PROJECT ID: 2240-03-74
WITH: 2240-00-77

COUNTY: RACINE

ORDER OF SHEETS

TOTAL SHEETS =

N

DESIGN DESIGNATION

A.A.D.T.	2020	=	13,600
A.A.D.T.	2040	=	15,600
D.H.V.		=	8.7
D.D.		=	60/40
T.		=	4.7
DESIGN SPEED		=	60 MPH
ESALS		=	4,400,000

CONVENTIONAL SYMBOLS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LIMITED EASEMENT
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE
FENCE
GUARD RAIL
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such) — ROCK
MARSH AREA
WOODED OR SHRUB AREA
STREAM OR WATER EDGE
BUSH
PINE TREE (SIZE)
TREE (SIZE)
TRAFFIC SIGNAL CONTROL CABINET
TRAFFIC SIGNAL
TRAFFIC SIGNAL MAST–ARM
TRAFFIC SIGNAL WITH LIGHT
EXISTING PULL BOX
BOLLARD

COMBUSTIBLE FLUIDS — CAUTION
UNDERGROUND UTILITIES GAS — (SIZE) G
SANITARY SEWER — (SIZE) SAN
STORM SEWER — (SIZE) SS
WATER — (SIZE) W
ELECTRIC — E
TELEPHONE — T
FIBER OPTIC — FO
CABLE TELEVISION — TV
FORCE MAIN — FM
MANHOLE — MH
UTILITY PEDESTAL
FIBER OPTIC HAND HOLE — HH
POWER POLE
TELEPHONE POLE
RAILROAD
HYDRANT
LIGHT POLE
RAILROAD SIGNAL
SIGN
TRANSMISSION TOWER
VALVE — (TYPE)
CURB STOP — CS
EXISTING CULVERT — (SIZE, TYPE)
PROPOSED CULVERT (Box or Pipe)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MILWAUKEE AVE, VILLAGE OF ROCHESTER

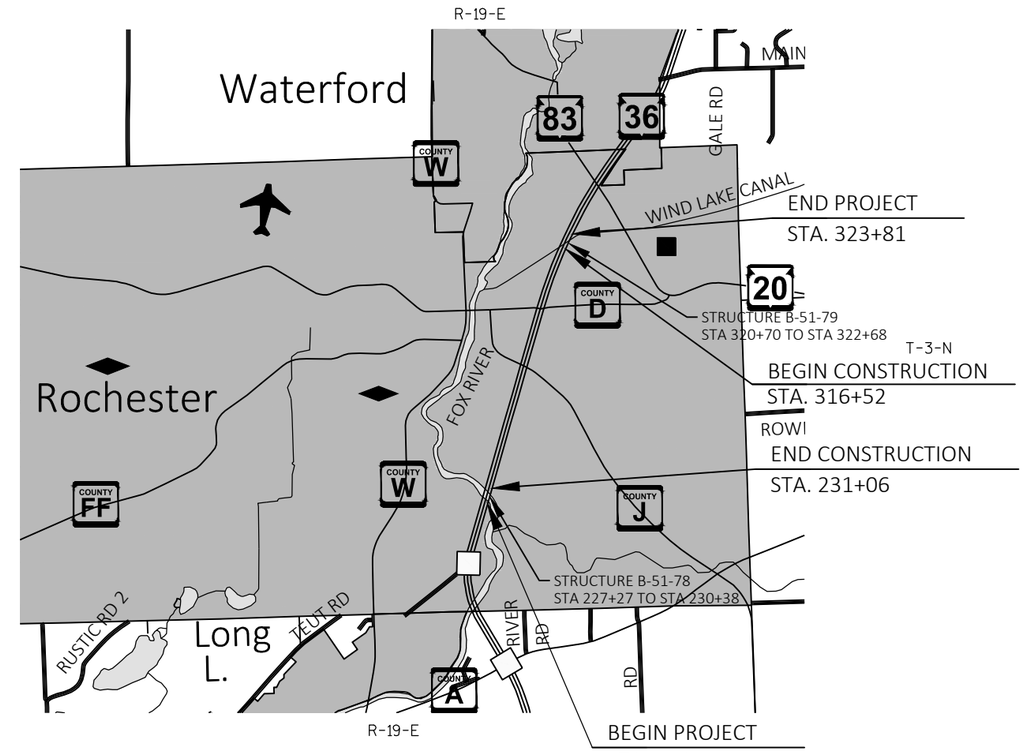
BRIDGES B-51-78 & 79

STH 36
RACINE COUNTY

STATE PROJECT NUMBER
2240-03-74

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2240-03-74		

DRAFT PS&E
2/1/2020



T-3-N

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY ZONE, NAD83 (2007)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD 88 (2007)

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SMZ (raSmith)
Designer	AJA/CLM (raSmith)
Project Manager	JUSTIN SUYDAM
Regional Examiner	
Regional Supervisor	JANET CANNON

APPROVED FOR THE DEPARTMENT

DATE: _____ _____ (Signature)

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\010101-TI.DWG PLOT DATE : 1/23/2020 12:58 PM PLOT BY : MANSKE, CALEB PLOT NAME :

UTILITIES

ATC MANAGEMENT INC
CHRIS DAILEY
W234 N200 RIDGEVIEW PARKWAY CT
PO BOX 47
WAUKESHA, WI 53187
(262) 506-6884
CDAILEY@ATCLLC.COM

TDS METROCOM / TELECOM
ERIK BORGEN
525 JUNCTION RD
MADISON, WI 53717
(608) 664-4438
ERIK.BORGEN@TDSTELECOM.COM

WE ENERGIES - GAS
SCOTT HOLSTEIN
700 S KANE ST
BURLINGTON, WI 53105
(262) 763-1084
SCOTT.HOLSTEIN@WE-ENERGIES.COM

AT&T WISCONSIN
MATTHEW DINNAUER
2005 PEWAUKEE ROAD
WAUKESHA, WI 53188
(262) 896-7690
MD9542@ATT.COM

WE ENERGIES - ELECTRIC
ADAM PSICIHULIS
700 S KANE ST
BURLINGTON, WI 53105
(262) 763-1011
ADAM.PSICIHULIS@WE-ENERGIES.COM

DESIGNER

raSmith
MR. JOHN ELKIN, PROJECT MANAGER
16745 W BLUEMOUND ROAD
BROOKFIELD, WI 53005-5938
(262) 317-3312
JOHN.ELKIN@RASMITH.COM

PERMANENT SIGNING DESIGNER
WISDOT SE REGION
MR. TOM HEYDEL, TRAFFIC AND DESIGN ENGINEER
141 NW BARSTOW ST
WAUKESHA, WI 53187
262-548-6763
TOM.HEYDEL@DOT.WI.GOV

DNR LIAISON

WISDNR
MS. KRISTINA BETZOLD
2300 N DR. MARTIN LUTHER KING JR. DRIVE
MILWAUKEE, WI 53212
(414) 263-8517
KRISTINA.BETZOLD@WISCONSIN.GOV

WISDOT CONTACTS

WISDOT SE REGION
MR. JUSTIN SUYDAM, PROJECT MANAGER
141 NW BARSTOW
WAUKESHA, WI 53187
(262) 548-8745
JUSTIN.SUYDAM@DOT.WI.GOV

AIRPORT CONTACTS

FOX RIVER AIRPORT
MR. JERRY MEHLHAFF
32032 WASHINGTON ST
ROCHESTER, WI 53167
(262) 534-6315
ACAC@EXECPC.COM

BURLINGTON MUNICIPAL AIRPORT
MR. GARY MEISNER
703 AIRPORT RD
BURLINGTON, WI 53105
(262) 763-6600
GMEISNER@BURLINGTON-WI.GOV

MUNICIPAL CONTACT

VILLAGE OF ROCHESTER DPW
MR. CHRISTOPHER BIRKETT
203 W SPRING STREET
PO BOX 65
ROCHESTER, WI 53167
(262) 534-2431
CBIRKETT@ROCHESTERWI.US

SEWRPC CONTACT

MR. CHRIS HIEBERT
CHIEF TRANSPORTATION ENGINEER
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
(262) 953-3227
CHIEBERT@SEWRPC.ORG

ORDER OF SECTION 2 SHEETS

GENERAL NOTES

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

2 ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED IN ACCORDANCE WITH SECTION 204 OF THE STANDARD SPECIFICATIONS. BACKFILL SHALL BE INCIDENTAL TO THE REMOVAL ITEM.

3 STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

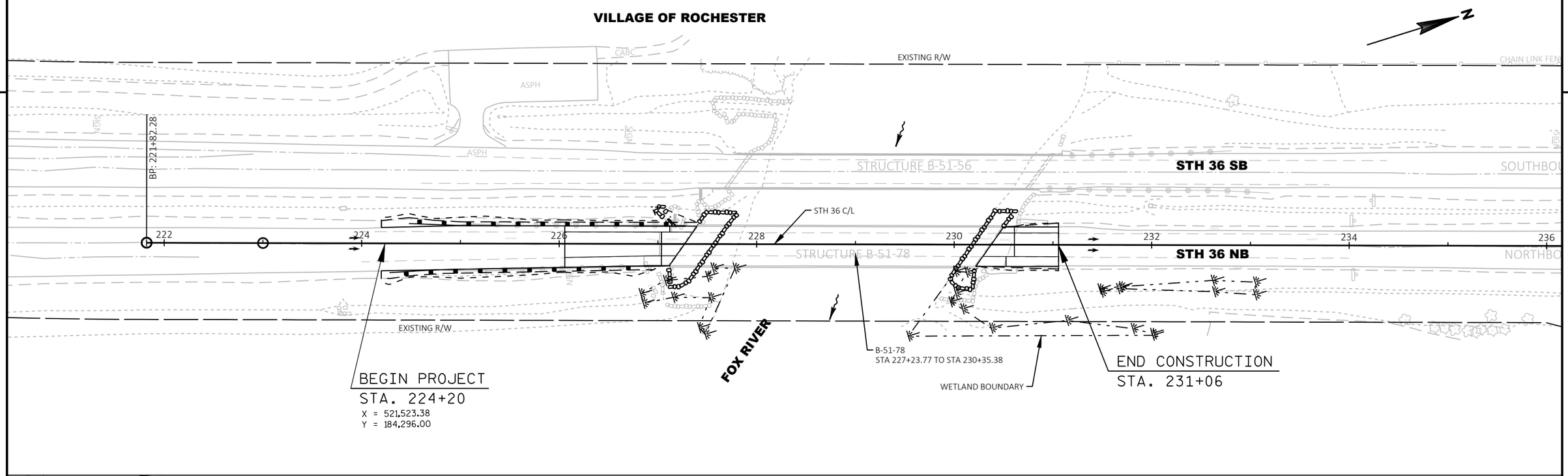
4 THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

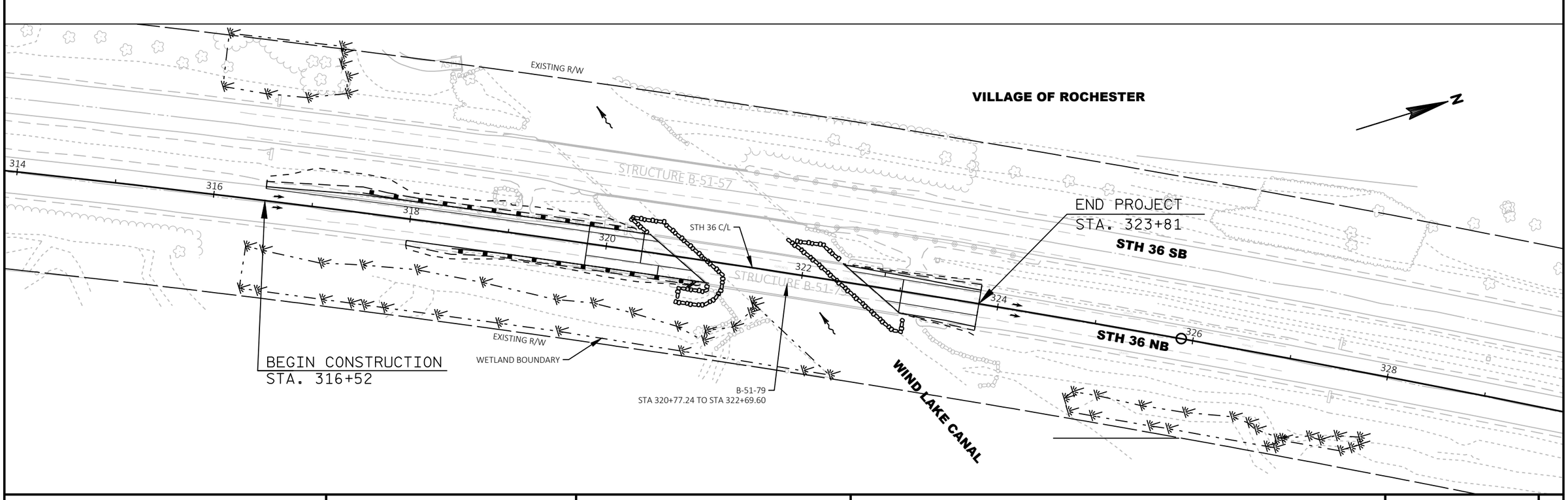
5 CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE AND ALL UTILITIES LISTED TO VERIFY UTILITY WORK STATUS PRIOR TO BIDDING.

6 SIGN POSTS AND SIGN PLATES SHALL BE PLACED BEYOND THE LATERAL CLEARANCE.

7 EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. REMOVAL OF EROSION CONTROL DEVICES SHALL BE INCIDENTAL TO THEIR RESPECTIVE BID ITEMS.

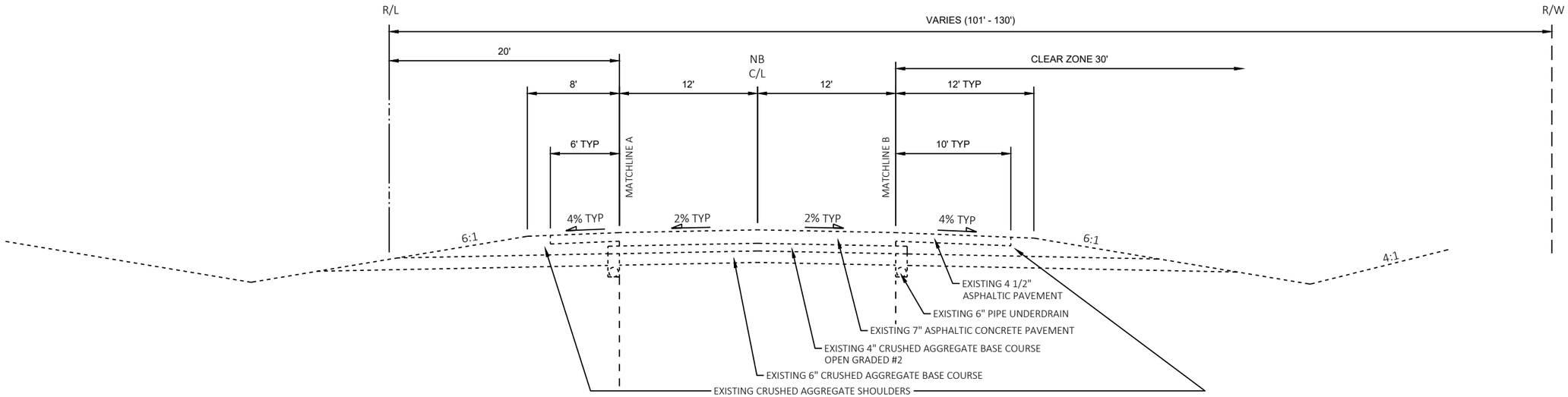
8 RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED AND FERTILIZE TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE EXPOSED FOR MORE THAN FOURTEEN (14) CALENDAR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



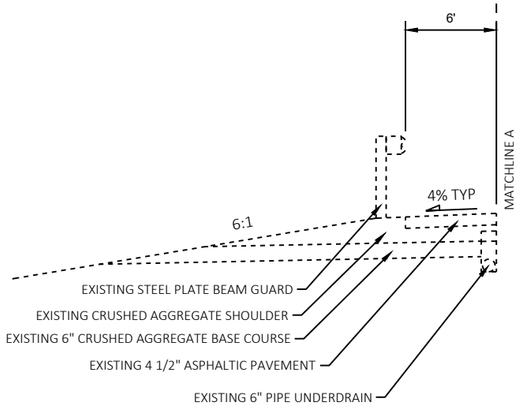


PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 3	E

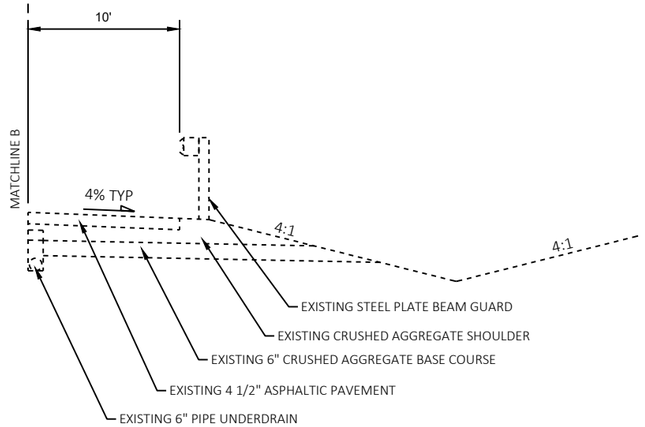
FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - Layout1-Plan 1 IN 1000 FT
PLOT DATE : 1/24/2020 3:07 PM
PLOT BY : MANSKE, CALEB
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 224+20 TO STA 227+27
STA 230+38 TO STA 231+06

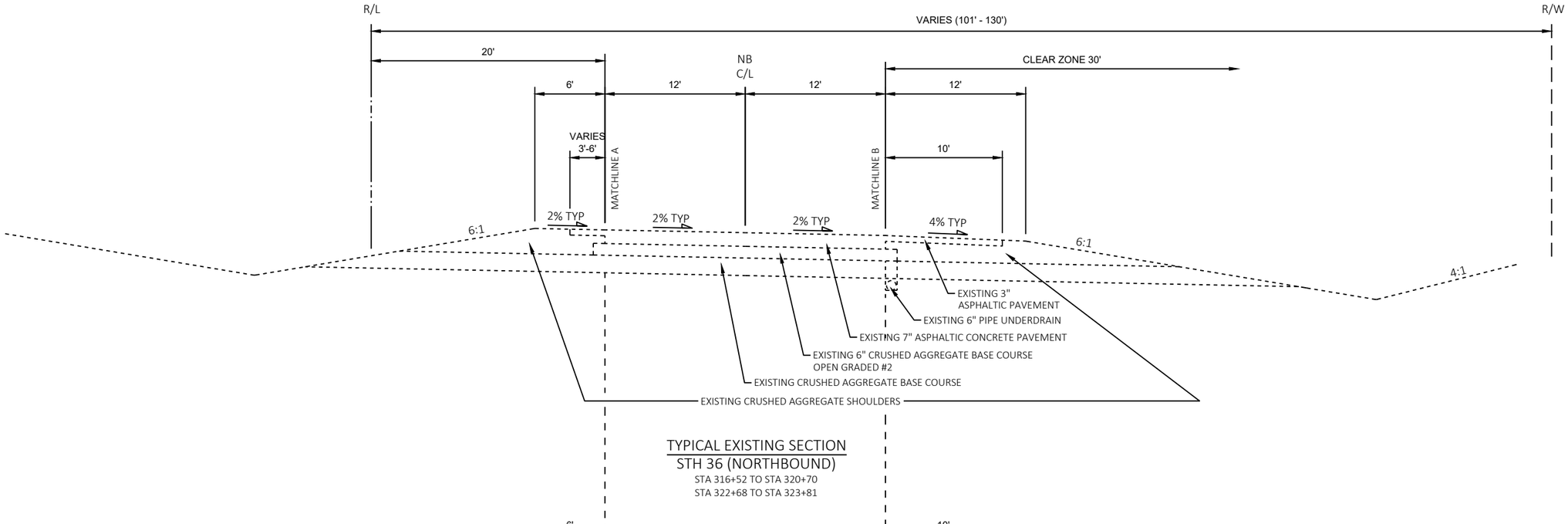


TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 225+09 TO STA 227+27 LT

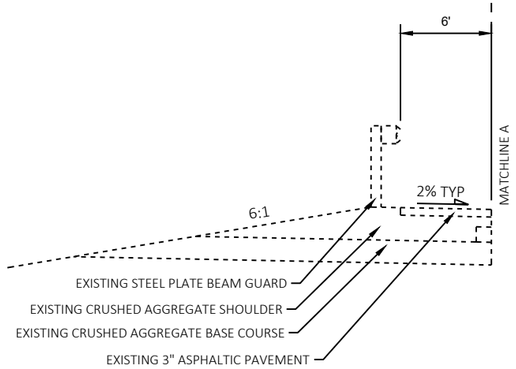


TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 225+27 TO STA 226+96 RT

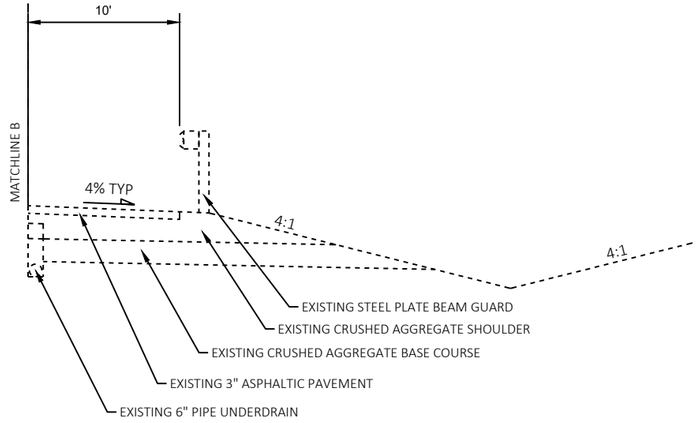
PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 4	E



TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 316+52 TO STA 320+70
STA 322+68 TO STA 323+81



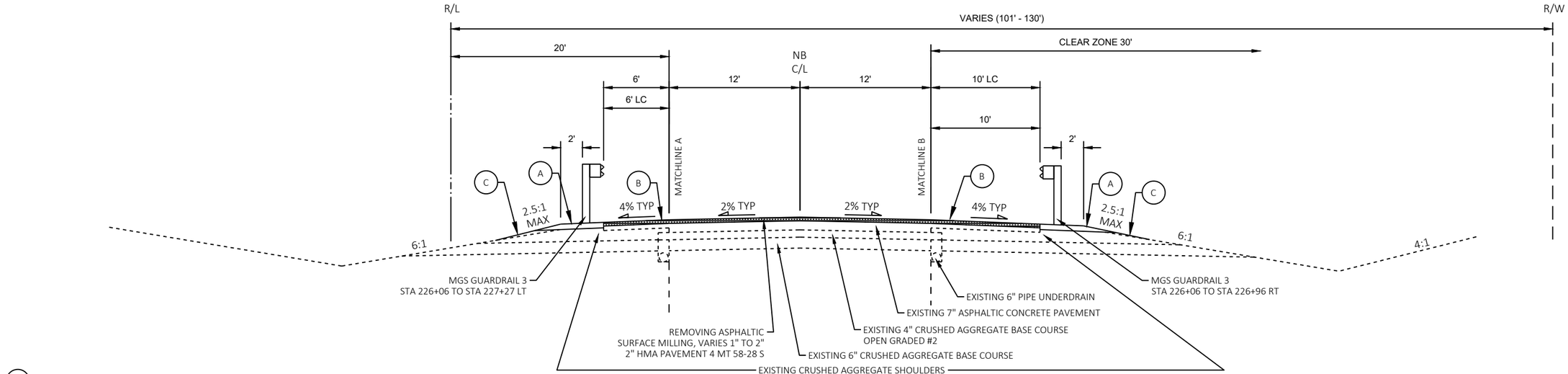
TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 317+95 TO STA 320+26 LT



TYPICAL EXISTING SECTION
STH 36 (NORTHBOUND)
STA 319+29 TO STA 320+98 RT

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02
PLOT DATE : 1/23/2020 12:06 PM
PLOT BY : MANSKE, CALEB
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

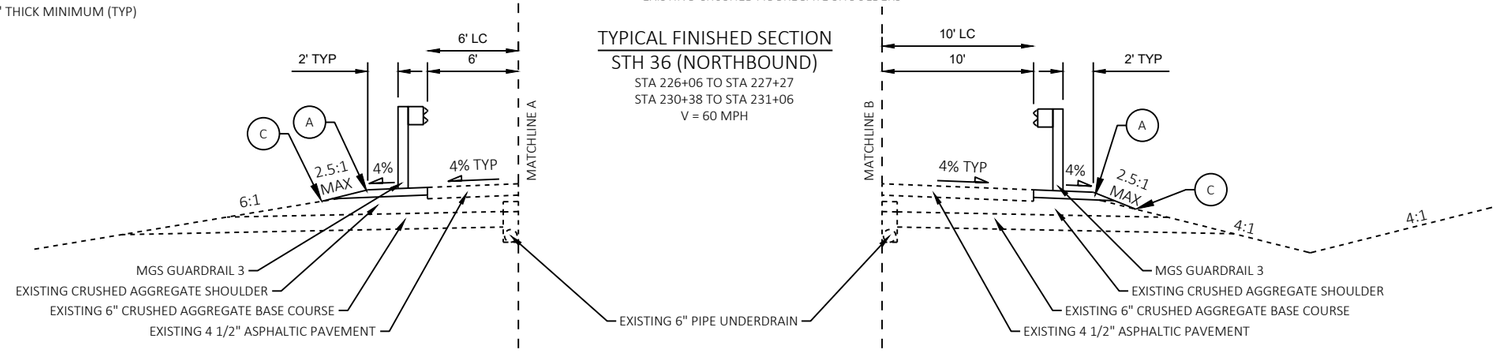


A SHAPING SHOULDERS & BASE AGGREGATE DENSE 3/4-INCH, 3" THICK MINIMUM (TYP)

B ASPHALTIC SHOULDER RUMBLE STRIPS

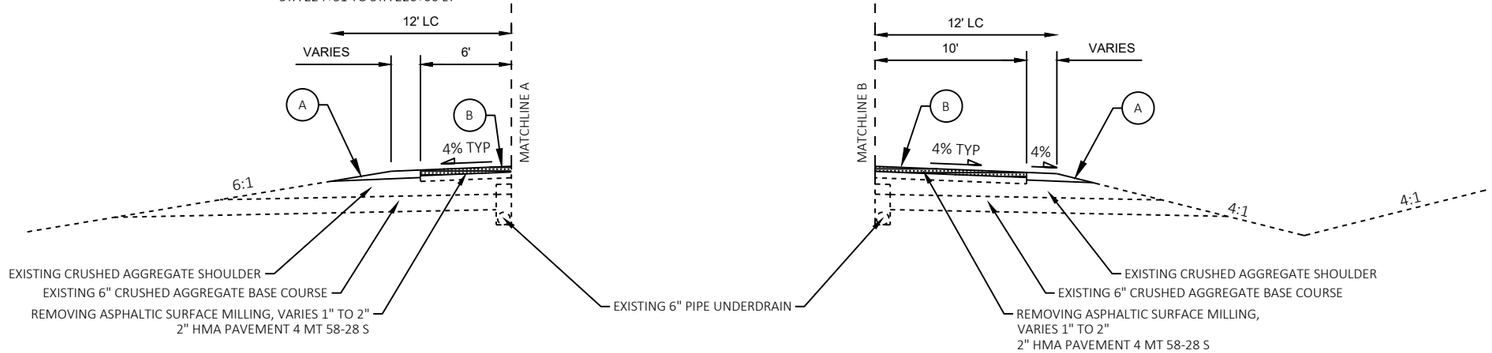
C SALVAGED TOPSOIL, SEED, FERTILIZER, MULCH

TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 226+06 TO STA 227+27
STA 230+38 TO STA 231+06
V = 60 MPH



TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 224+51 TO STA 226+06 LT

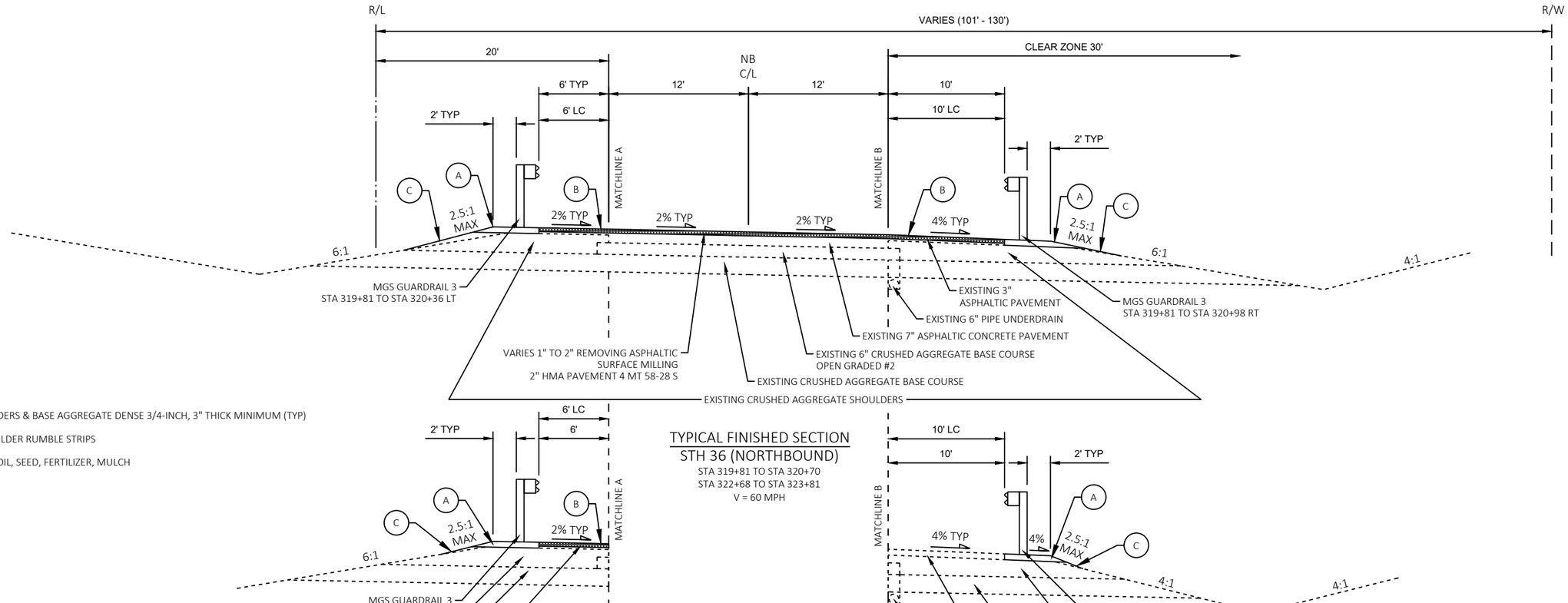
TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 224+20 TO STA 226+06 RT



TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 230+38 TO STA 231+06 LT

TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 230+38 TO STA 231+06 RT

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 6	E

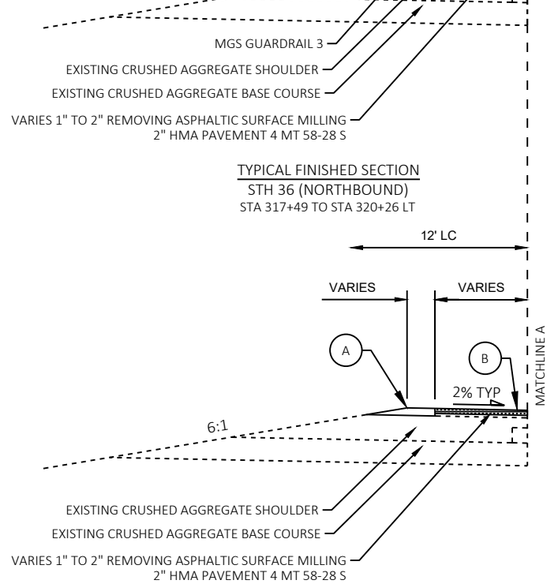


A SHAPING SHOULDERS & BASE AGGREGATE DENSE 3/4-INCH, 3" THICK MINIMUM (TYP)

B ASPHALTIC SHOULDER RUMBLE STRIPS

C SALVAGED TOPSOIL, SEED, FERTILIZER, MULCH

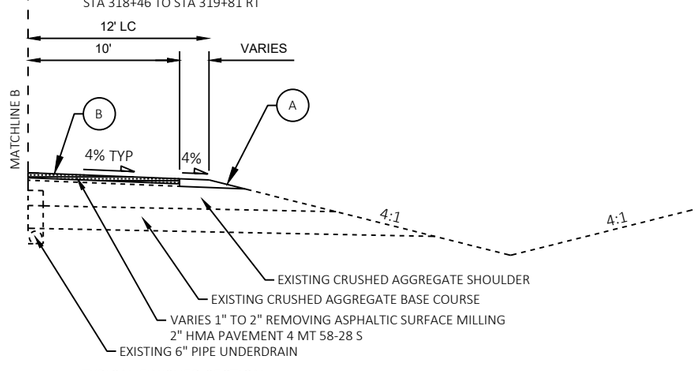
TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 319+81 TO STA 320+70
STA 322+68 TO STA 323+81
V = 60 MPH



TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 317+49 TO STA 320+26 LT

TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 316+52 TO STA 317+49 LT
STA 323+02 TO STA 323+81 LT

TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 318+46 TO STA 319+81 RT



TYPICAL FINISHED SECTION
STH 36 (NORTHBOUND)
STA 323+02 TO STA 323+81 RT

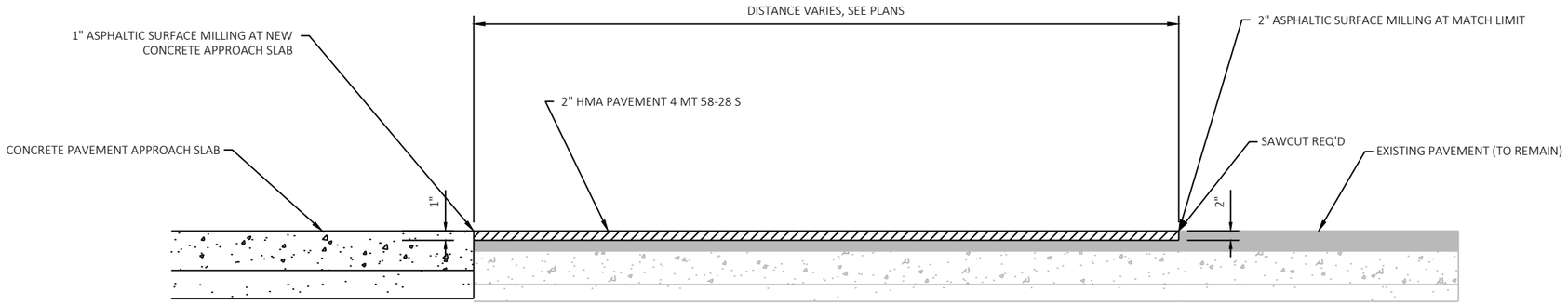
PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	TYPICAL SECTIONS	SHEET 7	E

2

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 9.16 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.43 ACRES

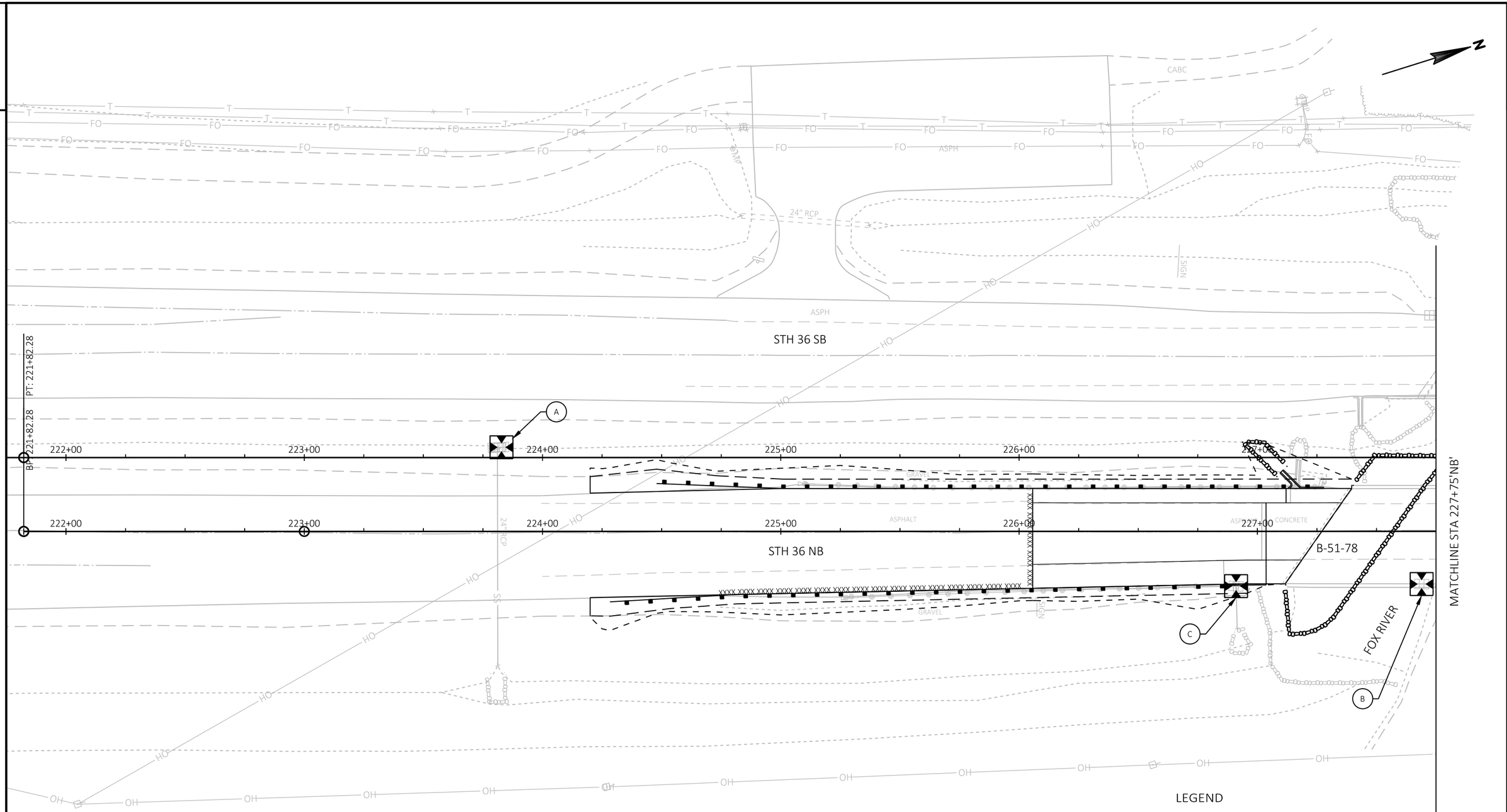


DETAIL FOR REMOVING ASPHALTIC SURFACE BUTT JOINTS

SEE PLANS FOR LOCATIONS

NOTES: VARY MILLING DEPTH FROM 1" TO 2" TO ACCOUNT FOR PROFILE CHANGE OF BRIDGE DECK OVERLAY.
TRANSITION MILL DEPTH FROM 1" TO 2" OVER A MINIMUM OF 50-FT.
THIS DETAIL ASSUMES THE BRIDGE DECK OVERLAY WILL RAISE THE PROFILE 1".

2



PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	EROSION CONTROL	SHEET 9	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 1/23/2020 1:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STRUCTURE B-51-56

B-51-56

STH 36 SB

A

B

228+00 229+00 230+00 231+00 232+00 233+00

24" RCP

SS

GRAVEL

CONCRETE

ASPHALT

MATCHLINE STA 227+75'NB'

STRUCTURE B-51-78

B-51-78

STH 36 NB

FOX RIVER

TILE

GUY

OH

FO

T

LEGEND

- EROSION MAT CLASS I, TYPE B
- X — INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	EROSION CONTROL	SHEET 10	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2020 1:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

WIND LAKE CANAL

STH 36 SB

B-51-57 STRUCTURE B-51-57

316+00 317+00 318+00 319+00 320+00 321+00

STH 36 NB

B-51-79

MATCHLINE STA 321+75'NB'

LEGEND

- EROSION MAT CLASS I, TYPE B
- INLET PROTECTION (TYPE AS NOTED)
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	EROSION CONTROL	SHEET 11	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 1/23/2020 1:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 36 SB

STH 36 NB

A

24" RCP

322+00

323+00

324+00

325+00

326+00

327+00

CONCRETE

ASPHALT

GRAVEL

UCTURE B-51-79

B-51-79

MATCHLINE STA 321+75'NB'

WIND LAKE CANAL

OH

FO

T

SS

LEGEND

EROSION MAT CLASS I, TYPE B

INLET PROTECTION (TYPE AS NOTED)

CULVERT PIPE CHECK

SLOPE INTERCEPT

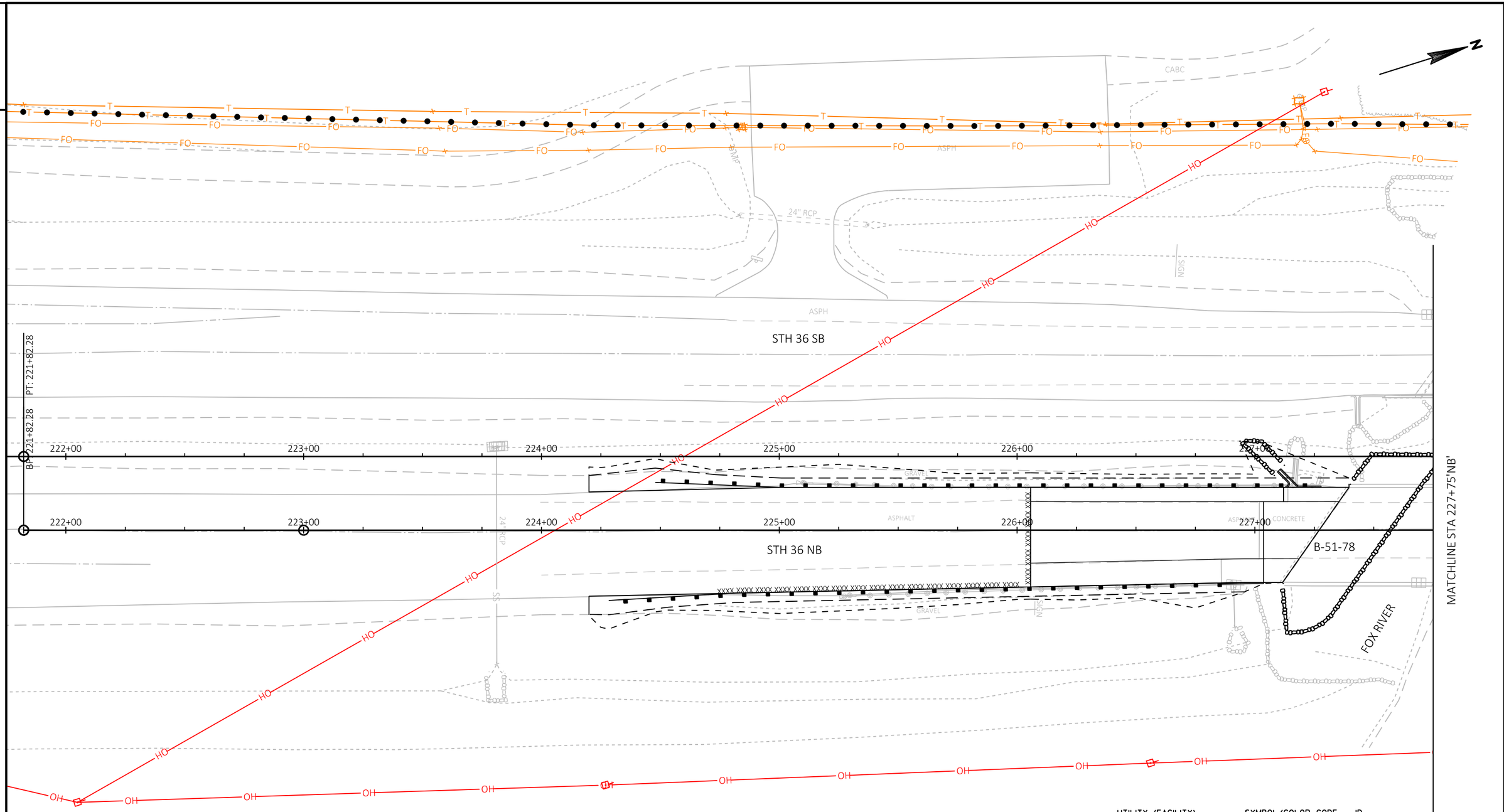
SURFACE WATER FLOW

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	EROSION CONTROL	SHEET 12	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 1/23/2020 1:05 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



