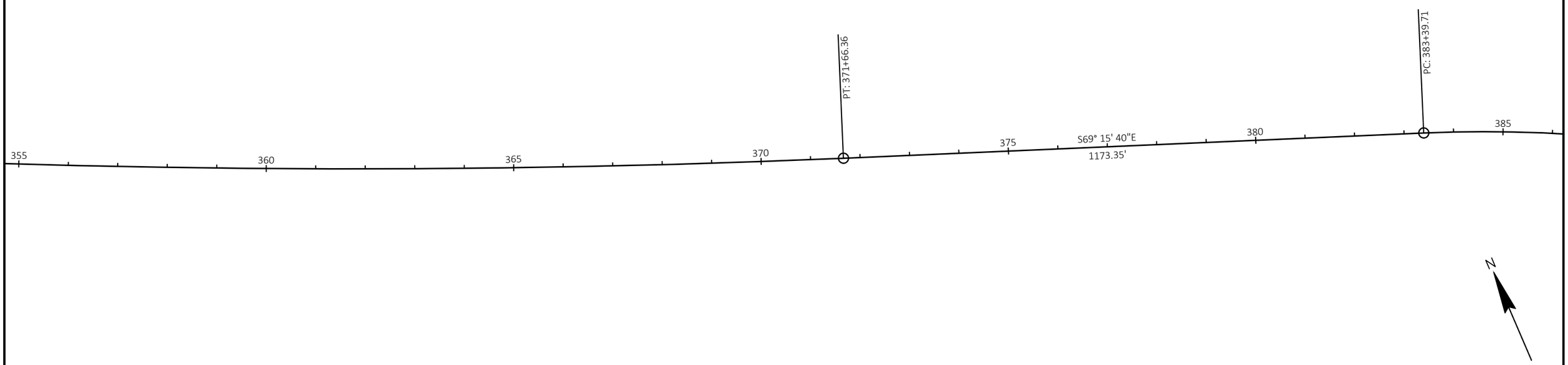
2

CURVE 5
PI STA = 351+04.96
Y = 371838.283
X = 581847.444
Δ = 10°20'04"
D = 0°15'00"
T = 2072.65'
L = 4134.05'
R = 22920.00'
PC STA = 330+32.31
Y = 372908.049
X = 580072.207
PT STA = 371+66.36
Y = 371104.335
X = 583785.790
BK = S58°55'35.9"E
AH = S69°15'39.6"E
SE = MATCH EXISTING



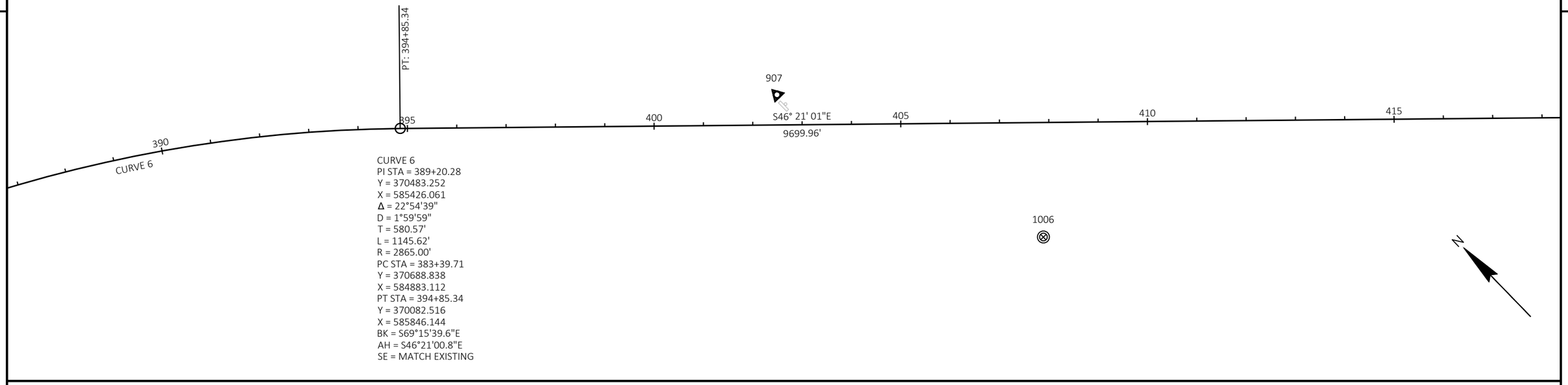
CONTROL POINT AND MONUMENT DATA

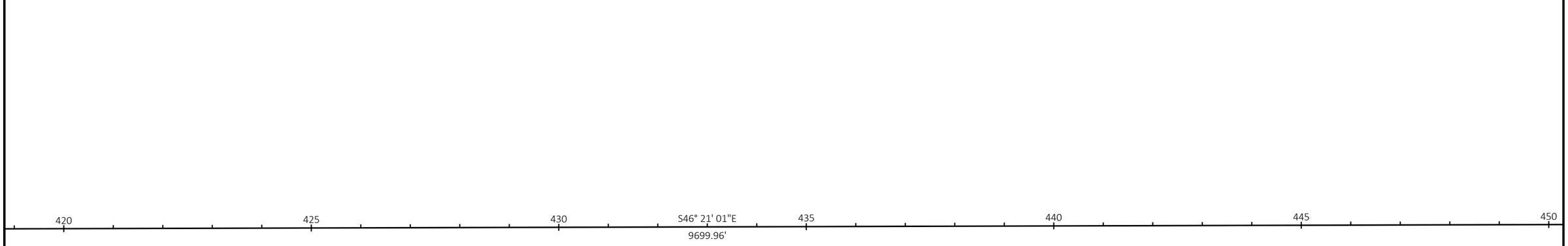
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
906	FENO MONUMENT	STA 350+01.61	58.84' RT	581774.558	371912.476	956.23



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 92	E

2





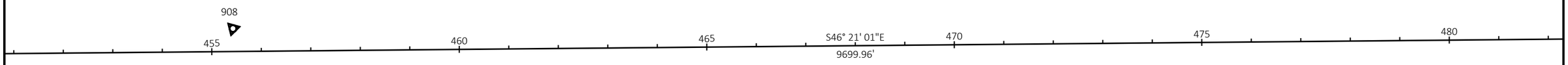
NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

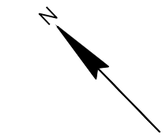
CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
907	FENO MONUMENT	STA 402+48.79	60.94' LT	586440.624	369599.637	857.57
1006	COLUMBIA COUNTY SECTION MONUMENT	STA 407+86.94	232.47' RT	586627.487	369015.880	855.66
1000	COLUMBIA COUNTY SECTION MONUMENT	STA 445+37.87	244.69' RT	589333.127	366417.961	869.40

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 93	E

2

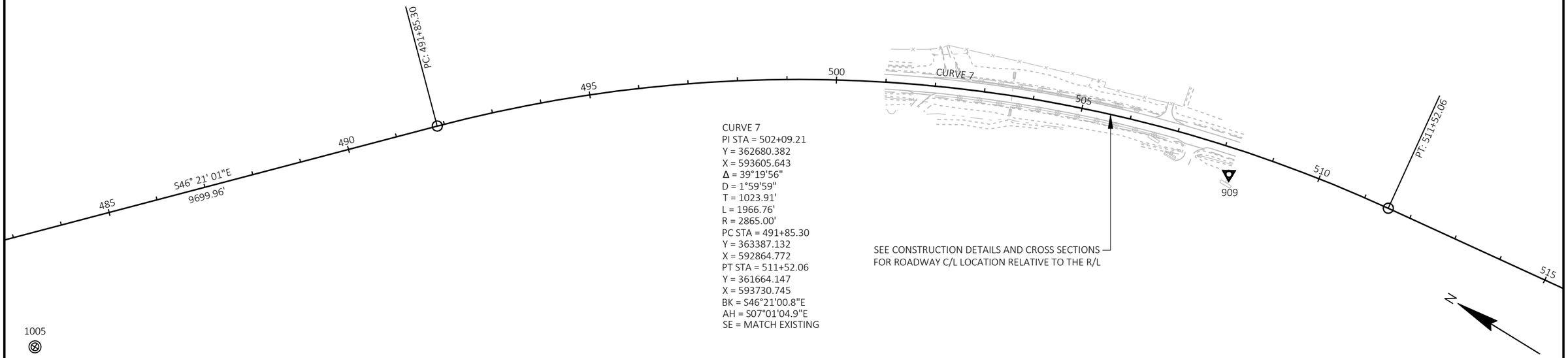




NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

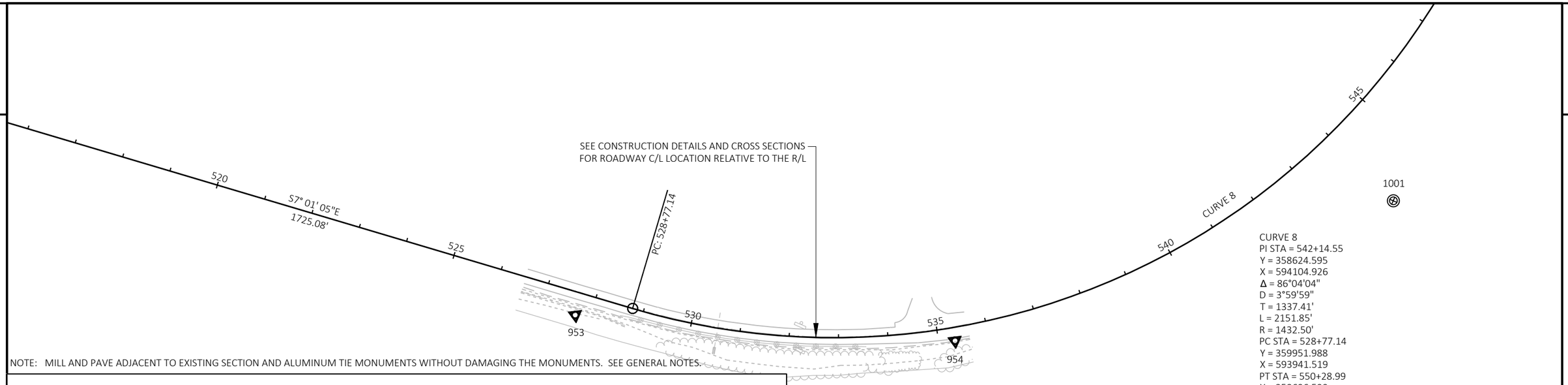
POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
908	FENO MONUMENT	STA 455+42.20	45.96' LT	590260.445	365935.030	869.13
1005	COLUMBIA COUNTY SECTION MONUMENT	STA 482+85.90	224.52' RT	592059.017	363845.484	917.13
909	FENO MONUMENT	STA 508+23.39	53.97' RT	593619.531	361974.648	909.75



CURVE 7
PI STA = 502+09.21
Y = 362680.382
X = 593605.643
Δ = 39°19'56"
D = 1°59'59"
T = 1023.91'
L = 1966.76'
R = 2865.00'
PC STA = 491+85.30
Y = 363387.132
X = 592864.772
PT STA = 511+52.06
Y = 361664.147
X = 593730.745
BK = S46°21'00.8"E
AH = S07°01'04.9"E
SE = MATCH EXISTING

SEE CONSTRUCTION DETAILS AND CROSS SECTIONS FOR ROADWAY C/L LOCATION RELATIVE TO THE R/L

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 94	E

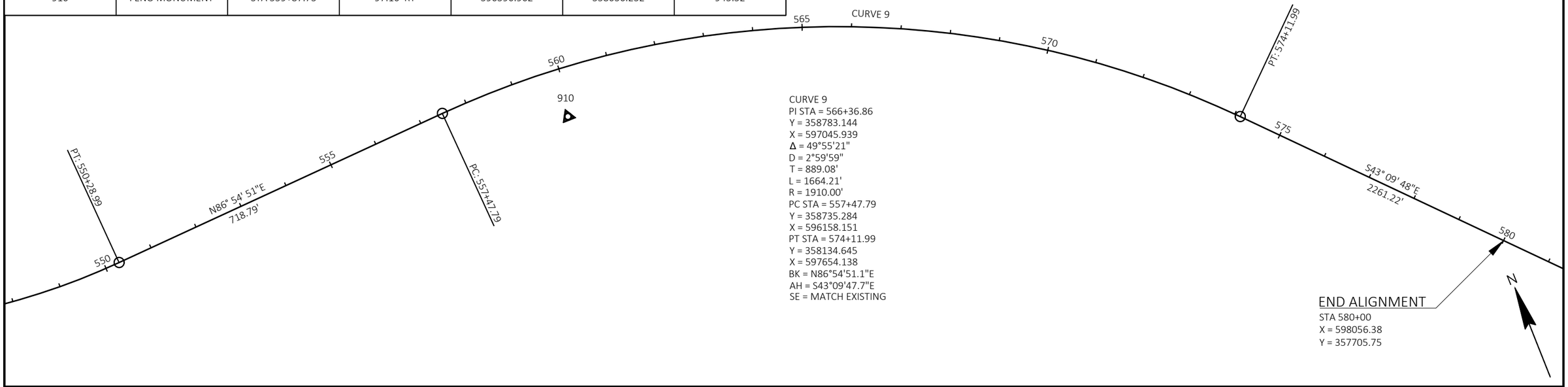


CURVE 8
PI STA = 542+14.55
Y = 358624.595
X = 594104.926
Δ = 86°04'04"
D = 3°59'59"
T = 1337.41'
L = 2151.85'
R = 1432.50'
PC STA = 528+77.14
Y = 359951.988
X = 593941.519
PT STA = 550+28.99
Y = 358696.590
X = 595440.400
BK = S07°01'04.9"E
AH = N86°54'51.1"E
SE = MATCH EXISTING

NOTE: MILL AND PAVE ADJACENT TO EXISTING SECTION AND ALUMINUM TIE MONUMENTS WITHOUT DAMAGING THE MONUMENTS. SEE GENERAL NOTES.

CONTROL POINT AND MONUMENT DATA

POINT	DESCRIPTION	STATION	OFFSET	X COORDINATE	Y COORDINATE	ELEVATION
953	IRON ROD	STA 527+69.15	46.60' RT	593882.071	360053.471	937.74
954	NAIL	STA 535+31.66	27.67' RT	594141.425	359327.538	949.66
1001	COLUMBIA COUNTY SECTION MONUMENT	STA 544+01.18	186.16' RT	594756.278	358626.476	965.71
910	FENO MONUMENT	STA 559+87.73	97.16' RT	596390.962	358636.232	943.52



CURVE 9
PI STA = 566+36.86
Y = 358783.144
X = 597045.939
Δ = 49°55'21"
D = 2°59'59"
T = 889.08'
L = 1664.21'
R = 1910.00'
PC STA = 557+47.79
Y = 358735.284
X = 596158.151
PT STA = 574+11.99
Y = 358134.645
X = 597654.138
BK = N86°54'51.1"E
AH = S43°09'47.7"E
SE = MATCH EXISTING

END ALIGNMENT
STA 580+00
X = 598056.38
Y = 357705.75

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	ALIGNMENT DIAGRAM	SHEET 95	E

1400-01-73

Line	Item	Item Description	Unit	Total	Qty
0008	204.0110	Removing Asphaltic Surface	SY	14,482.000	14,482.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	4,245.000	4,245.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	186,245.000	186,245.000
0014	204.0150	Removing Curb & Gutter	LF	53.000	53.000
0016	204.0155	Removing Concrete Sidewalk	SY	17.000	17.000
0018	204.0165	Removing Guardrail	LF	1,389.000	1,389.000
0020	205.0100	Excavation Common	CY	331.000	331.000
0024	208.0100	Borrow	CY	190.000	190.000
0030	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 1400-01-73	LS	1.000	1.000
0032	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	936.000	936.000
0036	213.0100	Finishing Roadway (project) 02. 1400-01-73	EACH	1.000	1.000
0038	305.0110	Base Aggregate Dense 3/4-Inch	TON	6,678.000	6,678.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	827.000	827.000
0042	305.0500	Shaping Shoulders	STA	93.000	93.000
0050	450.4000	HMA Cold Weather Paving	TON	2,900.000	2,900.000
0052	455.0605	Tack Coat	GAL	25,816.000	25,816.000
0054	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0056	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0058	460.2000	Incentive Density HMA Pavement	DOL	2,250.000	2,250.000
0060	460.2005	Incentive Density PWL HMA Pavement	DOL	32,380.000	32,380.000
0062	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	26,780.000	26,780.000
0064	460.2010	Incentive Air Voids HMA Pavement	DOL	46,090.000	46,090.000
0066	460.6223	HMA Pavement 3 MT 58-28 S	TON	27,873.000	27,873.000
0068	460.6224	HMA Pavement 4 MT 58-28 S	TON	21,713.000	21,713.000
0070	465.0105	Asphaltic Surface	TON	2,513.000	2,513.000
0072	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	448.000	448.000
0074	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	82,098.000	82,098.000
0076	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	41,195.000	41,195.000
0100	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	53.000	53.000
0102	602.0405	Concrete Sidewalk 4-Inch	SF	231.000	231.000
0104	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	21.000	21.000
0112	614.2300	MGS Guardrail 3	LF	803.130	803.130
0114	614.2330	MGS Guardrail 3 K	LF	312.500	312.500
0116	614.2350	MGS Guardrail Short Radius	LF	25.000	25.000
0120	614.2610	MGS Guardrail Terminal EAT	EACH	5.000	5.000
0122	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0126	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1400-01-73	EACH	1.000	1.000
0128	619.1000	Mobilization	EACH	0.450	0.450
0130	624.0100	Water	MGAL	31.000	31.000
0134	625.0500	Salvaged Topsoil	SY	1,503.000	1,503.000
0136	627.0200	Mulching	SY	31.000	31.000
0138	628.1504	Silt Fence	LF	1,779.000	1,779.000
0140	628.1520	Silt Fence Maintenance	LF	1,779.000	1,779.000
0142	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0144	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0146	628.2004	Erosion Mat Class I Type B	SY	1,471.000	1,471.000
0152	628.7010	Inlet Protection Type B	EACH	5.000	5.000
0154	628.7020	Inlet Protection Type D	EACH	6.000	6.000
0156	628.7504	Temporary Ditch Checks	LF	90.000	90.000

1400-01-73

Line	Item	Item Description	Unit	Total	Qty
0158	628.7570	Rock Bags	EACH	55.000	55.000
0160	629.0210	Fertilizer Type B	CWT	1.000	1.000
0162	630.0120	Seeding Mixture No. 20	LB	42.000	42.000
0166	630.0200	Seeding Temporary	LB	42.000	42.000
0168	630.0500	Seed Water	MGAL	51.000	51.000
0170	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	17.000	17.000
0172	638.2102	Moving Signs Type II	EACH	19.000	19.000
0174	638.3000	Removing Small Sign Supports	EACH	17.000	17.000
0176	642.5201	Field Office Type C	EACH	0.500	0.500
0178	643.0300	Traffic Control Drums	DAY	4,857.000	4,857.000
0180	643.0420	Traffic Control Barricades Type III	DAY	54.000	54.000
0182	643.0705	Traffic Control Warning Lights Type A	DAY	68.000	68.000
0184	643.0715	Traffic Control Warning Lights Type C	DAY	50.000	50.000
0186	643.0900	Traffic Control Signs	DAY	6,139.000	6,139.000
0190	643.1050	Traffic Control Signs PCMS	DAY	58.000	58.000
0192	643.5000	Traffic Control	EACH	0.260	0.260
0194	644.1420	Temporary Pedestrian Surface Plywood	SF	28.000	28.000
0196	644.1601	Temporary Pedestrian Curb Ramp	DAY	10.000	10.000
0198	644.1810	Temporary Pedestrian Barricade	LF	142.000	142.000
0204	646.1020	Marking Line Epoxy 4-Inch	LF	52,682.500	52,682.500
0206	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	105,406.000	105,406.000
0210	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	2,641.000	2,641.000
0212	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	53,390.500	53,390.500
0214	646.4620	Marking Line Same Day Epoxy 8-Inch	LF	2,641.000	2,641.000
0220	646.6120	Marking Stop Line Epoxy 18-Inch	LF	77.000	77.000
0222	646.7120	Marking Diagonal Epoxy 12-Inch	LF	250.000	250.000
0224	648.0100	Locating No-Passing Zones	MI	10.270	10.270
0226	649.0105	Temporary Marking Line Paint 4-Inch	LF	108,997.000	108,997.000
0228	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	212.000	212.000
0230	649.0205	Temporary Marking Line Paint 8-Inch	LF	2,641.000	2,641.000
0232	650.4500	Construction Staking Subgrade	LF	1,175.000	1,175.000
0234	650.5000	Construction Staking Base	LF	1,175.000	1,175.000
0236	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	53.000	53.000
0242	650.8000	Construction Staking Resurfacing Reference	LF	54,231.000	54,231.000
0244	650.9000	Construction Staking Curb Ramps	EACH	2.000	2.000
0248	650.9910	Construction Staking Supplemental Control (project) 02. 1400-01-73	LS	1.000	1.000
0250	650.9920	Construction Staking Slope Stakes	LF	1,175.000	1,175.000
0252	690.0150	Sawing Asphalt	LF	1,573.000	1,573.000
0254	690.0250	Sawing Concrete	LF	10.000	10.000
0260	740.0440	Incentive IRI Ride	DOL	20,540.000	20,540.000
0262	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,080.000	1,080.000
0264	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	975.000	975.000
0266	SPV.0060	Special 01. Verify Landmark Reference Monuments	EACH	5.000	5.000
0268	SPV.0060	Special 02. Landmark Reference Monument Special	EACH	1.000	1.000
0270	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	17,898.000	17,898.000

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ASPHALTIC PAVEMENT REMOVALS

CAT	LOCATION	STA	TO	STA	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING SY	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	2,182	---	---	---	USH 51/STH 16 INTERSECTION
0010	STH 16	25+76.5	-	132+50	267	463	38,253	268	
0010	STH 16	132+50	-	238+00	472	588	35,437	1,181	
0010	STH 16	238+00	-	343+50	1,197	597	40,860	2,051	
0010	STH 16	343+50	-	449+00	331	647	36,457	1,551	
0010	STH 16	449+00	-	561+35	10,033	1,011	35,238	8,525	
0010	STH 16	STH 22 RAMPS			---	939	---	---	RAMP BUTT JOINT LOCATIONS
0010	STH 16	PROJECT			---	---	---	4,322	
				TOTAL	**14,482**	**4,245**	**186,245**	**17,898**	

CONCRETE REMOVALS

CAT	LOCATION	LT/RT	STA	TO	STA	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	205.0100* COMMON EXCAVATION CY	COMMENTS
0010	STH 16	RT	559+26	-	559+45	36	17	7	
0010	STH 16	LT	559+27	-	559+44	17	---	4	
					TOTAL	**53**	**17**	**11**	

***ADDITIONAL QUANTITIES ELSWHERE IN THE PLAN**

GUARDRAIL REMOVALS

CAT	LOCATION	LT/RT	STA	TO	STA	204.0165 REMOVING GUARDRAIL LF	COMMENTS
0010	STH 16	RT	502+02	-	506+85	480	
0010	STH 16	LT	502+36	-	506+20	404	
0010	STH 16	RT	528+57	-	533+55	505	
					TOTAL	**1,389**	

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DIVISION	FROM - TO STATION	LOCATION	205.0100 COMMON EXCAVATION CUT (2)	205.0100 COMMON EXCAVATION EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0500 MARSH EXCAVATION	205.0200 ROCK EXCAVATION	REDUCED MARSH IN FILL FACTOR 0.60	REDUCED EBS IN FILL FACTOR 0.80	EXPANDED MARSH BACKFILL FACTOR 1.50	EXPANDED EBS BACKFILL FACTOR 1.30	EXPANDED ROCK FACTOR 1.10	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1																			
STH 16	501+86.53 - 507+15	STH 16 LT & RT SHOULDERS	179	0	179	0	0	0	0	0	0	0	0	114	143	-143	0	143	
	527+72.30 - 534+19.01	STH 16 RT SHOULDER	141	0	141	0	0	0	0	0	0	0	0	38	48	-48	0	48	
DIVISION 1 SUBTOTAL			320	0	320	0	0	0	0	0	0	0	0	152	190	-190	0	190	
GRAND TOTAL			320	0	179	0	0	0	0	0	0	0	0	152	190	-190	0	190	
TOTAL COMMON EXC			320																

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BASE AGGREGATE DENSE 1 1/4-INCH.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = X.6X
DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR**
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

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

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BASE AGGREGATE ITEMS

CAT	LOCATION	STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA	624.0100 WATER MGAL	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	50	---	---	1	USH 51/STH 16 INTERSECTION
0010	STH 16	25+76.5	-	132+50	1,196	30	9	5	
0010	STH 16	132+50	-	238+00	1,297	53	---	5	
0010	STH 16	238+00	-	343+50	1,489	22	41	6	SHAPING SHOULDERS - STH 22 RAMPS / STA 253+29 - STA 257+64 RT
0010	STH 16	343+50	-	449+00	1,182	37	---	5	
0010	STH 16	449+00	-	561+35	1,364	685	35	8	
0010	STH 16	STH 22 RAMPS			100	---	8	1	RAMP BUTT JOINT LOCATIONS
				TOTAL	**6,678**	**827**	**93**	**31**	

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HMA ITEMS

CAT	LOCATION	STA	TO	STA	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS EB STA	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS WB STA	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1) EB LF	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1) WB LF	465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	---	---	---	110	397	214	--	---	---	---	---	USH 51/STH 16 INTERSECTION
0010	STH 16	25+76.5	-	132+50	---	---	---	4,663	4,703	3,760	38	51	---	---	8,710	BEGIN RUMBLE STRIPS AT STA 27+40
0010	STH 16	132+50	-	238+00	---	---	---	4,393	4,439	3,464	166	91	---	---	9,750	
0010	STH 16	238+00	-	343+50	---	---	---	5,162	5,183	4,111	288	72	---	---	8,611	
0010	STH 16	343+50	-	449+00	---	---	---	4,553	4,494	3,578	218	85	---	---	8,550	
0010	STH 16	449+00	-	561+35	---	---	---	5,461	5,930	4,478	1,197	149	---	---	5,574	END RUMBLE STRIPS AT STA 508+74 - VILLAGE OF RIO LIMITS
0010	STH 16	STH 22 RAMPS			---	---	---	113	119	92	---	---	---	---	---	RAMP BUTT JOINT LOCATIONS
0010	STH 16	PROJECT			---	---	2,615	303	---	---	606	---	---	---	---	
		SUBTOTAL			**0**	**0**	**2,615**	**24,758**	**25,265**	**19,697**	**2,513**	**448**	**0**	**0**	**41,195**	
0020	STH 16	19+04.5	-	25+76.5	---	7	---	7	23	13	---	---	---	673	---	RUMBLE STRIPS ON WB SHOULDER ONLY
0020	STH 16	25+76.5	-	132+50	97	99	---	220	544	423	---	---	8,685	8,725	---	BEGIN EB SHOULDER RUMBLE STRIPS AT STA 27+40
0020	STH 16	132+50	-	238+00	104	106	---	242	587	457	---	--	9,523	9,650	---	
0020	STH 16	238+00	-	343+50	84	85	---	189	468	359	---	---	7,239	7,414	---	
0020	STH 16	343+50	-	449+00	101	103	---	232	569	443	---	---	9,196	9,745	---	
0020	STH 16	449+00	-	561+35	72	78	---	168	417	321	---	---	5,674	5,574	---	END RUMBLE STRIPS AT STA 508+74 - VILLAGE OF RIO LIMITS
0020	STH 16	PROJECT			---	---	285	---	---	---	---	---	---	---	---	
		SUBTOTAL			**458**	**478**	**285**	**1,058**	**2,608**	**2,016**	**0**	**0**	**40,317**	**41,781**	**0**	
		TOTAL			**936**		**2,900**	**25,816**	**27,873**	**21,713**	**2,513**	**448**	**82,098**		**41,195**	

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HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FT TO 15 FT DRIVING LANE	STA 19+04.5 TO STA 25+76.5	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	103	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT TO 15 FT DRIVING LANE	STA 19+04.5 TO STA 25+76.5	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	190	3.25"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES AND 15 FT RAMP LANES	STA 25+76.5 TO STA 286+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	7,012	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES AND 15 FT RAMP LANES	STA 25+76.5 TO STA 286+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	9,030	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 286+00 TO STA 289+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	79	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 286+00 TO STA 289+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	124	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES AND 15 FT RAMP LANES	STA 289+00 TO STA 501+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	5,785	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES AND 15 FT RAMP LANES	STA 289+00 TO STA 501+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	7,444	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
12 FT DRIVING LANES	STA 501+00 TO STA 508+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	183	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
12 FT DRIVING LANES	STA 501+00 TO STA 508+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	288	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
10 FT AND 12 FT DRIVING LANES	STA 508+00 TO STA 548+60	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1,355	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
10 FT AND 12 FT DRIVING LANES	STA 508+00 TO STA 548+60	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	1,751	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ITEM 460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
10 FT AND 12 FT DRIVING LANES	STA 548+60 TO STA 561+35	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	647	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
10 FT AND 12 FT DRIVING LANES	STA 548+60 TO STA 561+35	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	1,017	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
DISTRESSED MILLING LOCATIONS	VARIOUS	UPPER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	ASPHALTIC SURFACE	2,513	2.5"	QMP AS PER STANDARD SPEC 465	ACCEPTANCE BY ORDINARY COMPACTION

HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
3 FT SHOULDER,TURN LANES AND INTERSECTIONS	STA 19+04.5 TO STA 25+76.5	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	111	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDER,TURN LANES AND INTERSECTIONS	STA 19+04.5 TO STA 25+76.5	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	207	3.25"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS, PASSING LANES, TURN LANES AND INTERSECTIONS	STA 25+76.5 TO STA 286+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	2,129	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS, PASSING LANES, TURN LANES, INTERSECTIONS AND RAMP GORES	STA 25+76.5 TO STA 286+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3MT 58-28 S	2,527	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS	STA 286+00 TO STA 289+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	19	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS	STA 286+00 TO STA 289+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	30	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS, INTERSECTIONS AND RAMP GORES	STA 289+00 TO STA 501+00	UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1,679	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS AND INTERSECTIONS	STA 289+00 TO STA 501+00	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	1,970	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS	STA 501+00 TO STA 508+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	87	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS	STA 501+00 TO STA 508+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	136	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
3 FT SHOULDERS AND INTERSECTIONS	STA 508+00 TO STA 548+60	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	437	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FT SHOULDERS AND INTERSECTIONS	STA 508+00 TO STA 548+60	LOWER LAYER	MILLED ASPHALTIC SURFACE	HMA PAVEMENT 3 MT 58-28 S	439	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
INTERSECTIONS	STA 548+60 TO STA 561+35	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	71	1.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
INTERSECTIONS	STA 548+60 TO STA 561+35	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	112	2.75"	QMP AS PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT

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HMA QMP MIXTURE USE TABLE:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
2 FT PAVED SHOULDER WIDENING	STA 19+04.5 TO STA 25+76.5	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	13	1.75"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 19+04.5 TO STA 25+76.5	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	23	3.25"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 25+76.5 TO STA 286+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	1,039	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 25+76.5 TO STA 286+00	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	1,338	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 286+00 TO STA 289+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	14	1.75"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 286+00 TO STA 289+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	21	2.75"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 289+00 TO STA 501+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	855	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 289+00 TO STA 501+00	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	1,101	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 501+00 TO STA 508+00	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	10	1.75"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 501+00 TO STA 508+00	LOWER LAYER	EXISTING ASPHALT / BASE AGGREGATE BLEND	HMA PAVEMENT 3 MT 58-28 S	15	2.75"	QMP PER STANDARD SPEC 460	ITEM 460.2000 INCENTIVE DENSITY HMA PAVEMENT
2 FT PAVED SHOULDER WIDENINGS	STA 508+00 TO STA 548+60	UPPER LAYER	HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	85	1.75"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
2 FT PAVED SHOULDER WIDENINGS	STA 508+00 TO STA 548+60	LOWER LAYER	EXISTING BASE AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	110	2.25"	ITEM 460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

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

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GUARDRAIL ITEMS

CAT	LOCATION	LT/RT	STA	TO	STA	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS SHORT RADIUS GUARDRAIL LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	COMMENTS
0010	STH 16	RT	502+02	-	506+86	375	---	---	2	---	
0010	STH 16	LT	502+28	-	506+26	28.13	312.5	25	1	1	
0010	STH 16	RT	528+57	-	533+57	400	---	---	2	---	
					TOTAL	**803.13**	**312.5**	**25**	**5**	**1**	

CONCRETE ITEMS

CAT	LOCATION	LT/RT	STA	TO	STA	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	COMMENTS
0010	STH 16	RT	559+26	-	559+45	36	171	10	
0010	STH 16	LT	559+27	-	559+44	17	60	11	
					TOTAL	**53**	**231**	**21**	

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EROSION CONTROL AND LANDSCAPING ITEMS

						625.0500	627.0200	628.1504	628.1520	628.1905	628.1910	628.2004	628.7010	628.7020	628.7504	628.7570	629.0210	630.0120	630.0200	630.0500	
CAT	LOCATION	LT/RT	STA	TO	STA	SALVAGED TOPSOIL SY	MULCHING SY	SILT FENCE LF	SILT FENCE MAINTENANCE LF	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	EROSION MAT CLASS I TYPE B SY	INLET PROTECTION TYPE B EACH	INLET PROTECTION TYPE D EACH	TEMPORARY DITCH CHECKS LF	ROCK BAGS EACH	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEEDING TEMPORARY LB	SEED WATER MGAL	COMMENTS
0010	STH 16	RT	501+85	-	507+15	505	---	335	335	---	---	505	---	---	54	44	0.32	14	14	17	
0010	STH 16	LT	502+35	-	506+65	301	---	464	464	---	---	301	---	---	---	---	0.19	8	8	10	
0010	STH 16	RT	527+70	-	534+25	371	---	624	624	---	---	371	---	---	18	---	0.24	10	10	12	
0010	STH 16	LT	553+00	-	559+44	9	9	---	---	---	---	---	4	5	---	---	0.01	1	1	1	
0010	STH 16	RT	559+27	-	559+44	16	16	---	---	---	---	---	---	---	---	---	0.02	1	1	1	
					SUBTOTAL	**1,202**	**25**	**1,423**	**1,423**	**0**	**0**	**1,177**	**4**	**5**	**72**	**44**	**0.78**	**34**	**34**	**41**	
0010	STH 16	LT/RT	UNDISTRIBUTED			301	6	356	356	3	2	294	1	1	18	11	0.22	8	8	10	
					SUBTOTAL	**301**	**6**	**356**	**356**	**3**	**2**	**294**	**1**	**1**	**18**	**11**	**0.22**	**8**	**8**	**10**	
					TOTAL	**1,503**	**31**	**1,779**	**1,779**	**3**	**2**	**1,471**	**5**	**6**	**90**	**55**	**1**	**42**	**42**	**51**	

3

TRAFFIC CONTROL ITEMS

CAT	LOCATION	SEQUENCE	DURATION (DAYS)	643.0300 TRAFFIC CONTROL DRUMS		643.04200 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0900 TRAFFIC CONTROL SIGNS		643.1050 TRAFFIC CONTROL SIGNS PCMS		644.1420 TEMPORARY PEDESTRIAN SURFACE PLYWOOD	644.1601 TEMPORARY PEDESTRIAN CURB RAMP		644.1810 TEMPORARY PEDESTRIAN BARRICADE
				EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	UNITS	DAY	SF	UNIT	DAY	LF
0010	USH 51, STH 16 & STH 22	PROJECT ADVANCED WARNING	7	25	175	---	---	---	---	---	---	---	---	5	35	---	---	---	---
0010	USH 51/STH 16 INTERSECTION	SHORT TERM NIGHT-TIME WORK ADVANCED WARNING	7	10	70	---	---	---	---	---	---	---	---	2	14	---	---	---	---
0010	USH 51, STH 16 & STH 22	SHORT TERM NIGHT-TIME WORK ADVANCED WARNING SIGNING	3	---	---	---	---	---	---	---	---	10	30	---	---	---	---	---	---
0010	USH 51/STH 16 INTERSECTION	SHORT TERM NIGHT-TIME WORK	3	10	30	8	24	16	48	---	---	3	9	3	9	---	---	---	---
0010	PROJECT	SIDEROAD ADVANCED WARNING	86	---	---	---	---	---	---	---	---	46	3,956	---	---	---	---	---	---
0010	STH 16	MOVING OPERATIONS ADVANCED WARNING	86	---	---	---	---	---	---	---	---	10	860	---	---	---	---	---	---
0010	STA 27+50 TO STA 561+35	MILLED SURFACE SIGNING ON STH 16	62	---	---	---	---	---	---	---	--	10	620	---	---	---	---	---	---
0010	STA 27+50 TO STA 561+35	DROP OFF SIGNING	68	54	3,672	---	---	---	---	---	---	8	544	---	---	---	---	---	---
0010	STA 494+50 TO STA 508+00 EB	MGS GUARDRAIL WORK	10	16	160	---	---	---	---	---	---	2	20	---	---	---	---	---	---
0010	STA 520+75 TO STA 535+00 EB	MGS GUARDRAIL WORK	10	17	170	---	---	---	---	---	---	2	20	---	---	---	---	---	---
0010	STA 501+00 TO STA 511+25 WB	MGS GUARDRAIL WORK	10	15	150	---	---	---	---	---	---	2	20	---	---	---	---	---	---
0010	OAKVIEW DRIVE INTERSECTION	CURB RAMP WORK	10	16	160	2	20	---	---	5	50	3	30	---	---	28	1	10	142
0010	STH 16 WB AT LINCOLN AVENUE	CURB RAMP WORK	10	27	270	1	10	2	20	---	---	3	30	---	---	---	---	---	---
		TOTAL			**4,857**		**54**		**68**		**50**		**6,139**		**58**	**28**		**10**	**142**

3

TEMPORARY PAVEMENT MARKING ITEMS

					646.4520				646.4620	649.0105			649.0150		649.0205	
					MARKING LINE SAME DAY EPOXY 4-INCH				MARKING LINE SAME DAY EPOXY 8-INCH	TEMPORARY MARKING LINE PAINT 4-INCH			TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH		TEMPORARY MARKING LINE PAINT 8-INCH	
					12.5' LINE, 37.5' SKIP (WHITE)	SOLID (WHITE)	12.5' LINE, 37.5' SKIP (YELLOW)	SOLID (YELLOW)	(WHITE)	12.5' LINE, 37.5' SKIP (WHITE)	SOLID (WHITE)	SOLID (YELLOW)	(WHITE)	(YELLOW)	(WHITE)	
CAT	LOCATION	STA	TO	STA	LF	LF	LF	LF	LF	LF		LF	LF	LF	LF	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	---	---	--	---		---	---	125	---	---	331	HMA LOWER LAYER
0010	STH 16	19+04.5	-	25+76.5	---	---	---	125	331	---	---		---	---		HMA UPPER LAYER
0010	STH 16	25+76.5	-	132+50	---	---	---	---	---	62.5	---	21,347	---	---	194	HMA LOWER LAYER
0010	STH 16	25+76.5	-	132+50	62.5	---	2,175	5,531	194	---	---		---	---	---	HMA UPPER LAYER
0010	STH 16	132+50	-	238+00	---	---	---	---	---	---	---	21,100	---	---	---	HMA LOWER LAYER
0010	STH 16	132+50	-	238+00	---	---	2,637.5	1,571	---	---	---		---	---	---	HMA UPPER LAYER
0010	STH 16	238+00	-	343+50	---	---	---	---	---	---	---	21,100	---	---	--	HMA LOWER LAYER
0010	STH 16	238+00	-	343+50	---	---	2,136.5	9,443	---	---	---		---	---	---	HMA UPPER LAYER
0010	STH 16	343+50	-	449+00	---	---	---	---	---	---	---	21,100	---	---	---	HMA LOWER LAYER
0010	STH 16	343+50	-	449+00	---	---	2,012.5	8,376	---	---	---		---	---	---	HMA UPPER LAYER
0010	STH 16	449+00	-	561+35	---	---	---	---	---	1,187.5	505	22,470	---	---	---	HMA LOWER LAYER
0010	STH 16	449+00	-	561+35	1,187.5	505	925	16,703	---	---	---	---	---	---	---	HMA UPPER LAYER
0010	STH 16	OAKVIEW DRIVE INT			---	---	---	---	---	---	---	---	105	107	---	CURB RAMP IMPROVEMENTS
0010	STH 26	STH 22 RAMPS			---	---	---	---	---	---	---	---	---	--	2,116	GORES / HMA LOWER LAYER
0010	STH 16	STH 22 RAMPS			---	---	---	---	2,116	---	---	---	---	---	---	GORES / HMA UPPER LAYER
		TOTAL				**53,390.5**			**2,641**		**108,997**			**212**	**2,641**	

NO TEMPORARY MARKINGS ON MILLED SURFACES UNLESS DIRECTED BY ENGINEER IN THE FIELD

DOUBLE YELLOW CENTERLINE MARKINGS ON LOWER HMA LAYER

3

PAVEMENT MARKING ITEMS

					646.1020		646.1040			646.3040	646.6120	646.7120		648.0100	
					MARKING LINE EPOXY 4-INCH		MARKING LINE GROOVED WET REF EPOXY 4-INCH								
					SOLID	12.5' LINE 37.5' SKIP	SOLID	12.5' LINE, 37.5' SKIP	3' LINE, 9' SKIP	MARKING LINE GROOVED WET REF EPOXY 8-INCH	MARKING LINE STOP LINE EPOXY 18-INCH	MARKING DIAGONAL EPOXY 12-INCH		LOCATING NO PASSING ZONES	
					(YELLOW)	(YELLOW)	(WHITE)	(WHITE)	(WHITE)	(WHITE)	(WHITE)	(WHITE)	(YELLOW)		
CAT	LOCATION	STA	TO	STA	LF	LF	LF	LF	LF	LF	LF	LF	LF	(MI)	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	625	---	911	---	---	331	33	223	27	---	
0010	STH 16	25+76.5	-	132+50	5,531	2,175	19,870	62.5	135	194	---	---	---	---	
0010	STH 16	132+50	-	238+00	1,571	2,637.5	20,941	---	21	---	---	---	---	---	
0010	STH 16	238+00	-	343+50	9,443	2,136.5	16,566	---	117	---	---	---	---	---	
0010	STH 16	343+50	-	449+00	8,376	2,012.5	20,136	---	120	---	---	---	---	---	
0010	STH 16	449+00	-	561+35	16,703	925	21,068	1,187.5	255	---	44	---	---	---	
0010	STH 16	STH 22 RAMPS			547	---	4,016	---	---	2,116	---	---	---	---	RAMPS, TAPERS AND GORES
		SUBTOTAL			**52,682.5**			**105,406**		**2,641**	**77**	**223**	**27**	**0**	
0010	STH 16	PROJECT			---	---	---	---	---	---	---	---	---	10.27	
		SUBTOTAL			**0**			**0**		**0**	**0**	**0**	**0**	**10.27**	
		TOTAL			**52,682.5**			**105,406**		**2,641**	**77**	**250**		**10.27**	

3

CONSTRUCTION STAKING ITEMS

CAT	LOCATION	STA	TO	STA	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1400-01-73) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	---	---	---	---	---	---	---	
0010	STH 16	25+76.5	-	132+50	---	---	---	---	---	---	---	
0010	STH 16	132+50	-	238+00	---	---	---	---	---	---	---	
0010	STH 16	238+00	-	343+50	---	---	---	---	---	---	---	
0010	STH 16	343+50	-	449+00	---	---	---	---	---	---	---	
0010	STH 16	449+00	-	561+35	1,175	1,175	53	---	2		1,175	
				SUBTOTAL	**1,175**	**1,175**	**53**	**0**	**2**	**0**	**1,175**	
0010	STH 16	PROJECT			---	---	---	54,231	---	1	---	
				SUBTOTAL	**0**	**0**	**0**	**54,231**	**0**	**1**	**0**	
				TOTAL	**1,175**	**1,175**	**53**	**54,231**	**2**	**1**	**1,175**	

3

SIGNING ITEMS

CAT	LOCATION	STA	OFFSET	SIGN NO.	SIGN CODE	W x H	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	COMMENTS
0010	STH 16	57+59	30' RT	1	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	137+05	30' RT	2	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	137+86	30' LT	3	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	154+37	30' RT	4	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	242+09	30' LT	5	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	272+12	30' RT	6	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	305+64	30' RT	7	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	332+80	30' LT	8	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	377+10	30' LT	9	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	379+09	30' RT	10	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	402+64	30' RT	11	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	468+92	30' LT	12	W14-3	48" X 36"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	506+57	22.5' RT	13	W2-1	30" X 30"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	506+57	22.5' RT	14	W13-1	18" X 18"	---	1	---	
0010	STH 16	532+23	22' RT	15	R2-1	24" X 30"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	559+25	32.5' LT	16	D1-56R	60" X 12"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	559+25	32.5' LT	17	R7-1D	18" X 24"	---	1	---	
0010	STH 16	559+26	37' LT	18	J12-1	24" X 45"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
0010	STH 16	559+34	59.5' RT	19	R1-1	30" X 30"	1	1	1	VERIFY EXISTING LOCATION PRIOR TO CONSTRUCTION
					TOTAL		**17**	**19**	**17**	

3

SAWING ITEMS

CAT	LOCATION	STA	TO	STA	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	101	---	
0010	STH 16	25+76.5	-	132+50	216	---	
0010	STH 16	132+50	-	238+00	138	---	
0010	STH 16	238+00	-	343+50	240	---	
0010	STH 16	343+50	-	449+00	205	---	
0010	STH 16	449+00	-	561+35	589	10	
0010	STH 16	STH 22 RAMPS			84	---	
				TOTAL	**1,573**	**10**	

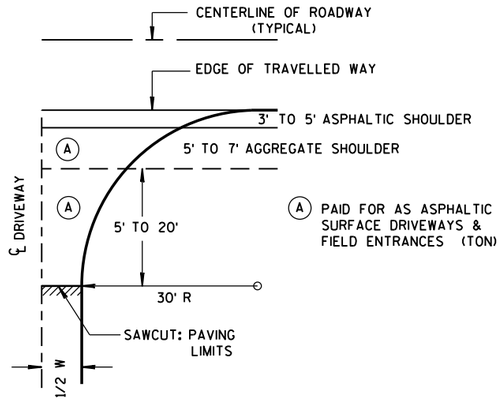
LANDMARK REFERENCE ITEMS

CAT	LOCATION	STA	TO	STA	SPV.0060.01 VERIFY LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.02 LANDMARK REFERENCE MONUMENTS SPECIAL EACH	COMMENTS
0010	STH 16	19+04.5	-	25+76.5	---	---	
0010	STH 16	25+76.5	-	132+50	2	1	POINT 996, 1002 AND 1003 / SEE ALIGNMENT DIAGRAM
0010	STH 16	132+50	-	238+00	1	---	POINT 1004 / SEE ALIGNMENT DIAGRAM
0010	STH 16	238+00	-	343+50	---	---	
0010	STH 16	343+50	-	449+00	1	---	POINT 1000 / SEE ALIGNMENT DIAGRAM
0010	STH 16	449+00	-	561+35	1	---	POINT 1001 / SEE ALIGNMENT DIAGRAM
				TOTAL	**5**	**1**	

Standard Detail Drawing List

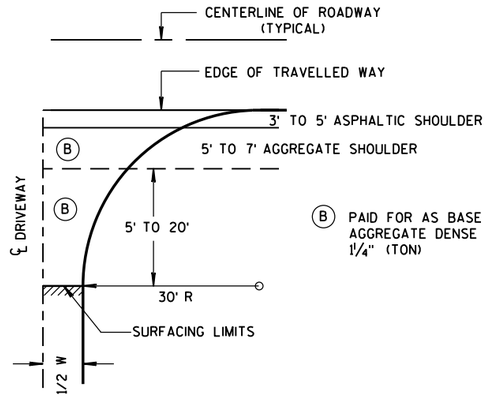
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
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
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-03A	PAVEMENT MARKING (RAMPS AND GORES)
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15C35-04B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-04C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D50-01A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-01B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

6



PLAN VIEW
HALF SECTION

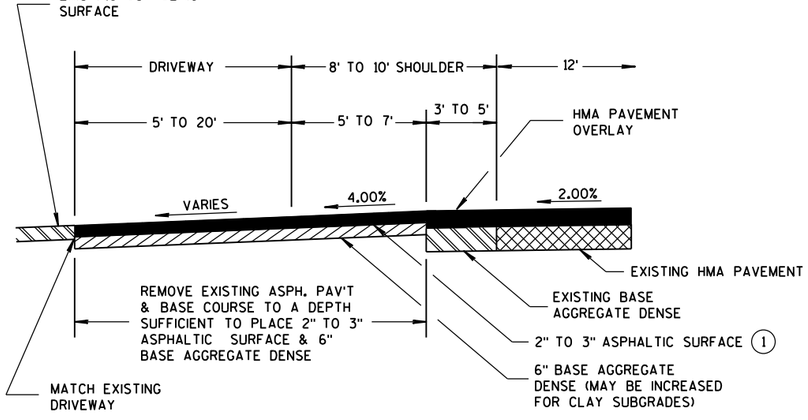
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

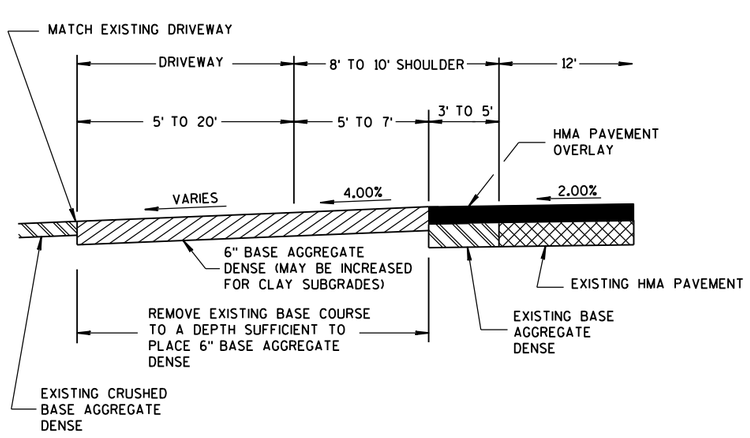
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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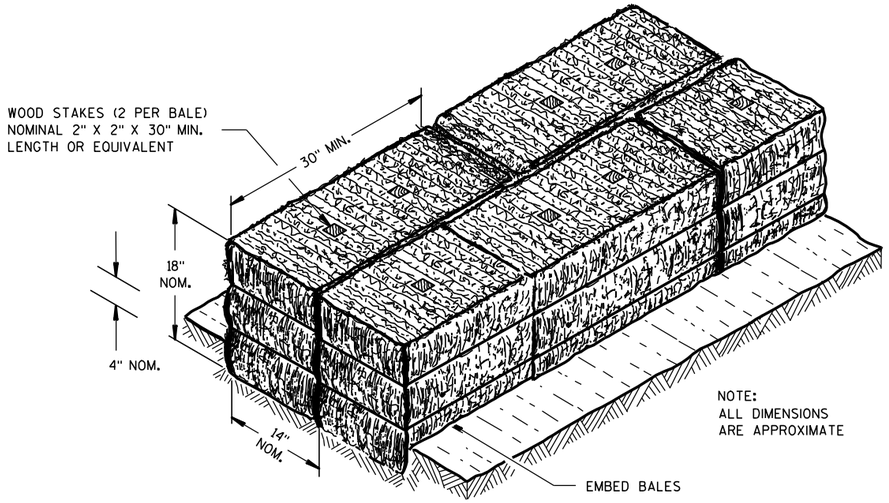
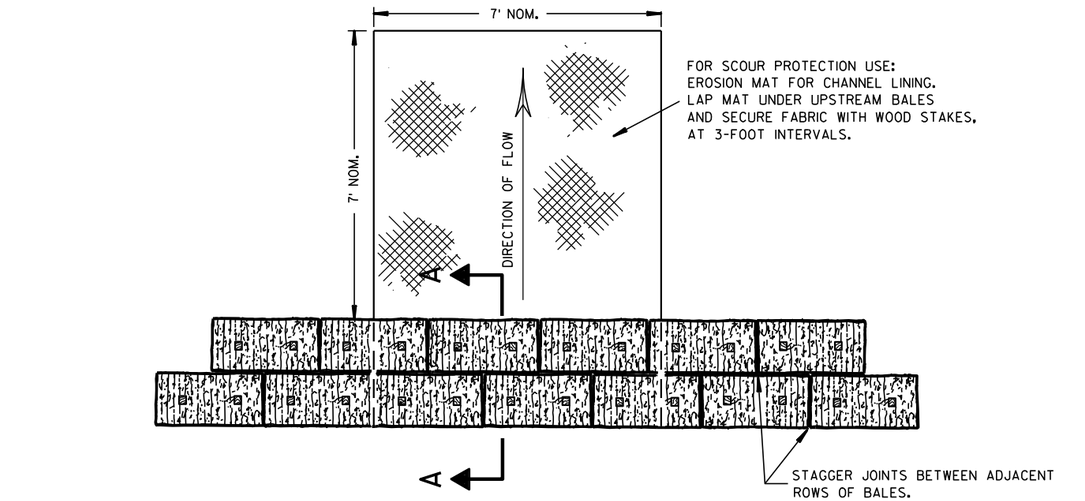
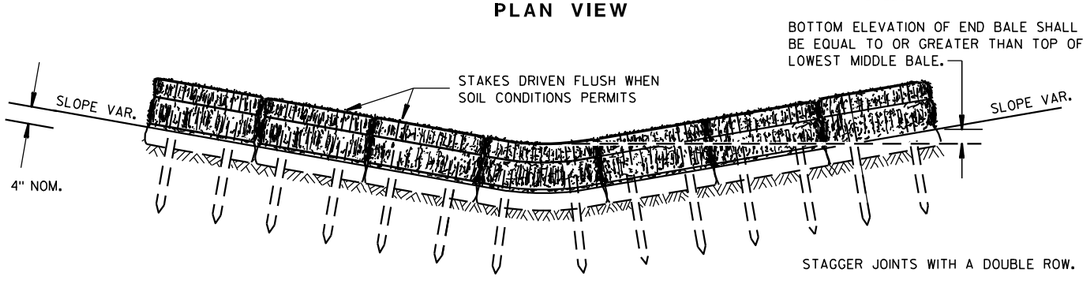


SECTION A-A



PLAN VIEW



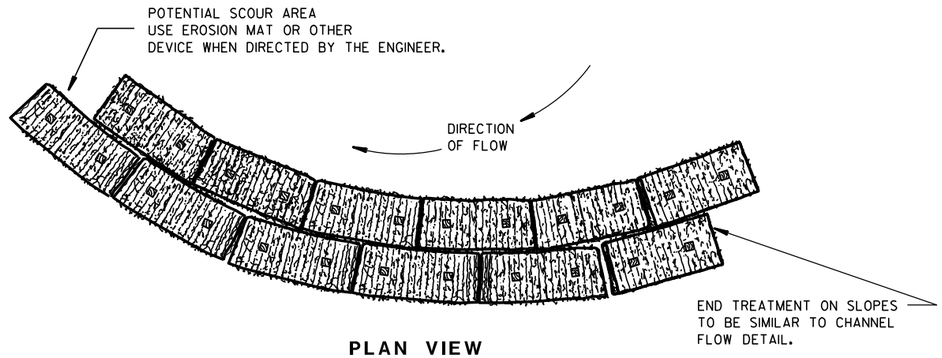
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

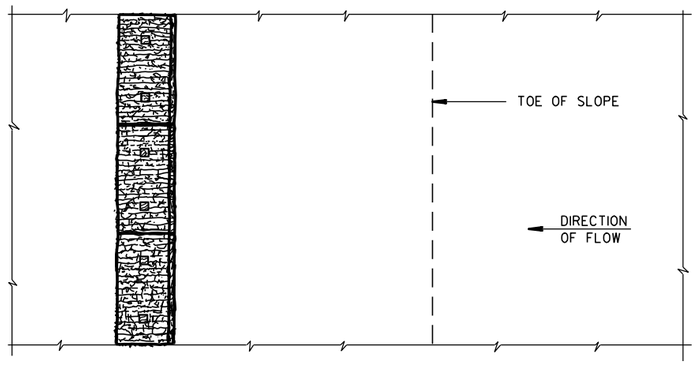
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

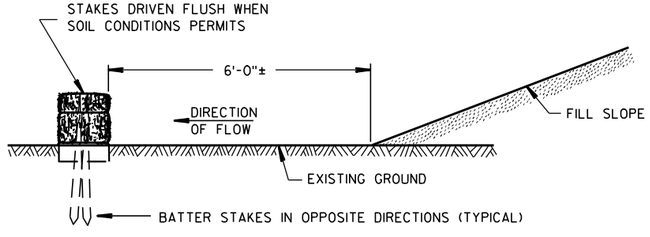


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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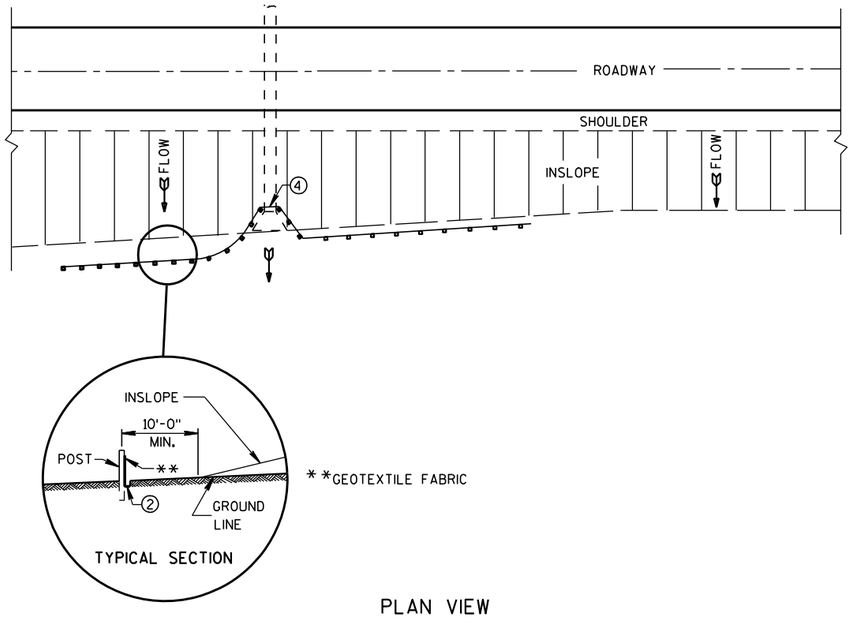
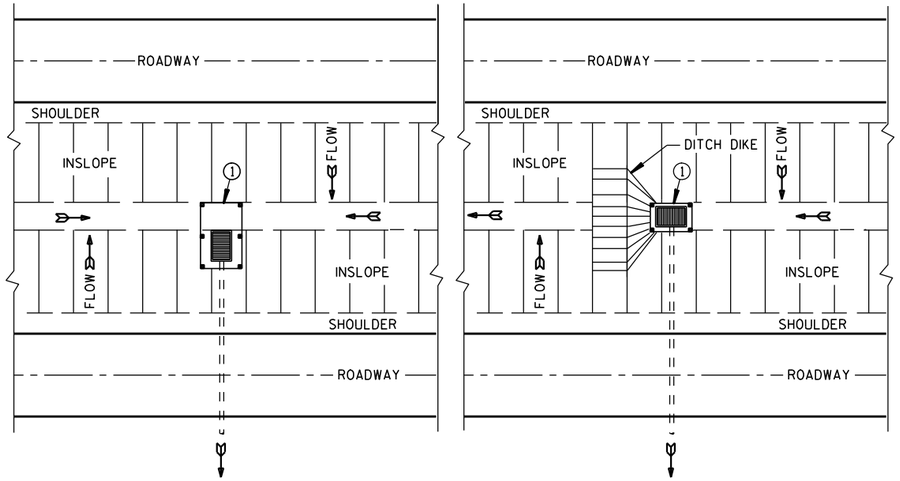


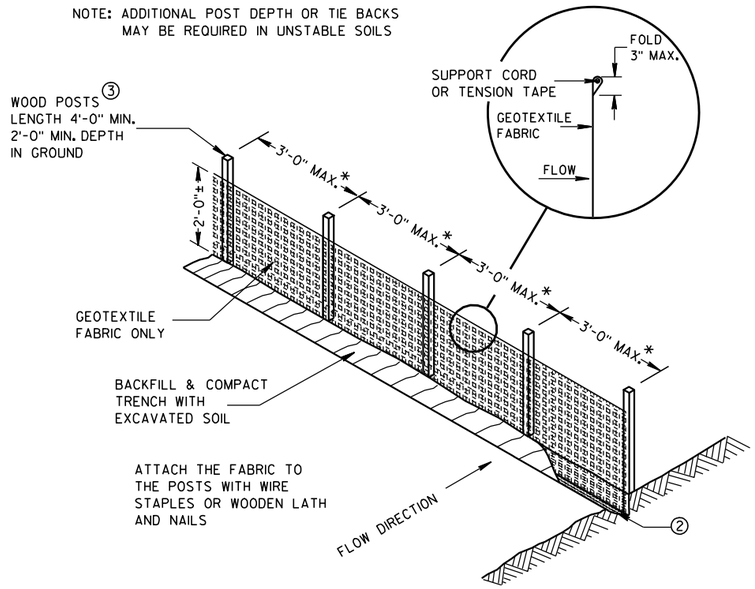
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



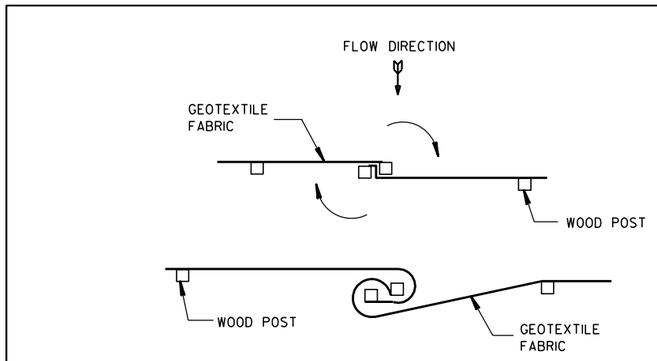
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

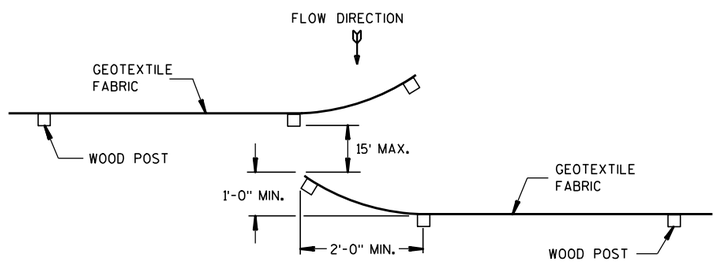


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD



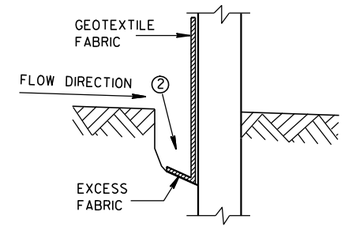
HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5

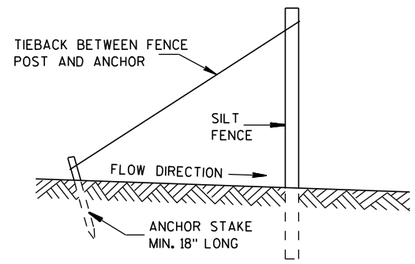
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 E 9-6

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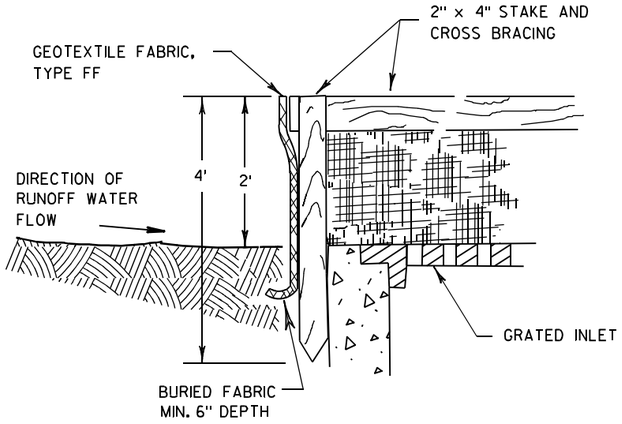
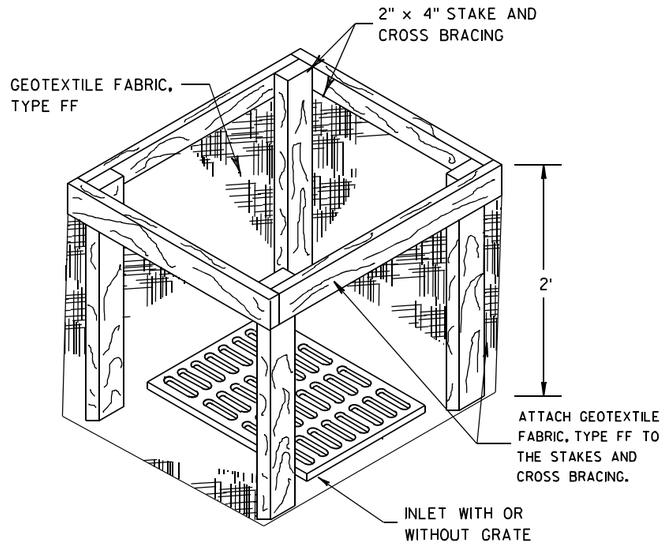
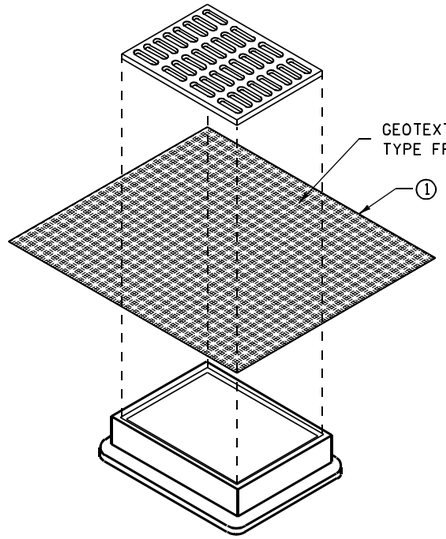


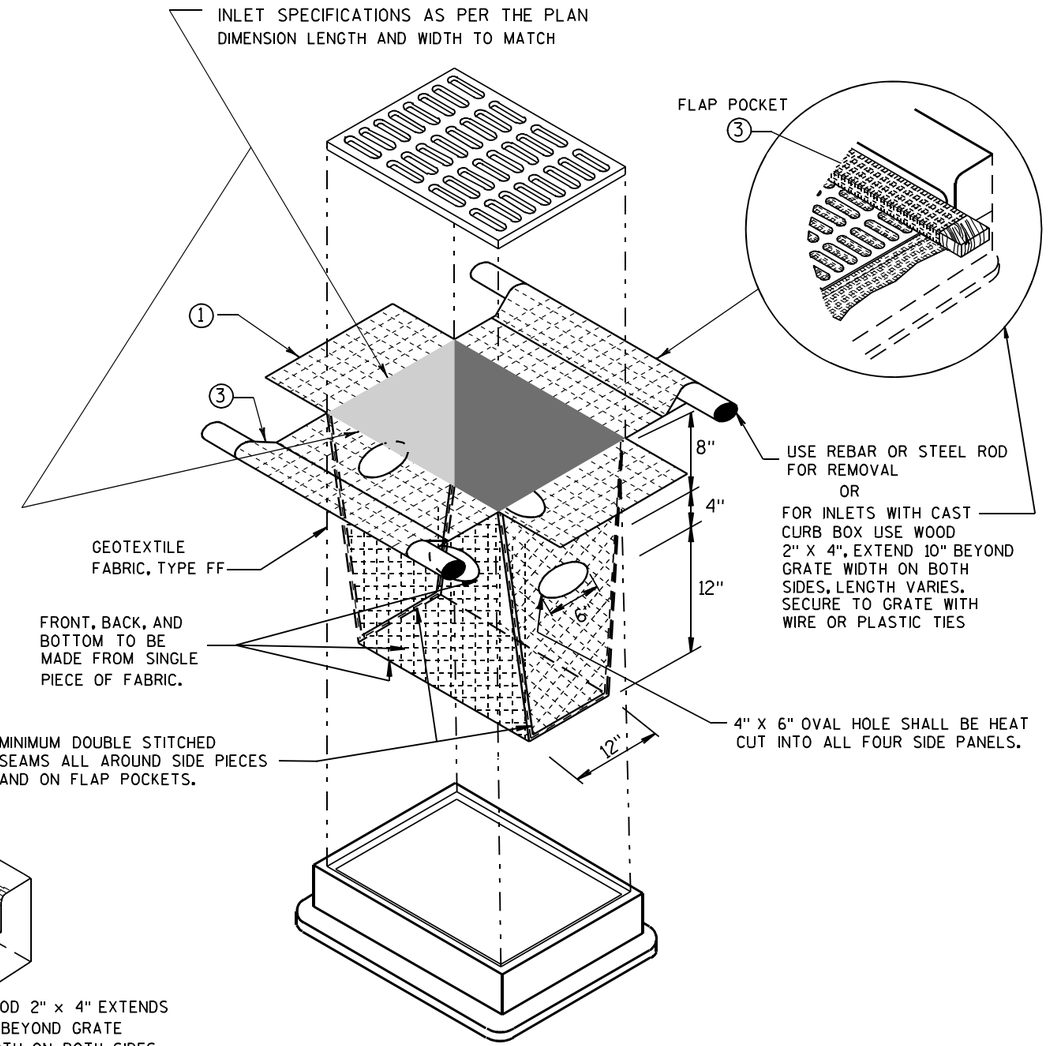


INLET PROTECTION, TYPE A



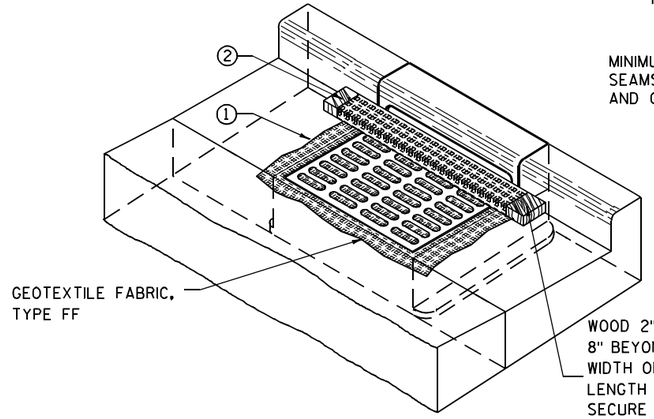
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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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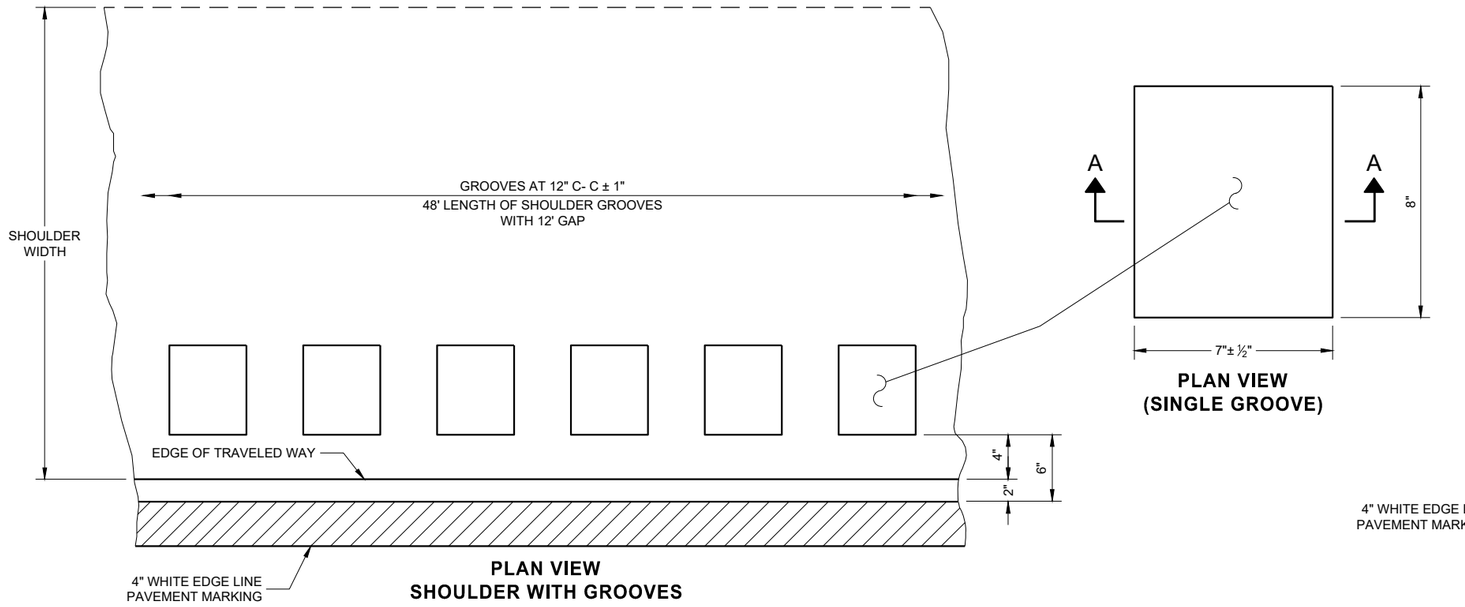


PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

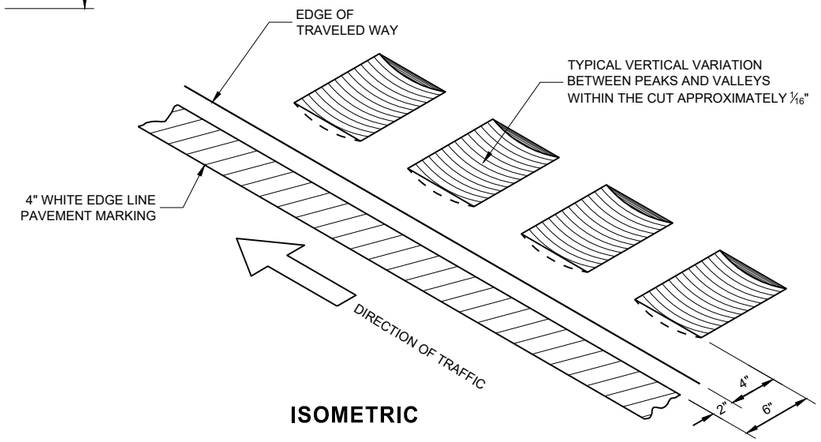
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

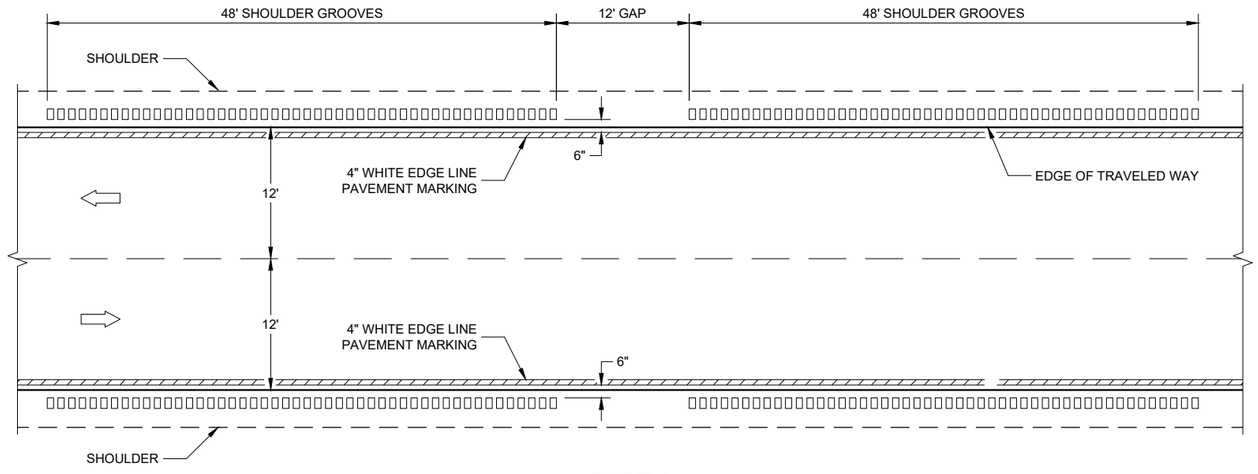
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

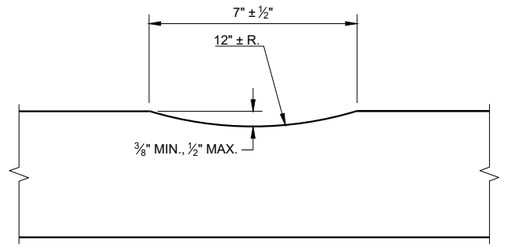
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

SDD 13A10 - 02a

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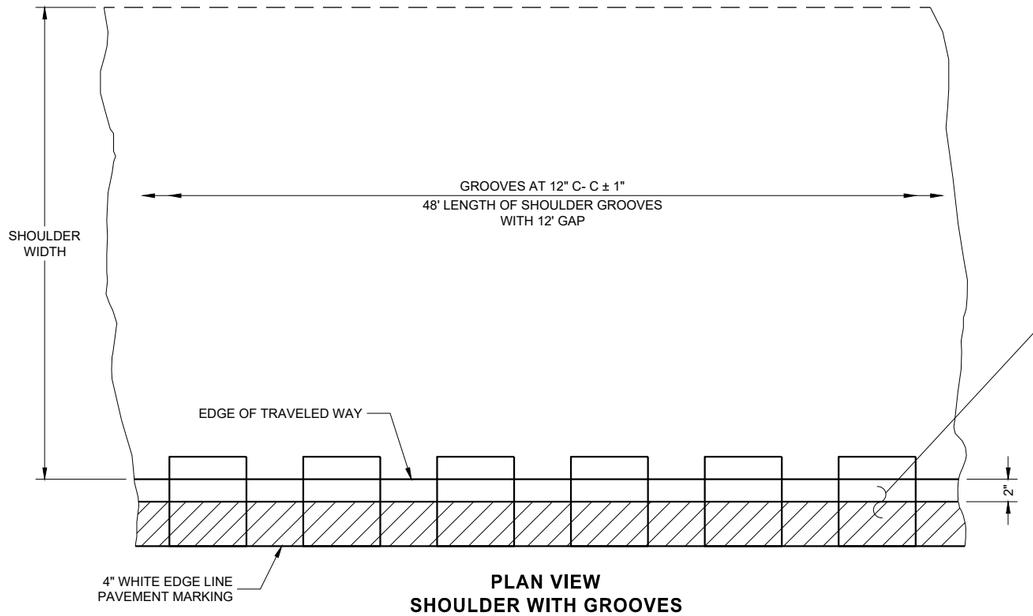
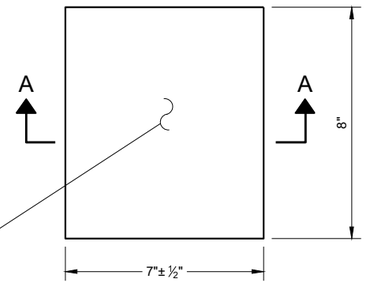
SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



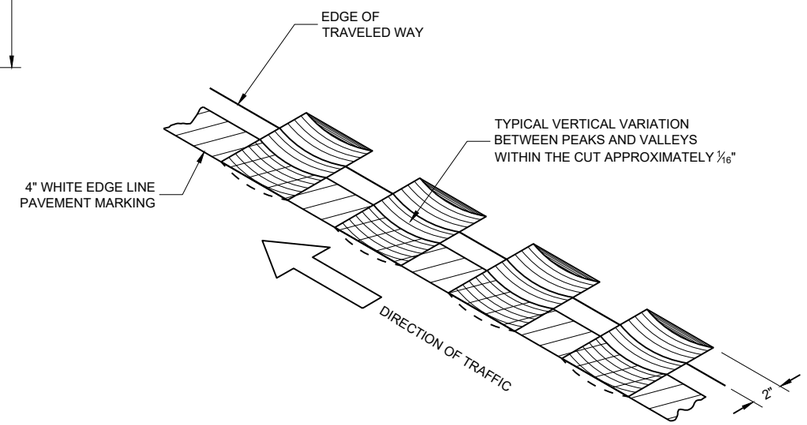
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

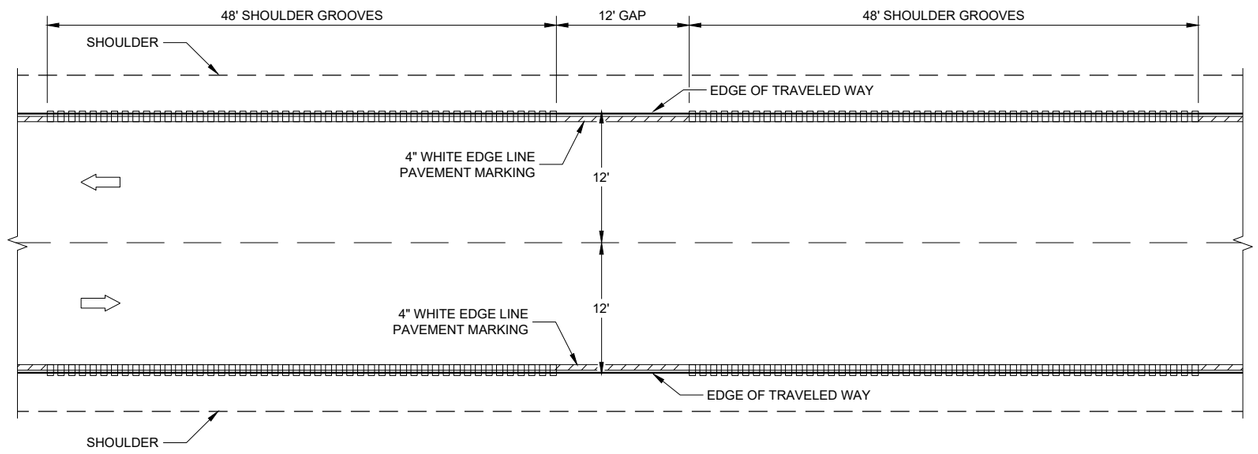
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

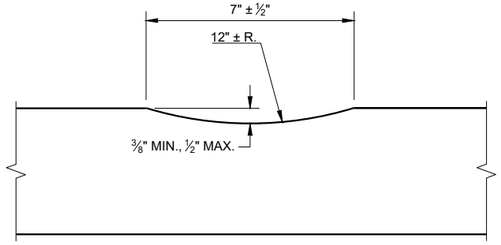


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



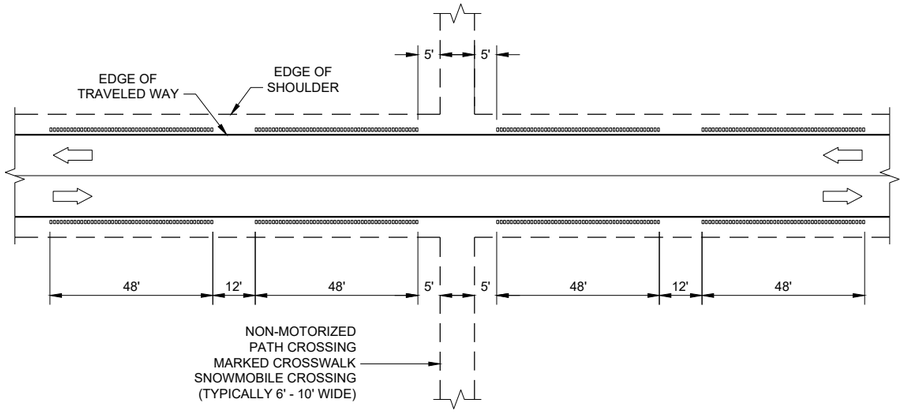
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

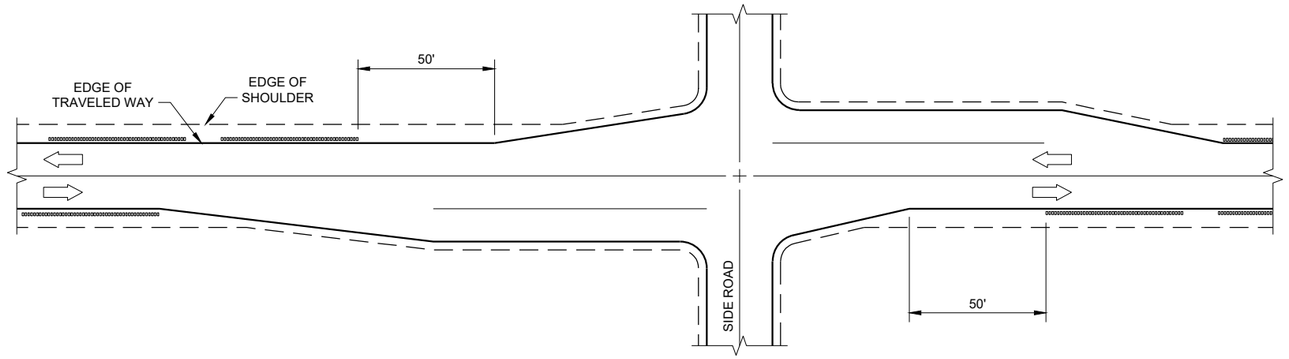
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

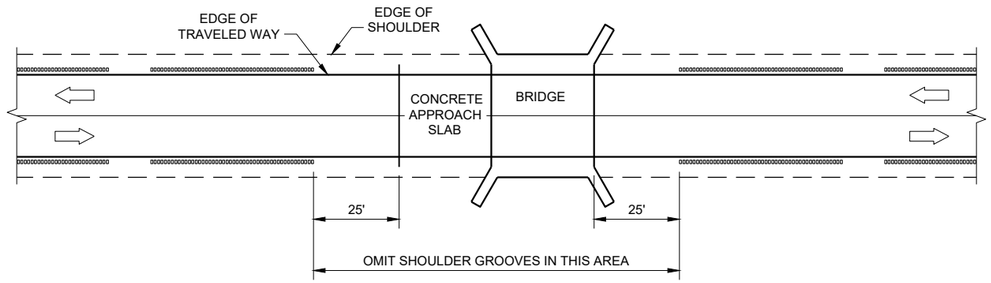
SDD 13A10 - 02b



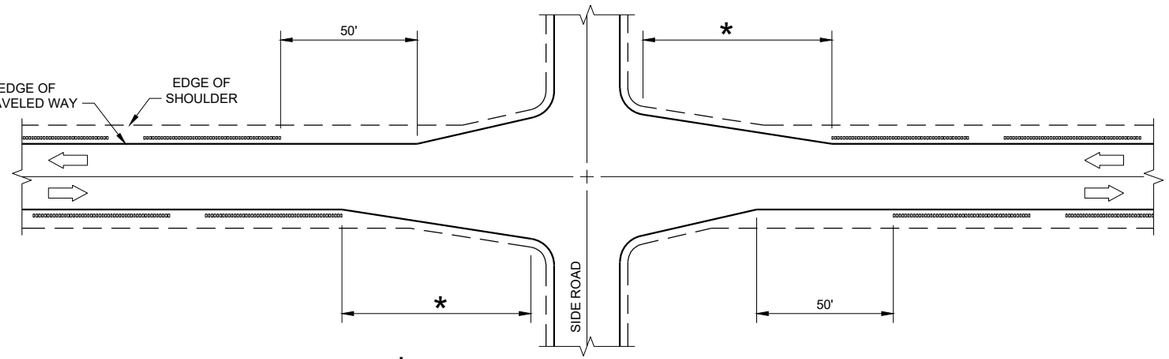
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

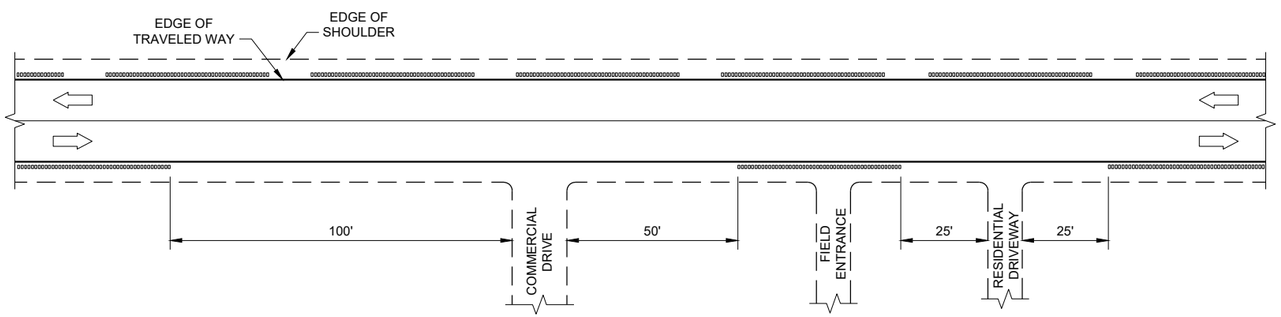


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13A10 - 02c

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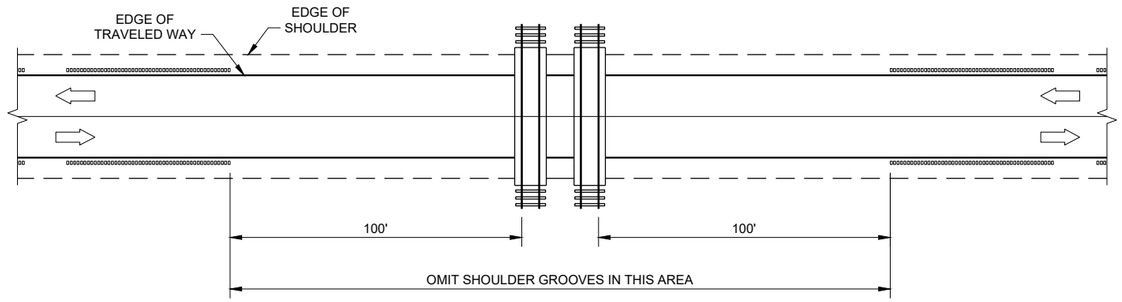
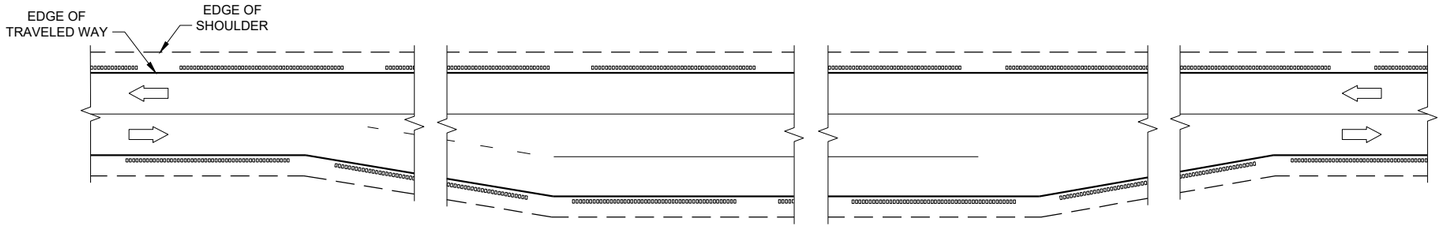
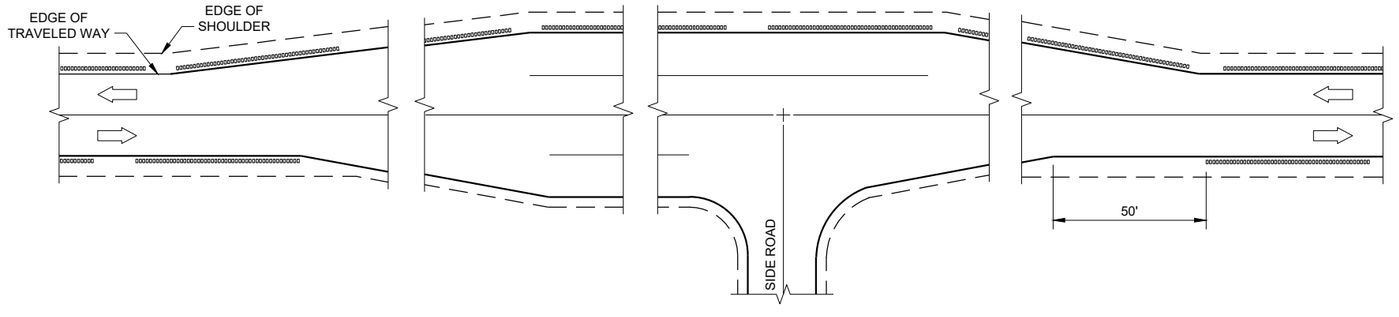
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

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2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

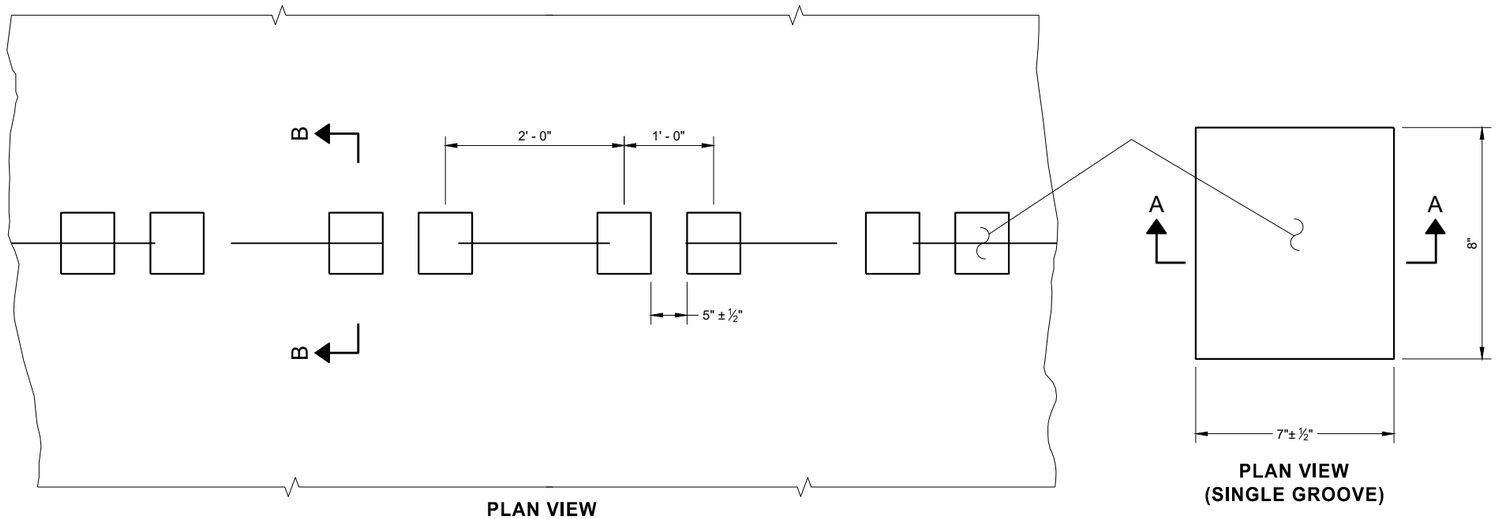
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

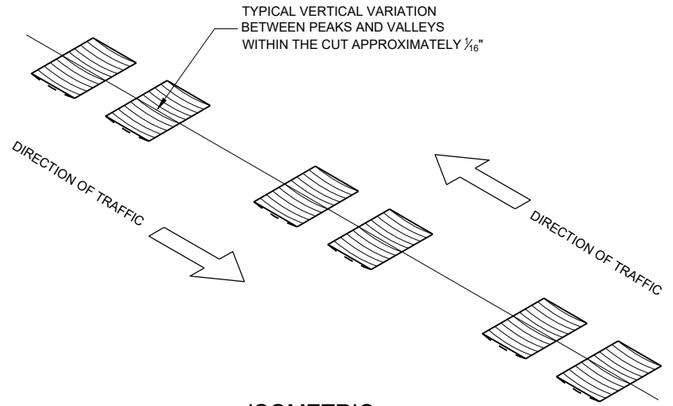
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

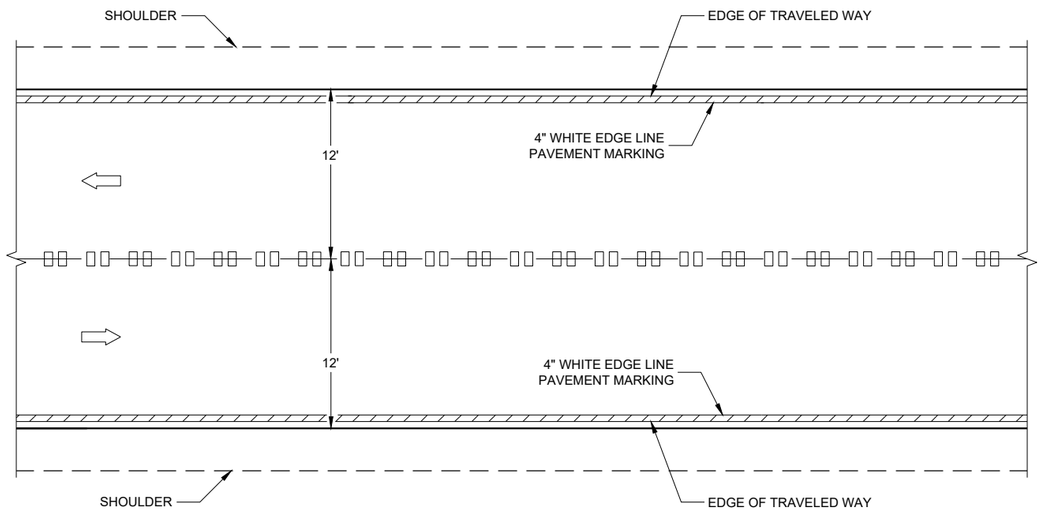
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

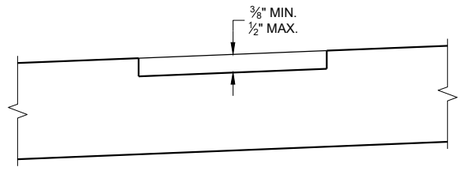
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



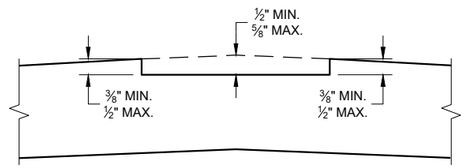
ISOMETRIC



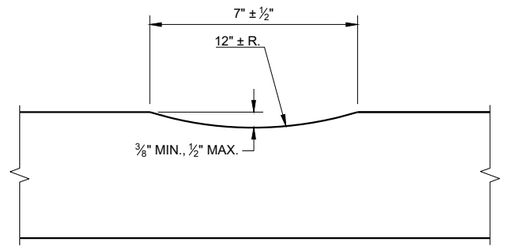
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

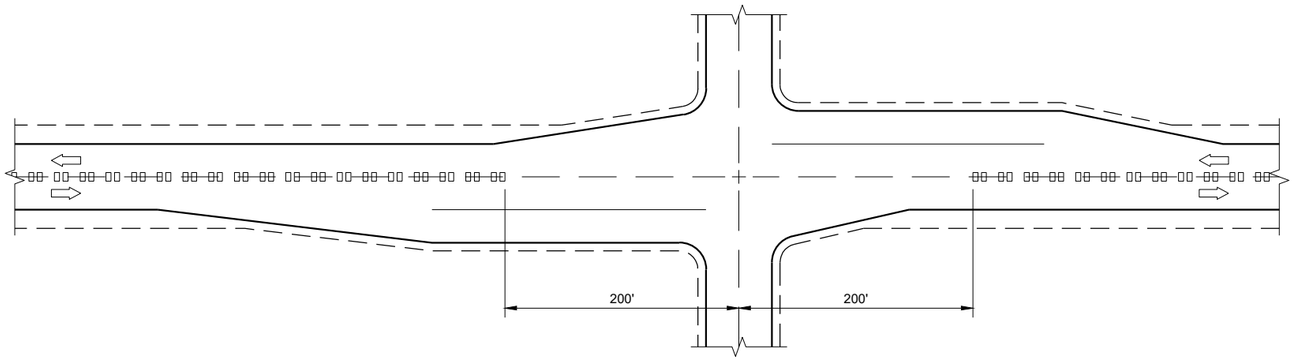
6

SDD 13A11 - 03a

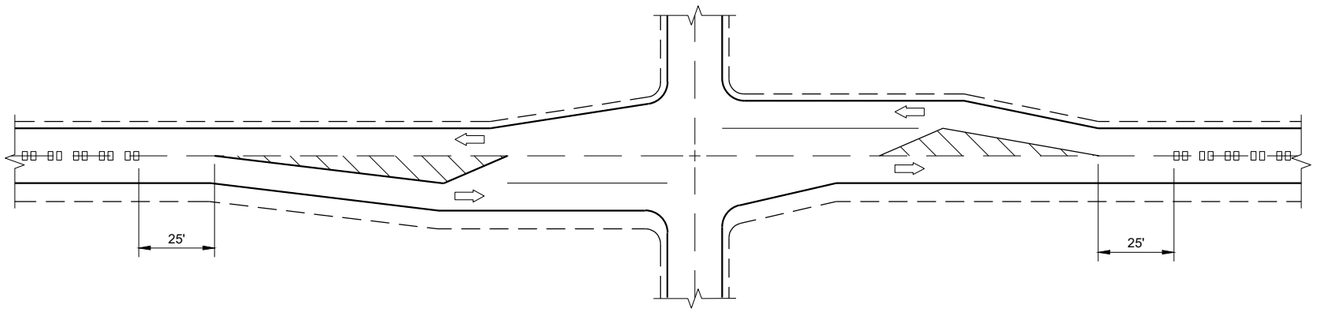
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

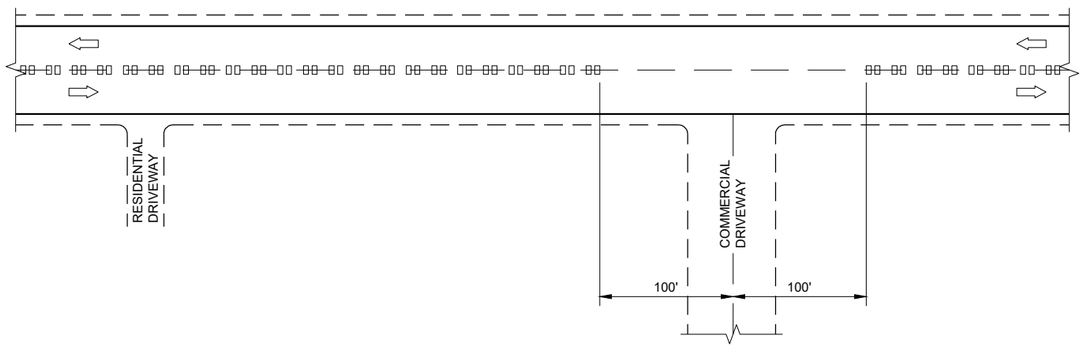
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



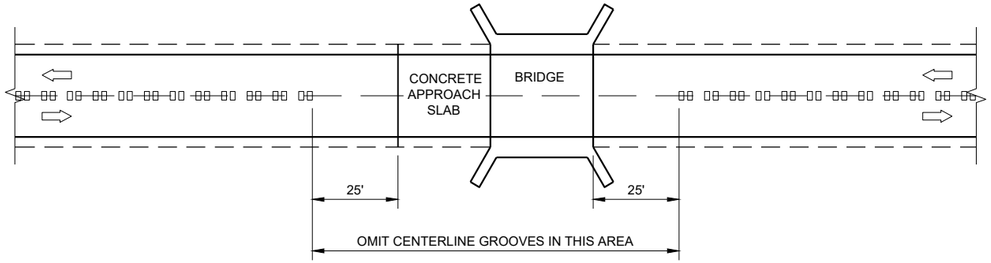
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



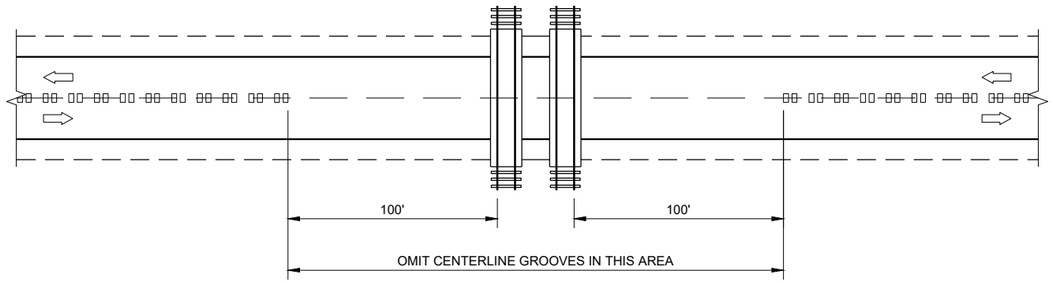
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

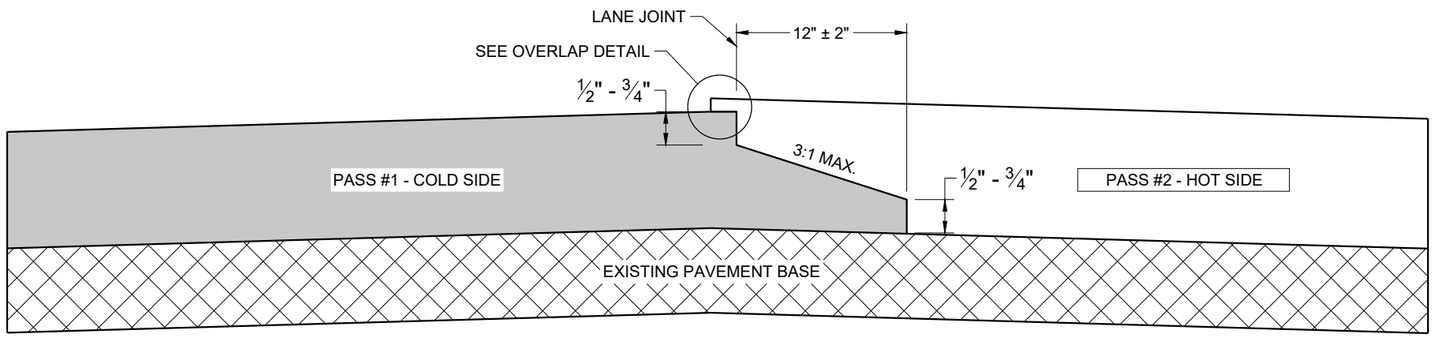
FHWA

6

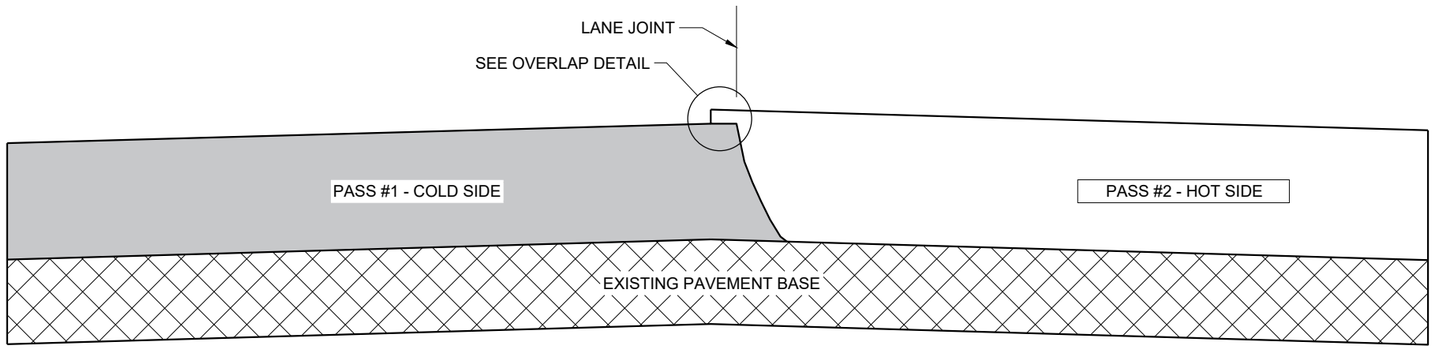
SDD 13A11 - 03b

6

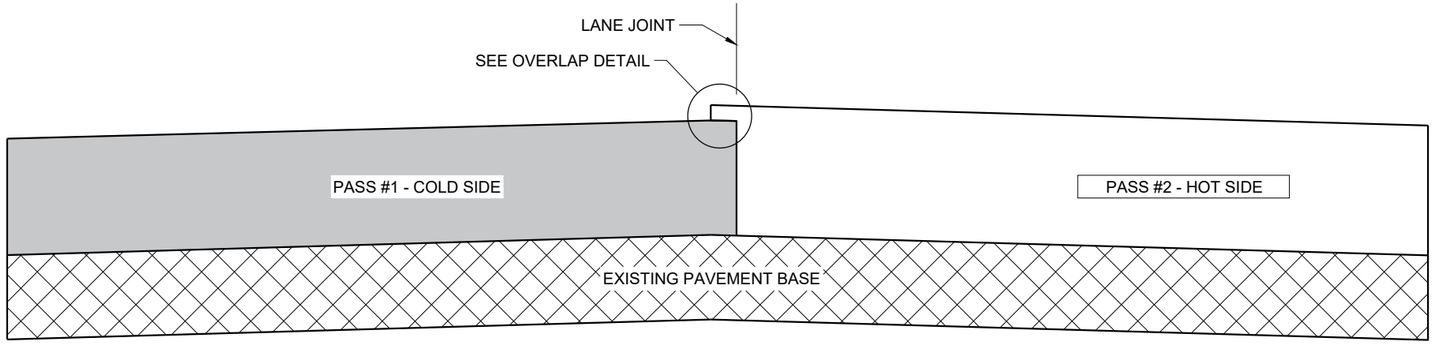
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

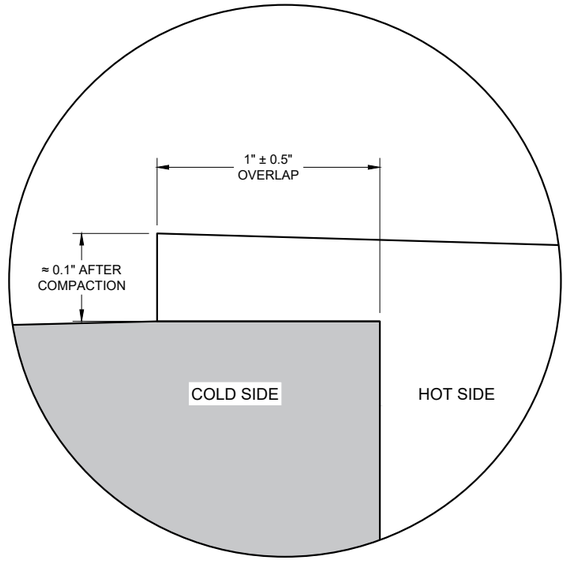
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

SDD 13C19 - 03

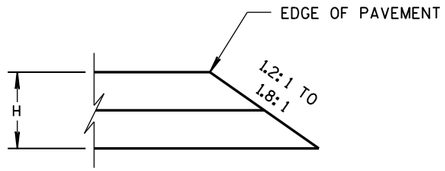
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

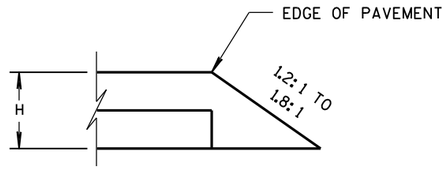
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



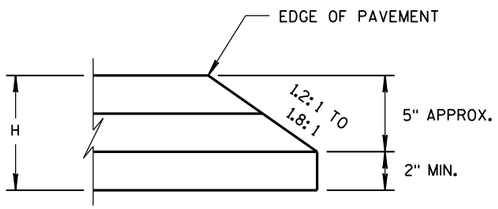
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



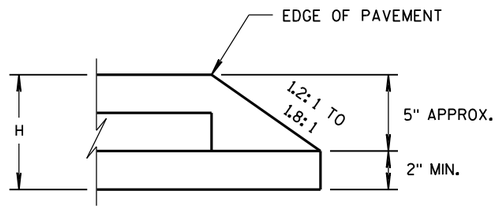
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

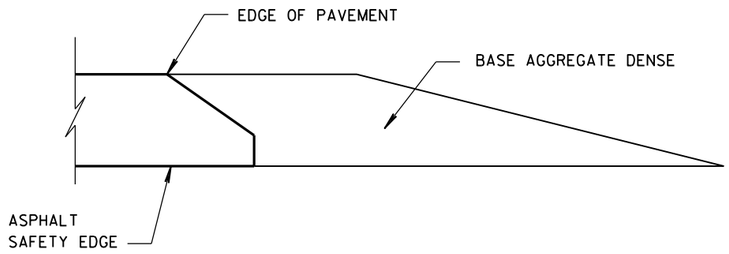
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(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.

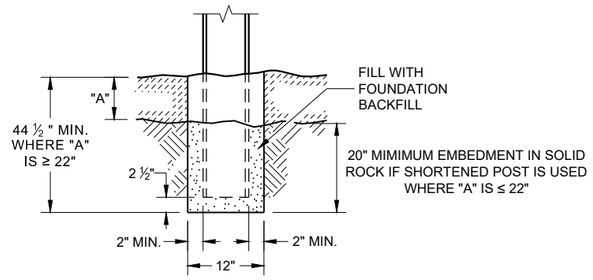
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

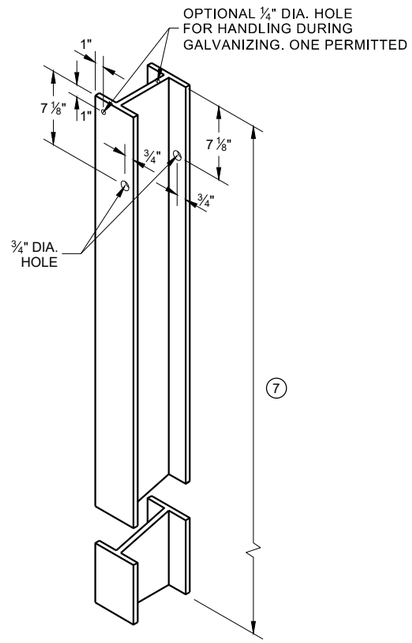
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

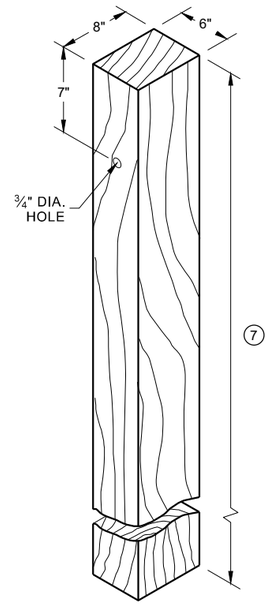
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



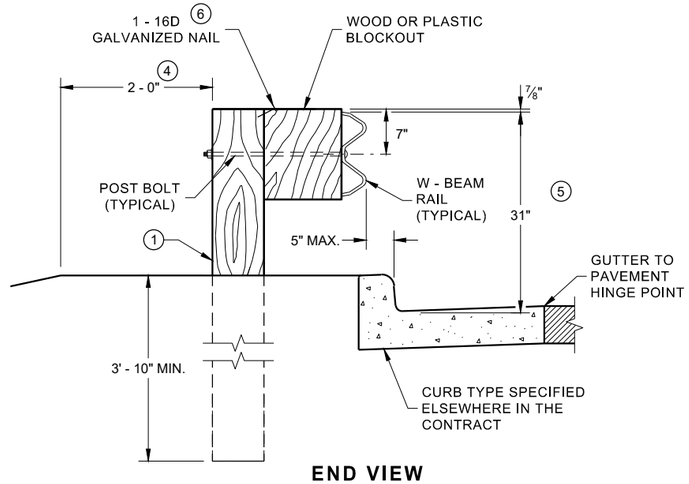
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



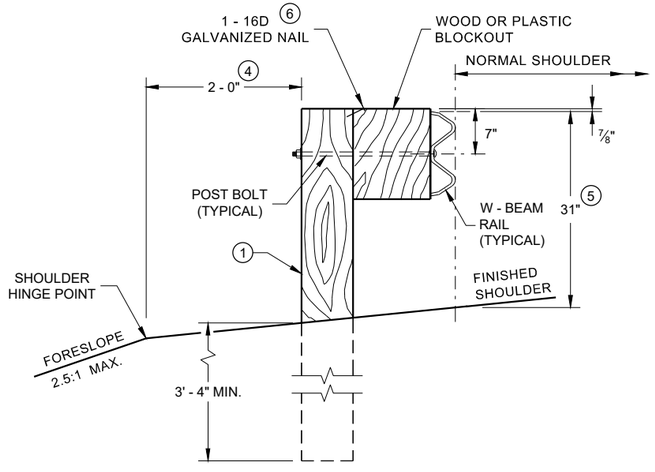
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



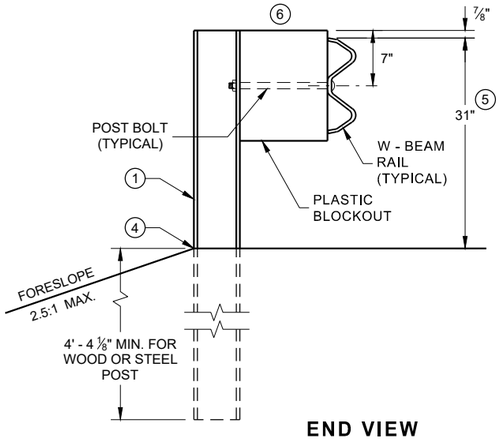
WOOD POST (6" X 8") NOMINAL (1)



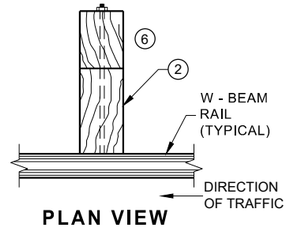
END VIEW
LOCATED ALONG A CURBED ROADWAY



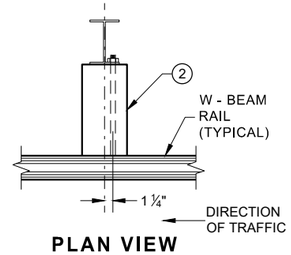
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



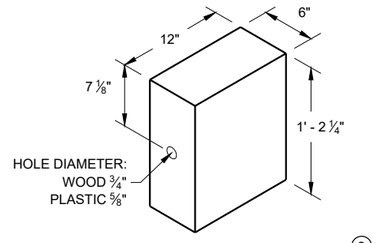
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

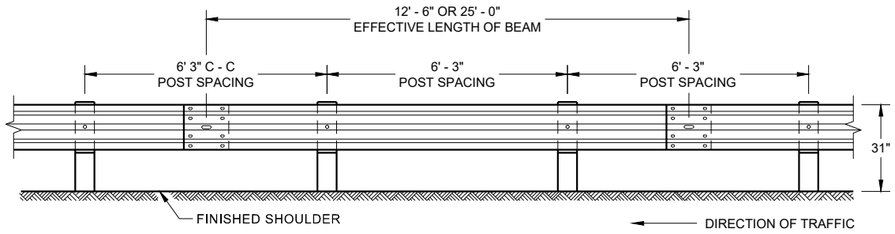
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

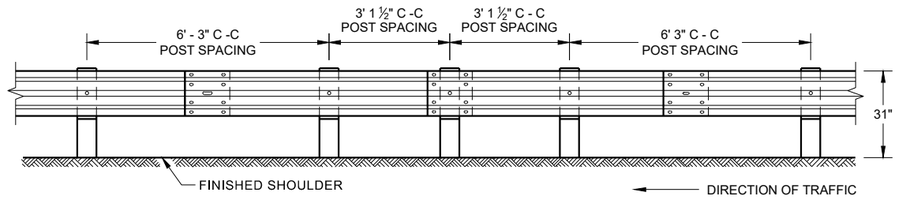
SDD 14B42 - 07a

6

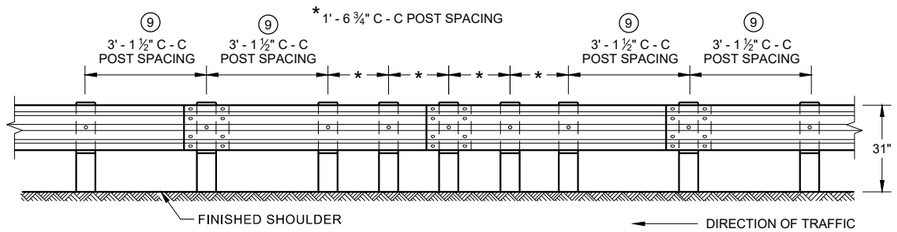
SDD 14B42 - 07a



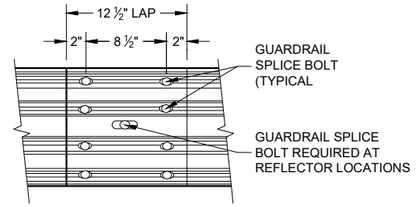
FRONT VIEW
POST SPACING STANDARD INSTALLATION



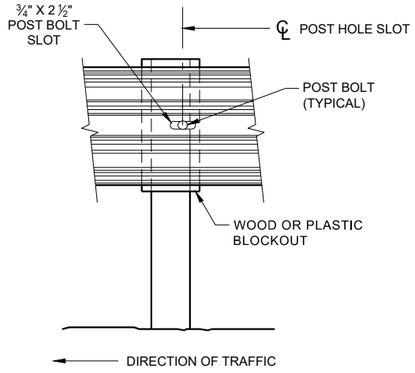
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



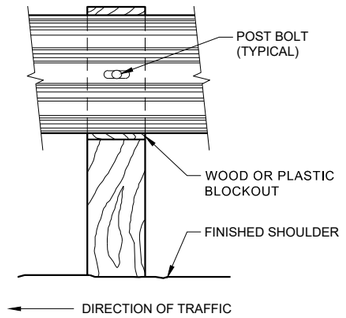
FRONT VIEW
QUARTER POST SPACING (QS)



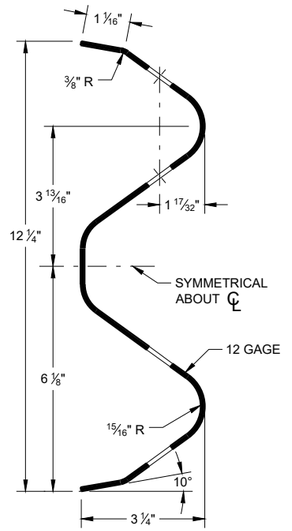
FRONT VIEW
MID-SPAN BEAM SPLICE



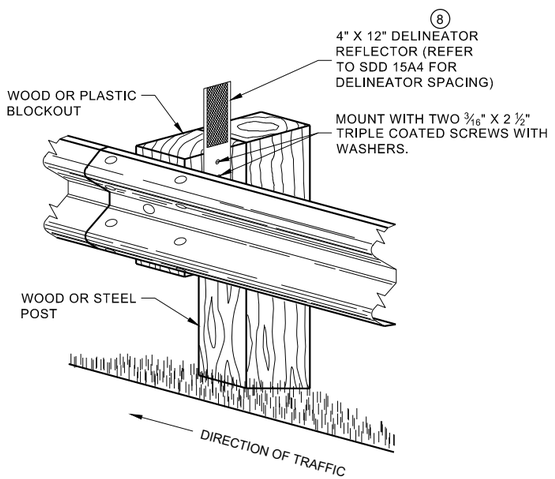
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

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

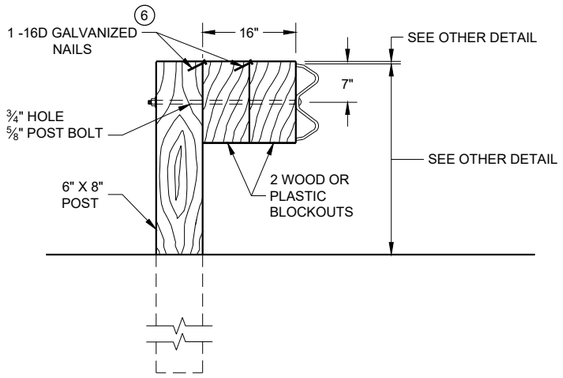
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

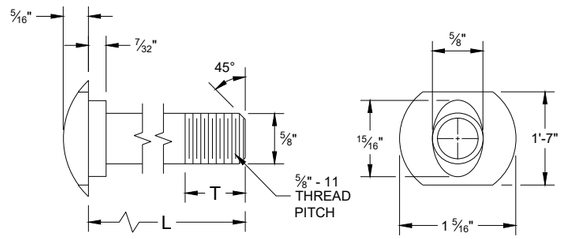


DETAIL FOR 16" BLOCKOUT DEPTH

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

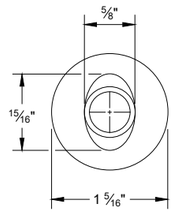
NOTE:

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

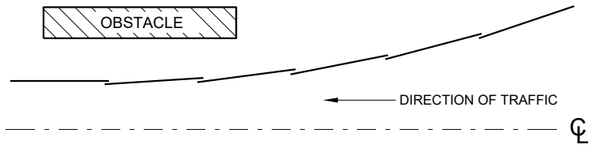


POST BOLT TABLE

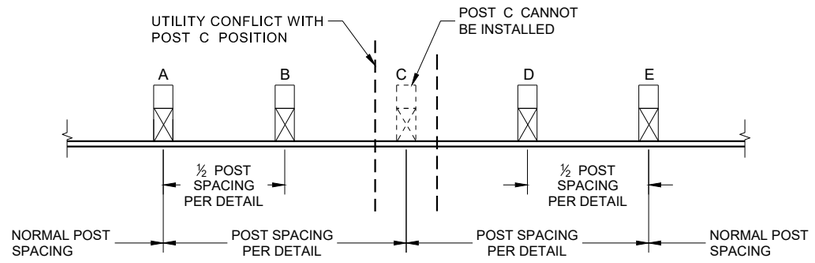
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



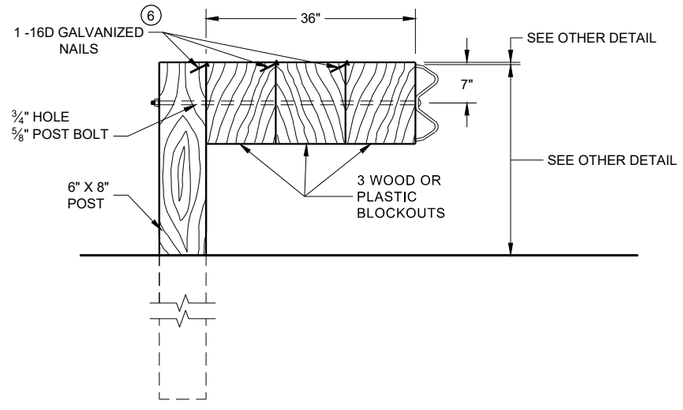
ALTERNATE BOLT HEAD



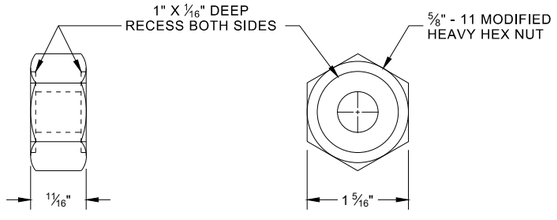
PLAN VIEW
BEAM LAPPING DETAIL



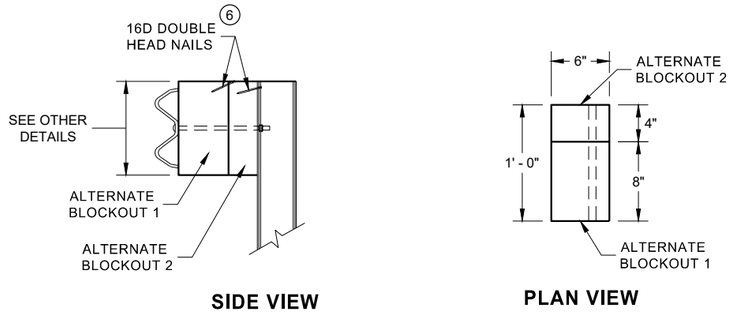
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

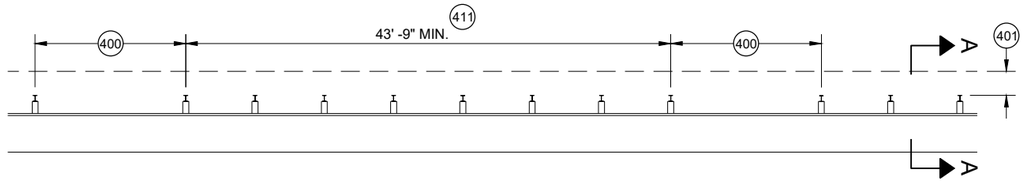
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

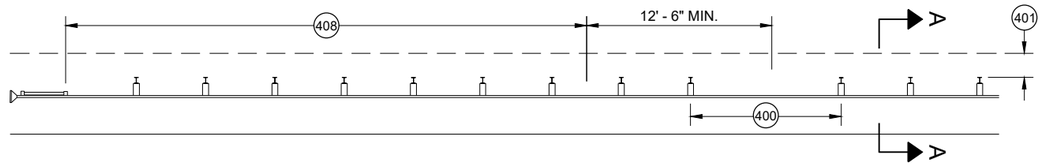
6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

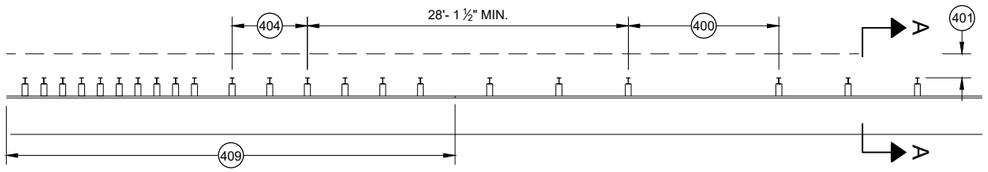
SDD 14B42 - 07c



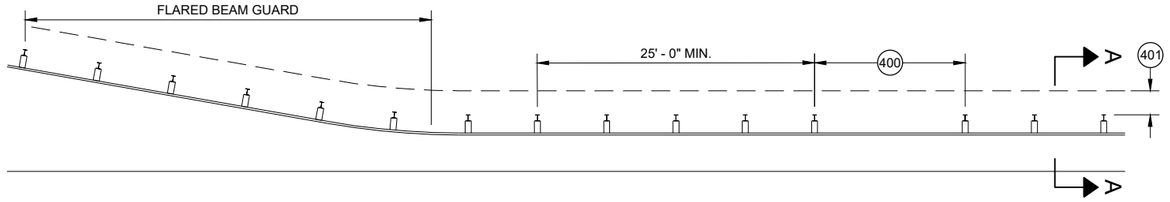
MISSING POST IN MGS GUARDRAIL



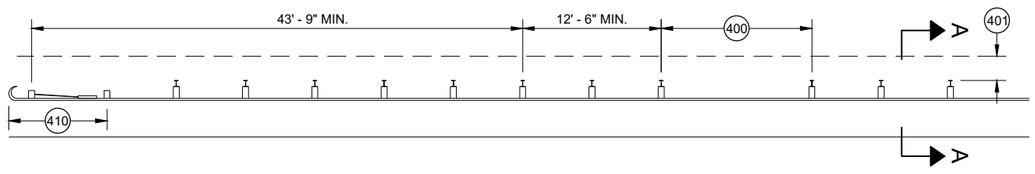
MISSING POST IN MGS GUARDRAIL NEAR EAT



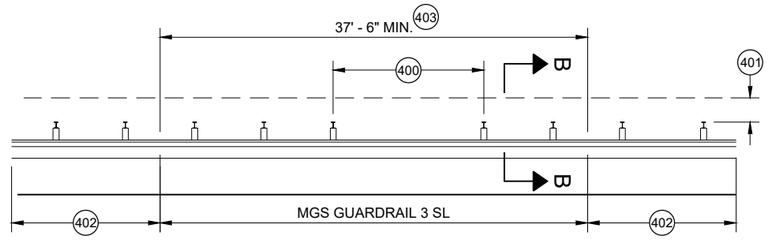
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

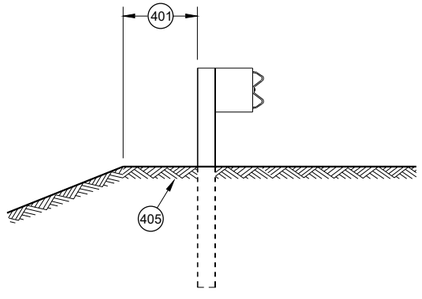


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

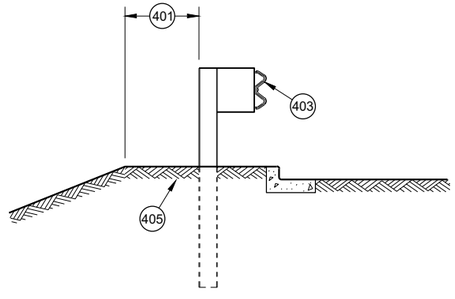


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

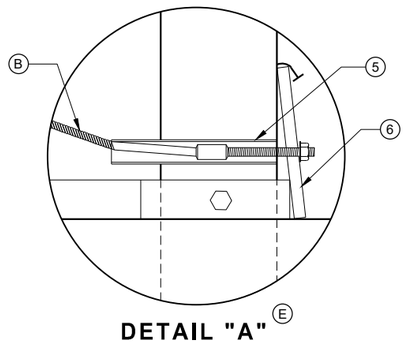
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