SHEET 1 OF 4

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	UTILITY DETAILS	SHEET 13	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\023001-UP.DWG
LAYOUT NAME - 01

PLOT DATE : 1/23/2020 1:17 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STRUCTURE B-51-56

B-51-56

STH 36 SB

24" RCP

228+00 229+00 230+00 231+00 232+00 233+00

MATCHLINE STA 227+75'NB'

CONCRETE ASPHALT GRAVEL ASPHALT

228+00 229+00 230+00 231+00 232+00 233+00

B-51-78

STRUCTURE B-51-78

STH 36 NB

GRAVEL

FOX RIVER

TILE

GUY GUY GUY

UTILITY (FACILITY)	SYMBOL/COLOR CODE	ID
AT&T (COMMUNICATIONS)	—T—	A
TDS (COMMUNICATIONS)	—FO—	TDS
ATC (ELECTRIC TRANSMISSION)	—OH—	ATC
WE ENERGIES (ELECTRIC)	—OH—	E
NOT FIELD VERIFIED	· ● ● ● ·	

SHEET 2 OF 4

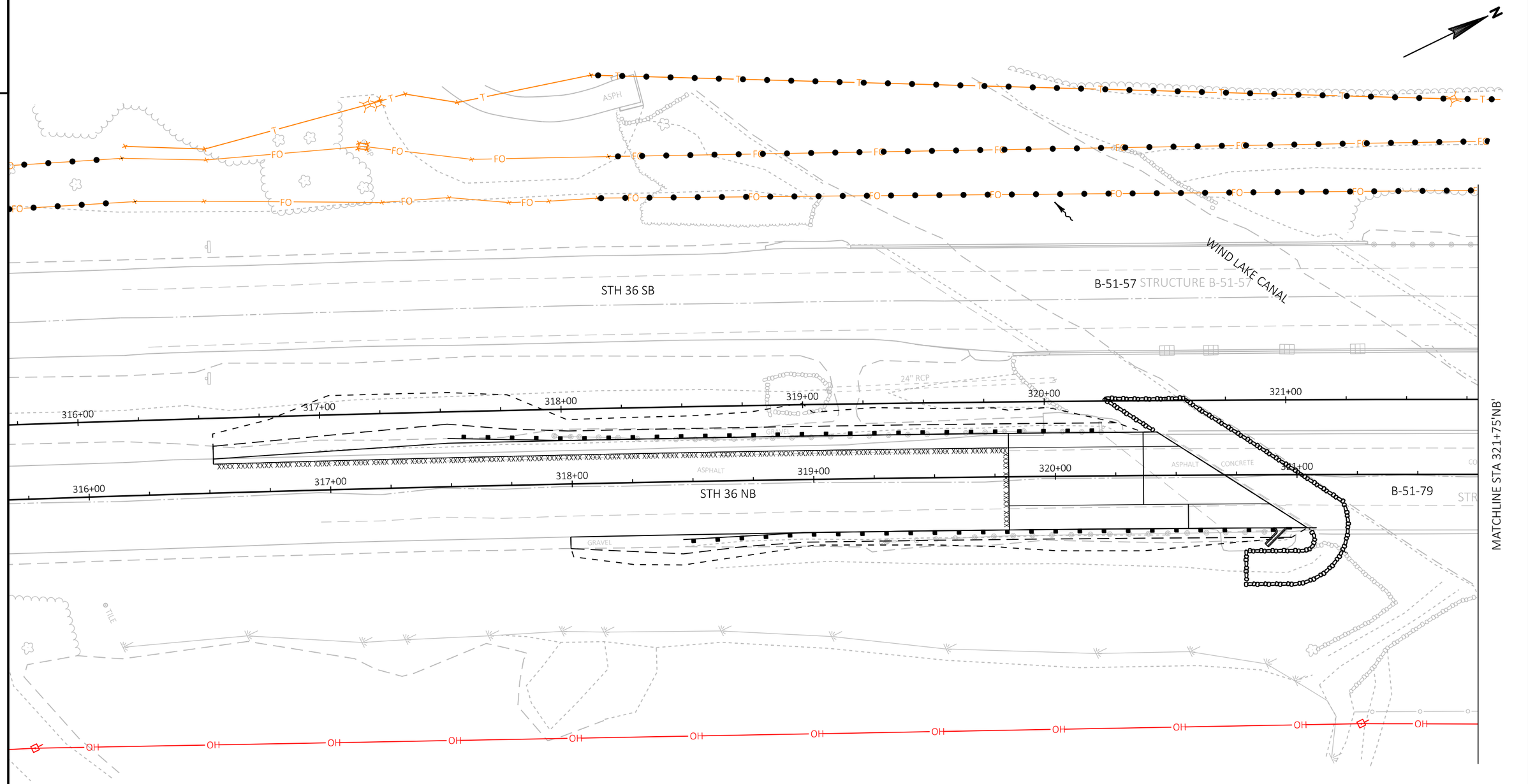
PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	UTILITY DETAILS	SHEET 14	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\023001-UP.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2020 1:17 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



UTILITY (FACILITY)	SYMBOL/COLOR CODE	ID
AT&T (COMMUNICATIONS)	—T—	A
TDS (COMMUNICATIONS)	—FO—	TDS
ATC (ELECTRIC TRANSMISSION)	—OH—	ATC
WE ENERGIES (ELECTRIC)	—OH—	E
NOT FIELD VERIFIED	· ● ● ● ·	

SHEET 3 OF 4

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	UTILITY DETAILS	SHEET 15	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\023001-UP.DWG
LAYOUT NAME - 03

PLOT DATE : 1/23/2020 1:17 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 36 SB

STH 36 NB

MATCHLINE STA 321+75'NB'

MATCHLINE STA 321+75'NB'

UCTURE B-51-79

B-51-79

WIND LAKE CANAL

24" RCP

GRAVEL

ASPHALT

CONCRETE

322+00

323+00

324+00

325+00

326+00

327+00

T

FO

OH

UTILITY (FACILITY)	SYMBOL/COLOR CODE	ID
AT&T (COMMUNICATIONS)	—T—	A
TDS (COMMUNICATIONS)	—FO—	TDS
ATC (ELECTRIC TRANSMISSION)	—OH—	ATC
WE ENERGIES (ELECTRIC)	—OH—	E
NOT FIELD VERIFIED	· ● ● ● ·	

SHEET 4 OF 4

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	UTILITY DETAILS	SHEET 16	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\023001-UP.DWG
LAYOUT NAME - 04

PLOT DATE : 1/23/2020 1:17 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

SEE PROJECT ID 2240-00-77
FOR STH 36 R/L INFORMATION

CONCRETE MONUMENT WITH BRASS CAP
X = 520,191.80
Y = 186,085.67

PT: 221+82.28

BP: 221+82.28'NB'

225 / 225'NB'

230 / 230'NB'

STH 36

235 / 235'NB'

N17° 23' 36"E
7410.60'

31'

240 / 240'NB'

N17° 23' 36"E
7410.60'

245 / 245'NB'

250 / 250'NB'

STH 36 R/L

STH 36 NB C/L

FOX RIVER

N RIVER RD

CONCRETE MONUMENT WITH BRASS CAP
X = 522,840.80
Y = 186,112.58

COMPUTED
X = 522,799.15
Y = 191,384.67

PC: 295+92.87

PC: 295+92.87'NB'

295 / 295'NB'

N17° 23' 36"E
7410.60'

300 / 300'NB'

305 / 305'NB'

STH 36

310 / 310'NB'

31'

315 / 315'NB'

320 / 320'NB'

325 / 325'NB'

CURVE #22

STH 36 NB C/L

STH 36 R/L

CONCRETE MONUMENT WITH BRASS CAP
X = 525,439.52
Y = 191,410.16

CONCRETE MONUMENT WITH BRASS CAP
X = 522,760.98
Y = 194,018.20

CURVE #22
PI STA = 326+18.85
Y = 194121.716
X = 524601.335
DELTA = 20°00'43"
D = 0°20'03"
T = 3025.98'
L = 5990.31'
R = 17150.81'
PC STA = 295+92.87
PT STA = 355+95.78
SE = RC

WIND LAKE CANAL

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	ALIGNMENT DETAIL	SHEET 17	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 1/23/2020 1:30 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:200 FT

SEE PROJECT ID 2240-00-77
FOR STH 36 R/L INFORMATION

CONCRETE MONUMENT WITH BRASS CAP
X = 525,352.88
Y = 196,814.88

CONCRETE MONUMENT WITH BRASS CAP
X = 525,379.32
Y = 196,815.28

STH 20 / STH 83

STH 36

STH 36 R/L

STH 36 NB C/L

CURVE #22

CURVE #22
PI STA = 326+18.85
Y = 194121.716
X = 524601.335
DELTA = 20°00'43"
D = 0°20'03"
T = 3025.98'
L = 5990.31'
R = 17150.81'
PC STA = 295+92.87
PT STA = 355+95.78
SE = RC

STH 20

31'

N37° 24' 19"E
2139.14'

STA BACK = 355+94.01
STA AHEAD = 355+95.78
PT: 355+95.78
PT: 355+95.78'NB'

STA BACK = 355+83.19'NB'
STA AHEAD = 355+95.78'NB'

EQUATION

CONCRETE MONUMENT WITH BRASS CAP
X = 525,411.05
Y = 194,077.55

CONCRETE MONUMENT WITH BRASS CAP
X = 525,352.88
Y = 196,814.88

CONCRETE MONUMENT WITH BRASS CAP
X = 525,379.32
Y = 196,815.28

PC: 377+34.92

EP: 377+34.92'NB'

CONCRETE MONUMENT WITH BRASS CAP
X = 528,006.72
Y = 196,856.35

CONCRETE MONUMENT WITH BRASS CAP
X = 528,019.88
Y = 196,856.49

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	ALIGNMENT DETAIL	SHEET 18	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02

PLOT DATE : 1/23/2020 1:30 PM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:200 FT

REMOVALS

LOCATION	204.0100 REMOVING PAVEMENT SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0165 REMOVING GUARDRAIL LF	204.0190 REMOVING SURFACE DRAINS EACH
STH 36 NORTHBOUND				
B-51-78				
225+07'NB' - 227+30'NB' LT	---	---	223	---
225+25'NB' - 226+84'NB' RT	---	---	159	---
226+06'NB' - 227+02'NB' RT	---	228	---	---
226+06'NB' - 227+14'NB' LT	---	201	---	---
226+86'NB' - 227+27'NB' RT	61	---	---	---
227+02'NB' - 227+40'NB' LT	56	---	---	---
227+17'NB' LT	---	---	---	1
230+23'NB' - 230+61'NB' RT	61	---	---	---
230+38'NB' - 230+61'NB' LT	31	---	---	---
230+53'NB' - 231+06'NB' RT	---	107	---	---
230+61'NB' - 231+06'NB' LT	---	75	---	---
B-51-79				
317+93'NB' - 320+27'NB' LT	---	---	234	---
316+52'NB' - 320+36'NB' LT	---	299	---	---
319+81'NB' - 320+55'NB' RT	---	157	---	---
319+27'NB' - 320+99'NB' RT	---	---	172	---
320+36'NB' - 320+70'NB' LT	40	---	---	---
320+36'NB' - 321+04'NB' RT	104	---	---	---
322+44'NB' - 323+02'NB' LT	71	---	---	---
322+68'NB' - 323+02'NB' RT	41	---	---	---
322+82'NB' - 323+81'NB' LT	---	138	---	---
323+02'NB' - 323+81'NB' RT	---	195	---	---
PROJECT TOTAL	**465**	**1,400**	**788**	**1**

Engineer Notes:
-204.0291.S: Assumed the entire length of the pipe is filled. Cross-sectional area of pipes = πr^2

BASE COURSE

LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA
STH 36 NORTHBOUND			
B-51-78			
224+20'NB' - 224+73'NB' RT	8	---	---
224+20'NB' - 224+73'NB' LT	10	---	---
224+73'NB' - 231+06'NB' RT	---	---	7
224+73'NB' - 226+50'NB' LT	---	---	2
226+50'NB' - 227+40'NB' LT	9	---	---
230+61'NB' - 231+06'NB' LT	---	---	1
B-51-79			
316+52'NB' - 320+36'NB' LT	41	157	---
318+00'NB' - 320+98'NB' RT	33	---	---
322+41'NB' - 323+81'NB' LT	11	---	---
323+03'NB' - 323+81'NB' RT	6	---	---
PROJECT TOTAL	**118**	**157**	**10**

CONCRETE

LOCATION	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	416.1010 CONCRETE SURFACE DRAINS CY
STH 36 NORTHBOUND		
B-51-78		
227+04'NB' - 227+27'NB' RT	39	---
227+04'NB' - 227+40'NB' LT	54	---
227+19'NB' - 227+28'NB' LT	---	3.5
226+86'NB' - 227+04'NB' RT	---	3.5
230+22'NB' - 230+61'NB' RT	67	---
230+38'NB' - 230+61'NB' LT	35	---
B-51-79		
320+36'NB' - 320+70'NB' LT	40	---
320+36'NB' - 321+04'NB' RT	104	---
322+41'NB' - 323+02'NB' LT	78	---
322+68'NB' - 323+02'NB' RT	41	---
320+87'NB' RT	---	2.0
PROJECT TOTAL	**458**	**9.0**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

EARTHWORK SUMMARY			A	B	C	D	E	F	G
DIVISION	**FROM / TO STATION**	**LOCATION**	**(1) 205.0100 EXCAVATION COMMON CY**	**SALVAGED / UNUSABLE PAVEMENT MATERIAL CY**	**(2) AVAILABLE MATERIAL CY**	**UNEXPANDED FILL CY**	**(3) EXPANDED FILL FACTOR 1.10 CY**	**(4) MASS ORDINATE +/- CY**	**208.0100 BORROW CY**
Division 1 - STH 36 Northbound									
	316+75'NB' - 320+00'NB'	B-51-79	27	27	0	34	37	-37	37
PROJECT TOTAL			**27**						**37**

Notes:
(1) Salvaged/Unusable Pavement Material (B) is included in Excavation Common (A). This assumes the existing pavement is salvaged or wasted by the contractor.
(2) Available Material (C) = Excavation Common (A) - Salvaged/Unusable Pavement Material (B).
(3) Expanded Fill (E) = Unexpanded Fill (D) x Fill Factor (1.10)
(4) The Mass Ordinate (I) + or - Qty calculated for the roadway segment as Available Material (C) minus Expanded Fill (E). Positive value indicates an excess of material within the roadway segment. Negative value indicates a shortage of material within the roadway segment.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

HMA PAVEMENT

LOCATION	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF
STH 36 NORTHBOUND			
B-51-78			
226+06'NB' - 227+04'NB' RT	15	28	---
226+06'NB' - 227+12'NB' LT	13	23	---
226+06'NB' - 227+12'NB' LT	---	---	107
226+06'NB' - 227+04'NB' RT	---	---	98
230+53'NB' - 231+06'NB' RT	---	---	54
230+53'NB' - 231+06'NB' RT	8	14	---
230+61'NB' - 231+06'NB' LT	6	11	---
230+61'NB' - 231+06'NB' LT	---	---	45
B-51-79			
316+52'NB' - 320+36'NB' LT	---	---	385
316+52'NB' - 320+36'NB' LT	20	36	---
319+81'NB' - 320+55'NB' RT	10	18	---
319+81'NB' - 320+55'NB' RT	---	---	75
322+83'NB' - 323+81'NB' LT	9	16	---
323+02'NB' - 323+81'NB' RT	12	22	---
322+83'NB' - 323+81'NB' LT	---	---	99
323+02'NB' - 323+81'NB' RT	---	---	79
PROJECT TOTAL	**93**	**168**	**942**

GUARDRAIL

LOCATION	614.2300 GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 GUARDRAIL TERMINAL EAT EACH
STH 36 NORTHBOUND			
B-51-78			
224+28'NB' - 224+81'NB' RT	---	---	1
224+84'NB' - 226+56'NB' RT	188	---	---
226+56'NB' - 226+96'NB' RT	---	40	---
224+48'NB' - 225+01'NB' LT	---	---	1
225+01'NB' - 226+88'NB' LT	188	---	---
226+88'NB' - 227+28'NB' LT	---	40	---
B-51-79			
317+49'NB' - 317+99'NB' LT	---	---	1
317+99'NB' - 319+86'NB' LT	188	---	---
319+86'NB' - 320+25'NB' LT	---	40	---
318+46'NB' - 318+96'NB' RT	---	---	1
318+96'NB' - 320+58'NB' RT	163	---	---
320+58'NB' - 320+98'NB' RT	---	40	---
PROJECT TOTAL	**725**	**160**	**4**

DRAINAGE

LOCATION	611.8115 ADJUSTING INLET COVERS EACH
STH 36 NORTHBOUND	
B-51-78	
226+91'NB', 22.961' RT	1
PROJECT TOTAL	**1**

EROSION CONTROL

LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
STH 36 NORTHBOUND				
B-51-78				
223+83'NB', 35' LT	---	1	---	---
226+91'NB', 23' RT	---	---	---	1
BRIDGE DECK	---	---	8	---
B-51-79				
317+99'NB' - 320+25'NB' LT	149	---	---	---
UNDISTRIBUTED	10	1	1	1
PROJECT TOTAL	**159**	**2**	**9**	**2**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

3

RESTORATION

LOCATION	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0500 SEED WATER MGAL	645.0120 GEOTEXTILE TYPE HR SY
STH 36 NORTHBOUND								
B-51-78								
224+20'NB' - 226+96'NB' RT	---	---	97	97	0.1	2	3	---
224+20'NB' - 227+40'NB' LT	---	---	118	118	0.1	3	3	---
227+05'NB' LT	6	---	---	---	---	---	---	20
230+22'NB' - 231+06'NB' RT	---	---	18	18	0.1	1	1	---
230+61'NB' - 231+06'NB' LT	---	---	4	4	0.1	1	1	---
SOUTH ABUTMENT	---	150	---	---	---	---	---	274
NORTH ABUTMENT	---	103	---	---	---	---	---	203
B-51-79								
316+52'NB' - 320+25'NB' LT	---	---	338	190	0.3	7	8	---
317+99'NB' - 320+98'NB' RT	---	---	104	104	0.1	2	3	---
322+39'NB' - 323+81'NB' LT	---	---	33	33	0.1	1	1	---
323+03'NB' - 323+81'NB' RT	---	---	15	15	0.1	1	1	---
SOUTH ABUTMENT	---	163	---	---	---	---	---	317
NORTH ABUTMENT	---	161	---	---	---	---	---	308
UNDISTRIBUTED	1	29	40	30	0.1	1	2	60
PROJECT TOTAL	**7**	**606**	**767**	**609**	**1.1**	**19**	**23**	**1,182**