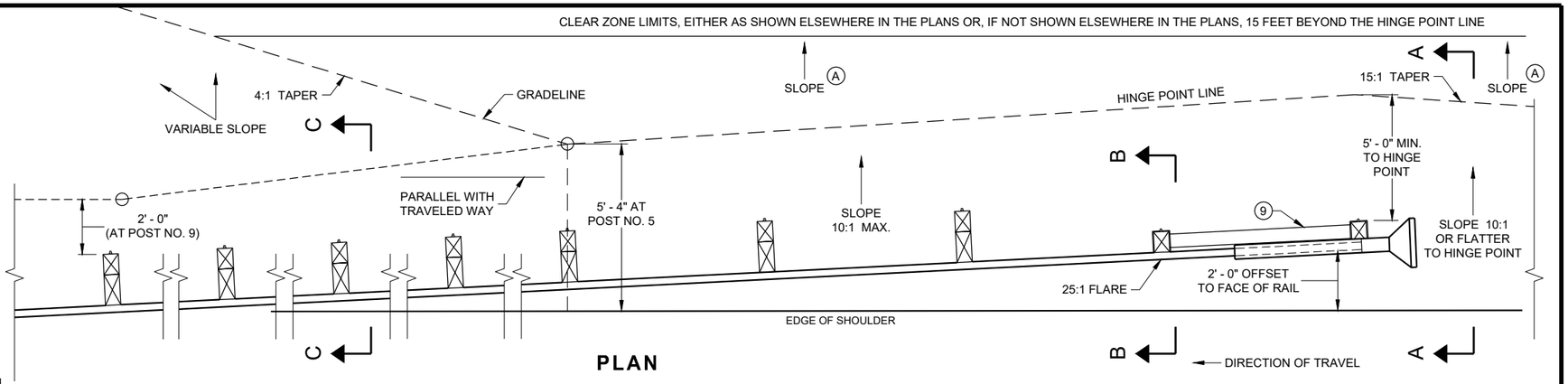
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

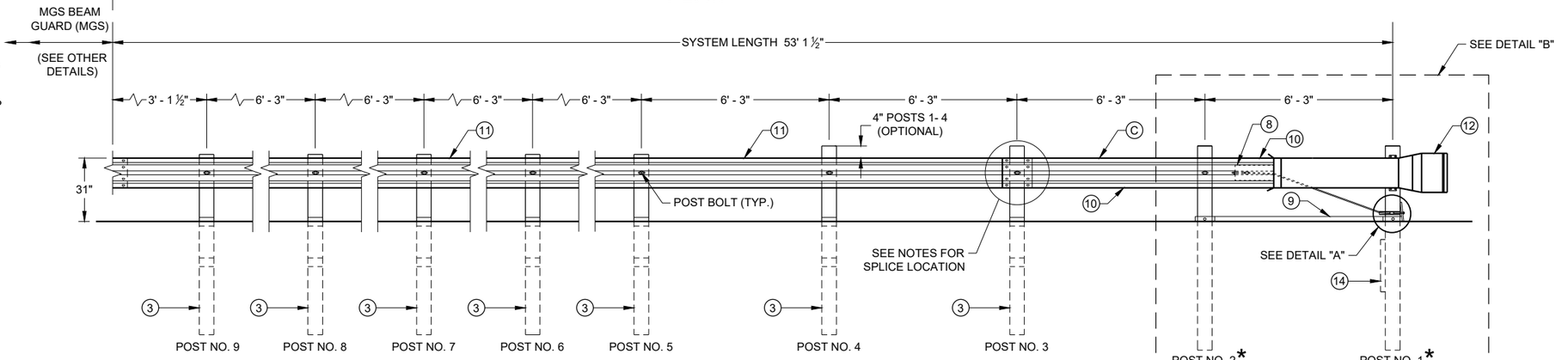
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



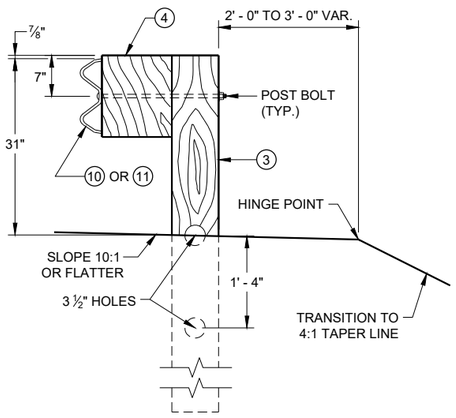
DETAIL "A" (E)



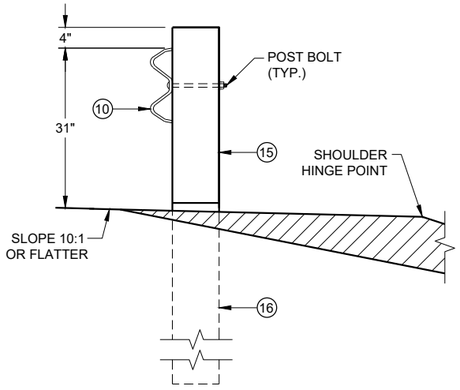
PLAN



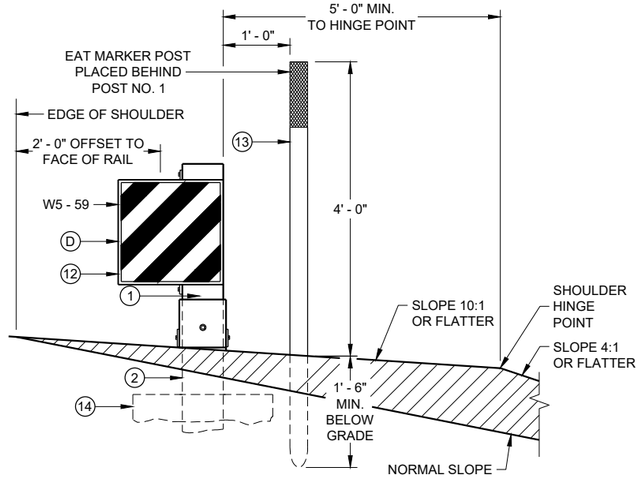
ELEVATION



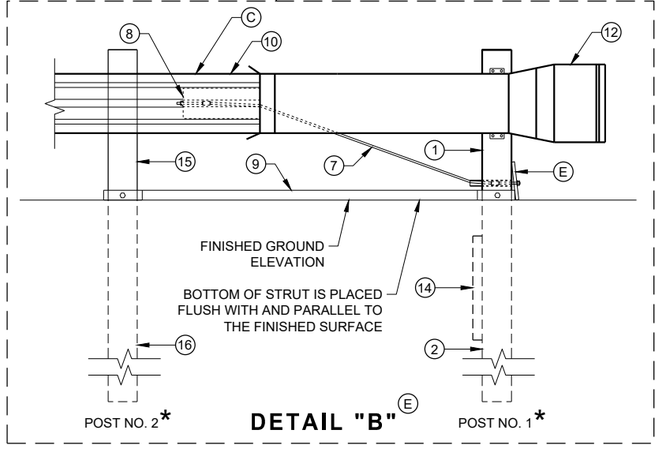
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



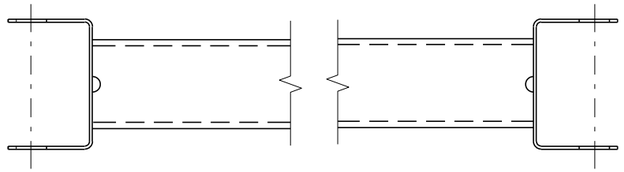
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

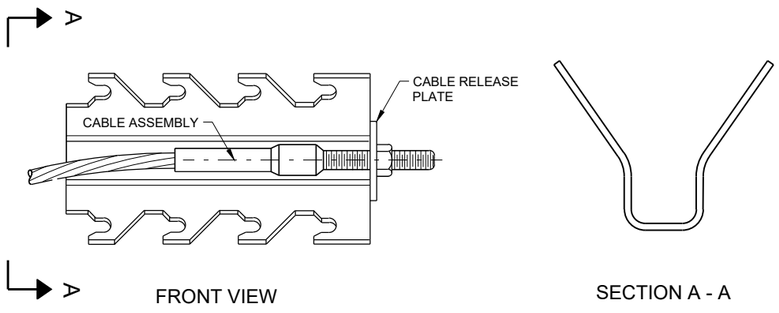
SDD 14B44 - 04a



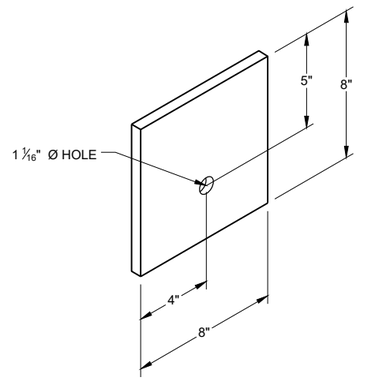
GENERIC GROUND STRUT ⑨ Ⓔ

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 Ⓔ

6

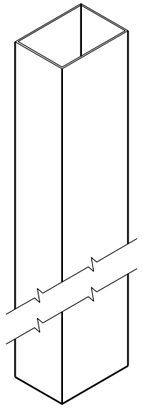
6

SDD 14B44 - 04b

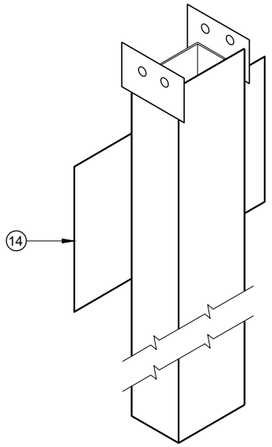
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

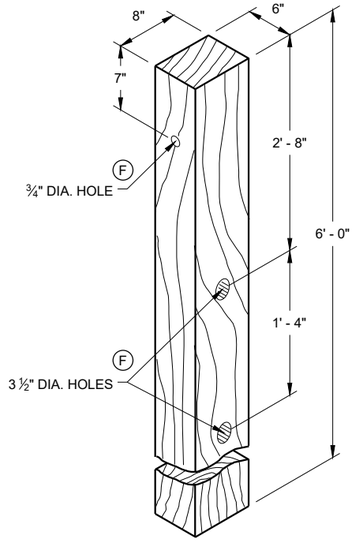
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



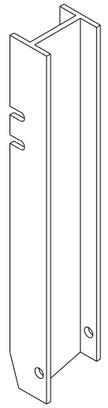
UPPER POST NO. 1 (1) (E)



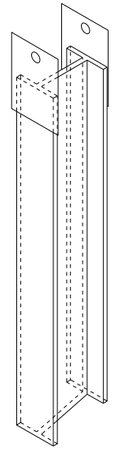
LOWER POST NO. 1 (2) (E)



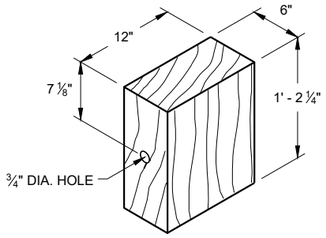
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



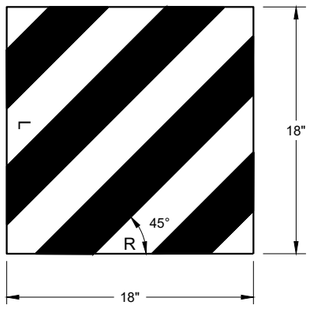
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

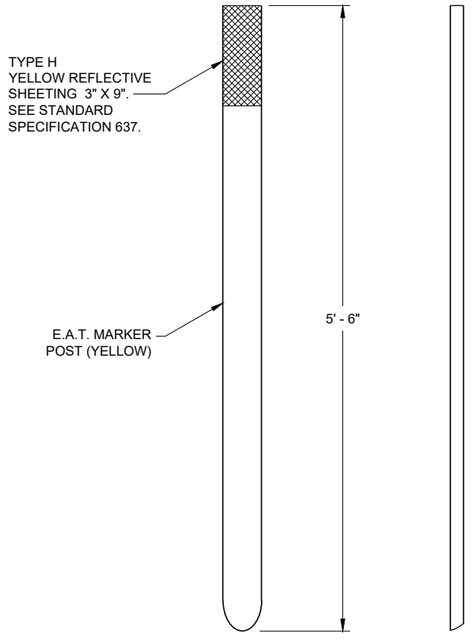


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



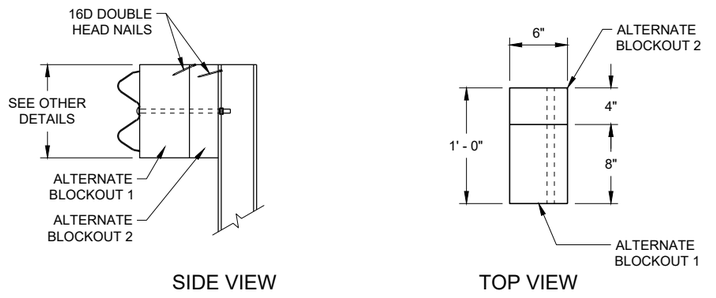
W5 - 59

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)

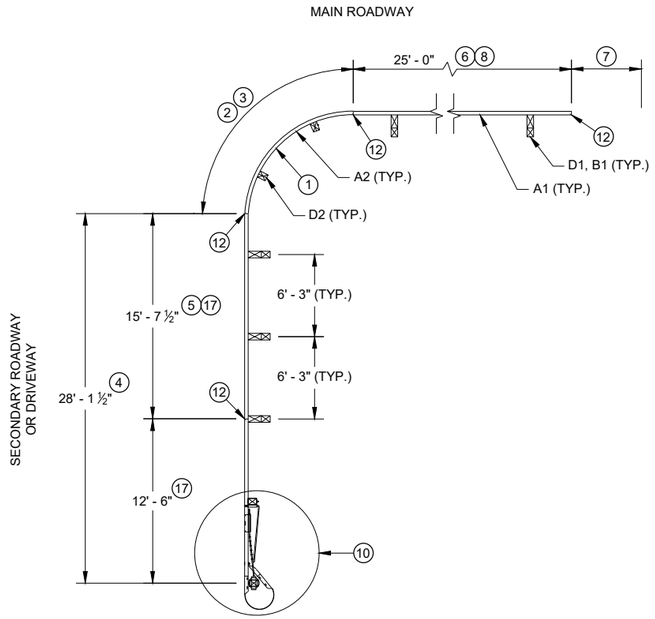
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

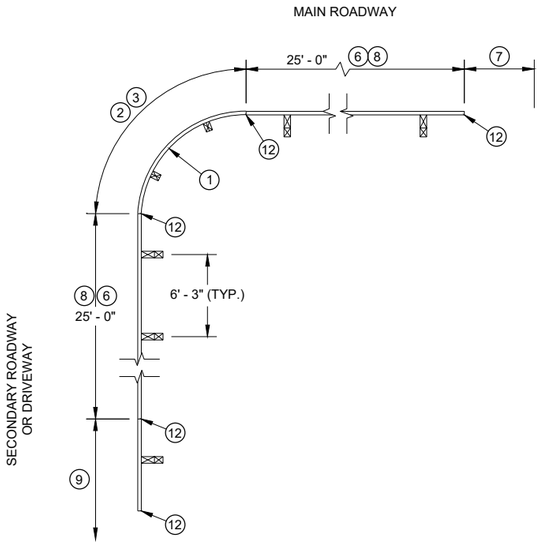
6

SDD 14B44 - 04c



PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

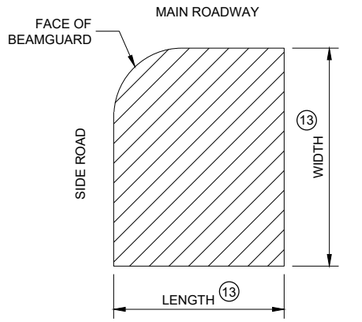


PLAN VIEW

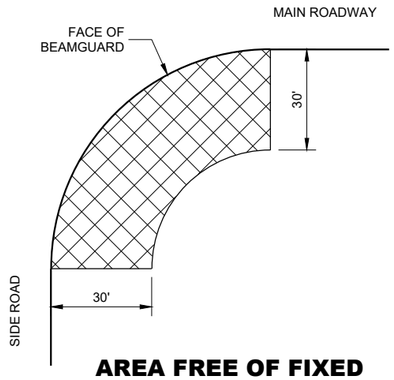
SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY

TABLE FOR RADIUS OF 32' AND LESS

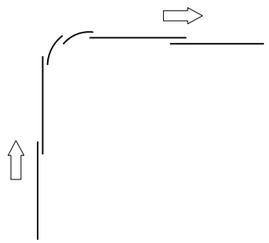
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

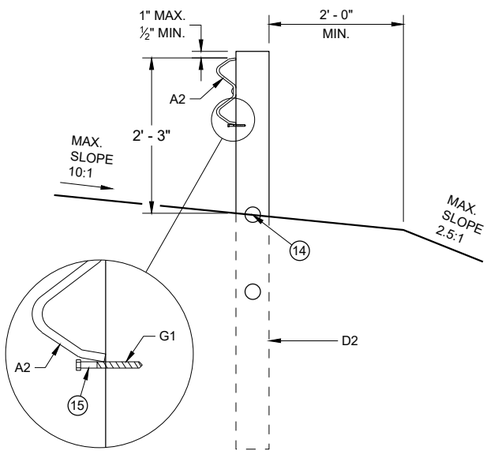
(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

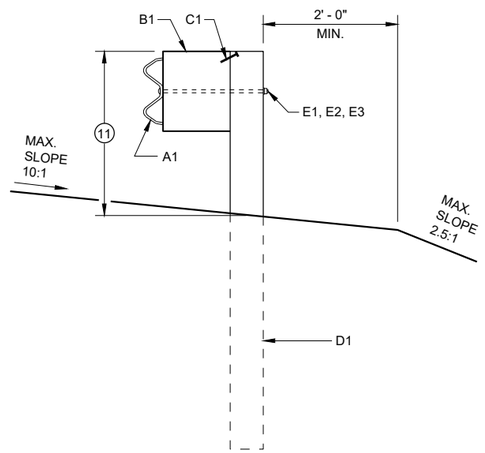
(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).



CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



BEAM GUARD POSTS IN HEIGHT TRANSITION

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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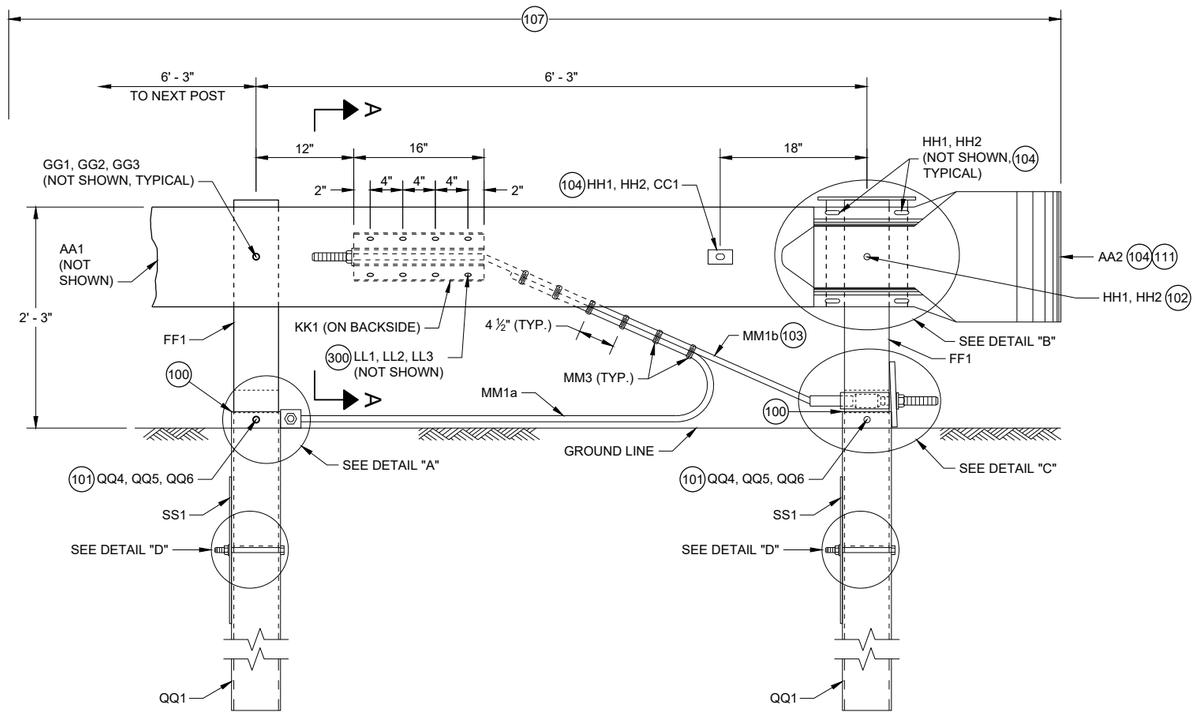
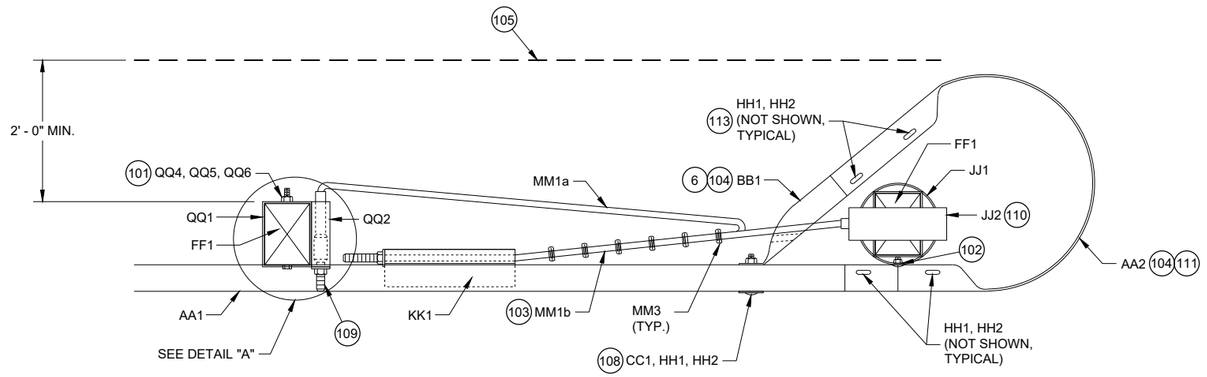


PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

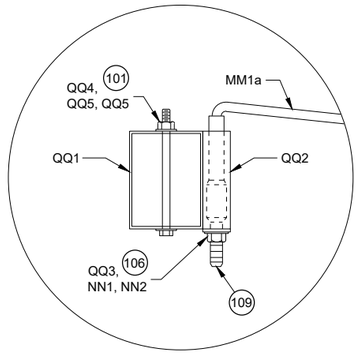
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

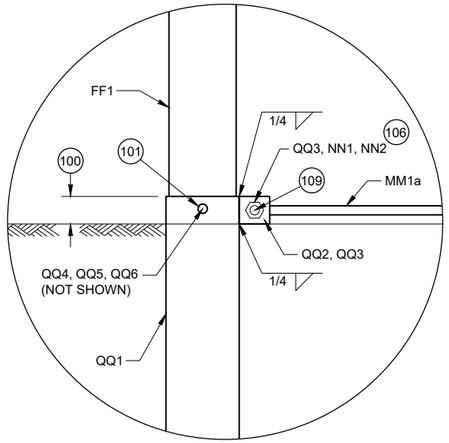
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 01b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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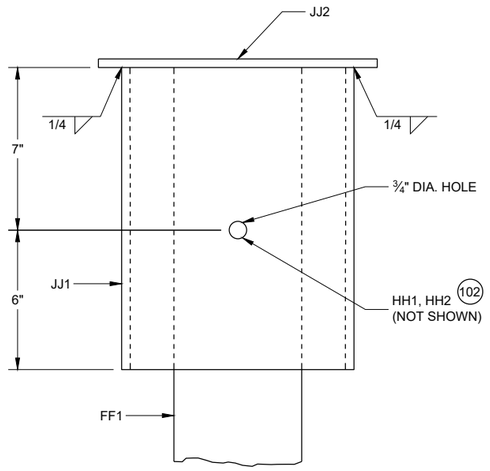
SDD 14B53 - 01b

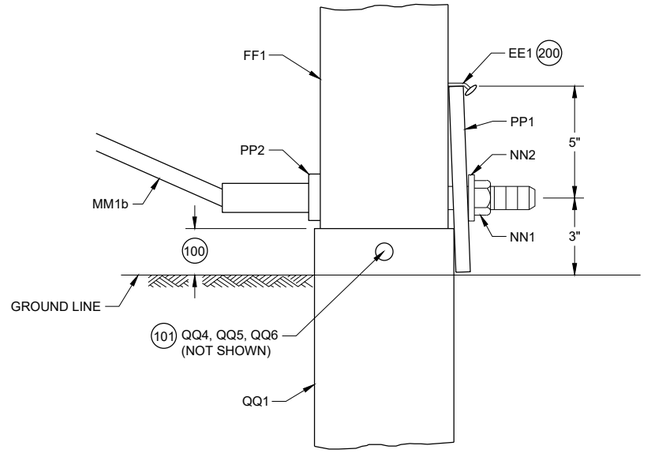
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



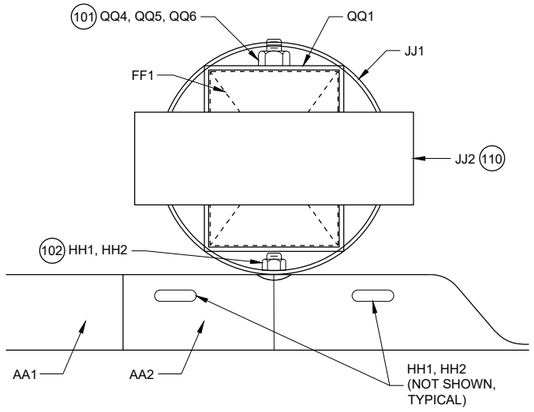
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



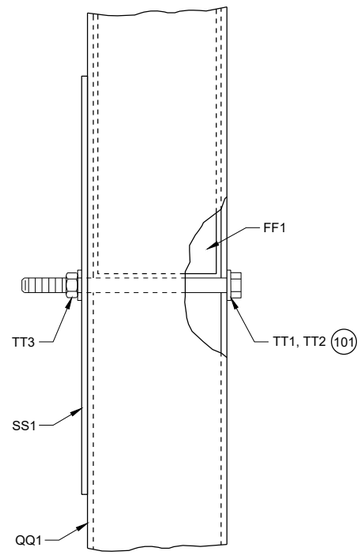
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

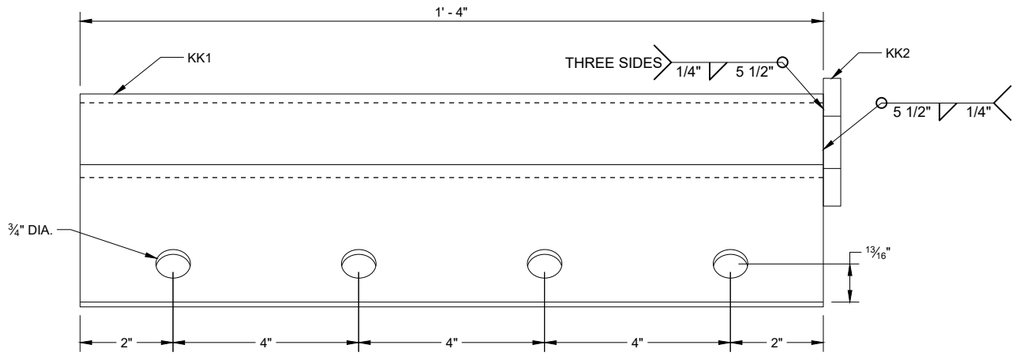
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

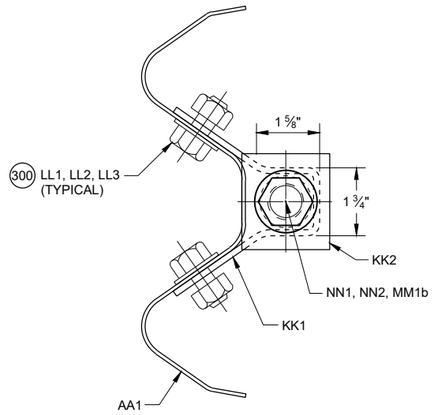
6

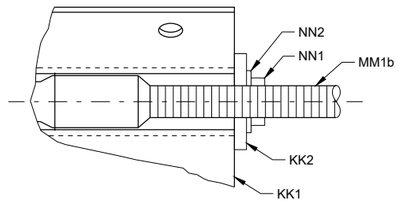
SDD 14B53 - 01c

GENERAL NOTES

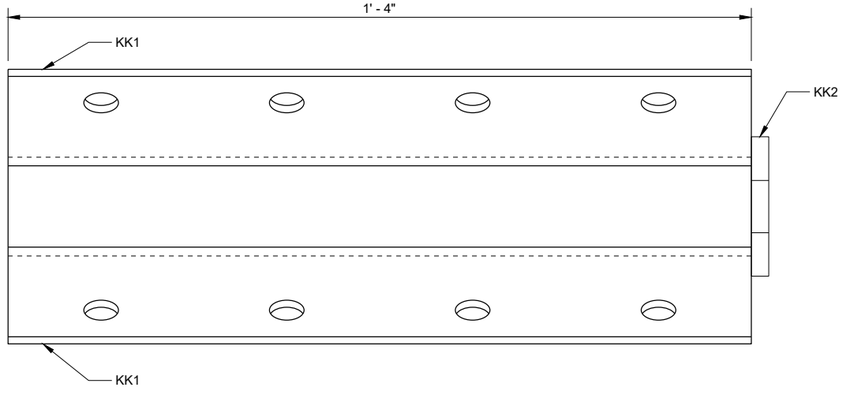
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

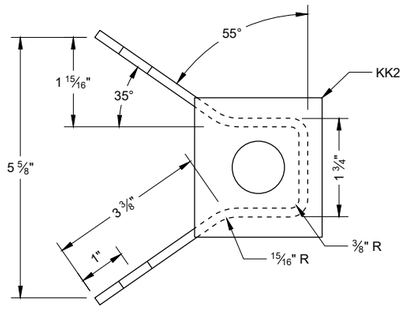




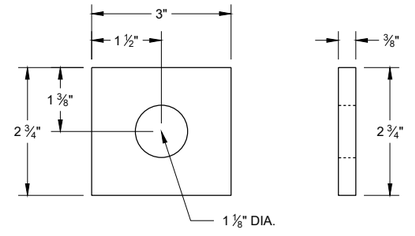


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

6

SDD 14B53 - 01d

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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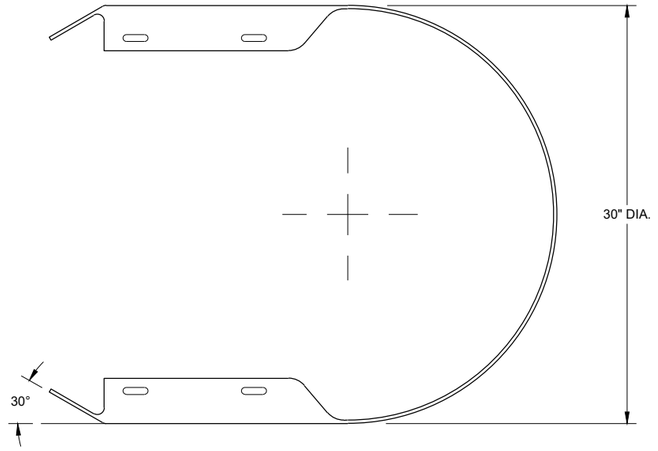
SDD 14B53 - 01d

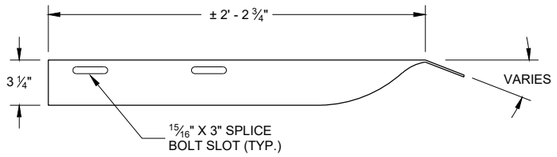
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

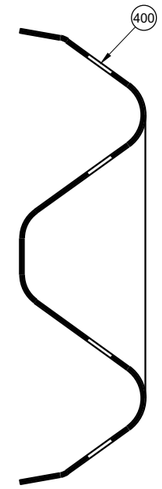
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



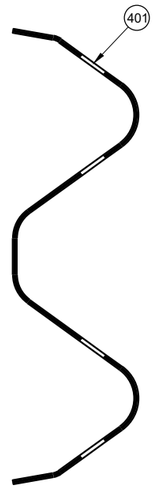
TOP VIEW



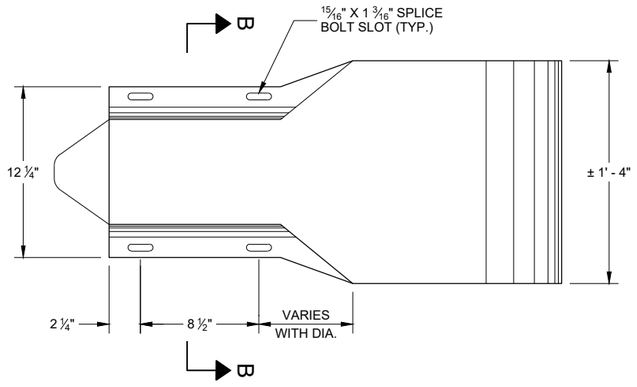
TOP VIEW



SECTION B -B

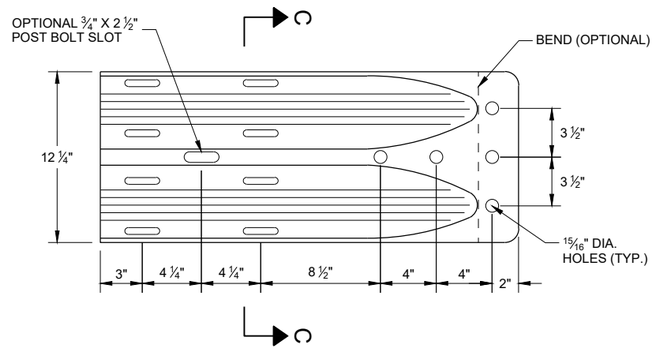


SECTION C -C



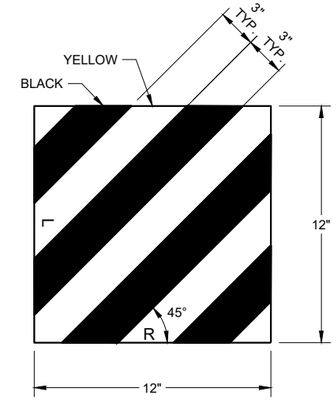
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
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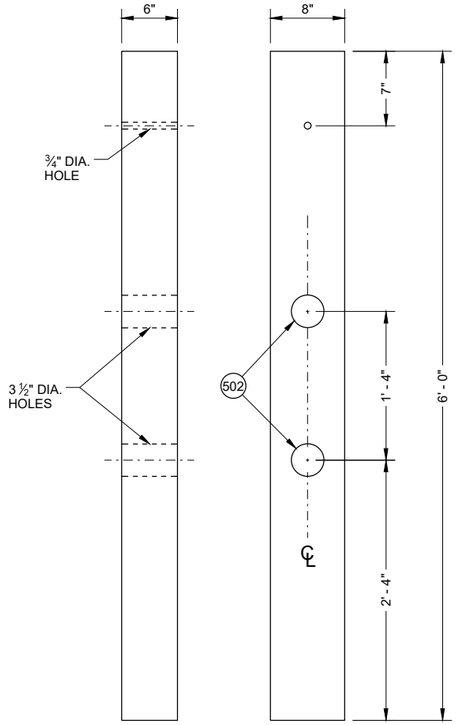
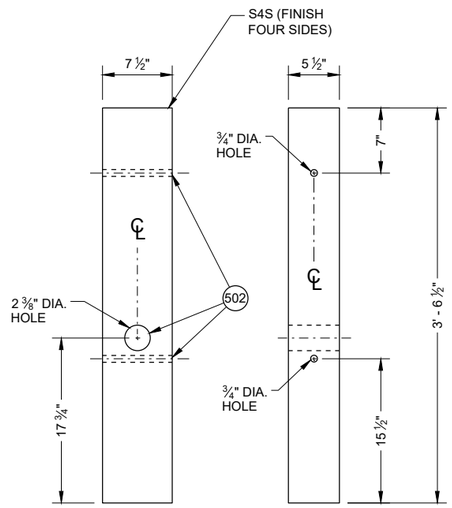


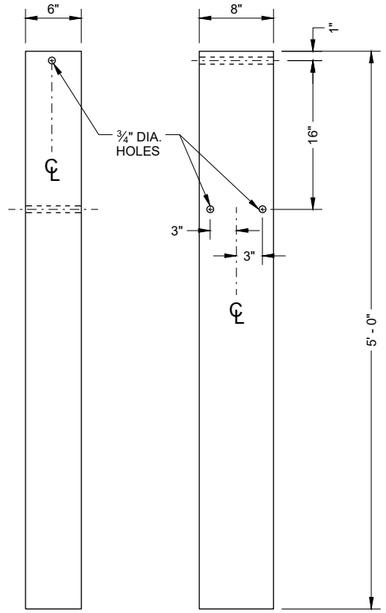
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

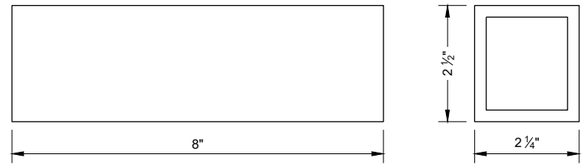
GENERAL NOTES

500 SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

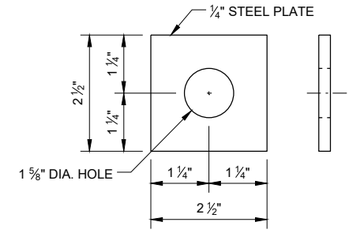
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

502 LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

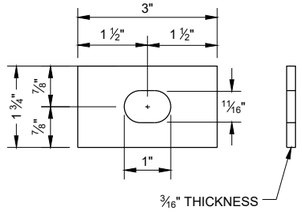
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



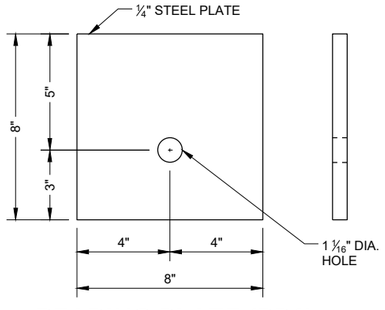
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



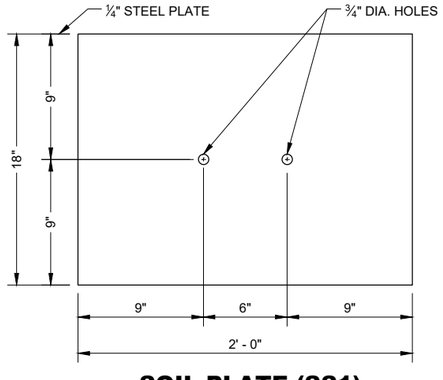
ANCHOR CABLE TUBE END PLATE (QQ3)



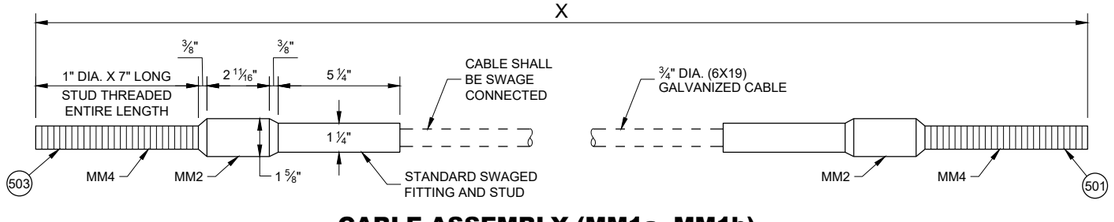
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 01f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 14B53 - 01g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

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SDD 14B53 - 01i

SDD 14B53 - 01i

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

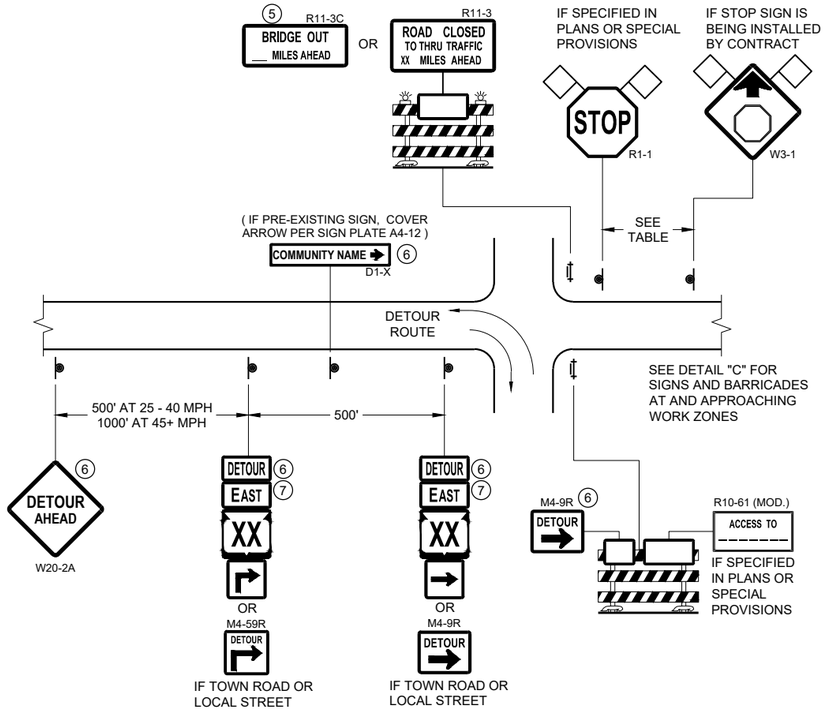
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

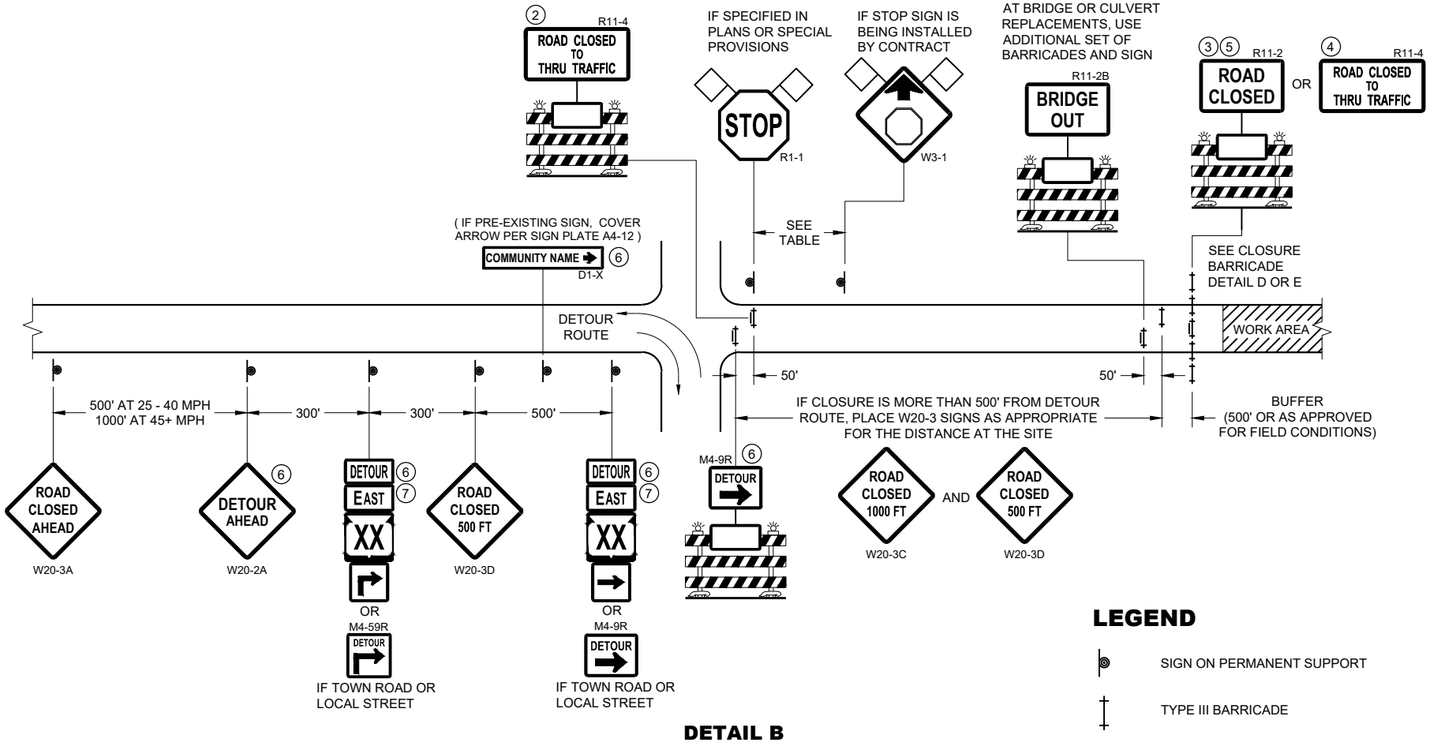
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



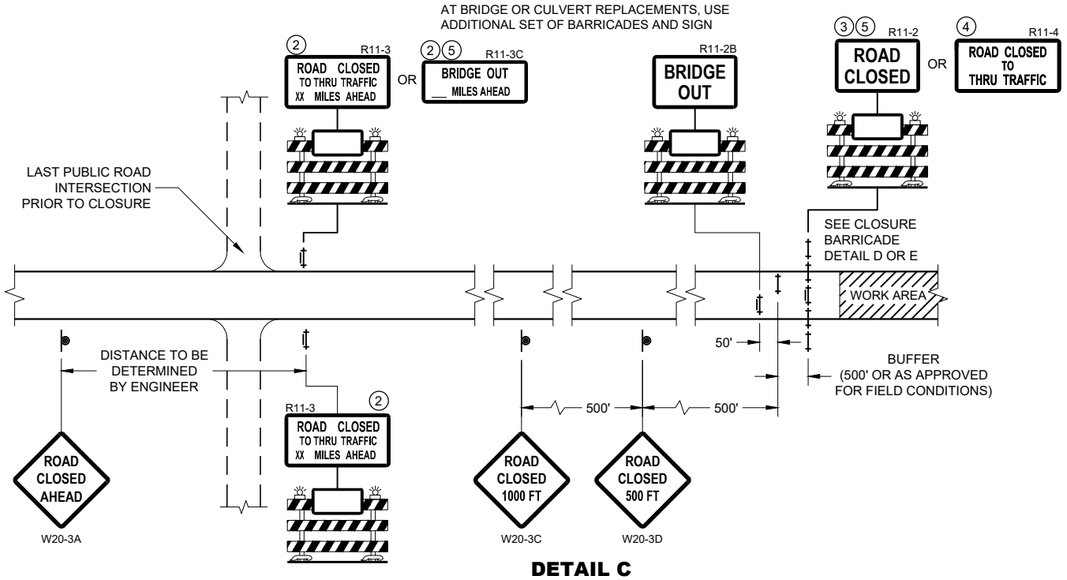
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

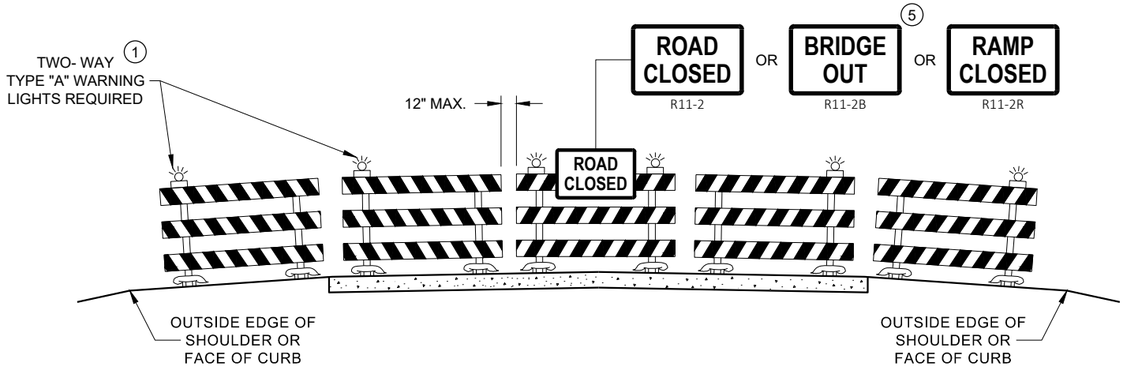
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

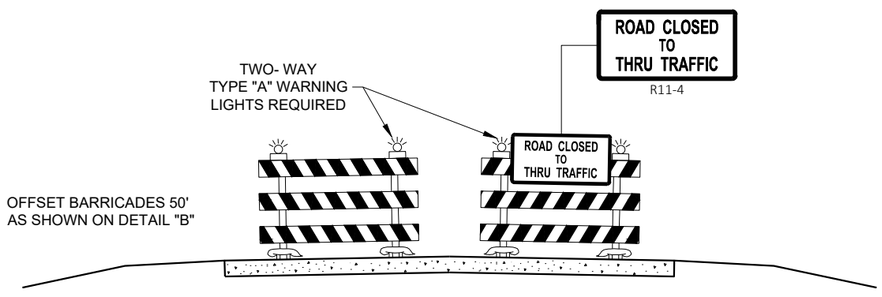
FHWA

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

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SDD 15C02 - 08b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

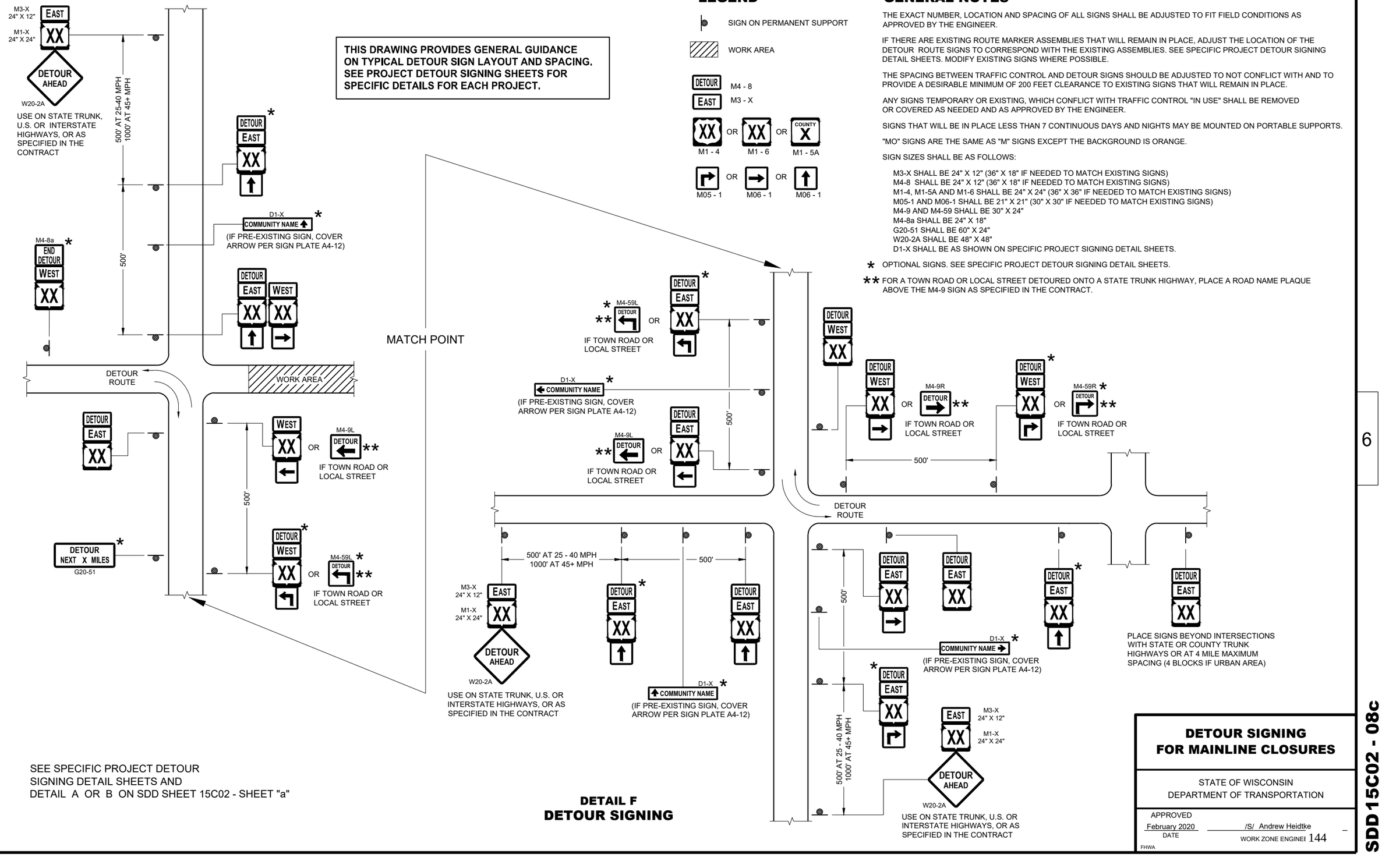
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

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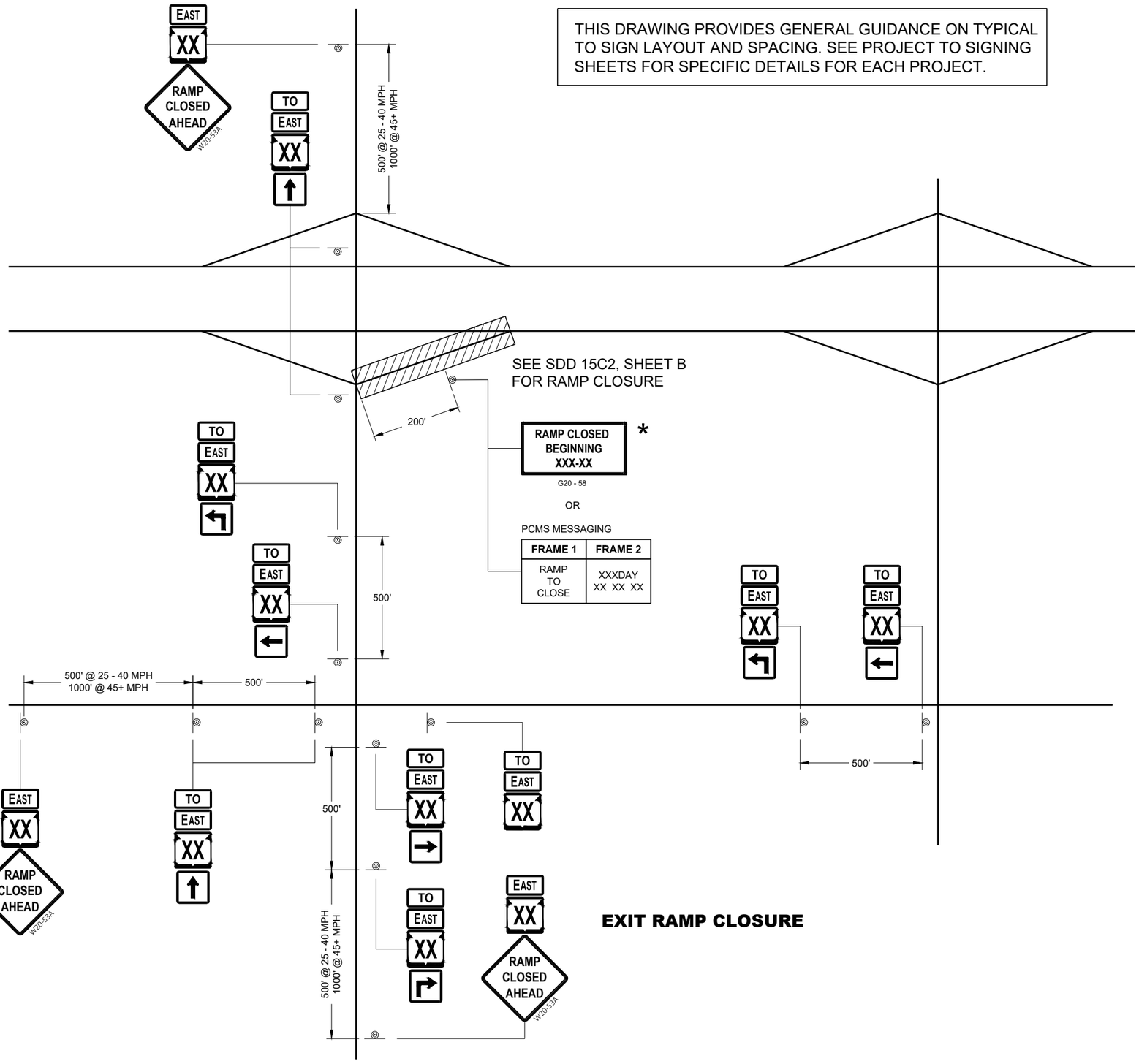

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

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

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

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

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

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

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

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

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

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

EXIT RAMP CLOSURE

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15C02 - 08d

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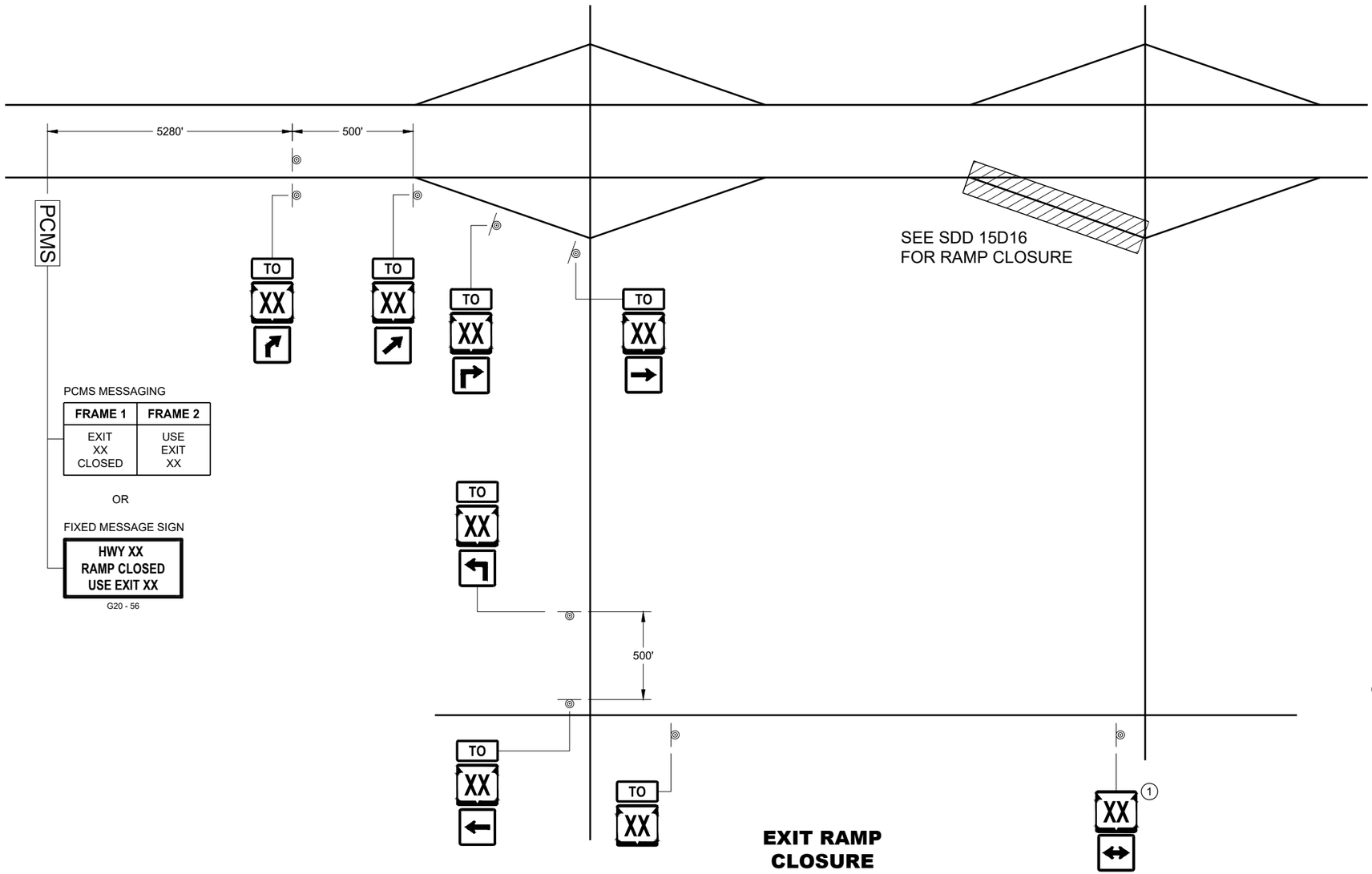
SDD 15C02 - 08d

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



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

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

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

GENERAL NOTES

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

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

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

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

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

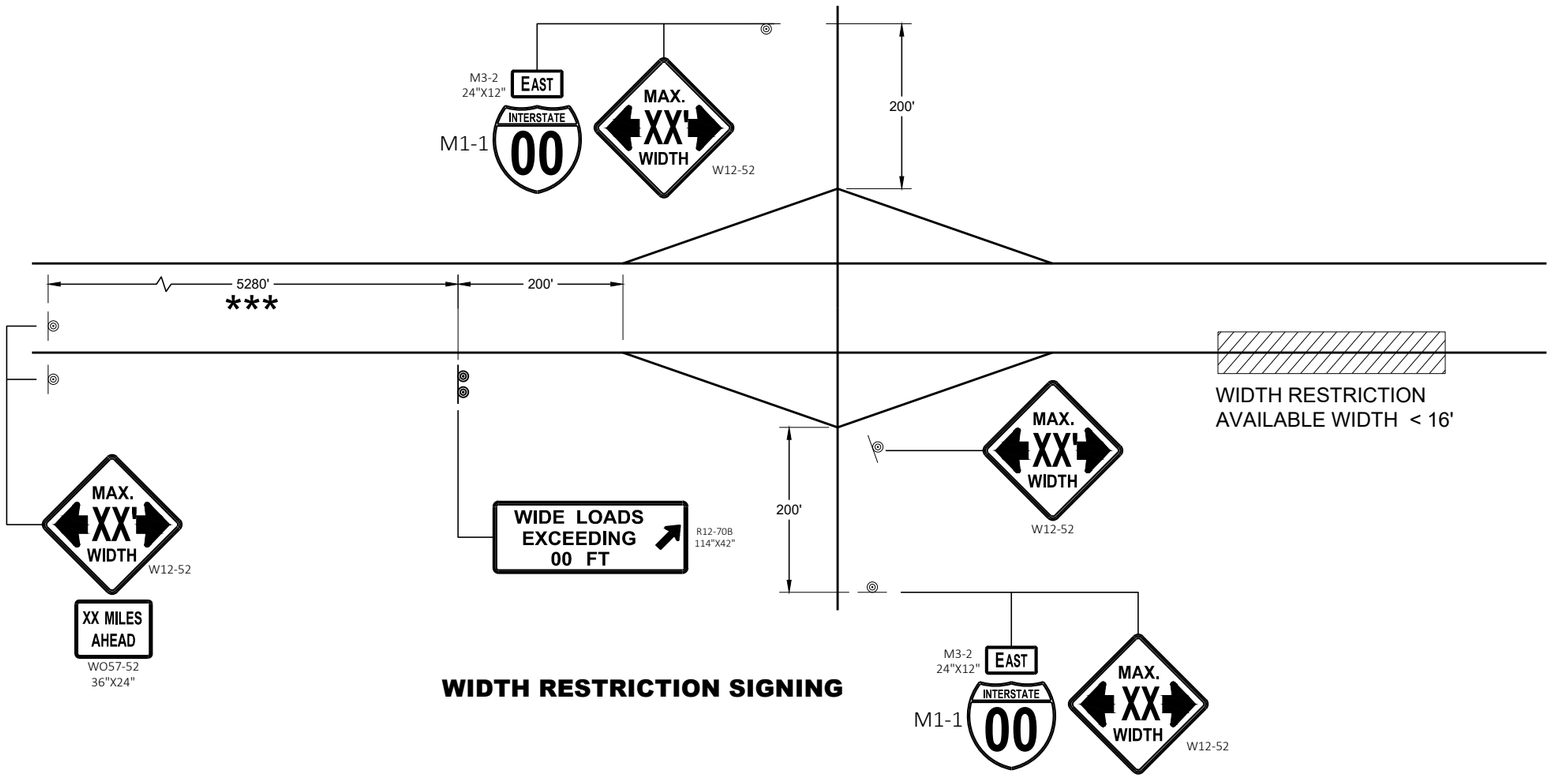
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15C02 - 08e

SDD 15C02 - 08e



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

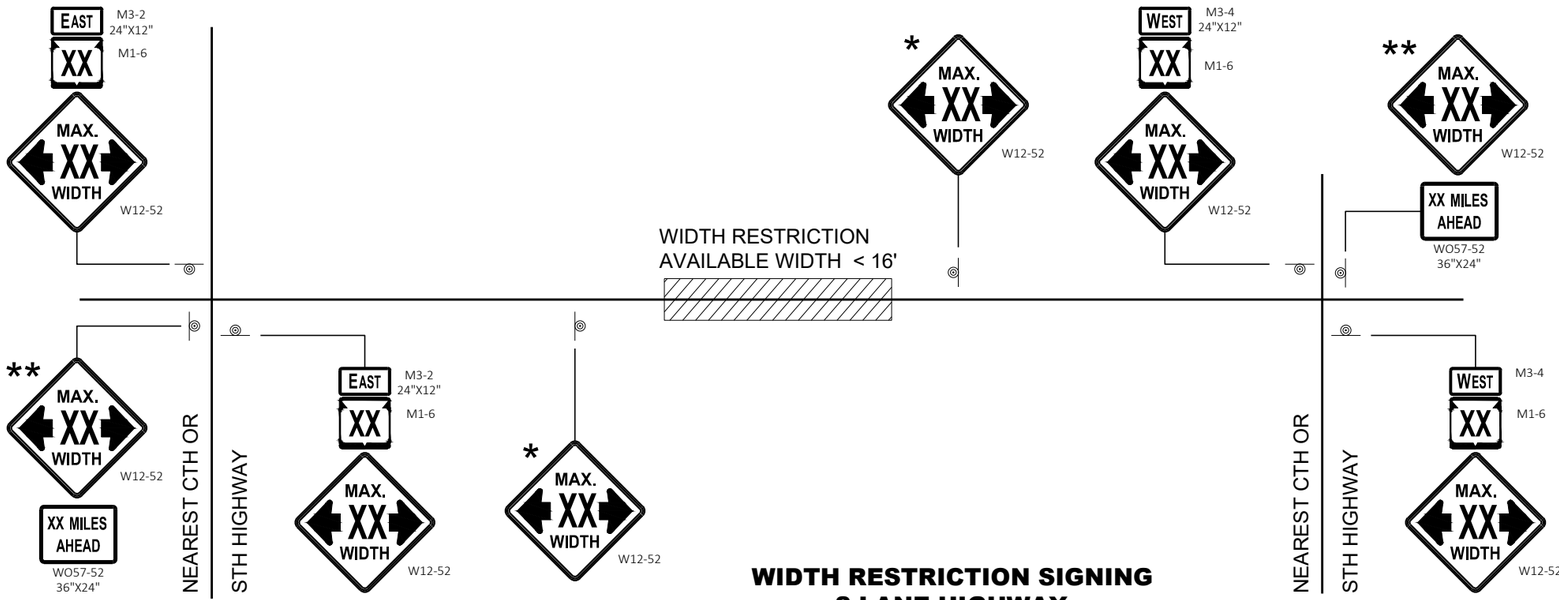
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

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

** SIGN SHALL BE VISIBLE FROM ROADWAY.

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

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



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

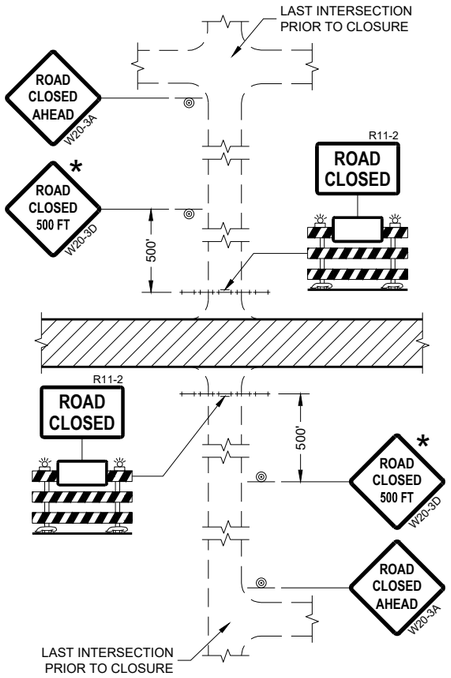
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

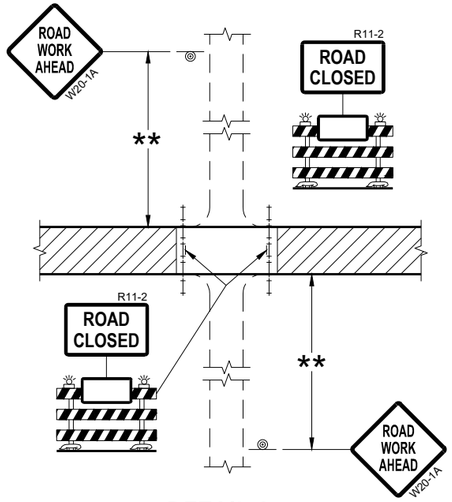
FHWA

6

SDD 15C02 - 08f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

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

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

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

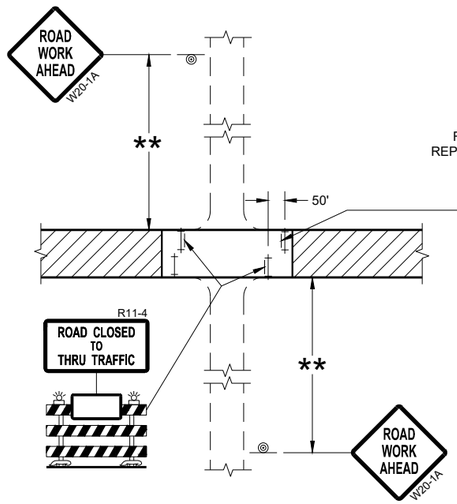
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

GENERAL NOTES

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

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

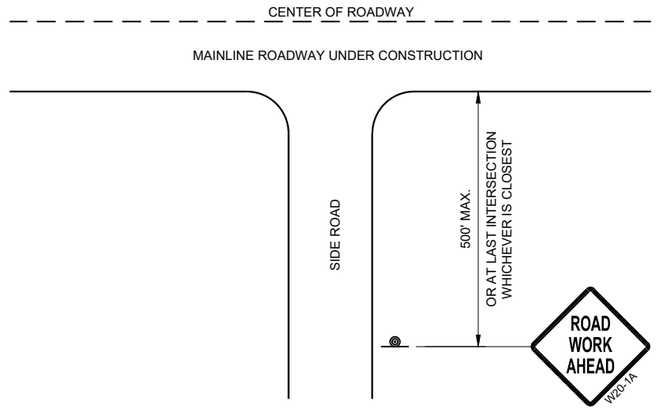
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



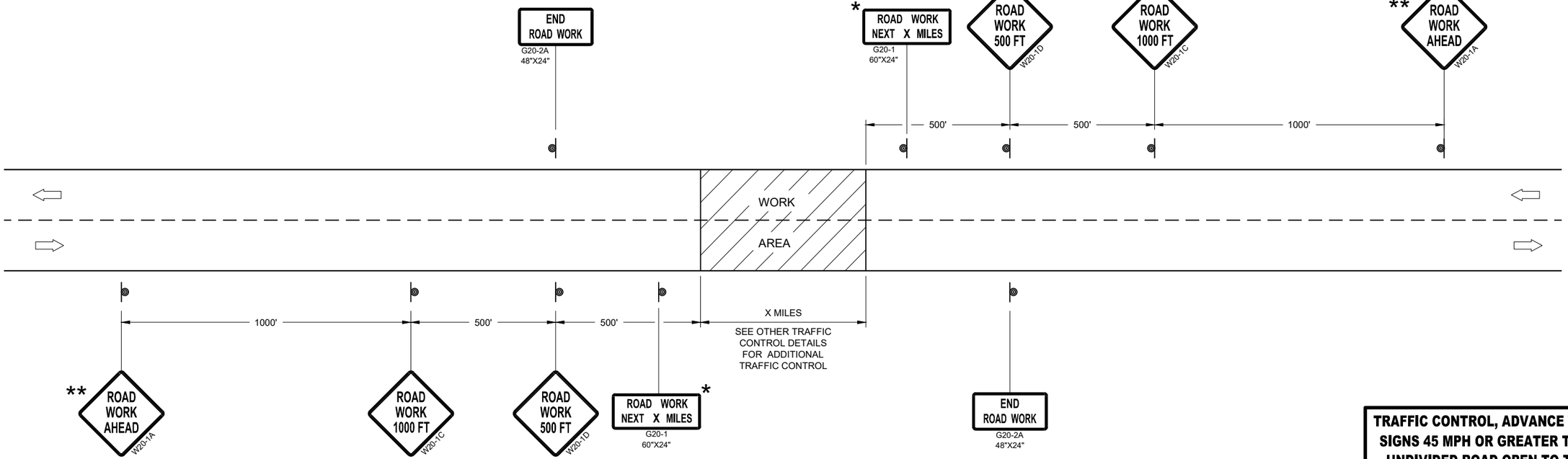
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

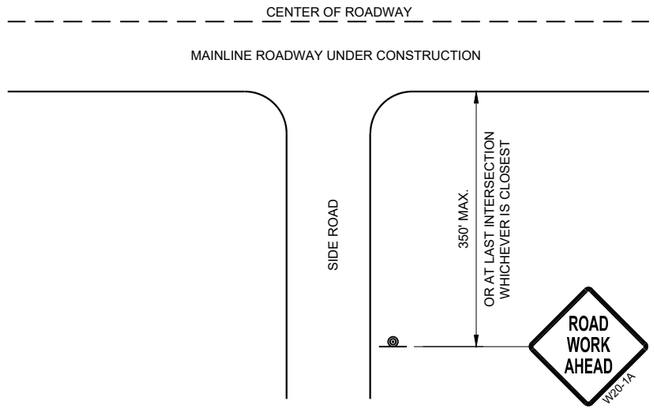
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



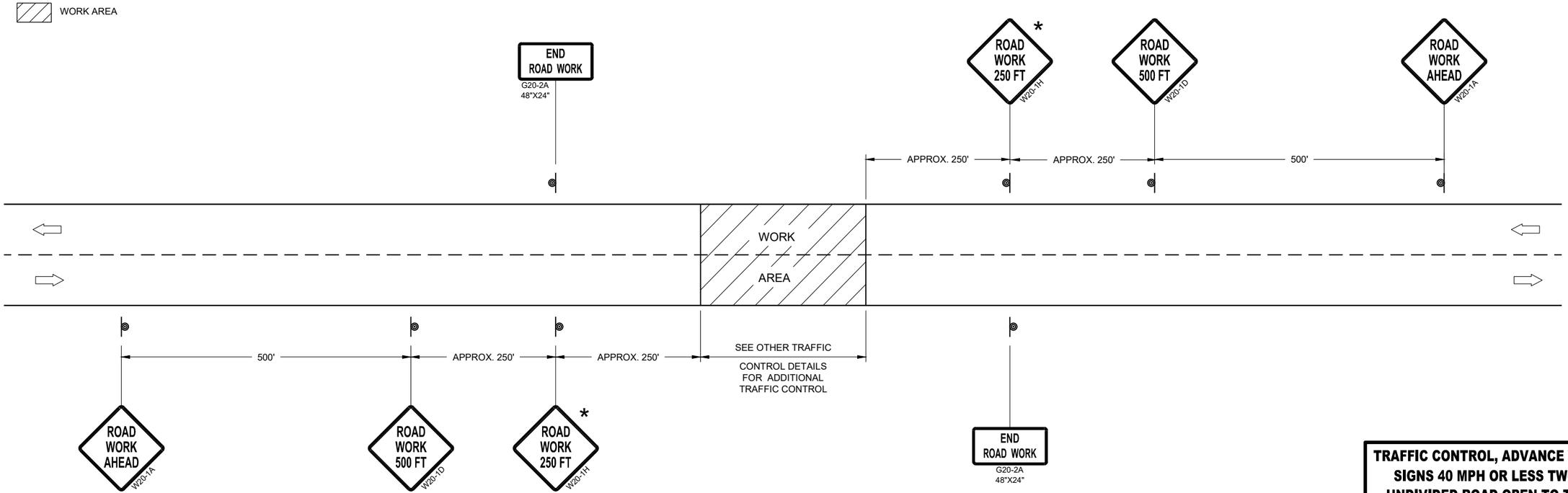
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

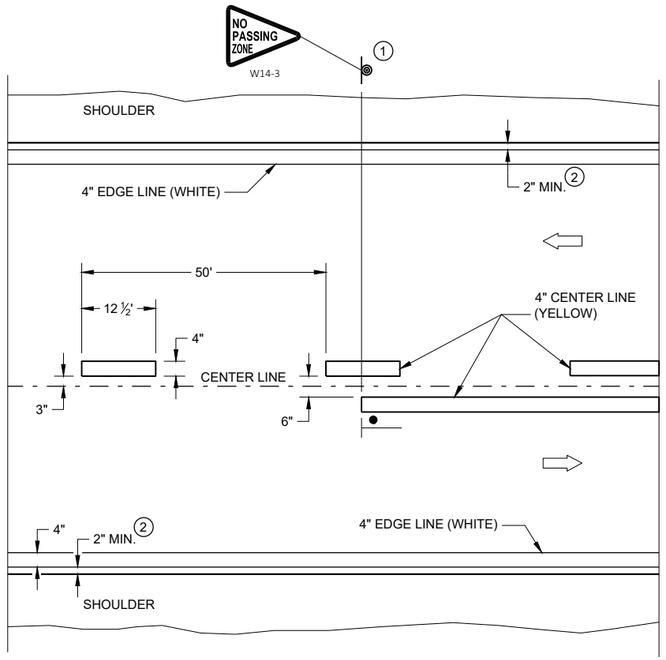
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

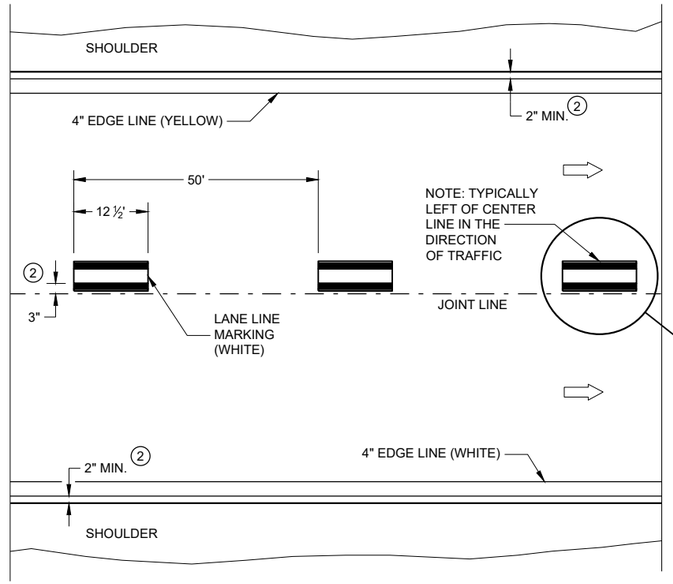
FHWA

6

SDD 15C05 - 05

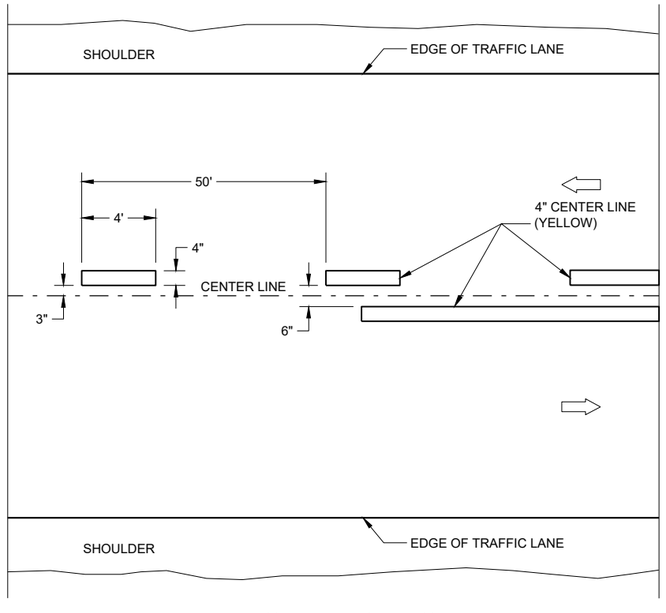


TWO WAY TRAFFIC

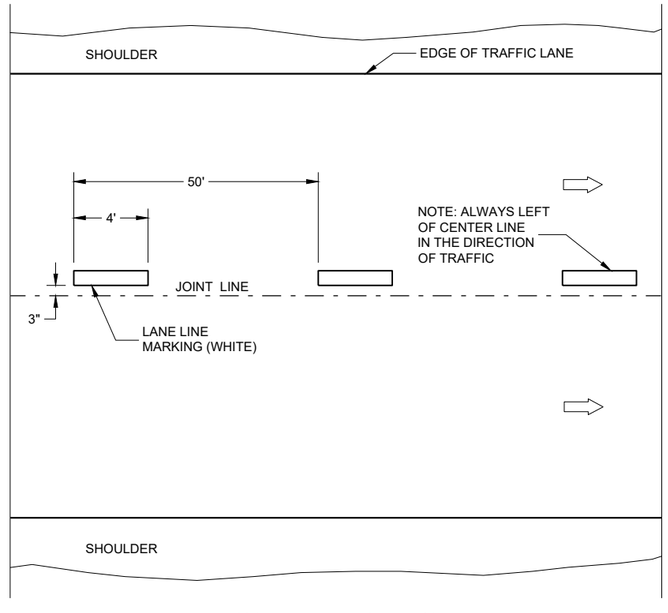


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

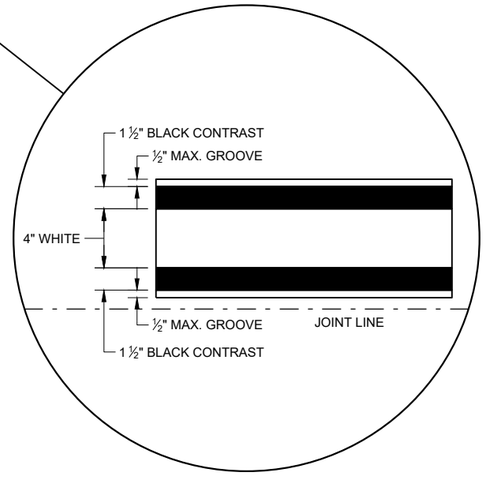
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

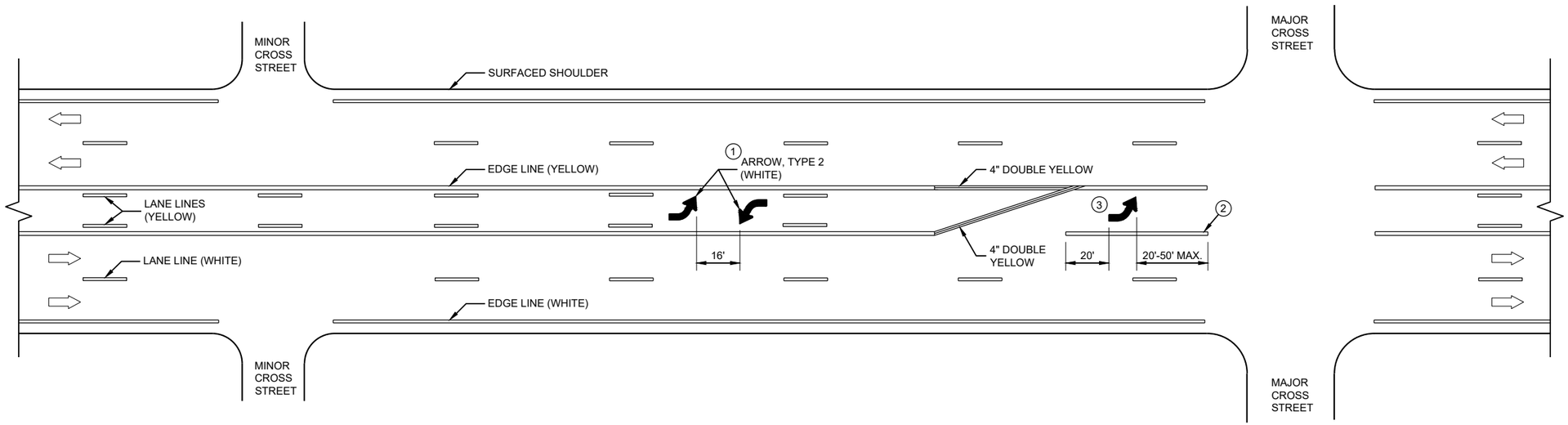
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

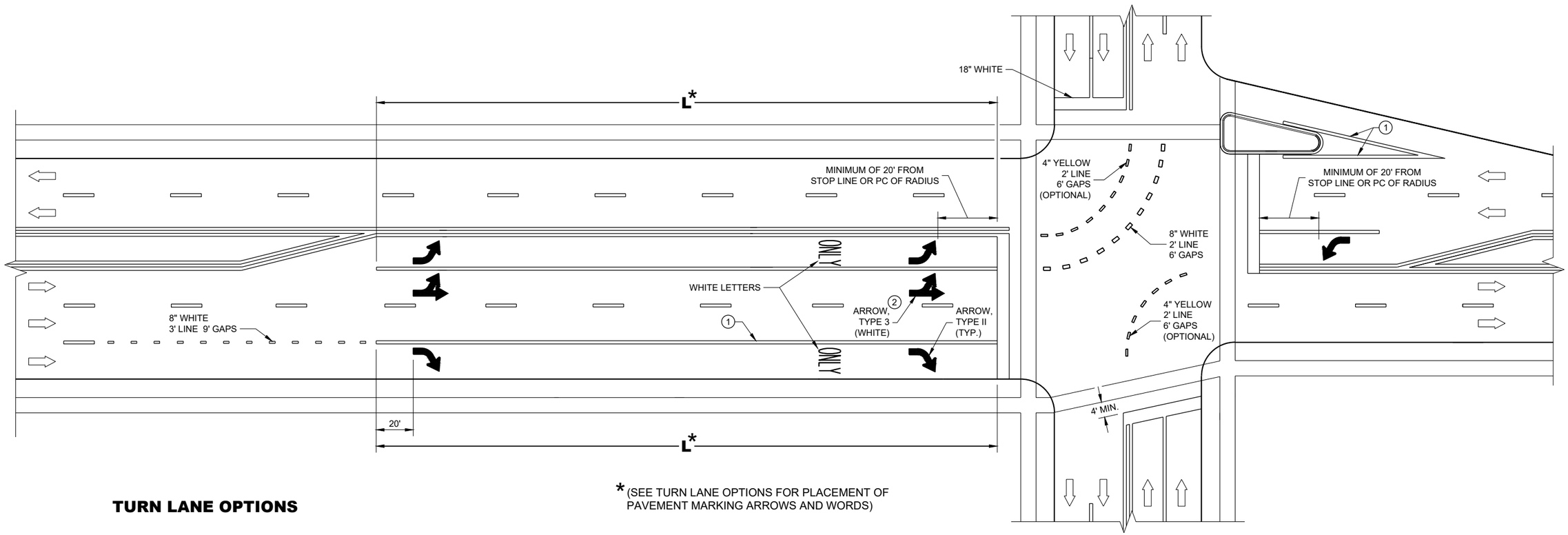
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

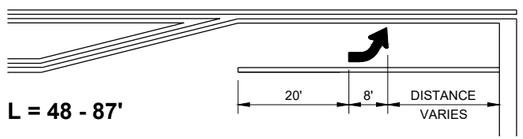
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



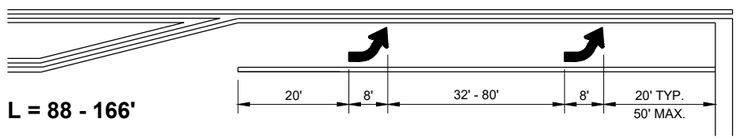
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

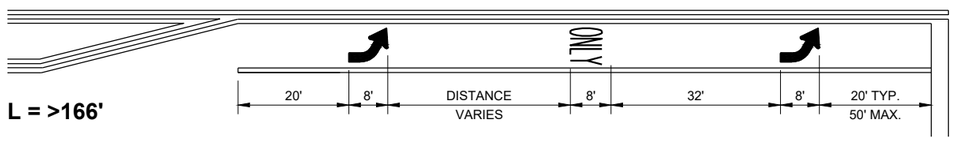
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

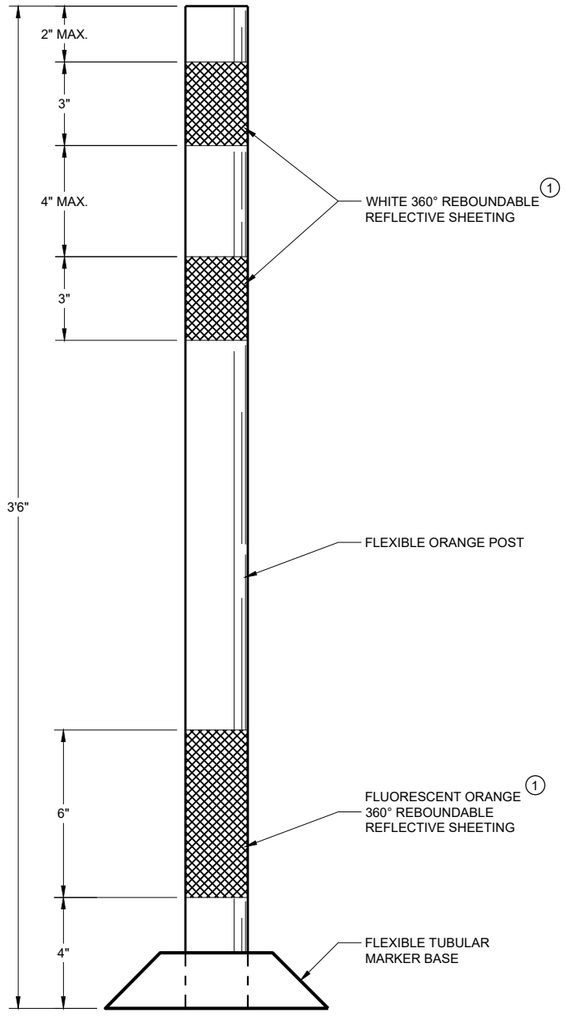
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c

SDD 15C08 - 20c



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

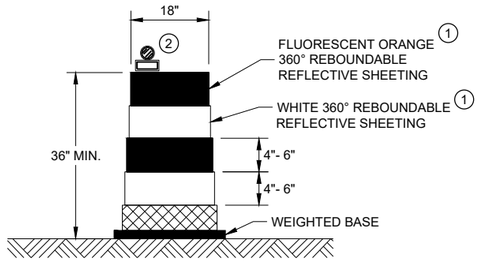
FHWA

SDD 15C11 - 09a

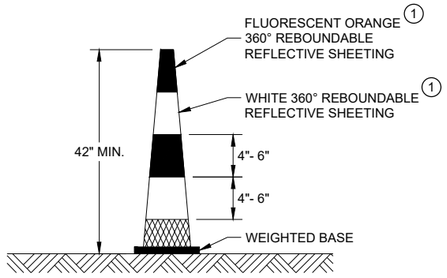
GENERAL NOTES

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

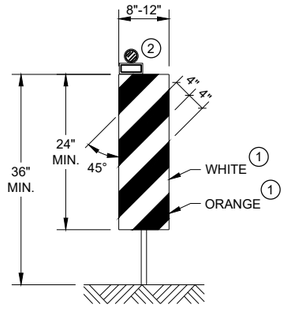


DRUM



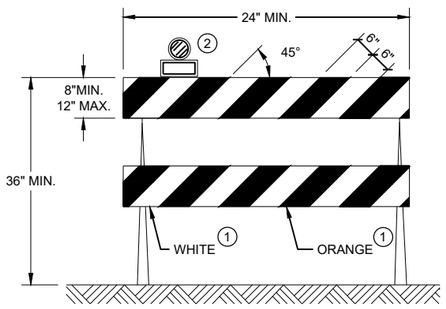
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



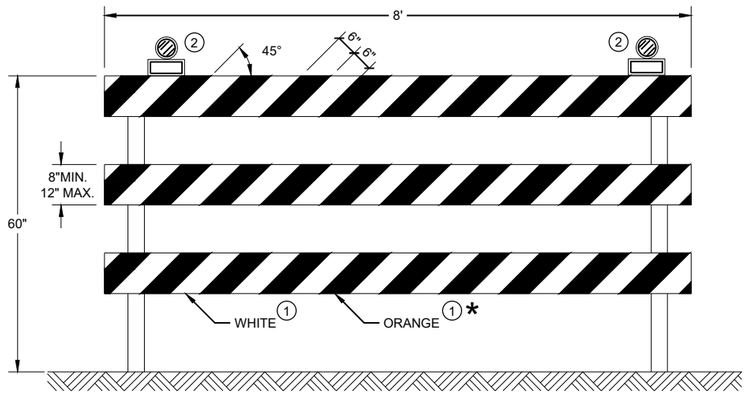
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

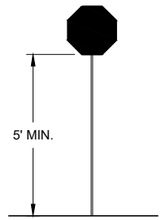
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

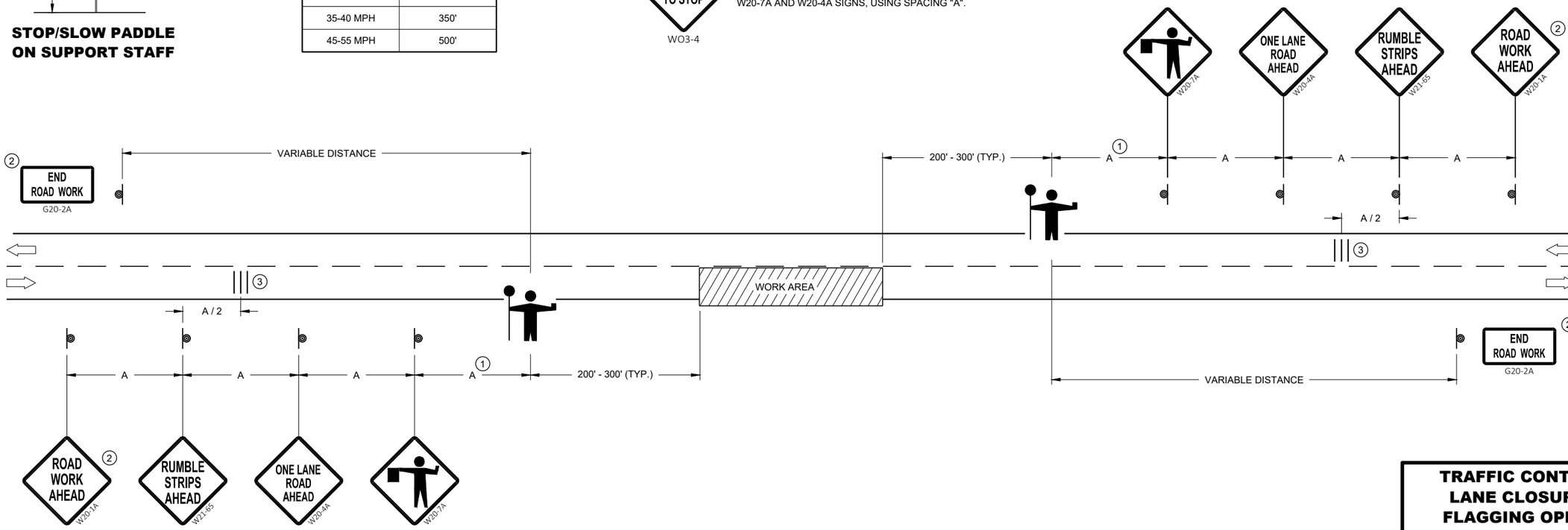
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 07

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

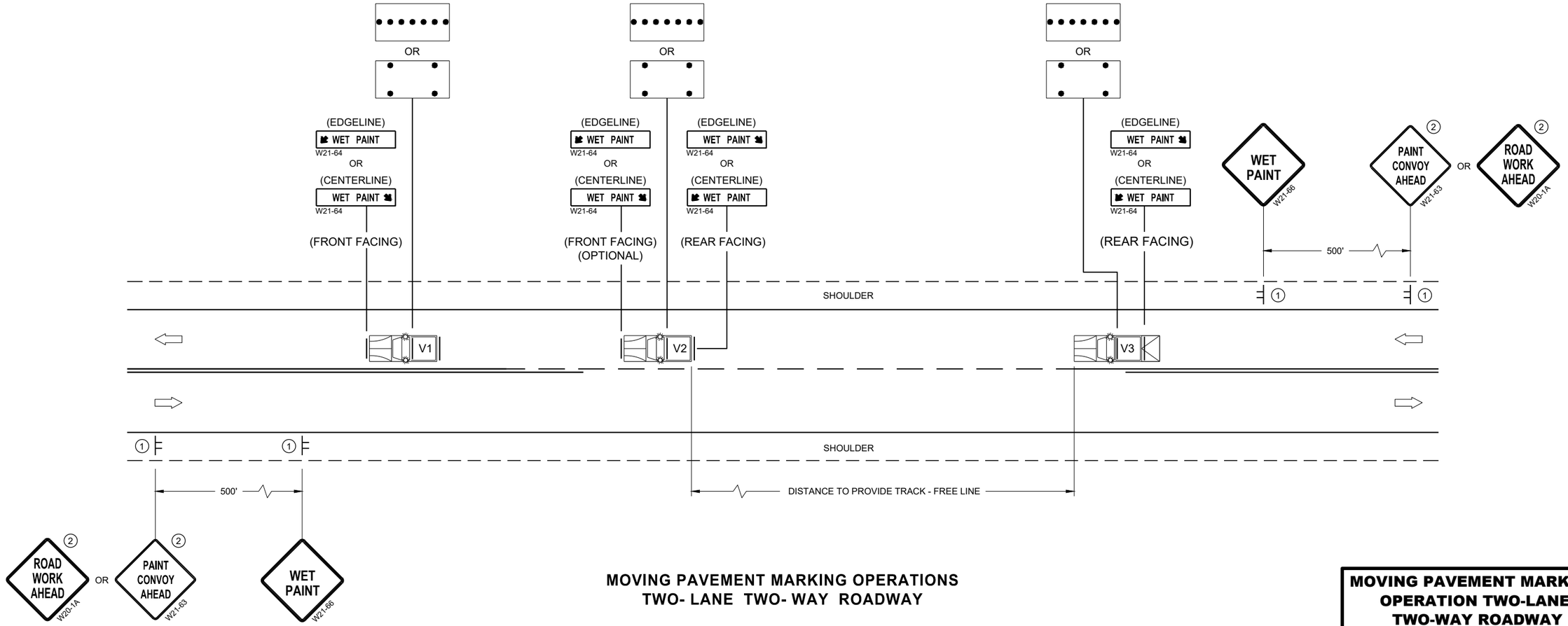
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C19 - 06a

SDD 15C19 - 06a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

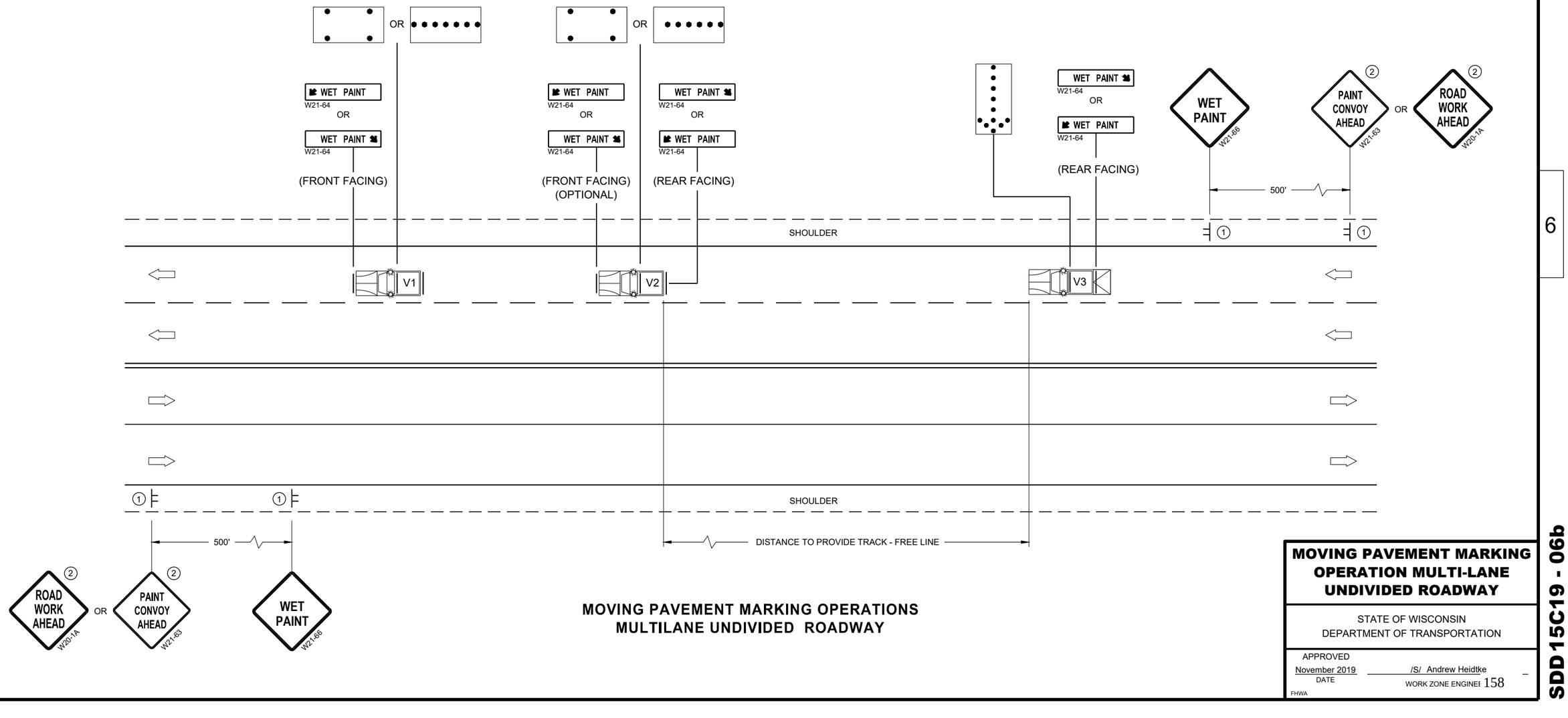
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

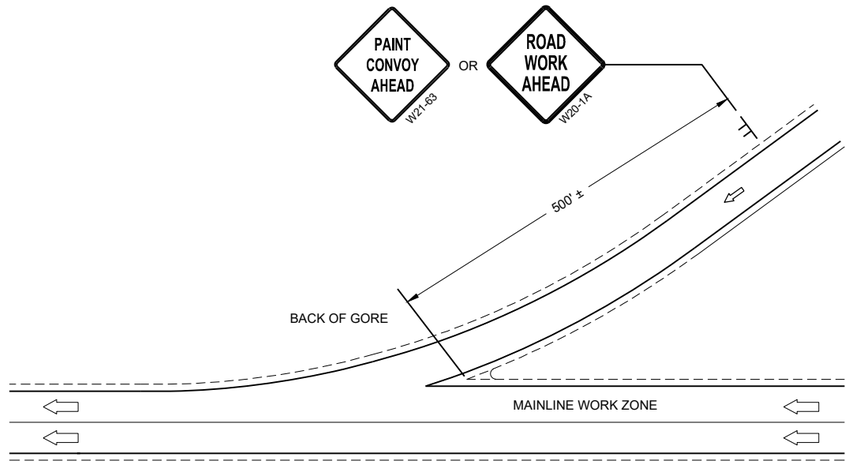
APPROVED
November 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C19 - 06b

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

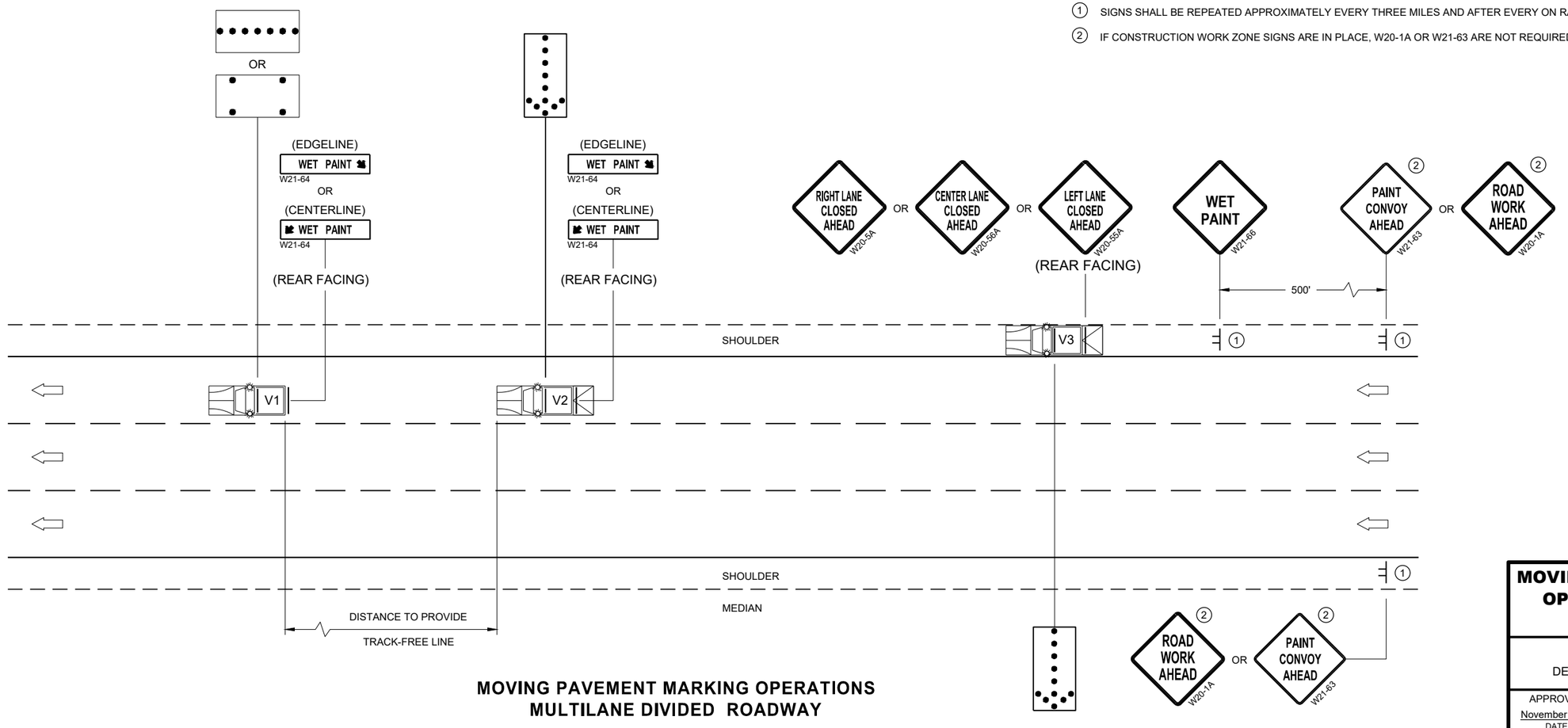
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C19 - 06c

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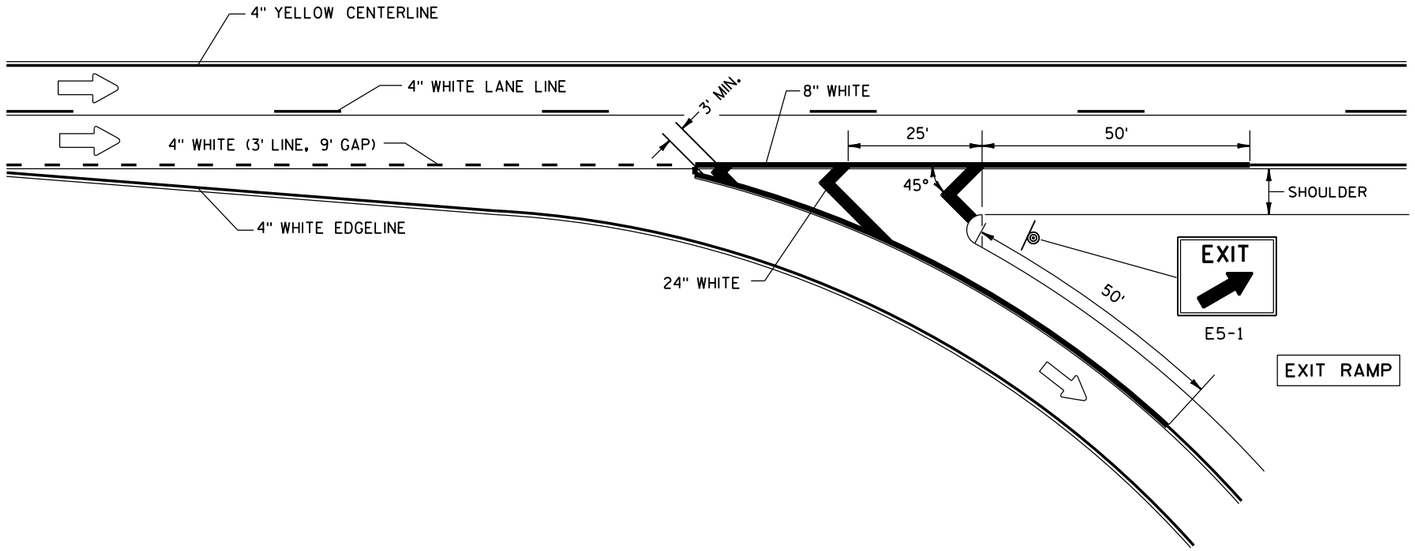
SDD 15C19 - 06c



PAVEMENT MARKING FOR EXIT RAMP

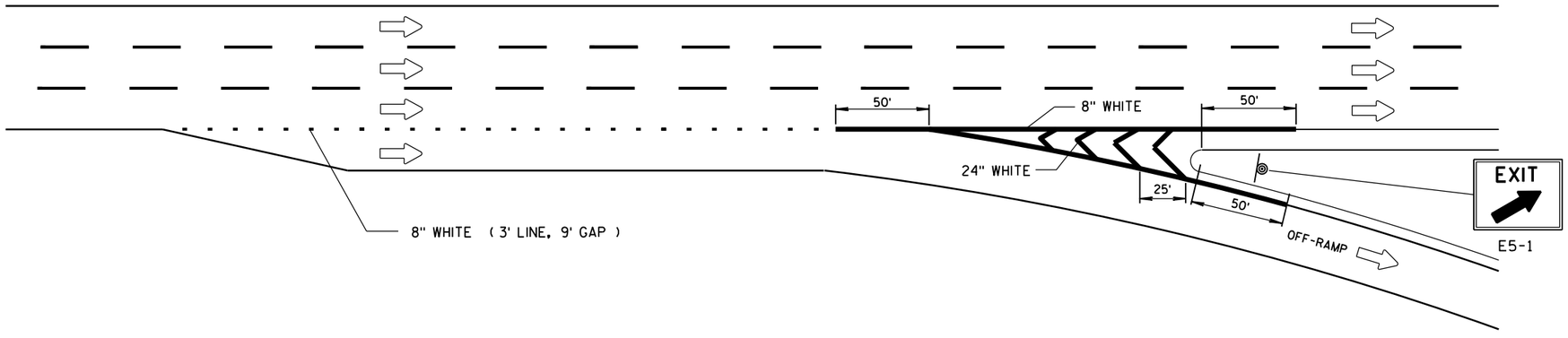
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

DIRECTION OF TRAVEL

SIGN ON PERMANENT SUPPORT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

6

S.D.D. 15 C 31-3a

PAVEMENT MARKING (RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

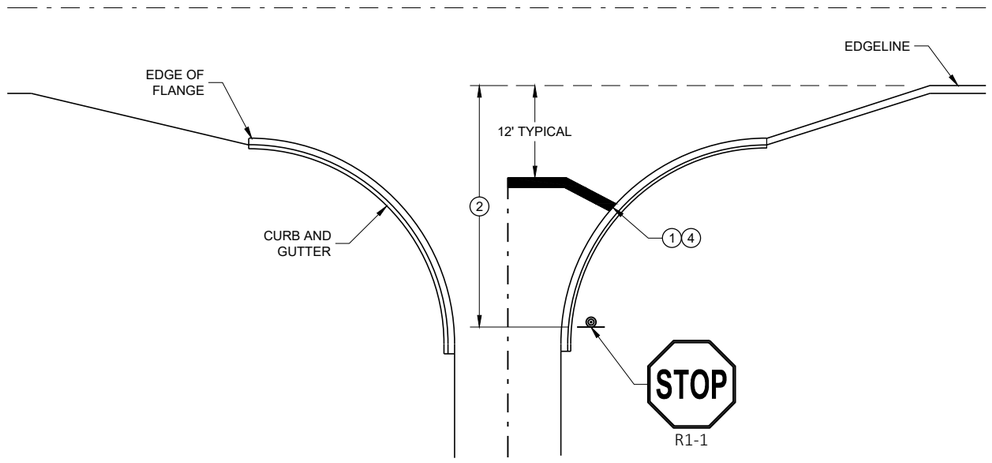
6

S.D.D. 15 C 31-3a

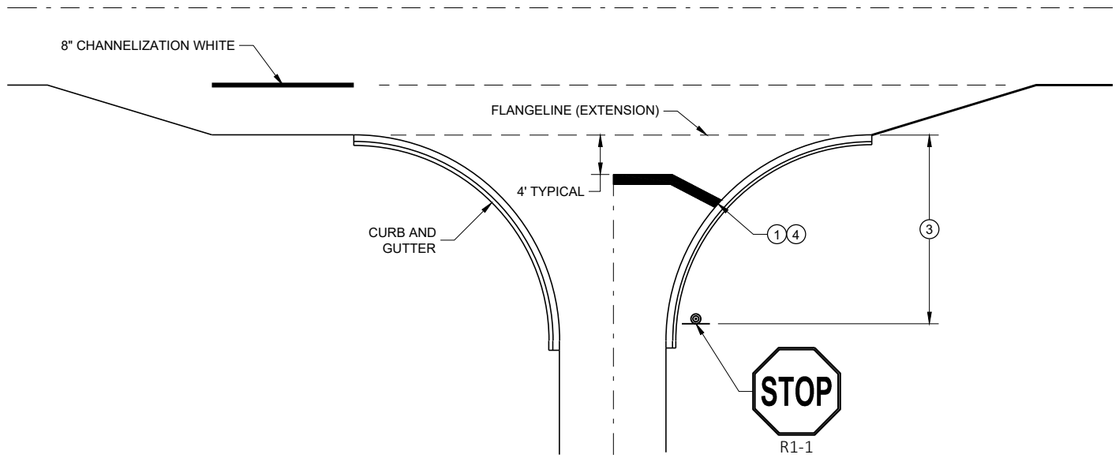
GENERAL NOTES

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

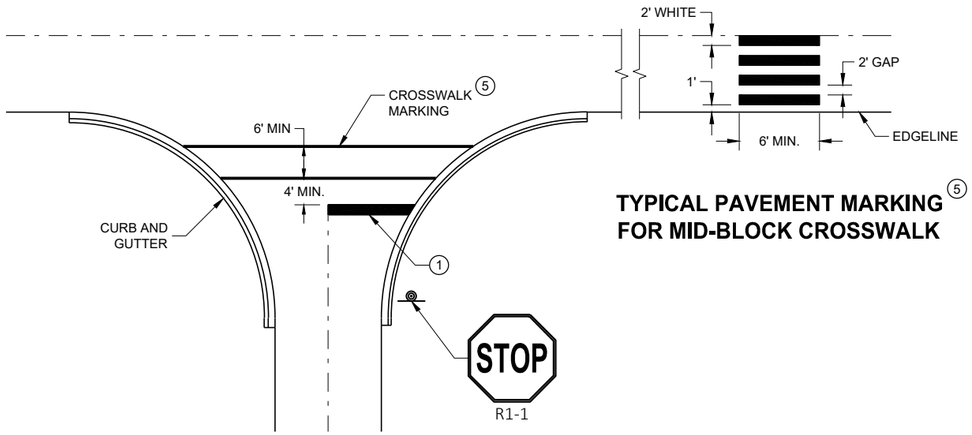
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

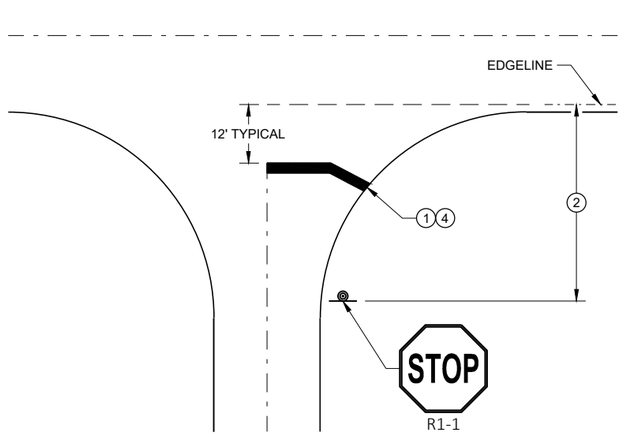


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

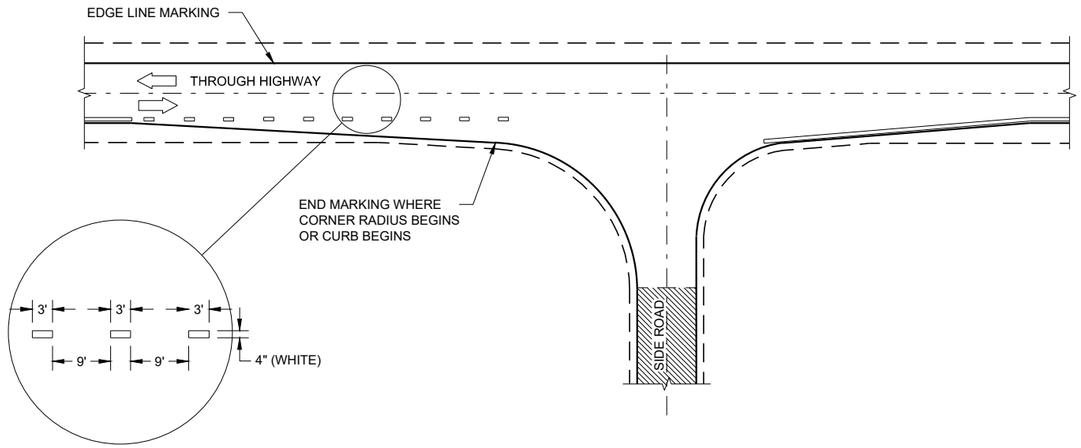
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

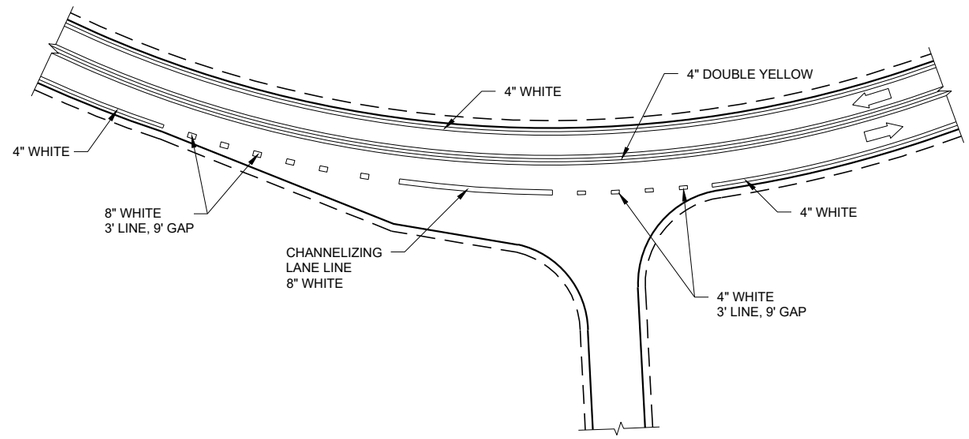
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

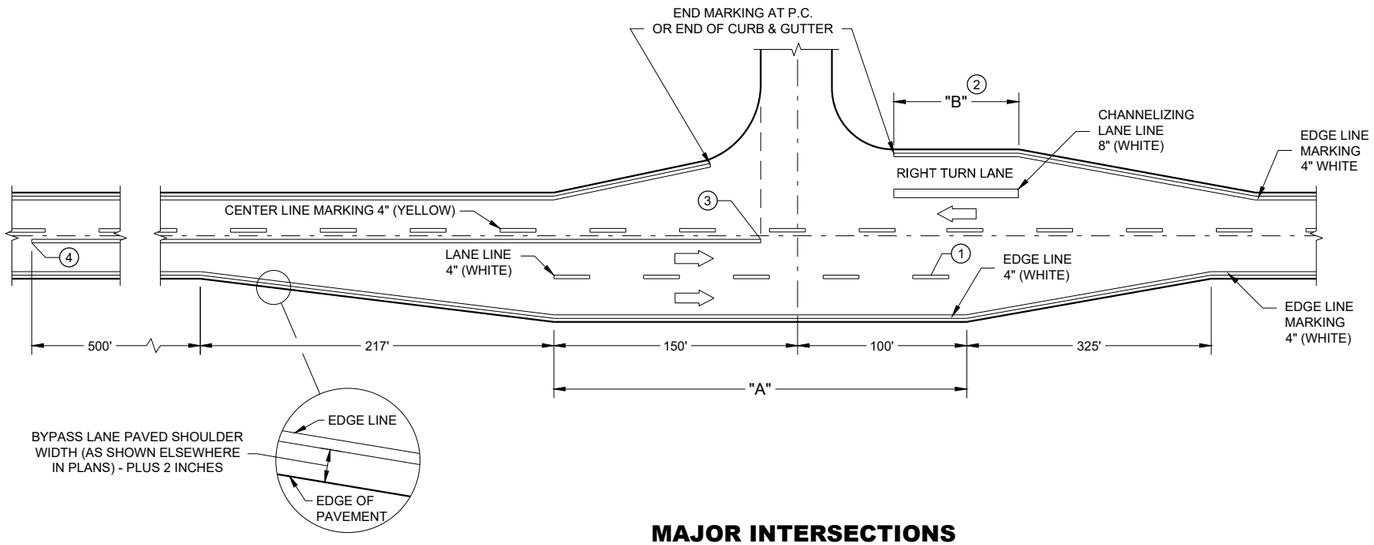
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

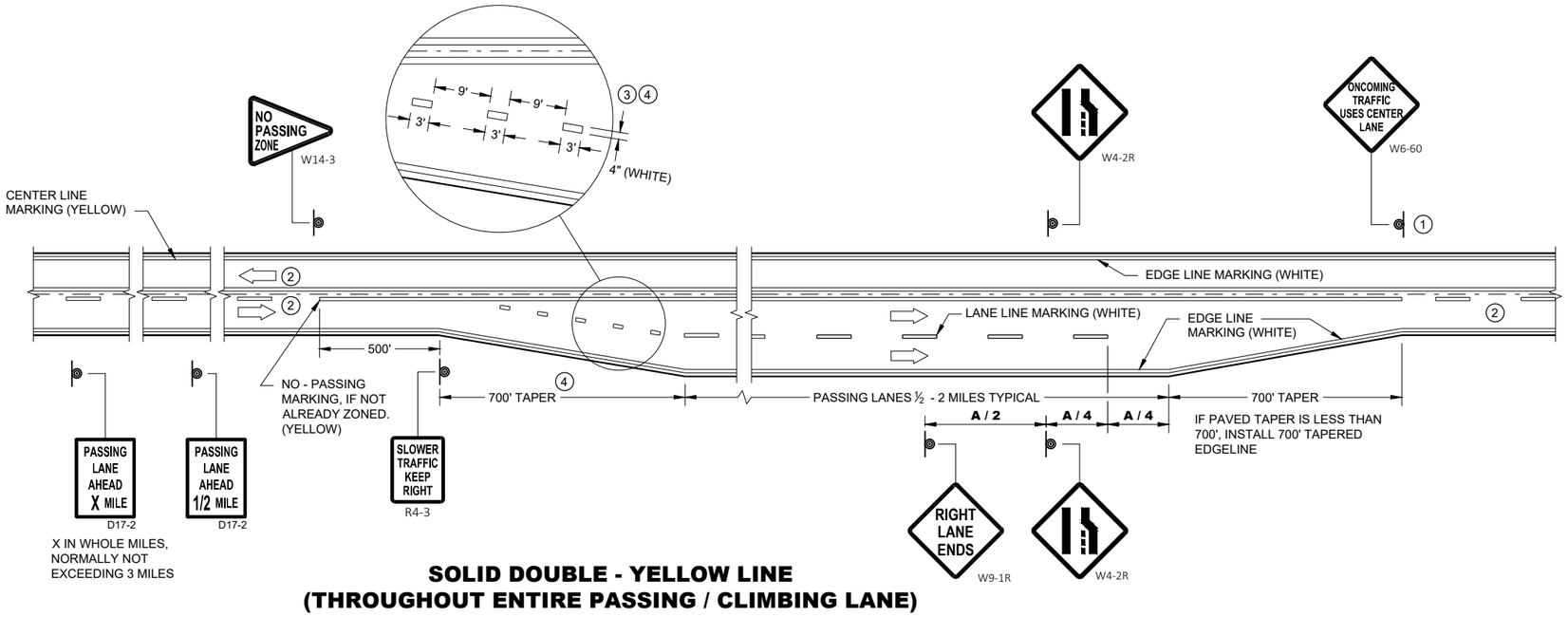
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

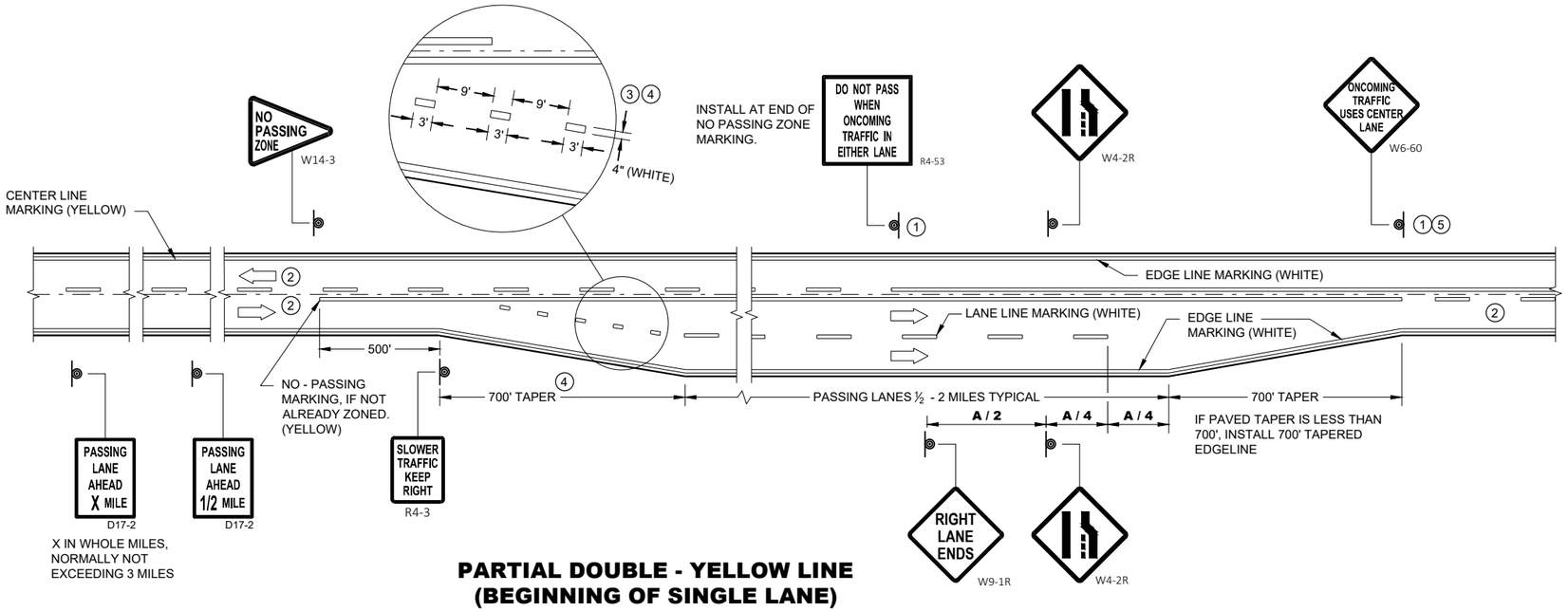
SDD 15C35 - 04a

6

SDD 15C35 - 04a



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

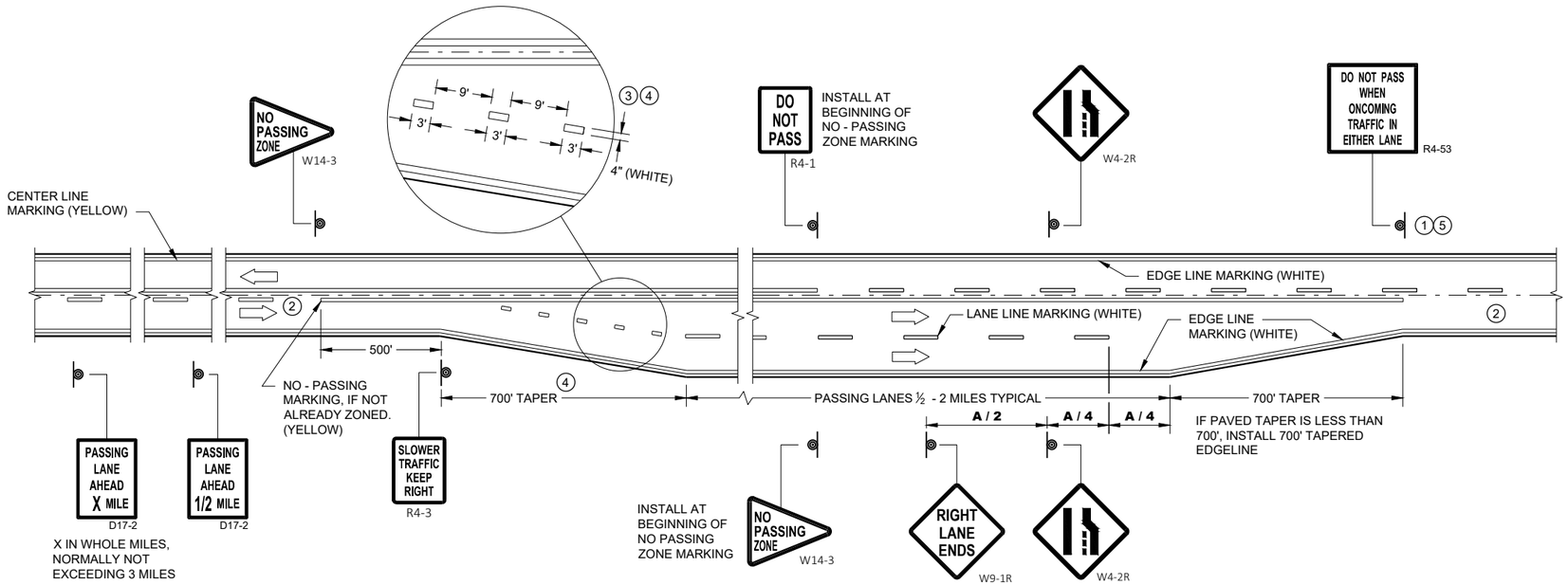
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