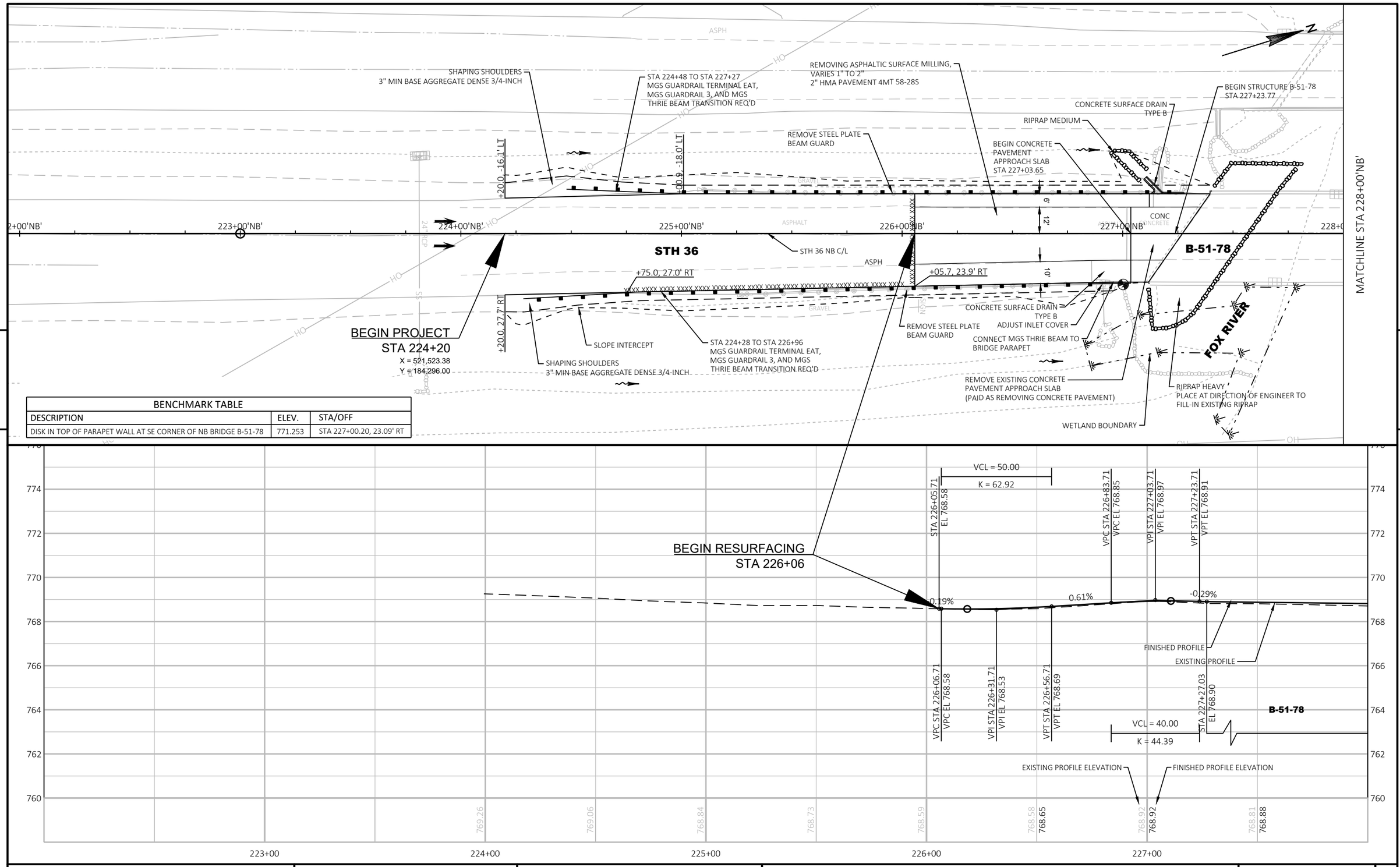
CONSTRUCTION STAKING

LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9920 SLOPE STAKES LF
STH 36 NORTHBOUND			
B-51-79			
316+75'NB' - 320+25'NB' LT	350	350	350
PROJECT TOTAL	**350**	**350**	**350**

SAWING

LOCATION	690.0150 ASPHALT LF
STH 36 NORTHBOUND	
B-51-78	
224+70'NB' - 226+06'NB'	178
231+06'NB'	40
B-51-79	
316+52'NB' - 319+81'NB'	366
323+81'NB'	38
PROJECT TOTAL	**622**

ALL ITEMS CATEGORY 0010 UNLESS NOTED

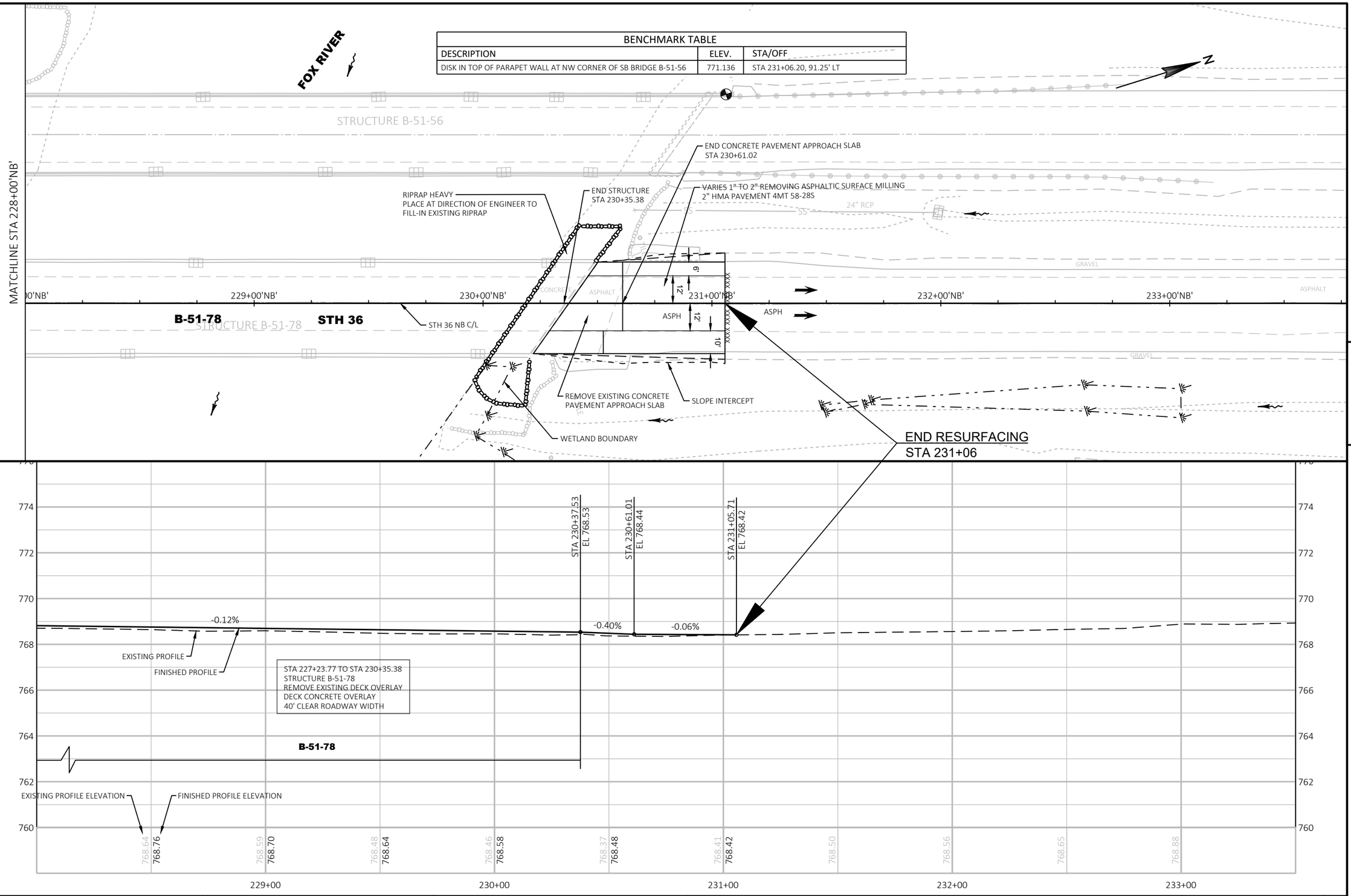


PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	PLAN AND PROFILE: B-51-78	SHEET 23	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 1

PLOT DATE : 1/24/2020 10:11 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

BENCHMARK TABLE		
DESCRIPTION	ELEV.	STA/OFF
DISK IN TOP OF PARAPET WALL AT NW CORNER OF SB BRIDGE B-51-56	771.136	STA 231+06.20, 91.25' LT

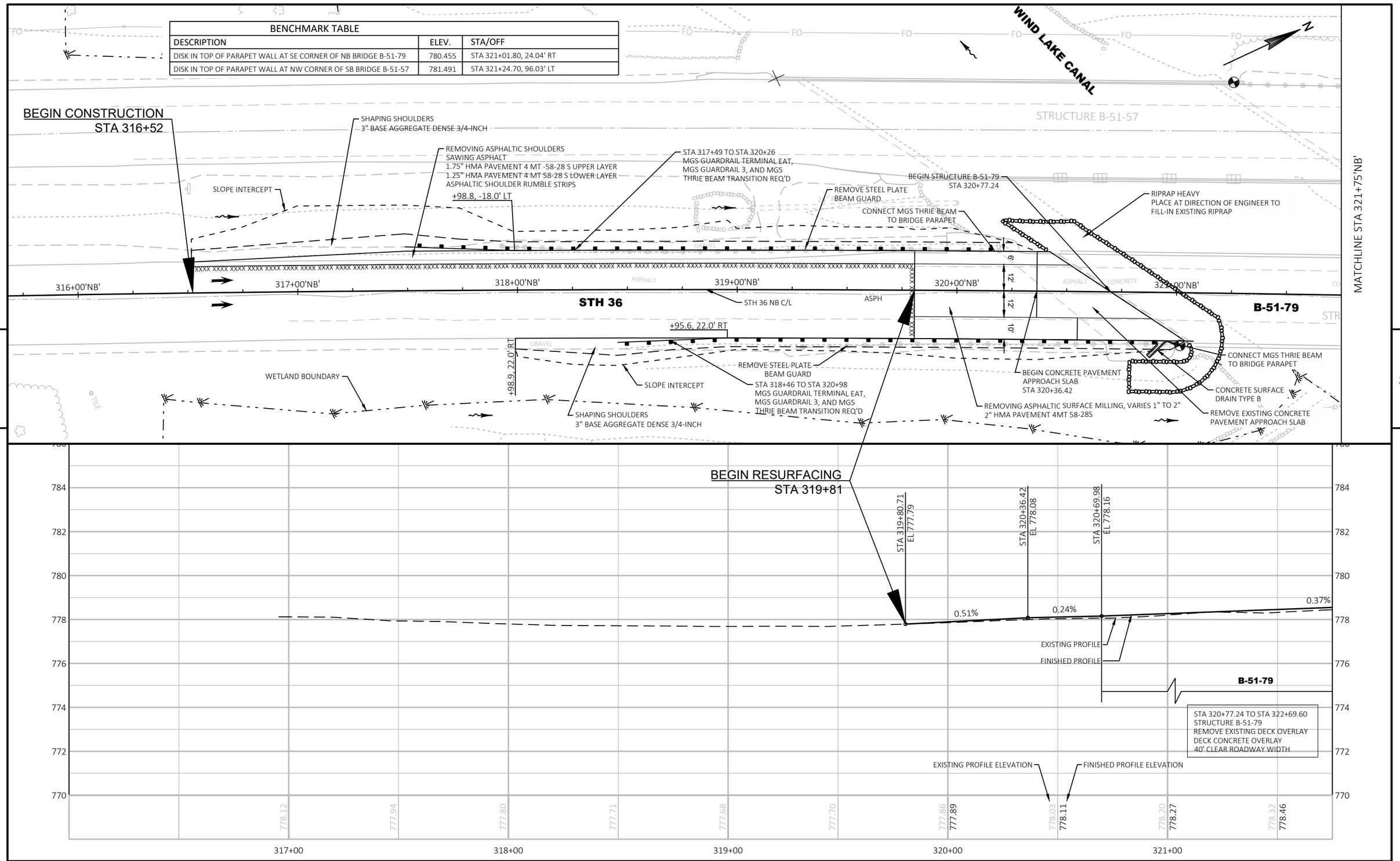


PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	PLAN AND PROFILE: B-51-78	SHEET 24	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 2

PLOT DATE : 1/24/2020 10:11 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

BENCHMARK TABLE		
DESCRIPTION	ELEV.	STA/OFF
DISK IN TOP OF PARAPET WALL AT SE CORNER OF NB BRIDGE B-51-79	780.455	STA 321+01.80, 24.04' RT
DISK IN TOP OF PARAPET WALL AT NW CORNER OF SB BRIDGE B-51-57	781.491	STA 321+24.70, 96.03' LT



PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	PLAN AND PROFILE: B-51-79	SHEET 25	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 4
PLOT DATE : 1/24/2020 10:11 AM
PLOT BY : MANSKE, CALEB
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

MATCHLINE STA 321+75'NB'

END STRUCTURE B-51-79
STA 322+69.60

END CONCRETE PAVEMENT
APPROACH SLAB
STA 323+01.93

VARIES 1" TO 2" REMOVING ASPHALTIC SURFACE MILLING
2" HMA PAVEMENT 4MT 58-28S

24" RCP

322+00'NB'

323+00'NB'

324+00'NB'

325+00'NB'

326+00'NB'

327+00'NB'

CONCRETE

ASPHALT

GRAVEL

ASPH

STH 36

STH 36 NB C/L

B-51-79

12'

12'

10'

WIND LAKE CANAL

SLOPE INTERCEPT

+50.00, 22.0' RT

REMOVE EXISTING CONCRETE
PAVEMENT APPROACH SLAB

RIPRAP HEAVY
PLACE AT DIRECTION OF ENGINEER TO
FILL-IN EXISTING RIPRAP

END PROJECT
STA 323+81

STA 322+67.76
EL 778.90

STA 323+01.92
EL 779.02

STA 323+80.71
EL 779.22

0.37%

0.25%

EXISTING PROFILE

FINISHED PROFILE

B-51-79

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

778.54	778.64	778.73	778.83	778.92	779.02	779.11	779.14	779.25	779.42	779.62	779.83	780.05	780.18

784
782
780
778
776
774
772
770

322+00
323+00
324+00
325+00
326+00
327+00

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	PLAN AND PROFILE: B-51-79	SHEET 26	E

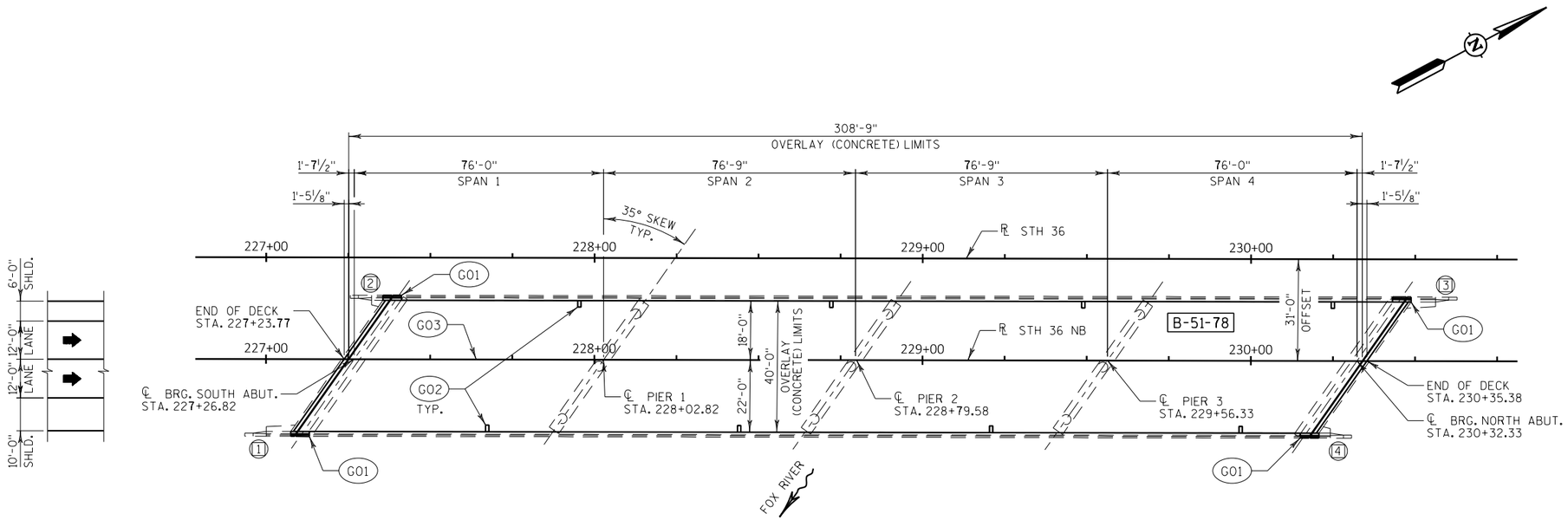
FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 5

PLOT DATE : 1/24/2020 10:12 AM PLOT BY : MANSKE, CALEB PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

STATE PROJECT NUMBER

2240-03-74

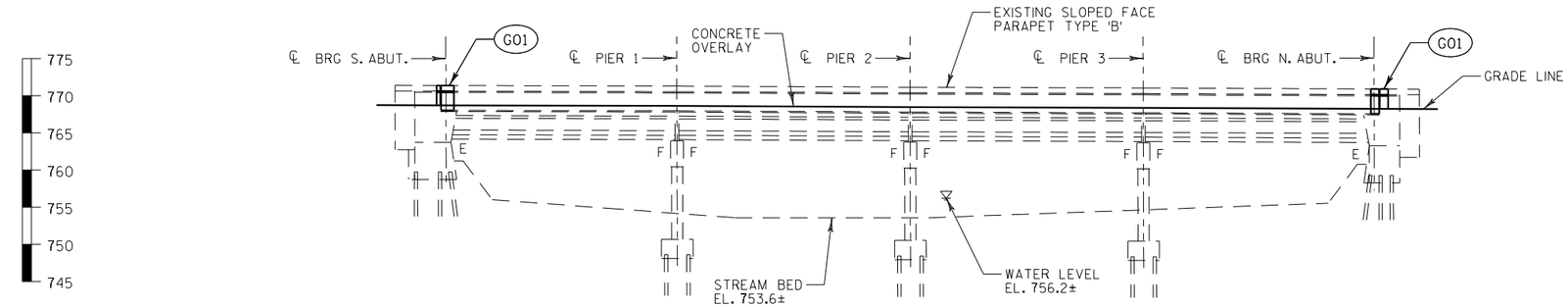


PLAN B-51-78

(4 SPAN 45" PRESTRESSED CONCRETE GIRDER - CONCRETE OVERLAY)

LEGEND

(n) - INDICATES WING NUMBER



ELEVATION

(NORMAL TO FOX RIVER)

BENCHMARK

NO.	DESCRIPTION	STATION	ELEVATION
1	WISDOT DISK IN TOP OF PARAPET AT SOUTHEAST CORNER OF BRIDGE B-51-78	STA. 227+00.20 23.09' RT.	771.25

NOTES

(GO1) REMOVE PARAPET IN THIS AREA AS REQUIRED TO PERMIT INSTALLATION OF NEW EXPANSION DEVICE.

(GO2) EXISTING FLOOR DRAINS TO REMAIN IN PLACE. REMOVE TOP OF DECK IN DRAIN AREA AS DIRECTED BY THE FIELD ENGINEER TO ALLOW PLACING AND SLOPING OF 1½" CONCRETE OVERLAY.

(GO3) OPTIONAL LONGITUDINAL CONSTRUCTION JOINT.

PRELIMINARY

DESIGN CONTACT:
SCOTT GINAL
(262)-317-3344

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

DESIGN DATA

LIVE LOAD:

DESIGN LOADING:	HS-20
INVENTORY RATING:	HS-TBD
OPERATING RATING:	HS-TBD
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV):	TBD KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY:
OVERLAY DECKS, DECK PATCHING,
& SUPERSTRUCTURE ——— f'c = 4,000 P.S.I.
ALL OTHER ——— f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT ——— fy = 60,000 P.S.I.

LIST OF DRAWINGS

TRAFFIC VOLUME

STH 36

A.D.T. = 13,600 (2020)
A.D.T. = 15,600 (2040)
R.D.S. = 60 M.P.H.

NO.	DATE	REVISION	BY

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-51-78

STH 36 NB OVER FOX RIVER

COUNTY: RACINE	~~TOWN/CITY~~/VILLAGE: ROCHESTER
DESIGN SPEC.: REHABILITATION N/A	

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
PFP	SJG	PFP	SJG

GENERAL PLAN

SHEET 27 OF 2

8

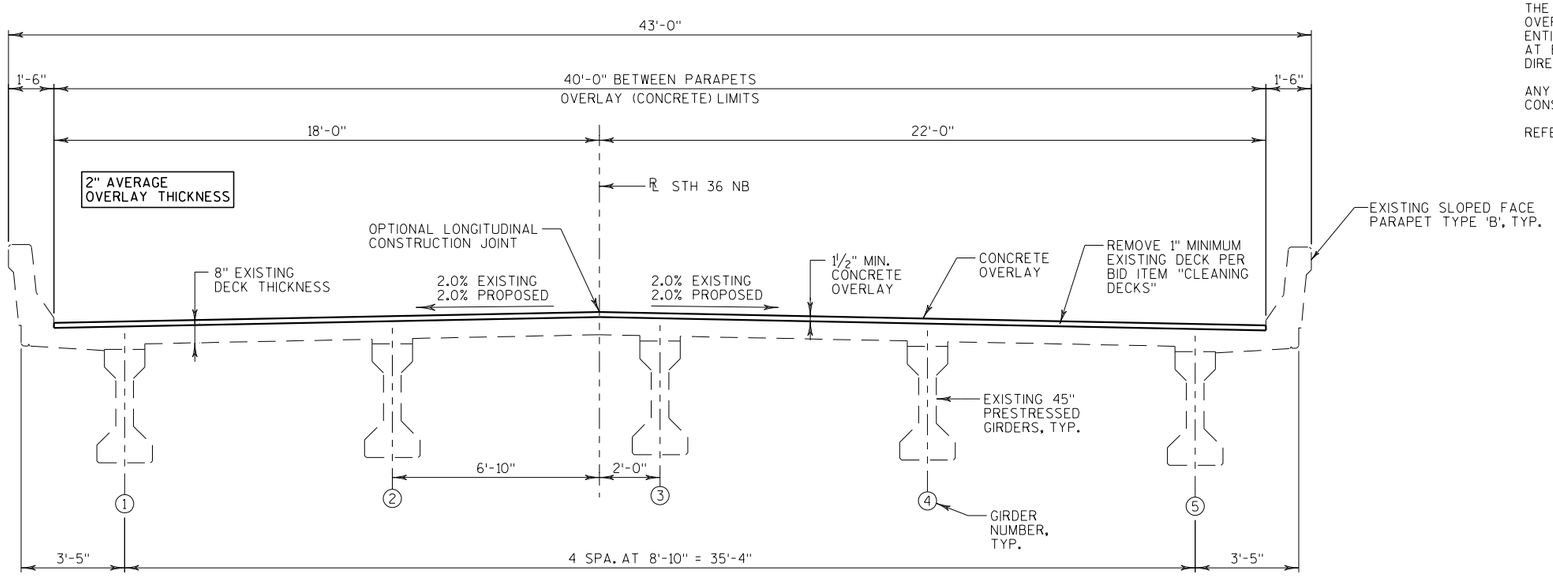
8

STATE PROJECT NUMBER

2240-03-74

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
502.0100	CONCRETE MASONRY BRIDGES	CY	---
502.3100	EXPANSION DEVICE B-51-78	LS	---
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---
502.3210	PIGMENTED SURFACE SEALER	SY	---
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	---
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	---
509.0301	PREPARATION DECKS TYPE 1	SY	---
509.0302	PREPARATION DECKS TYPE 2	SY	---
509.0500	CLEANING DECKS	SY	---
509.1000	JOINT REPAIR	SY	---
509.1500	CONCRETE SURFACE REPAIR	SF	---
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---
509.9050.S	CLEANING PARAPETS	LF	---



CROSS-SECTION THRU ROADWAY

(LOOKING NORTH)

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.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

"PROTECTIVE SURFACE TREATMENT" SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

"PIGMENTED SURFACE SEALER" SHALL BE APPLIED TO THE TOP AND INSIDE FACES OF THE PARAPETS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

"CONCRETE SURFACE REPAIR", "PREPARATION DECKS TYPE 1", AND "PREPARATION DECKS TYPE 2" AREAS SHALL BE AS DETERMINED BY THE ENGINEER IN THE FIELD.

"PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

THE QUANTITY FOR BID ITEM "CONCRETE MASONRY BRIDGES" CONSISTS OF THE VOLUME OF CONCRETE REQUIRED FOR RECONSTRUCTION OF THE PARAPETS AT THE EXPANSION JOINTS.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID FOR IN THE LUMP SUM PRICE, BID AS "EXPANSION DEVICE B-51-78".

EXISTING FLOOR DRAINS ARE TO REMAIN IN PLACE. REMOVE TOP OF DECK IN DRAIN AREA AS DIRECTED BY THE FIELD ENGINEER TO ALLOW PLACING AND SLOPING OF 1½" CONCRETE OVERLAY.

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE AFTER "CLEANING DECKS". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

THE EXISTING STRUCTURE, B-51-78, IS A 4-SPAN PRESTRESSED CONCRETE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 43'-0" AND AN OVERALL LENGTH BETWEEN BACK OF ABUTMENTS OF 313'-3". THE ENTIRE BRIDGE DECK SHALL BE PREPARED FOR A NEW CONCRETE OVERLAY. THE EXPANSION JOINTS AT BOTH ABUTMENTS SHALL BE REPLACED. CONCRETE SURFACE REPAIRS SHALL BE PERFORMED AS DIRECTED BY THE FIELD ENGINEER.

ANY EXCAVATION NECESSARY TO COMPLETE THE JOINT REPAIR AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

REFER TO ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS.

PRELIMINARY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-78

DRAWN BY PFP | PLANS CK'D. SJG

SECTIONS, NOTES AND QUANTITES

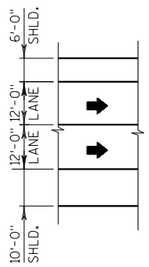
SHEET 28 2 OF 2

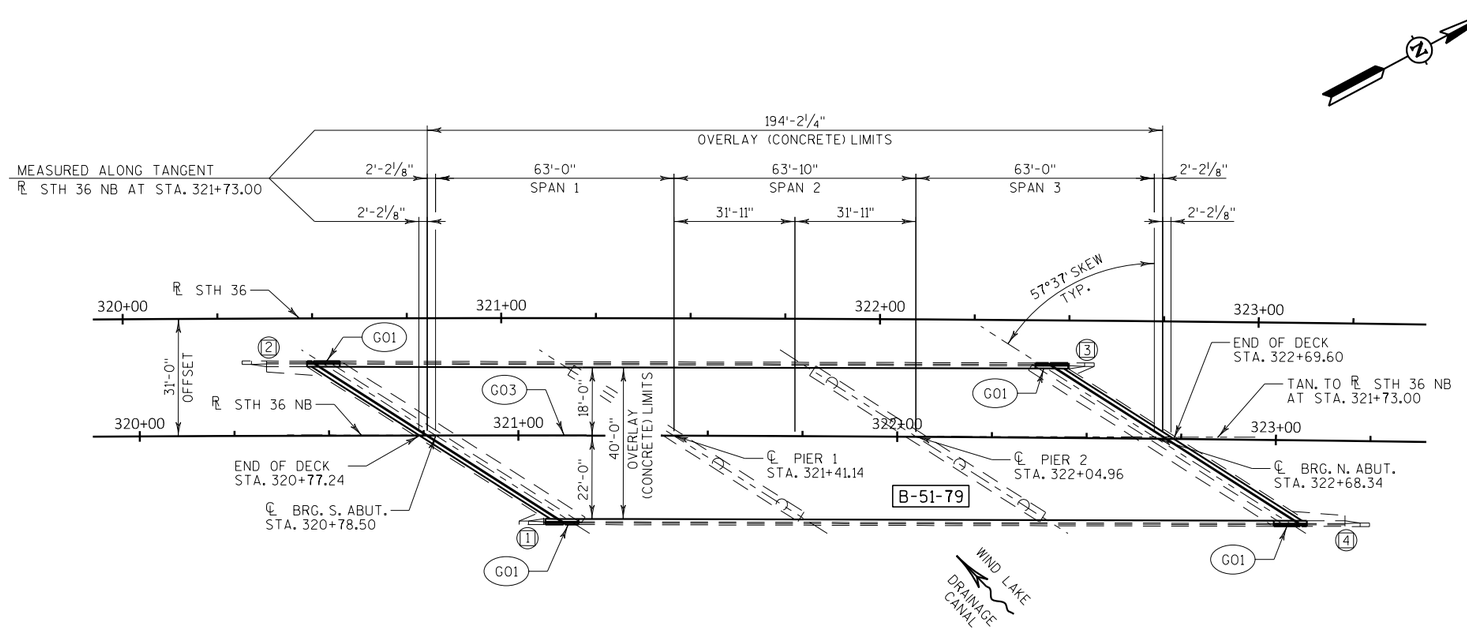
8

8

STATE PROJECT NUMBER

2240-03-74





PLAN B-51-79

(3 SPAN 36" PRESTRESSED CONCRETE GIRDER - CONCRETE OVERLAY)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING:	HS-20
INVENTORY RATING:	HS-TBD
OPERATING RATING:	HS-TBD
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV):	TBD KIPS

MATERIAL PROPERTIES:

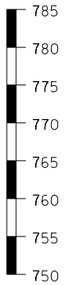
CONCRETE MASONRY:
OVERLAY DECKS, DECK PATCHING,
& SUPERSTRUCTURE ——— f'c = 4,000 P.S.I.
ALL OTHER ——— f'c = 3,500 P.S.I.

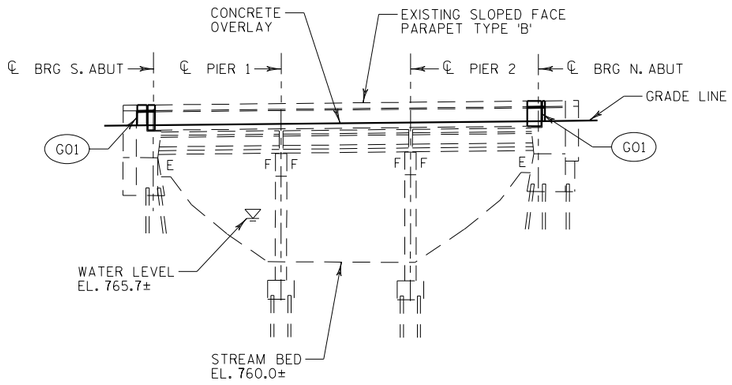
BAR STEEL REINFORCEMENT ——— fy = 60,000 P.S.I.

LIST OF DRAWINGS

LEGEND

⬡ - INDICATES WING NUMBER





ELEVATION

(NORMAL TO WIND LAKE DRAINAGE CANAL)

TRAFFIC VOLUME

STH 36

A.D.T. = 13,600 (2020)
A.D.T. = 15,600 (2040)
R.D.S. = 60 M.P.H.

BENCHMARK

NO.	DESCRIPTION	STATION	ELEVATION
3	WISDOT DISK IN TOP OF PARAPET AT SOUTHEAST CORNER OF BRIDGE B-51-79	STA. 321+01.80 24.04' RT.	780.46

NOTES

(G01) REMOVE PARAPET IN THIS AREA AS REQUIRED TO PERMIT INSTALLATION OF NEW EXPANSION DEVICE.

(G03) OPTIONAL LONGITUDINAL CONSTRUCTION JOINT.

PRELIMINARY

DESIGN CONTACT:
SCOTT GINAL
(262)-317-3344

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

NO.	DATE	REVISION	BY

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-51-79

STH 36 NB OVER OVER WIND LAKE DRAINAGE CANAL

COUNTY: RACINE	~~TOWN/CITY~~/VILLAGE: ROCHESTER
DESIGN SPEC.: REHABILITATION N/A	

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
PFP	SJG	PFP	SJG

GENERAL PLAN

SHEET 29 1 OF 2

8

8

STATE PROJECT NUMBER

2240-03-74

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
502.0100	CONCRETE MASONRY BRIDGES	CY	---
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509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	---
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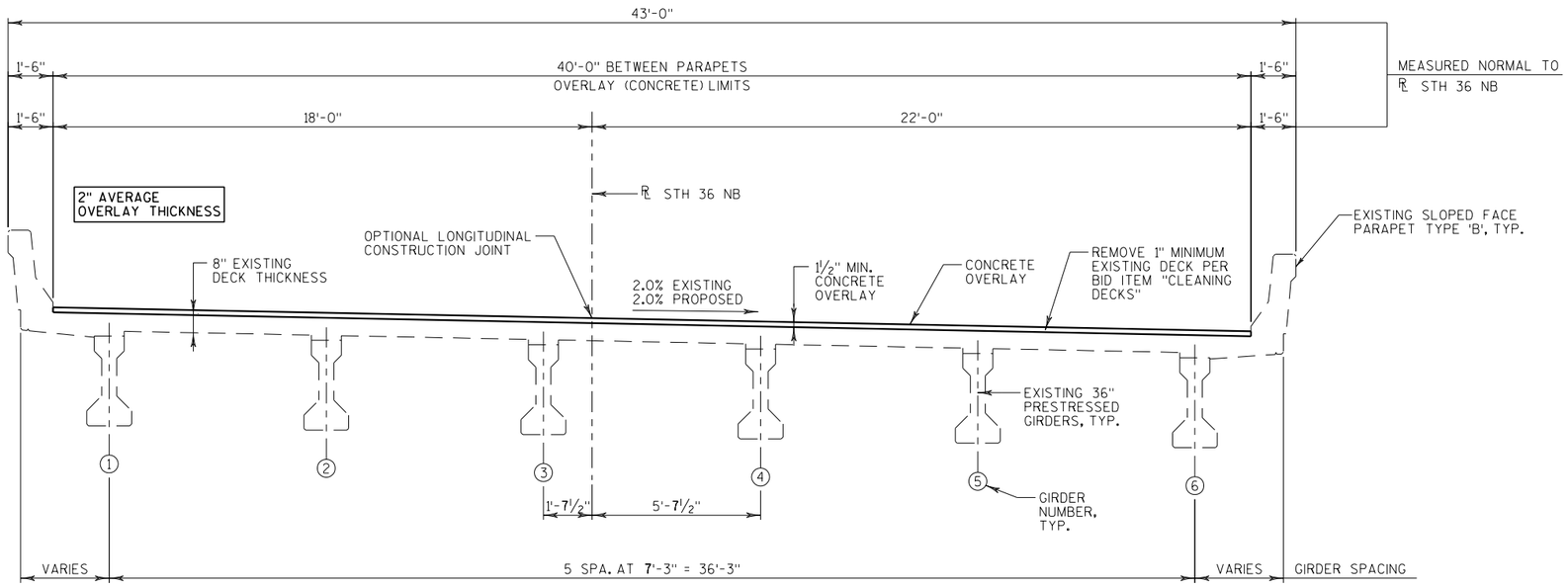
REFER TO ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS.



CROSS-SECTION THRU ROADWAY

(LOOKING NORTH)

PRELIMINARY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-51-79

DRAWN BY PFP | PLANS CK'D. SJG

SECTIONS, NOTES AND QUANTITES

SHEET 302 OF 2

8

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STH 36 NORTHBOUND (BRIDGE B-51-79)

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	FILL 1.10	MASS ORDINATE (1)
316+75'NB'	0.00	4.16	1.13	0	0	0	0	0
317+00'NB'	25.00	2.73	4.14	3	2	3	2	1
317+31'NB'	31.00	1.27	9.09	2	8	5	11	-6
317+49'NB'	18.00	0.83	12.31	1	7	6	19	-13
317+50'NB'	1.00	0.87	12.02	0	0	6	19	-13
317+74'NB'	24.00	1.96	4.34	1	7	7	26	-19
317+99'NB'	25.00	2.78	0.01	2	2	9	29	-20
318+00'NB'	1.00	2.77	0.02	0	0	9	29	-20
318+46'NB'	46.00	2.06	0.64	4	1	13	30	-17
318+50'NB'	4.00	1.83	0.76	0	0	13	30	-17
318+71'NB'	21.00	1.37	0.99	1	1	14	31	-17
318+96'NB'	25.00	2.69	0.85	2	1	16	32	-16
319+00'NB'	4.00	3.11	0.21	0	0	16	32	-16
319+50'NB'	50.00	3.06	1.43	6	2	22	34	-12
319+81'NB'	31.00	2.59	1.60	3	2	25	36	-11
320+00'NB'	19.00	2.47	1.53	2	1	27	37	-10

1. POSITIVE VALUE INDICATES EXCESS MATERIAL, NEGATIVE VALUE INDICATES SHORTAGE OF MATERIAL.

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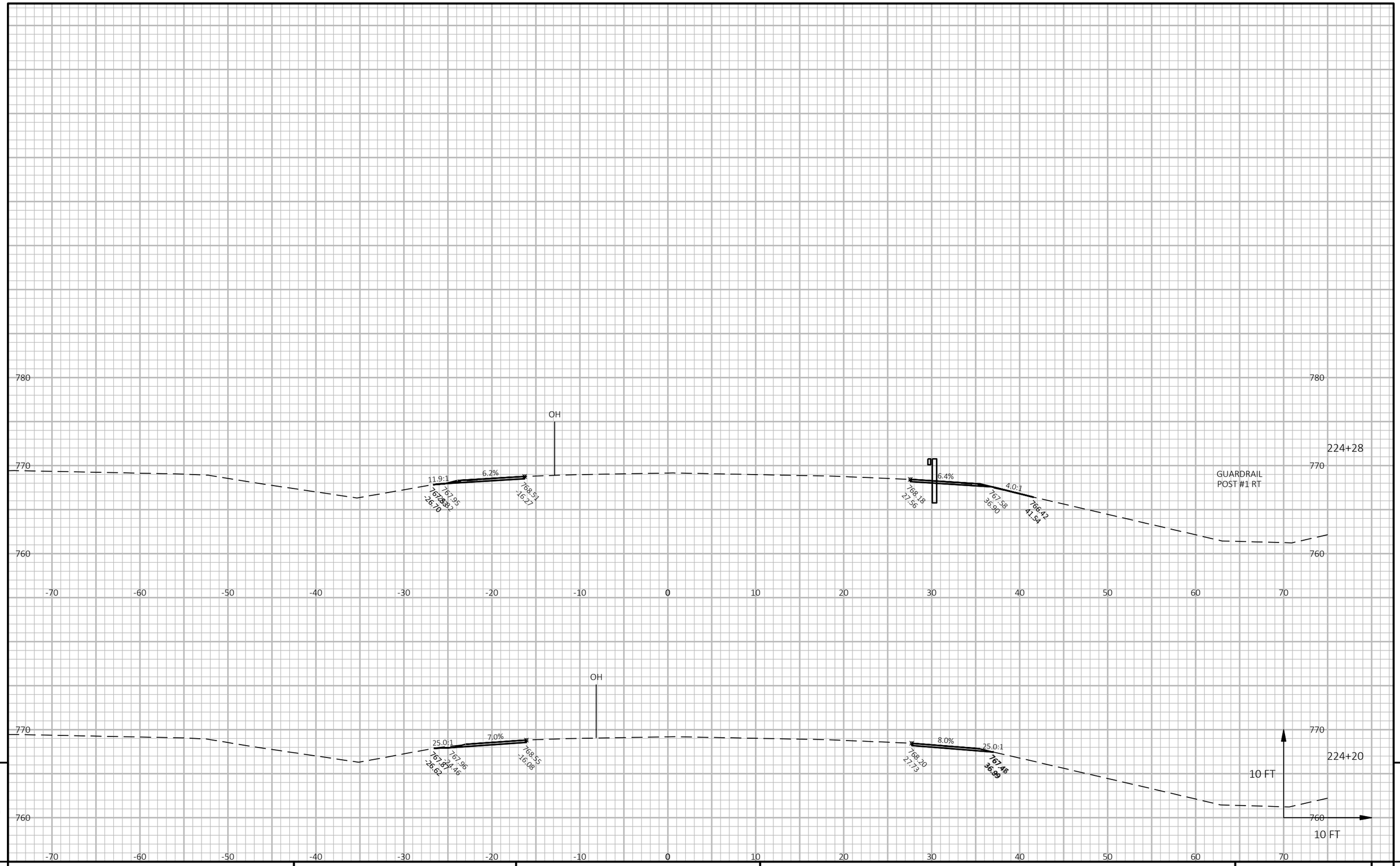

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 32	E

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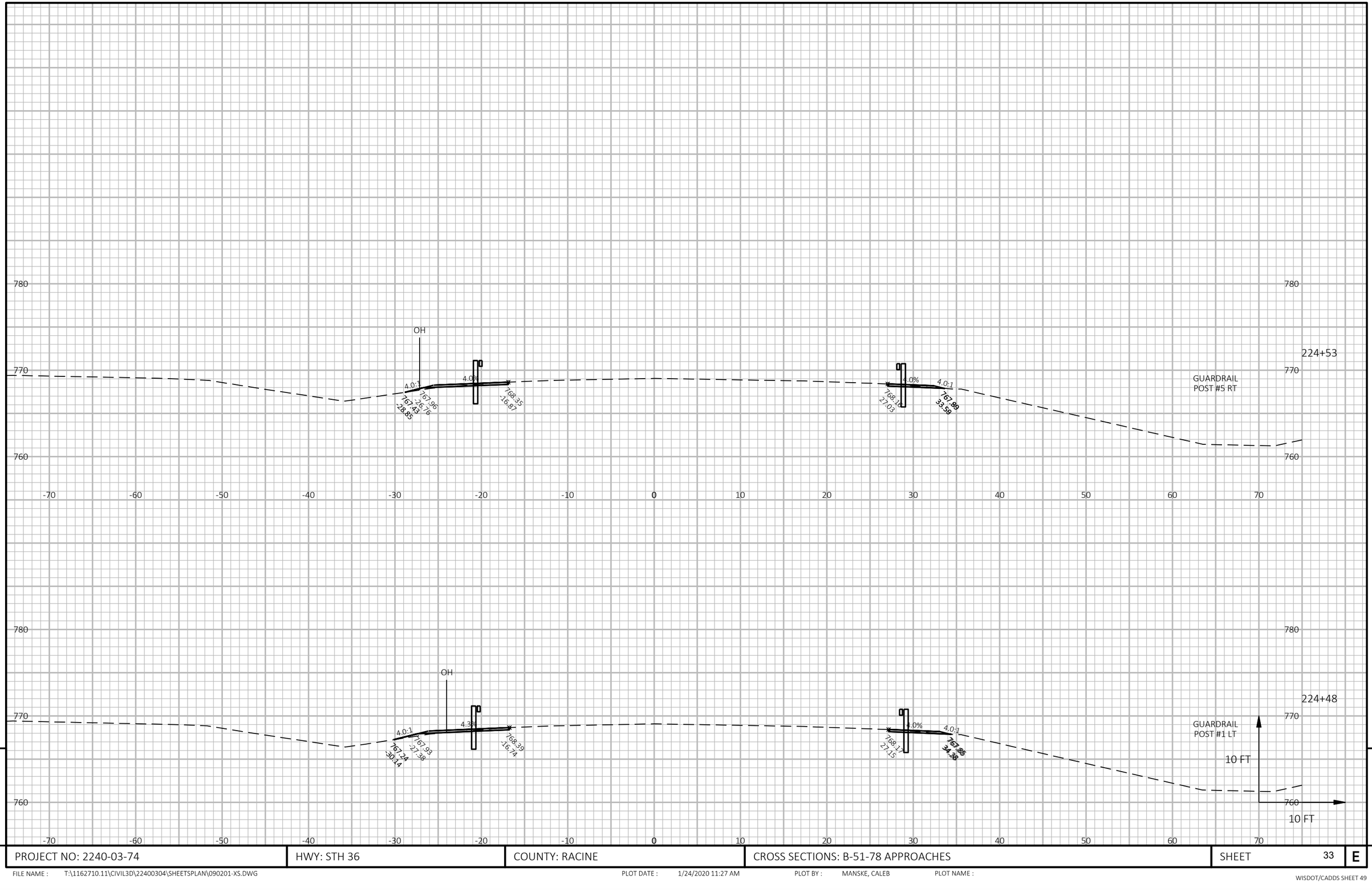

PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 33	E

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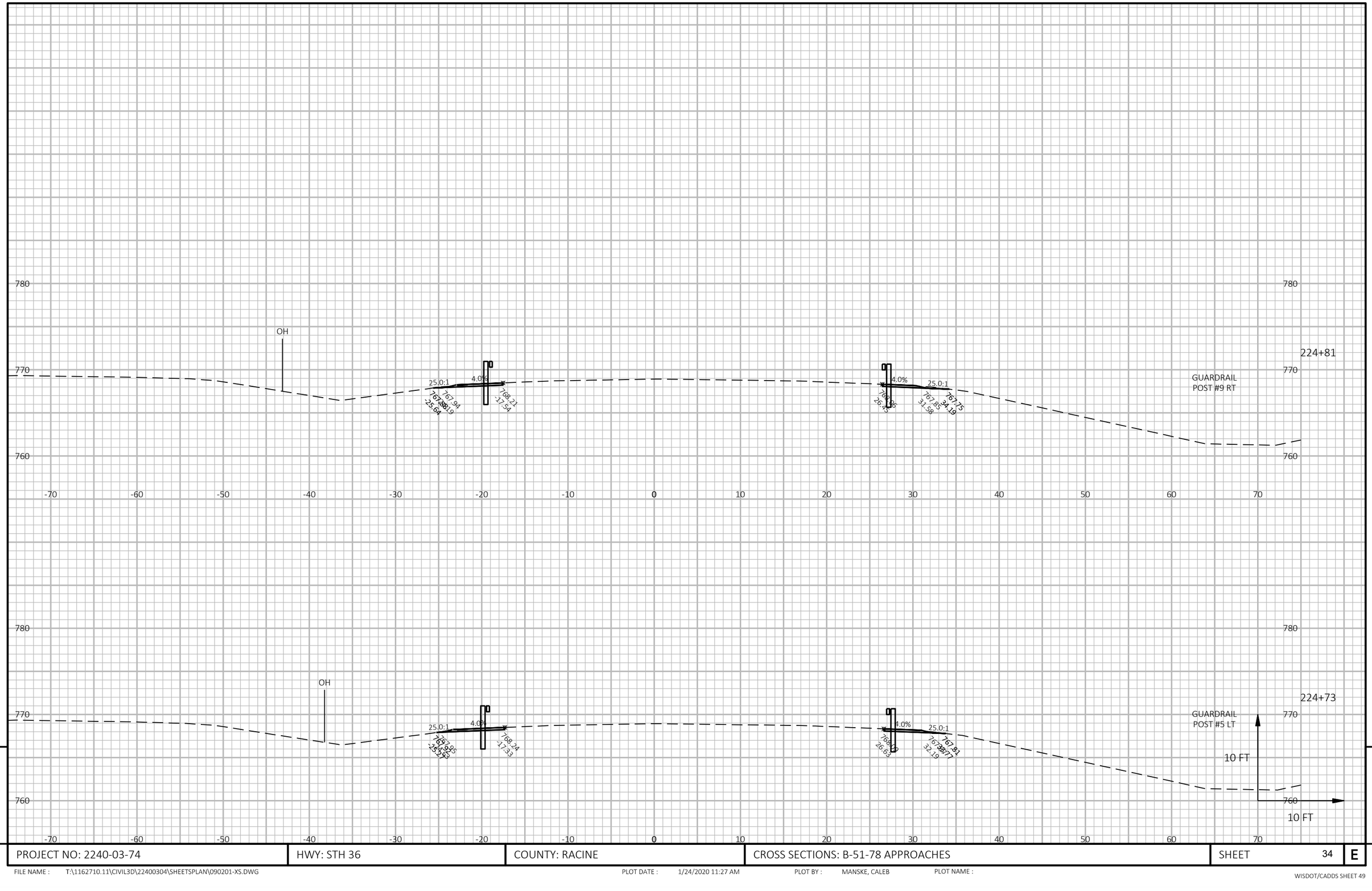
WISDOT/CADDS SHEET 49



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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 34	E

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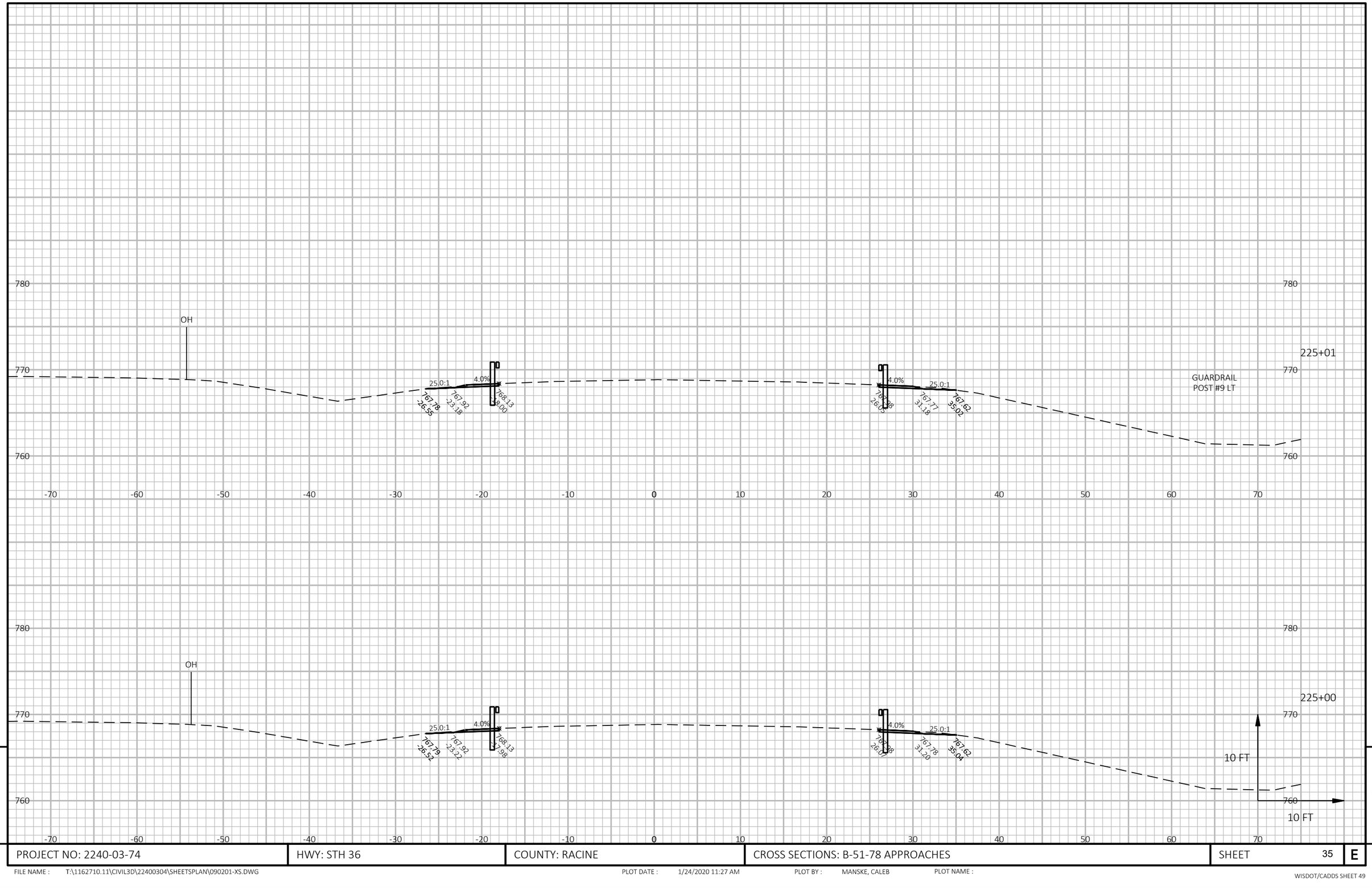

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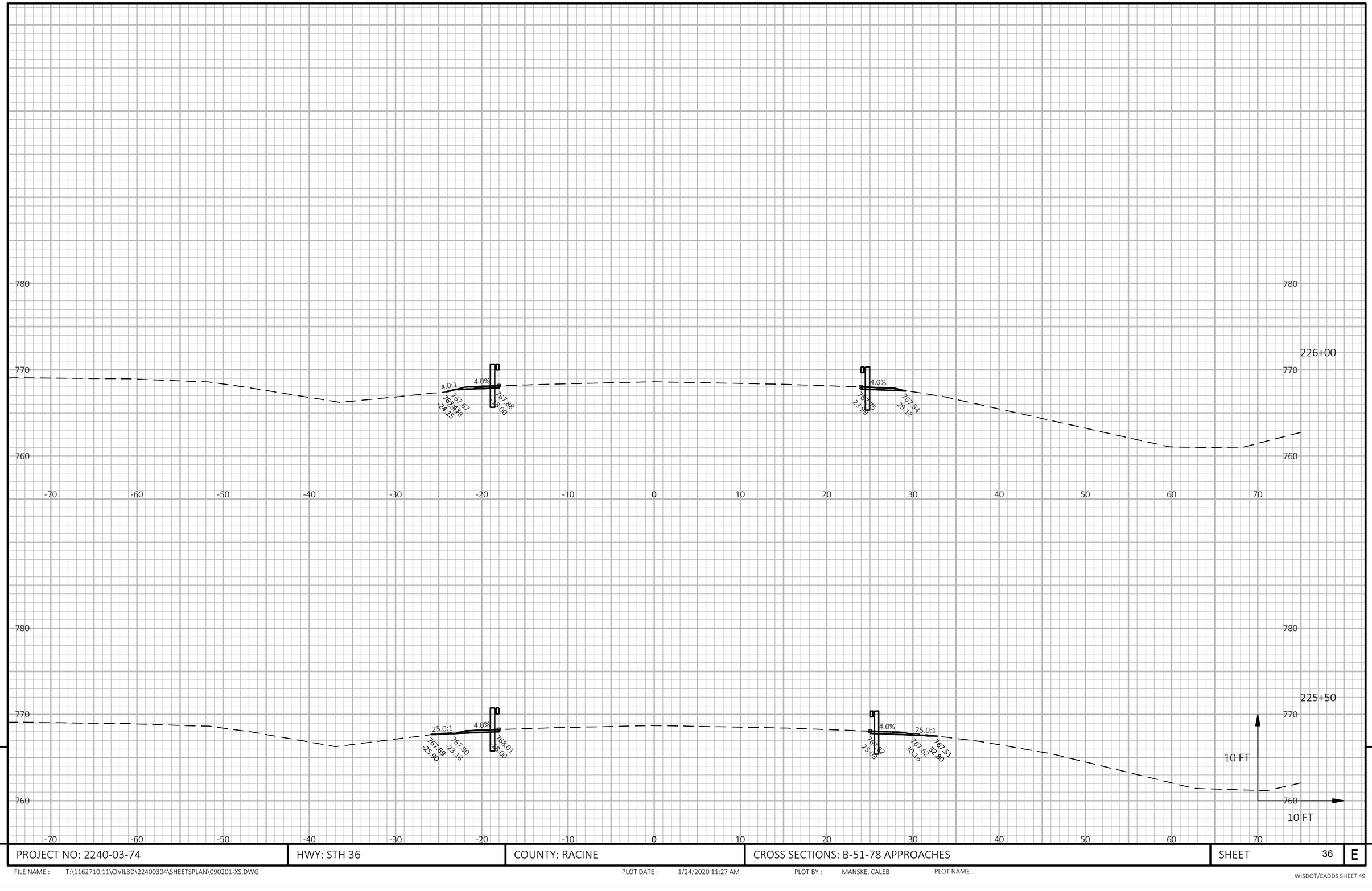

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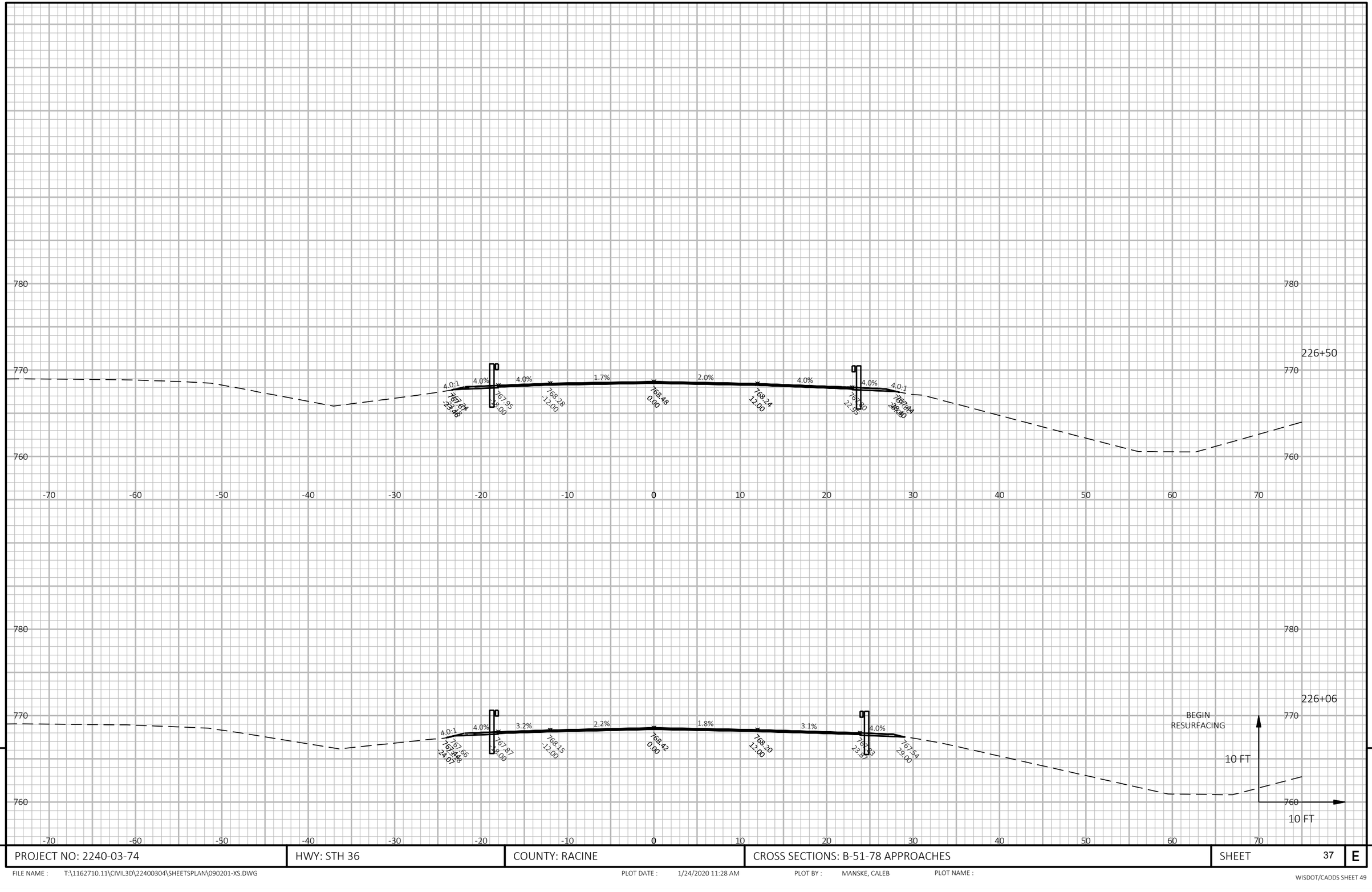

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 37	E

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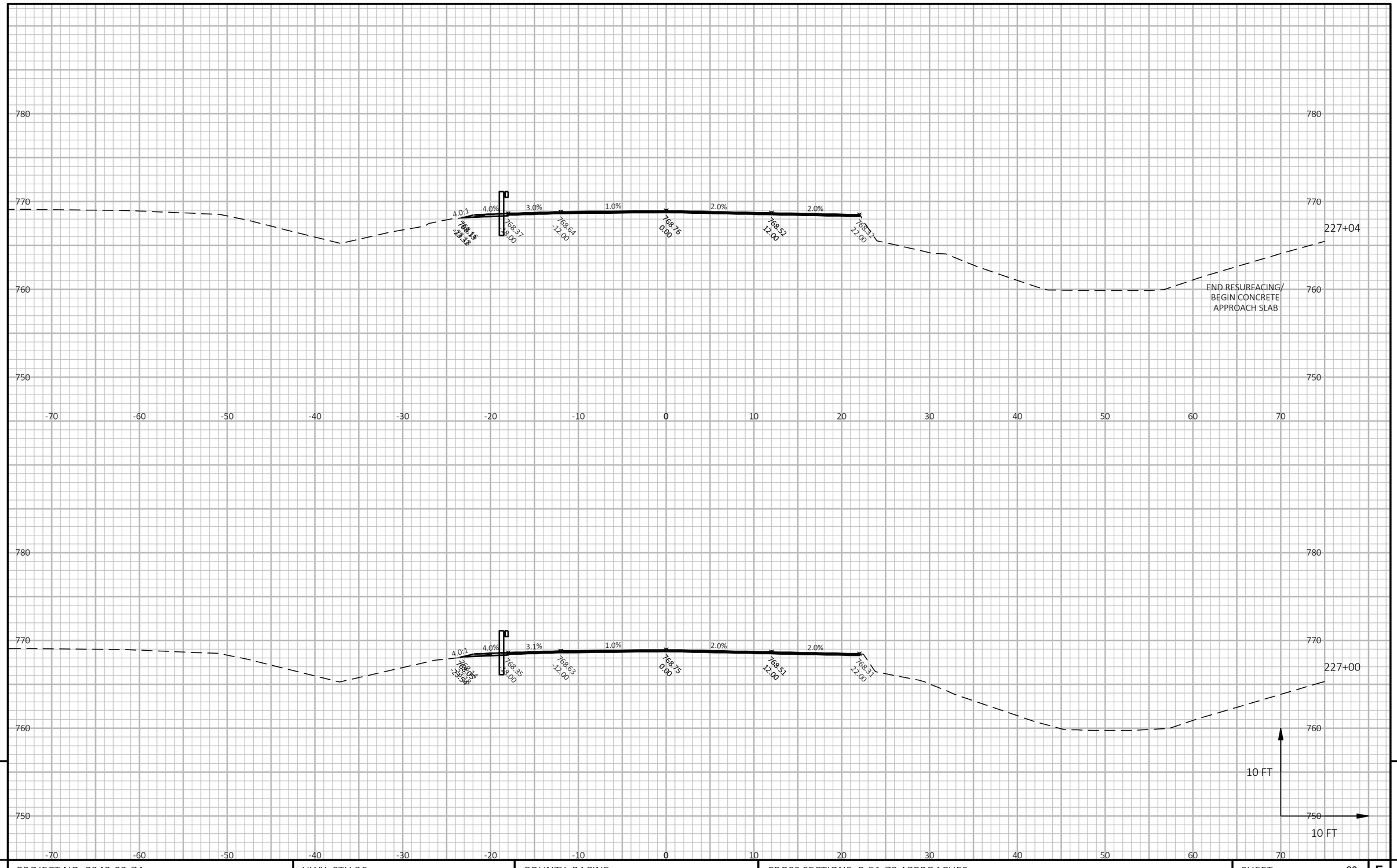

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 38	E

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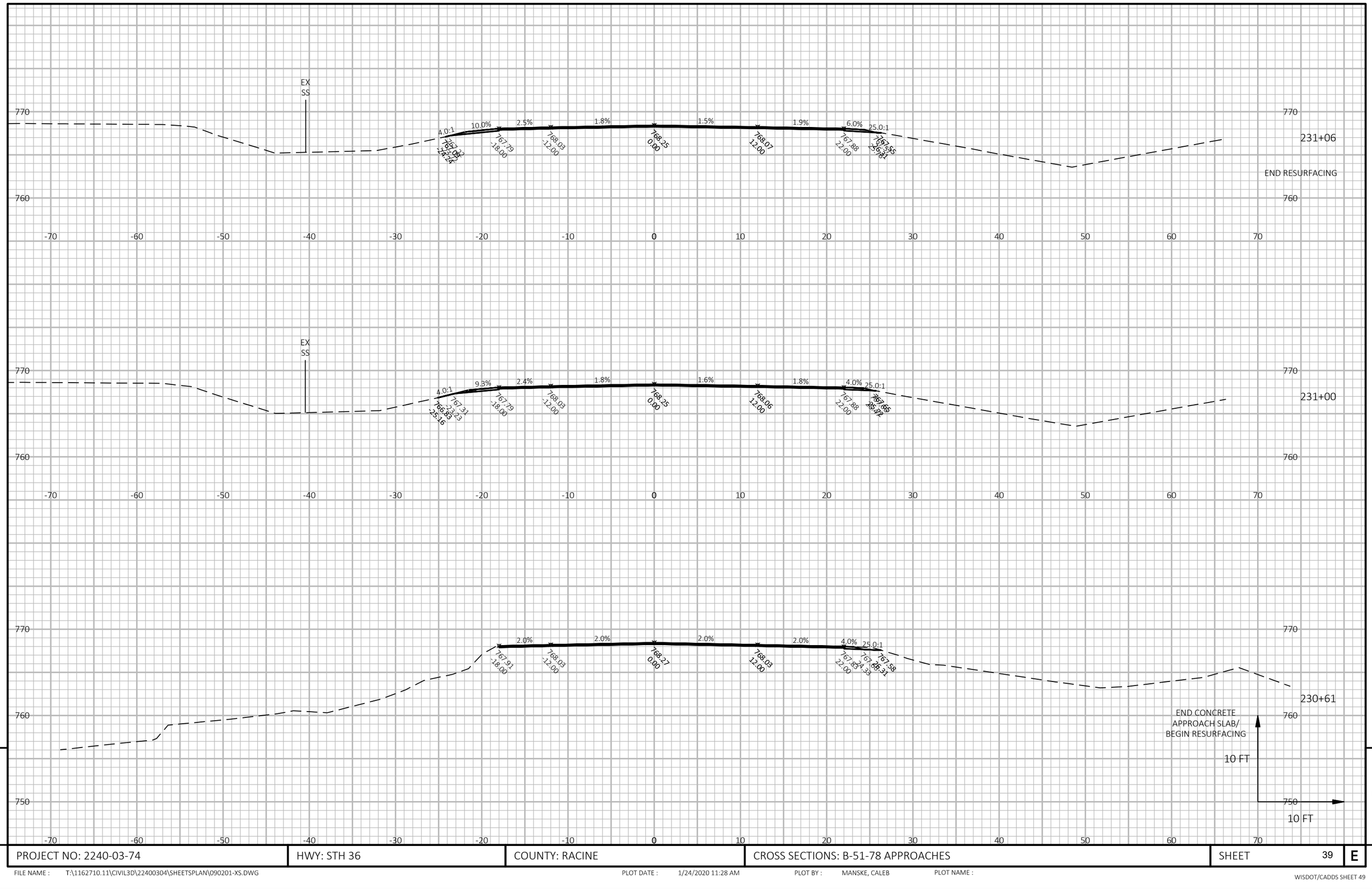