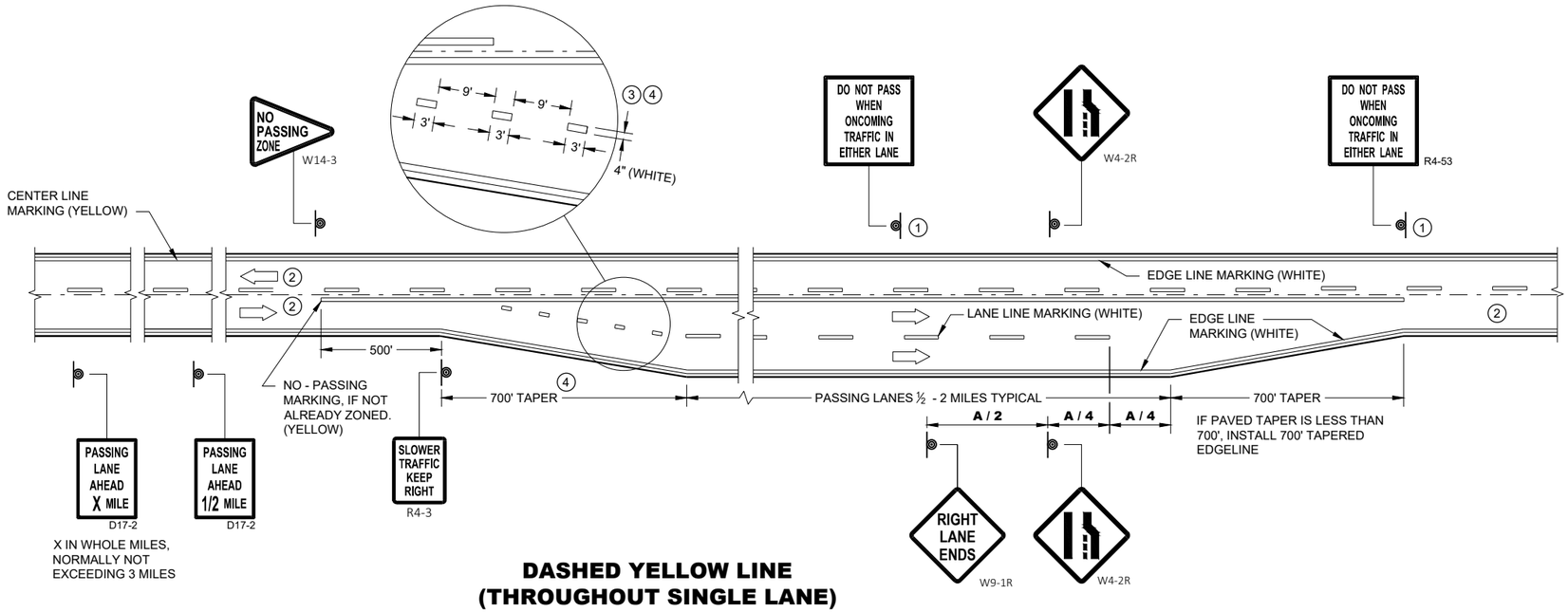
SDD 15C35 - 04b

6

SDD 15C35 - 04b



SOLID DOUBLE - YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW LINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

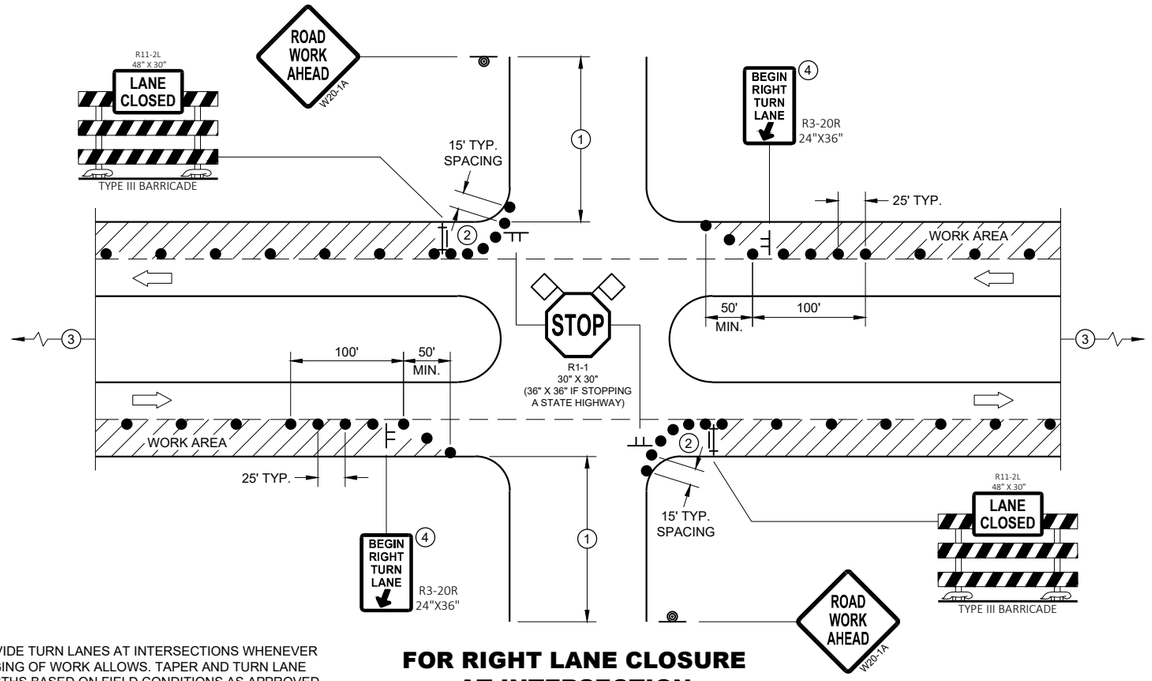
PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 15C35 - 04c

SDD 15C35 - 04c



FOR RIGHT LANE CLOSURE AT INTERSECTION

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

GENERAL NOTES

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

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

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

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

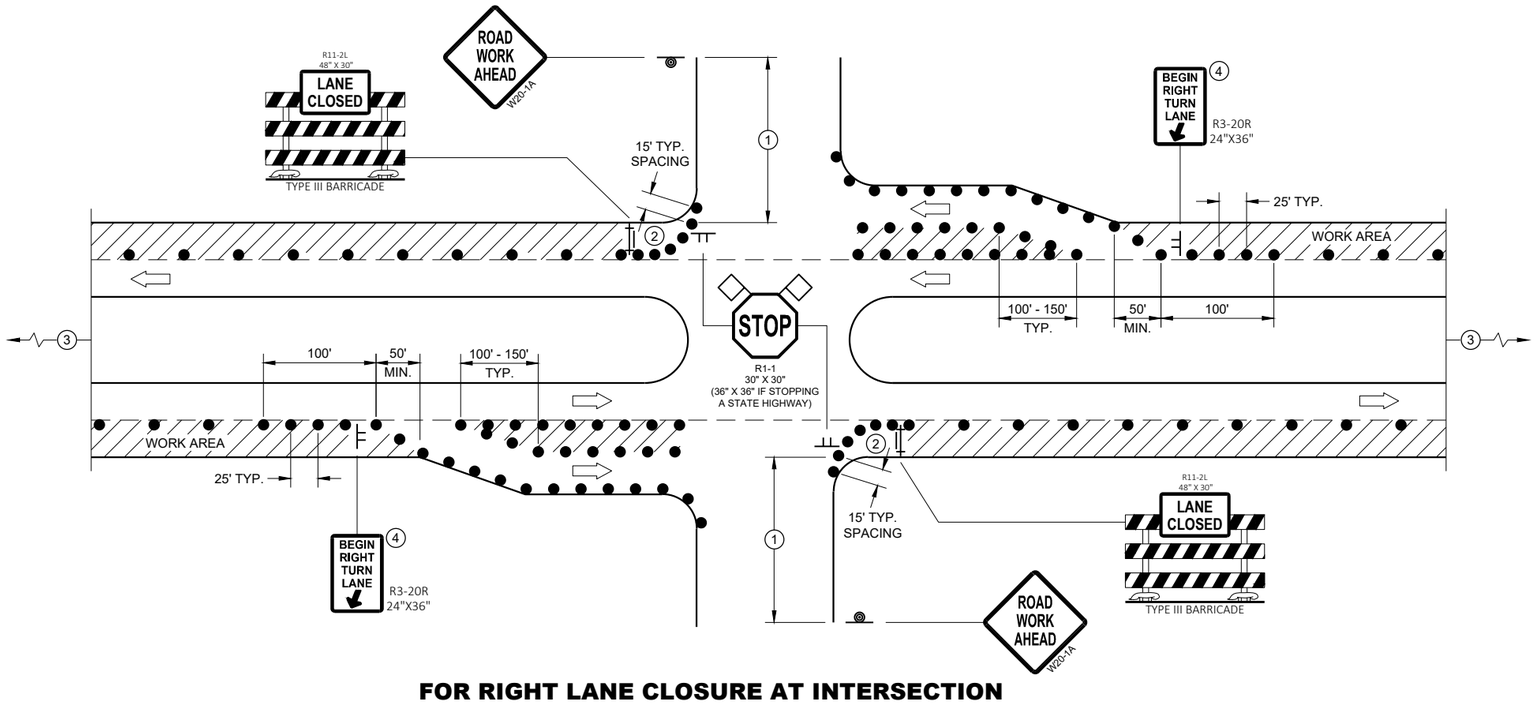
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

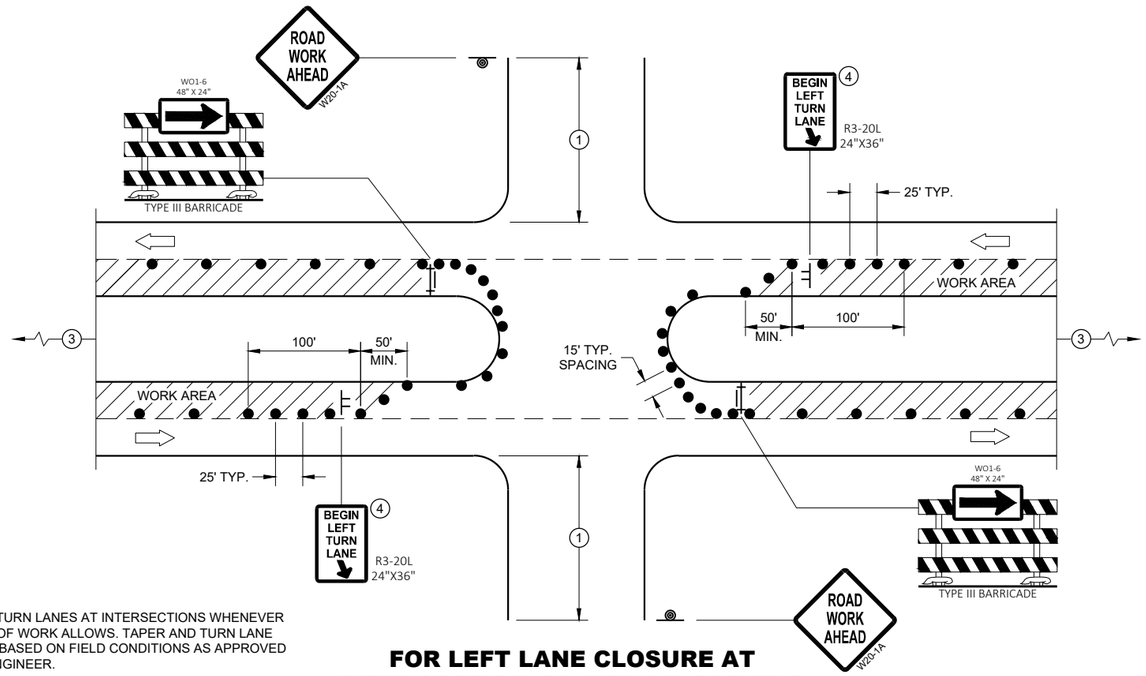


FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE



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

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

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

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

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

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

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

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

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

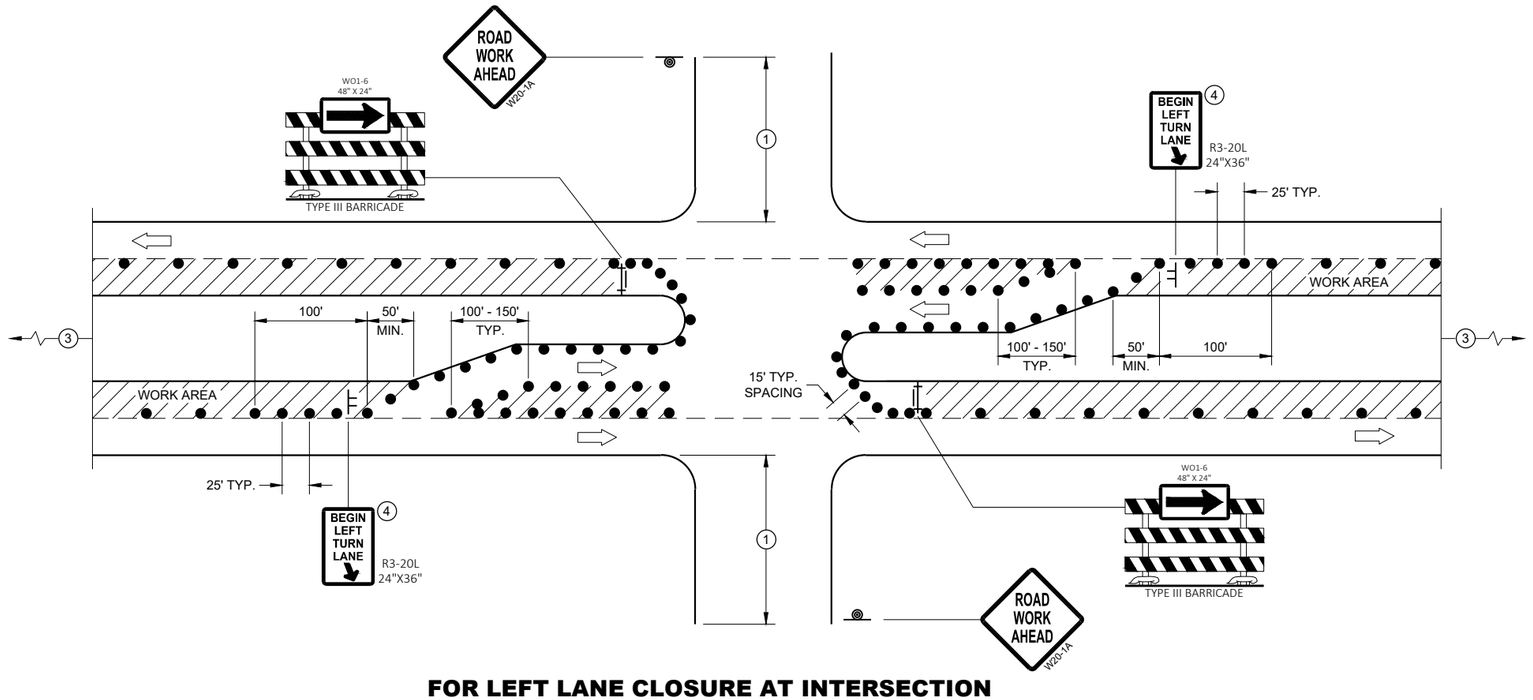
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

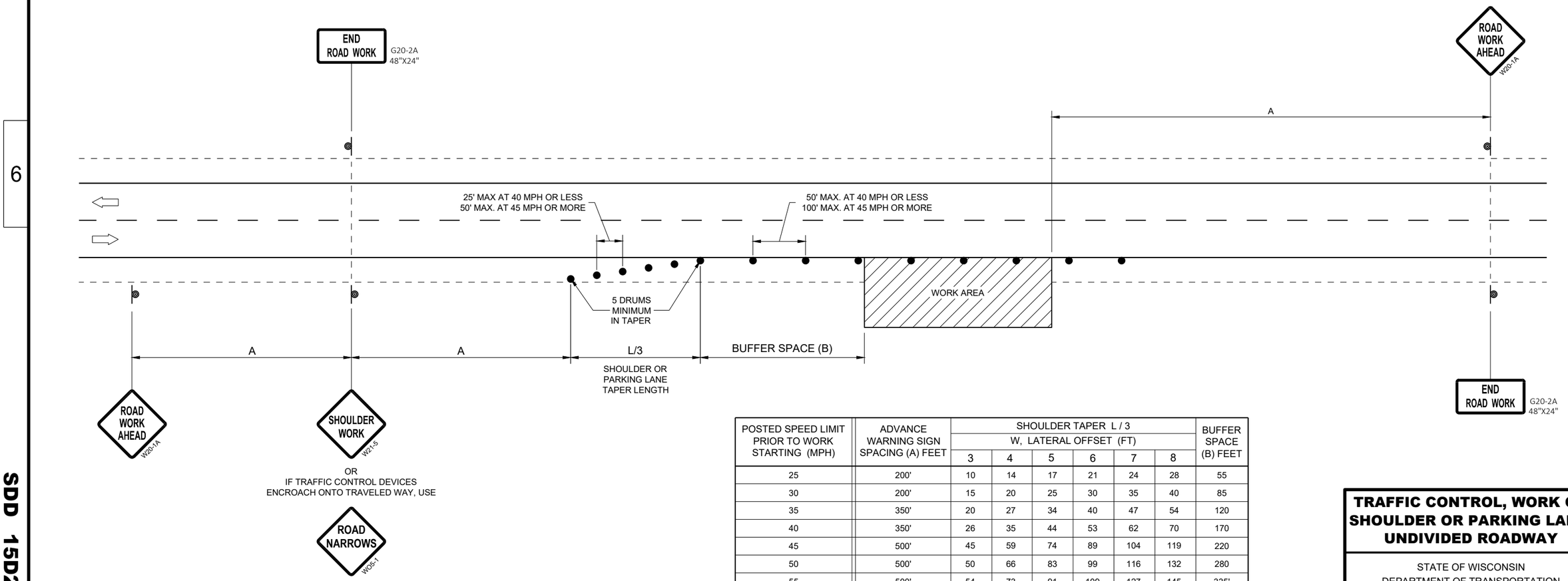
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

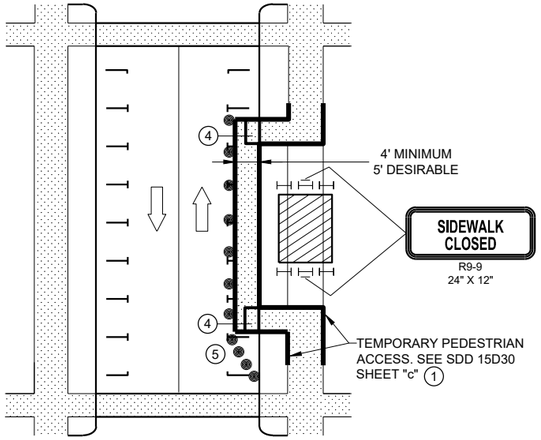
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D28 - 04

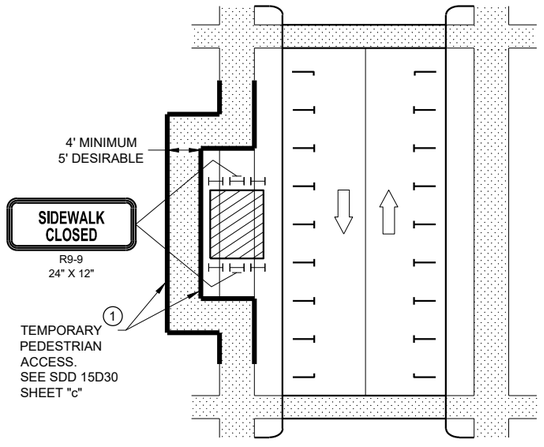
SDD 15D28 - 04

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

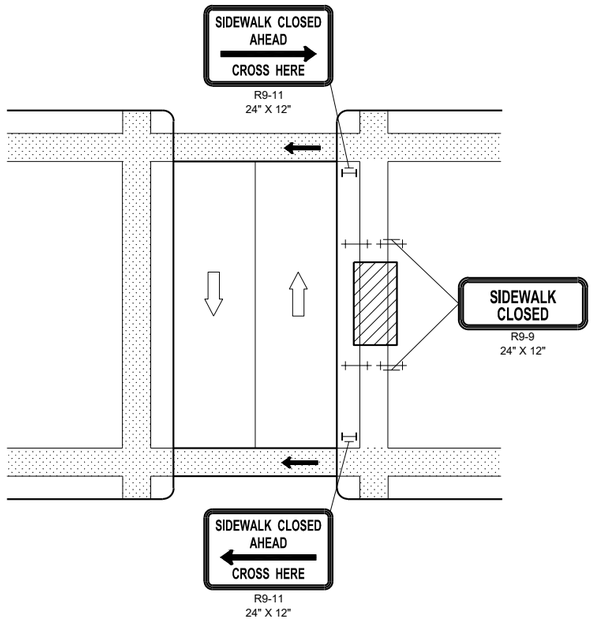


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

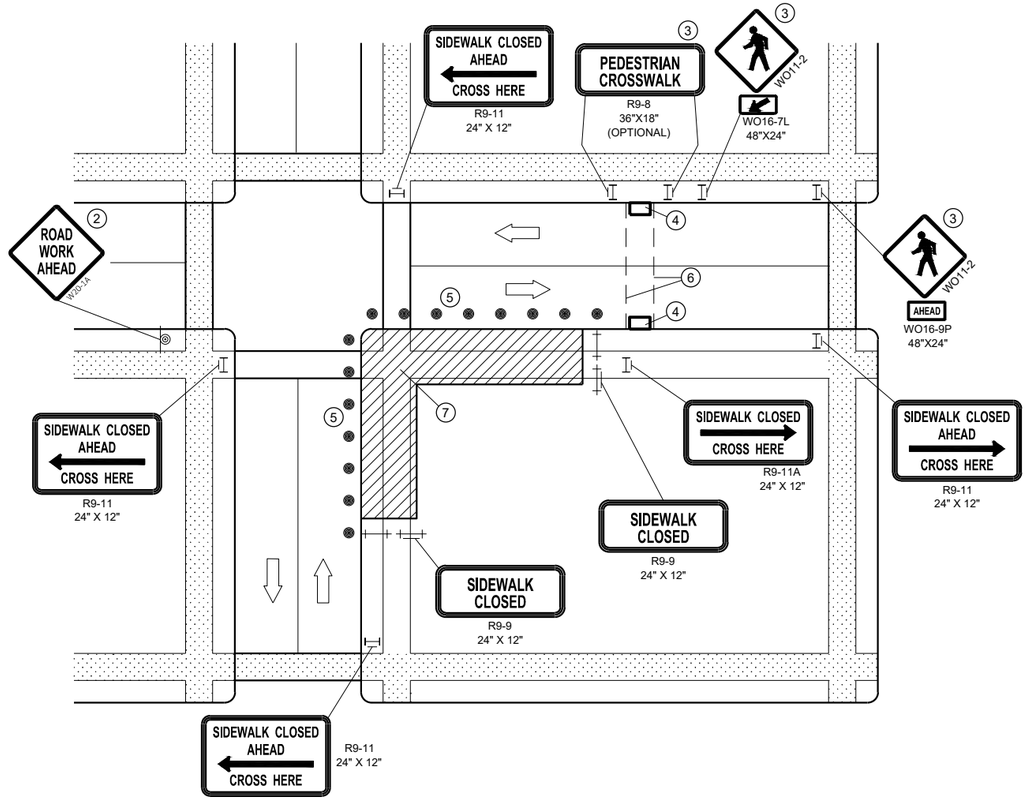
NOTE: LAYOUT SAME AS ABOVE.



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 NIGHTIME 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 BETWEEK 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 WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15D30 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.

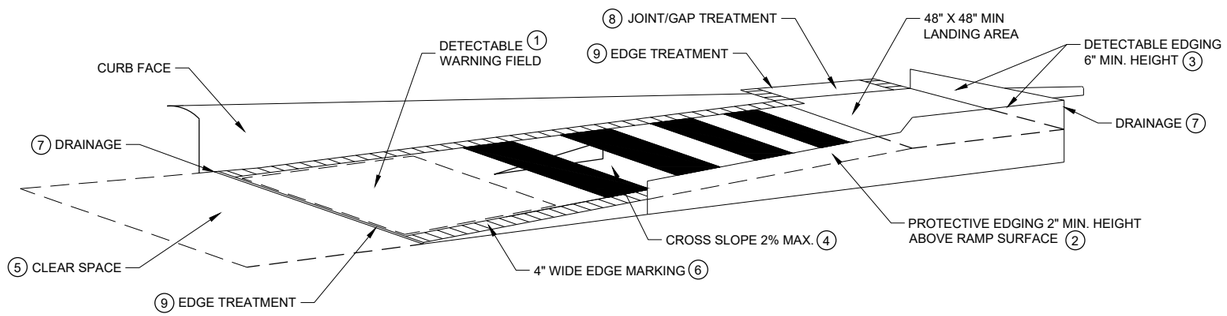
(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

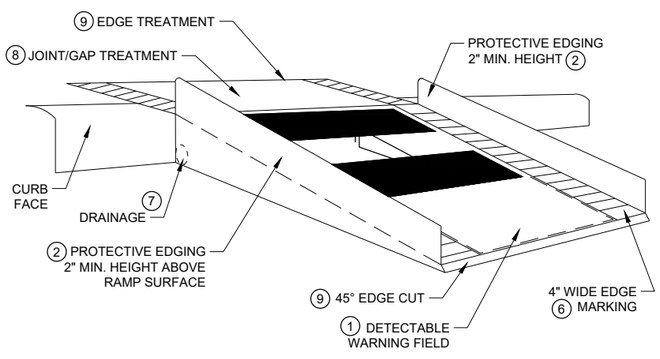
LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- 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)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

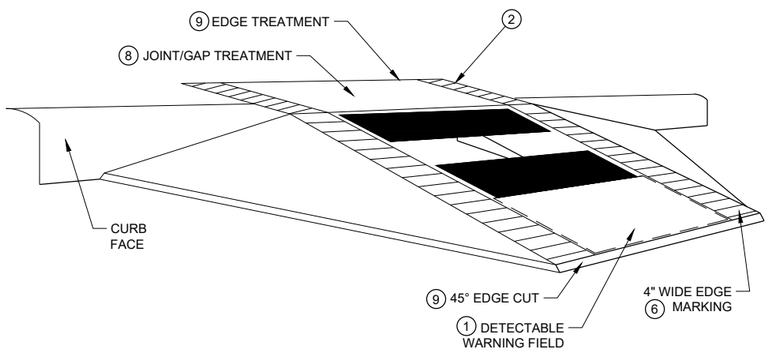
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

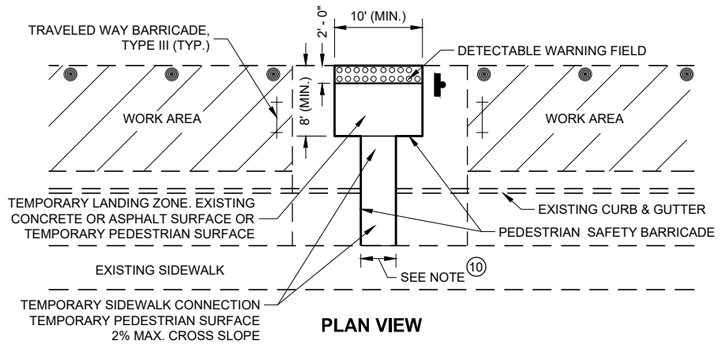
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

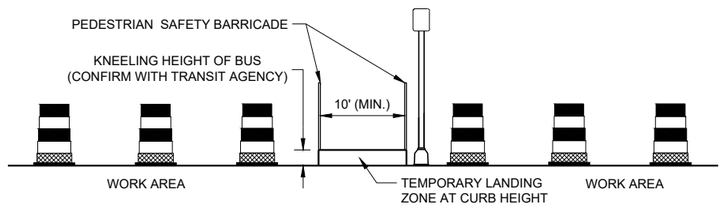
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, 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" X 48" 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 ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 15D30 - 06b

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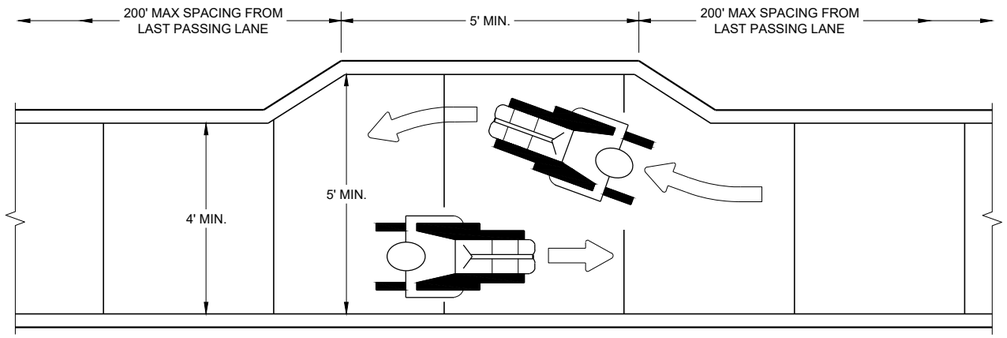
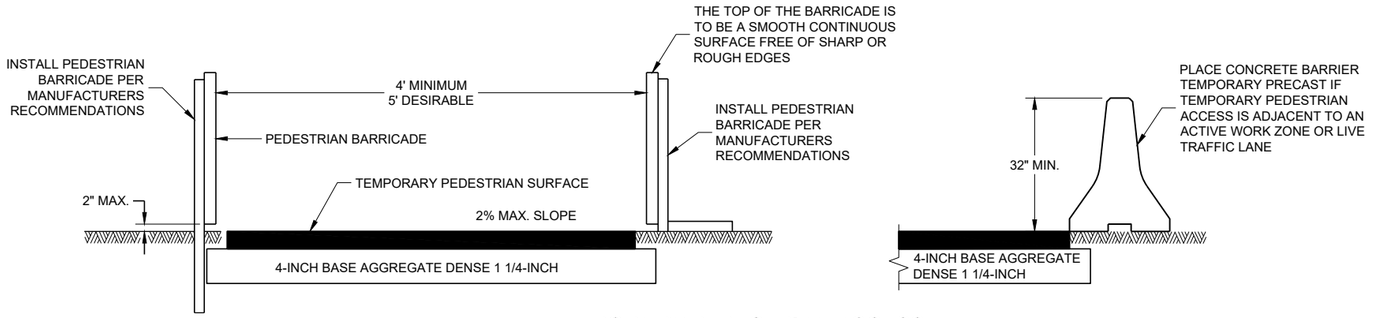
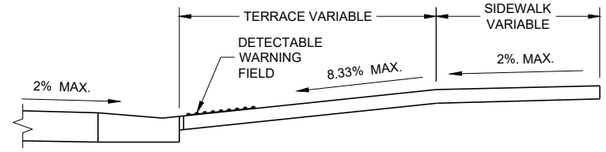
SDD 15D30 - 06b



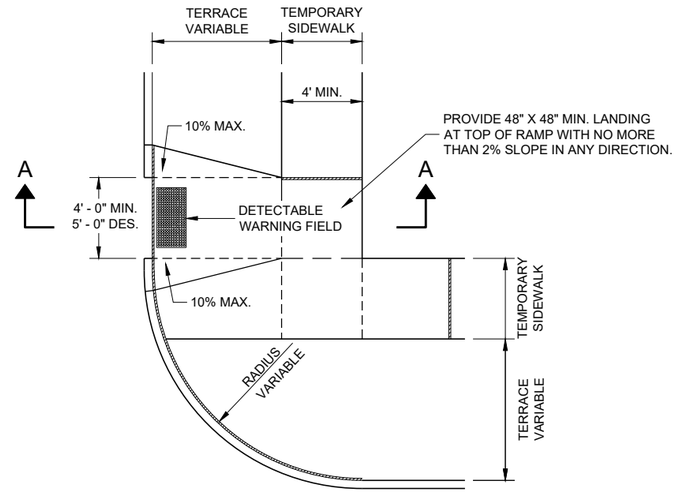
NARROW SIDEWALK PASSING DETAIL



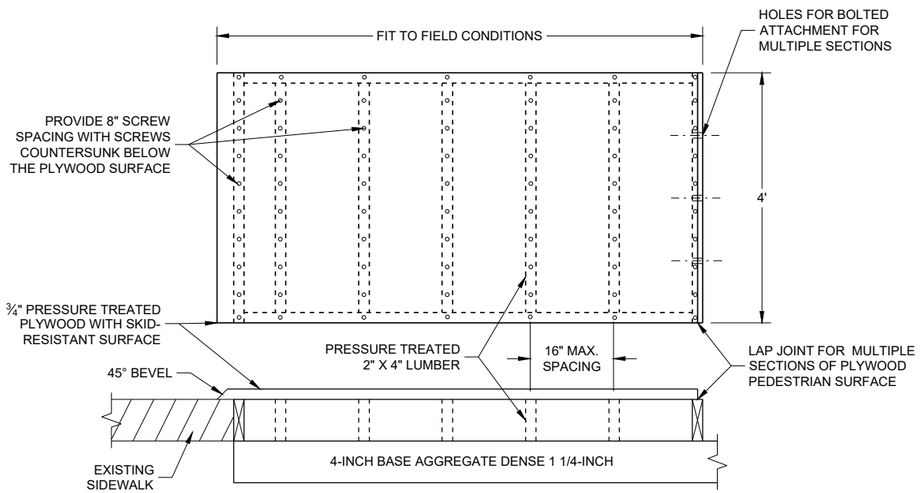
TEMPORARY PEDESTRIAN ACCESS



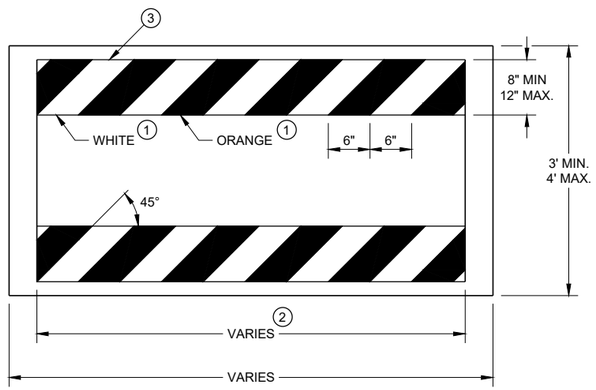
SECTION A - A



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



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D30 - 06c

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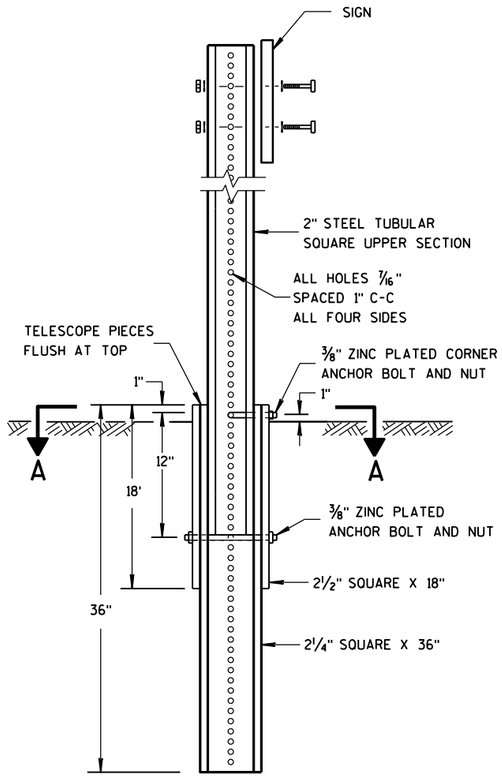
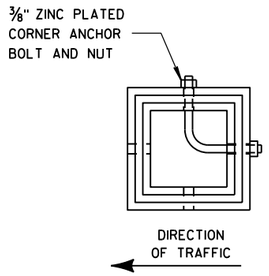
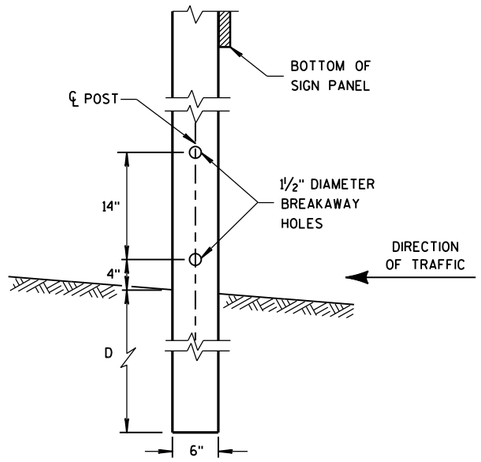
SDD 15D30 - 06c



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



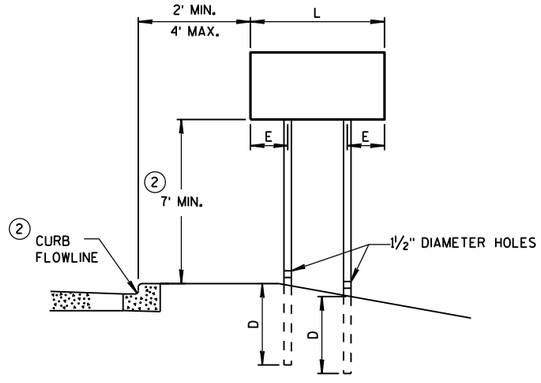
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

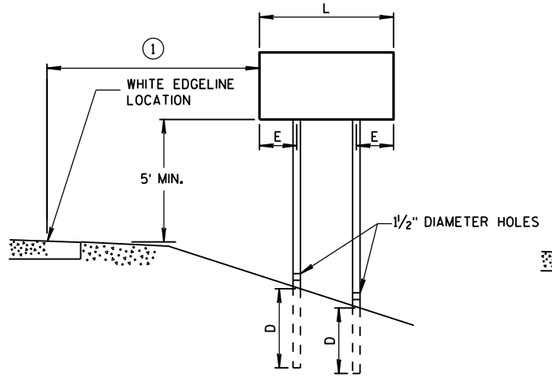
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

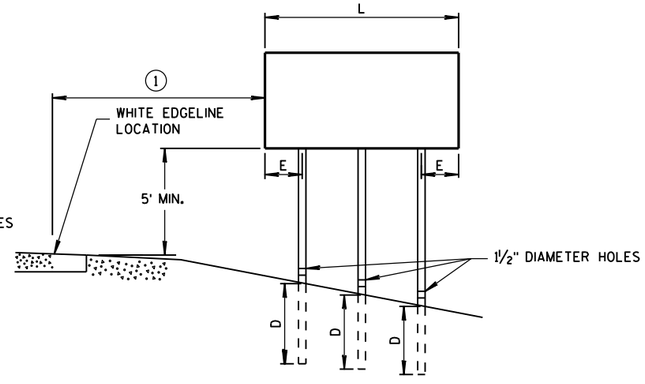
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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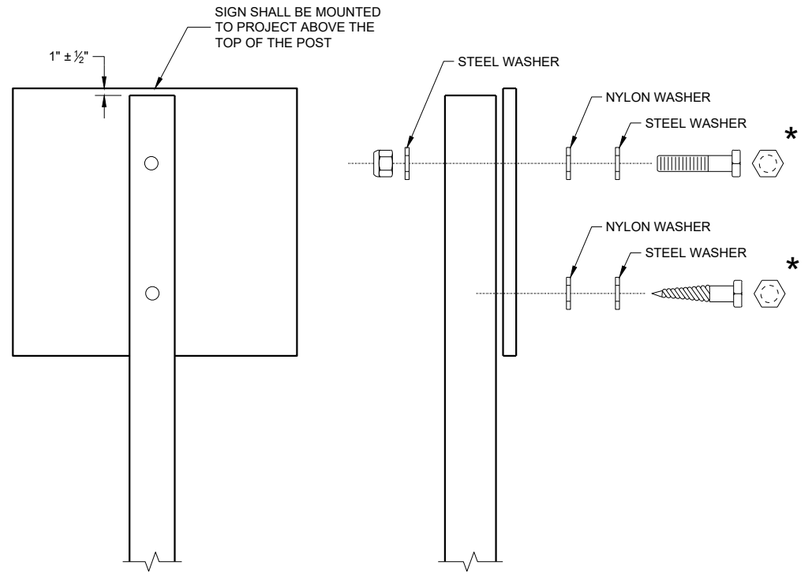
S.D.D. 15 D 38-2a



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 POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

SDD 15D38 - 02b

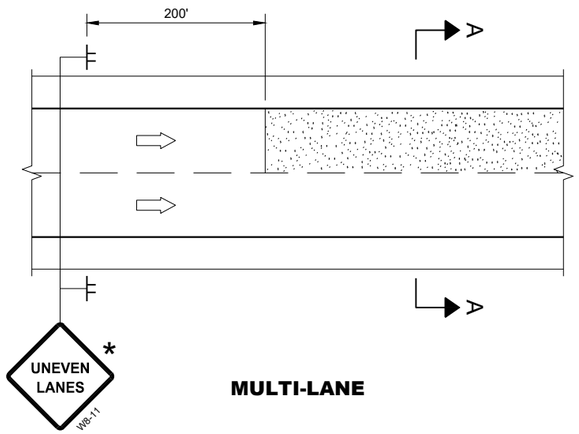
SDD15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

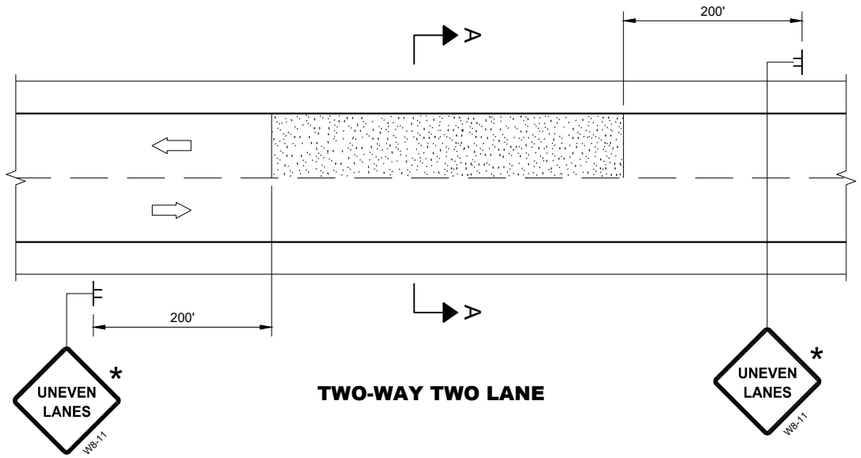
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

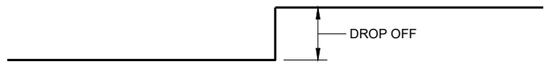
FHWA



MULTI-LANE

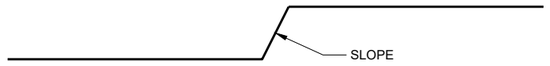


TWO-WAY TWO LANE

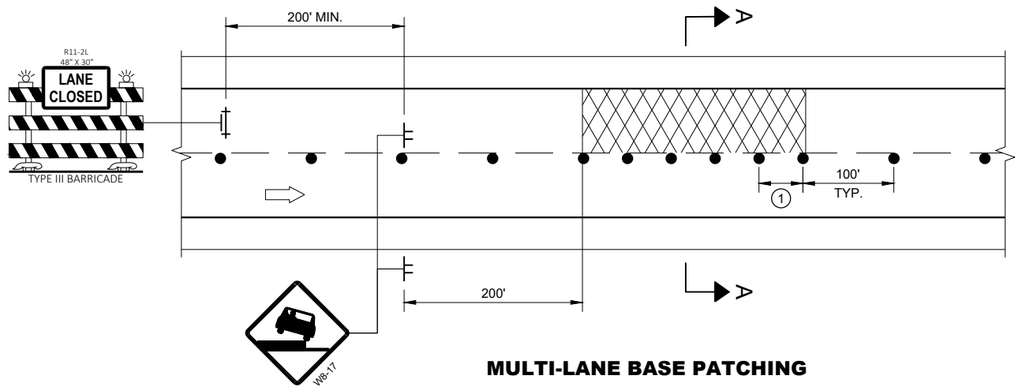


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

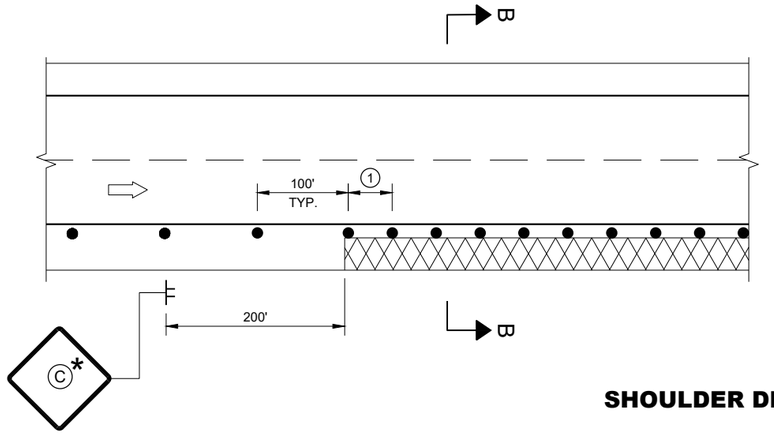
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

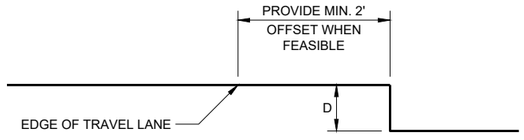
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

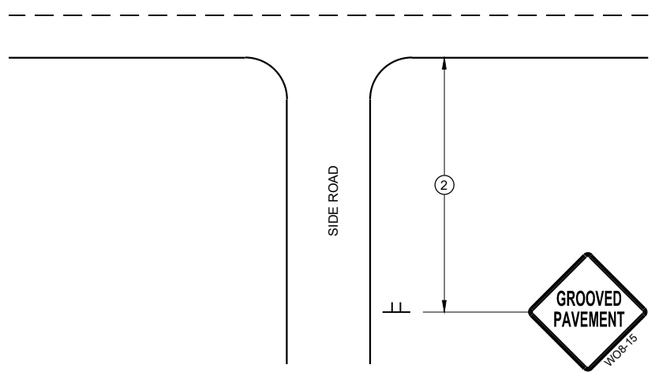
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

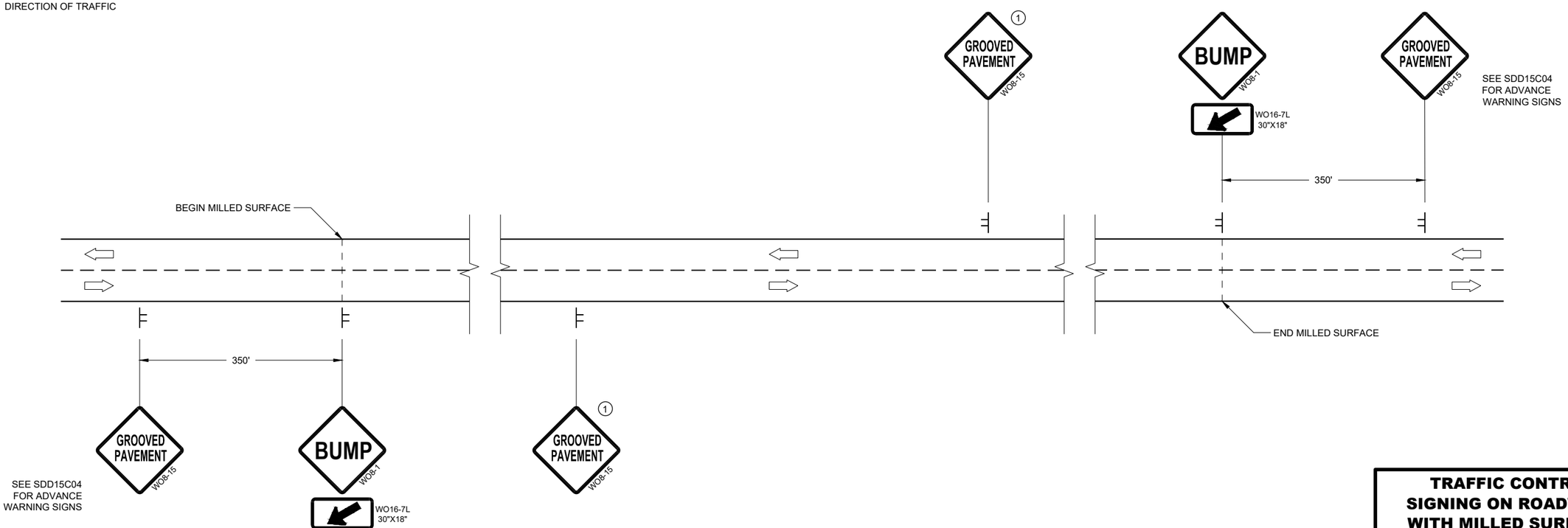
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

LEGEND

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

GENERAL NOTES

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

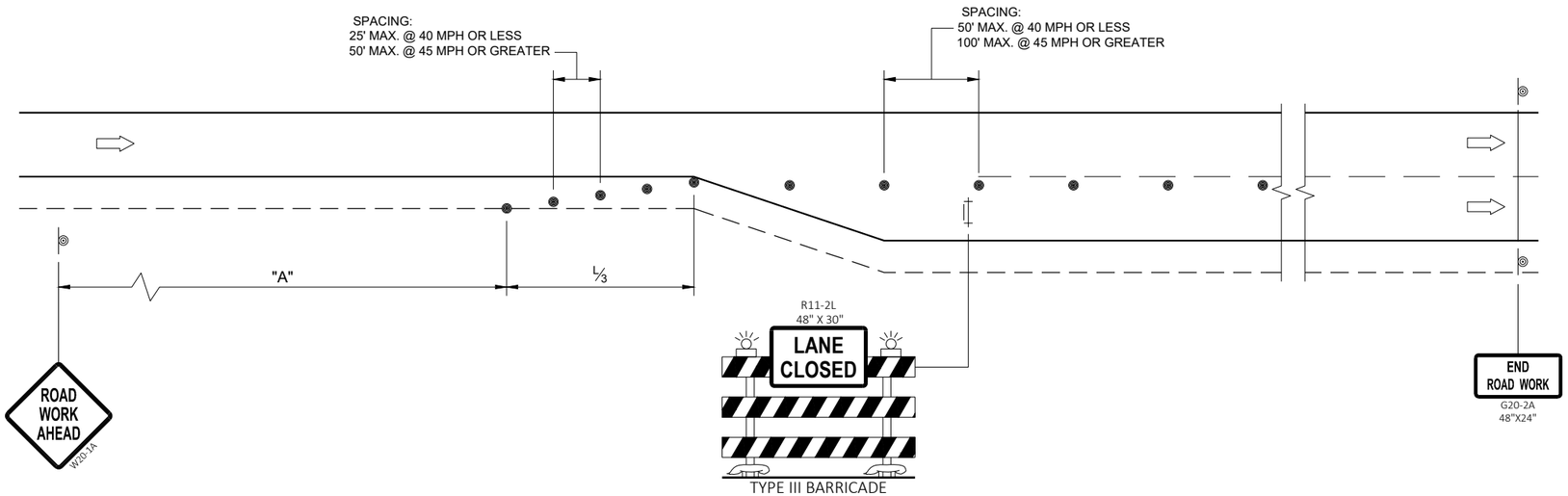
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

ADDED LANE CLOSURE WITHOUT LANE SHIFT

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D50 - 01a

6

SDD 15D50 - 01a

LEGEND

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

GENERAL NOTES

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

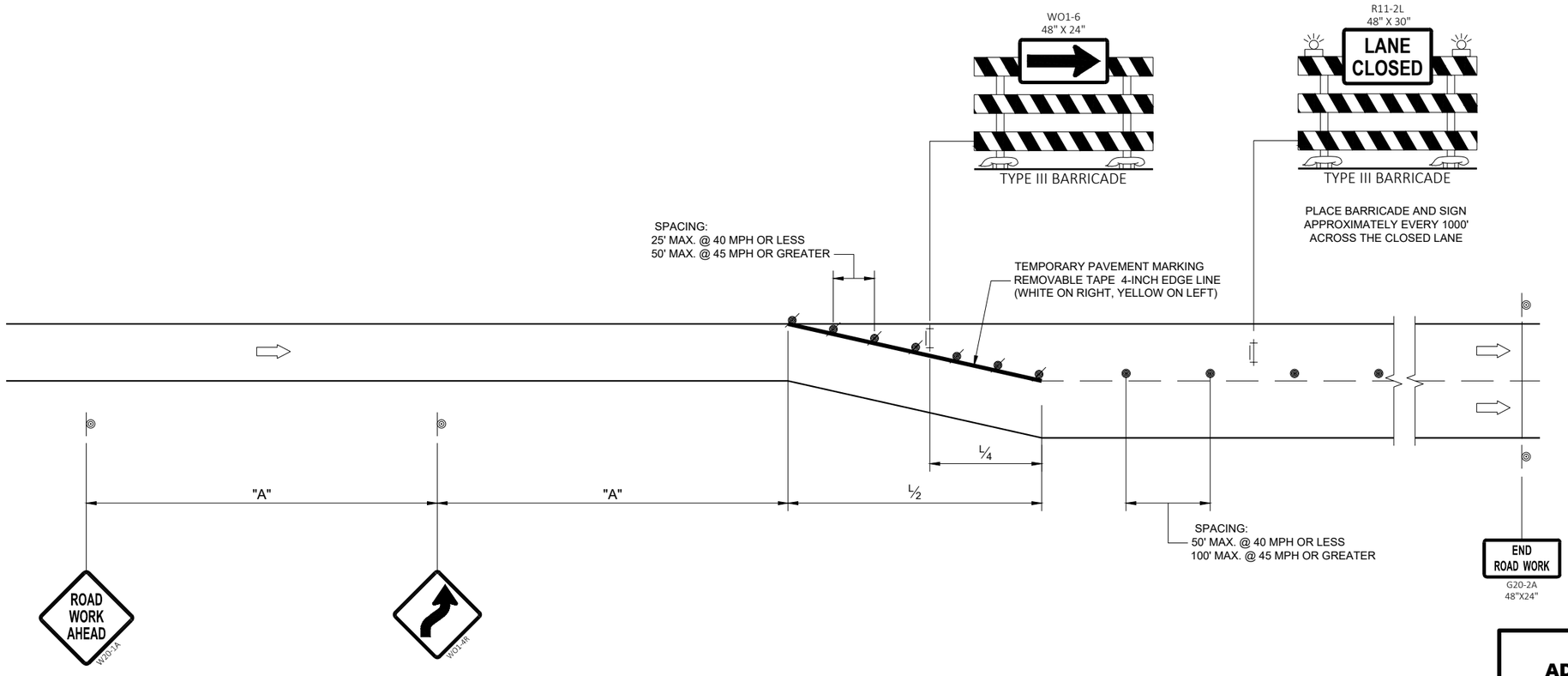
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR FOUR CONTINUOUS DAYS AND NIGHTS.



ADDED LANE CLOSURE WITH LANE SHIFT

February 2021
ADDED LANE CLOSURE WITH LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
00-00-00
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD15D50 - 01b

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

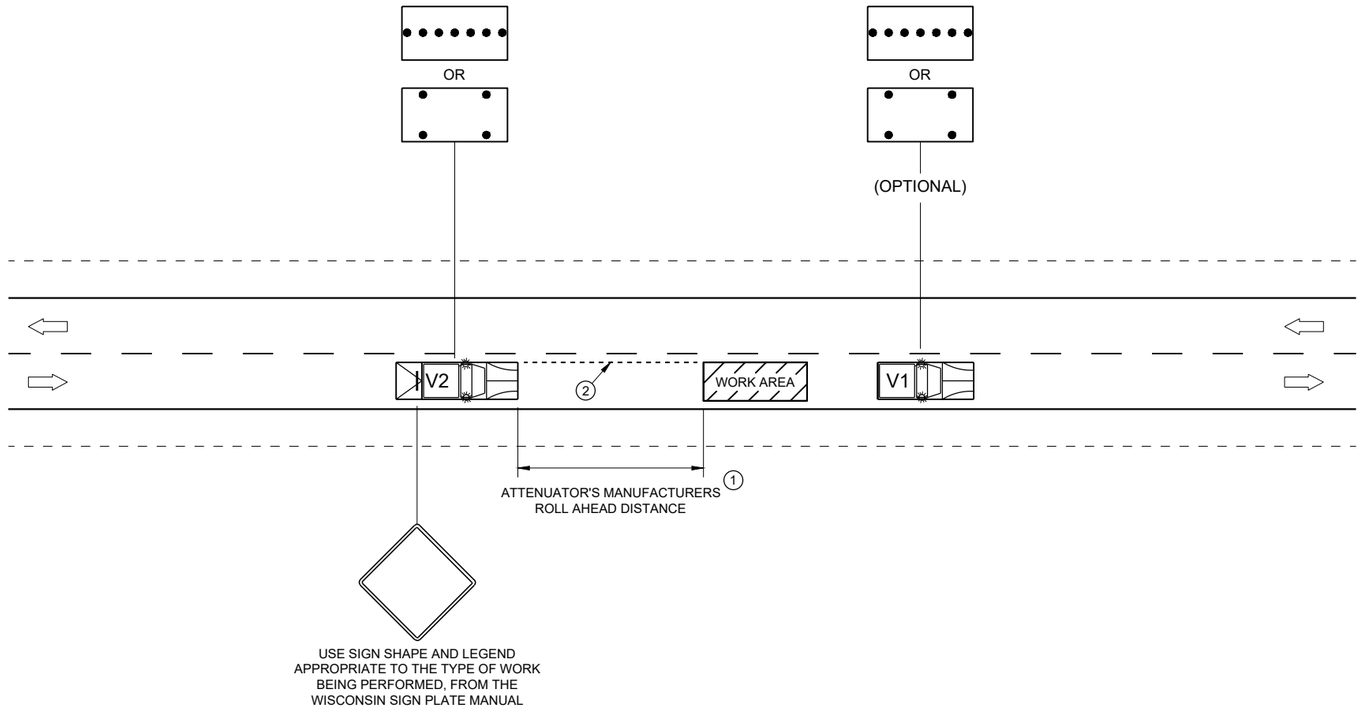
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



6

SDD 15D51 - 01

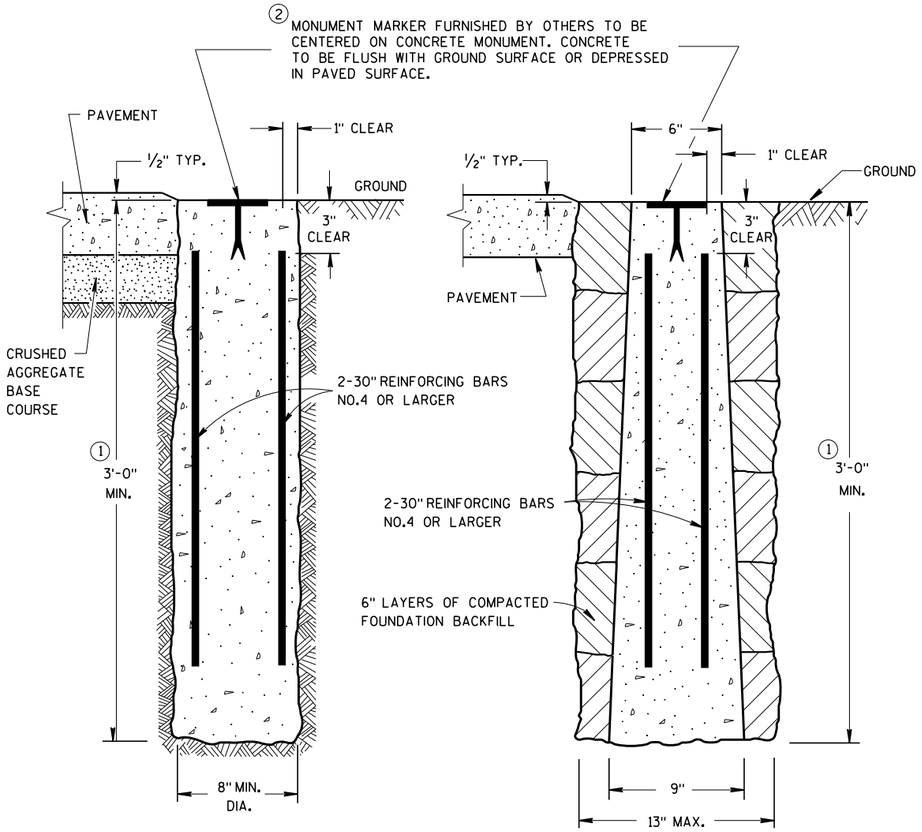
TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D51 - 01

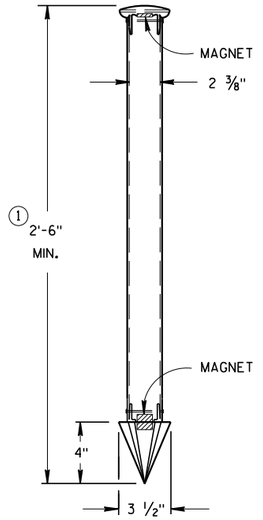


CAST-IN-PLACE

PRECAST

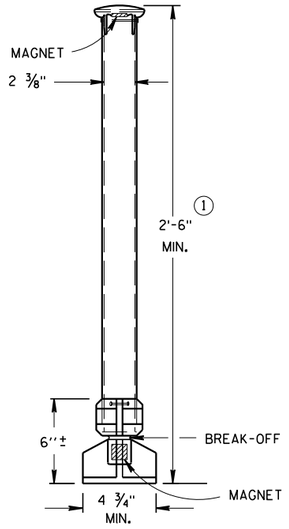
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

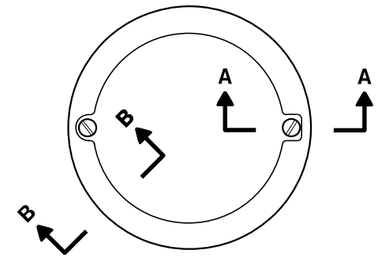
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

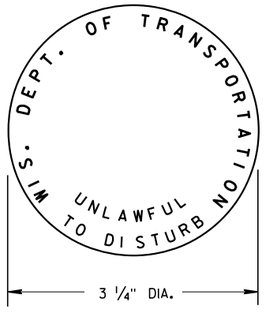
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

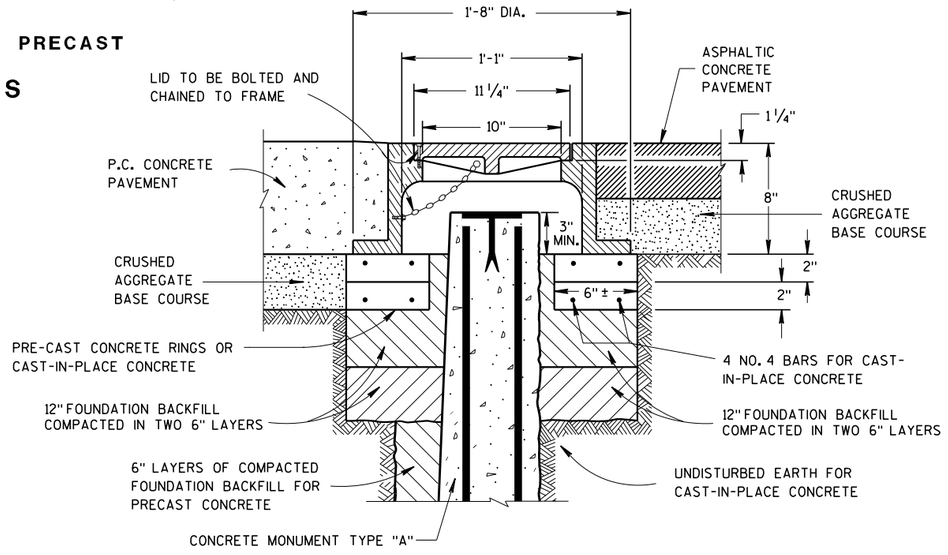


TOP VIEW



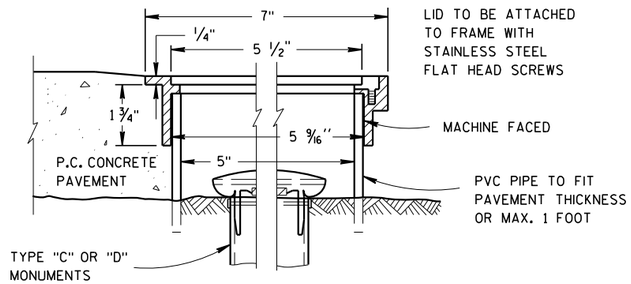
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6

S.D.D. 16 A 1-7

DIVISION 1 - STH 16

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
			NOTE 1		NOTE 2				NOTE 1		NOTE 3				1.00 NOTE 1	1.25	1.50	1.10	1.30	0.60	0.80	NOTE 8
501+86.527	50186.53	0.00	13.04	13.04	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
502+00	50200.00	13.47	8.57	8.57	0.47	0.00	0.00	0.00	5	5	0	0	0	0	5	0	0	0	0	0	0	0
502+01.684	50201.68	1.68	8.49	8.49	0.43	0.00	0.00	0.00	1	1	0	0	0	0	6	0	0	0	0	0	0	0
502+26.68	50226.68	25.00	6.85	6.85	1.31	0.00	0.00	0.00	7	7	1	0	0	0	13	1	0	0	0	0	0	-1
502+50	50250.00	23.32	4.30	4.30	8.05	0.00	0.00	0.00	5	5	4	0	0	0	18	6	0	0	0	0	0	-6
502+51.68	50251.68	1.68	4.21	4.21	8.64	0.00	0.00	0.00	0	0	1	0	0	0	18	8	0	0	0	0	0	-8
502+55	50255.00	3.32	4.06	4.06	9.95	0.00	0.00	0.00	1	1	1	0	0	0	19	9	0	0	0	0	0	-9
502+61.68	50261.68	6.68	3.84	3.84	1.67	0.00	0.00	0.00	1	1	1	0	0	0	20	10	0	0	0	0	0	-10
502+63.011	50263.01	1.33	8.92	8.92	2.20	0.00	0.00	0.00	0	0	0	0	0	0	20	10	0	0	0	0	0	-10
502+68.893	50268.89	5.88	10.38	10.38	4.77	0.00	0.00	0.00	2	2	1	0	0	0	22	11	0	0	0	0	0	-11
502+85	50285.00	16.11	10.10	10.10	2.12	0.00	0.00	0.00	6	6	2	0	0	0	28	14	0	0	0	0	0	-14
502+89.709	50289.71	4.71	9.88	9.88	3.30	0.00	0.00	0.00	2	2	0	0	0	0	30	14	0	0	0	0	0	-14
503+00	50300.00	10.29	9.41	9.41	4.98	0.00	0.00	0.00	4	4	2	0	0	0	34	16	0	0	0	0	0	-16
503+45	50345.00	45.00	10.22	10.22	18.55	0.00	0.00	0.00	16	16	20	0	0	0	50	41	0	0	0	0	0	-41
503+50	50350.00	5.00	11.13	11.13	0.00	0.00	0.00	0.00	2	2	2	0	0	0	52	44	0	0	0	0	0	-44
503+66.705	50366.70	16.70	12.29	12.29	0.00	0.00	0.00	0.00	7	7	0	0	0	0	59	44	0	0	0	0	0	-44
503+69.737	50369.74	3.03	13.43	13.43	0.00	0.00	0.00	0.00	1	1	0	0	0	0	60	44	0	0	0	0	0	-44
503+95.611	50395.61	25.87	10.68	10.68	0.00	0.00	0.00	0.00	12	12	0	0	0	0	72	44	0	0	0	0	0	-44
504+00	50400.00	4.39	10.47	10.47	0.10	0.00	0.00	0.00	2	2	0	0	0	0	74	44	0	0	0	0	0	-44
504+05	50405.00	5.00	10.34	10.34	0.32	0.00	0.00	0.00	2	2	0	0	0	0	76	44	0	0	0	0	0	-44
504+15	50415.00	10.00	10.23	10.23	5.56	0.00	0.00	0.00	4	4	1	0	0	0	80	45	0	0	0	0	0	-45
504+35	50435.00	20.00	7.80	7.80	1.11	0.00	0.00	0.00	7	7	2	0	0	0	87	48	0	0	0	0	0	-48
504+50	50450.00	15.00	7.36	7.36	0.23	0.00	0.00	0.00	4	4	0	0	0	0	91	48	0	0	0	0	0	-48
504+56.127	50456.13	6.13	7.43	7.43	0.09	0.00	0.00	0.00	2	2	0	0	0	0	93	48	0	0	0	0	0	-48
504+60	50460.00	3.87	7.54	7.54	0.00	0.00	0.00	0.00	1	1	0	0	0	0	94	48	0	0	0	0	0	-48
505+00	50500.00	40.00	7.88	7.88	0.00	0.00	0.00	0.00	11	11	0	0	0	0	105	48	0	0	0	0	0	-48
505+10	50510.00	10.00	8.21	8.21	0.10	0.00	0.00	0.00	3	3	0	0	0	0	108	48	0	0	0	0	0	-48
505+25	50525.00	15.00	9.64	9.64	2.89	0.00	0.00	0.00	5	5	1	0	0	0	113	49	0	0	0	0	0	-49
505+30	50530.00	5.00	9.33	9.33	2.39	0.00	0.00	0.00	2	2	0	0	0	0	115	49	0	0	0	0	0	-49
505+40	50540.00	10.00	8.26	8.26	0.83	0.00	0.00	0.00	3	3	1	0	0	0	118	50	0	0	0	0	0	-50
505+50	50550.00	10.00	7.86	7.86	0.80	0.00	0.00	0.00	3	3	0	0	0	0	121	50	0	0	0	0	0	-50
505+65	50565.00	15.00	7.86	7.86	1.75	0.00	0.00	0.00	4	4	1	0	0	0	125	51	0	0	0	0	0	-51
505+76.13	50576.13	11.13	7.89	7.89	34.91	0.00	0.00	0.00	3	3	8	0	0	0	128	61	0	0	0	0	0	-61
505+95	50595.00	18.87	8.42	8.42	24.42	0.00	0.00	0.00	6	6	21	0	0	0	134	88	0	0	0	0	0	-88
506+00	50600.00	5.00	8.69	8.69	20.63	0.00	0.00	0.00	2	2	4	0	0	0	136	93	0	0	0	0	0	-93
506+01.13	50601.13	1.13	8.77	8.77	20.01	0.00	0.00	0.00	0	0	1	0	0	0	136	94	0	0	0	0	0	-94
506+26.128	50626.13	25.00	11.84	11.84	15.29	0.00	0.00	0.00	10	10	16	0	0	0	146	114	0	0	0	0	0	-114
506+36.01	50636.01	9.88	12.77	12.77	20.80	0.00	0.00	0.00	5	5	7	0	0	0	151	123	0	0	0	0	0	-123
506+50	50650.00	13.99	12.44	12.44	11.40	0.00	0.00	0.00	7	7	8	0	0	0	158	133	0	0	0	0	0	-133
506+57.608	50657.61	7.61	14.87	14.87	4.56	0.00	0.00	0.00	4	4	2	0	0	0	162	135	0	0	0	0	0	-135
506+61.01	50661.01	3.40	5.22	5.22	3.68	0.00	0.00	0.00	1	1	1	0	0	0	163	136	0	0	0	0	0	-136
506+86.012	50686.01	25.00	8.50	8.50	2.02	0.00	0.00	0.00	6	6	3	0	0	0	169	140	0	0	0	0	0	-140
507+00	50700.00	13.99	8.23	8.23	2.97	0.00	0.00	0.00	4	4	1	0	0	0	173	141	0	0	0	0	0	-141
507+15	50715.00	15.00	13.12	13.12	0.00	0.00	0.00	0.00	6	6	1	0	0	0	179	143	0	0	0	0	0	-143

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

9

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PROJECT NO: 1400-01-73 | HWY: STH 16 | COUNTY: COLUMBIA | EARTHWORK SUMMARY | SHEET NO: 179 | E

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

DIVISION 1 - STH 16

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50	1.10	1.30	0.60	0.80	NOTE 8
527+72.301	52772.30	0.00	1.98	1.98	0.52	0.00	0.00	0.00	0	0	0	0	0	0	179	143	0	0	0	0	0	-143
527+80	52780.00	7.70	2.27	2.27	0.89	0.00	0.00	0.00	1	1	0	0	0	0	180	143	0	0	0	0	0	-143
527+85	52785.00	5.00	2.47	2.47	1.16	0.00	0.00	0.00	0	0	0	0	0	0	180	143	0	0	0	0	0	-143
528+15	52815.00	30.00	3.62	3.62	0.72	0.00	0.00	0.00	3	3	1	0	0	0	183	144	0	0	0	0	0	-144
528+50	52850.00	35.00	4.90	4.90	8.43	0.00	0.00	0.00	6	6	6	0	0	0	189	151	0	0	0	0	0	-151
528+57.021	52857.02	7.02	5.71	5.71	10.99	0.00	0.00	0.00	1	1	3	0	0	0	190	155	0	0	0	0	0	-155
528+82.02	52882.02	25.00	7.18	7.18	7.51	0.00	0.00	0.00	6	6	9	0	0	0	196	166	0	0	0	0	0	-166
529+00	52900.00	17.98	5.98	5.98	10.95	0.00	0.00	0.00	4	4	6	0	0	0	200	174	0	0	0	0	0	-174
529+07.02	52907.02	7.02	5.56	5.56	8.60	0.00	0.00	0.00	1	1	3	0	0	0	201	178	0	0	0	0	0	-178
529+25	52925.00	17.98	4.15	4.15	0.00	0.00	0.00	0.00	3	3	3	0	0	0	204	181	0	0	0	0	0	-181
529+41.056	52941.06	16.06	3.88	3.88	0.00	0.00	0.00	0.00	2	2	0	0	0	0	206	181	0	0	0	0	0	-181
529+50	52950.00	8.94	4.34	4.34	0.00	0.00	0.00	0.00	1	1	0	0	0	0	207	181	0	0	0	0	0	-181
529+60	52960.00	10.00	4.41	4.41	0.00	0.00	0.00	0.00	2	2	0	0	0	0	209	181	0	0	0	0	0	-181
529+65	52965.00	5.00	4.58	4.58	0.00	0.00	0.00	0.00	1	1	0	0	0	0	210	181	0	0	0	0	0	-181
529+73.014	52973.01	8.01	5.27	5.27	0.00	0.00	0.00	0.00	1	1	0	0	0	0	211	181	0	0	0	0	0	-181
529+80	52980.00	6.99	6.05	6.05	0.00	0.00	0.00	0.00	1	1	0	0	0	0	212	181	0	0	0	0	0	-181
529+85	52985.00	5.00	5.80	5.80	0.00	0.00	0.00	0.00	1	1	0	0	0	0	213	181	0	0	0	0	0	-181
529+90	52990.00	5.00	5.78	5.78	0.00	0.00	0.00	0.00	1	1	0	0	0	0	214	181	0	0	0	0	0	-181
529+95	52995.00	5.00	5.47	5.47	0.00	0.00	0.00	0.00	1	1	0	0	0	0	215	181	0	0	0	0	0	-181
530+50	53050.00	55.00	5.92	5.92	0.00	0.00	0.00	0.00	12	12	0	0	0	0	227	181	0	0	0	0	0	-181
530+80	53080.00	30.00	6.15	6.15	0.00	0.00	0.00	0.00	7	7	0	0	0	0	234	181	0	0	0	0	0	-181
530+85	53085.00	5.00	6.15	6.15	0.00	0.00	0.00	0.00	1	1	0	0	0	0	235	181	0	0	0	0	0	-181
531+00	53100.00	15.00	5.93	5.93	0.00	0.00	0.00	0.00	3	3	0	0	0	0	238	181	0	0	0	0	0	-181
531+30	53130.00	30.00	7.03	7.03	0.00	0.00	0.00	0.00	7	7	0	0	0	0	245	181	0	0	0	0	0	-181
531+50	53150.00	20.00	6.11	6.11	0.00	0.00	0.00	0.00	5	5	0	0	0	0	250	181	0	0	0	0	0	-181
531+70	53170.00	20.00	5.88	5.88	0.00	0.00	0.00	0.00	4	4	0	0	0	0	254	181	0	0	0	0	0	-181
531+75	53175.00	5.00	6.09	6.09	0.00	0.00	0.00	0.00	1	1	0	0	0	0	255	181	0	0	0	0	0	-181
532+00	53200.00	25.00	6.73	6.73	0.00	0.00	0.00	0.00	6	6	0	0	0	0	261	181	0	0	0	0	0	-181
532+15	53215.00	15.00	7.41	7.41	0.00	0.00	0.00	0.00	4	4	0	0	0	0	265	181	0	0	0	0	0	-181
532+32.5	53232.50	17.50	9.02	9.02	0.00	0.00	0.00	0.00	5	5	0	0	0	0	270	181	0	0	0	0	0	-181
532+35	53235.00	2.50	9.23	9.23	0.00	0.00	0.00	0.00	1	1	0	0	0	0	271	181	0	0	0	0	0	-181
532+40	53240.00	5.00	9.53	9.53	0.00	0.00	0.00	0.00	2	2	0	0	0	0	273	181	0	0	0	0	0	-181
532+50	53250.00	10.00	7.68	7.68	0.00	0.00	0.00	0.00	3	3	0	0	0	0	276	181	0	0	0	0	0	-181
532+90	53290.00	40.00	5.83	5.83	0.00	0.00	0.00	0.00	10	10	0	0	0	0	286	181	0	0	0	0	0	-181
532+94.97	53294.97	4.97	6.12	6.12	0.00	0.00	0.00	0.00	1	1	0	0	0	0	287	181	0	0	0	0	0	-181
533+00	53300.00	5.03	6.21	6.21	0.12	0.00	0.00	0.00	1	1	0	0	0	0	288	181	0	0	0	0	0	-181
533+07.4	53307.40	7.40	6.06	6.06	1.57	0.00	0.00	0.00	2	2	0	0	0	0	290	181	0	0	0	0	0	-181
533+20	53320.00	12.60	5.96	5.96	0.11	0.00	0.00	0.00	3	3	0	0	0	0	293	181	0	0	0	0	0	-181
533+32.4	53332.40	12.40	6.06	6.06	1.23	0.00	0.00	0.00	3	3	0	0	0	0	296	181	0	0	0	0	0	-181
533+35	53335.00	2.60	6.07	6.07	1.56	0.00	0.00	0.00	1	1	0	0	0	0	297	181	0	0	0	0	0	-181
533+45	53345.00	10.00	5.98	5.98	6.29	0.00	0.00	0.00	2	2	1	0	0	0	299	183	0	0	0	0	0	-183
533+50	53350.00	5.00	5.80	5.80	7.79	0.00	0.00	0.00	1	1	1	0	0	0	300	184	0	0	0	0	0	-184
533+57.402	53357.40	7.40	5.13	5.13	8.59	0.00	0.00	0.00	1	1	2	0	0	0	301	186	0	0	0	0	0	-186
533+65	53365.00	7.60	5.88	5.88	4.07	0.00	0.00	0.00	2	2	2	0	0	0	303	189	0	0	0	0	0	-189
533+75	53375.00	10.00	6.75	6.75	0.73	0.00	0.00	0.00	2	2	1	0	0	0	305	190	0	0	0	0	0	-190
533+88.471	53388.47	13.47	8.11	8.11	0.00	0.00	0.00	0.00	4	4	0	0	0	0	309	190	0	0	0	0	0	-190
534+00	53400.00	11.53	10.16	10.16	0.00	0.00	0.00	0.00	4	4	0	0	0	0	313	190	0	0	0	0	0	-190
534+05	53405.00	5.00	10.09	10.09	0.00	0.00	0.00	0.00	2	2	0	0	0	0	315	190	0	0	0	0	0	-190
534+19.013	53419.01	14.01	9.11	9.11	0.00	0.00	0.00	0.00	5	5	0	0	0	0	320	190	0	0	0	0	0	-190

Notes:		
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL	
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS	
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME	
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]	EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]	MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

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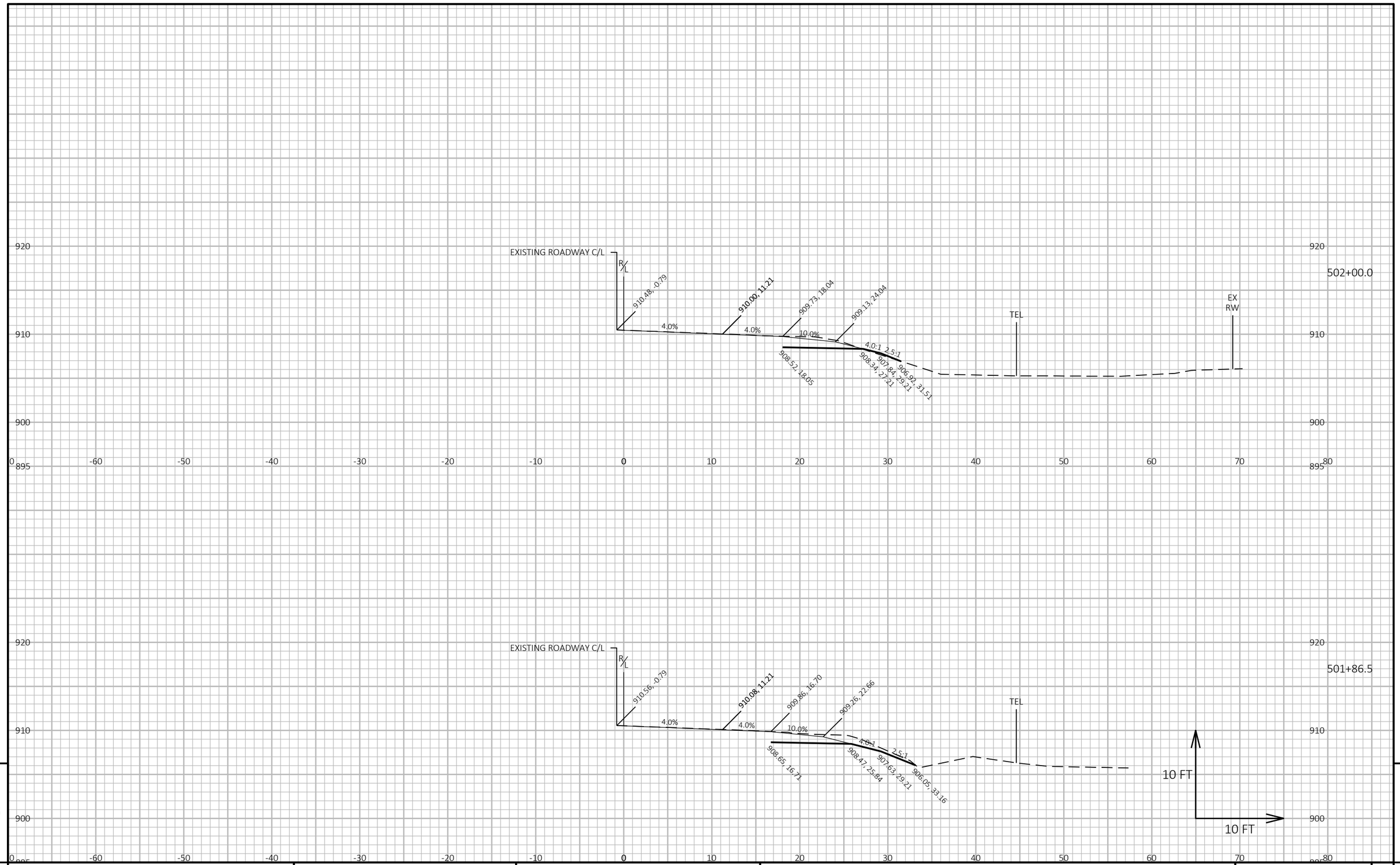
PROJECT NO: 1400-01-73 | HWY: STH 16 | COUNTY: COLUMBIA | EARTHWORK SUMMARY | SHEET NO: 180 | E

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



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 181	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 01

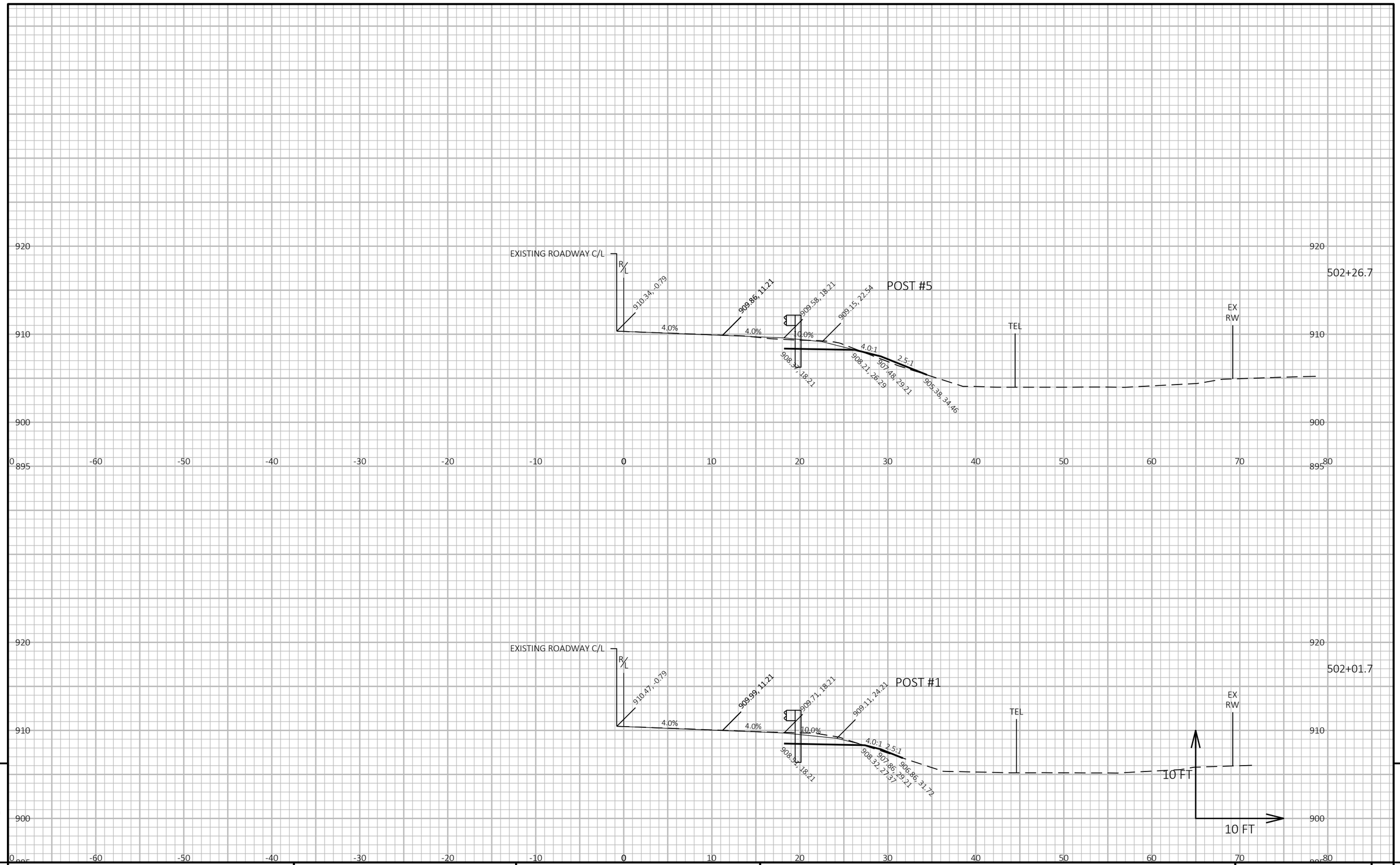
PLOT DATE : 4/22/2021 4:50 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 182	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 02

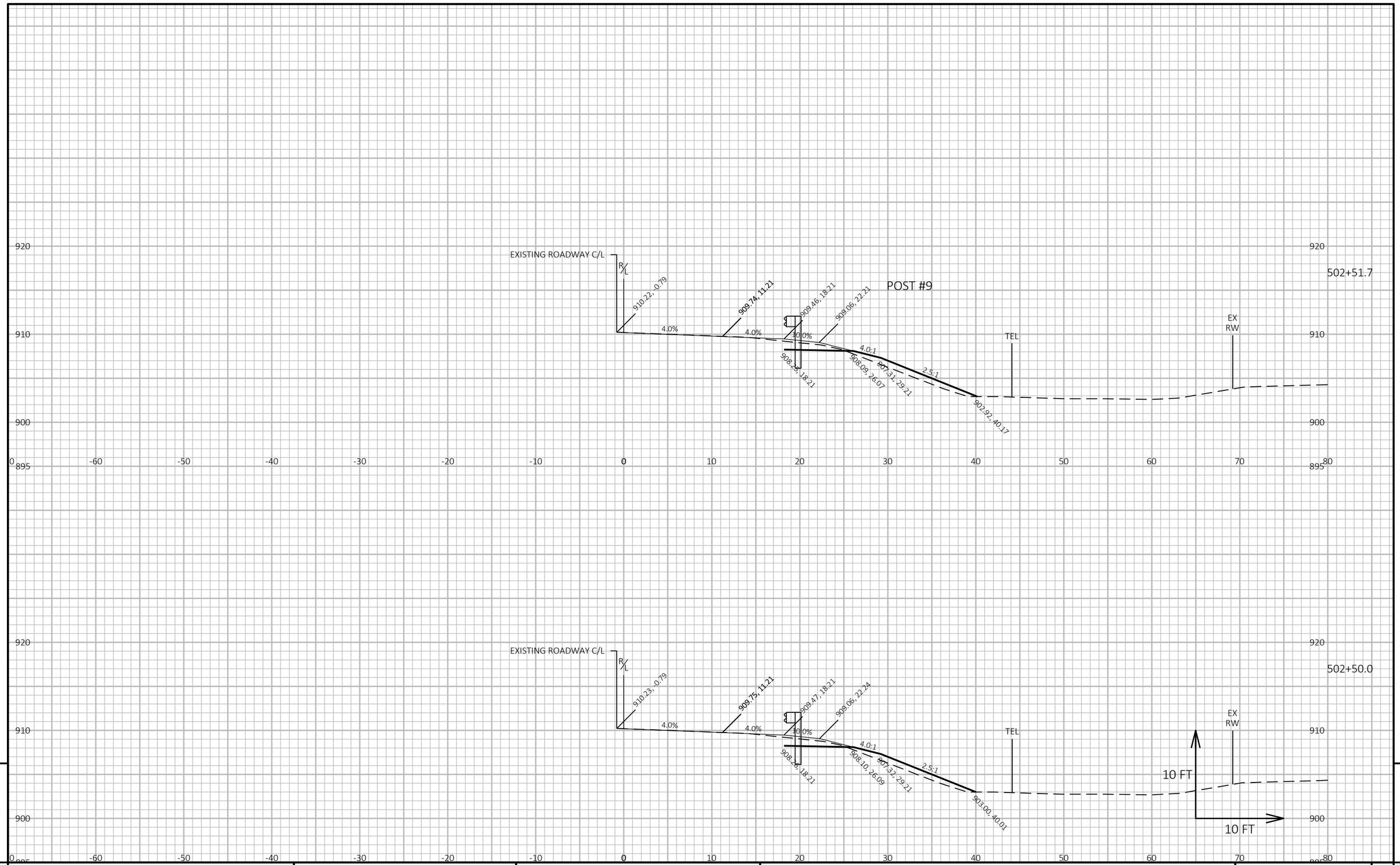
PLOT DATE : 4/22/2021 4:50 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 183	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 03

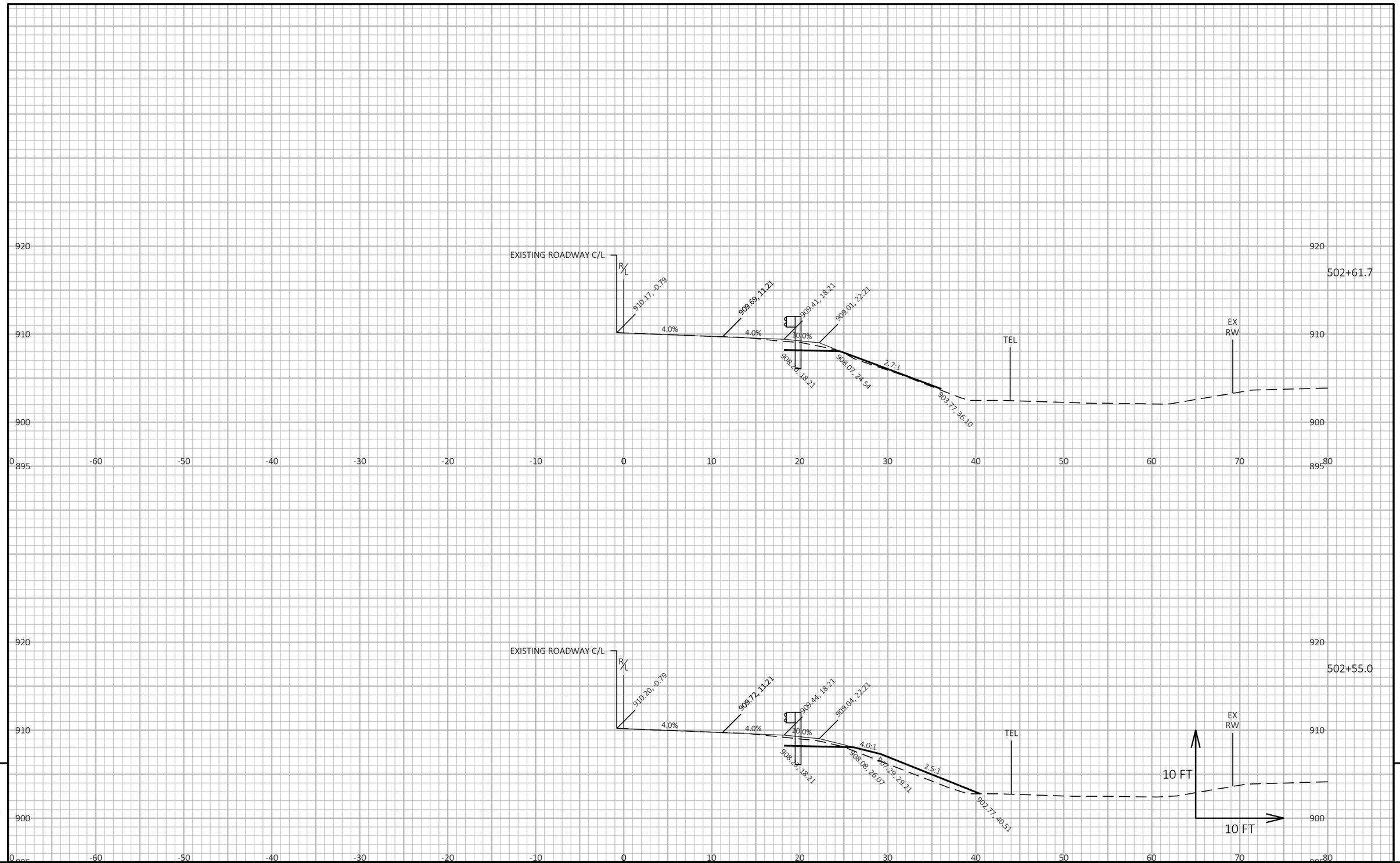
PLOT DATE : 4/22/2021 4:50 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 184	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 04

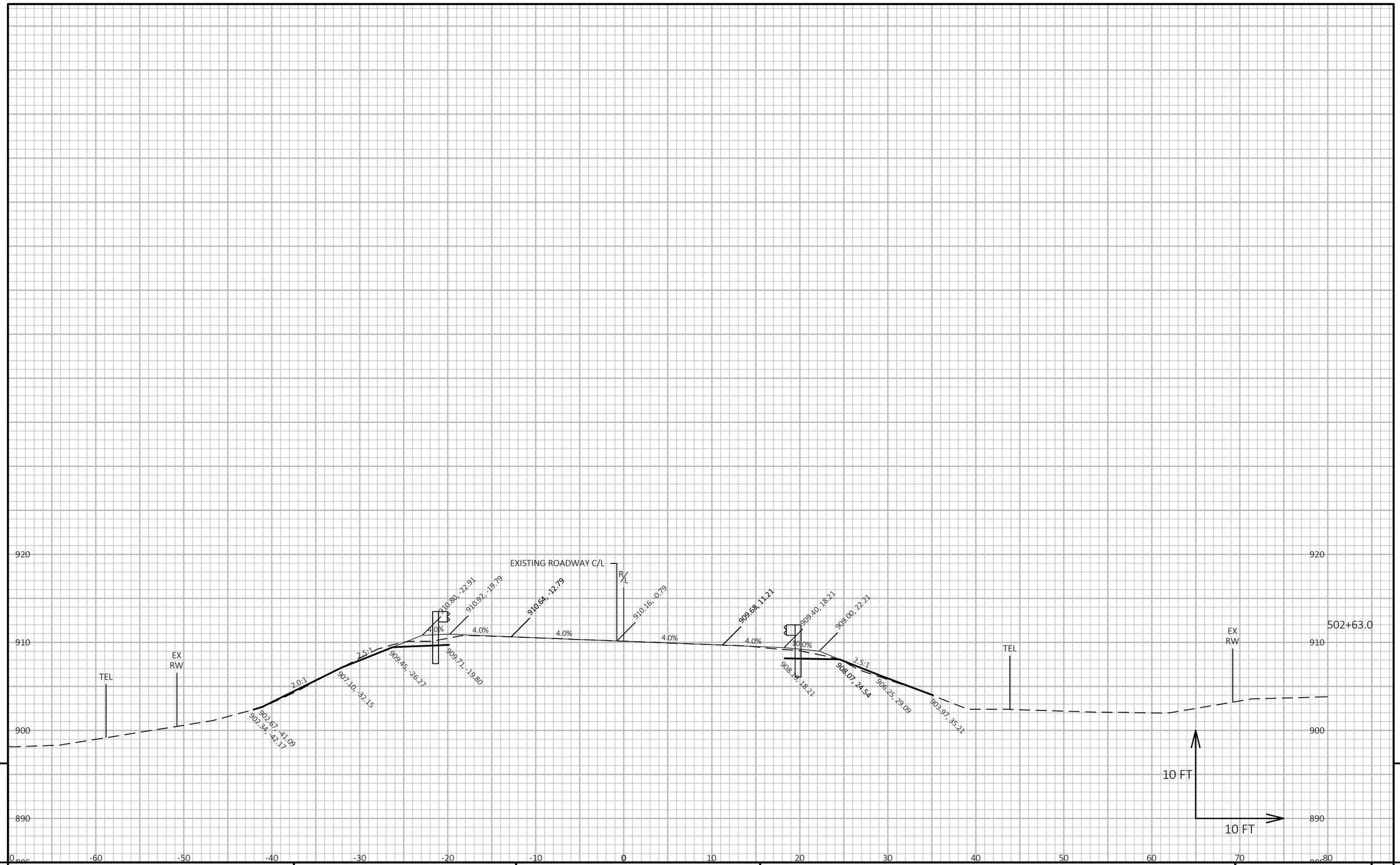
PLOT DATE : 4/22/2021 4:50 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 185	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 05

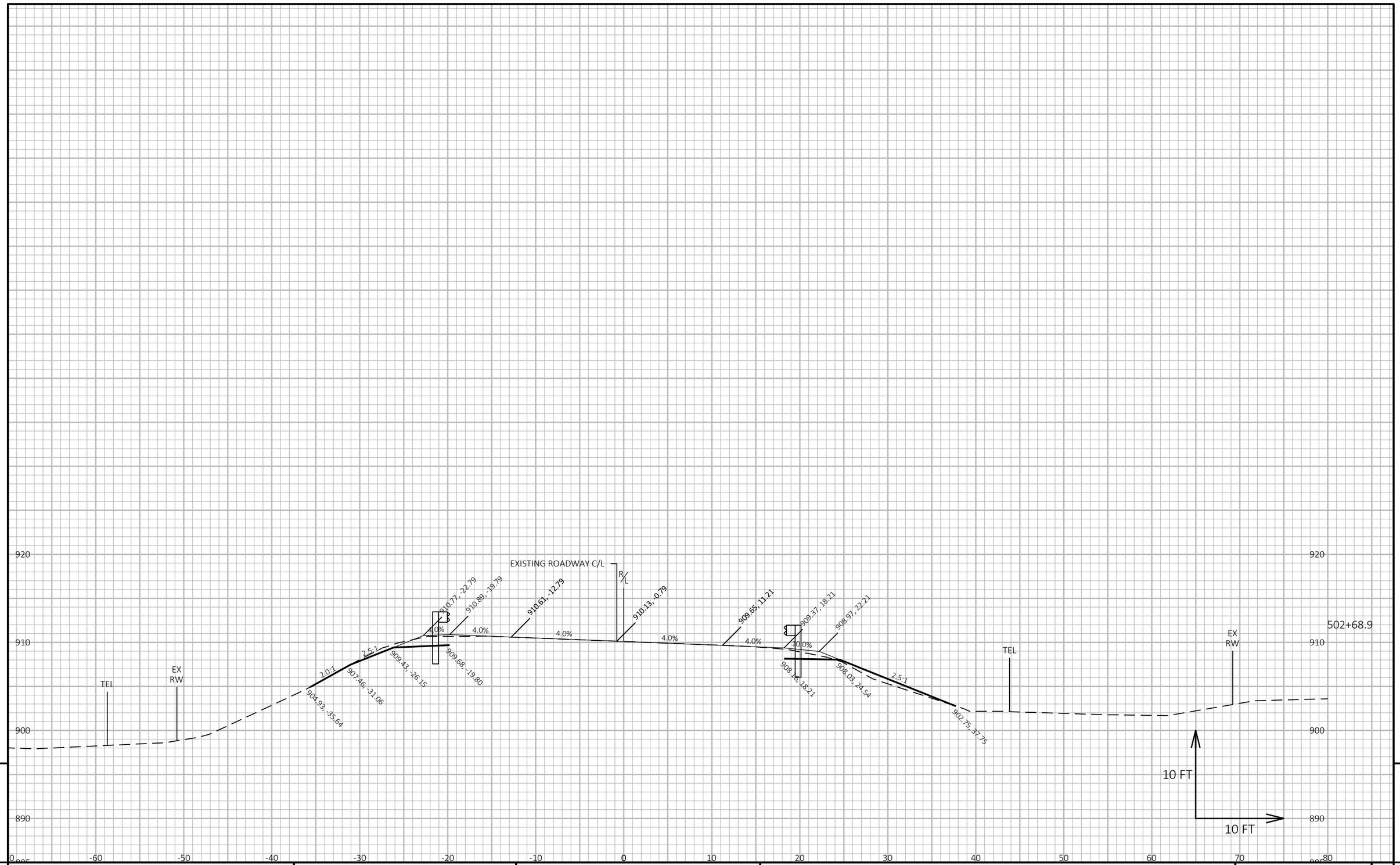
PLOT DATE : 4/22/2021 4:50 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



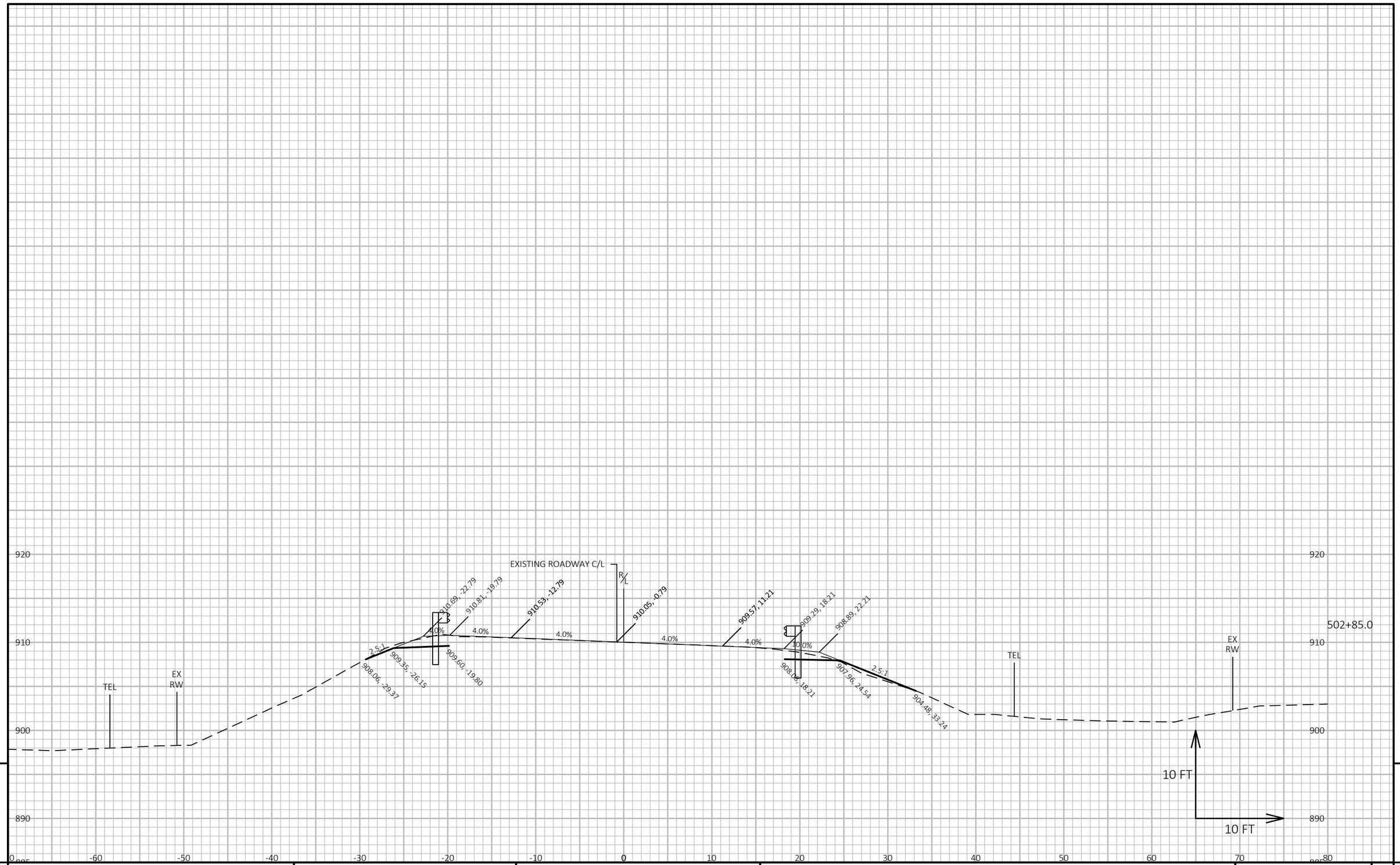
9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 186	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 4/22/2021 4:50 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

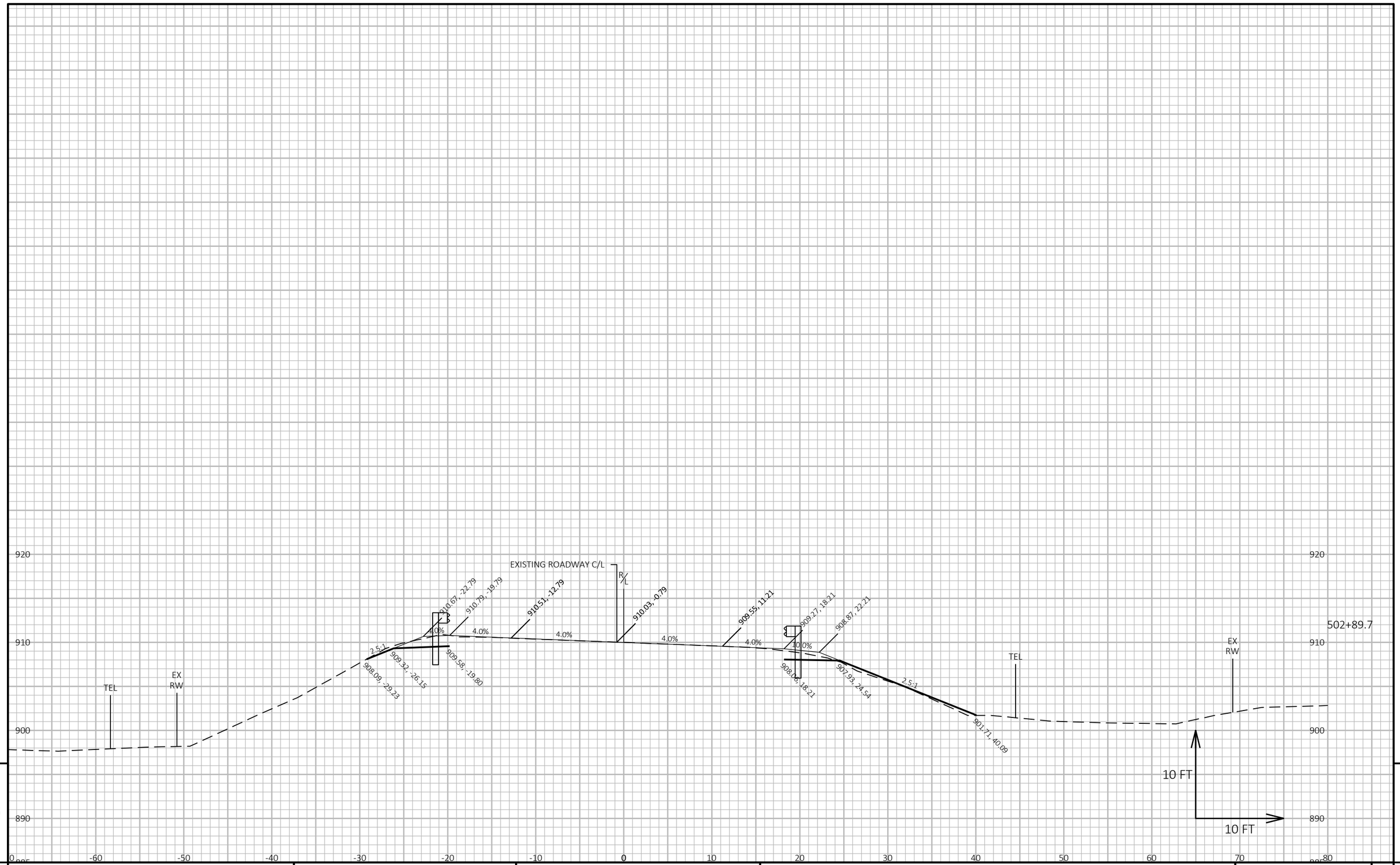


PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 187	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 188	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 08

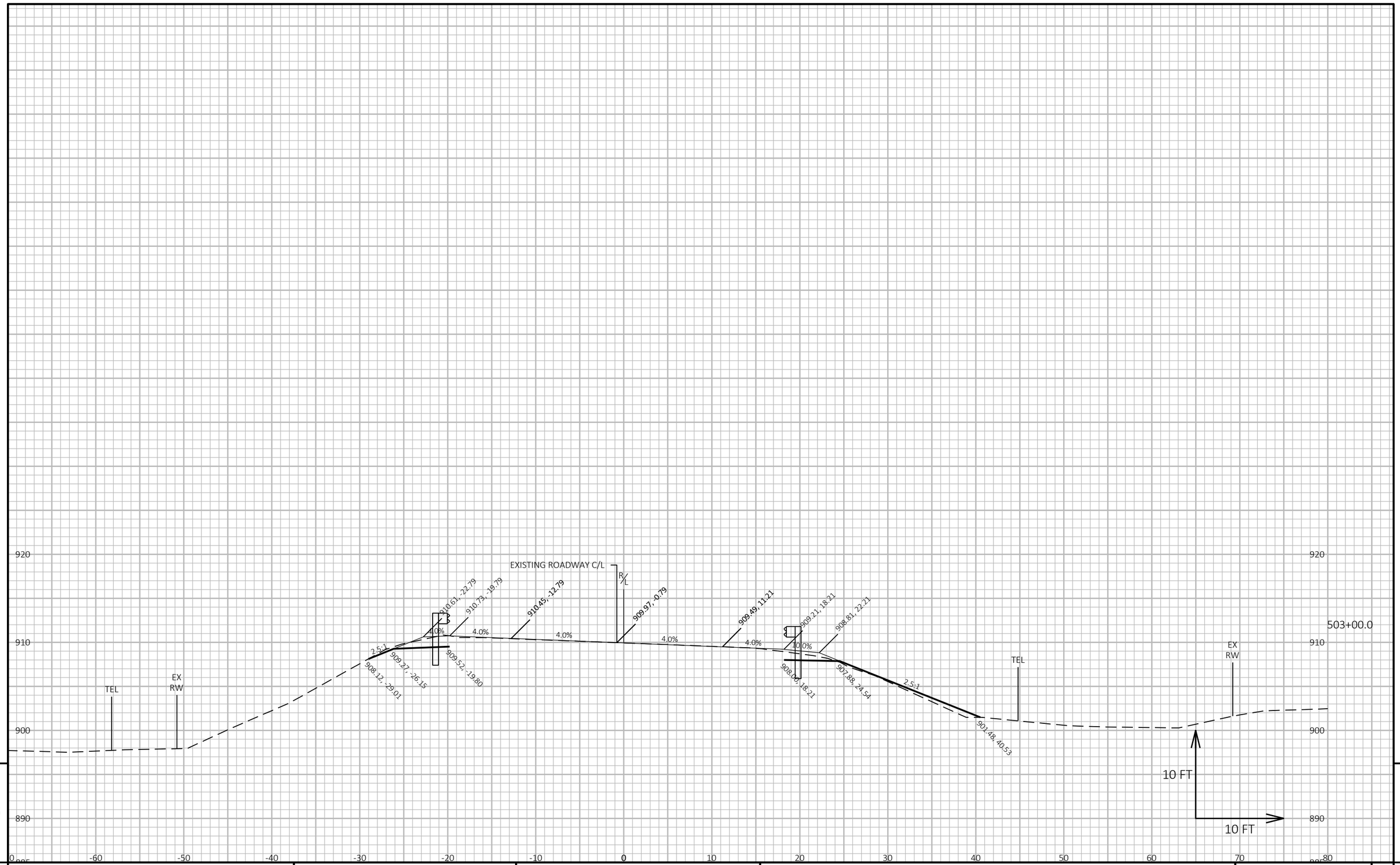
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



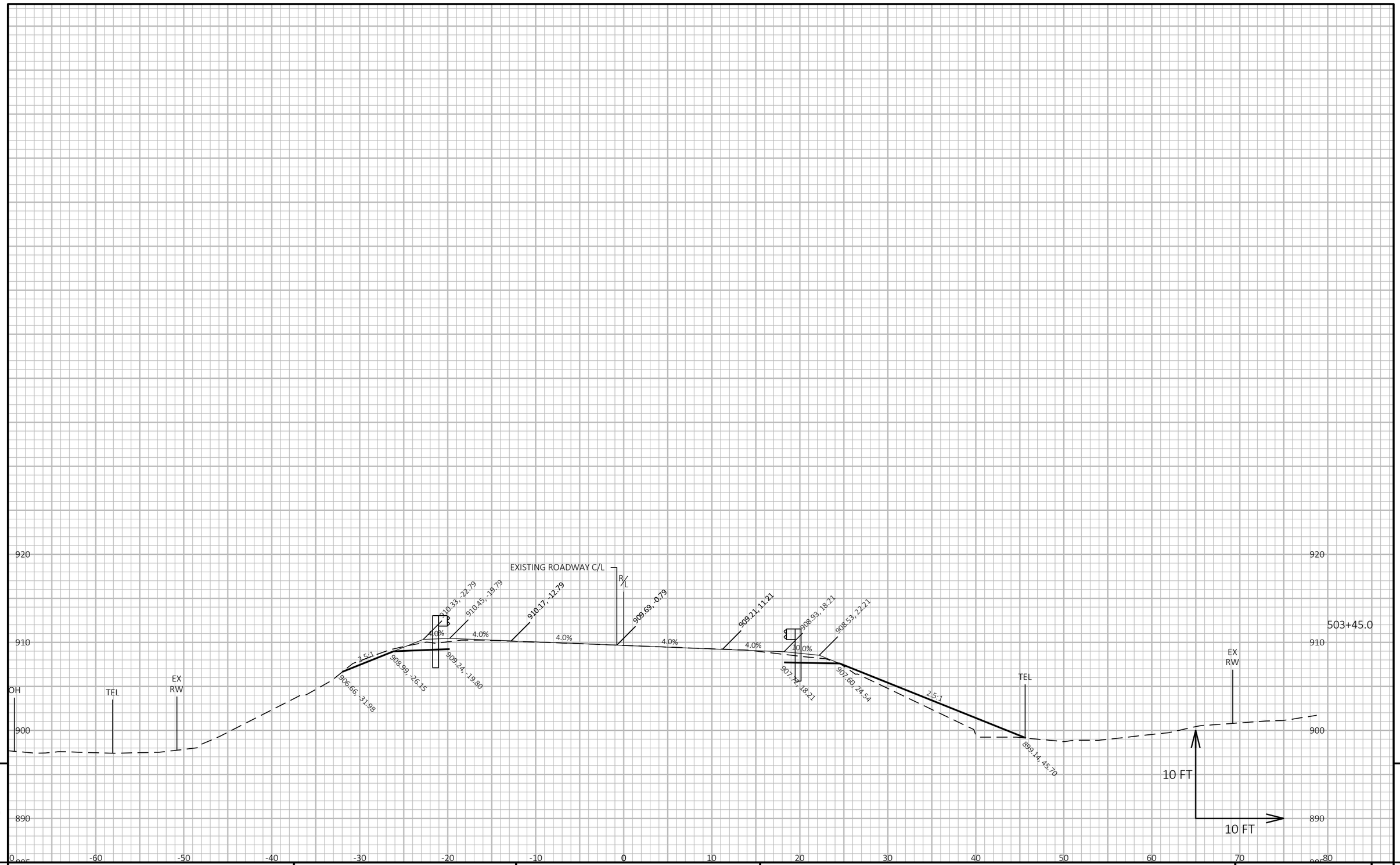
9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 189	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



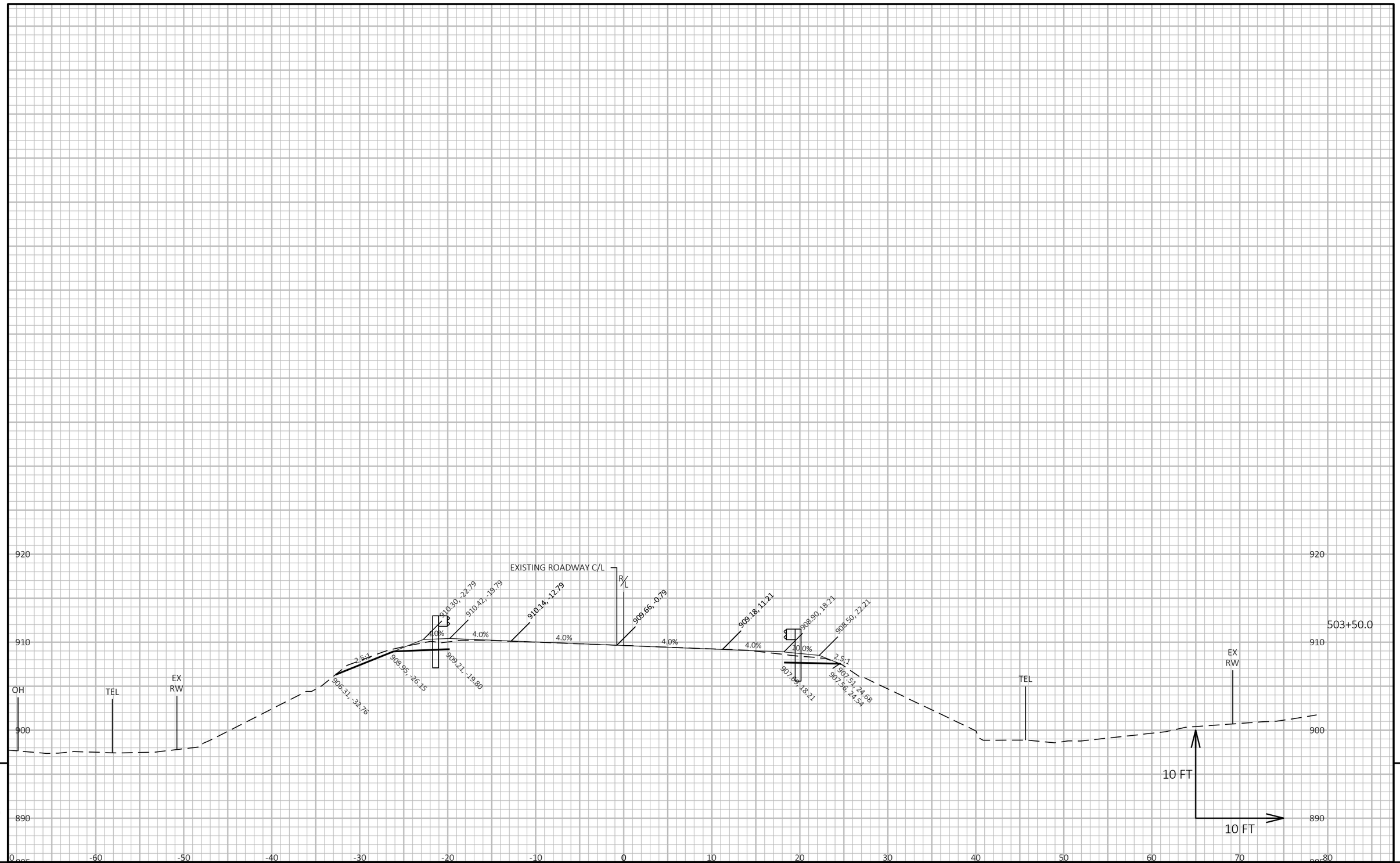
9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 190	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

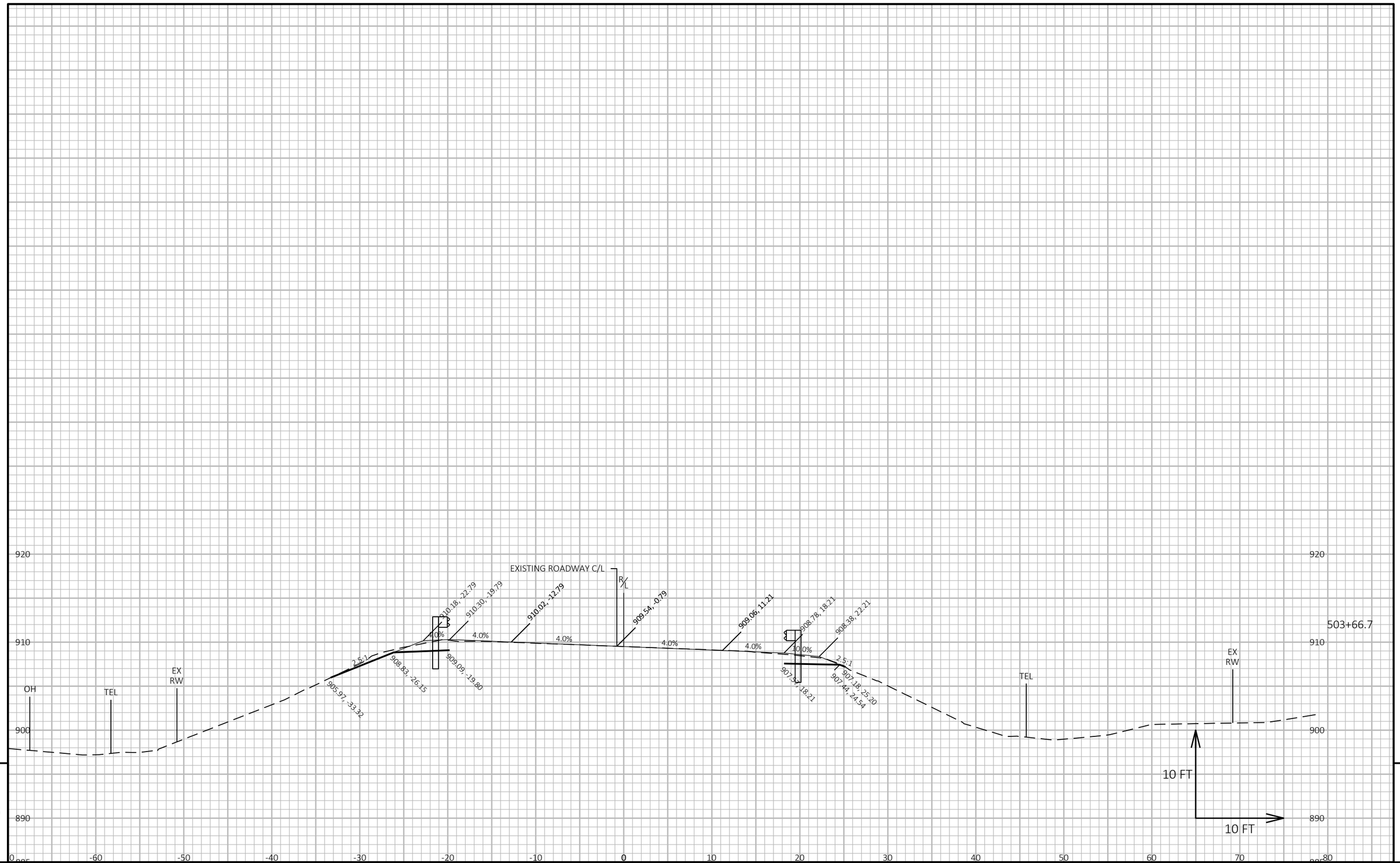


9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 191	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 192	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 12

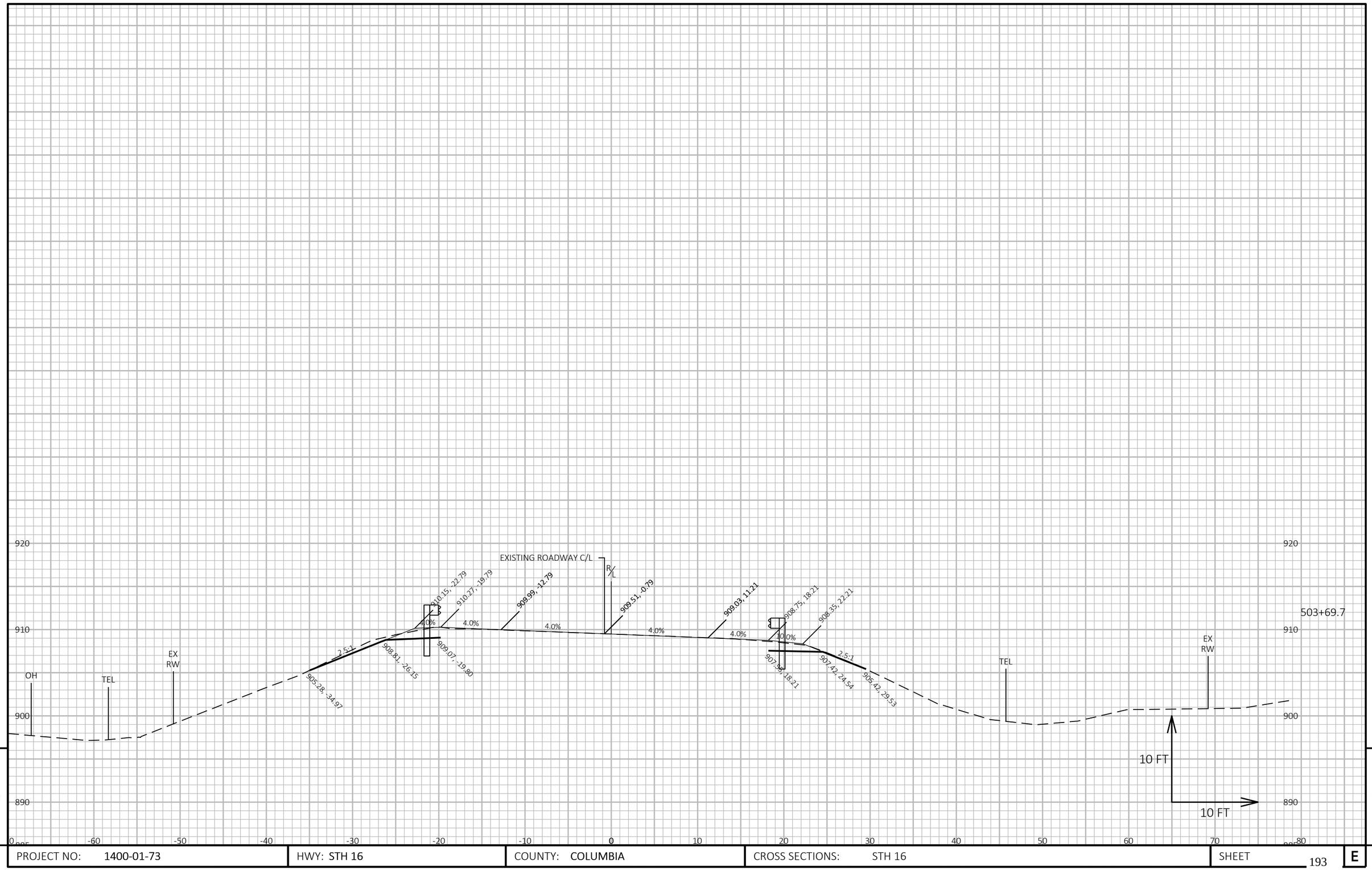
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

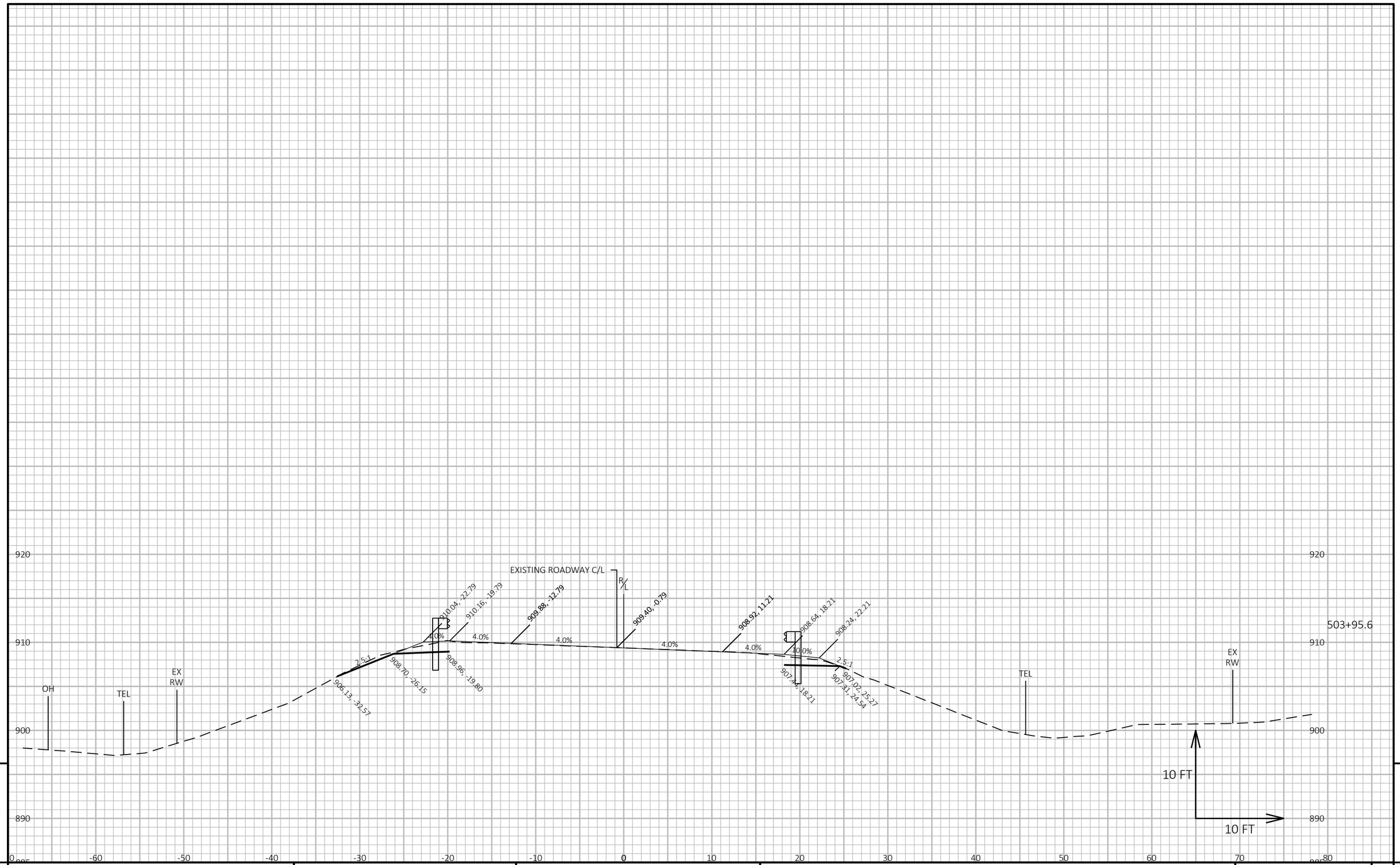


9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 193	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 194	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 14