9	PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-78 APPROACHES	SHEET 39 E

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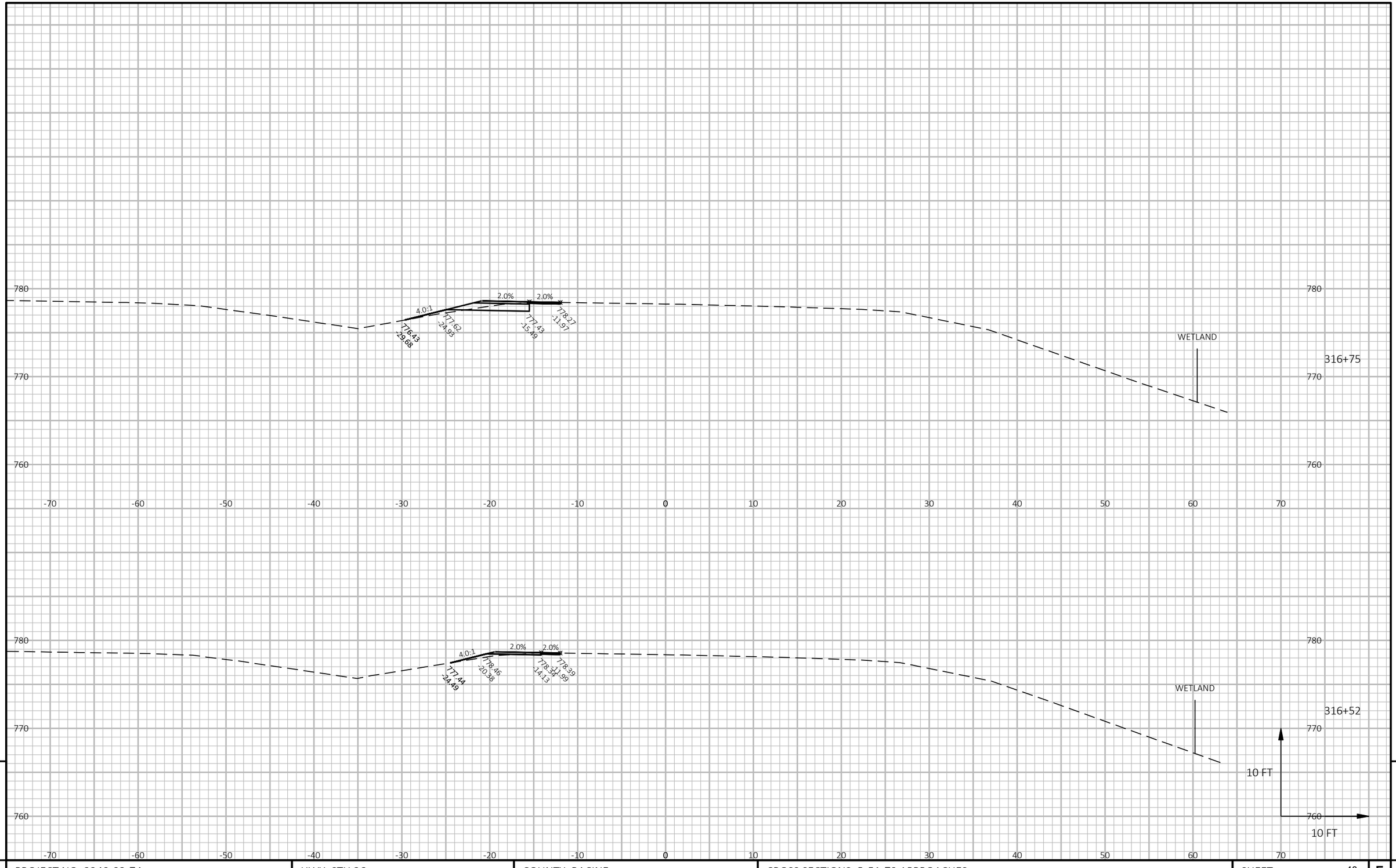

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 40	E

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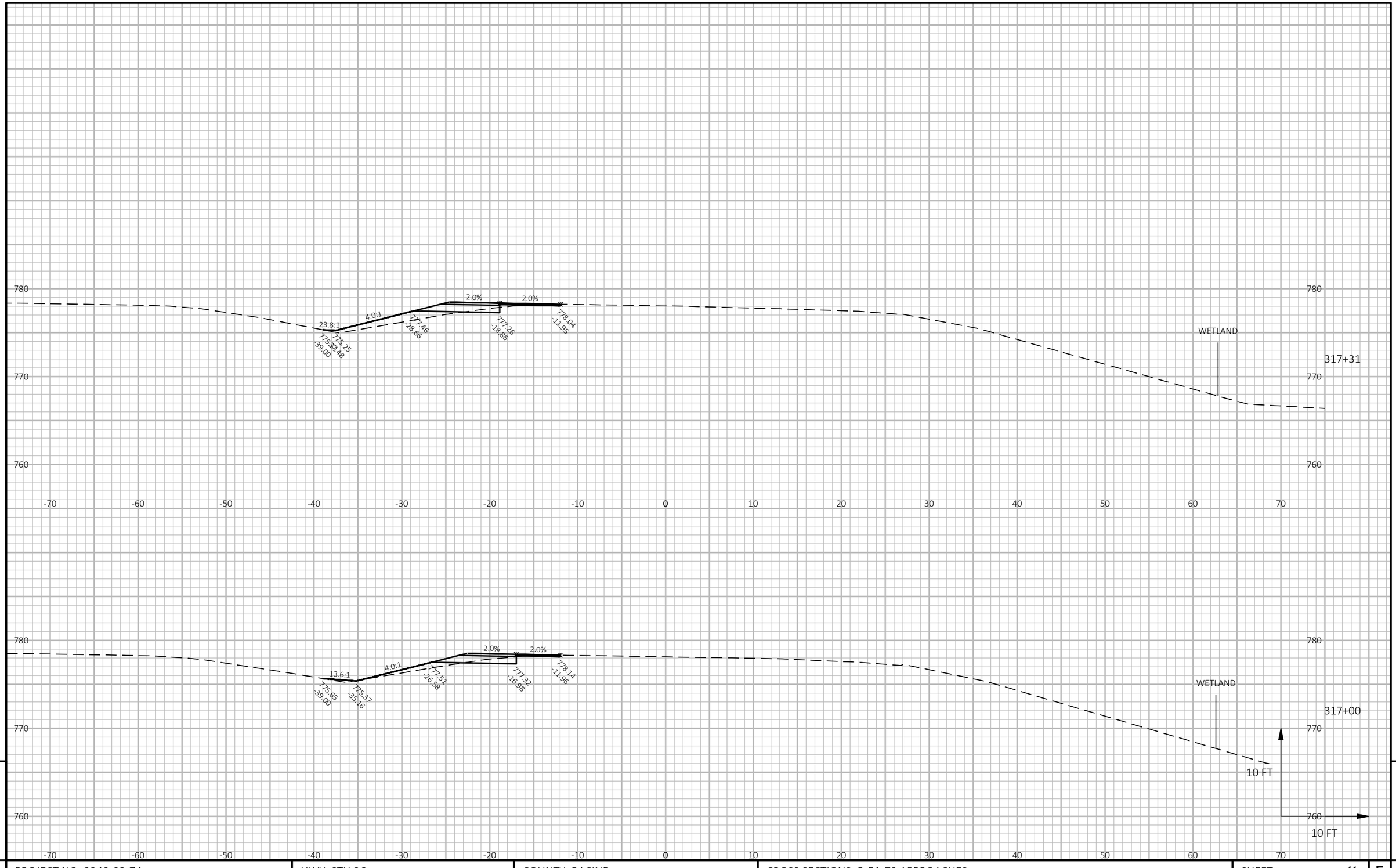

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 41	E

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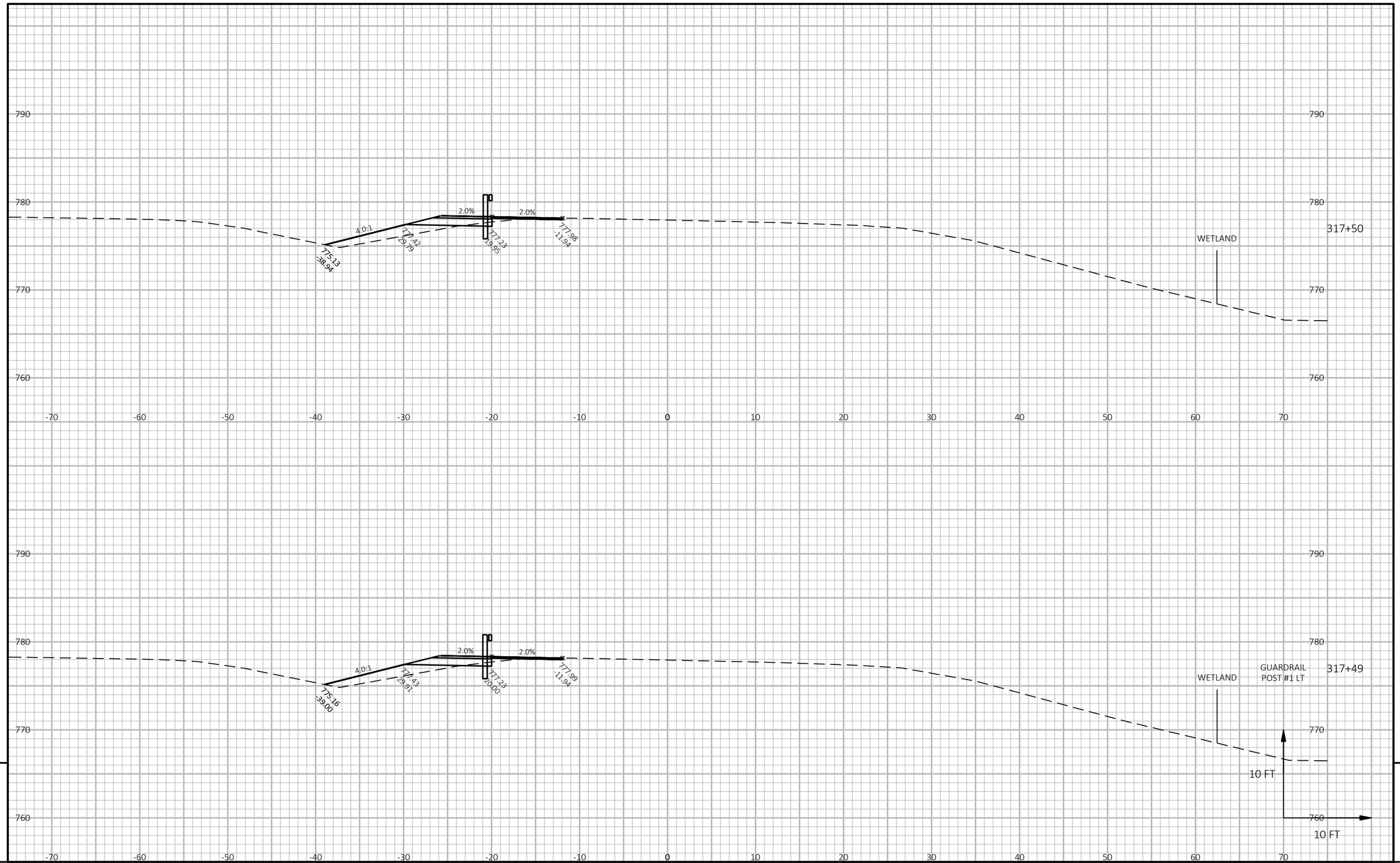

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 42	E

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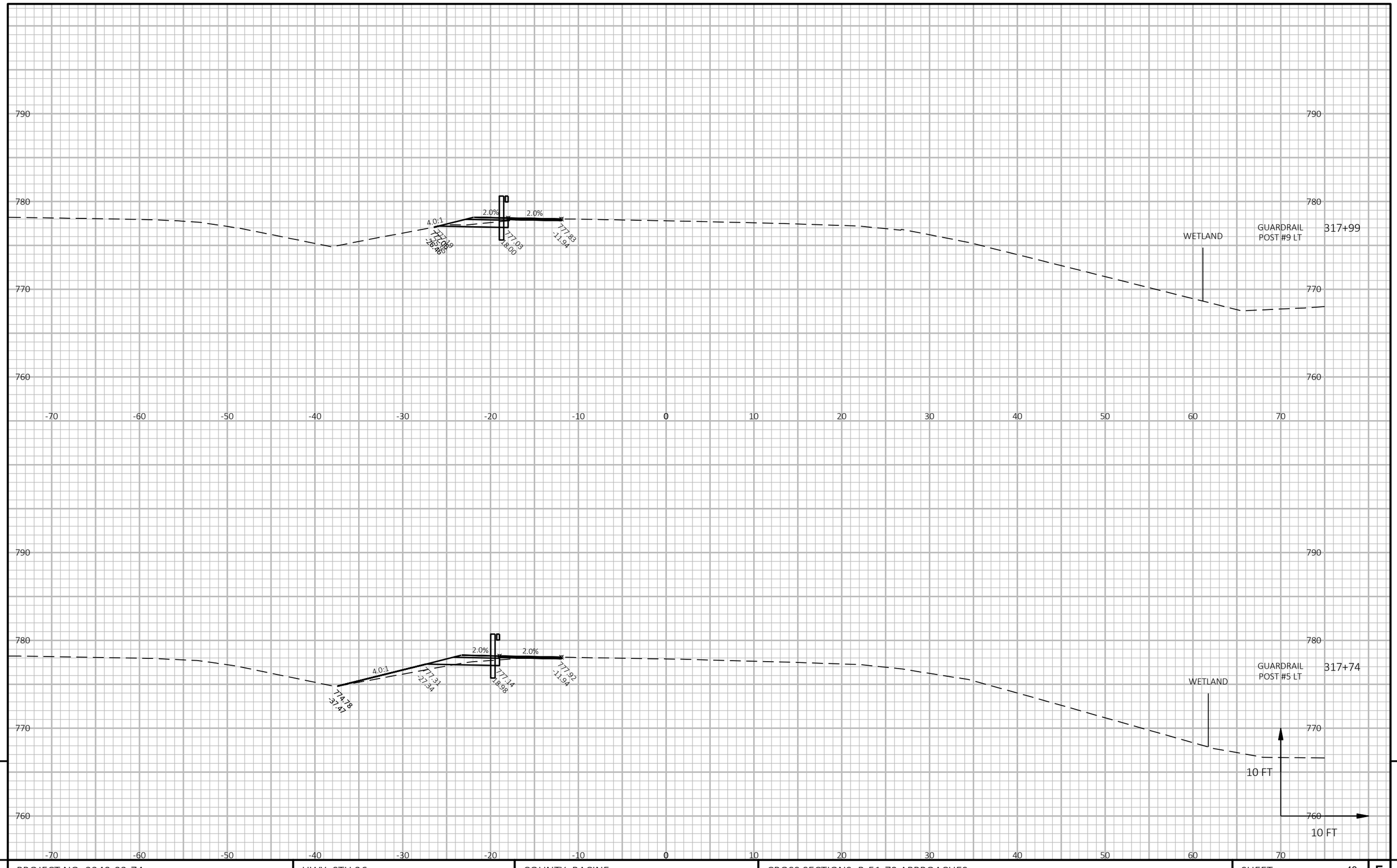
WISDOT/CADDS SHEET 49



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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 43	E

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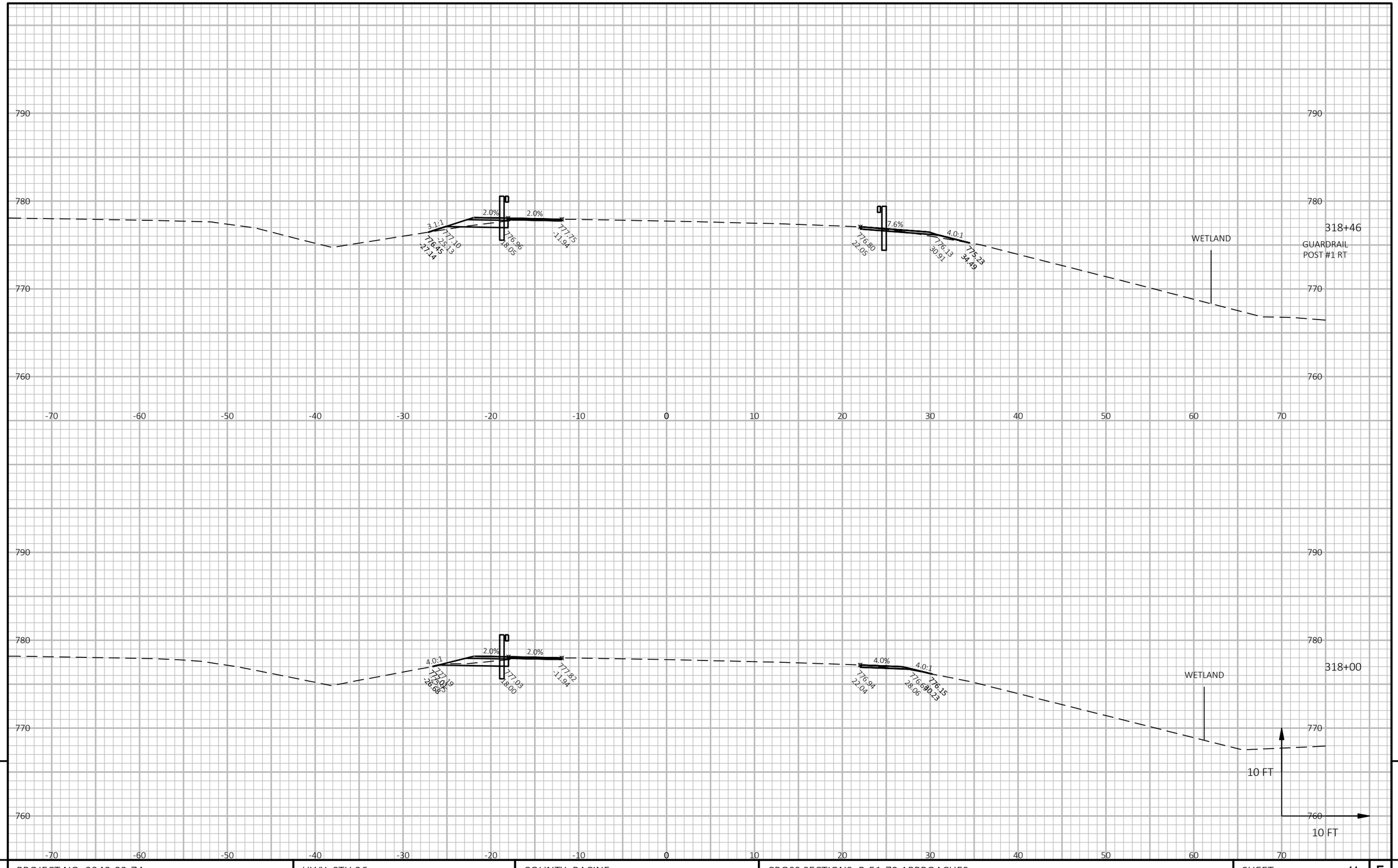
WISDOT/CADDS SHEET 49



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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 44	E