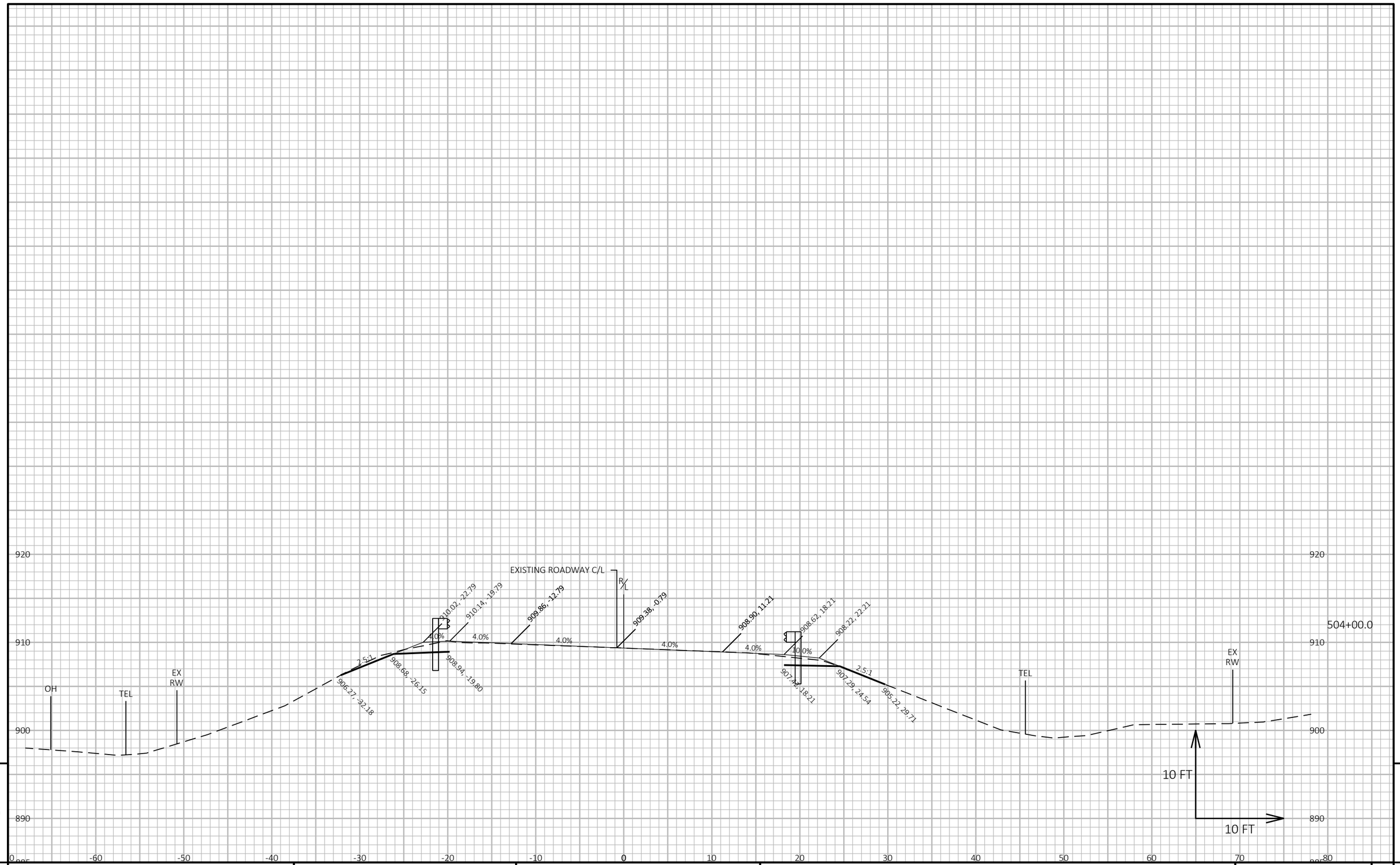
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

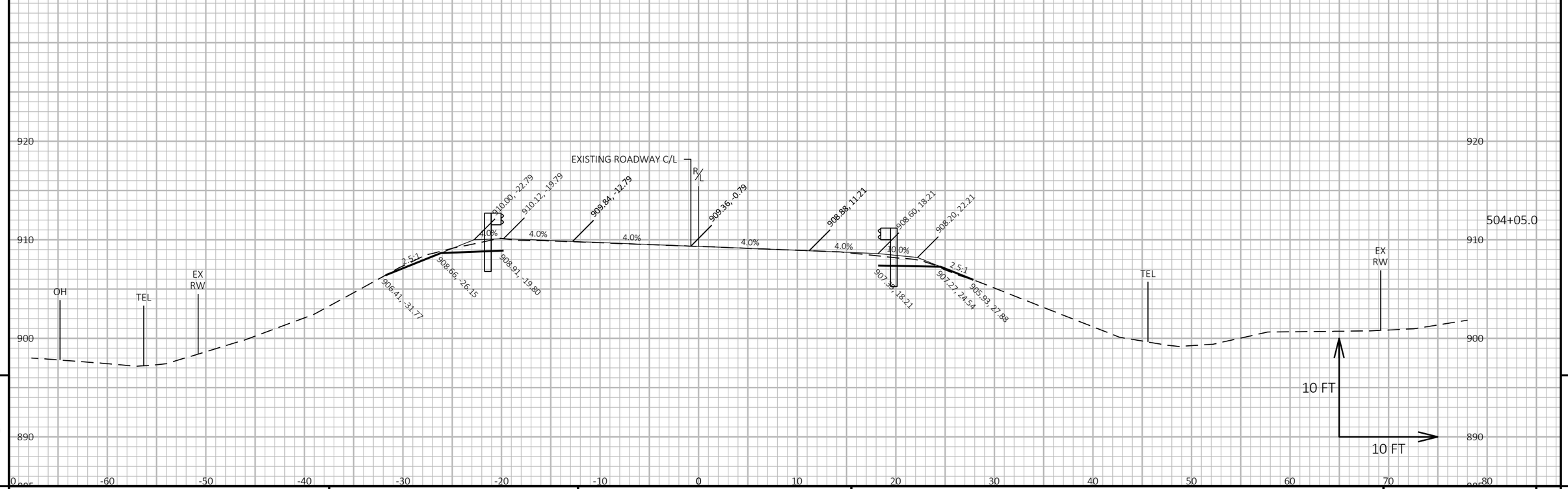


9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 195	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 196	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 16

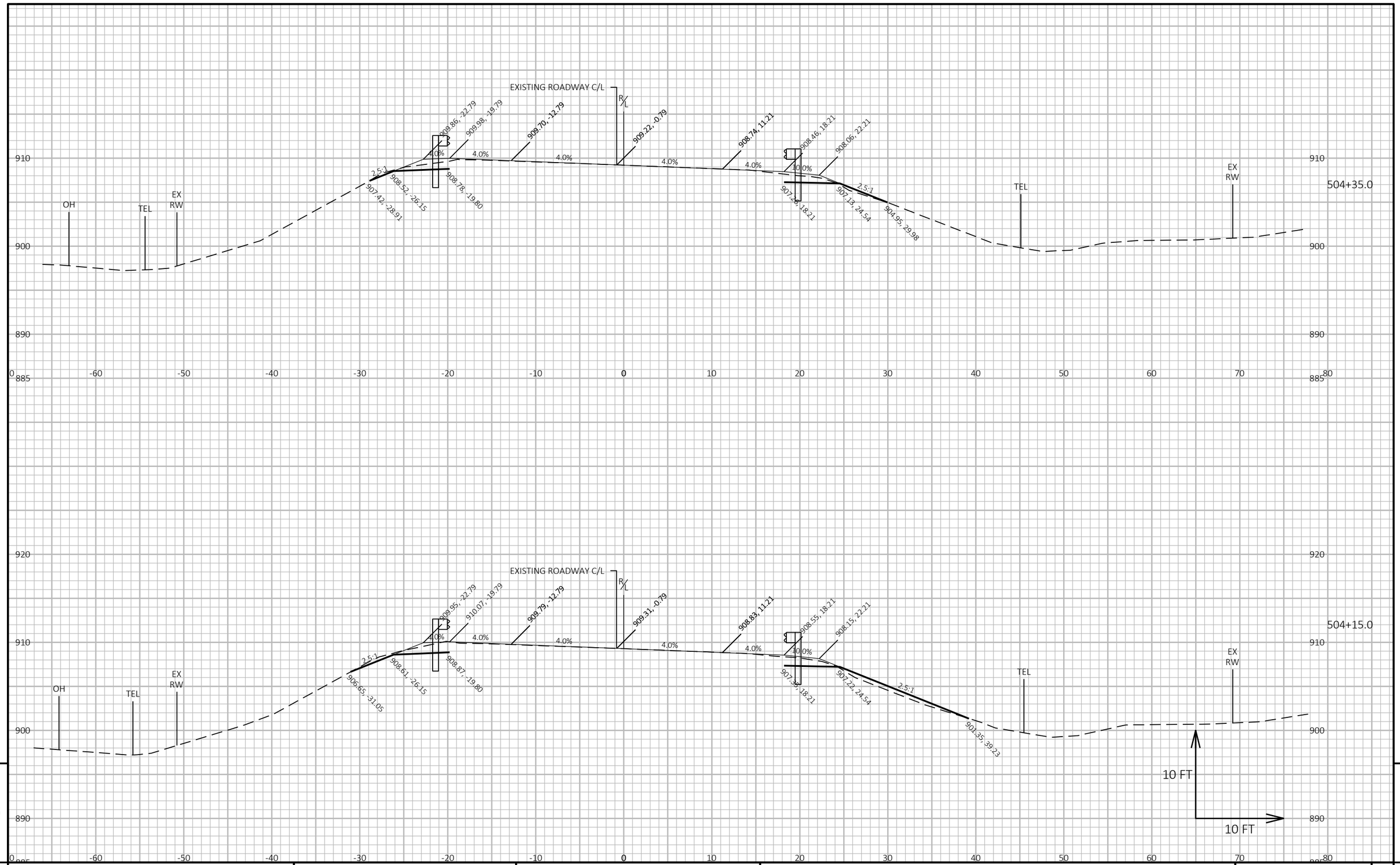
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 197	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 17

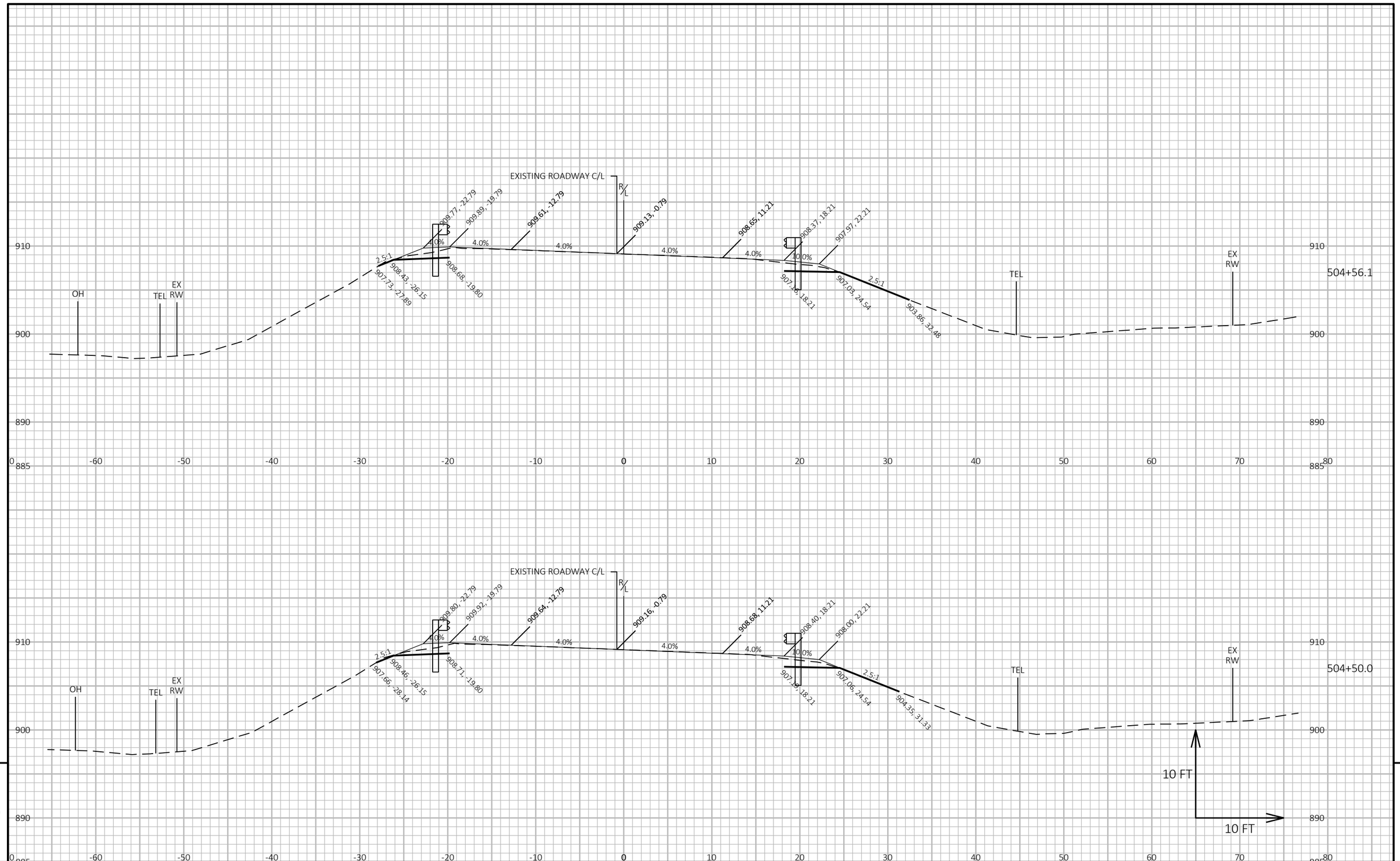
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 198	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 18

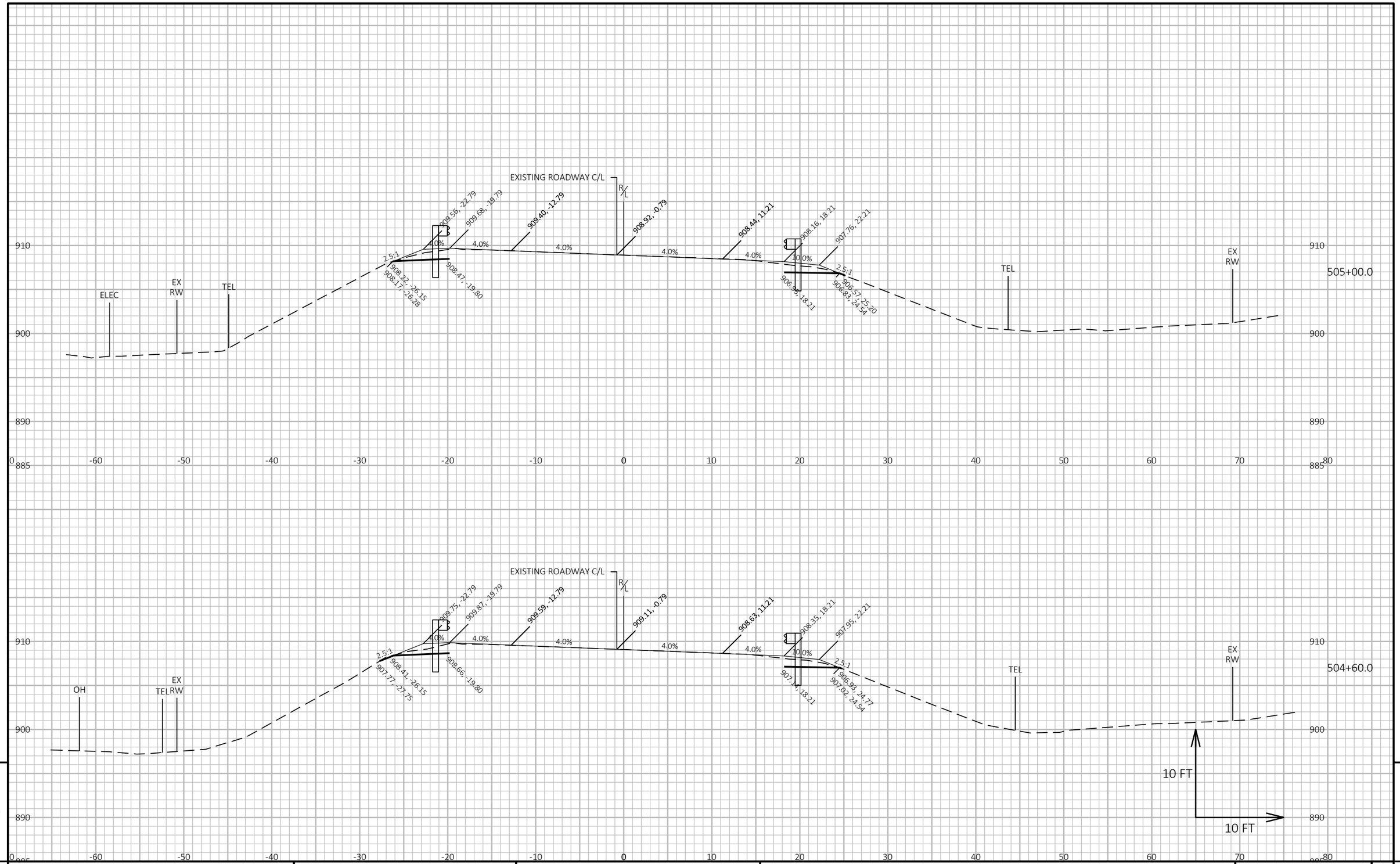
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 199	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 19

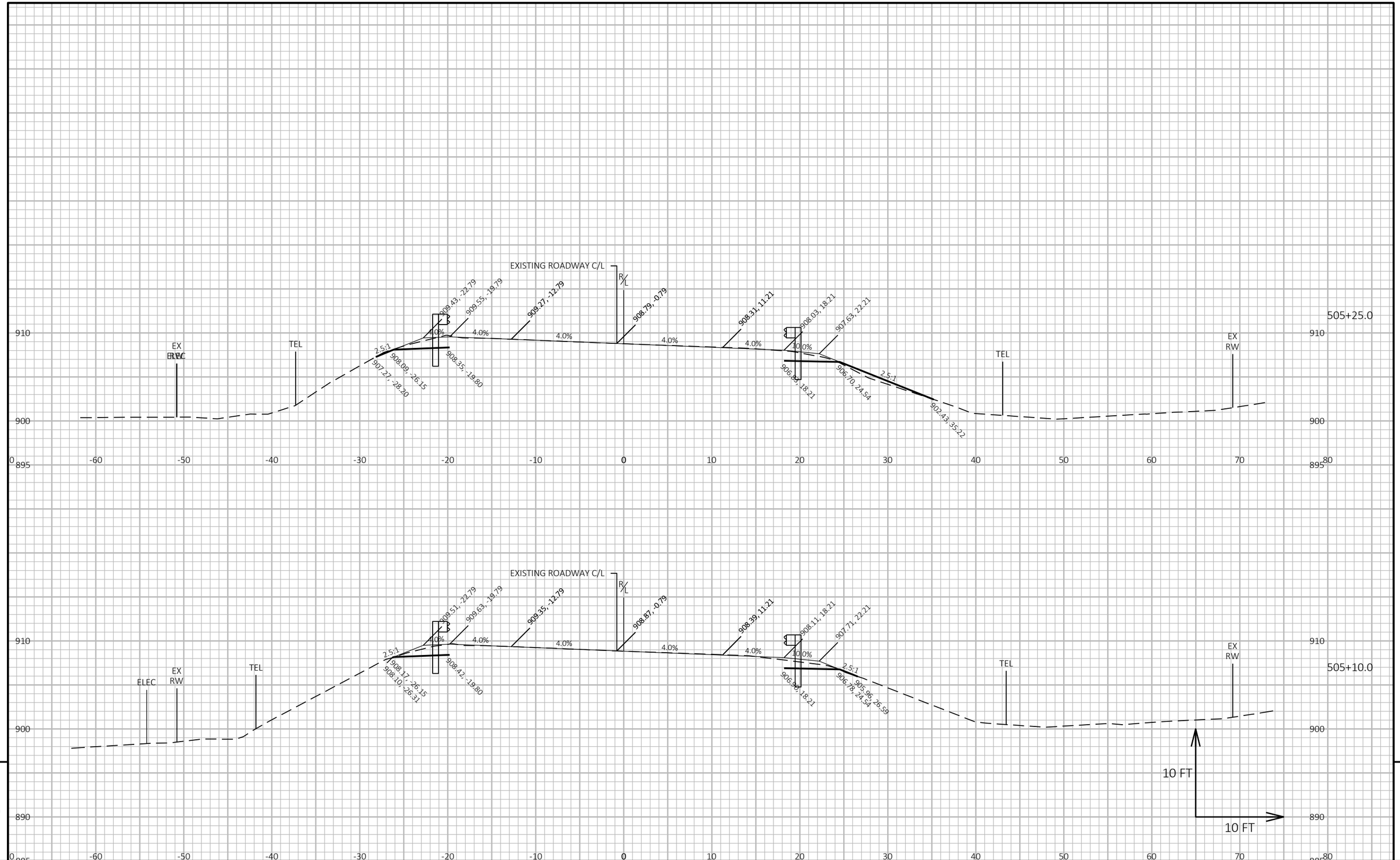
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 200	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 201	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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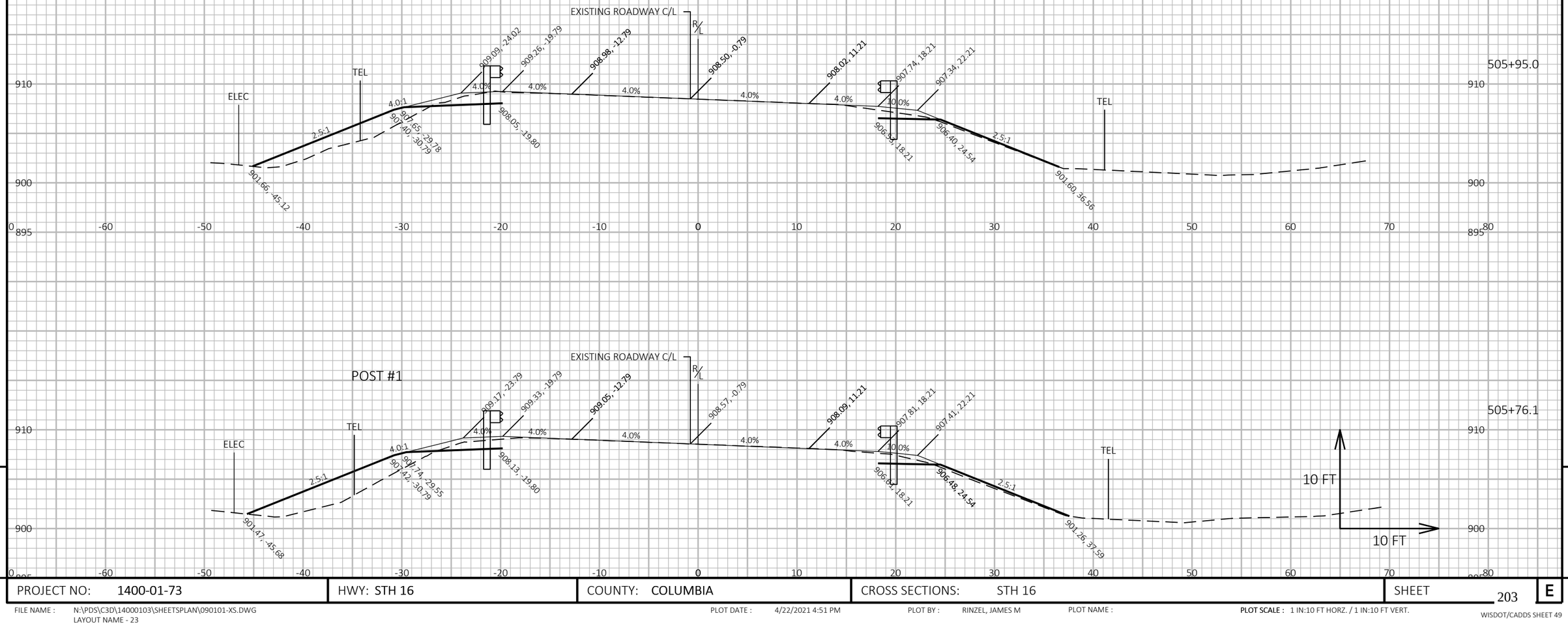
9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 202	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 203	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 23

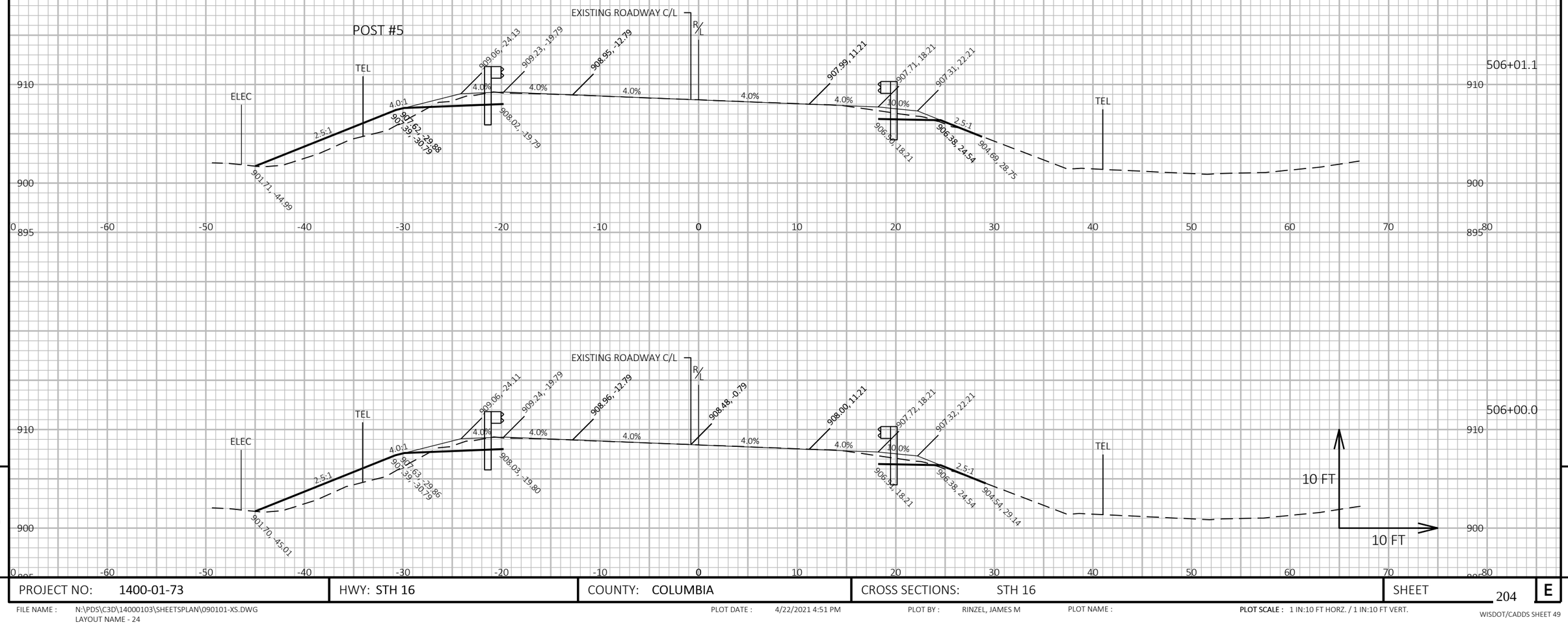
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

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: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 204	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 205	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 25

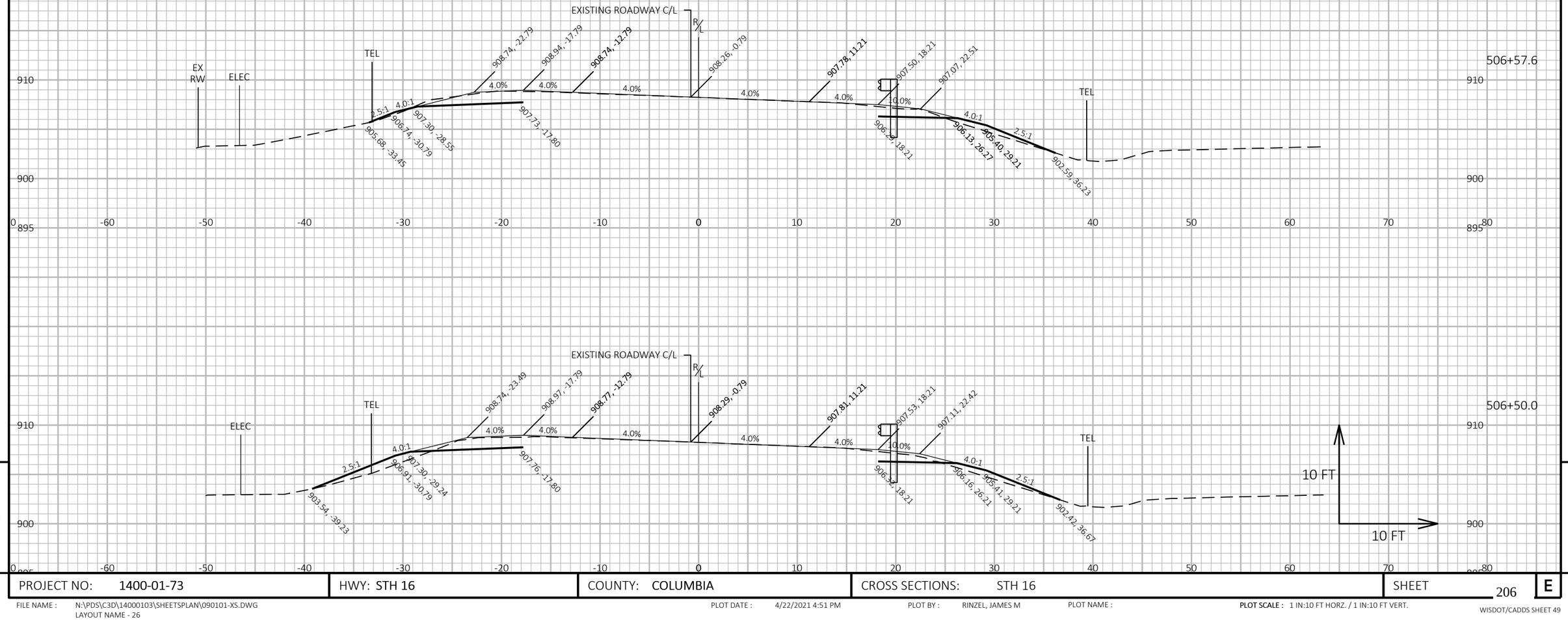
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 206	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 26

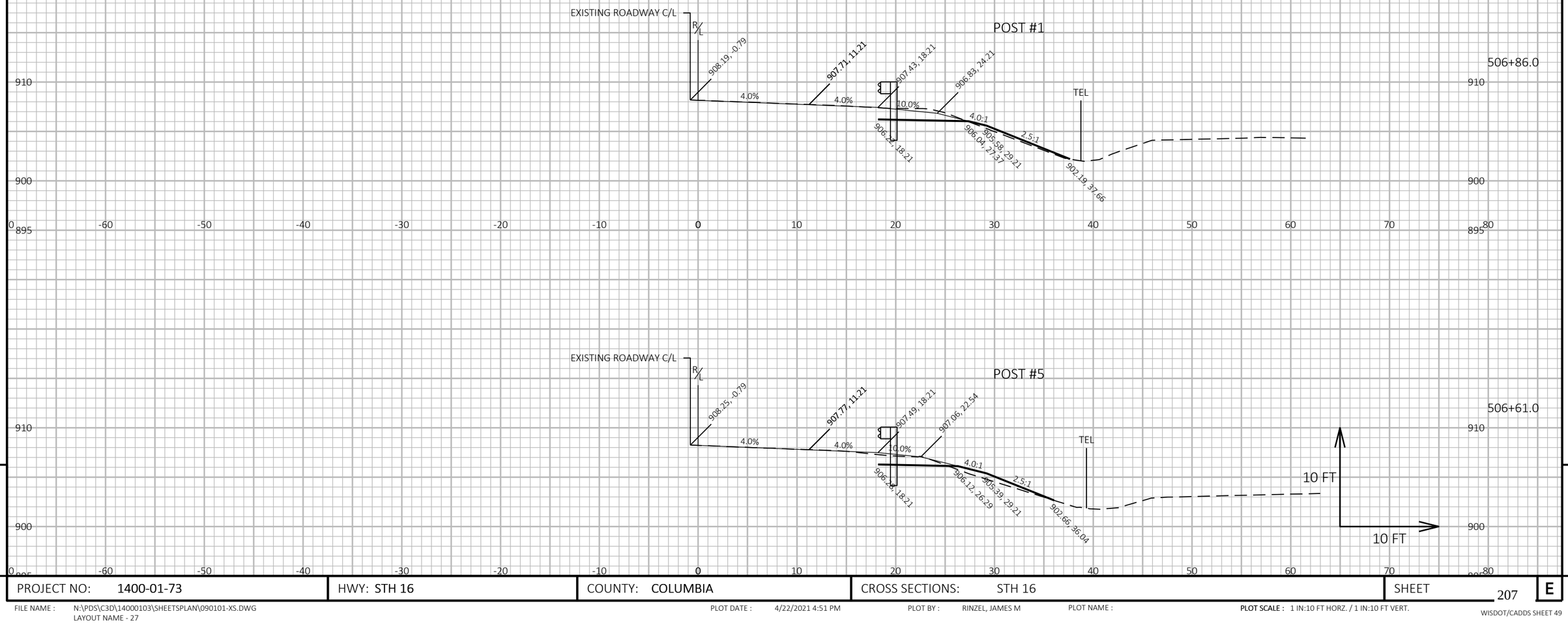
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

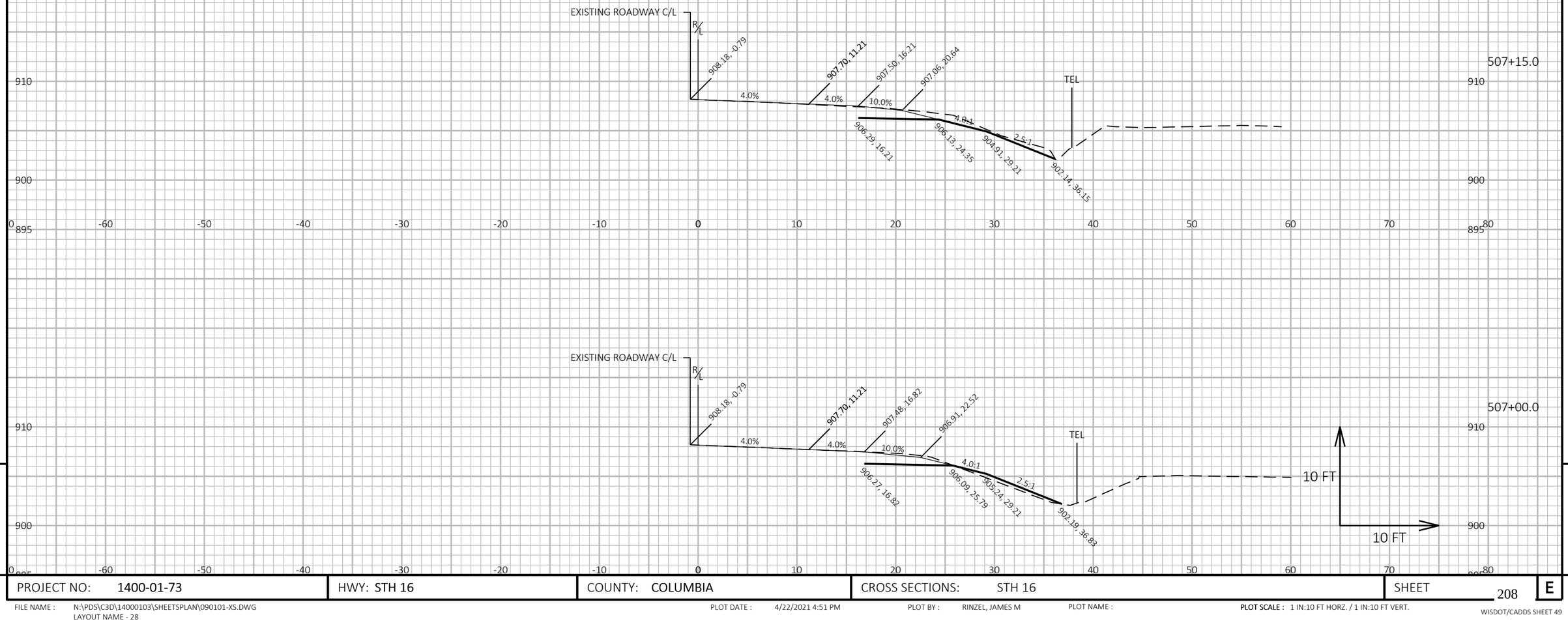
9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 207	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 208	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 28

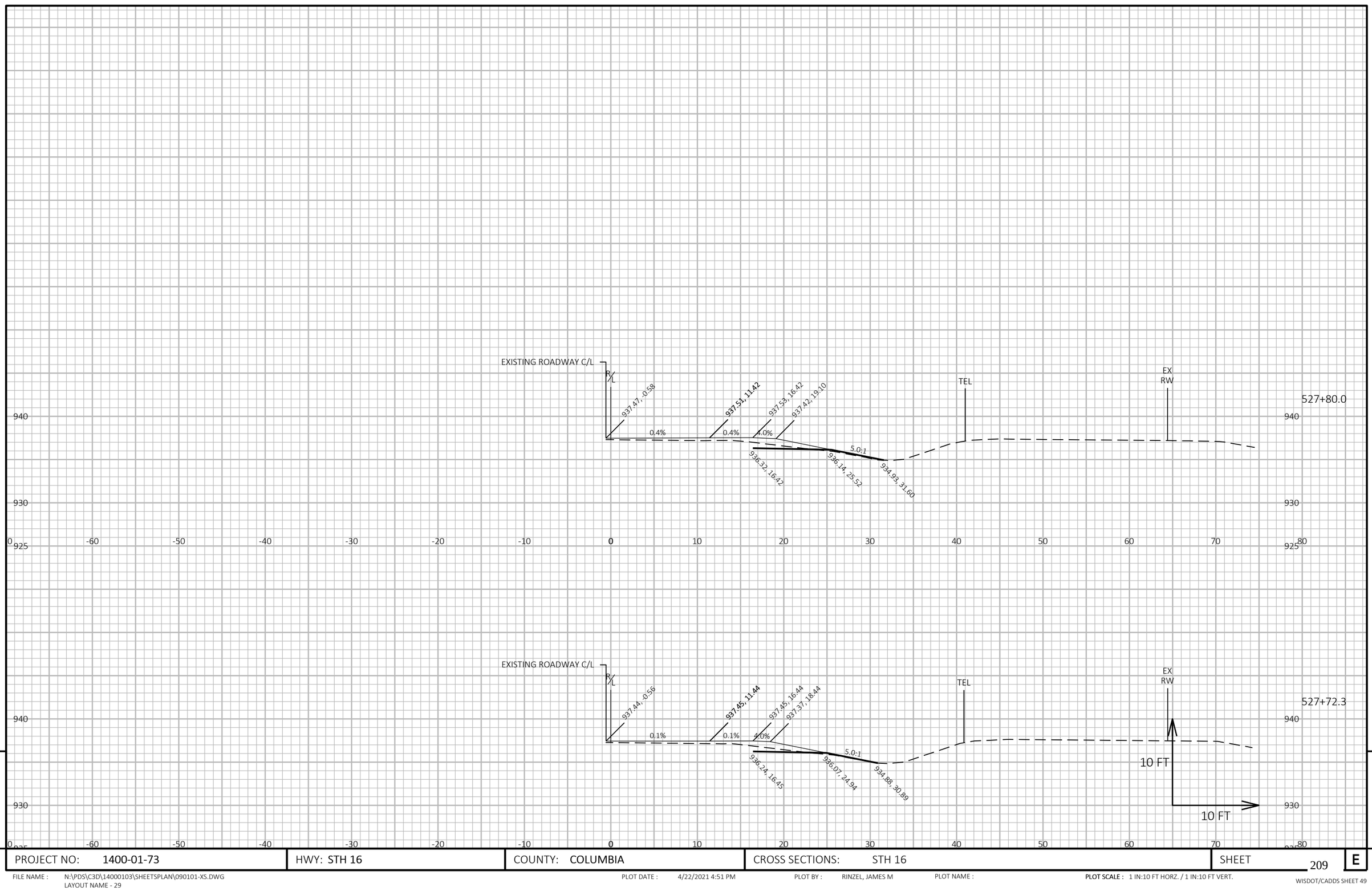
PLOT DATE : 4/22/2021 4:51 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

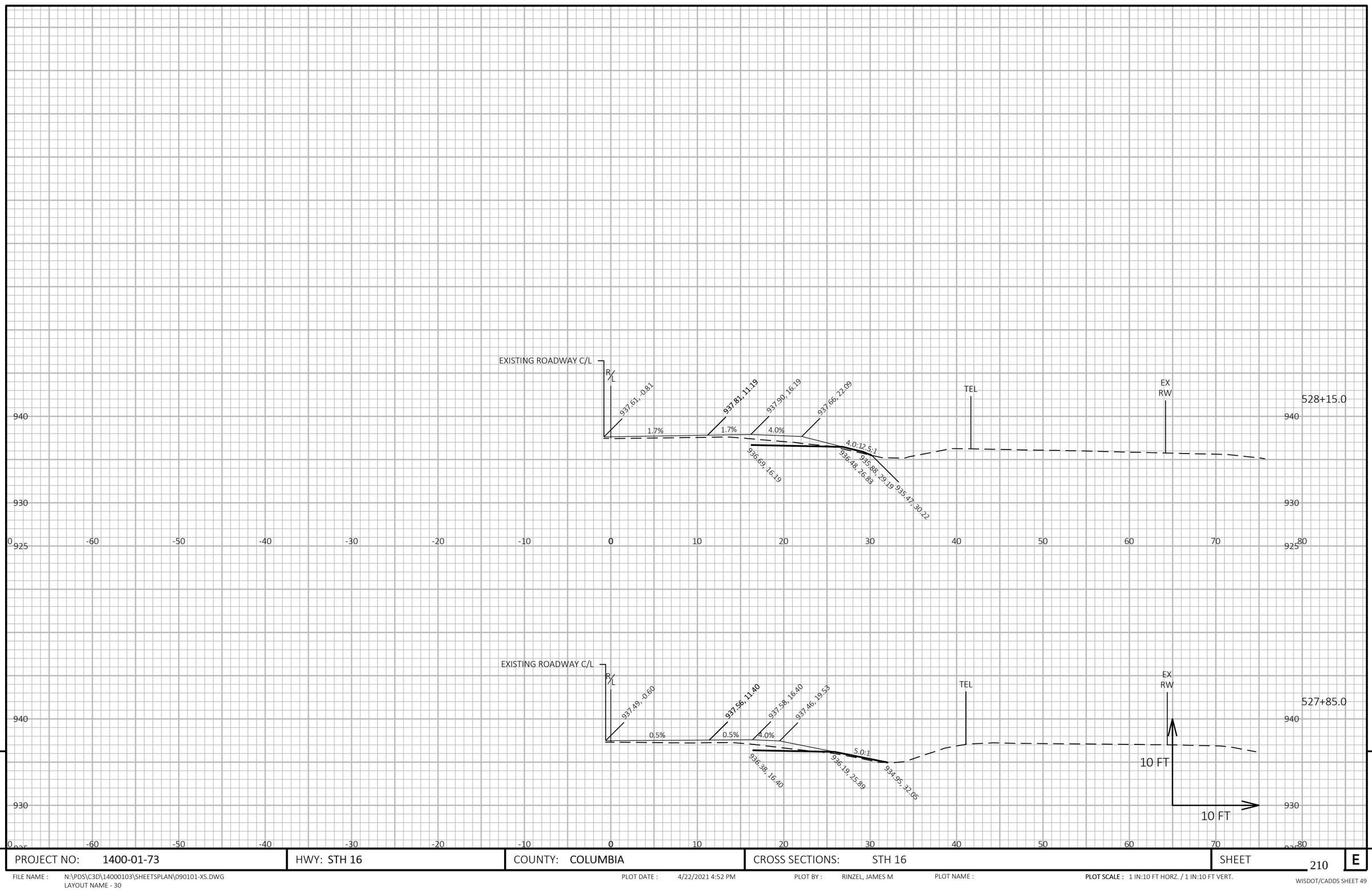
9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 209	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 4/22/2021 4:51 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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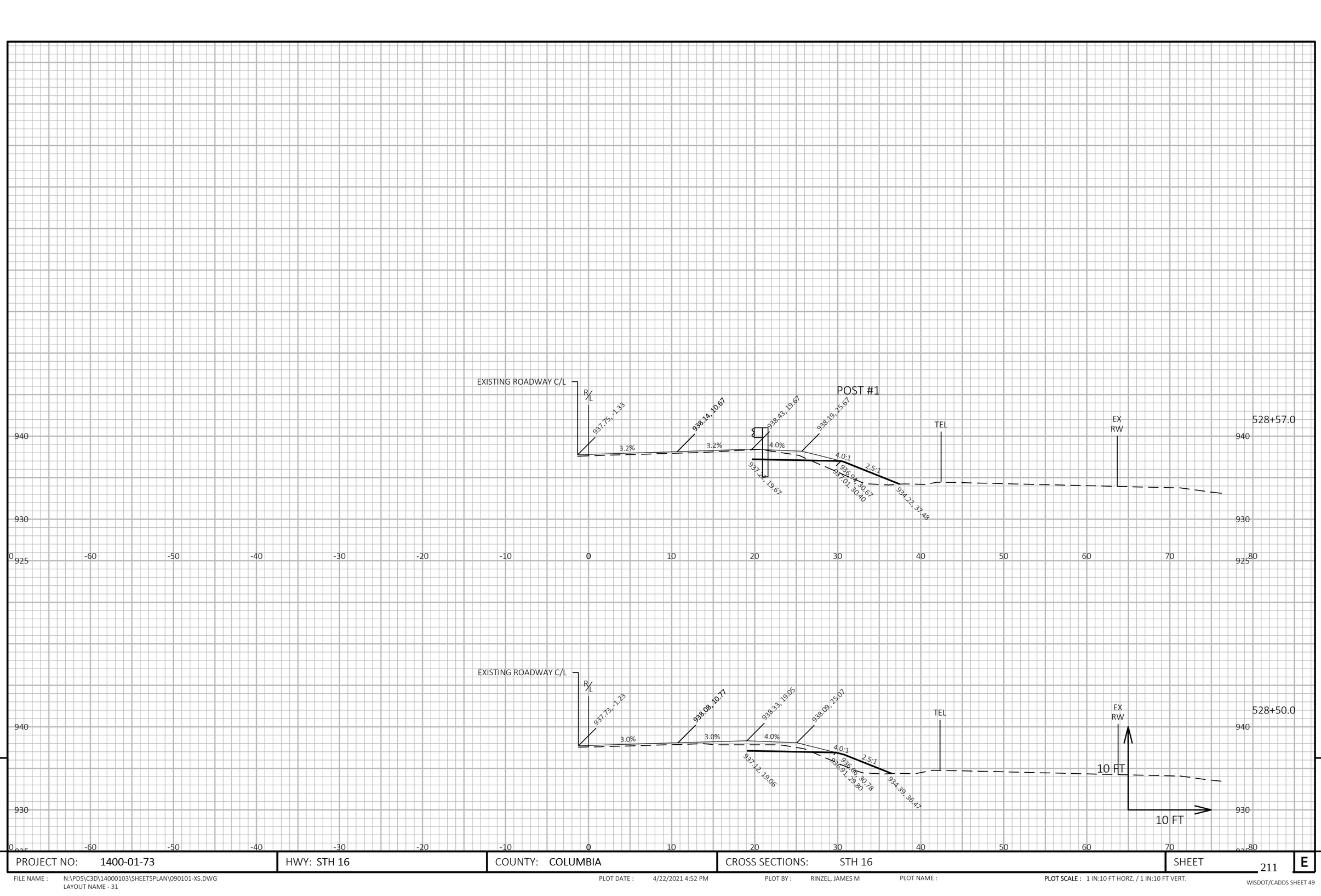
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 210	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 4/22/2021 4:52 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 211	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 31

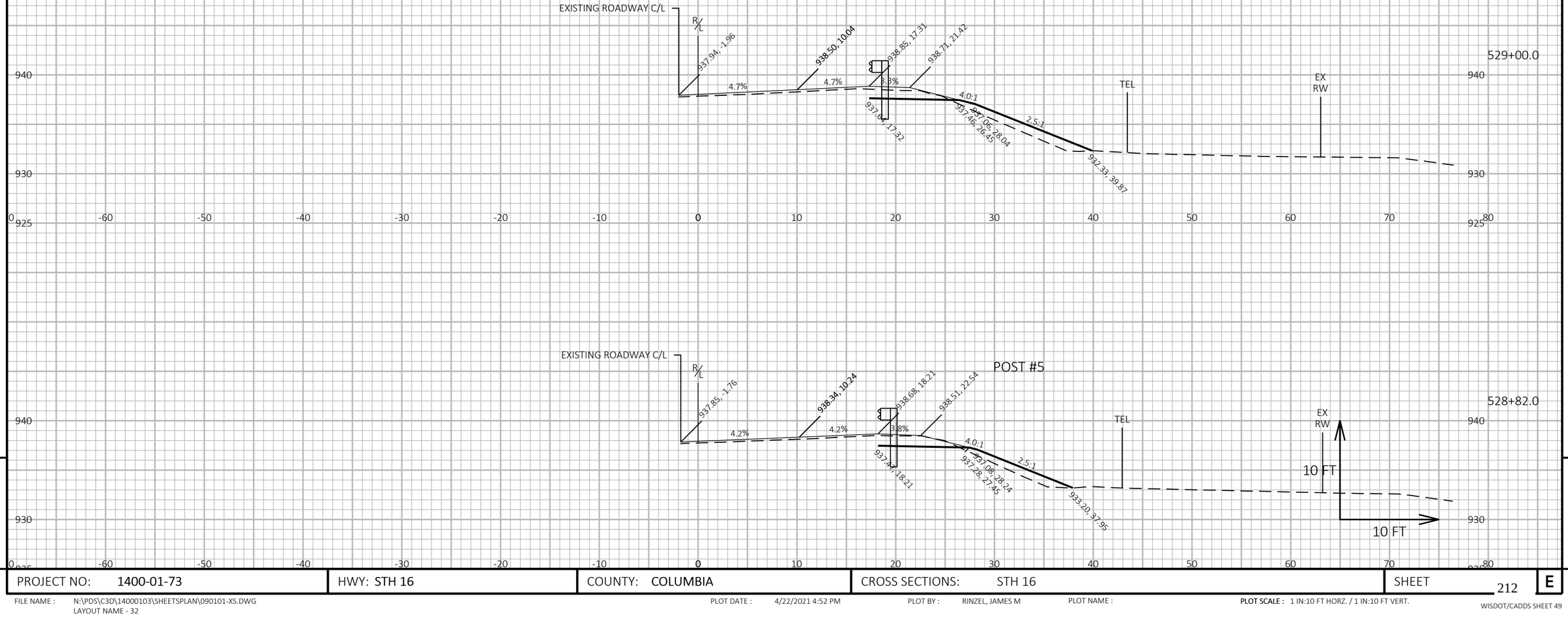
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 212	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 32

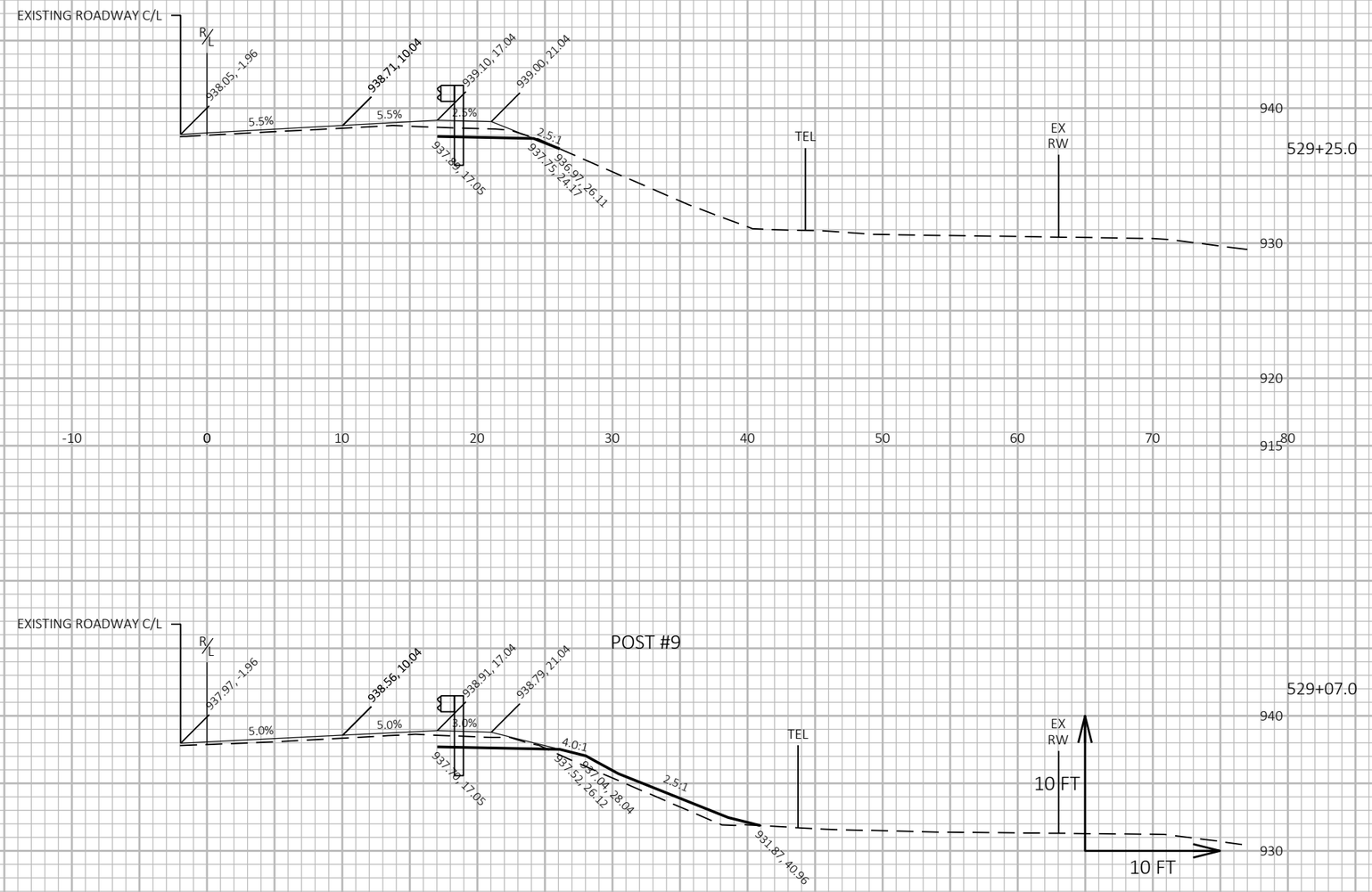
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 213	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 33

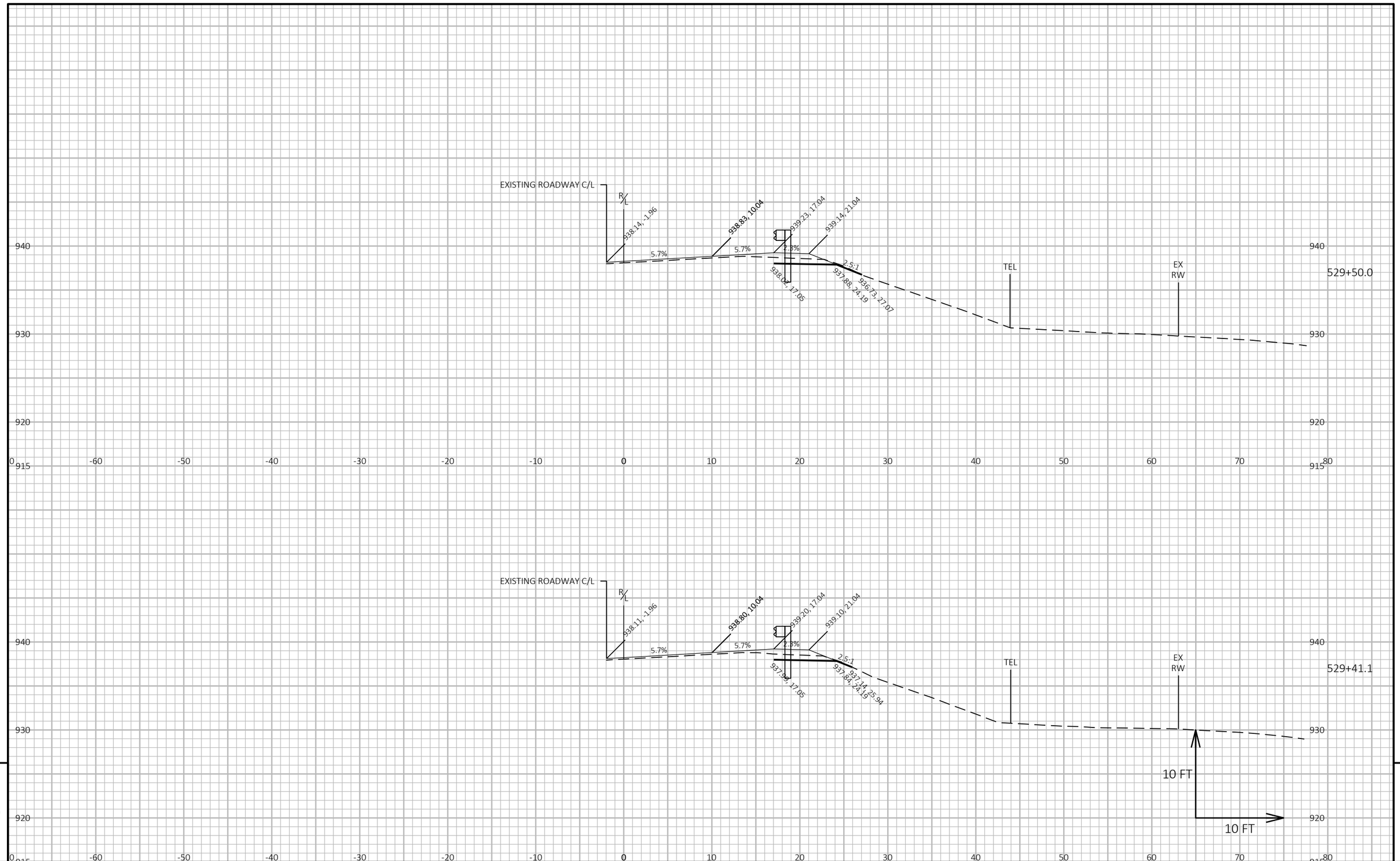
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 214	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 34

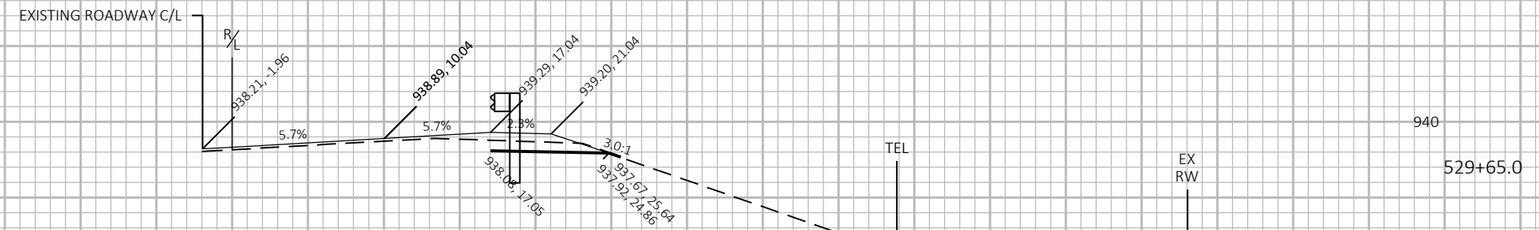
PLOT DATE : 4/22/2021 4:52 PM

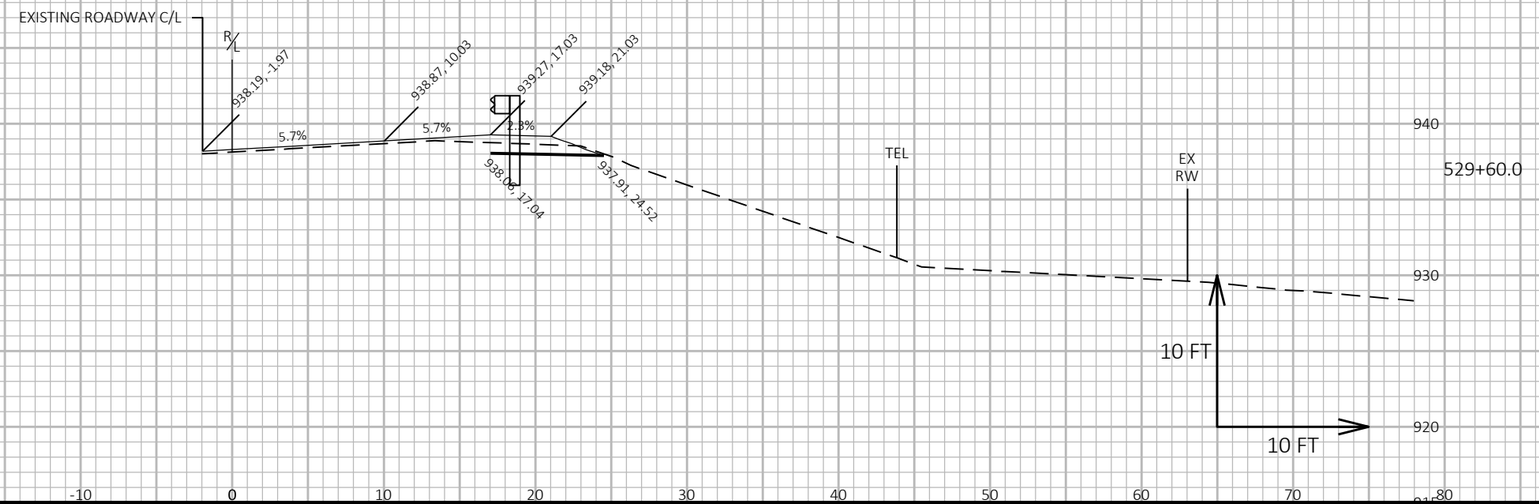
PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 215	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 35

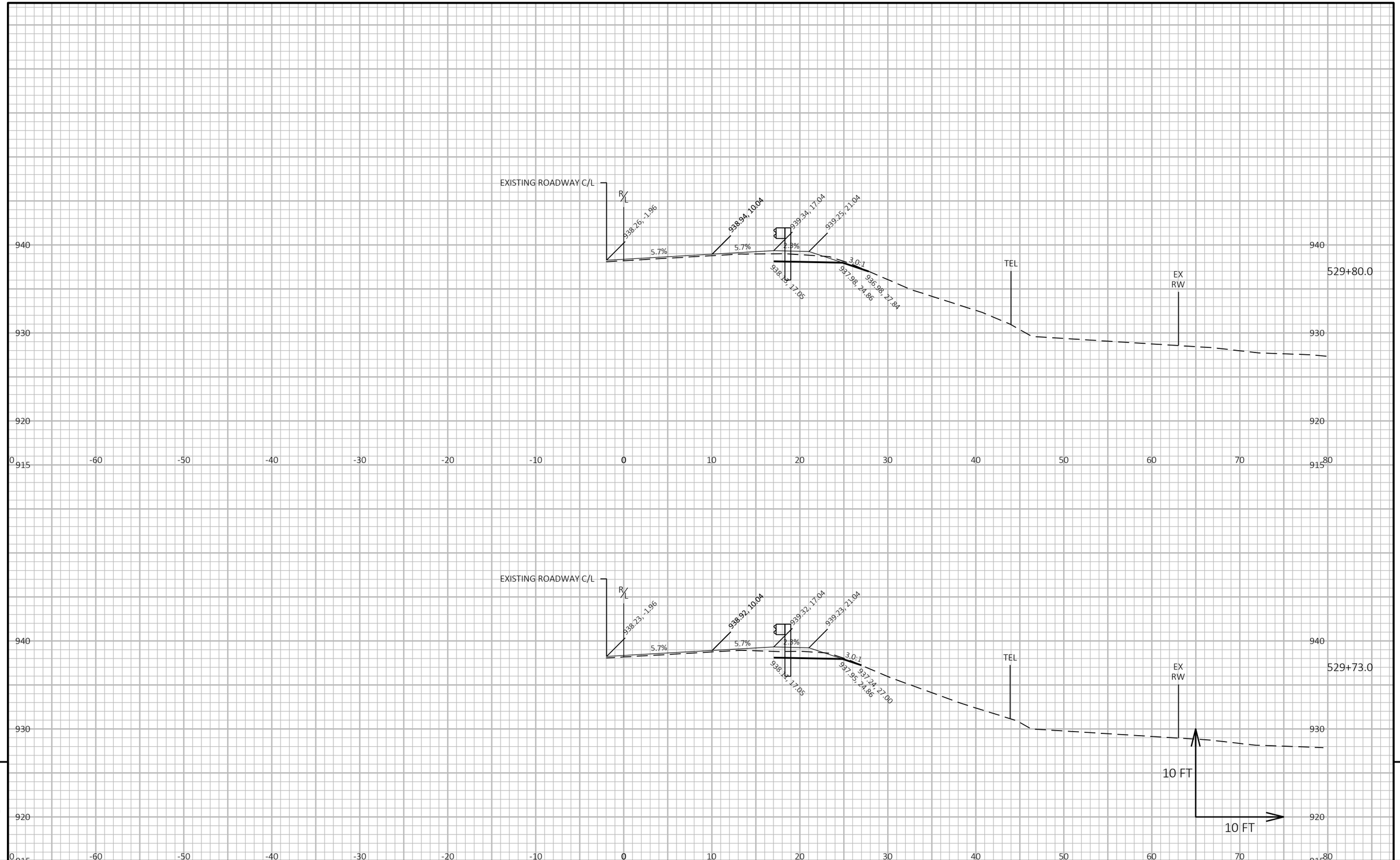
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

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: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 216	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 36