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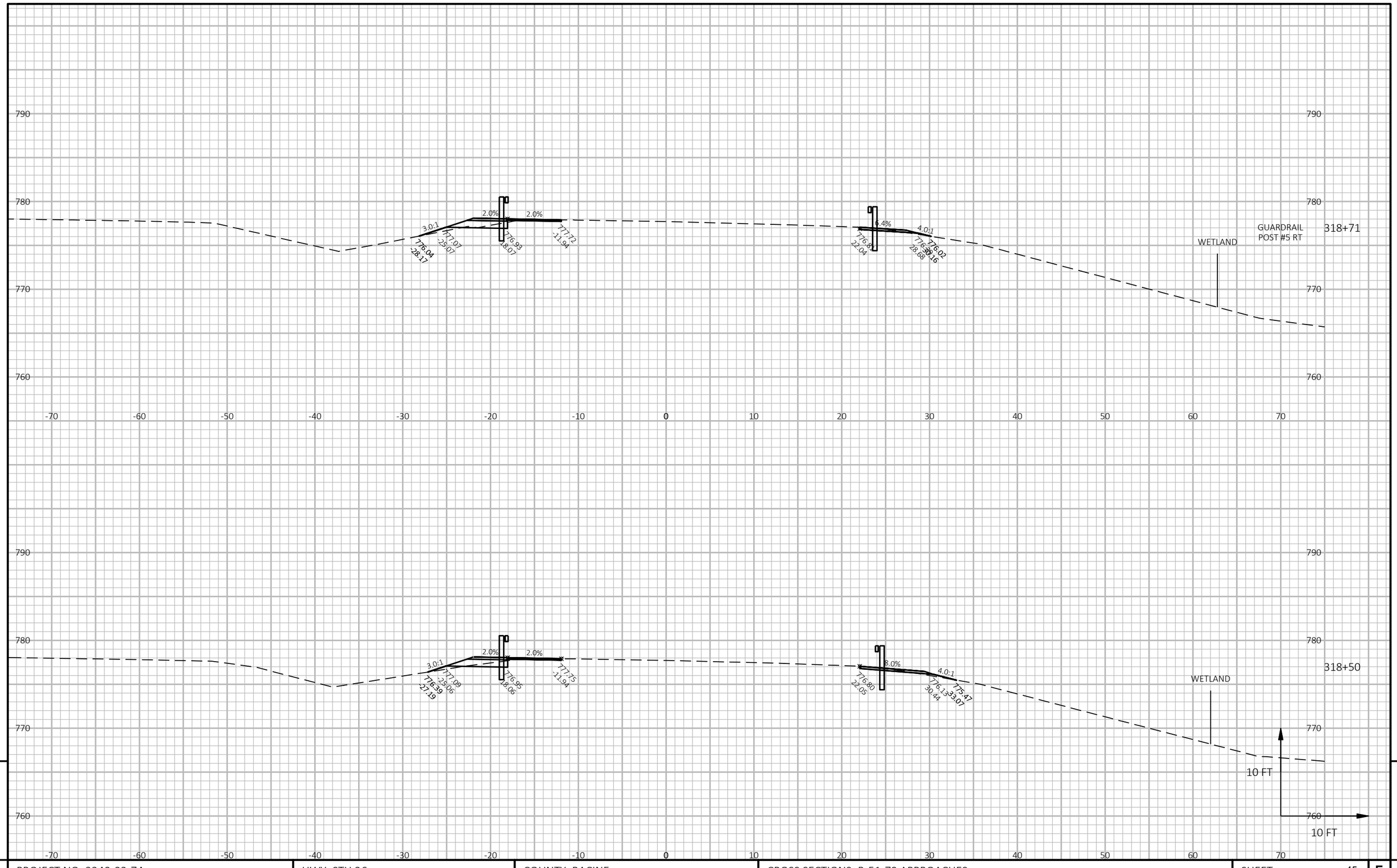

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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 45	E

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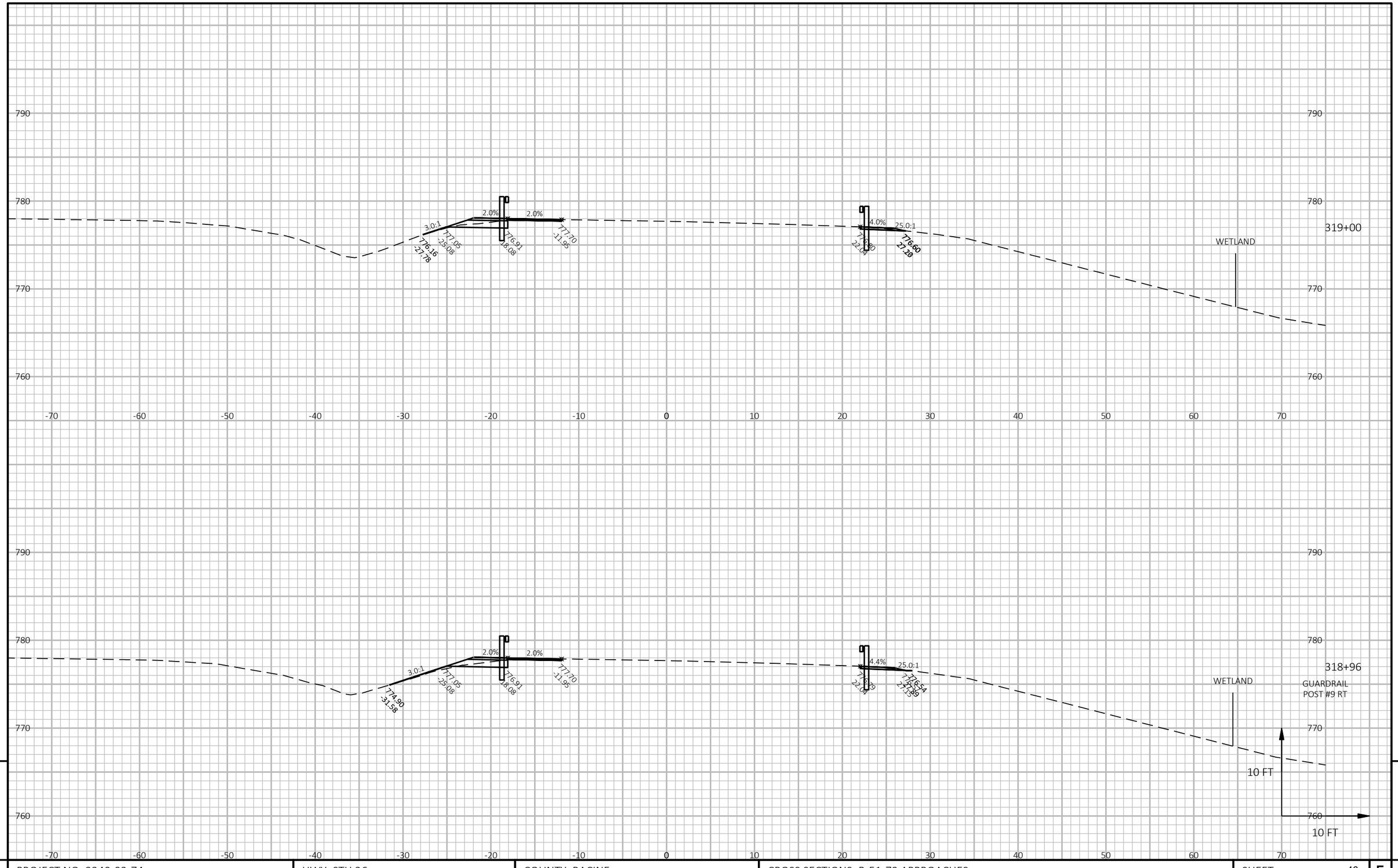
WISDOT/CADDS SHEET 49



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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 46	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\090201-XS.DWG PLOT DATE : 1/24/2020 11:33 AM PLOT BY : MANSKE, CALEB PLOT NAME :

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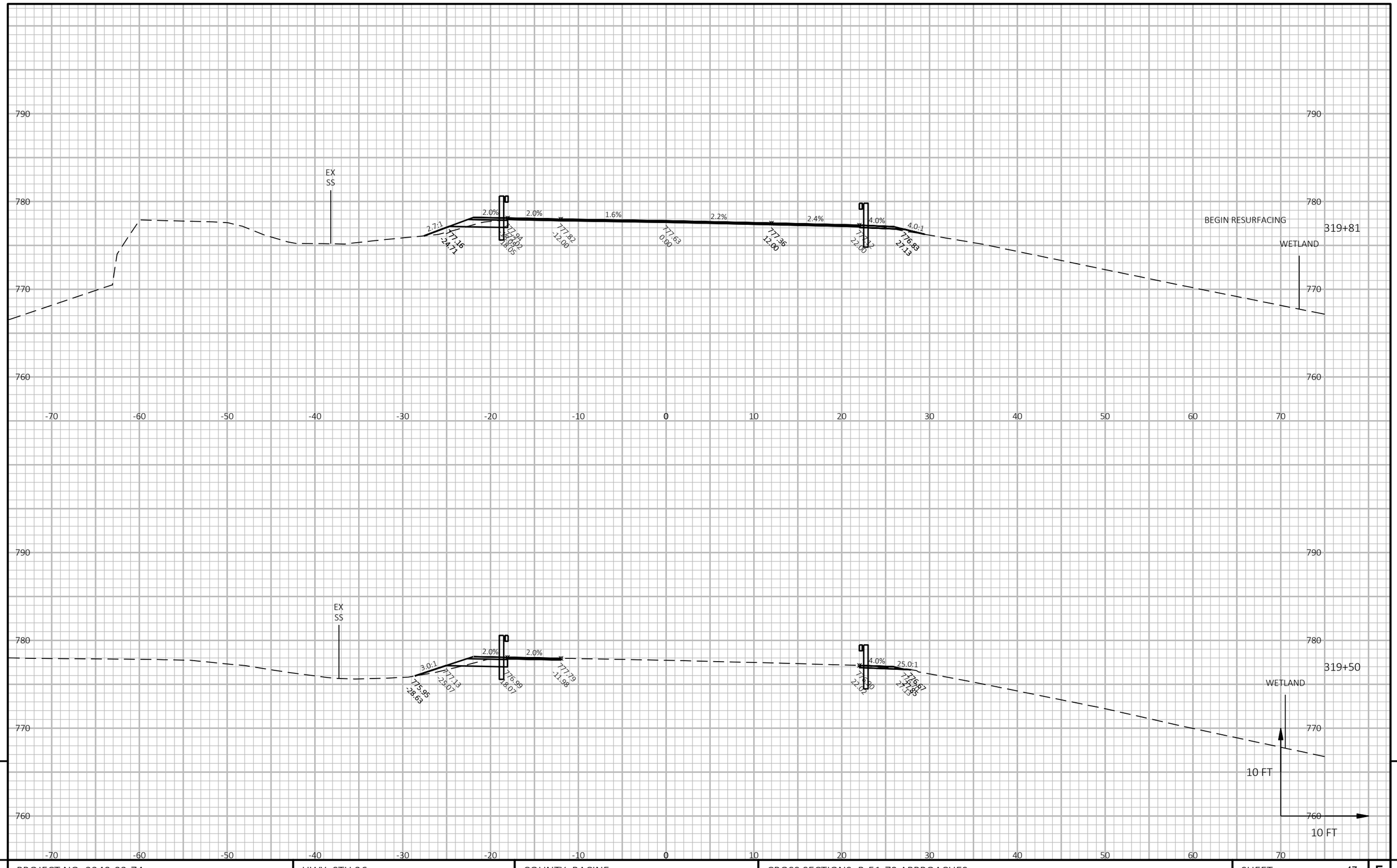

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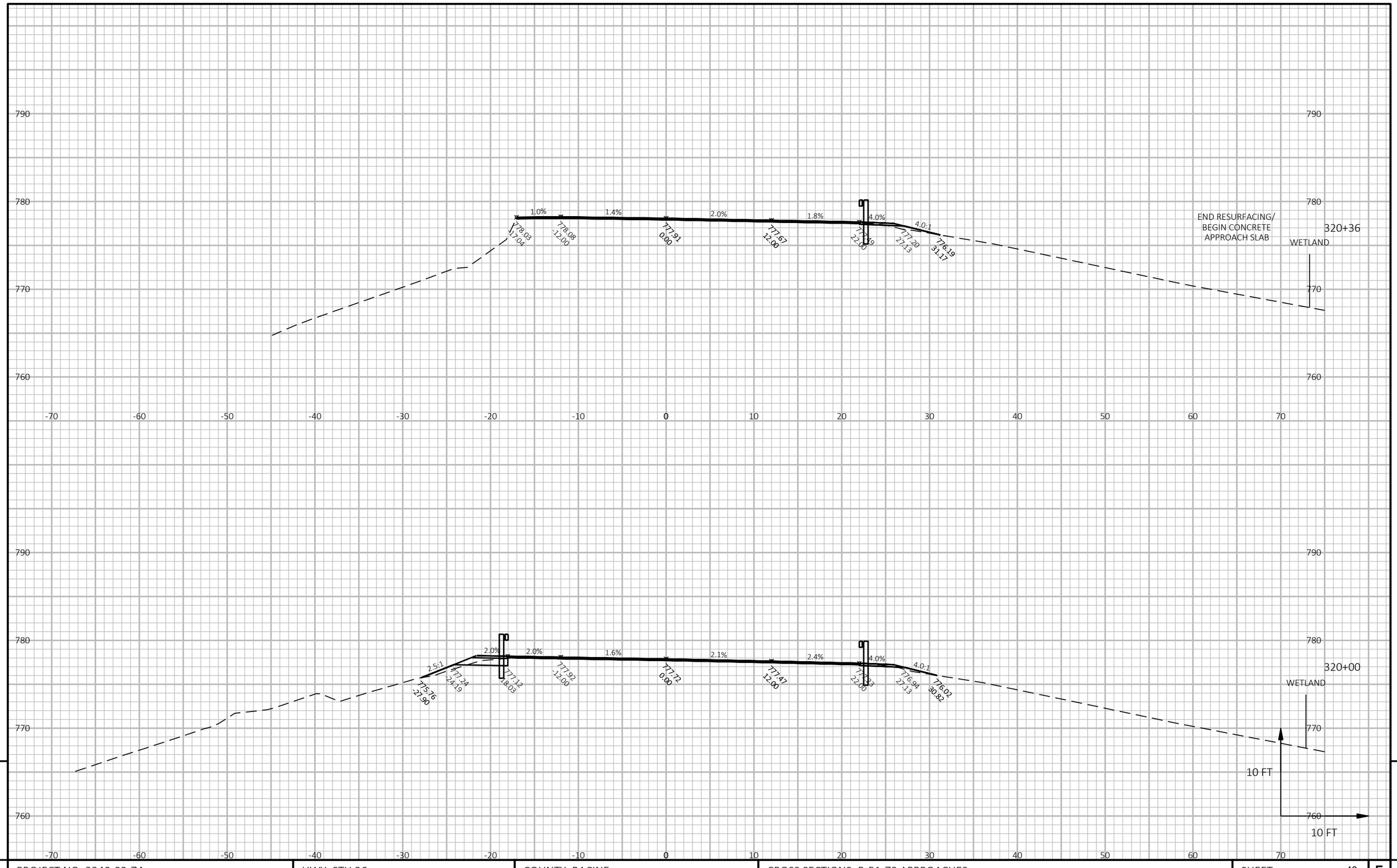

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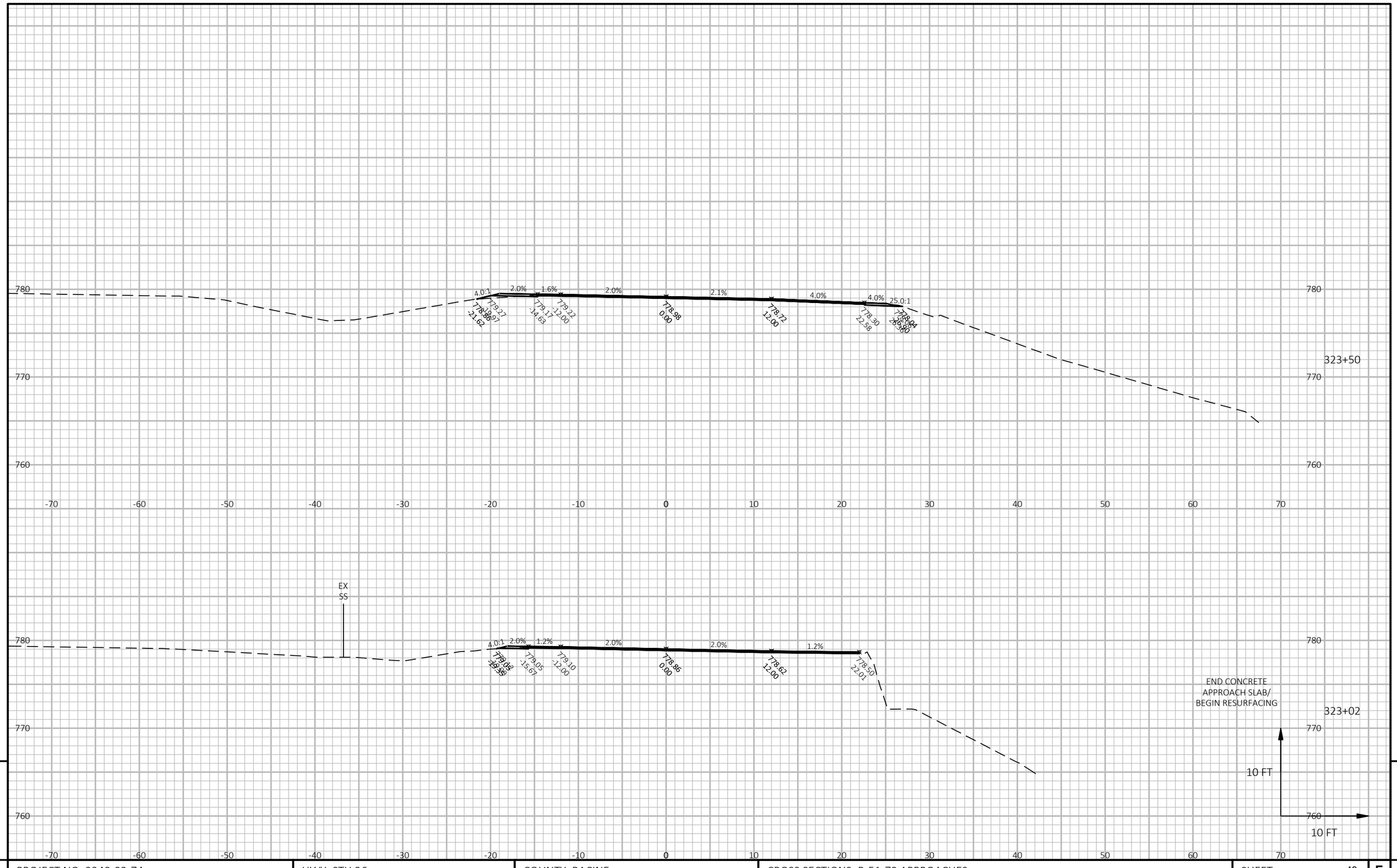

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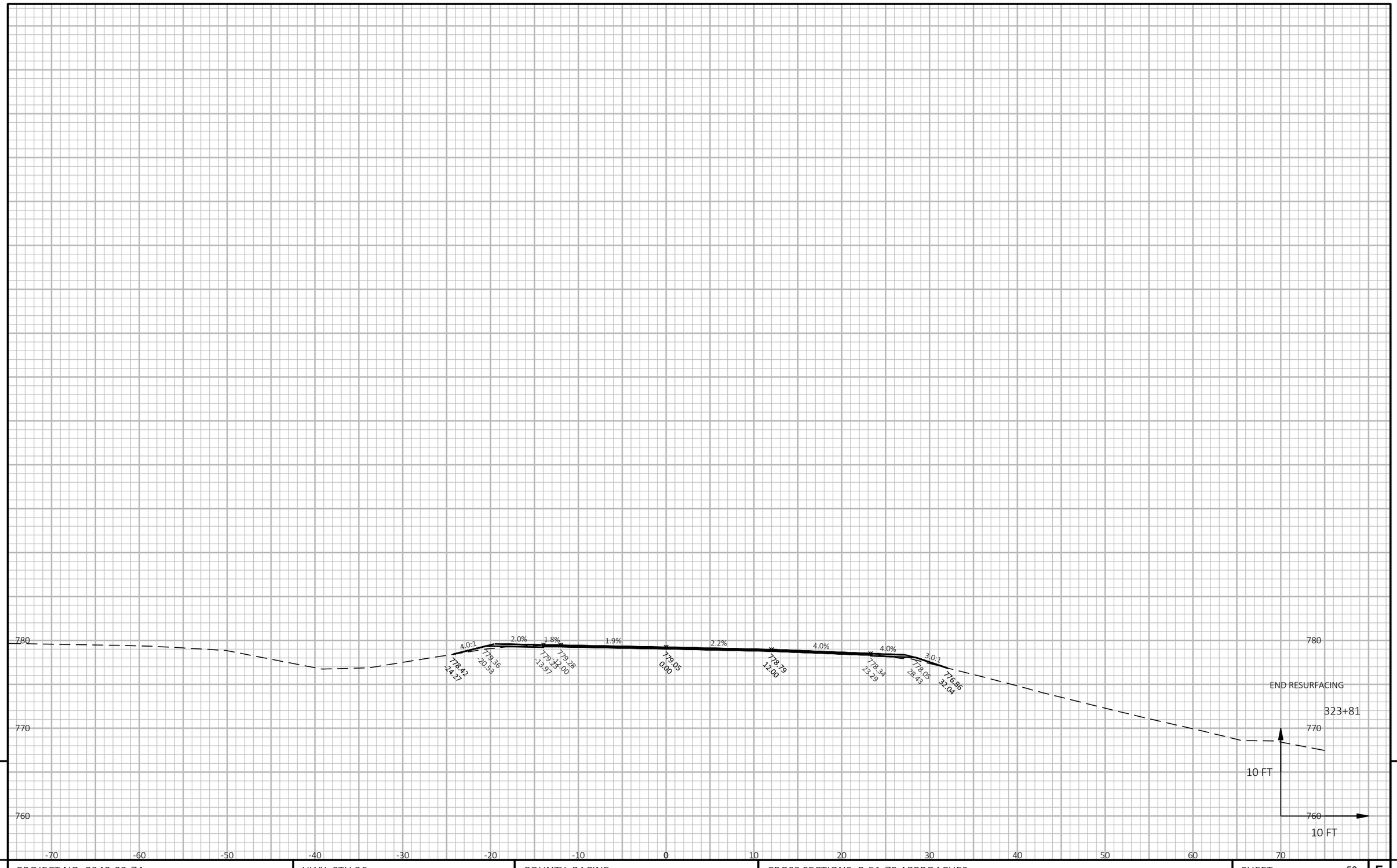
PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 49	E

FILE NAME : T:\1162710.11\CIVIL3D\22400304\SHEETSPLAN\090201-XS.DWG PLOT DATE : 1/24/2020 11:33 AM PLOT BY : MANSKE, CALEB PLOT NAME :



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PROJECT NO: 2240-03-74	HWY: STH 36	COUNTY: RACINE	CROSS SECTIONS: B-51-79 APPROACHES	SHEET 50	E

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