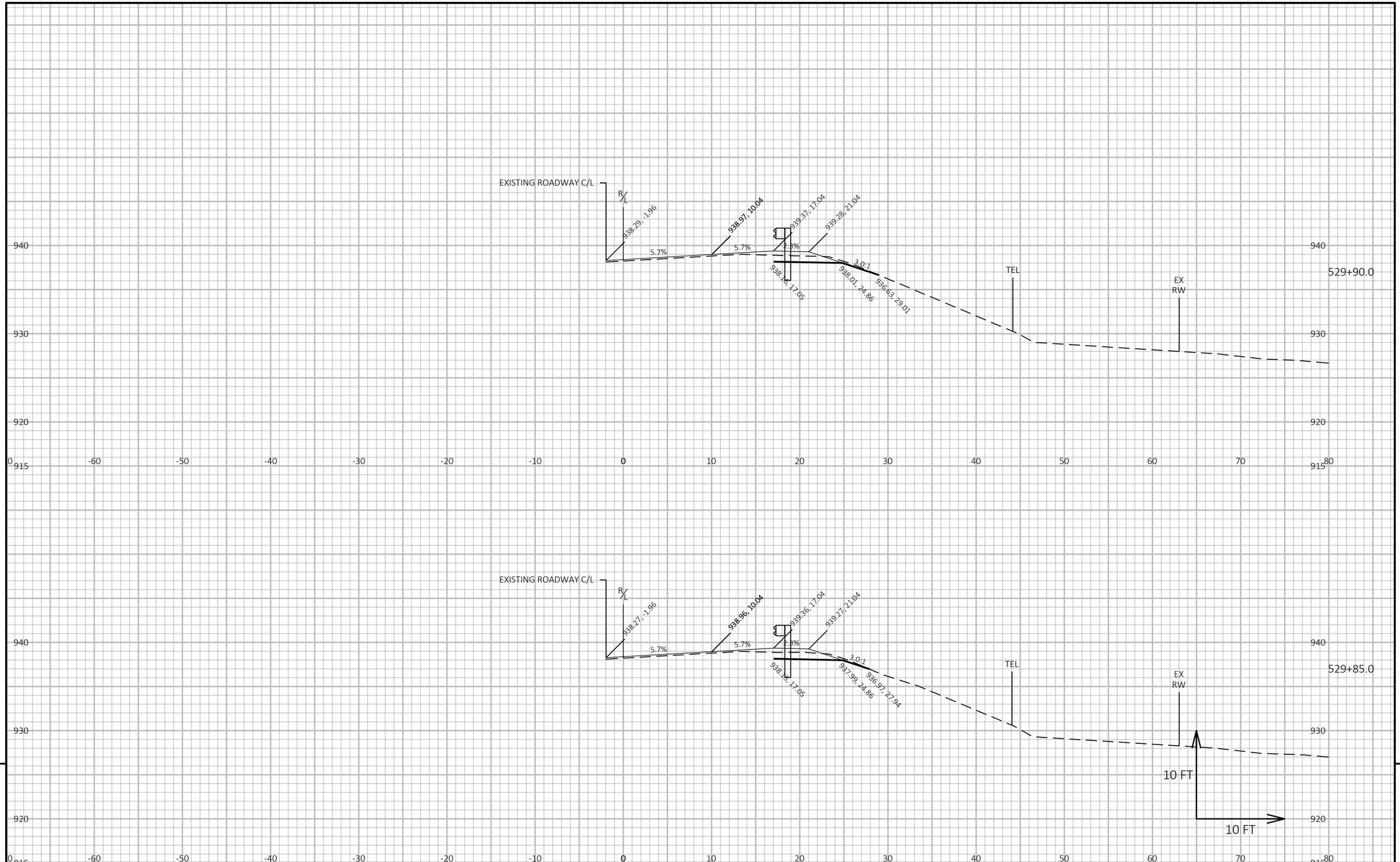
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

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: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 217	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 37

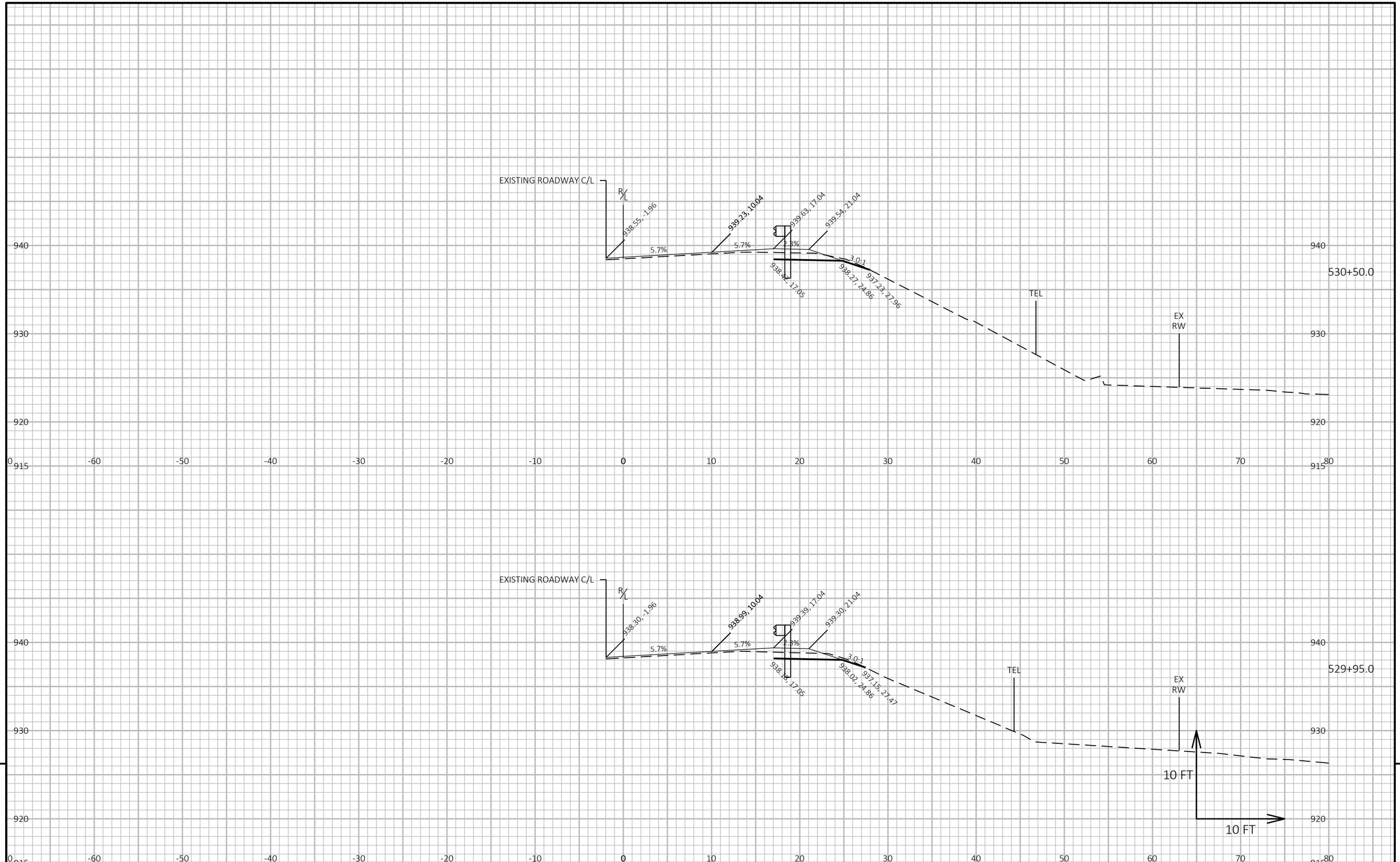
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 218	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 38

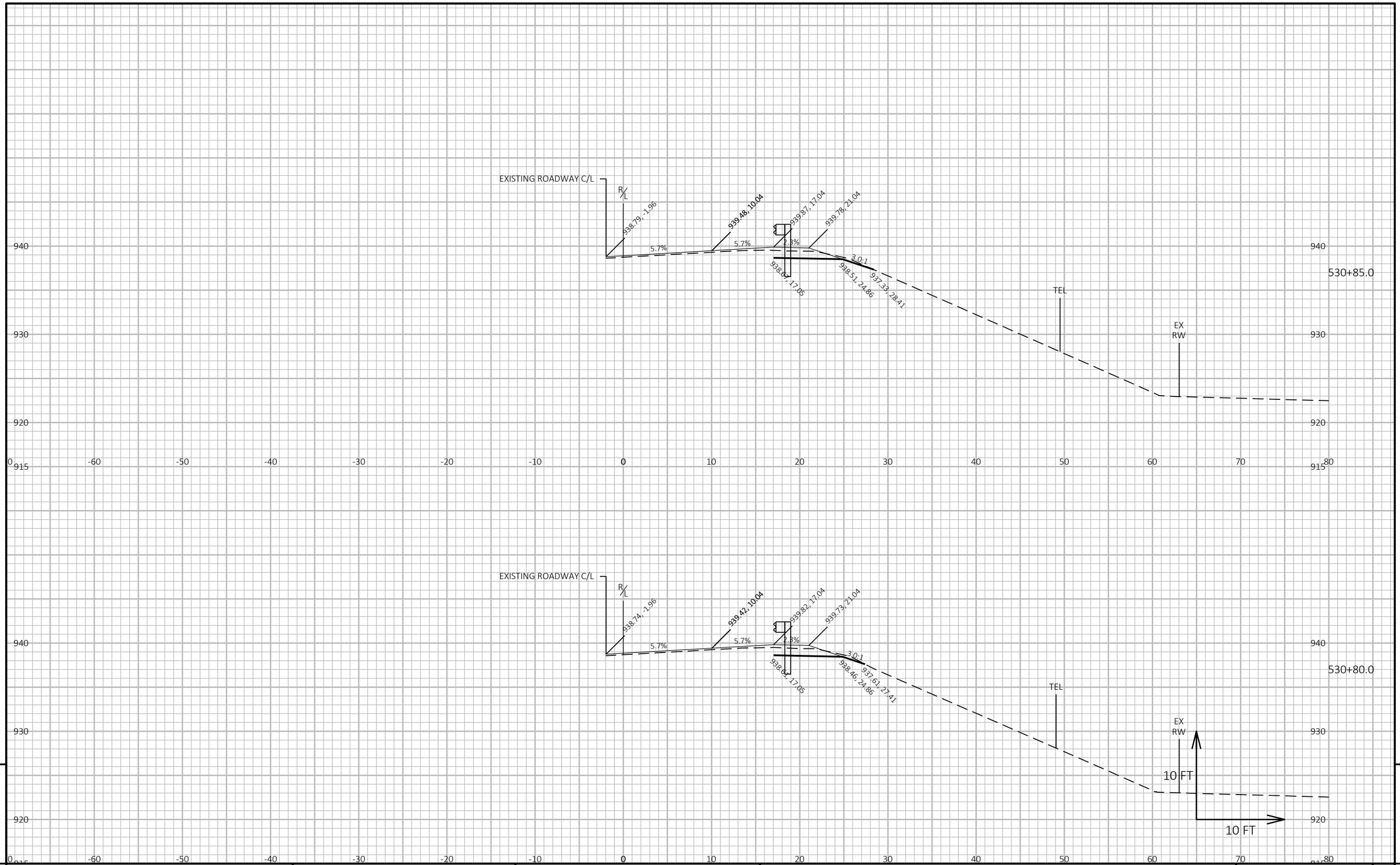
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 219	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 39

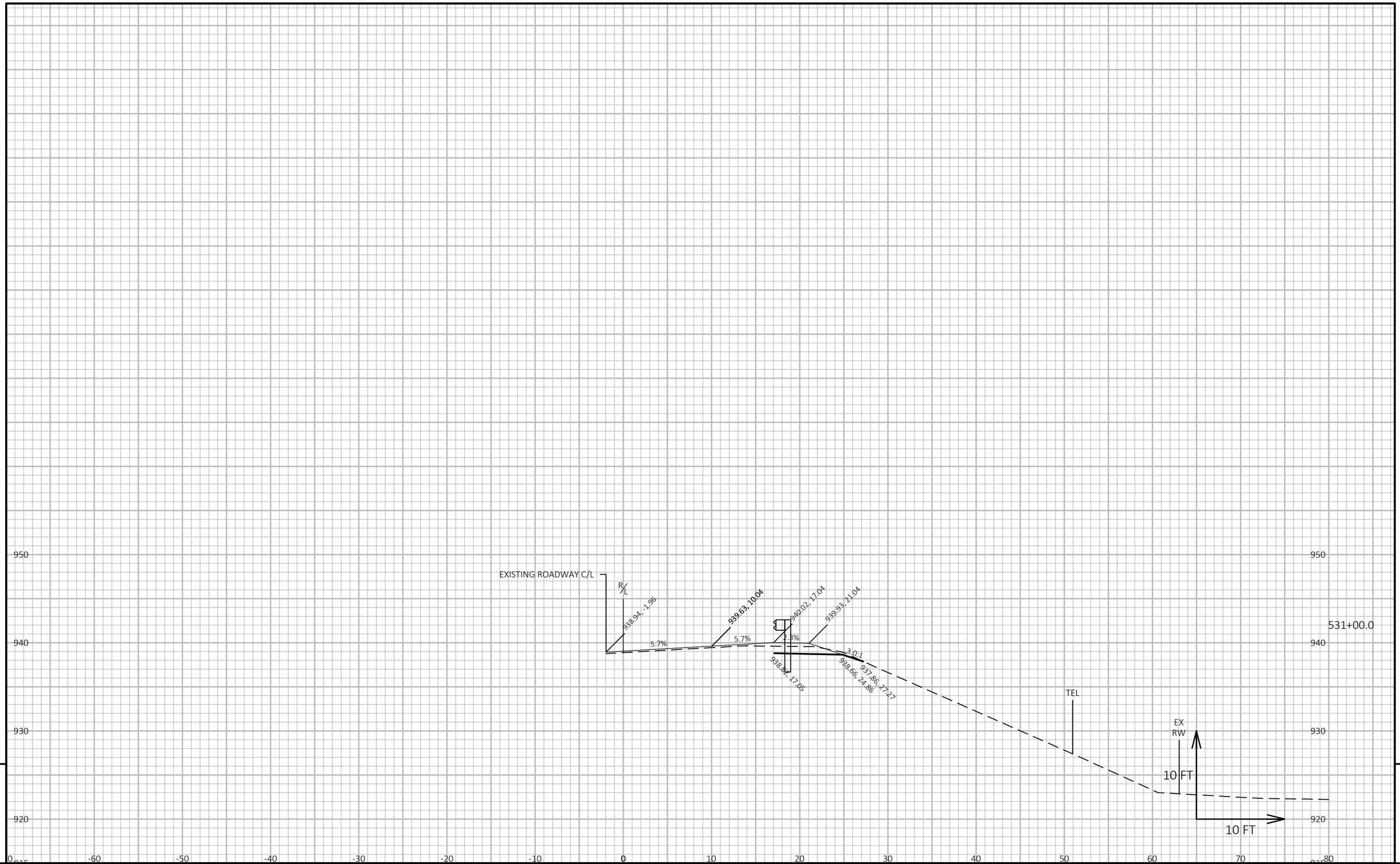
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 220	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 40

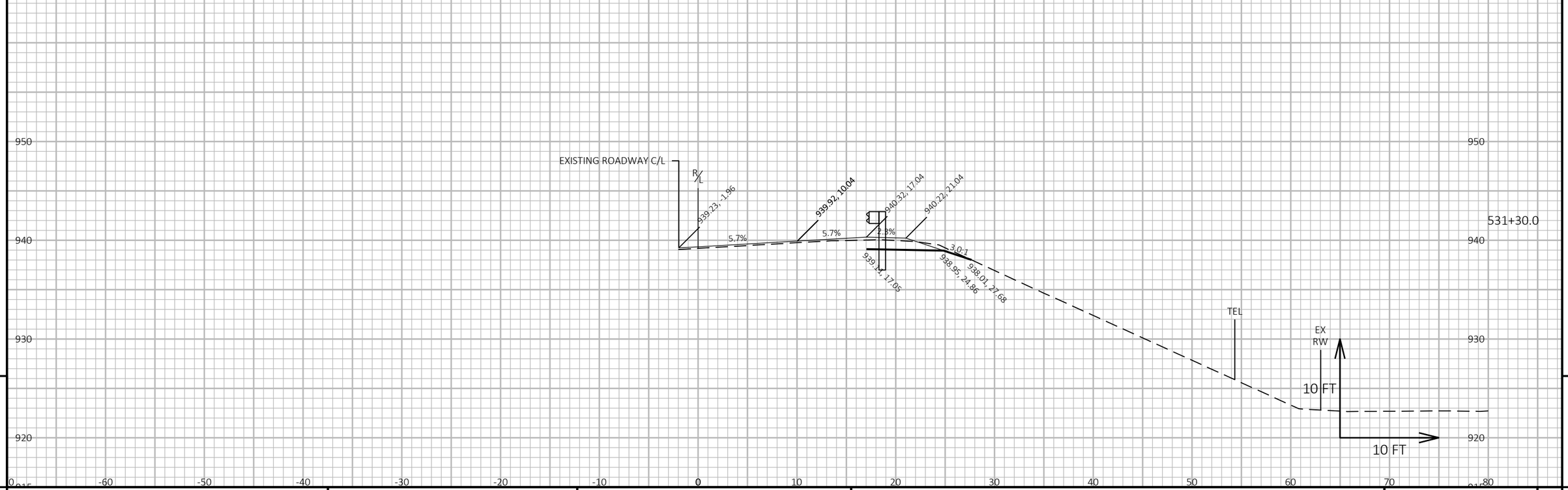
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 221	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 41

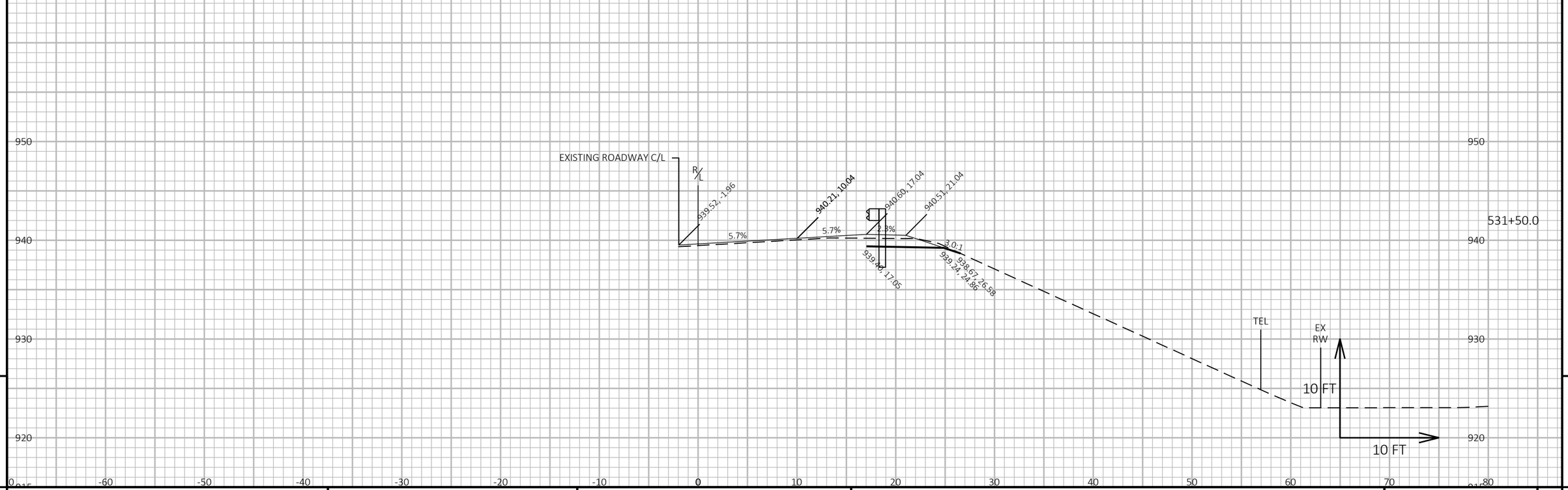
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

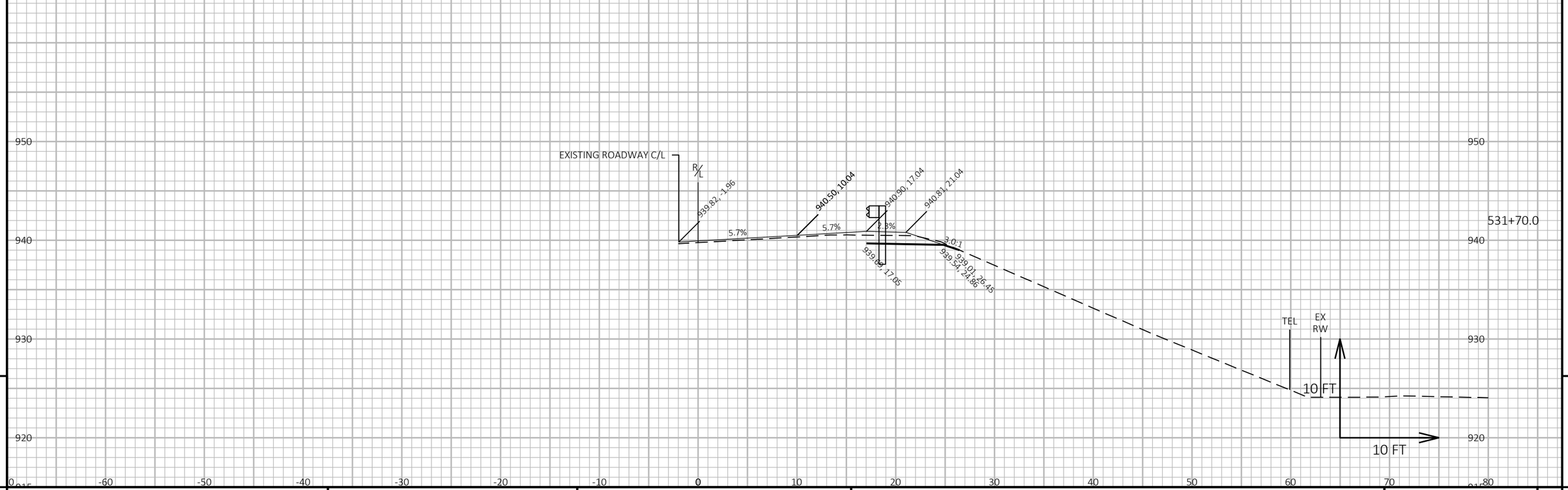
PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 222	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 4/22/2021 4:52 PM PLOT BY : RINZEL, JAMES M 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: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 223	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 43

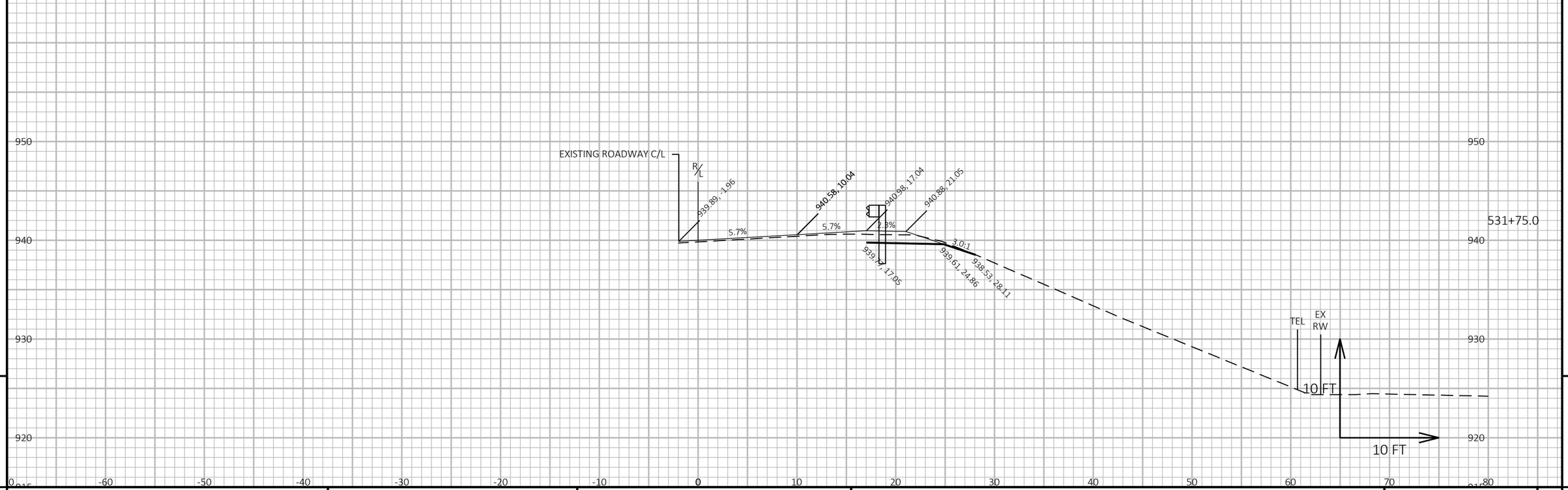
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 224	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 44

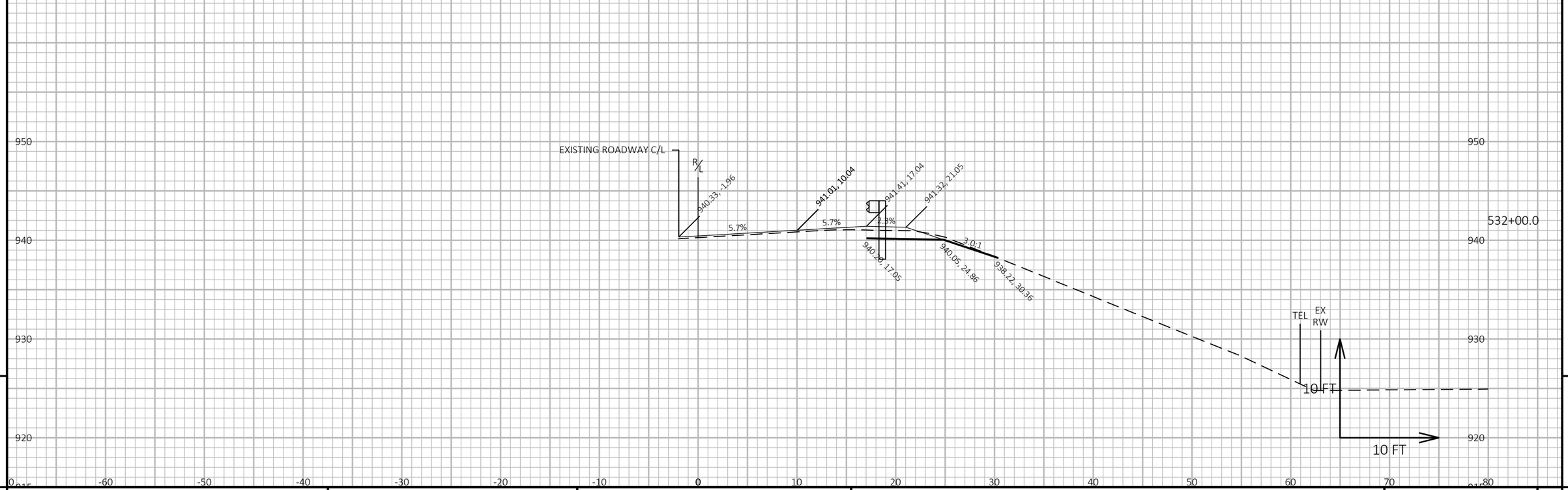
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 225	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 45

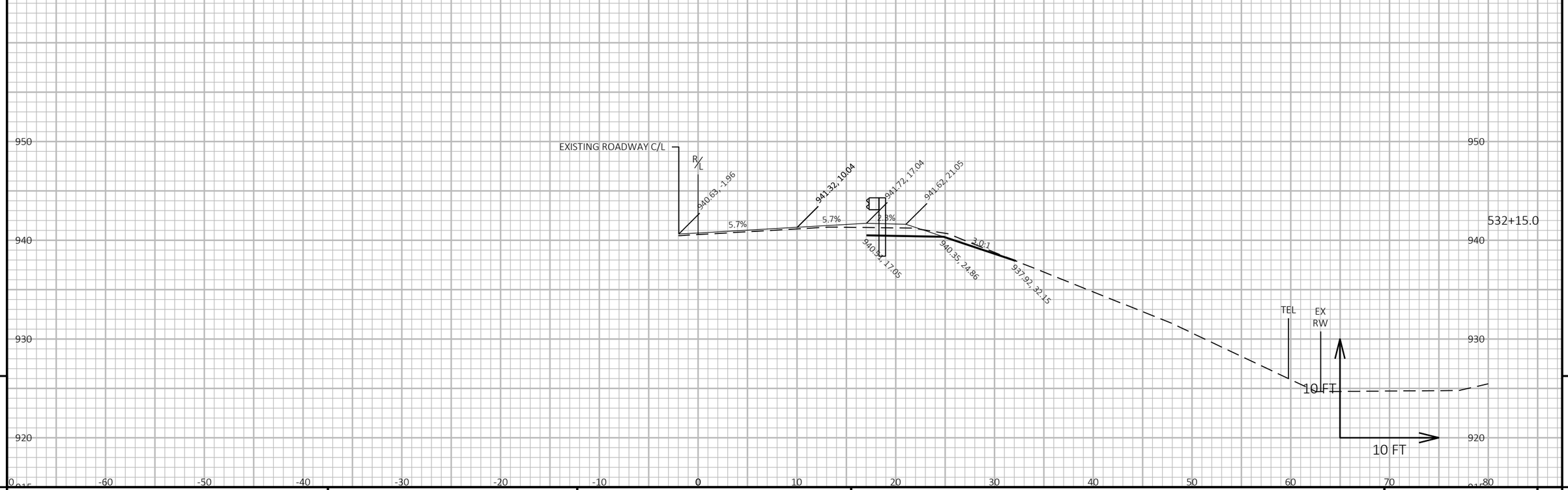
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



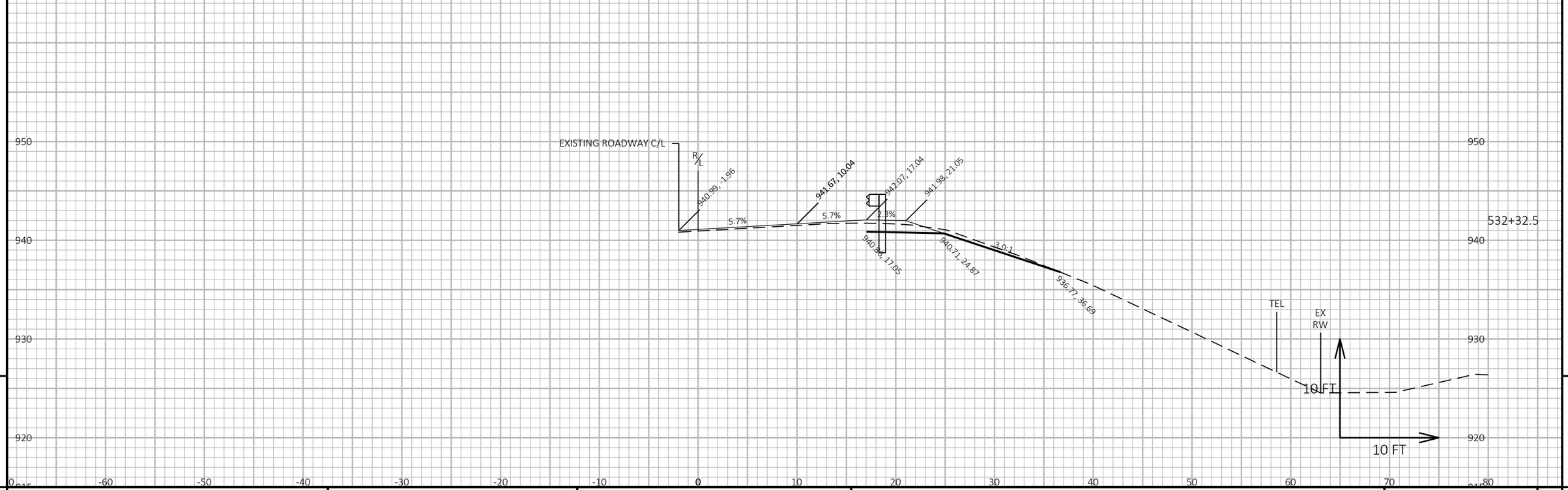
9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 226	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 4/22/2021 4:52 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 227	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 47

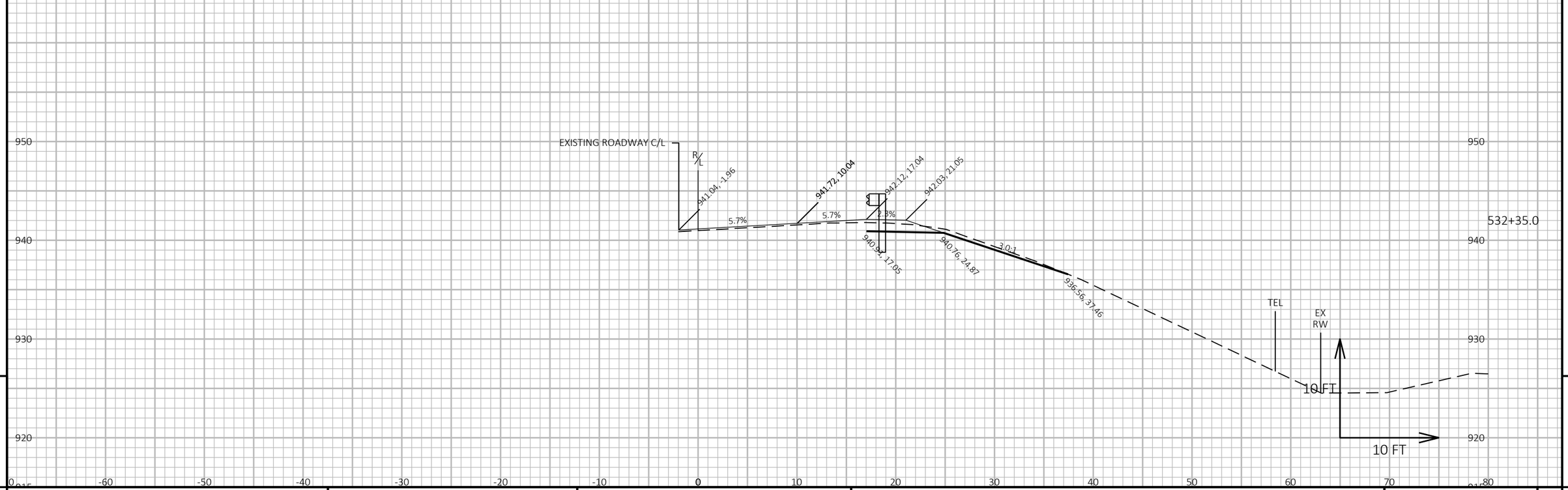
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



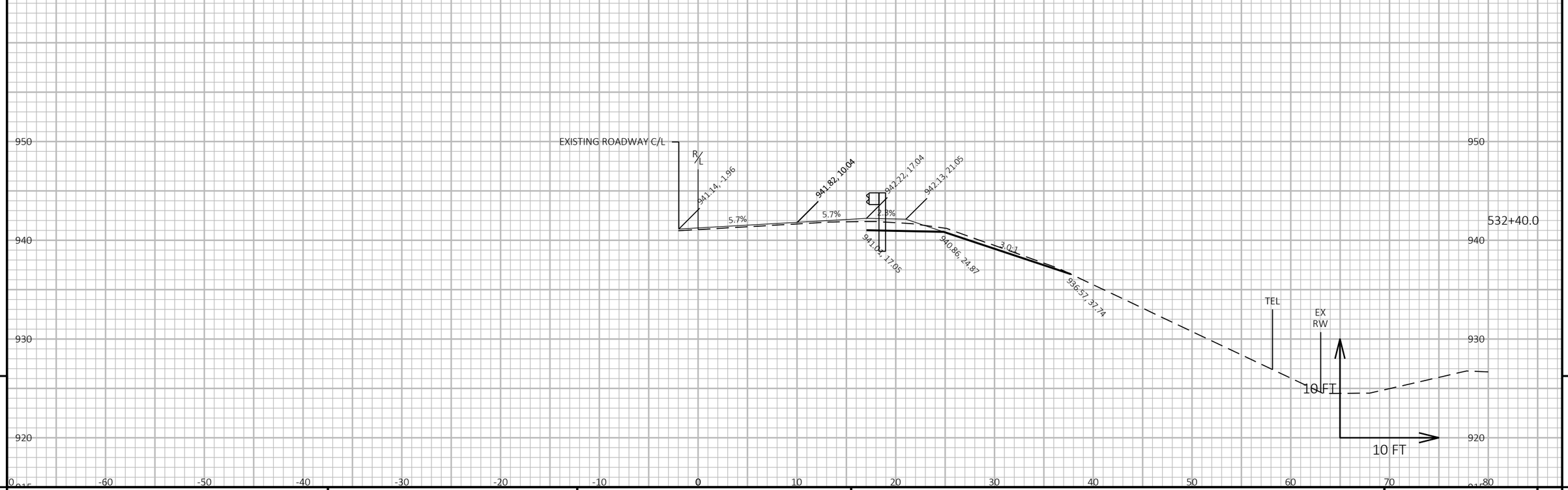
9 9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 228	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 48

PLOT DATE : 4/22/2021 4:52 PM PLOT BY : RINZEL, JAMES M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 229	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 49

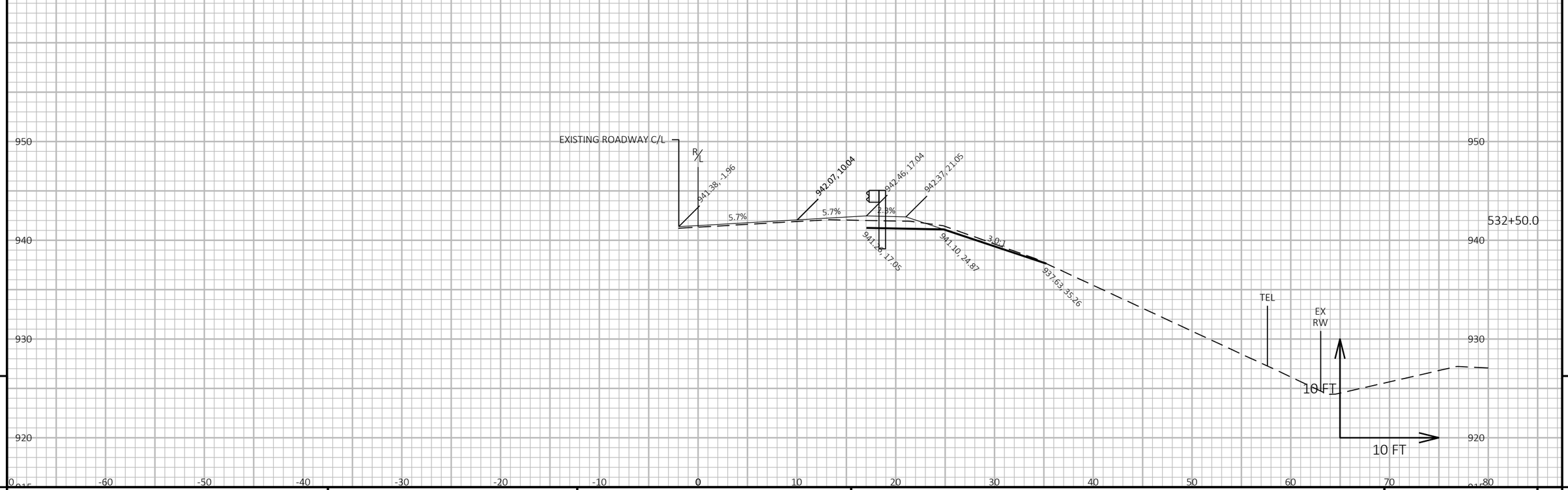
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 230	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 50

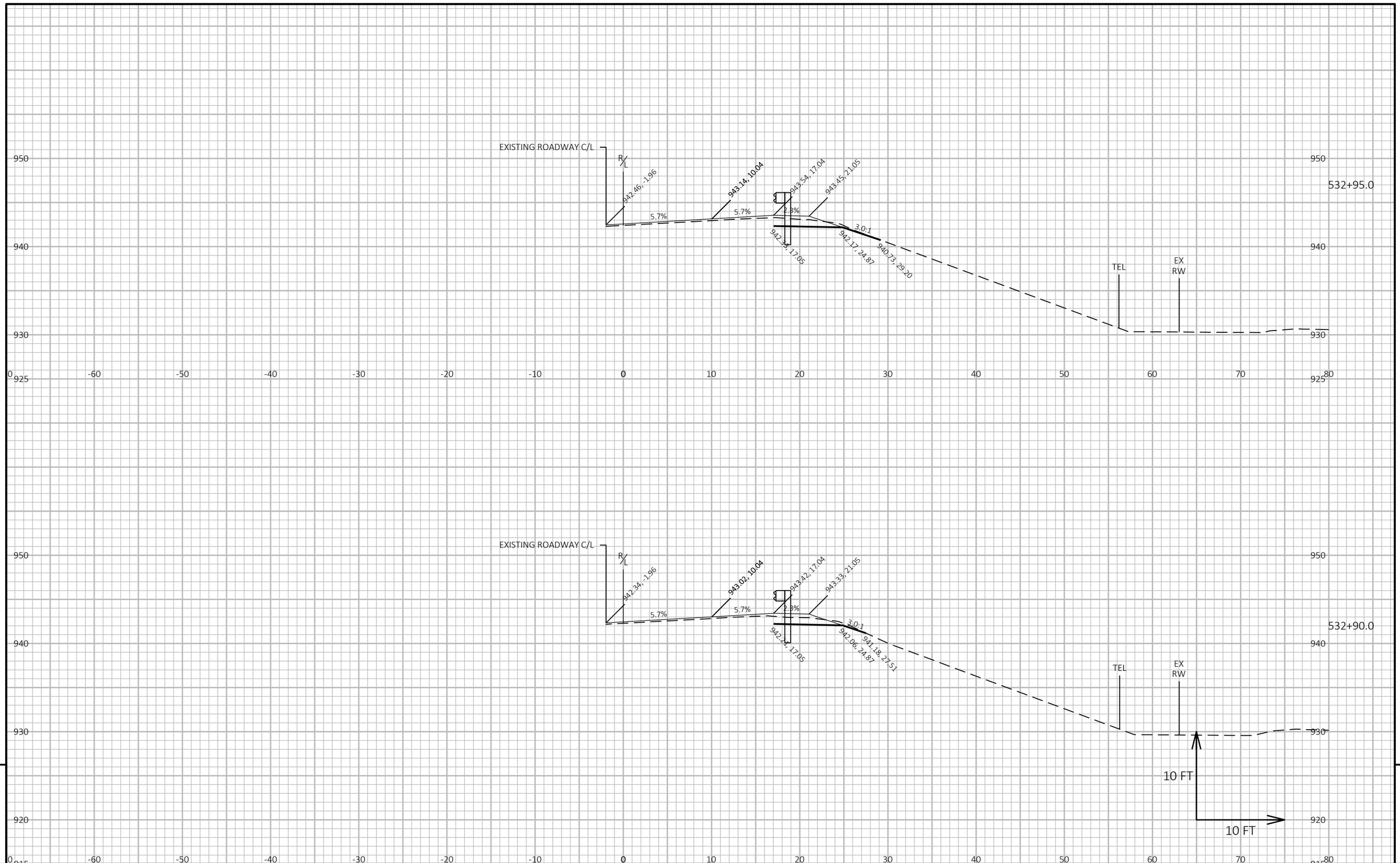
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 231	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 51

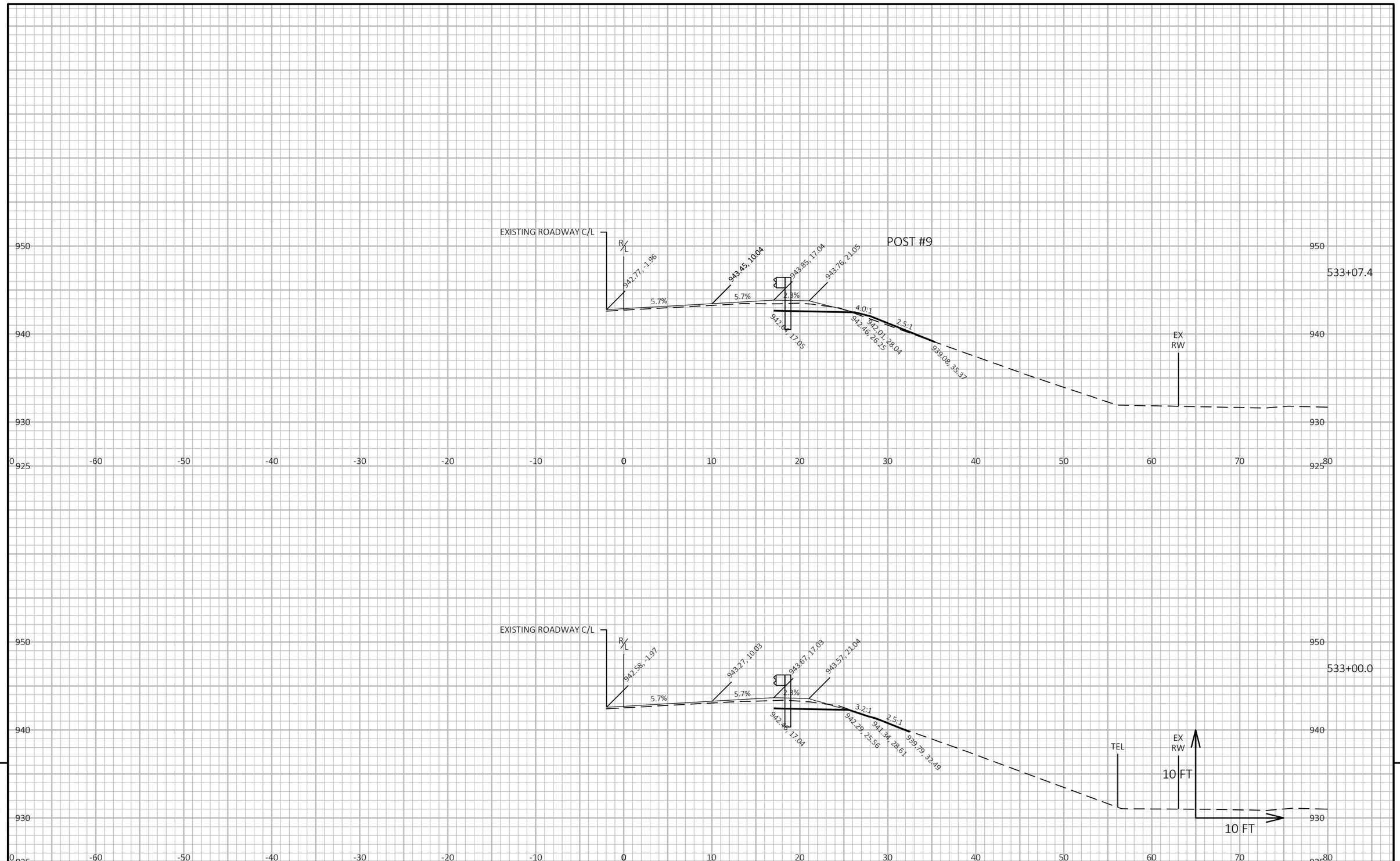
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 232	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 52

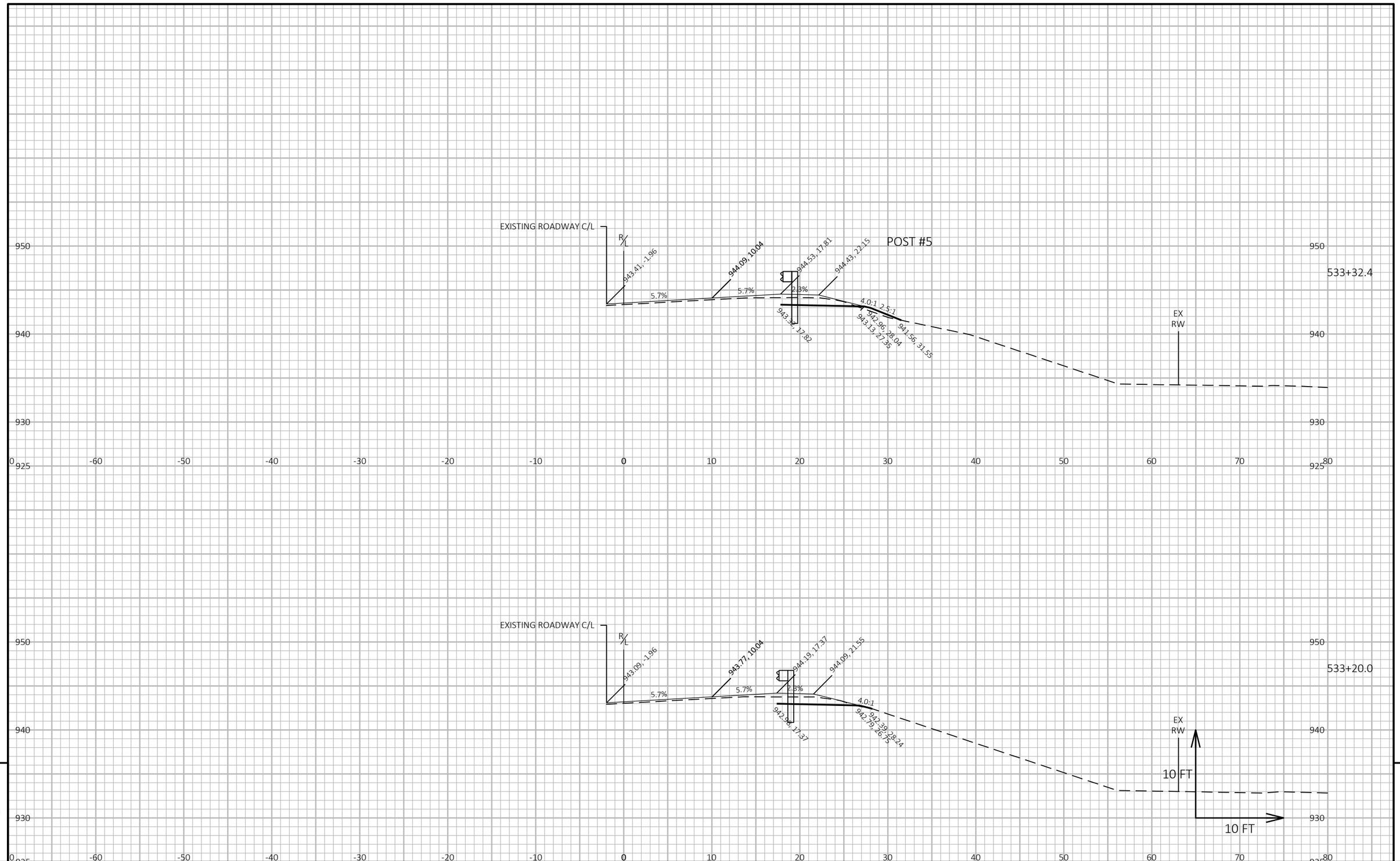
PLOT DATE : 4/22/2021 4:52 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 233	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 53

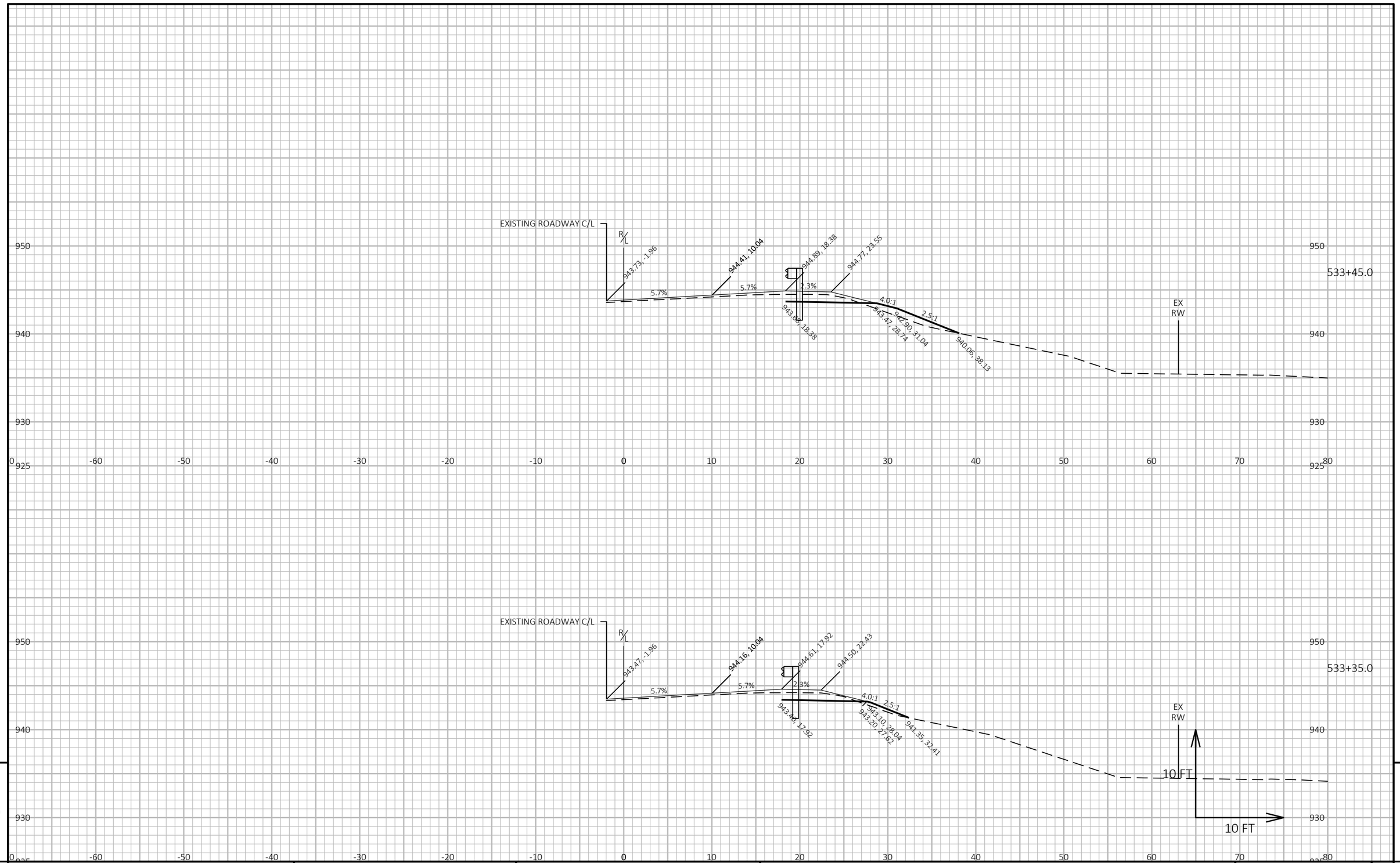
PLOT DATE : 4/22/2021 4:53 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 234	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 54

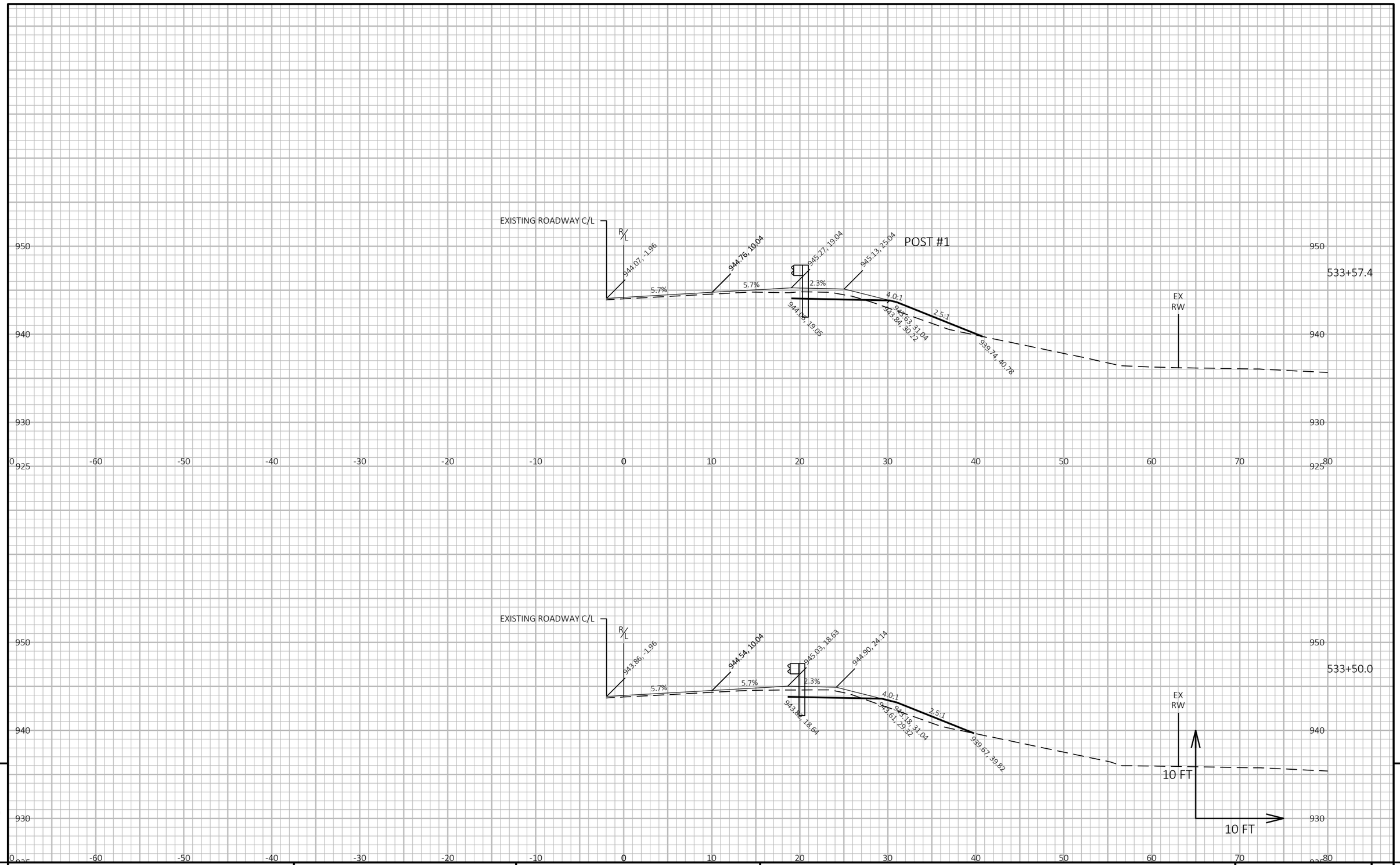
PLOT DATE : 4/22/2021 4:53 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 235	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 55

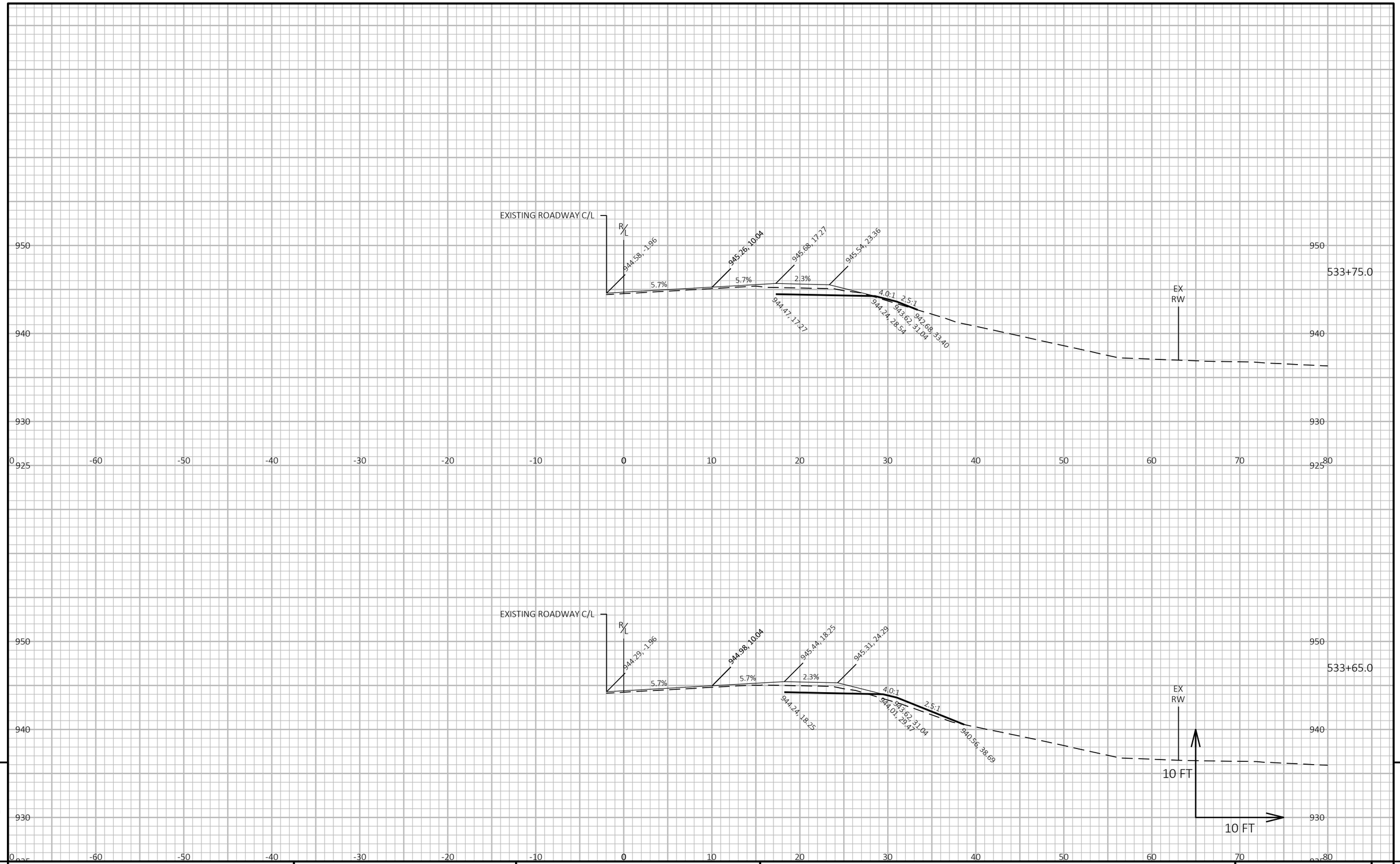
PLOT DATE : 4/22/2021 4:53 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 236 E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 56

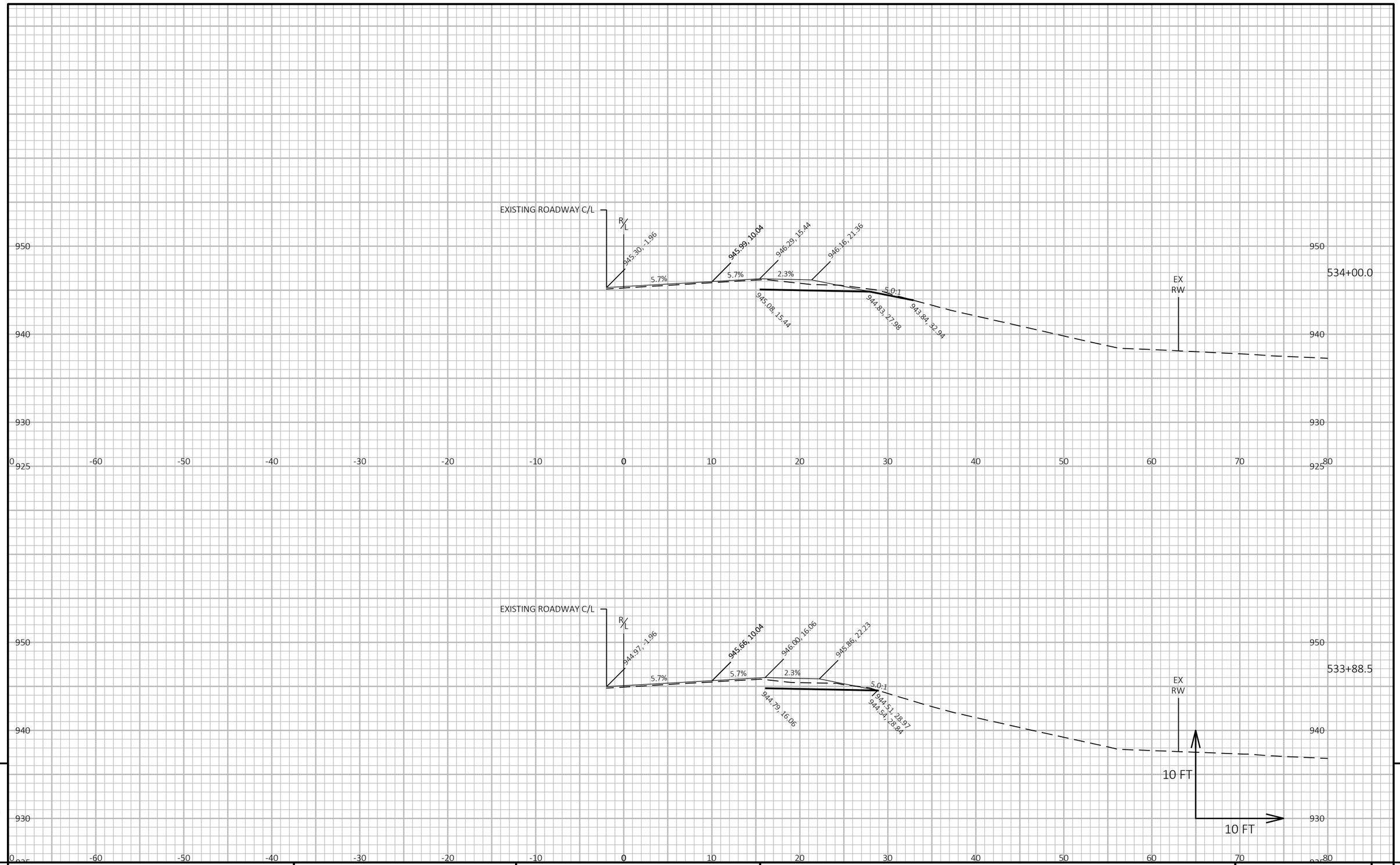
PLOT DATE : 4/22/2021 4:53 PM

PLOT BY : RINZEL, JAMES M

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: 1400-01-73	HWY: STH 16	COUNTY: COLUMBIA	CROSS SECTIONS: STH 16	SHEET 237	E

FILE NAME : N:\PDS\C3D\14000103\SHEETSPLAN\090101-XS.DWG
LAYOUT NAME - 57

PLOT DATE : 4/22/2021 4:53 PM

PLOT BY : RINZEL, JAMES M

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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